



**HIV/AIDS in Eastern Europe and  
the Commonwealth of Independent States**

**REVERSING  
THE EPIDEMIC**

**FACTS AND POLICY OPTIONS**



**United Nations Development Programme  
Bratislava, 2004**



*HIV/AIDS in Eastern Europe  
and the Commonwealth  
of Independent States*

**REVERSING THE EPIDEMIC  
FACTS AND POLICY OPTIONS**

United Nations Development Programme  
Bratislava, 2004

All rights are reserved. The document may, however, be freely reviewed, quoted, reproduced or translated, in part or in full, provided the source is acknowledged. The document may not be sold or used in conjunction with commercial purposes. The views expressed in boxes of this report are solely the responsibility of named authors of those texts.

The analysis and policy recommendations of the Report do not necessarily represent the views of the United Nations Development Programme; its Executive Board or its Member States.

ISBN 92-1-126162-7

Cover Designed by KOLOVRATOK, Slovak Republic  
Printed by RENESANS, Slovak Republic  
Bratislava, 2004

## Foreword

This report contains a simple message: without an immediate, accelerated and significantly scaled up response by governments and other actors, HIV/AIDS risks undermining and even reversing human development gains across the countries of Eastern Europe and the Commonwealth of Independent States. Mounting such a response will be difficult, but far from impossible. By drawing on experience and knowledge from other parts of the world, and by using new financing mechanisms such as the Global Fund to fight HIV/AIDS, TB and Malaria, there is every chance we will succeed in stemming the spread of the epidemic and containing its impact in the region. But that will only happen if the countries of the region first take direct action themselves, focusing their own social and economic policies and resources more clearly and explicitly on this growing problem.

In practice that means several things. It means policy makers must put in place new and extensive networks of information: investing in public awareness by educating the public, especially vulnerable groups. It means that governments need to approach the issue in a way that allows all stakeholders - including people living with HIV/AIDS - to participate in decision-making. And above all it means real leadership in confronting the issue. Leadership at all levels and in all structures of society - not just at the central government level, but also with local authorities, in business organisations, civil societies, schools, religious organisations, and in families.

This report does not simply analyse the problems: it offers concrete solutions. Drawing on best practices and on the proven experience of countries and communities where HIV/AIDS prevention and care have produced results, it sets out a series of recommendations for policy makers, government institutions, business and civil society actors on exactly how that can be done. A product of the joint efforts of a team of researchers drawn from UN agencies, civil society organisations and other partners, it is a powerful call to action.

*Mark Malloch Brown  
Administrator, UNDP*

## Acknowledgements

This report is a product of extensive collaboration by many individuals and institutions actively involved in HIV prevention and care in Eastern Europe and the CIS. Its publication would not have been possible without the joint work of representatives of many different UN agencies and programmes who contributed their expertise, time and staff to work in the team of authors and editors of this report. In particular, special thanks are due to the WHO Euro office in Copenhagen, the World Bank, and the UNAIDS Secretariat in Geneva.

The report was researched and edited by Tony Barnett, David Barr, Andrey Ivanov, and Ben Slay. The introduction was written by David Barr and Ben Slay. Chapters I and II are a contribution of WHO, drafted by Martin Donoghoe, Srdan Matic and George Schmid. Chapter III is a result of joint effort of the World Bank and UNDP: it was prepared by Olu-soji Adeyi, Tony Barnett, Sarbani Cherkaborty, Shombi Sharp, and Ben Slay. Chapter IV was drafted by Jeff Hoover and Anna Alexandrova, and benefited from valuable contributions by Marcia Kran and Stefan Preisner. Chapter VI was written by David Barr and Anna Alexandrova, Chapter V was written by David Barr and Ben Slay. Policy recommendations were formulated in a consultative process between UNDP, the UNAIDS Secretariat, and national stakeholders. Special contributions were also made by Vadim Pokrovsky, Mamasabyr Burhanov, Kasia Malinowska-Sempruch and Vladimr Frolov.

The report benefited from extensive comments and contributions made by many national experts, institutions, and non-governmental organisations in the region. Special thanks go to AIDS Info Share in Moscow and organisations of people living with HIV. They also go to the Ukrainian experts and NGOs who commented on the report's second draft.

Editors of the report and the UNDP Regional Bureau for Europe and the CIS express their gratitude to the many colleagues and experts who offered their knowledge, time and advice to make the report a strong advocacy tool. Special thanks go to Andrew Ball, Hakan Bjorkman, Sarah Burd-Sharps, Desmond Cohen, Ivan Krastev, Steve Kraus, Kasia Malinowska-Sempruch, Henning Mikkelsen, Monica Sharma, and Nadia Rasheed. Special thanks also go to UNDP and UNAIDS staff working in UN offices throughout the region, especially Natalia Gordienko, Alexander Kashkarev, Elena Malanova, Jelena Marjanovic, Eduard Petrescu, Helen Petrozzola, Tatiana Shoumilina, and all HIV/AIDS focal points and UNAIDS Theme Group members.

Production of this report was made possible by UNDP's Regional Centre in Bratislava. Critical support in editing, production and launching the publication was provided by Andrey Ivanov and Sandra Pralong.

Leaders of this initiative—Kalman Mizsei, Soknan Han Jung, Bruce Harland and Joanna Kazana—are very grateful for everyone's help and cooperation in making this publication a strong advocacy tool.

# Table of Contents

<b>Executive Summary</b>	<b>1</b>
<b>Introduction: HIV/AIDS and Human Development in Central and Eastern Europe and the Commonwealth of Independent States</b>	<b>5</b>
<b>Chapter I: HIV/AIDS Epidemiological Trends in Central and Eastern Europe and the CIS</b>	<b>11</b>
<b>HIV/AIDS surveillance</b>	<b>13</b>
<b>Regional overview of epidemiological trends</b>	<b>15</b>
Western CIS: The Russian Federation, Ukraine, Belarus, and Moldova	15
The Baltic States	19
The Caucasus and Central Asia	20
Central and South Eastern Europe	22
<b>Conclusions and recommendations</b>	<b>24</b>
<b>Chapter II: Drivers of the Epidemic: Major Risk Factors, Risk Behaviours, and Groups at Risk</b>	<b>25</b>
<b>High Risk Behaviours and Environmental Factors</b>	<b>25</b>
Substance abuse and HIV/AIDS	27
Male-to-male Sex	27
Sexually Transmitted Infections	28
Mother-to-child transmission of HIV	29
<b>Major Groups at Risk</b>	<b>30</b>
Injecting Drug Users	30
Sex Workers	32
Prisoners	32
Migrants and Displaced Persons	35
<b>Conclusions and recommendations</b>	<b>36</b>
<b>Chapter III: The Impact of the Epidemic</b>	<b>37</b>
<b>Vulnerability, Susceptibility, and Impact</b>	<b>37</b>
Poverty	37
Demographic Implications	38
<b>Socio-economic Implications</b>	<b>40</b>
Macroeconomic Impact of HIV/AIDS on Growth and Development	41
Sectoral Impacts	43
Households	43
<b>Human Development Implications</b>	<b>44</b>
Inequality	44
Life Expectancy	45
HIV/AIDS and the Millennium Development Goals	46
Conclusions and recommendations	47
<b>Chapter IV: Human Rights and HIV/AIDS in Central and Eastern Europe and the CIS</b>	<b>49</b>
<b>HIV/AIDS and Human Rights</b>	<b>49</b>
Human Rights Protection	52
National, Regional, and International Legal Protection of Human Rights	52

International Guidelines on HIV/AIDS and Human Rights	54
<b>Legal Guarantees: Theory and Practice</b>	<b>55</b>
Injecting drug users	55
Sex workers	56
Men Who Have Sex With Men	58
Roma and Ethnic Minorities	58
<b>Civil Society</b>	<b>58</b>
<b>Conclusions and recommendations</b>	<b>60</b>
<hr/>	
<b>Chapter V: Developing an Effective Response to HIV/AIDS</b>	<b>63</b>
<b>Governance Foundations of Response</b>	<b>63</b>
High-level political commitment	63
Multisectoral national programming and responses	64
Involving at risk communities	65
Financing the response	66
External financing	66
Harm reduction	67
Harm reduction and drug use	68
Substitution therapy	69
International agencies	70
Involving the Private Sector	71
Education and risk reduction for youth	71
Voluntary counselling and testing	72
<b>AIDS treatment</b>	<b>72</b>
Antiretroviral therapy	73
Treatment to prevent mother-to-child HIV transmission	74
Access to antiretroviral treatment	74
Access to quality generic HIV-related drugs in CIS countries	75
Diagnostic Testing, Treatment, and Prevention of Opportunistic Infections	76
Leadership and empowerment	77
<b>Conclusions and recommendations</b>	<b>77</b>
<hr/>	
<b>Chapter VI: Conclusions</b>	<b>79</b>
<b>What Works? Success stories</b>	<b>79</b>
Industrial countries' experience	79
Developing country experience	81
<b>Conclusions</b>	<b>82</b>
Information	82
Inclusion	83
Leadership	84
<hr/>	
<b>Annexes 85</b>	
<b>Annex 1: Modelling the Macroeconomic Implications of a Generalised AIDS Epidemic in the Russian Federation</b>	<b>85</b>
<b>Annex 2: The National Security Implications of the HIV/AIDS Epidemic in Russia</b>	<b>91</b>
<b>Annex 3: The 'Leadership for Results Programme'—UNDP's Role in the UN System Response to HIV/AIDS</b>	<b>97</b>
<b>Annex 4: Glossary</b>	<b>109</b>
<b>Annexes 5: Bibliography</b>	<b>113</b>

---

## Index of Tables

---

Table 1: Sample studies of HIV prevalence among injecting drug users in selected cities in the Russian Federation 2000-2002	16
Table 2: Results of HIV sentinel surveillance in Ukraine in 2002	18
Table 3: Estimated size of core population groups at high risk of HIV by country	26
Table 4: Prisoner population and diagnostic HIV screening in the penitentiary system of the Russian Federation, 1995-2002	33
Table 5. Understanding economic and social impact by level, time and degree	40
Table 6: Macroeconomic Impact Models: Findings	41
Table 7: Effects of declining life expectancy on the HDI in selected countries	44
Table 8: The Human Development Index and life expectancy in CIS countries	46
Table 9: HIV/AIDS and MDG Targets (by 2015)	46
Table 10: Human Rights of Vulnerable Populations	55
Table 11: Global Fund Allocations for East European and CIS Countries	67

---

## Index of boxes

---

Box 1: Why have the numbers of newly registered HIV cases in Russia fallen recently?	17
Box 2: Prisons as HIV Incubators	34
Box 3: Modelling the macroeconomic impact of HIV/AIDS	42
Box 4: Security implications of HIV/AIDS: The case of Russia	47
Box 5: Restrictive policies: Well intended but ill-performing	51
Box 6: Unintended Consequences: Punitive Drug Policies Fuel the HIV Epidemic in Russia and Ukraine	57
Box 7: Financing AIDS Treatment in Russia	66
Box 8: OSI Harm Reduction Programme in Russia	67
Box 9: Methadone substitution therapy in the Kyrgyz Republic	70
Box 10: Voluntary testing vs. mandatory testing	72
Box 11: Dialogue with producers increases access to antiretroviral drugs	74
Box 12: Improving access to generic antiretrovirals: The case of Ukraine	76

---

## Index of Figures

---

Figure 1: Estimated HIV prevalence rates and number of people living with HIV/AIDS	12
Figure 2: Newly reported HIV cases with known transmission route, entire region, excluding Turkey. Source: EuroHIV (2003)	14
Figure 3: Newly reported HIV infections in Belarus, Moldova, Ukraine and the Russian Federation, 1995-2002	15
Figure 4: Number of newly reported HIV cases in the Baltic	19
Figure 5: Newly reported HIV infections in the Caucasus	20
Figure 6: Newly reported HIV infections in four Central Asian Republics,	21
Figure 7: Newly reported HIV, AIDS and AIDS death cases, Central and South Eastern Europe	22
Figure 8: Reported HIV cases by transmission group, Central and South Eastern Europe	23
Figure 9: Reported syphilis cases per 100,000 population, 2000-2001	28
Figure 10: Rates of reported syphilis cases per 100,000 population, NIS	29
Figure 11: Newly reported HIV infections through mother-to-child transmission in Western, Central, and Eastern Europe, 1997-2002	30
Figure 12: Russia population impact of AIDS by scenario	38
Figure 13: Russia Dependency Ratios by Age Structure	39

---

Figure 14: Impact on Life Expectancy	45
Figure 15: Prices decreases Fluconazole due to generic imports (Ukraine)	75
Figure 16: Russia, Cumulative Impact of AIDS on GDP levels	88

---

# REVERSING THE EPIDEMIC

## FACTS AND POLICY OPTIONS

### Executive Summary

One out of every hundred adults walking down the streets of a city in Eastern Europe or the Commonwealth of Independent States (CIS) countries carries the HIV virus that causes AIDS. Most have contracted HIV from injecting drug use. But the region's prisoners are increasingly functioning as incubators for HIV, and the numbers of infections attributable to commercial sex work and mother-to-child transmission are growing.

Official estimates of the numbers of people living with HIV/AIDS in this region at the end of 2003 ran as high as 1.8 million. Last year, the number of new infections rose sharply in Ukraine, Estonia, Latvia, Belarus, and Moldova. The incidence of new infections is also rising (albeit from very low levels) in some of the region's poorest countries—in Central Asia and the Caucasus—whose impoverished and overburdened health care systems will face grave difficulties in meeting this challenge.

This report details the available data on HIV/AIDS in Central and Eastern Europe and the CIS. It explains the causes of the epidemic in this region and offers policy options to halt the spread of the disease. While former communist countries harbour the fastest growing rates of infection in the world, paradoxically the region also has the most potential to reverse the trend with relative ease. This report explains why, and what policy choices are needed to stop the epidemic from becoming even more devastating and costly.

AIDS threatens the fabric of society and pushes governance and health care systems to limits they have not yet faced. Addressing the behavioural and socio-economic factors that determine vulnerability requires coordinated actions by many individuals and organisations, directed toward a common goal. AIDS cannot be conquered through the sort of 'command and control' approaches that have traditionally shaped public policy in the region. Instead, the creation of open, democratic, inclusive environments where comprehensive, multisectoral policies and innovative partnerships build trust and reduce stigma is essential to turning back the epidemic.

Policy makers, academics, civil society leaders, government officials, civil servants, business and community leaders, and, in general, all those involved in combating the AIDS epidemic, or those who are just curious about what can be done about it, will find this report of interest. This is not a report exclusively targeted at health care professionals or public health officials. It is instead intended to increase awareness among policy makers and publics in general about this growing threat to human development in the post-communist region.

The United Nations Development Programme (UNDP) views HIV/AIDS as a human development issue rather than as primarily a health care concern. The concept of human development, as used by UNDP, emphasises economic development as a framework for expanding people's choices and thereby serving the broader objectives of human welfare. To have real choices, individuals need decent levels of education, health and income—the three components of human development. By investigating how the AIDS epidemic affects human development in the former communist world, this report seeks to contribute to the debate about improving human welfare in the countries of Eastern Europe and the CIS. It is not only those infected who suffer from AIDS, but, rather, the entire community is affected when one of its members becomes infected.

Well conceived public policy can make a difference in halting the spread of HIV and reducing the consequences of AIDS. The report which follows identifies the ways in which these challenges can be met to offer a comprehensive response to HIV/AIDS in

the region. While differences in socio-economic and demographic conditions across countries necessitate an individual approach, the common historical legacy and policy environments—particularly in the CIS countries—provide a strong basis for analysis and recommendations at the regional level. Throughout the region, communities have little choice but to face these challenges.

In order to help halt and eventually roll the epidemic back, this report identifies three specific categories of challenges in the areas of **information, leadership, and inclusion**.

### **The Information Challenge**

HIV/AIDS is relatively new in the region, particularly in CIS countries. Like all new infectious diseases it is met with suspicion and ignorance. Ignorance is anathema to good policy. Inadequate awareness and insufficient evidence-based information breeds ineffective, even harmful responses to HIV/AIDS. This pertains in particular to mechanisms for gathering data on epidemiological trends and risk factors.

Suggested responses to this challenge include:

- *Prioritise large scale media, information, and education campaigns, tailored specifically to vulnerable groups, especially injecting drug users and their sexual partners.*
- *Build the capacity needed to provide universal, affordable access to voluntary counselling and HIV testing.*
- *Improve sex education, AIDS awareness, and drug prevention programmes in school curricula.*
- *Invest in second-generation monitoring systems to better identify the drivers of the epidemic. Study the behavioural patterns of specific at risk groups, and adjust prevention and care policies based on knowledge generated by these studies.*

### **The Leadership Challenge**

AIDS threatens human development on a broad scale. As such it requires a concerted response from leaders of all walks of life—including people living with HIV and AIDS. An effective response requires the ability and willingness of diverse social groups to work together in the face of this common challenge.

Non-governmental organisations (NGOs) and other grass-roots institutions play key roles in delivering harm-reduction services, empowering individuals to change their behaviour, and connecting people at risk with public health institutions. However, the communist institutions that dominated political life in most of this region until the 1990s prevented the development of these much needed representatives of civil society. Their absence—particularly in CIS countries—constitutes a major institutional gap in the fight against the epidemic.

Suggested responses to this challenge include:

- *Build real partnerships and cooperation with the private sector (especially media, pharmaceutical companies, and employers' organisations), NGOs, and people living with HIV/AIDS. Make use of their experience and advice in formulating and implementing prevention and care policies.*
- *Invest in the infrastructure and policies needed for universal access to treatment, especially antiretroviral therapies. Promote cooperation between local and multinational pharmaceutical companies to increase the production and affordability of generic retroviral drugs.*
- *Remove legal and other barriers that are preventing the rapid development of the NGOs wishing to work in the HIV/AIDS area. Help NGOs to become better partners for state agencies dealing with the epidemic, particularly those who represent people living with HIV/AIDS.*

- *Identify those activities that have a proven record for fostering leadership in NGOs and connecting them with leaders in other sectors.*

## The Challenge of Inclusion

Including all stakeholders, especially people living with HIV/AIDS, in designing and implementing appropriate policy responses is critical to better policy outcomes. In addition, while information is critical for prevention, it is more effective when combined with a comprehensive range of prevention activities. Marginalising people living with HIV/AIDS and members of at risk communities is not only unfair and violates international human rights agreements that have been signed by all the governments of the region. Marginalisation is also an ineffective—even harmful—public policy approach to the epidemic.

Adopting inclusive responses to HIV/AIDS means rebalancing criminalisation and punitive approaches to the epidemic, in favour of practical, evidence-based, harm reduction approaches. This means:

- *De facto decriminalisation of injecting drug use and sex work, in favour of measures that provide health services and address social intolerance.*
- *Integrating harm reduction programmes, voluntary testing, and staff training into correctional systems.*
- *Dramatically scaling up needle exchanges, methadone replacement therapy, condom distribution, and outreach programs for injecting drug users. Focus on projects that prevent the sexual transmission of HIV from drug users to their sexual partners.*

A comprehensive response to HIV/AIDS is required for impact, because the effects of the epidemic manifest themselves in a multitude of ways. HIV/AIDS is not solely a matter for the health sector. By limiting people's abilities to live with freedom and dignity, the epidemic threatens prospects for sustainable human development for entire communities. HIV/AIDS is therefore:

- **A social issue:** HIV/AIDS feeds on and exacerbates social marginalisation, poverty, stigma, and intolerance.
- **An economic issue:** HIV/AIDS consumes scarce resources and attacks the human capital of workers who would otherwise provide the lion's share of national labour forces, thereby reducing household, enterprise, and macroeconomic potential.
- **A health issue:** a cofactor of other diseases, HIV/AIDS attacks the body's immune system with fatal consequences if untreated, reducing life expectancies and quality of life while straining public health systems.
- **A human rights issue:** HIV/AIDS can generate responses that emphasise criminal justice solutions to what is essentially a public health problem. In addition to disregarding internationally accepted human rights principles, such responses can harm those most affected and be counter productive.
- **A policy coordination issue:** while public health systems must be at the core of any response to HIV/AIDS, effective responses require coordinated engagement by many central and local government bodies.
- **A security issue:** HIV/AIDS breeds insecurity at all levels, from individuals to households to countries. It also reduces the capacity of security organisations such as the military and police.
- **A policy horizon issue:** because its consequences are delayed by its 'slow-onset' nature, AIDS blurs the distinction between today and tomorrow. Policy making must be shaken out of short term time horizons in order to respond effectively to the epidemic.

Building the conditions for change requires information, leadership, and inclusion. It requires action across all sectors: government, civil society, businesses, and religious organisations. The United Nations Development Programme believes this report can serve as a valuable tool in understanding and responding to this complex development challenge, in demystifying an often sensitive and awkward topic, through the presentation of straightforward analysis and practical responses.



# REVERSING THE EPIDEMIC

## FACTS AND POLICY OPTIONS

### Executive Summary

One out of every hundred adults walking down the streets of a city in Eastern Europe or the Commonwealth of Independent States (CIS) countries carries the HIV virus that causes AIDS. Most have contracted HIV from injecting drug use. But the region's prisoners are increasingly functioning as incubators for HIV, and the numbers of infections attributable to commercial sex work and mother-to-child transmission are growing.

Official estimates of the numbers of people living with HIV/AIDS in this region at the end of 2003 ran as high as 1.8 million. Last year, the number of new infections rose sharply in Ukraine, Estonia, Belarus, and Moldova. The incidence of new infections is also rising (albeit from very low levels) in some of the region's poorest countries—in Central Asia and the Caucasus—whose impoverished and overburdened health care systems will face grave difficulties in meeting this challenge.

This report details the available data on HIV/AIDS in Central and Eastern Europe and the CIS. It explains the causes of the epidemic in this region and offers policy options to halt the spread of the disease. While former communist countries harbour the fastest growing rates of infection in the world, paradoxically the region also has the most potential to reverse the trend with relative ease. This report explains why, and what policy choices are needed to stop the epidemic from becoming even more devastating and costly.

AIDS threatens the fabric of society and pushes governance and health care systems to limits they have not yet faced. Addressing the behavioural and socio-economic factors that determine vulnerability requires coordinated actions by many individuals and organisations, directed toward a common goal. AIDS cannot be conquered through the sort of 'command and control' approaches that have traditionally shaped public policy in the region. Instead, the creation of open, democratic, inclusive environments where comprehensive, multisectoral policies and innovative partnerships build trust and reduce stigma is essential to turning back the epidemic.

Policy makers, academics, civil society leaders, government officials, civil servants, business and community leaders, and, in general, all those involved in combating the AIDS epidemic, or those who are just curious about what can be done about it, will find this report of interest. This is not a report exclusively targeted at health care professionals or public health officials. It is instead intended to increase awareness among policy makers and publics in general about this growing threat to human development in the post-communist region.

The United Nations Development Programme (UNDP) views HIV/AIDS as a human development issue rather than as primarily a health care concern. The concept of human development, as used by UNDP, emphasises economic development as a framework for expanding people's choices and thereby serving the broader objectives of human welfare. To have real choices, individuals need decent levels of education, health and income—the three components of human development. By investigating how the AIDS epidemic affects human development in the former communist world, this report seeks to contribute to the debate about improving human welfare in the countries of Eastern Europe and the CIS. It is not only those infected who suffer from AIDS, but, rather, the entire community is affected when one of its members becomes infected.

Well conceived public policy can make a difference in halting the spread of HIV and reducing the consequences of AIDS. The report which follows identifies the ways in which these challenges can be met to offer a comprehensive response to HIV/AIDS in

the region. While differences in socio-economic and demographic conditions across countries necessitate an individual approach, the common historical legacy and policy environments—particularly in the CIS countries—provide a strong basis for analysis and recommendations at the regional level. Throughout the region, communities have little choice but to face these challenges.

In order to help halt and eventually roll the epidemic back, this report identifies three specific categories of challenges in the areas of **information, leadership, and inclusion**.

### **The Information Challenge**

HIV/AIDS is relatively new in the region, particularly in CIS countries. Like all new infectious diseases it is met with suspicion and ignorance. Ignorance is anathema to good policy. Inadequate awareness and insufficient evidence-based information breeds ineffective, even harmful responses to HIV/AIDS. This pertains in particular to mechanisms for gathering data on epidemiological trends and risk factors.

Suggested responses to this challenge include:

- *Prioritise large scale media, information, and education campaigns, tailored specifically to vulnerable groups, especially injecting drug users and their sexual partners.*
- *Build the capacity needed to provide universal, affordable access to voluntary counselling and HIV testing.*
- *Improve sex education, AIDS awareness, and drug prevention programmes in school curricula.*
- *Invest in second-generation monitoring systems to better identify the drivers of the epidemic. Study the behavioural patterns of specific at risk groups, and adjust prevention and care policies based on knowledge generated by these studies.*

### **The Leadership Challenge**

AIDS threatens human development on a broad scale. As such it requires a concerted response from leaders of all walks of life—including people living with HIV and AIDS. An effective response requires the ability and willingness of diverse social groups to work together in the face of this common challenge.

Non-governmental organisations (NGOs) and other grass-roots institutions play key roles in delivering harm-reduction services, empowering individuals to change their behaviour, and connecting people at risk with public health institutions. However, the communist institutions that dominated political life in most of this region until the 1990s prevented the development of these much needed representatives of civil society. Their absence—particularly in CIS countries—constitutes a major institutional gap in the fight against the epidemic.

Suggested responses to this challenge include:

- *Build real partnerships and cooperation with the private sector (especially media, pharmaceutical companies, and employers' organisations), NGOs, and people living with HIV/AIDS. Make use of their experience and advice in formulating and implementing prevention and care policies.*
- *Invest in the infrastructure and policies needed for universal access to treatment, especially antiretroviral therapies. Promote cooperation between local and multinational pharmaceutical companies to increase the production and affordability of generic retroviral drugs.*
- *Remove legal and other barriers that are preventing the rapid development of the NGOs wishing to work in the HIV/AIDS area. Help NGOs to become better partners for state agencies dealing with the epidemic, particularly those who represent people living with HIV/AIDS.*

- *Identify those activities that have a proven record for fostering leadership in NGOs and connecting them with leaders in other sectors.*

### The Challenge of Inclusion

Including all stakeholders, especially people living with HIV/AIDS, in designing and implementing appropriate policy responses is critical to better policy outcomes. In addition, while information is critical for prevention, it is more effective when combined with a comprehensive range of prevention activities. Marginalising people living with HIV/AIDS and members of at risk communities is not only unfair and violates international human rights agreements that have been signed by all the governments of the region. Marginalisation is also an ineffective—even harmful—public policy approach to the epidemic.

Adopting inclusive responses to HIV/AIDS means rebalancing criminalisation and punitive approaches to the epidemic, in favour of practical, evidence-based, harm reduction approaches. This means:

- *De facto decriminalisation of injecting drug use and sex work, in favour of measures that provide health services and address social intolerance.*
- *Integrating harm reduction programmes, voluntary testing, and staff training into correctional systems.*
- *Dramatically scaling up needle exchanges, methadone replacement therapy, condom distribution, and outreach programs for injecting drug users. Focus on projects that prevent the sexual transmission of HIV from drug users to their sexual partners.*

A comprehensive response to HIV/AIDS is required for impact, because the effects of the epidemic manifest themselves in a multitude of ways. HIV/AIDS is not solely a matter for the health sector. By limiting people's abilities to live with freedom and dignity, the epidemic threatens prospects for sustainable human development for entire communities. HIV/AIDS is therefore:

- **A social issue:** HIV/AIDS feeds on and exacerbates social marginalisation, poverty, stigma, and intolerance.
- **An economic issue:** HIV/AIDS consumes scarce resources and attacks the human capital of workers who would otherwise provide the lion's share of national labour forces, thereby reducing household, enterprise, and macroeconomic potential.
- **A health issue:** a cofactor of other diseases, HIV/AIDS attacks the body's immune system with fatal consequences if untreated, reducing life expectancies and quality of life while straining public health systems.
- **A human rights issue:** HIV/AIDS can generate responses that emphasise criminal justice solutions to what is essentially a public health problem. In addition to disregarding internationally accepted human rights principles, such responses can harm those most affected and be counter productive.
- **A policy coordination issue:** while public health systems must be at the core of any response to HIV/AIDS, effective responses require coordinated engagement by many central and local government bodies.
- **A security issue:** HIV/AIDS breeds insecurity at all levels, from individuals to households to countries. It also reduces the capacity of security organisations such as the military and police.
- **A policy horizon issue:** because its consequences are delayed by its 'slow-onset' nature, AIDS blurs the distinction between today and tomorrow. Policy making must be shaken out of short term time horizons in order to respond effectively to the epidemic.

Building the conditions for change requires information, leadership, and inclusion. It requires action across all sectors: government, civil society, businesses, and religious organisations. The United Nations Development Programme believes this report can serve as a valuable tool in understanding and responding to this complex development challenge, in demystifying an often sensitive and awkward topic, through the presentation of straightforward analysis and practical responses.

## Introduction: HIV/AIDS and Human Development in Central and Eastern Europe and the Commonwealth of Independent States

Only a few years ago it was hoped that Central and Eastern Europe and the Commonwealth of Independent States (CIS)<sup>1</sup> would avoid the devastation of AIDS. For at least some countries in this region, these hopes are set to fail.

UNAIDS estimates that as many as 280,000 people in 2003 contracted HIV in the region, bringing the total number of people living with the virus to as many as 1.8 million. Should this figure be correct, it would constitute 0.9 percent of the region's adult population<sup>2</sup>. This would exceed the prevalence rates reported for North Africa and the Middle East, Asia and the Pacific, and Latin America, not to mention Western Europe and North America. (According to UNAIDS data, only Sub-Saharan Africa and the Caribbean regions reported higher prevalence rates at the end of 2003<sup>3</sup>). The available data suggest that the Russian Federation, Latvia, Ukraine, and Estonia are now experiencing some of the fastest growing HIV epidemics in the world<sup>4</sup>. UNAIDS estimated that some 1 million people were living with HIV in Russia at the end of 2003<sup>5</sup>. HIV continues to spread rapidly in Belarus, Moldova, and Kazakhstan, while more recent epidemics have become evident in Kyrgyzstan and Uzbekistan<sup>6</sup>. In Central and Southeast Europe, sub-regions not yet experiencing rapid growth of the epidemic, infection rates appear to be low. But con-

ditions exist in many countries that could encourage the rapid spread of HIV<sup>7</sup>.

An epidemic of injecting drug use (done mostly by young men) is fuelling the spread of HIV in the region: 70 percent of newly registered HIV infections in CIS countries were attributed to injecting drug use during 2001-2002<sup>8</sup>. The number of opiate<sup>9</sup> (mostly heroin) users in this region may be as high as 3 million. If correct, this figure would represent one fifth of total opiate users globally, and about 1 percent of the region's population over the age of fifteen<sup>10</sup>. UNAIDS reports that 80 percent of the people living with HIV in the region in 2003 were under 30 years of age. By contrast, 70 percent of those living with HIV in the United States were 30 years of age or older. Likewise, 70 percent those diagnosed as living with HIV in the region during 2002-2003 were men, although the share of women in this unfortunate group seems to be growing<sup>11</sup>.

Epidemiological data concerning HIV/AIDS in this region and projections of its spread are diverse. Forecasts of epidemiological trends depend on trends in the supply of and demand for opiates, on patterns of sexual networking and behaviour, and on the willingness of leaders to raise what may be seen as awkward questions about sex, drug abuse, public health, and private empowerment. But although the eviden-

*80 percent of the people living with HIV in the region in 2003 were under 30 years of age*

<sup>1</sup> Central and Eastern Europe and the CIS include the following countries: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, the Kyrgyz Republic, Latvia, Lithuania, the Former Yugoslav Republic of Macedonia, Moldova, Poland, Romania, the Russian Federation, Serbia and Montenegro, Slovakia, Slovenia, Tajikistan, Turkmenistan, Turkey, Ukraine, and Uzbekistan.

<sup>2</sup> UNAIDS data are estimates that are given in ranges. The numbers of people living with HIV/AIDS in this region at the end of 2003 were estimated 1.2-1.8 million; new infections in 2003 were estimated at 180,000-280,000. See UNAIDS, *AIDS Epidemic Update*, December 2003, Geneva, p. 5 (available at <http://www.unaids.org/en/Resources/Publications/Corporate+publications/AIDS+epidemic+update+++December+2003.asp>).

<sup>3</sup> *Ibid.*

<sup>4</sup> *Ibid.*, p. 14.

<sup>5</sup> *Ibid.*, p. 14. UNAIDS also mentions that other estimates of the number of people living with HIV/AIDS in Russia range from 600,000 to 1.5 million.

<sup>6</sup> *Ibid.*, p. 14.

<sup>7</sup> *Ibid.*

<sup>8</sup> *End Year Report 2002*, European Centre for the Epidemiological Monitoring of AIDS, 2003, Paris.

<sup>9</sup> The term 'opiates' in this publication refers to both synthetic and natural opioids.

<sup>10</sup> Estimate is for 2000-2001. *Global Illicit Drug Use Trends 2003*. UNODC, 2003, Vienna.

<sup>11</sup> UNAIDS, *AIDS Epidemic Update*, December 2003, Geneva, p. 15.

*HIV/AIDS threatens human development: it undermines economies, national security, family and community stability, intellectual and industrial growth, and public health*

ce to date is insufficient for making reliable predictions, and while more accurate data are needed, there is no doubt that the incidence<sup>12</sup> of HIV is growing rapidly in many parts of the region. The possibility of significant further growth—if not a full-fledged epidemic—is very real. In the meanwhile, thousands of people living with HIV/AIDS are falling through the cracks of the region's health care systems, and are not receiving treatment or care for their disease.

The prevention of such an epidemic is best begun now. In many ways, the region has a unique opportunity to reverse the spread and impact of HIV. The political commitment needed to counteract the epidemic is now emerging: sixty percent of the region's governments have developed comprehensive, multisectoral strategies for combating HIV/AIDS. Although less than 10 percent of the *Global Fund*<sup>13</sup> monies have been directed to this region, the region's success ratio in applying for funds has been the highest in the world. A range of successful pilot programmes, based on international best practices, have been implemented, creating a solid basis for scaling up the response. Public health care systems, although drastically affected by the negative economic trends of the 1990s, are in place and can create a backbone for providing care and treatment. The growth of civil society, the private sector, and emerging public-private partnerships create chances for engaging business partners (especially the media, employers' organisations and pharmaceutical companies) in large scale education and information campaigns that target the stigma and discrimination that surround drugs and AIDS. Striking medical achievements in the past years, including the development of antiretroviral drugs, have changed the nature of treatment and are providing broader access to treatment at affordable prices. Relatively well-educated societies in Eastern Europe and CIS countries are receptive to common sense policies and public health information campaigns. And a plethora of civil-society groups and non-governmental orga-

nisations are reaching out to people at most risk. In the CIS region, the common legacies of Soviet Union system, in the form of the Russian language and similar epidemiological trends, enable countries to learn from each other and share resources. Finally, funding provided by the Global Fund and World Bank are removing financial barriers to effective, immediate responses.

Still, defeating HIV/AIDS in the region will require many things: significantly more resources (allocations in national budgets, institutional capacity, more skilled human resources and expanded services), the adoption of sound and evidence-based policies, and multisectoral collaboration. Above all, responding to the growing threat requires bold leadership at the highest levels of government and society, the willingness to openly address the social determinants of vulnerability to HIV/AIDS, and the courage to introduce controversial but necessary responses. Concrete recommendations on the actions that are necessary to seize these opportunities are contained in each section of this report.

HIV/AIDS threatens human development: it undermines economies, national security, family and community stability, intellectual and industrial growth, and public health. Its potential threat is particularly large in the poorer countries of the region—particularly Central Asia and the Caucasus, where relatively high levels of poverty and weak state capacity limit policy makers' abilities to respond effectively. And because such positive and negative social factors as poverty, increased mobility, education, socio-economic opportunity, corruption, social justice, and democracy influence the spread of HIV in these countries, the region's human development trends are linked to prospects for averting a full-blown epidemic.

Most of the countries of Central and Eastern Europe and the CIS are undergoing political, economic and social transitions that began in the late 1980s and early 1990s. The collapse of communism had

<sup>12</sup> In epidemiological terms, 'incidence' refers to the number of new cases of a disease within a given time period (usually a year), while the number of new reported cases within a given time period would be *detected incidence*. 'Prevalence' refers to the total number of cases.

<sup>13</sup> The Global Fund Against AIDS, Malaria, and Tuberculosis.

profound implications for the health of the population. For the countries of Central Europe, the transition has had a broadly beneficial impact: human development indicators are much higher today than they were in 1990, and preparations for membership in the European Union have made at least some state structures stronger and more nimble than they were before the fall of the Berlin Wall. Political democratisation has allowed the media to report frankly on HIV/AIDS and empowered individuals and non-governmental organisations (NGOs) to take the grass-roots actions needed to avert an epidemic.

The rest of the region, and particularly the CIS countries, have not been so fortunate. The unfavourable demographic trends that took hold during the Soviet period have continued in many CIS countries, and in some cases accelerated sharply, during the 1990s. The demographic crisis in the Russian Federation and its Western neighbours is marked by rapidly increasing mortality, reduced life expectancy, growing substance abuse (both alcohol and drugs), and very disturbing epidemiological trends for tuberculosis and sexually transmitted infections, as well as HIV/AIDS<sup>14</sup>. Social and political conditions in at least some of these countries encourage significant segments of the population to engage in high-risk behaviours and place themselves in high-risk environments. At-risk groups in these countries do not have strong incentives for adopting safer forms of behaviour, nor do they have access to effective protection from HIV/AIDS.

These regional characteristics are important for understanding prospects for averting a full-blown epidemic, modelling the future path of the disease, and for designing and implementing effective policies for prevention and control. Among other things, these characteristics imply that public health interventions—even the best ones available today—can only be a part of the solution to the threats to the region posed by HIV/AIDS. Efforts to reform and build capacity in public health institutions will not prevent a full-blown epidemic if they are not accompanied by

broader initiatives involving government, the private sector and communities.

Treating people living with HIV/AIDS and those suffering from substance dependencies as pariahs or criminals—the standard posture for law enforcement agencies in much of the region—ensures that those most likely to spread the disease will conceal their behaviour and their afflictions from the authorities. Such behaviour does more than just distort the reporting of the public health data needed to accurately monitor epidemiological trends. It also keeps those most at risk from seeking the help they need, and precludes the application of otherwise successful preventive interventions.

A better balance needs to be struck between bringing hard-core narcotics traffickers to justice and responding to a public health menace. Civil societies, communities, and individuals need to be empowered in order to foster the grass roots behavioural changes needed to vanquish the threat of HIV/AIDS. The challenge of empowering individuals and communities goes well beyond HIV/AIDS: it is also a precondition for the successful completion of the region's democratisation agenda. This, and the poverty that encourages risky behaviour, underscores the fundamental links between HIV/AIDS, transition, and human development in the countries of Eastern Europe and the CIS.

Public policy *can* affect the behavioural choices that spread HIV. Effective interventions *are* possible, and governments have many ways of influencing private behaviour. At bottom, there are two complementary approaches. The first aims to influence individual choices within the existing economic and social context by changing the costs and benefits of various types of behaviour, in order to make safer behaviour more attractive. But individual behaviour is shaped by the socio-economic context; some individuals' choices are very constrained indeed. The second, complementary approach is to change the socio-economic conditions that make it difficult or impossible for some people to protect themselves from HIV. The benefits

*Civil societies, communities, and individuals need to be empowered in order to foster the grass roots behavioural changes needed to vanquish the threat of HIV/AIDS*

*Public policy can affect the behavioural choices that spread HIV*

<sup>14</sup> McKee, M., 'Substance use and social and economic transition: the need for evidence', *International Journal of Drug Policy* 13 (2002), 453-459.

*Trust—particularly trust in the state—is a key precondition for successful public policies seeking to reverse the spread of HIV*

of this approach typically extend far beyond HIV prevention<sup>15</sup>.

From an individual's point of view, trust—particularly trust in the state—is a key precondition for successful public policies seeking to reverse the spread of HIV. For much of the region—particularly the CIS and Southeast European countries—the absence of such trust is one of communism's most devastating legacies. Many people who are HIV-positive or who engage in high-risk forms of behaviour believe that candid discourse with government or other actors in these matters will result in punishment and social exclusion. Many harbour doubts about whether their governments and societies value and want to help them. They do not always believe the official information they receive concerning the choices they can make. Nor do they believe that governments and societies really understand and are willing to frankly face up to the underlying causes of unsafe behaviour—vulnerability, poverty, exclusion—or to the sexuality associated with the spread of HIV. They are far from thinking that they are entitled to services that governments should provide.

*the formal guarantees of access to health care could facilitate efforts to promote the de facto recognition of the human and civil rights needed to empower the individuals and communities most threatened by HIV/AIDS*

Constitutions in most of the East European and CIS countries have maintained the formal guarantees of access to health care (as well as to education and employment) inherited from the socialist period. In many countries, the transition has not eroded attachment to such collective rights. This attachment could facilitate efforts to promote the de facto recognition of the human and civil rights needed to empower the individuals and communities most threatened by HIV/AIDS. The lack of respect for these basic rights effectively limits access to equitable, effective, and appropriate prevention and care. Human rights are particularly important in addressing drug use and dependency, sex work, sexual orientation and practices, human trafficking, and minority rights. Moralistic policies in areas of human sexuality or substance use can easily be self-defeating: by increasing individual and group vulnerability to HIV, such policies can make behavioural change more difficult and risky. In countries where very

repressive policies are implemented, individuals at highest risk are very unlikely to seek treatment for HIV or utilise prevention options.

HIV/AIDS trends in this region can not be isolated from broader geographic trends. The region's links between HIV and drug use (which is the disease's main driver at the moment) reflect its ties to neighbouring regions. Drug use in the region is closely related to production and trafficking of opiates in and through Afghanistan, Pakistan, and Iran—opiates that are destined for West European markets. Measures to combat the threat of HIV/AIDS in Europe and the CIS must reflect this broader geographical context.

Underlying the statistics about HIV/AIDS in the region are millions of people, many of whom are under 30, most of whom are men. The success of the region's political and social transitions depends on these younger generations. For them, better prospects for human development mean realistic hopes for a future filled with more opportunities and choices. Unless the threats of HIV, drug addiction, poverty, and vulnerability are addressed, their promise cannot be fulfilled. If engaged, they can be a tremendous force for positive change.

The United Nations Development Programme (UNDP) believes that this publication can also be a positive force for change. It combines data from national and international sources with analysis and advocacy developed by some of the best specialists on the human development challenges posed by the region's HIV/AIDS threat. It offers policy makers a clear, focused picture of the nature of the threat, and relevant policy suggestions for dealing with it.

Chapter I focuses on HIV/AIDS epidemiological trends in the countries of Eastern Europe and the CIS. It describes for the lay reader the methodologies used by the region's public health services to identify and measure the extent and movement of the epidemic, and points out the areas in which the epidemiological data leave much to be desired. With this large caveat, Chapter I illustrates the different epidemi-

<sup>15</sup> *Confronting AIDS: Public Priorities in a Global Epidemic*, The World Bank, 1997, Washington D.C.

ological trends apparent in various sub-regions, with the disease's frightening trajectory in the Western CIS and Northern Baltic countries contrasting with the progress that has been made in Central Europe.

Chapter II provides information about epidemiological trends among key risk groups, including injecting drug users, sex workers, prisoners, and men who have sex with men. The chapter concludes by pointing out that a number of countries are close to (if not already exceeding) the 1 percent prevalence benchmark for adult population living with HIV. This suggests that, even if a generalised epidemic can be avoided, the costs of treating those people who have already contracted HIV will rise substantially in the coming years. The chapter also shows that policy makers in many of these countries—particularly in the Western CIS and the Northern Baltics—can no longer afford abstract, moralistic approaches to could become a devastating public health problem. A better policy balance must be found between exclusion and criminalisation on the one hand, and tolerance, inclusion, and treatment on the other.

Chapter III explores the economic, poverty, and human development impact of HIV/AIDS in the region. It examines how current socio-economic trends affect the 'risk environment' and increase vulnerability and susceptibility to HIV/AIDS. It also considers the potential future impact of a possible generalised HIV/AIDS epidemic on life expectancy, the economy, society and households. This chapter provides a brief overview of the nascent economics literature on how growth models can be used to forecast the long term effects of the epidemic. And it documents how the epidemic may pose a national security threat to the region's premier military power, the Russian Federation. The chapter shows that the Western CIS and Northern Baltic countries that have the region's most disturbing epidemiological profiles also have the most unfavourable demographic trends, in terms of shrinking populations and labour forces, rising mortality and morbidity trends, and declining replacement rates. This will pose major—perhaps unprecedented—challenges in the area of social policy reform.

Chapter IV analyses the human rights dimension of HIV/AIDS in the region. It

points out that many of the problems facing policy makers—ranging from the often poor quality of the epidemiological data to the authorities' inability to fully reach those marginalised groups most at risk—stem from communism's legacy of distrust and disempowerment. The NGOs and other civil society groups that have played key roles in halting or reversing the spread of HIV/AIDS in many countries are newcomers in much of the region, which is undergoing a profound democratisation experiment. In many countries, injecting drug users, sex workers, gay men, and members of other risk groups have doubts about whether the post-communist state will respect their human rights if they seek to avail themselves of testing and treatment services. Overcoming this legacy requires that states in this region unambiguously recommit themselves to the democratisation agenda, in order to protect human rights and build the rule of law. Chapter IV also notes that, while a body of national legislation and international agreements designed to combat the epidemic is now in place, this legal framework is far from a sufficient answer to the region's HIV/AIDS challenge. A number of countries have yet to bring their national legislation into full compliance with their international obligations, particularly in terms of the relevant anti-discrimination statutes.

Chapter V examines the trade-offs, choices, and linkages between preventing and treating HIV/AIDS that must be faced when developing an effective response to the epidemic. It argues that the 'prevention versus treatment' dilemma is a false choice: countries need to do both in order to respond effectively to the epidemic. In principle, of course, the preferred option is prevention, via behavioural changes that reduce the likelihood of risky sexual and drug taking activities. In practice, however, millions of people in the region are already living with HIV, and growing numbers will need to be treated for AIDS. Fortunately, effective and increasingly affordable techniques for treating HIV/AIDS—especially antiretroviral therapy—are becoming more available. Treatment not only alleviates human suffering: it also minimises the socio-economic costs of the epidemic, by allowing people living with AIDS to lead productive lives as workers, parents, and community members. Unfortunately, only

*A number of countries are close to (if not already exceeding) the 1 percent prevalence benchmark for adult population living with HIV*

*The 'prevention versus treatment' dilemma is a false choice: countries need to do both in order to respond effectively to the epidemic*

a handful of countries in the region have responded well to the challenges of treatment, and today's HIV trends suggest that large increases in the numbers of people living with AIDS can be expected in the future. Chapter V also describes the kind of leadership response that is needed to confront the HIV epidemic, and discusses the ways in which the region is meeting this challenge. It reviews the scope of the response from civil society, examines international financial support for HIV/AIDS prevention and care in the region, and describes UNDP's 'Leadership for Results' programme.

Chapter VI briefly describes some of the 'success stories' in responding to the epidemic that have been recorded in other regions, in both developing and developed countries. It then summarises the report's main findings, underscoring once again the importance of information, inclusion, and leadership.

# Chapter I: HIV/AIDS Epidemiological Trends in Central and Eastern Europe and the CIS

*Strikingly patterned outbreaks of HIV, tuberculosis and even Ebola—and the social responses to these outbreaks—all suggest that models of disease emergence need to be dynamic, systemic and critical. They need to be critical of facile claims of causality, particularly those that scant the pathogenic roles of social inequalities. Critical perspectives on emerging infections must ask how large-scale social forces come to have their effects on unequally positioned individuals in increasingly interconnected populations; a critical epistemology needs to ask what features of disease emergence are obscured by dominant analytic frameworks. Such models must strive to incorporate change and complexity and must be global in scope, yet alive to local variation<sup>16</sup>.*

This chapter presents the surveillance data describing the size and the nature of the HIV/AIDS epidemic in the region, and the extent and significance of related behavioural risks and trends in the epidemic. It describes the geographic and social distribution of risks, of vulnerability to HIV/AIDS, and of its consequences.

The countries of Central and Eastern Europe and the Commonwealth of Independent States (CIS) were largely spared the spread of HIV/AIDS that took hold in Western Europe and North America in the 1980s. Until 1994, countries in this region had few reported HIV infections, with most of these attributable to men having sex with men. Romania had a large HIV outbreak among children linked to unsafe injection practices, and Poland saw a significant but limited outbreak among

injecting drug users, but these were by and large exceptions.

This began to change in 1995, with the first large HIV outbreaks were reported in Ukraine among injecting drug users. This was followed by an outbreak among injecting drug users in Belarus later that year, and in the following year by drug-related outbreaks in Kaliningrad and other parts of the Russian Federation. By 2001 the region had reported some of the world's highest annual growth rates of new HIV cases. According to the most recent UNAIDS estimate, between 1.2 and 1.8 million people for the region were living with HIV/AIDS at the end of 2003<sup>17</sup>. Even the lower end of this range would represent a sharp increase over the 1.0 million reported at the end of 2001<sup>18</sup>. The epidemic claimed as many as 37,000 lives in 2003.

Most of the countries in Central and South Eastern Europe have low-level epidemics<sup>19</sup> today. Poland, Romania, and Serbia and Montenegro are exceptions, reporting concentrated epidemics. Many CIS countries are also reporting concentrated epidemics, with the exception of Georgia, the Kyrgyz Republic, and Tajikistan. Prevalence data for Azerbaijan and Turkmenistan are not available. According to UNAIDS data, HIV prevalence rates Estonia, Russia, and Ukraine, at the end of 2001 were close to 1 percent of the adult population<sup>20</sup>. Such a state of affairs did not then constitute a generalised epidemic, since the spread from high risk to risk groups—as measured by HIV prevalence among pregnant

*By 2001 the region had reported some of the world's highest annual growth rates of new HIV cases*

<sup>16</sup> Paul Farmer, *Infections and Inequalities*, University of California Press, 1999, Berkeley.

<sup>17</sup> UNAIDS, *AIDS Epidemic Update*, December 2003, Geneva, p. 5.

<sup>18</sup> Table of Country-specific HIV/AIDS Estimates and Data, End-2001' UNAIDS data (1 July 2002), [http://www.unaids.org/html/pub/global-reports/barcelona/tableestimatesend2001\\_en\\_xls.htm/](http://www.unaids.org/html/pub/global-reports/barcelona/tableestimatesend2001_en_xls.htm/).

<sup>19</sup> Low level epidemic—less than 1 percent prevalence among pregnant women and less than 5 percent prevalence in groups at high risk; concentrated epidemic—less than 1 percent prevalence among pregnant women and at least 5 percent prevalence in at least one high-risk group. The term 'generalised epidemic' is officially defined in UN publications as 'adult prevalence consistently greater than one percent in both urban and rural areas' (*Report of the Secretary General: Progress towards implementation of the Declaration of Commitment on HIV/AIDS*, UN General Assembly, 58th session, 25 July 2003, New York, p. 7.)

<sup>20</sup> Table of Country-specific HIV/AIDS Estimates and Data, End-2001' UNAIDS data (1 July 2002), [http://www.unaids.org/html/pub/global-reports/barcelona/tableestimatesend2001\\_en\\_xls.htm/](http://www.unaids.org/html/pub/global-reports/barcelona/tableestimatesend2001_en_xls.htm/).

women—was still limited. The rapid growth in HIV prevalence reported during 2002-2003 for the region strongly suggests, however, that this rubicon has been crossed—particularly in the Western CIS and northern Baltic countries.

The future of the HIV/AIDS threat in the region is uncertain. Surveillance data are incomplete and inconsistent, and therefore insufficient for conclusive predictions. What is certain, though, is that the epidemic is still in its early stages, and that existing conditions—particularly those pertaining to injecting drug use, sex work, and high rates of sexually transmitted infections—are conducive to its spread.

*The epidemic is still in its early stages, but conditions are conducive to its spread*

The region’s epidemiological situation is heterogeneous, both between and within countries. But regardless of the size of the country or current epidemiological trends, quite clear patterns of local sub-epidemics can be identified. Today, this is predominantly an epidemic among urban, young, male, injecting drug users and their sexual partners<sup>21</sup>, with a few other transmission groups of growing significance. In this respect the countries of Central and Eastern Europe and the CIS seem to differ from other regions, where the epidemic has affected women and men in roughly equal proportions.

There is great political and cultural heterogeneity in this region of over 400 million persons living in more than 25 countries. The size of populations at high risk varies greatly, and even in those countries with sizeable populations at high risk and substantial numbers of new infections, concerted political will and public health action can have a significant impact on the future trajectory of the disease.

**Figure 1:**

*Estimated HIV prevalence rates and number of people living with HIV/AIDS, end of 2001.*

*Source: UNAIDS/WHO (2002)*



<sup>21</sup> See *Report of the Secretary General: Progress towards implementation of the Declaration of Commitment on HIV/AIDS*, UN General Assembly, 58th session, 25 July 2003, New York, p. 6.

## HIV/AIDS surveillance

Surveillance is vital in providing the data needed by public health decision makers. It should offer the reliable and timely information needed to understand the size and nature of the epidemic, and its geographic spread and trends over time. Good surveillance provides on a continuous, comparable basis data on risk behaviours and risk environments, on the coverage, quality, and impact of prevention, care, and treatment services. It should link data from a variety of relevant sources, such as HIV and AIDS case reports, death registries, surveillance data on sexually transmitted infections, illicit drug supply, demand and treatment data, hospital records on admissions, HIV/AIDS treatment and care outcomes, economic data, and the like. Surveillance needs to be standardised, representative, and sensitive enough to capture short-term changes in epidemiological trends. It should also conform to ethical standards, and protect the rights of the individuals covered by the surveillance.

Good-quality surveillance data are a public good and a basic precondition for responding effectively to HIV/AIDS. Unfortunately, while the extent and scope of HIV/AIDS surveillance in the region varies greatly among countries, it is generally incomplete and insufficient. Inadequate knowledge of HIV/AIDS's basic epidemiological profile in this region may be the single biggest obstacle to combating it.

Two formal surveillance methods are mostly used: national case reporting, and sentinel surveillance. 'Second generation surveillance' is also taking hold in the region. This concept supplements traditional case reporting and sentinel surveillance with surveillance of sexual and drug use behaviour, of sexually transmitted infections and of hepatitis C, rapid assessments of risks and populations, monitoring and evaluation of service provision, estimations of the size of populations at high risk, and the like. Unfortunately, expanded surveillance is being introduced very slowly and inconsistently, and not always on a sustainable basis.

**Case reporting.** National reporting of newly diagnosed HIV and AIDS cases and of AIDS-related deaths in the region started as soon as diagnostic tests became available. This reporting is based on large scale and sometimes mandatory HIV testing. Despite HIV testing, policy changes, and improvements in national surveillance in a number of countries, case reporting still serves as the main source of information on epidemiological trends and levels<sup>22</sup>.

Over 24 million persons are tested annually for HIV throughout the region (excluding testing of blood donations and unlinked anonymous testing). Efforts have been made to standardise case reporting in the region, but there is still great variety in data collection, completeness, and quality, as well as in how data are interpreted, presented and used. Some countries include only the results of testing on their own citizens and exclude data from tests on foreigners from national statistics. Since migration is often an important HIV transmission factor, this can be a serious omission. Case reporting is not always anonymous. Only limited sets of data are included in national reporting, and these are not consistent over time or across the region. Links between HIV and AIDS registries are not always well established; AIDS cases are not included in HIV case reporting, and duplication is not always prevented.

The European Centre for Epidemiological Monitoring of AIDS (EuroHIV) recommends that case reporting data be population-based, as this approach is usually free of sampling biases and hence is useful for monitoring overall trends. Nevertheless, the identification of cases, in particular those of HIV without AIDS, depends heavily on patterns of HIV testing, as more active testing programmes will detect more cases of infection in individuals with no or minimal symptoms. During transitions from mandatory to voluntary HIV testing, case reporting is heavily influenced by the availability of voluntary counselling and testing services (scarce in the region), and by the extent of health seeking behaviour of persons at high risk.

Two prominent features of HIV case reporting in 2002—a sharp decrease in reported

*Good-quality surveillance data are a public good and a basic precondition for responding effectively to HIV/AIDS*

*Surveillance should conform to ethical standards, and protect the rights of the individuals covered by the surveillance*

<sup>22</sup>European Centre for the Epidemiological Monitoring of AIDS (EuroHIV) (2003) *HIV/AIDS Surveillance in Europe End-year Report, 2002*. Saint Maurice: Institut de Veille Sanitaire, no. 68.

*Both sentinel surveillance and occasional surveys often use samples of convenience. These may be indicative, but are often unrepresentative of the populations in question*

new HIV cases from injecting drug use in Russia, and continuously insignificant numbers of HIV transmitted through male-to-male sex—can easily be explained by deficiencies in case reporting (Figure 2). Thus, while useful, these data should be interpreted with caution<sup>23</sup>.

**Sentinel surveillance.** Weaknesses in case reporting are precipitating a gradual shift to sentinel surveillance in much of the region. Sentinel surveillance does not attempt to identify all cases, but instead targets groups at varying degrees of risk for HIV and periodically tests a sample of them. Sentinel surveillance is typically conducted on a defined population (such as sex workers, or men who have sex with other men) in a particular area, or can be done at a surveillance site with relatively constant features over time, such as a drug treatment centre or a clinic that treats sexually transmitted infections.

Sentinel surveillance conducted on a range of at-risk groups in a country can yield a fuller picture of risks than does case reporting. If performed over time and in a standardised and comparable manner, it can provide valuable insights into epidemiological trends. Sentinel surveillance is increasingly coupled with simultaneous surveys of risk behaviours of the same individuals (e.g., drug preparation and injection equipment sharing habits, or sexual behaviour). This behavioural sentinel surveillance offers public health authorities additional information on the types, levels, and trends of risks. These data can also

be used for the design, implementation, monitoring, and evaluation of prevention interventions. Limitations of sentinel surveillance include relatively high risks of sampling bias and the related problem of unknown characteristic of the actual population under surveillance, which limits the generality of the study results.

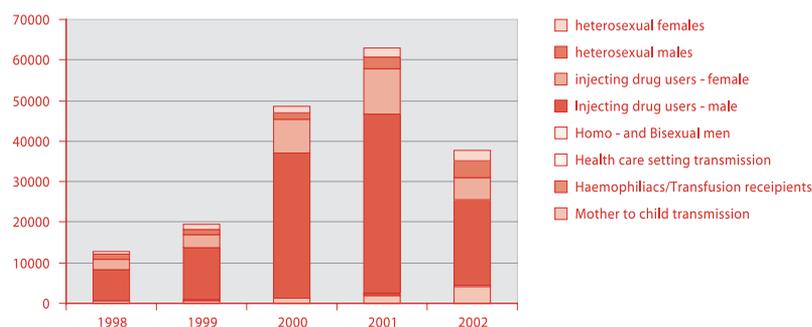
Albania, Armenia, Kazakhstan, Slovenia, Ukraine and other countries in the region have introduced sentinel HIV surveillance in the past few years. Despite its drawbacks, this has generally been of great benefit for monitoring epidemiological trends and shaping policy responses.

**Occasional surveys.** Occasional surveys of at-risk groups are performed in all countries of the region. These surveys may focus on HIV infection, risk behaviour, or both. They are usually cross-sectional, although other study designs are occasionally used. These surveys are conducted by international and national institutions and authorities. They provide valuable information about the current state of the epidemic, and point to the need for more scientific evidence about epidemiological trends in the region.

The limitations of occasional studies are similar to those of sentinel surveillance. Both surveys often use samples of convenience, such as visitors to a gay venue, or clients of an outreach programme servicing injecting drug users. These samples may be indicative, but they are often unrepresentative of the entire population in question. Surveys of HIV prevalence in at-risk groups and behavioural surveys in recent years have provided most of the data referred to in this chapter.

**Region-wide surveillance.** Surveillance data from national sources are regularly collected at the regional level by a number of organisations and institutions, and are made available to the public. Some 52 European countries report individual, anonymous data on new HIV and AIDS cases every six months to the European Centre for Epidemiological Monitoring of AIDS (EuroHIV). EuroHIV also maintains a database of HIV prevalence studies in the region, and publishes information about them in its reports<sup>24</sup>.

**Figure 2:** Newly reported HIV cases with known transmission route, entire region, excluding Turkey. Source: EuroHIV (2003)



<sup>23</sup> *Ibid*

<sup>24</sup> EuroHIV is a collaborating centre of the World Health Organisation's (WHO) Regional Office for Europe and of UNAIDS, and is located at the Institut de Veille Sanitaire in Paris.

UNAIDS and the World Health Organisation (WHO) collect annual data from HIV/AIDS case reporting on the prevalence of HIV, AIDS, and sexually transmitted infections, and develops estimates of national HIV prevalence for all UN member states. They also collect data and information on the epidemic, responses, and global impact, and conduct numerous individual surveys and research projects. Individual country information is publicly available in the format of country-specific epidemiological fact sheets on the Internet<sup>25</sup>.

The WHO's Regional Office for Europe (WHO EURO) collects HIV/AIDS surveillance data from its 52 member states, as well as the national surveillance data on sexually transmitted infections that are collected via the annual WHO/UNICEF joint infectious diseases questionnaire. Data are available on its website<sup>26</sup>. WHO EURO also periodically surveys the region for other kinds of surveillance information, such as health care services coverage (substitution drug treatment, access to antiretroviral drugs, and the like).

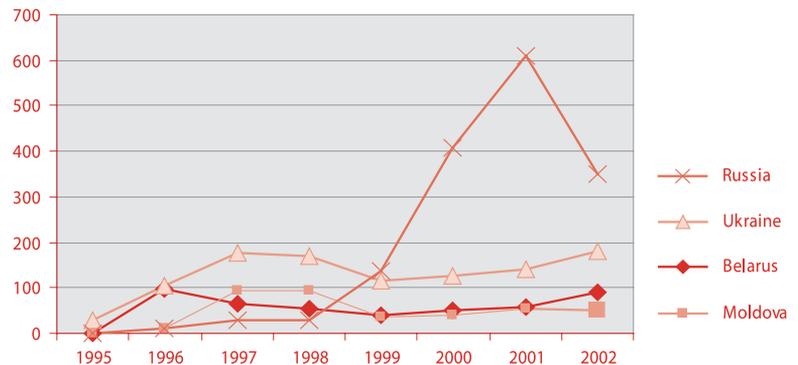
The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) in Lisbon collects information and data concerning drugs and drug dependencies and their consequences, primarily in EU countries and Norway, but also in EU accession countries.

The United Nations Office for Drugs and Crime (UNODC) collects and publishes data on illicit drug demand and supply, and on drug use treatment in all UN member states, including all the countries of Central and Eastern Europe and the CIS.

## Regional overview of epidemiological trends

The issues described in the previous section preclude a detailed analysis of the existing data. Still, some broad sub-regional epidemiological trends can be identified<sup>27</sup>.

**Figure 3:** Newly reported HIV infections in Belarus, Moldova, Ukraine and the Russian Federation, 1995-2002. Rates per million population. Source: EuroHIV (2003)



### Western CIS: The Russian Federation, Ukraine, Belarus, and Moldova

The UNAIDS data suggest that the epidemic is most serious in the Western CIS countries, understood as the Russian Federation, Ukraine, Belarus, and Moldova. Prevalence rates for the adult population in Ukraine and Russia at the end of 2001 were reported at 1.0 and 0.9 percent, respectively—the region's highest (along with Estonia's 1.0 percent). While Belarus and Moldova reported relatively low prevalence rates (of 0.3 and 0.2 percent, respectively) in 2001, these countries' growth in new HIV cases during 2001-2002 was among the highest in the region<sup>28</sup>. Moreover, since Russia and Ukraine account for some two thirds of the population of the CIS countries, and since citizens in these countries travel freely (on a visa-free basis) to other CIS countries<sup>29</sup>, epidemiological trends in Russia and Ukraine clearly have a major influence on trends in other CIS countries.

Among the CIS countries, Belarus and Ukraine have the longest experience with HIV. Until the second half of the 1990s only a few individual cases of HIV, due mainly to sexual or nosocomial<sup>30</sup> transmission, had been reported. Ukraine noted its first

*Prevalence rates for the adult population in Ukraine and Russia at the end of 2001 were reported at 1.0 and 0.9 percent, respectively—the region's highest along with Estonia's 1.0 percent*

<sup>25</sup> See <http://www.unaids.org/en/geographical+area/by+country.asp>.

<sup>26</sup> See <http://cisid.who.dk/HIV-STI/>.

<sup>27</sup> Unless otherwise identified, the data in this section come from the EuroHIV data base.

<sup>28</sup> UNAIDS, *AIDS Epidemic Update*, December 2003, Geneva, p. 14.

<sup>29</sup> Citizens of Georgia, many of whom require visas to enter the Russian Federation, are a notable exception.

<sup>30</sup> Originating or taking place in a hospital.

*The heterogeneity of the epidemiological situation in Russia is apparent in the great variety of prevalence rates among high risk populations*

significant outbreaks in 1995, Belarus and Russia in 1996, and Moldova in 1997—all of which were concentrated among injecting drug users in clearly recognisable local communities (Figure 3, page 15). Within the next 2-3 years, HIV outbreaks took place in all four countries. These outbreaks showed patterns associated with injecting drug use, which according to many indicators underwent explosive growth in those years. Difficult socio-economic conditions, and the consolidation of trading routes supplying cheap Central Asian heroin through and to the four countries, apparently contributed to these outbreaks.

In the **Russian Federation** the number of newly reported HIV infections doubled every 6-12 months during 1995-2001, when case reporting peaked with a record 88,336 new HIV cases. By August 2003, the Russian Federation had reported some 800 AIDS cases and some 600 AIDS deaths<sup>31</sup>. Of the HIV cases with documented transmission routes, 90 percent are attributable to injecting drug use, 6 percent to heterosexual contact, 3.5 percent

are children born to HIV-infected mothers, and the remainder are attributed to male-to-male sex. Of all the 24,000 new infections with documented transmission routes reported in 2002, the shares are 76, 12, 12 and 0.2 percent, respectively<sup>32</sup>. Although significant geographic variance is apparent across the Federation, HIV/AIDS cases have been reported in 88 of Russia's 89 sub-national administrative units<sup>33</sup>. Analysis of case reporting shows that the epidemic is growing unevenly throughout the country, with most regions reporting at least moderate numbers of new HIV cases since 2000.

The heterogeneity of the epidemiological situation in Russia is apparent in the great variety of prevalence rates among high risk populations. For example, studies in 13 Russian cities conducted between 2000 and 2002 found HIV prevalence rates ranging from 0 percent (treatment seeking injecting drug users in Arkhangel'sk) to 65 percent among needle exchange<sup>34</sup> project clients in Irkutsk (Table 1). Data from routine diagnostic testing indicate that, out of almost 25 million individuals tested in 2002, only 9,489 were classified as homo- or bisexual men, and only 0.3 percent of those tested were HIV positive. These data suggest that this population is poorly covered by HIV testing and reporting procedures. The lack of data on male-to-male sex and HIV risk in Russia (as with most of the rest of the region) is a serious gap in our knowledge, and further reduces our abilities to estimate and model the epidemic. On the other hand, out of 2.9 million pregnant women tested in prenatal care programmes in 2002, only 0.1 percent were HIV positive—a hopeful sign. The corresponding rate among the 740,000 prisoners tested was about 1 percent.

Somewhat surprisingly, the number of new HIV infections recorded in 2002 dropped by some 40 percent (see Box 1). Some Russian experts explain the marked

**Table 1: Sample studies of HIV prevalence among injecting drug users in selected cities in the Russian Federation 2000-2002**

Town	Year	Source	Prevalence among needle-exchange project clients (number tested)	Prevalence among injecting drug users in drug treatment facilities (number tested)
Arkhangel'sk	2002	UNAIDS/WHO	0.5% (212)	0%
Yekaterinburg	2002	UNAIDS/WHO	34% (82)	26% (1.80)
Irkutsk	2002	UNAIDS/WHO	65% (152)	56% (1.81)
Moscow	N/A	UN Reference Group	-	0.1% (980) – 28% (6.0)
Novosibirsk	N/A	UN Reference Group	-	6% (239)
Pskov	N/A	UN Reference Group	0.0% (543)	-
Rostov na Donu	2002	UNAIDS/WHO	18% (200)	3% (150)
Samara	2002	UNAIDS/WHO	29% (150)	27% (150)
St. Petersburg	2002	UNAIDS/WHO	36%	-
St. Petersburg	N/A	UN Reference Group <sup>35</sup>	0.3% (1500) – 36% (270)*	-
Sverdlovsk	2001	Sverdlovsk Oblast Psychiatric Clinic	-	28%
Togliatti	2001	Imperial College	56% (426)	-
Tver'	2002	UNAIDS/WHO	55% (137)	56% (24)
Western Siberia	N/A	UN Reference Group	6% (239)	-

\* A range is used in this case because different studies show different picture

<sup>31</sup> AIDS Foundation East-West (2003), <http://www.afew.org/english/statistics/russia.htm>

<sup>32</sup> HIV/AIDS Surveillance in Europe. European Centre for the Epidemiological Monitoring of AIDS. December 2002. [http://www.eurohiv.org/reports/report\\_68/pdf/report\\_eurohiv\\_68.pdf](http://www.eurohiv.org/reports/report_68/pdf/report_eurohiv_68.pdf).

<sup>33</sup> UNAIDS, *AIDS Epidemic Update*, December 2003, Geneva, p. 14.

<sup>34</sup> Unless otherwise specified, the phrase 'needle exchange' programmes/projects also refers to the exchange of syringes and other equipment used for injecting drugs.

<sup>35</sup> UN Reference Group on HIV/AIDS prevention among injecting drug users. Database of prevalence studies 2000-2002 (2003).

decline in newly reported HIV cases in 2002 as the result of testing 'saturation' among injecting drug users. This argument is consistent with the growth in the share of cases attributable to heterosexual contact. However, data suggesting that large areas of the Russian Federation are not yet fully affected by the epidemic, and showing great variety in HIV prevalence rates among injecting drug users in individual locations (combined with no data for the majority of urban and rural areas), cast doubt on this argument.

UNODC estimates that 2-3 percent of the Russian population aged 15-64 is using drugs (three times as many as in Western Europe), and that two percent can be categorised as problem drug users, with the majority are injecting heroin. This suggests an estimate of injecting drug users in Russia at around 1.5 million—the upper bound of the UNAIDS range. If this is correct, then with 120,000 reported HIV cases among injecting drug users, the majority of injecting drug users in Russia are either not yet infected, or are not diagnosed and/or reported. In either case, there would still be ample space for the epidemic to grow even within this high risk group. Detected HIV prevalence rates among injecting drug users are also still below (sometimes significantly so) the saturation levels observed in cities around the world with significant injecting drug use and HIV epidemics.

Although the epidemic in **Ukraine** started a few years before the epidemic in Russia, trends in the CIS's two most populous countries share a number of common characteristics. These include great sub-national variety in newly reported HIV cases, and worrisome prevalence rates in high risk groups.

UNAIDS estimated that there were as many as 320,000 people living with HIV/AIDS in Ukraine at the end of 2001, representing more than 1 percent of the adult population. By April 2003, Ukraine had reported a total of 54,680 new HIV infections, and about 4,300 AIDS cases and 2,400 AIDS deaths. Another 11,000 persons living with HIV were listed as dying from other causes<sup>36</sup>. The regions

**Box 1: Why have the numbers of newly registered HIV cases in Russia fallen recently?**

The answer to this critical question remains the object of speculation—particularly since Russia's case-reporting surveillance system has limited capacity to explain shifts in reported epidemiological trends. Dr. Vadim Pokrovsky, chief of the Russian Federal AIDS Centre, believes that reductions in reported HIV cases in 2002 were not a true reflection of changes in HIV incidence. Instead, he believes that they resulted from declines in the number of at-risk people reached by the surveillance system. Pokrovsky notes that, while the number of reported new infections decreased by roughly 41 percent from 2001 to 2002, the number of drug users tested also fell by 38 percent during this time. Thus, changes in "the number of newly registered cases of HIV infection may be associated merely with changes in the constitution of the tested group."

*Box based on "AIDS: Let's face the problem," Vadim Pokrovsky, Meditsinskaya Gazeta, 31 October 2003.*

worst affected were Odesa, Mikolaiv, Dnipropetrovsk, Donetsk, the Crimea, and Sevastopol, each reporting a cumulative prevalence rate of over 1,697 per million, and an incidence of newly reported cases of over 259 per million in 2002. In 2002, fourteen Ukrainian regions (with a combined population of 27.6 million) reported more than 100 HIV cases per million population, which was equivalent to the 2002 rate in United Kingdom. Each of the remaining thirteen regions (with a combined population of 20.6 million) reported between 9.6 and 96.3 cases per million.

Of the newly reported HIV cases in Ukraine with documented transmission routes since the beginning of the epidemic, 71 percent are attributable to injecting drug use, 21 percent to heterosexual contact, and 8 percent were children born to mothers living with HIV. Only 0.1 percent were attributed to male-to-male sex. In 2002, those proportions were 54, 30, 16, and 0.02 percent, respectively. After the first peak in the epidemic in 1997 due to the rapid spread of HIV in a handful of communities with significant injecting drug use, the numbers of new cases reported annually started to steadily grow again after 1999. While the number of new cases among injecting drug users remains stable or is growing only slowly, the overall increase is due to growth in heterosexually transmitted cases, among which women are the majority. The virtual absence of reported HIV infections through male-to-

<sup>36</sup> *HIV Infection in Ukraine - Information Bulletin No. 22*. Ministry of Health of Ukraine (2003), Kyiv.

Table 2: Results of HIV sentinel surveillance in Ukraine in 2002

Place	HIV Prevalence among injecting drug users (number tested)	HIV Prevalence among sex workers (number tested)	HIV Prevalence among injecting drug using sex workers (number tested)	HIV Prevalence among non-injecting drug using sex workers (number tested)	HIV Prevalence among reporting sexually transmitted infections (number tested)
Donetsk	40% (250)	31% (102)	36% (73)	21% (29)	1% (482)
Lutsk	32% (250)	4% (51)	33% (3)	2% (48)	1% (310)
Nikolaev	53% (250)	30% (100)	83% (18)	18% (82)	28% (300)
Odessa	58% (259)	22% (103)	33% (57)	9% (46)	10% (333)
Poltava	32% (250)	17% (100)	33% (35)	8% (65)	2% (300)
Simferopol	28% (250)	6% (100)	32% (19)	0.0% (81)	12% (300)
Kharkiv	17% (250)	12% (90)	39% (18)	6% (72)	0.3% (300)

Source: Ministry of Health of Ukraine (2003).

*The virtual absence of reported HIV infections through male-to-male sex almost certainly reflects significant underreporting*

male sex (as in other CIS countries) almost certainly reflects significant underreporting. The changing gender ratio of new HIV cases, which show growing numbers of infected women, is also causing marked annual increases in the number of children born to HIV positive mothers: from 12 in 1995 to 1,371 in 2002<sup>37</sup>.

Prevalence rates among injecting drug users in the most affected regions of Ukraine are comparable to those in Russia, Belarus, and Moldova, and show significant geographic variance (Table 2). Data on HIV prevalence among sex workers suggest that overall rates are much higher than among sex workers in Western and Central Europe. Rates among sex workers who use injecting drugs are higher than those among sex workers who do not, and are similar to prevalence rates reported among injecting drug users in general. Limited sample sizes, a lack of published information about the selection of participants in the studies, and great variances among prevalence rates reported for the same locations from different sources make generalisation difficult.

Numbers of newly reported AIDS cases in Ukraine began to rise dramatically in the mid-1990s, from 45 in 1995 to 1,356 in 2002. Likewise for AIDS deaths: from 20 in 1995 to 837 in 2002. Unlike Russia so far, Ukraine is already starting to feel the impact of a large-scale and growing HIV epidemic that is occurring in the absence of widespread access to antiretroviral treatment.

The first significant HIV outbreak in **Belarus** was noted among injecting drug users in Svetlogorsk (Gomel region) in 1996. By September 1998, 2,173 HIV cases were reported in the town (81 percent of all cases reported in the country at the time), and HIV prevalence rates among local injecting drug users reached 74 percent<sup>38</sup>.

HIV testing in Belarus is mandatory for blood donors, prisoners, patients with sexually transmitted infections, drug users, and sex workers. Data on people living with HIV are maintained in a national HIV database. Some 5,100 HIV infections, 65 AIDS cases, and 50 AIDS deaths had been reported by the end of June 2003. Of the HIV cases with documented transmission modes, 76 percent are attributed to injecting drug use and 23 percent to heterosexual sex. In 2002, these numbers were 64 and 35 percent, respectively. Of the 319 documented heterosexually transmitted cases in 2002, 52 percent were persons with high-risk partners, mainly injecting drug users.

As in neighbouring Russia and Ukraine, the epidemic has not spread evenly throughout the country. The largest numbers of people living with HIV were registered in the Gomel region (2,858 cases, or 187.09 per 100,000 population), and in Minsk (593 cases, or 34.62 per 100,000 population). HIV has been reported in 127 administrative territories, of which 16 were affected for the first time in 2002<sup>39</sup>.

National prevalence rates in different groups, as reported from diagnostic testing by the Ministry of Health for 2000 and 2001, were as follows: pregnant women—0.16 and 0.19 percent; injecting drug users—2.6 and 3.2 percent; patients with sexually transmitted infections—0.04 and 0.055 percent; and men who have sex with men—2.6 and 0.0 percent, respectively<sup>40</sup>. According to the results of sentinel HIV surveillance reported by the National AIDS Committee of Belarus in 2002, injecting drug users showed AIDS rates of 23 percent in Minsk, 84 percent in Zhlobine, 6 percent in Baranovichi, and 5 percent in Brest.

<sup>37</sup> HIV/AIDS Surveillance in Europe. European Centre for the Epidemiological Monitoring of AIDS. December 2002. [http://www.eurohiv.org/reports/report\\_68/pdf/report\\_eurohiv\\_68.pdf](http://www.eurohiv.org/reports/report_68/pdf/report_eurohiv_68.pdf).

<sup>38</sup> Vickerman, P., C. Watts, 'The Impact of an HIV prevention intervention for injecting drug users in Svetlogorsk, Belarus: Model Predictions', *International Journal of Drug Policy* 13 (2002).

<sup>39</sup> Grant application to the Global Fund for AIDS, TB and Malaria, Ministry of Health of Belarus, 2003, Minsk.

<sup>40</sup> Report to WHO EURO, Ministry of Health of Belarus, 2001, Minsk.

After initial rapid growth in new cases in 1997-1998, reported annual rates of new HIV cases in the **Republic of Moldova** stabilised at around 40 to 50 per million population, with a slowly increasing tendency. By the end of 2002, 1,691 HIV cases had been reported. Of those cases with documented transmission routes, 82 percent are related to injecting drug use and 17 percent to heterosexual sex. Only eight cases are attributed to male-to-male sex. The majority of HIV cases are concentrated in the districts of Balti (738) and Chishinau (535), with 175 reported cases in Transnistria, mostly in Tiraspol<sup>41</sup>.

### The Baltic States

The Baltic states are something of a paradox: they are among the region's most developed countries, and are on track to accede to the European Union in May 2004. Despite this, their HIV/AIDS profiles are extremely worrisome.

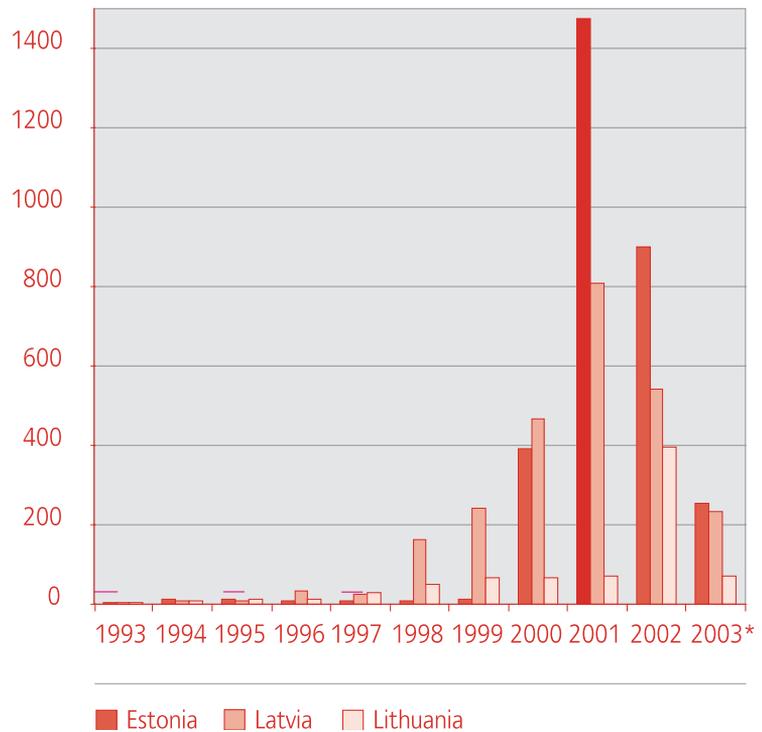
It is in **Estonia** where this contrast is most vivid: per-capita GDP in Estonia measured \$10,170 in 2001, even as the country reported an HIV prevalence rate of 1.0 percent. To make matters worse, UNAIDS data indicate that Estonia reported the region's most rapid growth in HIV incidence (new cases reported) during 2002-2003.

A similar (if not quite so stark) pattern is apparent in Estonia's southern neighbour **Latvia**, whose \$7,730 in per-capita GDP was accompanied by a 0.4 percent prevalence rate in 2001. Latvia also reported sharp growth in new infections in 2001 followed by decline during 2002-2003.

**Lithuania** is both somewhat poorer than Estonia (\$8,470 in per-capita GDP in 2001) and less threatened by the epidemic (0.1 percent prevalence rate in that year). Likewise, growth in new HIV cases during 2002-2003 in Lithuania was more moderate than in Estonia and Lithuania (although it was above average for the region)<sup>42</sup>.

**Figure 4:**

*Number of newly reported HIV cases in the Baltic states. Source: EuroHIV. Data for 2003 as of March 2003 for Estonia, and as of June 2003 for Latvia and Lithuania.*



Many factors can be invoked to explain this apparent paradox, notably the different socio-economic and institutional settings in these countries.

Epidemiological trends in the Baltic states show long periods of low rates of infection followed by a rapid increases, particularly in Estonia and Latvia in the late 1990s (Figure 4). In Estonia, numbers of people diagnosed as living with HIV soared from eight in 1996 to 3,400 through June 2003. Initially, male-to-male sex was the main transmission mode, but this changed in 2000 with a major HIV outbreak among Russian-speaking injecting drug users in Eastern Estonia. This followed a mostly unnoticed outbreak of hepatitis B and C in the same locations two years earlier. Esto-

*The Baltic states are something of a paradox: they are among the region's most developed countries, and their HIV/AIDS profiles are extremely worrisome*

<sup>41</sup> Ministry of Health of the Republic of Moldova, *HIV/AIDS Infection in the Republic of Moldova*, 2003, Chisinau.

<sup>42</sup> The epidemiological data quoted in this paragraph come from UNAIDS, *AIDS Epidemic Update*, December 2003, p. 14. The per-capita GDP data are in purchasing-power-parity terms, and are taken from *Millennium Development Goals: A Compact among Nations to End Human Poverty*, UNDP Human Development Report 2003, New York, p. 237.

nia had reported 34 cases of AIDS and 21 AIDS deaths by the end of June 2003. Out of 2,854 HIV cases with documented transmission routes, 84 percent have been attributed to injecting drug use, 13 percent to heterosexual activity, and 3 percent to male-to-male sex.

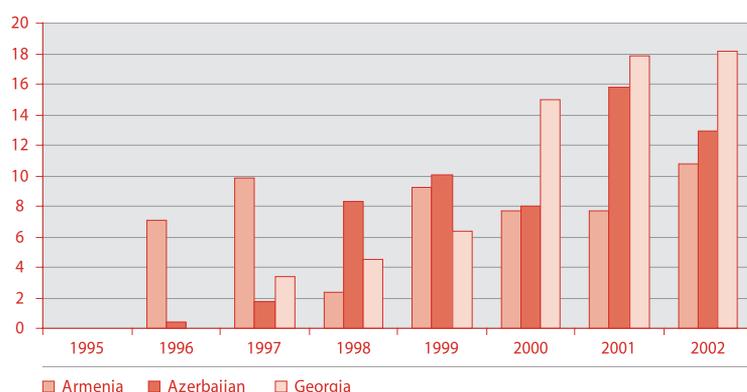
A burgeoning epidemic is also visible in Latvia, where annual reported numbers of new HIV infections rose from 17 in 1996 to a total of more than 1,000 in 2002. Some 2,530 HIV cases had been reported through mid-July 2003. Some 83 percent of these cases have been attributed to

and of the 777 cases with documented transmission, 84 percent were attributable to injecting drug use, eight percent to heterosexual transmission, and another eight percent to male-to-male sex. The majority of non-prison HIV cases are concentrated in Klaipeda and Vilnius.

### The Caucasus and Central Asia

The three countries of the Southern Caucasus and the five Central Asian countries share a number of characteristics that generate relatively similar HIV epidemiological trends (Turkmenistan, for which there is insufficient data, may be an exception). These countries generally report small numbers of people living with HIV/AIDS, with numbers of newly diagnosed HIV cases growing rapidly (from these low bases) due to instances of localised outbreaks. The centralised nature of the governments, combined with relatively low income levels and weak public health system capacity, make these sub-regions potential epidemiological flash points. With the partial exception of Kazakhstan (whose \$6,500 in per-capita GDP reported for 2001 was well above Ukraine's \$4,350<sup>43</sup>), these problems are particularly stark for Central Asia—and are further exacerbated by the sub-region's proximity to Afghanistan's heroin production and trafficking.

**Figure 5:**  
Newly reported HIV infections in the Caucasus, rates per million population. Source: EuroHIV (2003)



injecting drug use, 11 percent to heterosexual activity, and 5 percent to homo/bisexual transmission. Most of the HIV cases are concentrated in the capital of Riga, with a few significant foci in Western Latvian towns. Latvia also reported large number of new AIDS cases (169 cases) in 2002.

Lithuania was mainly spared worrisome epidemiological trends until a major HIV outbreak was reported in one of its prisons: 284 inmates (15 percent of the total) were diagnosed as HIV-positive between May and August 2002. This underscores the often overlooked importance of prisons for HIV surveillance and prevention activities. By mid-July 2003, Lithuania had registered a total of 805 HIV infections, 61 AIDS cases, and 26 AIDS deaths. Women account for nine percent of all HIV cases,

UNAIDS data indicate that **Armenia** had the highest prevalence rate in the South Caucasus (0.2 percent) in 2001, thanks in large measure to rapid growth (from a very low base) in the mid-1990s. In absolute terms, however, the epidemic remains quite small: 224 people living with HIV in Armenia were reported as of July 2003. Of the cases with documented transmission routes, 54 percent were attributed to injecting drug use and 44 percent to heterosexual transmission. All injecting drug use cases are men, the majority of whom temporarily resided in high-prevalence localities in Russia and Ukraine. Some 94 percent of the female cases are linked to heterosexual transmission. Reported transmission through injecting drug use is growing, with half of all reported cases residing in Yerevan. According to 2002 sentinel surveillance data, prevalence was

<sup>43</sup>By contrast, per-capita GDP in Tajikistan for 2001 was reported at \$1,170, with the other countries of Central Asia and the Caucasus between \$2,400 and \$3,100. All data in purchasing power parity terms. *Millennium Development Goals: A Compact among Nations to End Human Poverty*. UNDP Human Development Report, New York, 2003, p. 238.

zero percent for pregnant women and for men having sex with men, 1.2 percent for female sex workers, 5.5 percent in tested prisoners and 11-20 percent among injecting drug users.

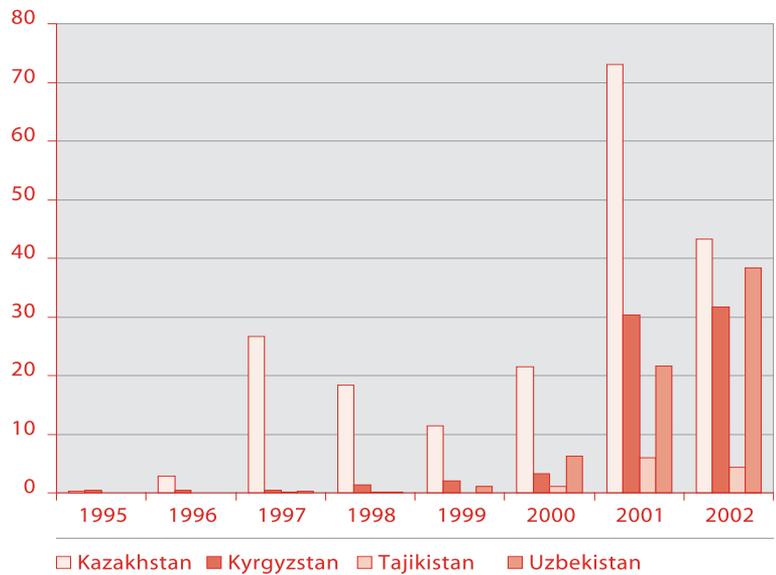
Similarly, half of all people living with HIV in **Azerbaijan** were diagnosed in Baku. Of the 556 people living with HIV reported by July 2003, 62 percent apparently contracted the disease through injecting drug use, 35 percent through heterosexual sex, and 1 percent via male-to-male sexual transmission. Significant numbers of people living with HIV apparently contracted the disease while temporarily residing in cities in Ukraine and Russia that have reported significant HIV outbreaks.

As Figure 5 shows, **Georgia** has reported the most rapid growth in the numbers of new infections (again, from a very low base) in the Caucasus during the past few years. 440 HIV cases were reported by July 2003. Of those, 72 percent were among injecting drug users and 25 percent were attributed to heterosexual transmission. Half of the people living with HIV in Georgia are located in Tbilisi. HIV prevalence rates for at risk groups were very low according to diagnostic testing in 2001: 0.54 percent for injecting drug users, 0.36 percent for patients reporting sexually transmitted infections, 1.4 percent among sex workers, and 0.67 percent in patients suffering from tuberculosis.

**Kazakhstan** has the most sophisticated data and most ambitious preventive measures in Central Asia. The recent introduction of a rather sophisticated HIV/AIDS surveillance system is generating significant amounts of useful data on a regular basis. Significant efforts have also been made to expand prevention activities by targeting high-risk behaviours and environments. Perhaps because of its relatively effective monitoring system (as well as its long border with the Russian Federation and relatively large Russian minority), Kazakhstan's reported epidemiological situation is somewhat less favourable than the other Central Asian countries. UNAIDS estimated HIV prevalence in Kazakhstan in 2001 at 0.1-0.3 percent, while the other Central Asian countries reported prevalence rates below 0.1 percent.

Some 3,700 new cases had been reported in Kazakhstan by 1 July 2003, as well as 85 AIDS cases and 80 AIDS deaths. Of the cases with

**Figure 6:** Newly reported HIV infections in four Central Asian Republics, rates per million population. Source: EuroHIV (2003)



documented transmission routes, 90 percent have been attributed to injecting drug use, 10 percent to heterosexual sex, and 0.5 percent to male homosexual and bisexual sex. As in other countries, the proportion of cases reportedly due to heterosexual contact is slowly growing, reaching 19 percent of the annual total reported in 2002.

The geographic distribution of HIV/AIDS is very uneven, with the majority of cases reported in Karaganda and Pavlodar (northern cities with large Russian communities close to the Russian border) and Almaty (the capital), as well as in the trading city of Shymkent. Those are also localities with the highest HIV prevalence rates among injecting drug users. The surveillance data show significant inter-city differentiation for almost all indicators, including the types of frequently used drugs, duration of injecting drug use, extent of sharing of injecting equipment, involvement of injecting drug users in sex work, and condom use rates.

As Figure 6 shows, **Uzbekistan** reported sharp annual increases in newly registered HIV cases during 1999-2002. By July 2003, Uzbekistan reported a total of 2,534 new HIV infections, and 6 AIDS cases. As in most other CIS countries, the vast majority of the people living with HIV in Uzbekistan are men (84 percent) in young age cohorts (56 percent are under 30). Some 84 percent reportedly contracted HIV

*The centralised governments in the Caucasus and Central Asia, combined with relatively low income levels and weak public health capacity, make these sub-regions potential epidemiological flash points*

*The trafficking of opiates from Afghanistan into and through the countries in the region gives them higher risks in terms of injecting drug use*

through injecting drug use and 15 percent through heterosexual contact. Only 1 percent was attributed to male-to-male sex. Some 75 percent of all cases were registered in the Tashkent area. Other regions each reported less than 4 percent of all HIV cases.

Despite its relatively favourable epidemiological profile, trends in Uzbekistan need to be closely monitored. Its relatively high degree of urbanisation and large population (about half of Central Asia's total), combined with the importance of injecting drug use as a transmission mode, suggest that prospects for further HIV outbreaks on a larger scale are uncomfortably high.

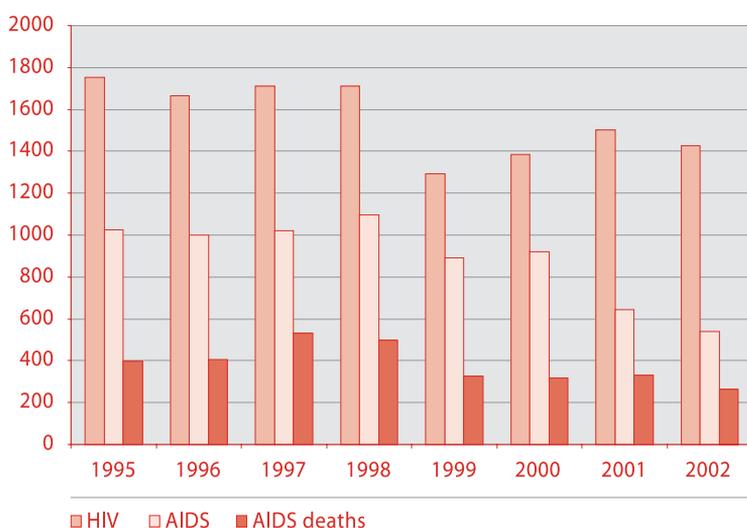
HIV is only now beginning to register in the **Kyrgyz Republic** and **Tajikistan**: only 364 HIV cases had been reported in the Kyrgyz Republic and 92 in Tajikistan as of mid-2003. Most of these were attributable to injecting drug use as in the rest of Central Asia, and are geographically concentrated. More than half of the people reported as living with HIV in the Kyrgyz Republic are located in one prison in the district of Osh.

The Kyrgyz Republic has introduced some elements of second-generation surveillance and that may help to more precisely assess risks in the future. In Tajikistan, inadequate public health resources have caused fluctuating HIV testing patterns over time, which create further difficulties in interpreting case-reporting results.

The trafficking of opiates from Afghanistan into and through these countries gives the Kyrgyz Republic and especially Tajikistan higher risks in terms of injecting drug use than would otherwise be the case. These countries' relatively low per-capita GDP and human development indicators (by these measures, Tajikistan and the Kyrgyz Republic are the poorest CIS countries) offer further grounds for concern. The fact that Tajikistan and the Kyrgyz Republic in 2000 reported only \$29 and \$145, respectively, in per-capita health expenditures (compared to \$415 for the Russian Federation and \$1,463 for Slovenia) underscores the basic frailty of the public health infrastructure in these countries<sup>44</sup>.

**Turkmenistan** has reported only two HIV cases so far, and almost no other national data are available. At risk populations are nonetheless present, and not only because of the country's proximity to Afghanistan and the opiates that are transported through Central Asia.

**Figure 7:**  
*Newly reported HIV, AIDS and AIDS death cases, Central and South Eastern Europe. Source: EuroHIV (2003)*



### Central and South Eastern Europe

Epidemiological trends in the sub-regions of Central Europe (the Czech Republic, Hungary, Poland, Slovakia, and Slovenia) and South Eastern Europe (Turkey, Bulgaria, Romania, Albania, the Former Yugoslav Republic of Macedonia, and Serbia and Montenegro) differ sharply from those in the CIS. Around 20,000 new HIV infections had been reported in these sub-regions by the end of 2002, three quarters of which were in two countries—Romania and Poland. In the same period, 11,927 cases of AIDS and 5,523 AIDS deaths were reported<sup>45</sup>.

<sup>44</sup> *Millennium Development Goals: A Compact among Nations to End Human Poverty*, Human Development Report, United Nations Development Programme, New York, 2003, pp. 254-56.

<sup>45</sup> HIV/AIDS Surveillance in Europe. European Centre for the Epidemiological Monitoring of AIDS. December 2002. [http://www.eurohiv.org/reports/report\\_68/pdf/report\\_eurohiv\\_68.pdf](http://www.eurohiv.org/reports/report_68/pdf/report_eurohiv_68.pdf).

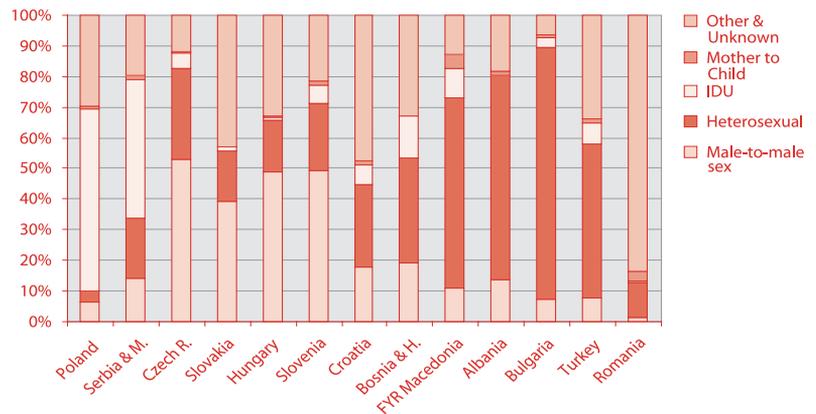
But while these overall numbers may seem large compared to many CIS countries, trends in newly reported HIV cases and AIDS deaths over the past decade have stabilised at low levels. In fact, the region's most hopeful epidemiological trends are to be found in these countries. According to the 2001 UNAIDS data, none of these countries reported prevalence rates above 0.1 percent<sup>46</sup>. By contrast, prevalence rates in Western Europe at the end of 2003 average 0.3 percent, and were in the 0.5-0.7 percent range in North America<sup>47</sup>. The better quality of the data and greater capacity in public health systems in these sub-regions offer further reasons for hope.

It should not be a surprise that the region's wealthiest countries that have made the most rapid progress in creating market economies and democratic societies have also experienced the greatest successes in managing HIV/AIDS. The challenges posed by acceding to the European Union (EU) have required the democratisation and modernisation of state structures and the empowerment of individuals and NGOs. These changes have promoted the good governance and grass-roots social and behavioural changes needed to reverse the epidemic. At the same time, the top leaders in most of these countries have not used their position to educate the public about HIV/AIDS, and in many of these countries sectoral policies have not yet struck the best balance between the criminalisation versus public health approaches.

While there are some common epidemiological features across these countries, trends are far from uniform. Most of the countries have mature epidemics, with the first cases and outbreaks recorded in 1980s. Some 14 percent of all infections are attributed to blood transfusions which, as in Western Europe, mainly occurred before the dangers of infected blood products were understood and appropriate screening measures introduced. To a greater extent than in CIS countries, HIV cases in Central and South Eastern Europe tend to be concentrated among foreign-

**Figure 8:**

*Reported HIV cases by transmission group, Central and South Eastern Europe. Source: EuroHIV (2003)*



ners. A significant share of nationals living with HIV/AIDS are believed to have 'imported' the disease, via such transmission modes as migrating workers and sailors who contracted HIV in Western Europe, Latin America, and South East Asia. HIV prevalence rates have been low in most high risk groups as well as among tested blood donors and pregnant women in these countries, with some exceptions (such as injecting drug users in Poland, and in Serbia and Montenegro). But although the epidemic has been held to low levels, most of these countries contain high risk groups that can be the source of future outbreaks.

**Poland** and **Serbia and Montenegro** have mature epidemics that are driven by injecting drug use, which started in the mid-1980s. New HIV cases in Poland peaked in 1990 with 809 cases reported, declined during the following three years (to 384 cases in 1993), and have increased slowly since then. By August 2003, Poland had reported 8,300 people living with HIV, 1,308 people living with AIDS, and 641 AIDS deaths. Injecting drug users account for the majority (4,898, or 59 percent) of all reported cases in Poland. Serbia and Montenegro reported 1,771 people living with HIV by the July 2003, as well as 1,078 AIDS cases and 731 AIDS deaths.

In 1989, **Romania** experienced a unique, major nosocomial HIV epidemic in which

*The region's most hopeful epidemiological trends are to be found in the countries of Central and South Eastern Europe*

<sup>46</sup> Table of Country-specific HIV/AIDS Estimates and Data, End-2001; UNAIDS data (1 July 2002), [http://www.unaids.org/html/pub/global-reports/barcelona/tableestimatesend2001\\_en.xls.htm/](http://www.unaids.org/html/pub/global-reports/barcelona/tableestimatesend2001_en.xls.htm/).

<sup>47</sup> UNAIDS, *AIDS Epidemic Update*, December 2003, Geneva, p. 14.

several thousand institutionalised children contracted HIV through blood transfusions. Most probably, Romania has the highest number of HIV infections in this sub-region. But irregularities in past case reporting prevent accurate assessments of the numbers of people living with AIDS. By the end of June 2003, Romania had reported 5,580 people living with HIV but 8,247 people living with AIDS, as well as 3,569 AIDS deaths. Despite two extensive reviews of its case reporting, this discrepancy between HIV and AIDS registries has never been resolved. The actual numbers of people living with HIV are probably between 5,500 and 14,000.

*The link between successful transitions and effective response to HIV/AIDS is an immensely powerful and positive outcome, which has not yet been fully appreciated*

In the remaining countries, HIV is predominantly sexually transmitted. In the **Czech Republic, Hungary, Slovakia, and Slovenia**, the majority of reported cases were transmitted through male-to-male sex, while in **Turkey, Bulgaria, Albania**, and the Former Yugoslav Republic of **Macedonia**, transmission has had a predominantly heterosexual character. As in the rest of the region, the vast majority of cases are concentrated in such major urban centres as Istanbul or Budapest.

## Conclusions and recommendations

The public health data in many Southeast European and CIS countries leave much to be desired. Despite this, it is clear that HIV/AIDS shows a very heterogeneous epidemiological profile in this region. In Russia, Ukraine, and Estonia, the epidemic is growing rapidly, and one percent of the adult population (or more) in these countries may have already become infected. In the absence of immediate and concerted action, there is a very real chance that the unfavourable epidemiological trends in these countries will continue, if not accelerate. While the epidemiological trends in Central Asia and the Caucasus are not yet as troubling, these sub-regions' poverty and their proximity to major opium trafficking routes must be treated as danger signs.

Many countries in Central and South Eastern Europe have recorded important successes in halting and reversing the spread of the epidemic. The Central European countries in particular have been able to leverage progress in building

strong market economies, vibrant democracies that protect human rights, and the state capacity needed for EU accession into effective responses to HIV/AIDS. This link between success in combating the epidemic and success in the transition is an extremely positive association, one that bodes well for the future. At the same time, successful transition outcome does not in itself guarantee an effective response. This is apparent in the case of Estonia, which combines one of the region's most successful transitions with some of its highest HIV prevalence rates.

HIV/AIDS may not be poised to devastate the region in its entirety. But the epidemic in many countries—particularly Russia, Ukraine, and Estonia—has progressed too far to be decisively defeated in the short and medium term. Latvia, Belarus, and Moldova are too close to the danger zone for comfort. Like millions of its citizens, the countries of the Western CIS and the Northern Baltics—which together comprise more than half the region's population—will have to learn to live with HIV/AIDS.

These conclusions suggest the following recommendations:

- *Significant investments need to be made in improving the data collecting capacity of the region's public health services, particularly in CIS countries. Expert disagreements about the veracity of the data showing declining HIV incidence in the Russian Federation during 2002-2003 underscores the importance of this point.*
- *The region's heterogeneous epidemiological trends show that a single policy template cannot be applied across the region. Instead, efforts must be made to identify those projects and initiatives that have been particularly successful in Central and South Eastern Europe, in order to transplant them to the Western CIS and Northern Baltic countries where the epidemic seems most at risk of 'breaking out' into the general population.*
- *Policy makers in Western CIS and Northern Baltic countries can no longer hope to halt it in early stages. They instead need to think in terms of minimising its social costs, by preventing its further spread and by developing effective treatment programmes for people living with HIV and AIDS.*

# Chapter II: Drivers of the Epidemic: Major Risk Factors, Risk Behaviours, and Groups at Risk

Knowledge of epidemiological trends can only guide policy makers if the mechanisms by which HIV is transmitted from one individual to another, and the circumstances and behaviours that are conducive to the spread of the epidemic, are thoroughly understood. Such an understanding must begin with the identification of high-risk behaviours and environments. The former include unsafe use of injecting drug equipment, substance dependencies, unsafe homo- and heterosexual relations with multiple partners, and sex work. Environmental risks include poverty, migration, imprisonment, social exclusion, and discrimination on the basis of ethnic, sexual, and other criteria. This chapter explores information about the extent and consequences of such risk elements in the countries of Central and Eastern Europe and the Commonwealth of Independent States.

While substance dependency and other high-risk behaviours are often linked to poverty and socio-economic deprivation, claims of direct, causal links between poverty, substance abuse, and HIV/AIDS are simplifications. Groups and individuals with similar socio-economic characteristics can have significantly different risks of substance abuse, or of contracting HIV. Only a small percentage of the millions of people in the region who are living in poverty develop substance dependencies, and only a subset of these have contracted infectious diseases. In order to understand the drivers of epidemiological trends, combinations of mutually aggravating risk conditions that put otherwise similar individuals at different levels of vulnerability vis-à-vis HIV must be identified.

## High Risk Behaviours and Environmental Factors

Economic hardship and insecurity, the erosion or relaxation of rigid social controls, and the armed conflicts that accompanied and followed the collapse of the Soviet Union and socialist Yugoslavia, combined with greater drug availability in the region to create propitious conditions for increases in injecting drug use since 1989. This is not an unprecedented historical phenomenon: large increases in drug use were recorded in Russia during the first world war and after the civil war of 1918-1920<sup>48</sup>. Nor is it unique to this region. Similar patterns of rapidly deteriorating health (particularly among adolescents and young adults), combined with sharp increases in substance dependencies and HIV and tuberculosis epidemics, have been documented in inner cities in the US and in urban centres in the UK. These phenomena have been described as 'societies fractured by changing circumstances' in which traditional values and support networks have been disrupted without being replaced with new ones. Such circumstances can produce large numbers of people, particularly young men, whose outlook is marked by futility, lack of purpose, and emotional emptiness and despair<sup>49</sup>.

The available data strongly suggest that HIV risks in this region are multiple and heavily concentrated, socially, geographically, and demographically. Persons and groups most vulnerable to HIV/AIDS are generally exposed to other risks as well. Substance use, multiple sexual partnerships, infrequent condom use, and frequent sexually transmitted infections are

*Claims of direct, causal links between poverty, substance abuse, and HIV/AIDS are simplifications*

<sup>48</sup>Conroy, M.S. 'Abuse of drugs other than alcohol and tobacco in the Soviet Union', *Soviet Studies* 1990 42(3): 447-80.

<sup>49</sup>McKee, M. 'Substance use and social and economic transition: The need for evidence', *International Journal of Drug Policy* 13 (2002).

combined with social exclusion, discrimination and repressive legislation, and are concentrated in high risk groups.

Most HIV epidemics in industrialised countries start in high risk populations, and all European countries have experienced either low level or concentrated epidemics. Most new transmissions occur within high risk groups, with only limited 'spill over' into larger, lower risk populations. Prospects for a more generalised epi-

demic, in which risks to larger populations become significant, depend crucially on the characteristics of so-called 'bridging populations' and 'bridging behaviour'. The sexual partners of injecting drug users, female partners of bisexual men, and clients of sex workers (who are often drawn from certain migratory occupational groups, such as truck drivers) are examples of bridging groups. Use by sex workers of injecting drugs is an example of 'bridging behaviour'. The data in Table 3

**Table 3: Estimated size of core population groups at high risk of HIV by country**

Country	Injecting drug users (Prevalence in %)	Men having sex with men <sup>50</sup>	Sex workers (male and female)	Prisoners <sup>51</sup> (rate per 100,000)
Albania	10,000 (0.4)	40,000 – 50,000	6,000 – 8,000	3,000 (90)
Armenia	7,000 – 11,000 (0.18-0.3)	N/a	9,000 – 11,000	4,400 (114)
Azerbaijan	15,000 – 150,000 (0.2-2.0)	10,000-15,000 (Baku)	8,000 – 10,000 (Baku)	17,800 (217)
Belarus	41,000 – 51,000 (0.4-0.5)	45,000 – 77,000	10,000 – 25,000	55,000 (554)
Bosnia and Herzegovina	11,500 (0.5)	30,000-50,000	4,000 – 7,000	2,400 (60)
Bulgaria	30,000 (0.43)	20,000-30,000	30,000	9,500 (119)
Croatia	2,000 – 23,000 (0.04-0.5)	20,000 – 50,000	5,000 – 10,000	2,600 (59)
Czech Republic	25,000 – 30,000 (0.24-0.3)	50,000 – 100,000	12,000 – 21,000	16,600 (162)
Estonia	10,000 – 15,000 (0.72-1.1)	5,000 – 12,000	3,000 – 5,000	5,000 (361)
Georgia	40,000-50,000 (0.8-1.0)	10,000	10,000	7,400 (198)
Hungary	2,900 – 25,000 (0.03-0.25)	26,000 – 130,000	3,000 – 17,000	17,900 (176)
Kazakhstan	97,000 – 250,000 (0.6-1.55)	20,000 – 150,000	20,000 – 50,000	84,000 (522)
Kyrgyz Republic	19,000-100,000 (0.38-1.6)	50,000	3,300	19,500 (390)
Latvia	9,000 – 12,000 (0.4-0.5)	6,000 – 19,000	4,000 – 15,000	8,100 (352)
Lithuania	7,000 – 11,000 (0.2-0.3)	17,000 – 44,000	5,000 – 8,000	11,400 (327)
FYR Macedonia	6,000 – 10,000 (0.3-0.6)	5,000 – 17,000	3,000 – 5,000	1,300 (64)
Moldova	34,000 – 52,000 (0.12-0.18)	N/a	N/a	11,000 (300)
Poland	77,000 – 116,000 (0.2-0.3)	105,000 – 310,000	42,000 – 83,000	83,000 (215)
Romania	89,000 – 112,000 (0.4-0.5)	60,000 – 120,000	23,000 – 47,000	47,400 (212)
Russian Federation	1,500,000 – 3,500,000 (1.01-2.4)	400,000 – 2,000,000	150,000 – 300,000	875,000 (611)
Serbia and Montenegro	6,000-30,000 (0.05-0.3)	35,000 – 90,000	11,000 – 19,000	6,300 (70)
Slovakia	11,000 – 16,000 (0.2-0.3)	15,000 – 45,000	6,000 – 12,000	7,500 (138)
Slovenia	5,000 (0.25)	3,000 – 7,000	2,000 – 3,000	1,100 (56)
Tajikistan	2,000 – 62,000 (0.2-1.03)	60,000	5,000	11,000 (175)
Turkey	1,000 – 133,000 (0.0-0.2)	100,000-300,000	18,000 – 40,000	64,200 (90)
Turkmenistan	9,000 - 50,000 (0.2-1.0)	N/a	700 – 1,300	22,000 (489)
Ukraine	400,000 – 600,000 (0.78-1.17)	200,000	45,000 – 55,000	200,000 (413)
Uzbekistan	65,000 - 150,000 (0.3-0.6)	70,000 – 210,000	14,000 – 28,000	65,000 (255)

Source: WHO EURO data collection (2003)<sup>52</sup>.

<sup>50</sup> Estimates of populations of men having sex with men can only be compared great caution. Some estimates are of the 'core' population (self-identified gay men), while others pertain to the total numbers of men who have had sexual contact with other men in their lifetime.

<sup>51</sup> International Centre for Prison Studies (2003), <http://www.kcl.ac.uk/depsta/rel/icps/worldbrief/europe.html>

<sup>52</sup> Data in the WHO EURO databases are drawn mainly from official national sources, and are generated by national surveillance, service providers, and NGOs, or by such international organisations as the UN Reference Group on injecting drug users. Where no published or official data are available, preliminary estimates made by national experts during a workshop on estimating and modelling the HIV/AIDS epidemic in Europe are used. This workshop was jointly organised by WHO EURO and UNAIDS in summer 2003.

show estimates of the size (and, in the case of injecting drug users, prevalence rates) of four key high risk groups: injecting drug users, men who have sex with men, sex workers, and prisoner.

The behaviours and environments identified above show significant overlaps. Many injecting drug users, particularly women, report receiving money for sex, while a significant share of homosexual men report using injecting drugs. Members of marginalised groups (the poor or ethnic minorities—groups that often coincide) who lack sustainable development opportunities are more likely to become sex workers or be involved in drug-related activities (both distribution and use). Links between these ‘bridging groups’ and their ‘bridging behaviours’ play an important role in helping HIV to spread from high risk groups to the general population. Prospects for a more widespread, self-sustaining, heterosexually transmitted epidemic are also linked to patterns of sexual activity and social networking, which in turn are often culturally conditioned.

### Substance abuse and HIV/AIDS

Data on the relationship between substance abuse and HIV in the countries of Central and Eastern Europe and the CIS are limited. Most quantitative and qualitative research concerns injecting drug use, which is the dominant HIV-related risk behaviour in the region. Rapid growth in opium production in Afghanistan (the region’s major supplier) has fuelled the growth of heroin markets in Central Asia, the Russian Federation, and Eastern Europe (UNDCP, 1997; UNODCCP, 1999; UNODC 2003). Opium production in Afghanistan is estimated to have grown steadily, from around 500 metric tons in the mid-1980s to over 4500 metric tons in 1999. There was a marked drop in production to 185 metric tons in 2001, but production apparently returned to pre-war levels in 2002.

A number of indicators suggest that CIS countries are playing growing roles in the transshipment of opiates from Afghanistan. Heroin seizures (which are

thought to account for 10-20 percent of total shipment) in CIS countries continue to rise, while sharp declines since 2001 have been reported in heroin and opium seizures in countries along the ‘southern’ trafficking route (Pakistan: down 22 percent; Iran: down 53 percent; Turkey: down 41 percent). Heroin imported from Afghanistan has traditionally been cheap in CIS countries, and it remains more affordable than cocaine, amphetamines, and other drugs. For example, the wholesale price of Afghan heroin in Tajikistan reached an historic low of \$1,200 per kilogram in early 2001. Heroin seizures at that time tripled in size, further indicating that Tajikistan had become a very significant outlet for Afghan heroin<sup>53</sup>. The security benefits to CIS (particularly Central Asian) countries associated with the military removal of the Taliban regime during 2001-2002 seem to have been offset by the human costs of substantial increases in the trafficking and use of opiates from Afghanistan.

### Male-to-male Sex

Sex among men has been a key HIV transmission mode in Western Europe and in North America. While the data indicate that injecting drug use is playing this role in Central and Eastern Europe and the CIS, the stigmatisation (and in some countries criminalisation) of homosexuality ensures that HIV transmission via male-to-male sex is often underreported. The importance of this transmission mode is therefore underestimated in the region, probably significantly so.

Although homosexuality and male-to-male sex are no longer strictly criminalised in most of the region, legal and social factors continue to stigmatise and marginalise members of this vulnerable group. Since homosexuality in many countries was decriminalised as a result of external pressure (particularly from the Council of Europe), the extent of change in social attitudes and the behaviour of law enforcement agencies remains questionable. Men involved in male-to-male sex are still victims of violence, discrimination and social exclusion,

*Prospects for more generalised epidemics, in which risks to larger populations become significant, depend on the characteristics of ‘bridging populations’ and ‘bridging behaviour’*

<sup>53</sup> *Global Illicit Drug Trends 2002*. UNODC, (2003).

making them more vulnerable to HIV/AIDS than would otherwise be the case.

As with sex work, it is risky behaviour—chiefly unprotected anal intercourse—that carries with it the major risk of HIV transmission, rather than sexual identity. Additional risks are associated with sexually transmitted infections, multiple partners, substance use, and other factors described elsewhere in this chapter. These risks are often widespread, multiple, and simultaneous<sup>54</sup>.

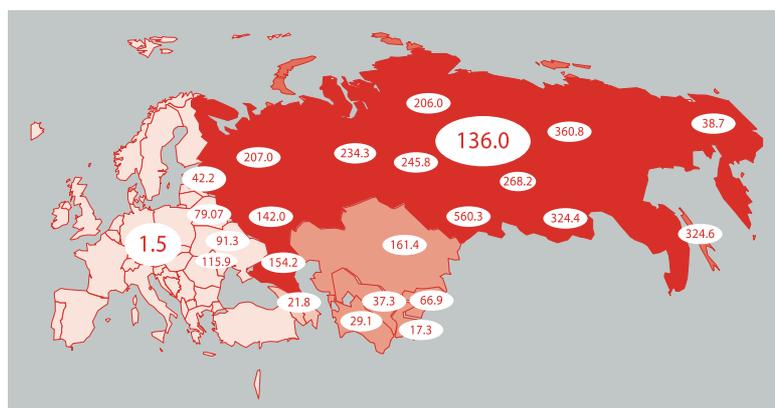
Very little research has been done on the extent of male-to-male sex in the region. In a national representative study in Russia, 2 percent of men self-identified as homosexual. Large-scale studies in Western countries show that 3-20 percent of men (sometimes more) have had some sexual experience with other men during their lifetime, and that 2-4 percent self-identify as homosexual<sup>55</sup>. Estimates of bisexuality vary greatly.

The limited data from the region that are available suggest that a high proportion of men who have sex with men also have female sexual partners, and thereby constitute a bridge to lower risk populations. In a study of 175 male sex workers in

Moscow, only 52 percent of the respondents reported being sexually attracted exclusively to men. Some 10 percent were married to a woman and 16 percent had a steady female partner<sup>56</sup>. Surveys conducted in Belarus, Ukraine, the Kyrgyz Republic, Kazakhstan, Uzbekistan, Russia, and Tajikistan have documented the existence of extensive underground networks of men having sex with men. They also suggest that high risk forms of sexual behaviour are common. In St. Petersburg, in a study of 434 men attending any of the city's five gay nightclubs, the lifetime mean number of male partners was found to be 62. Only 43 percent of men surveyed who engaged in anal intercourse reported consistent condom use. In a Ukrainian study of men who have sex with men conducted in Kyiv, Mikolaiv, and Odesa in 2001, 41 percent did not use condoms because of cost; only 21 percent reported consistent condom use for anal sex.

More epidemiological research on male-to-male sex clearly needs to be done in this region, in order to design and implement effective prevention programmes. As in the case of injecting drug use and sex work, moralistic or repressive approaches generally reduce the effectiveness of HIV/AIDS prevention activities.

**Figure 9:**  
Reported syphilis cases per 100,000 population, 2000-2001.  
Source: WHO/EURO, 2002



### Sexually Transmitted Infections

Levels of sexually transmitted infections are an important indicator of risk or vulnerability to HIV. In addition to being a relatively good marker of unsafe sex, sexually transmitted infections facilitate the physiological transmission of HIV. Most of the available information about sexually transmitted infections in the region concerns syphilis and gonorrhoea, and takes the form of case reports. The data in Figure 9 show that rates of syphilis in some countries in the region are nearly 100 times higher than in Western Europe.

<sup>54</sup> J.A. Kelly, Y.A. Amirhanian, P. Csepe, E. Kabakchieva, and T.L. McAuliffe: *High levels of HIV risk behaviour among men who have sex with men in Russia, Hungary, and Bulgaria* (2002).

<sup>55</sup> Vannappagari, Vani, and Robin Ryder. *Monitoring Sexual Behaviour in the Russian Federation. The Russia Longitudinal Monitoring Survey*. Report submitted to the U.S. Agency for International Development. Carolina Population Centre, University of North Carolina at Chapel Hill, North Carolina. April 2002. Online [http://www.cpc.unc.edu/projects/rlms/papers/sex\\_01.pdf](http://www.cpc.unc.edu/projects/rlms/papers/sex_01.pdf).

<sup>56</sup> *The Study of Sexual Behaviour of Male CSW's in Moscow*. PSI Russia (1999).

Fortunately, as Figure 10 shows, systematic declines in rates of sexually transmitted infections have been observed across the region now for six years. But these rates are still very high in comparison with other parts of Europe. These declining trends in reported syphilis cases may well depict actual decreases in incidence resulting from better diagnostic and treatment programmes. But these declines could also be a reflection of the natural cycle of the epidemic. In some countries, they could indicate growing underreporting by deficient surveillance systems. Growing numbers of patients may for example be seeking treatment in the private health clinics, which are less likely to report detected cases than are state-run facilities.

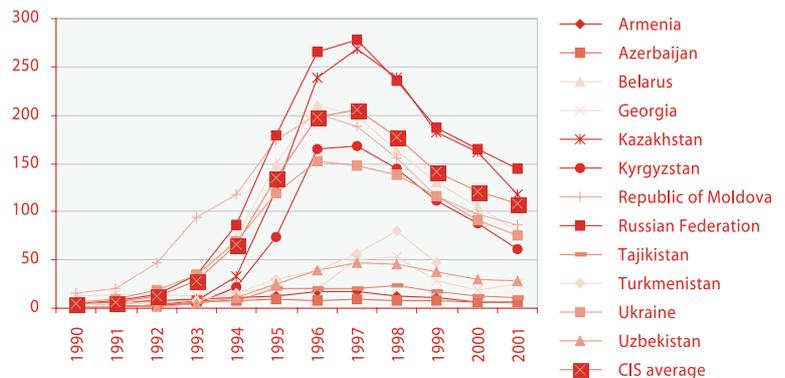
The monitoring of sexually transmitted infections by surveillance systems in the region is often even less sophisticated than those for monitoring HIV/AIDS. Data collected through case reporting are insufficient for monitoring outbreaks or for detailed analysis. Background information on sexually transmitted infections, including gender, behavioural risks, age, and geographic distribution, is generally poor and incomplete.

Significant improvements in the surveillance of sexually transmitted infections are needed in almost all of the countries, in order to better understand and monitor risks associated with sexual behaviour. In Western Europe, the incidence of sexually transmitted infections in such population sub-groups as gay men or immigrants is monitored, and extensive epidemiological contact tracing helps to identify situations and environments in which transmission risks are high and where intensified preventive interventions would be most beneficial. Such case management and surveillance practices are rare in Central and East European and CIS countries, or at least the associated data are not publicised or analysed. Likewise, few countries have national programmes to prevent sexually transmitted infections. Some countries in the region have started to adopt WHO recommended policies and practices on prevention and care, and are gradually shifting from punitive to more user-friendly approaches.

**Figure 10:**

*Rates of reported syphilis cases per 100,000 population, NIS.*

*Source: WHO/EURO, 2002*



### Mother-to-child transmission of HIV

HIV can be transmitted from mothers to children during pregnancy, labour, delivery, and breastfeeding. Initially large numbers of paediatric HIV cases in Western Europe significantly decreased after 1995 with the large scale introduction of prevention techniques. But despite this knowledge of how to prevent mother-to-child transmission, rapidly growing numbers of HIV-infected women in East European and CIS countries have caused sharp increases in mother-to-child transmissions since 1996. These have been recorded mostly in Ukraine and Russia, which together account for over 78 percent of all reported mother-to-child transmission HIV cases in Europe since the beginning of the epidemic. Growing mother-to-child-transmission is beginning to change the gender profile of the epidemic<sup>57</sup> in these countries: UNAIDS reports that the share of women (including new born girls) in total numbers of new HIV diagnoses in Russia rose from 24 percent in 2002 to 33 percent in 2003<sup>58</sup>.

Large scale interventions to prevent mother-to-child transmission have been introduced in Ukraine and in some parts of the Russian Federation. The introduction of modified surveillance of mother-to-child transmission, in line with the case reporting and definitions used in

*Rapidly growing numbers of HIV-infected women in East European and CIS countries have caused sharp increases in mother-to-child transmissions since 1996*

<sup>57</sup> EuroHIV, 2003.

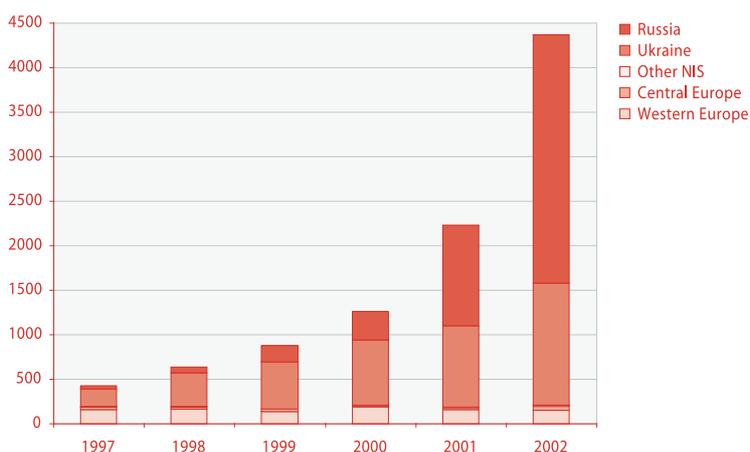
<sup>58</sup> UNAIDS, *AIDS Epidemic Update*, December 2003, Geneva, p. 15.

the rest of Europe<sup>59</sup>, would help to show the impact of these interventions and provide an accurate picture of mother-to-child transmission in these countries.

### Figure 11:

*Newly reported HIV infections through mother-to-child transmission in Western, Central, and Eastern Europe, 1997-2002.*

Source: EuroHIV (2003)



*Treatment and care for people living with HIV/AIDS are integral parts of a comprehensive response to the epidemic*

HIV transmission through blood transfusions, infected blood products, and unsafe health care practices were key drivers in the early years of the epidemic in the region. Equitable access to safe blood products is necessary to prevent the spread of such serious blood-borne diseases such as syphilis and hepatitis B and C, as well as HIV. Romania's dramatic HIV epidemic among children in the early 1990s, which was due to fatally unsafe health care practices, is a graphic example of what can happen if blood safety and safe injecting are not taken seriously.

Treatment and care for people living with HIV/AIDS are integral parts of a comprehensive response to the epidemic. Prevention of HIV infection, and treatment and care for those already infected, are often mutually reinforcing and complementary

activities. People living with AIDS require access to health care facilities, particularly in order to receive correct regimes and dosages of antiretroviral drugs. Inadequacies in health care infrastructures can therefore constitute another source of health system related risk.

## Major Groups at Risk

The risk factors and behaviours outlined above may appear in different combinations among different groups. For example, injecting drug usage can be safe or unsafe, from an HIV/AIDS perspective. It can occur among relative well educated casual drug users, or in prisons with appalling sanitary conditions. Different combinations of risk factors among different groups require differentiated approaches to analysing the particular groups exposed to major risks.

### Injecting Drug Users

According to UNODC estimates, heroin use in the region significantly exceeds levels reported in North America and Western Europe<sup>60</sup>. National data suggest that, on average, 60-90 percent of drug users inject heroin, albeit with great variations between countries and individual cities. Rates of heroin smoking are also more than twice as high as those in Western Europe. UNODC estimates that 2.7 million people in this region were using opiates in the late 1990s (1 percent of the total population over the age of 15), mostly via injection<sup>61</sup>.

Estimating the number of injecting drug users is difficult, since the stigmatisation and criminalisation of drug use ensures that it often remains hidden. It nonetheless seems clear that, until the late 1980s, injecting drug use in this region was relatively infrequent. Its subsequent growth use reflects not only overall increases in drug supply, but also changes in local production and consumption patterns, and the effects of increased travel and migrati-

<sup>59</sup>Both Russia and Ukraine report to EuroHIV the number of children born to HIV positive mothers. This deviates from standard international practice (which features the reporting of positively diagnosed HIV infected infants) and somewhat distorts the epidemiological picture. But even with the average 20-25 percent transmission rates observed elsewhere, the Russian Federation and Ukraine would have the disproportionate burden of 2,000-3,000 HIV infected infants annually.

<sup>60</sup>*Global Illicit Drug Trends 2002*, UNODC, 2003, Vienna.

<sup>61</sup>*Ibid.*

on. The region has also experienced dramatic social and political changes and armed conflicts, which in many countries have entailed sharp declines in living standards. Unemployment has increased, while access to housing, health care and social services has deteriorated in many countries (especially in the CIS). Mortality rates in many CIS countries have increased, as has incidence of cholera, tuberculosis, diphtheria, and sexually transmitted infections. Socio-economic pressures have encouraged the growth of informal and illicit economic activities, including drug trafficking. The breakdown of old social orders has also contributed to increased drug consumption and promoted risky sexual behaviour. The proximity of many CIS countries to West Asian areas of drug cultivation or trafficking routes has made drugs more available.

In many countries in the region, 'home made' opiates and stimulants for injecting use are produced, trafficked, and consumed, following in the tradition of home-brewed vodka, brandies, and other heavy liquors. Opium poppies and poppy straw are processed with household chemicals to produce opium alkaloid solutions, which are then injected. In Central Asia, and in parts of the Caucasus and Western CIS, smoking and ingesting opium are traditional among older people.

For most EU countries, AIDS incidence related to injecting drug usage seems to have peaked around 1993-1994. HIV prevalence is accordingly stable or declining in most EU countries. But while the available data suggest that many Central and East European countries may now be following the same trend, the dubious quality of some of these data, and the scale of the region's development challenges, argue against complacency.

Although some surveys have been conducted at the sub-national or city level, most data for HIV prevalence among injecting drug users come from country-wide diagnostic testing<sup>62</sup>. Behavioural and serological surveillance of injecting drug users is, at best, incomplete for most

countries in the region. Prevalence studies suggest that there are strong differences in injecting drug use and related HIV epidemiological trends between the western and eastern parts of the region, between countries within the same sub-region, and between cities and rural areas within countries.

Broadly speaking, HIV epidemics related to injecting drug use have developed in a number of countries (most notably in Belarus, Estonia, Russia and Ukraine) and in specific geographic locations within those countries (Svetlogorsk in Belarus, Narva in Estonia, Irkutsk, Moscow, Togliatti, and Rostov-na-Donu in the Russian Federation, and Odesa and Mikolaiv in Ukraine). While few HIV prevalence studies among injecting drug users have been conducted, the testing that has been done points to consistently high levels of HIV infection—a result that is consistent with available information on unsafe injection practices. Even fewer data are available on risk behaviours of injecting drug users (e.g., the scope of needle and syringe sharing, syringe hygiene, numbers and types of sexual partners). Syringe sharing appears to be widespread, and the common use of other paraphernalia (cookers, filters, etc.) and other unsafe injection practices seem too frequent. Common usage of a single container while injecting home-made drugs is a special cause for concern. A synthesis of 63 rapid assessment studies conducted during 1998-2000 in Russia yielded rates of syringe sharing in the 40-60 percent range. In 2001 in Togliatti (Russia), 84 percent of injecting drug users reported syringe sharing. In 2000, 22 percent of drug users undergoing treatment in Estonia reported sharing syringes in the previous month. In Ekaterinburg (Russia) in 1998, 86 percent of drug users had shared injection equipment in the past month<sup>63</sup>, in Moscow, 35-41 percent of injecting drug users reported sharing equipment.

Epidemiological models for the region and empirical data from other regions point to the increasing importance of sexual transmission of HIV among injec-

*In many countries in the region, 'home made' opiates and stimulants for injecting use are produced, trafficked, and consumed*

*Epidemiological models for the region and empirical data from other regions point to the increasing importance of sexual transmission of HIV among injecting drug users*

<sup>62</sup>Hammers, F. and Downs A., *HIV in Central and Eastern Europe*, Lancet 2003; 361: 1035-44.

<sup>63</sup>A.A. Golubkova et al., 'Behaviour of injecting drug users that leads to HIV infection', *Epidemiology of Infectious Disease* (2000) 4:32-35.

*Sex work is highly stigmatised and criminalised in the countries of Central and Eastern Europe and the CIS. Because of this, many sex workers are victims of violence and police harassment*

ting drug users as the epidemic progresses. Sexual contact can become the dominant transmission mode in mature epidemics. The growing importance of the sexual transmission of HIV in this region is the inevitable result of rising HIV prevalence among injecting drug users. In addition, some female injecting drug users rely on sex work to supplement their incomes.

### **Sex Workers**

Sex work is highly stigmatised and criminalised in the countries of Central and Eastern Europe and the CIS. Because of this, many sex workers are victims of violence and police harassment. Such attitudes on the part of law enforcement agencies (and societies more broadly) make sex workers more vulnerable to HIV/AIDS than would otherwise be the case, and increase the likelihood that their clients will transmit HIV to broader population groups. This increases the probability of wider, self-sustaining heterosexual epidemics—as has occurred in other regions.

The vast majority of those who exchange sex for money, favours, or drugs are women, although fragmentary data from the region suggest that 5-10 percent of sex workers are male. As with male-to-male sex and injecting drug use, sex work is not a risk factor in and of itself. The risk is instead a reflection of the legal, cultural, health, and socio-economic conditions in which sex workers find themselves.

There is relatively little systematic data on sex work in the region, and the figures that are available show great variety across locations and studies. Still, most of these data, such as those shown in Table 4 above, suggest that the extent of sex work in the region should be cause for concern, particularly in CIS countries. They also point to a co-mingling of risk factors asso-

ciated with sexual behaviour and injecting drug use. In Kazakhstan, 14 percent of injecting drug users reported engaging in sex work in the previous six months<sup>64</sup>. In Togliatti (Russia), one study found that 43 percent of injecting drug users were also sex workers, while in St Petersburg 28 percent of injecting drug users reported receiving money for sex. A survey of injecting drug users in six Russian regions found that one quarter to one third of all injecting drug users surveyed had had sex with a sex worker in the past year, and that 10-15 percent of injecting drug users surveyed exchanged sex for drugs or money. Fortunately, those surveyed reported significantly higher (up to 50 percent more often) condom use rates than did respondents with casual sexual partners<sup>65</sup>. A survey of men who have sex with men conducted in gay venues in Budapest in 2001 found that 17 percent of those surveyed exchanged sex for money<sup>66</sup>. Data on condom use also vary greatly. Results of the Russian longitudinal survey shows that 36 percent of 21-30 year-olds and 44 percent of 41-49 year-olds used condoms when sex was exchanged for money or gifts—a lower frequency than when having non-commercial sex<sup>67</sup>. HIV prevalence among sex workers is not surprisingly often high, and evidence suggests that it is increasing.

### **Prisoners**

HIV spreads quickly through sex and shared needles in the region's prisons. The risk and incidence of HIV are higher in prison than in the general population for at least three reasons. First, the prevalence of sexually transmitted infections, which encourage the spread of HIV, is higher in prisons in this region (as in other parts of the world). Second, a relatively high percentage of prisoners are incarcerated for sex work and drug use that increase their likelihood of contracting HIV. Third, risk

<sup>64</sup> Centre on public opinion research, *Behavioural Surveillance among Injecting Drug Users in Nine Cities in Kazakhstan*, Almaty, 2002.

<sup>65</sup> UNAIDS et al., *The Technical Report: Development, adaptation and field testing of the tools for measuring of biological and behavioural markers used in HIV surveillance in the groups of injecting drug users in the selected cities of the Russian Federation*. St. Petersburg, 2002.

<sup>66</sup> Csepe P. et al., 'HIV risk behaviour among gay and bisexual men in Budapest, Hungary', *International Journal of Sexually Transmitted Diseases and AIDS* (March 2002), 13(3):192-200.

<sup>67</sup> Vannappagari, Vani, and Robin Ryder. *Monitoring Sexual Behaviour in the Russian Federation. The Russia Longitudinal Monitoring Survey*. Report submitted to the U.S. Agency for International Development. Carolina Population Center, University of North Carolina at Chapel Hill, North Carolina. April 2002. Online [http://www.cpc.unc.edu/projects/rfms/papers/sex\\_01.pdf](http://www.cpc.unc.edu/projects/rfms/papers/sex_01.pdf).

behaviours in prison, such as sharing needles and forced or voluntary sex between men, involve a high risk of infection.

There were some 1.7 million inmates in the region's penal systems in early 2003<sup>68</sup>. The vast majority of these inmates are young men, who statistically are the most vulnerable to HIV in this region. Incarceration, whether in temporary detention facilities or longer term in prison, is a high-risk environment with dire consequences for people's health in Eastern Europe and the CIS. The prevalence of tuberculosis, HIV, and sexually transmitted infections in these institutions is often orders of magnitude greater than that found outside of the penal system. Overcrowding, poor nutrition, appalling physical facilities, and inadequate medical care—combined with underpaid, poorly trained staff who do not enjoy public respect and are themselves susceptible to corruption—create an environment conducive to poor health in general and violence, substance abuse, and other forms of high-risk behaviours.

The region's limited penal capacities have to cope with some of the highest incarceration rates in the world. The Russian Federation with its 875,000 prisoners (611 per 100,000 population) has the world's second highest incarceration after the United States (2.02 million prisoners, or 702 per 100,000), and the third largest prison population after the US and China (1.5 million prisoners, or 117 per 100,000). Twenty out of 28 countries in this region have incarceration rates higher than China's. In addition to Russia, Belarus, Kazakhstan, Turkmenistan, and Ukraine have more than 400 prisoners per 100,000 population. Only Albania, Bosnia-Herze-

govina, Croatia, Macedonia, Poland, Serbia and Montenegro, Slovenia, and Turkey have less than 100 inmates per 100,000, rates similar to those observed in the majority of West European countries.

Prison overcrowding in the region is sometimes so serious that inmates have to sleep in shifts. In the Russian Federation, the average prison space per detainee in 2002 was about two square meters. The slow pace at which the wheels of justice turn means that large numbers of detainees experience months of pre-trial detention. While awaiting trial or sentencing they are exposed to traditional and multi-drug resistant strains of tuberculosis and sexually transmitted infections, as well as HIV. These protracted periods of detention combined with poor prison conditions magnify the risk of contracting deadly diseases, and have been criticised as a form of cruel and unusual punishment prohibited by international law<sup>69</sup>. Since sexual relations and drug use in prisons are prohibited—but often continue anyway—condoms and sterile injecting equipment are generally unavailable. From an epidemiological perspective, the region's penal systems are functioning as incubators for HIV and other infectious diseases.

Health data on prison populations are scarce, and in some of the region they are completely unavailable. But the information that is published illustrates the gravity of the problem. In Ukraine, which has one of the highest HIV growth rates in the region, 7 percent of prisoners in 1999 were infected with HIV<sup>70</sup>. This number has almost certainly grown in the four years that have elapsed since then. Prison offici-

*The risk and incidence of HIV are higher in prison than in the general population*

**Table 4: Prisoner population and diagnostic HIV screening in the penitentiary system of the Russian Federation, 1995-2002**

	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total number of prisoners (thousands)	929	1017	1052	1010	1014	1060	924	965	875
Prisoners living with HIV	7	13	240	1,460	2,300	4,100	15,100	33,000	36,850
Prisoners living with HIV (per 1000 inmates)	0.008	0.013	0.23	1.44	2.3	3.9	16.3	34.2	42.1

Source: AIDS Foundation East-West (2003).

<sup>68</sup> International Centre for Prison Studies (2003), <http://www.kcl.ac.uk/depsta/rel/icps/worldbrief/europe.html>

<sup>69</sup> *The CPT Standards*. Council of Europe, European Committee for the Prevention of Torture (2001).

<sup>70</sup> Mikolaiv Charitable Foundation (Blagodijnist), Ukraine, 'Prevention of the HIV/STD Spread,' proposal submitted to the Open Society Institute's International Harm Reduction Development Programme (IHRD), 1999.

**Box 2: Prisons as HIV Incubators**

Criminal justice systems that throw non-violent injecting drug users into overcrowded, inhumane prisons, where HIV spreads quickly through sex and shared needles, are having disastrous public health consequences in many East European and CIS countries. The region's prison overcrowding both promotes the easy transmission of HIV inside prisons and makes inevitable the eventual release to society of prisoners living with HIV/AIDS. This can completely offset efforts to combat the epidemic outside of prisons. Non-violent drug offenders—many of whom need not be imprisoned in the first place—require better access to harm reduction services, in order to limit the negative consequences of drug use for themselves, other prisoners, and ultimately the public.

Prisons and detention facilities in many East European and CIS countries function as HIV incubators. In Ukraine, which has one of the highest HIV growth rates, 7 percent of prisoners were infected with HIV in 1999, a figure that has almost certainly risen since then<sup>74</sup>. Prison officials in Poland estimate that 20 percent of the country's nearly 7,000 HIV-infected individuals at some point in their lives spent time either in prison or in pre-trial detention. Substandard nutrition, shortages of basic medical equipment, and inadequate light and ventilation are common. Overcrowding is particularly severe: occupancy rates in Romania's prisons, for instance, run from 150 to 700 percent over intended capacity, according to the General Directorate of Penitentiaries; and 20 people share each toilet<sup>75</sup>. In Russia, cells meant for 28 hold up to 110 people, who sleep in shifts while others stand. The manager of Russia's Butyrka prison said, 'Every day I plead with God for bad weather, because when it is too hot, epidemics and deaths are unavoidable'<sup>76</sup>. Violence between prisoners is rife and drugs are available.

Few treatment programmes (if any) exist in these grossly understaffed detention and correctional institutions, and staff are not trained in harm reduction methods. Financial constraints make it hard to find qualified doctors, not to mention psychologists and other specialists.

(Continued on page 35)

als in Poland estimate that 20 percent of the country's nearly 7,000 HIV-infected persons spent time in prison or pre-trial detention at some point in their lives. In Latvia, a fifth of the country's known HIV cases are persons in prison. Half of the new cases reported in Latvia each year are persons that are or have been in the penitentiary system.

In Russia the number of persons imprisoned for non-medical drug use increased five-fold over a three-year period. In seven Russian prisons studied in 2000, 43 percent of inmates had injected drugs, and 13.5 percent started doing so while in prison<sup>71</sup>. About 1 percent of all prisoners reported injecting drugs for the first time while in prison. The results showed that 50 percent of all imprisoned injecting drug users shared needles and syringes, and 10 percent had penetrative sexual intercourse with other prisoners. Similar results have been obtained from other studies, suggesting that up to 20 percent of prisoners use injecting drugs while incarcerated, and shared needles and syringes regularly<sup>72</sup>.

Some 37,000 prisoners in the Russian Federation's prison system in 2002 were diagnosed as living with HIV, or about 4 percent of the total prison population. As the data in Table 4 show, this is a sharp increase over rates reported five years earlier. Moreover, about 10 percent of all Russian inmates have been diagnosed as having active tuberculosis, and rates of multi-drug resistant tuberculosis strains among them are as high as 20 percent. Reported syphilis rates in Russian prisons varied between 3 and 4 percent during 1997-2000<sup>73</sup>.

Reasonable people may disagree in the abstract about the appropriate balance of punishment and rehabilitation in criminal justice systems. From a practical public health perspective, however, tens of thousands of prisoners are released from the region's overcrowded prisons / epidemiological incubators annually. These individuals are a bridging population that poses a major threat in terms of spreading HIV to the general population. This suggests that initiatives to make prison conditions more humane and to introduce HIV prevention programmes are of critical importance.

<sup>71</sup> Médecins sans Frontières, *Heath Promotion in the Russian Prison System: Prisoner Survey 2000*, Holland, November 2000.

<sup>72</sup> Moscow Helsinki Group, <http://www.mhg.ru/english/1F4F76C>.

<sup>73</sup> WHO EURO (2002).

<sup>74</sup> Mikolaiv Charitable Foundation (Blagodijnist), Ukraine, 'Prevention of the HIV/STD Spread,' proposal submitted to the Open Society Institute's International Harm Reduction Development Programme, 1999.

<sup>75</sup> General Directorate of Penitentiaries, Romania, 'Education for HIV Prevention in Prisons,' proposal submitted to the Open Society Institute's International Harm Reduction Development Programme, 2000.

<sup>76</sup> Stern, Vivien, *A Sin Against the Future: Imprisonment in the World*, Northeastern University Press, 1998, Boston, p. 75.

## Migrants and Displaced Persons

Although published data are scarce, available evidence strongly suggests that migration increases the risk of HIV. The links between them range from statistically significant relationships between travel away from place of permanent residence (often abroad) and increased rates of sexually transmitted infections, to the trafficking of sex workers from the region to Western Europe<sup>77</sup>.

At the end of 2001, some 3.7 million people were classified as refugees, internally displaced persons, asylum seekers, stateless persons and forced migrants in Central and Eastern Europe and the CIS, some 18 percent of the global total. Armenia, Azerbaijan, Bosnia-Herzegovina, Georgia, Kazakhstan, Russia, and Serbia and Montenegro each reported between 100,000 and a million migrants in those categories<sup>78</sup>. Additional millions are temporarily migrating in search of work within and outside of the region.

Migration and displacement are often associated with difficult living conditions, which can facilitate risk behaviour in terms of sex and drug use. As such they increase vulnerability to HIV/AIDS. These groups generally have less access to prevention, treatment, and care services. A recent UN study (reviewing national progress on the implementation of the Declaration of the UN General Assembly Special Session on HIV/AIDS<sup>79</sup>), found that 40 percent of the Central and East European and CIS countries had not introduced national policies to provide HIV/AIDS and health information to migrants.

### Box 2 (continued from page 34)

While the extent of HIV in prisons is not known, it appears that the risk of HIV infection is higher in prison than in the general population. A recent study by Médecins Sans Frontières discovered that 43 percent of the inmates in seven Russian prisons had injected drugs, and of those 13,5 percent had started doing so in prison<sup>80</sup>.

Even when prisoners do not start out as users, the prison environment can help them to become users. One fifth of Latvia's known HIV cases are in prison, and half of the new annually reported cases are coming out of the penitentiary system. While the total number of HIV cases in Latvian prisons is low, it is telling that of them 87 percent are injecting drug users<sup>81</sup>.

Prison overcrowding in the region is partly due to unbalanced 'zero tolerance' drug policies that emphasise criminalisation over public health concerns. Poland in October 2000 passed zero tolerance legislation that led to increased prosecution of and longer criminal sentences for drug users. This has been reflected by a change in attitude, away from treatment toward punitive discipline<sup>82</sup>. In Russia, which already has the highest imprisonment rate in the world, the number of people imprisoned for non-medical drug use has increased five-fold during a three year period in the late 1990s<sup>83</sup>.

Zero tolerance is a recipe for sending more non-violent drug users into prisons/HIV incubators. It may or may not reduce drug use. But a less effective approach to slowing or halting the spread of HIV is difficult to imagine.

A major rebalancing in criminal justice and public health approaches to drug use—one that emphasises harm reduction activities like needle exchanges and methadone substitution therapy—is therefore needed. Opponents of this rebalancing are in this sense complicit in the spread of the epidemic.

*Box based on contribution from Kasia Malinowska-Sempruch*

The migration of sex workers is a particular concern. In the past decade, Ukraine, Moldova, and Russia have become significant 'exporters' of sex workers destined for Western, Central and South Eastern Europe. The majority of these are women, and

<sup>77</sup> Wilson, T.E., A. Uuskula, J. Feldman, S. Holman, J. Dehovitz, 'A Case-control Study of Beliefs and Behaviours Associated with Sexually Transmitted Disease Occurrence in Estonia', *Sexually Transmitted Diseases* 2001;28:624-629.

<sup>78</sup> 2002 UNHCR Population Statistics, United Nations High Commission for Refugees, 2003, Geneva.

<sup>79</sup> Report of the Secretary General: Progress towards implementation of the Declaration of Commitment on HIV/AIDS, UN General Assembly, 58th session, 25 July 2003, New York, p. 14.

<sup>80</sup> Médecins sans Frontières, *Health Promotion in the Russian Prison System: Prisoner Survey 2000*, Holland, November 2000.

<sup>81</sup> Ibid.

<sup>82</sup> Krakow Association for Drug Users Support, Poland, 'Polish Prison Project,' proposal submitted to the Open Society Institute's International Harm Reduction Development Programme, 2000.

<sup>83</sup> Pskovian Anti-AIDS Initiative, Russia, proposal submitted to the Open Society Institute's International Harm Reduction Development Programme, 2000.

many come from countries with high prevalence of HIV and sexually transmitted infections, and therefore represent—along with their clients—a bridging population that can spread those diseases. These individuals are themselves vulnerable to infection. They have very limited or no access to health care services or to other forms of protection from infection, and suffer abuse at the hands of their clients and pimps. More data about the relationship between migration and HIV would be very helpful in designing appropriate policies in this respect.

## Conclusions and recommendations

Data from the region about people and behaviours with higher risks of contracting HIV unambiguously point to the socio-economic and governance dimensions of the epidemic. Members of at-risk groups are generally victims of social exclusion, due to poverty (sex workers, injecting drug users), stigmatisation (men who have sex with men), or incarceration (prisoners). The higher prevalence of HIV in the region's overcrowded penal institutions—'HIV incubators'—is a serious cause for concern in this respect.

Reasonable people may disagree in the abstract about the relative weights of crime and punishment, the appropriate legal response to social deviance, or tolerance of 'immoral' behaviour. But the growing socio-economic threat posed by HIV/AIDS strongly suggests that policy makers in many of these countries—particularly in the Western CIS and the Northern Baltics—can no longer afford abstract, moralistic approaches to what could become a devastating public health problem. A better policy balance must be found between exclusion and criminalisation on the one hand, and tolerance, inclusion, and treatment on the other.

In particular, this chapter suggests the following policy recommendations:

- *Penal and judicial reform initiatives—and more broadly efforts to ensure that security forces are subject to effective social control—are issues of public health as well as of the legal system. Support for these reform*

*initiatives needs to be redoubled, and their implementation accelerated.*

- *Fundamental reforms of prison systems are needed, in order to reduce overcrowding, better align punishments with crimes, and help to guarantee the rights of prisoners. To the extent possible, the principle of equivalence—under which prisoners receive the same quality health as the rest of the population—should be adopted.*

- *Harm reduction methods should be broadly introduced in all prisons. More generally, prisons should be seen as places of rehabilitation as well as punishment.*

- *To the extent possible, non-violent drug users should not be incarcerated. One month in prison is enough to get HIV from a shared, infected needle.*

- *The region needs more frank discussion about the socio-economic causes of drug use, homosexuality, the true state of its prisons, and the importance of tolerance for people who differ from the social mainstream. Members of political, social, and cultural elites face particular responsibilities for—and opportunities in—breaking the stigmas and addressing the ignorance surrounding HIV and the behaviours with which it is associated.*

*Members of at-risk groups are generally victims of social exclusion, due to poverty (sex workers, injecting drug users), stigmatisation (men who have sex with men), or incarceration (prisoners)*

# Chapter III: The Impact of the Epidemic

United Nations Secretary General Kofi Annan has described AIDS as the 'greatest leadership challenge of our time'<sup>84</sup>. This chapter explores the consequences of failing to meet this challenge: the epidemic's potential effects on socio-economic conditions and development prospects in the countries of Central and Eastern Europe and the CIS. It first examines how current socio—economic trends in the region affect the 'risk environment,' particularly in terms of vulnerability and susceptibility to AIDS, and in creating conditions that exacerbate the epidemic's impact. A broad human development lens is then applied to the epidemic's potential future implications on life expectancy, economies, societies, and households, including its links to human development indices and the Millennium Development Goals (MDGs). Finally, a cost-benefit analysis of prevention programming is examined, to demonstrate the strong economic case for early action.

The epidemiological data presented in Chapter I strongly suggest that a number of countries of the region—particularly the Western CIS and the Northern Baltics—now have no alternative to living with HIV/AIDS. The epidemic has spread too far to permit rapid reductions in HIV prevalence today, or to prevent significant AIDS deaths in the future. But further rapid growth in AIDS prevalence in Russia, Ukraine, Estonia, and elsewhere can be prevented if governments and individuals adopt more proactive approaches to combating the epidemic today. The region as a whole can benefit from the knowledge accumulated globally by those countries and regions that have already borne the brunt of full-scale AIDS epidemics. Together with Chapter V, the following pages demonstrate that decisive action today can dramatically reduce the human and socio-economic costs of AIDS in the region.

## Vulnerability, Susceptibility, and Impact

Socio-economic factors increase the vulnerability and susceptibility of societies to HIV/AIDS<sup>85</sup>, and the decade following the collapse of communism in this region has been marked by rapid socio—economic change. There have been shifts in livelihoods, changes in sexual and drug-taking behaviours, and populations have become more mobile. These and other factors have increased the risk and consequences of HIV infections.

### Poverty

Evidence is growing that HIV/AIDS spreads more rapidly where poverty is extensive, incomes and wealth are distributed very unevenly, gender relations are unequal, livelihoods are not sustainable, large population movements occur, and civil disorder is present<sup>86</sup>. Not only does poverty facilitate the spread of HIV, but the AIDS that follows pushes people into poverty or makes it harder for them to escape from it. Low levels of human development both encourage the spread of and limit response to the epidemic.

Virtually all of the countries of Central and Eastern Europe and the CIS experienced growth in absolute and relative poverty levels during the last decade. Income inequalities have increased as well: countries like Armenia, the Kyrgyz Republic, Moldova, and the Russian Federation have become some of the most unequal in the world (World Bank, 2000). The high percentages of people living in poverty, particularly in those countries hardest hit by HIV, make the potential for a generalised epidemic and its subsequent impact on human development undeniable.

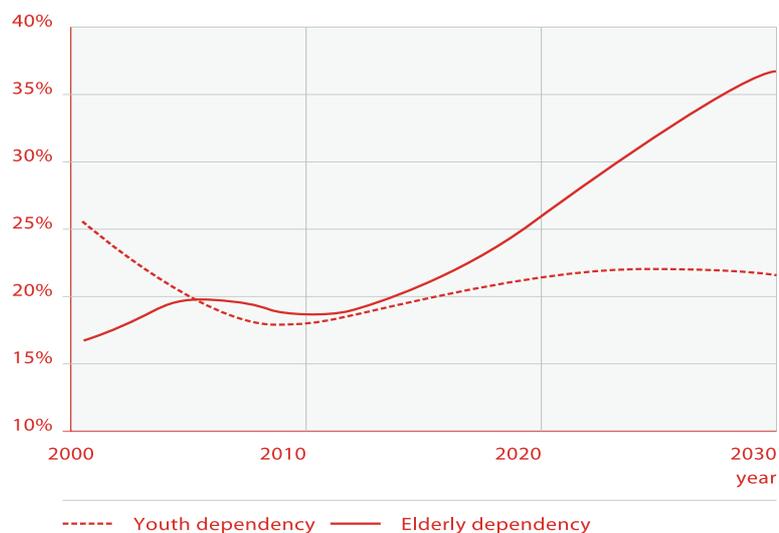
*A number of countries of the region—particularly the Western CIS and the Northern Baltics—now have no alternative to living with HIV/AIDS*

<sup>84</sup> UN General Secretary Kofi Annan at the summary of the proceedings of the high-level interactive panel on HIV/AIDS, General Assembly, 22 September 2003.

<sup>85</sup> Barnett, T., and A. Whiteside, *AIDS in the Twenty-first Century: Disease and Globalisation*, Palgrave, 2002, London.

<sup>86</sup> *Ibid.*

**Figure 12:**  
*Russia Dependency Ratios by Age Structure, 'Medium AIDS' scenario.*  
 Source: Sharp, 2002.



Poverty breeds susceptibility to HIV in a number of ways. Poverty reduces the choices that people have. Poor women with few possibilities to sustain themselves or their families are more likely to become sex workers, and are less able to negotiate the safety of their sexual encounters. This increases the likelihood of contracting HIV. Poverty encourages migration, as people (including those living with HIV/AIDS) move in search of greater economic opportunities. But perhaps most important, and most difficult to quantify, is poverty's effect on future aspirations. If people have little hope for the future, they are more likely to engage in risky behaviour today. The short-term gratification associated with drug use and unsafe sex may be compelling for people with little hope for long-term fulfilment through education, employment, building communities and families, or good health practices. It is difficult to convince people without long-term aspirations to change their behaviour so as to avoid a disease that will cause them to become sick 8-10

years in the future. Although many of their acquaintances may already have contracted HIV, those who are infected may not yet be symptomatic or even know their status. In contrast to other regions, relatively few people in Central and Eastern Europe and the CIS have experienced the loss of friends or family members to AIDS, or seen how devastating AIDS-related illnesses can be. Combined with the social stigmatisation associated with AIDS, the infection's apparent dormancy contributes to dangerous attitudes of denial. HIV's relative newness in Eastern Europe and the CIS is particularly important in this respect.

### Demographic Implications

An AIDS epidemic can brutally alter the structure of a population. Although the region may still be able to avoid the demographic devastation experienced in other parts of the world, the epidemiological trends that now are taking hold in the Western CIS and Northern Baltics suggest that premature adult morbidity and mortality due to AIDS will have a significant demographic impact. This has implications for social policies that address the needs of such vulnerable groups as the elderly, children, and the disabled, and which are typically funded (directly and indirectly) from taxes paid by age cohorts with high labour force participation rates<sup>87</sup>.

Current demographic indicators such as total fertility rates<sup>88</sup>, life expectancy<sup>89</sup>, and migration rates, when combined with HIV/AIDS epidemiological data, suggest that the region can be broken down into four distinct groups:

**Western CIS and Northern Baltic countries:** These countries, which include the Russian Federation, Ukraine, Belarus, Moldova, Estonia, and Latvia, are characterised by aging populations and declining birth

<sup>87</sup> Labour force participation rates describe the share of the population (or a certain cohort therein) that is active in the labour force, irrespective of employment status.

<sup>88</sup> Total fertility rates refer to the average number of children a woman would have in her lifetime if she reflected her age-cohort adjusted fertility rates for a specific year.

<sup>89</sup> Life expectancy describes mortality levels in a given population at a particular point in time as measured in years of life. Life expectancy is affected by mortality rates (childhood and adult). The lower the death rates, the more people will survive through an entire age cohort, so that the number of years lived will be greater. With high death rates, fewer people will survive through an entire cohort, so that the number of years that a newborn infant can expect to live will be lower.

rates, with most of the population between the ages of 20 and 60. They also have the region's most unfavourable HIV epidemiological trends.

**Central and South Eastern Europe:** Bosnia-Herzegovina, Bulgaria, the Czech Republic, Hungary, Lithuania, Poland, Romania, Slovakia, and Serbia and Montenegro. Like the first group, these countries have aging populations and declining birth rates, with most of the population between the ages of 20 and 60. Unlike the first group, however, epidemiological data suggest more benign HIV/AIDS profiles for these countries. This reflects either successes in combating the epidemic over a nearly twenty-year period (as in Poland and other Central European countries), or the relative newness of HIV/AIDS in these countries (as in many South East European countries). Georgia can also be placed in this group.

**Central Asia and Turkey:** Some of these countries (Tajikistan, Turkmenistan, Turkey, Uzbekistan) have relatively high birth rates, low life expectancies, and therefore generally young and growing populations. Others (Azerbaijan, the Kyrgyz Republic, Kazakhstan) have significantly older populations, smaller numbers of children due to falling birth rates, and therefore slower (or no) population growth. Although the quality of the epidemiological data from most of these countries leaves a great deal to be desired, these data indicate that HIV has a rather benign profile here. On the other hand, the combination of poverty and proximity to Afghanistan suggests that these countries may face greater risks than might otherwise be anticipated.

**Albania and Armenia:** A clear pattern is hard to detect for these two countries, due in part to large population movements and emigration. These countries are aging, but young people still make up a significant share of the population. The epidemiological data from these countries suggest a rather benign HIV profile.

The **Western CIS and northern Baltic** group includes those countries in the

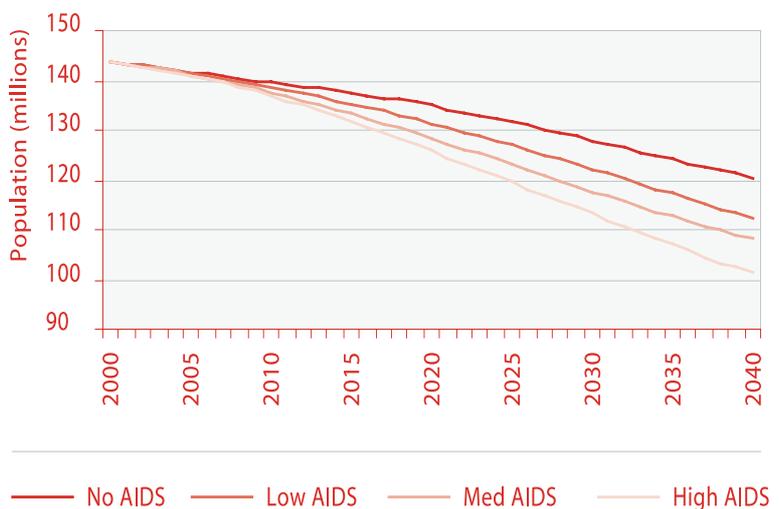
region where HIV/AIDS is spreading most rapidly. This rapid spread of HIV combined with aging and declining populations will have major demographic implications and pose sharp social policy challenges. The dependency ratio (the share of the population not included in the labour force) in these countries is likely to increase sharply due to premature mortality that will strike down people who would otherwise be working. Models of the demographic impacts of the epidemic in the Russian Federation show that the changes in the dependency ratio will have large implications for social security and pension systems (see Figure 12). According to one set of projects, the Russian Federation by 2015 will have only four workers for every three non-workers. When growing stresses on traditional family structures associated with alcoholism and early death are added to this picture, the demographic and social challenges facing many countries in this group become particularly daunting.

In **Tajikistan, Turkmenistan, Turkey, and Uzbekistan**, total fertility rates remain at or above replacement levels<sup>90</sup>. The epidemic therefore has the potential to sharply increase the number of orphans. Orphans face a bleak future; providing for this group will greatly increase the costs of social protection programmes. The South African experience

*Premature adult morbidity and mortality due to AIDS will have a significant demographic impact*

**Figure 13:**

*Russia, population Impact of AIDS by Scenario. Source: Sharp, 2002.*



<sup>90</sup>The replacement level is relative to a total fertility rate of 2.14.

**Table 5: Understanding economic and social impact by level, time and degree**

Level of Impact	Time of Impact	Degree of Impact	Does evidence exist that it happens?
Individual	Early (Immediate)	Always severe; variation by age and gender; physical and social (stigma and discrimination).	Yes: death and illness.
Household	Early, middle (1-5 years) and late (10 years and beyond/ intergenerational for households)	Severe emotional, variable financial depending on socio-economic status, gender, ethnicity and other social variables.	Yes: household studies. Orphans and the elderly especially affected.
Community	Early, middle and late	Variable: dependent on scale, and resource base of community. Likely to be long term and profound but not necessarily readily visible.	Yes: services for orphans and the elderly, and local service provision, affected.
Production unit/ institution	Middle and late	Variable: dependent on the nature of an organisation or institution's activities, or type of production, labour mix.	Yes: firm/ organisational surveys.
Sector	Late	Variable: dependent on location, production, use of labour, and sensitivity to investor sentiment	Yes, some evidence but limited.
National/ Macro	Late	Economic and demographic projections indicate possibility of significant aggregate impact in a generalised epidemic scenario.	Not yet: analysis based on economic and demographic models, with anecdotal evidence about the effects on government infrastructure.

Source: Barnett and Whiteside, 2002.

*HIV/AIDS is also projected to dramatically accelerate Russia's 'natural' population decline*

shows that the social policy burden represented by a single orphan can reach \$2,600. Community-based support structures offer the most cost-effective solutions, while residential care for children living with HIV/AIDS is often the most costly approach. In Azerbaijan, the Kyrgyz Republic, and Kazakhstan—countries with stable and older demographic profiles—AIDS could increase the proportions of the elderly and persons under 15 years of age. In the short and medium terms this would also generate substantial social protection needs. In addition, social protection programmes will most likely have to be expanded to include home or community-based care for persons living with AIDS.

The best available projections of the likely future trajectory of the epidemic in **Russia** foresee dramatic increases in HIV prevalence rates among the labour force until 2025. The World Bank estimates the cumulative number of registered HIV cases in Russia in 2020 at 5.4 million in the 'optimistic scenario' (with mortality

rates rising to 21,000 per month by 2020), and at 14.5 million in the 'pessimistic scenario'<sup>91</sup>. A study by Nicolas Eberstadt of the American Enterprise Institute projects total HIV cases in 2025 at 4 million in a 'mild epidemic', 13 million in a 'moderate' epidemic, and 19 million in a 'severe' HIV/AIDS epidemic in Russia. The corresponding increase in mortality rates and possible net population losses due to AIDS as a result of this large-scale HIV/AIDS epidemic in Russia<sup>92</sup> are projected at 3.0, 9.0, and 12.0 million people by 2025 (Eberstadt's three scenarios), or at 5.04 million and 12.96 million by 2020 (in two World Bank scenarios)<sup>93</sup>.

HIV/AIDS is also projected to dramatically accelerate Russia's 'natural' population decline. Most studies project a net population loss due solely to mortality from a high incidence of AIDS at approximately 20 million people over a 20-30 year period. Eberstadt's model foresees Russia's population in 2025 at 120 million (compared to 140 million without the AIDS factor). A model by Sharp (see Annex 1) suggests similarly alarming conclusions: Russia's population in 2045 is forecast to be at 97 million with a 'high AIDS' scenario (compared to 117 million without AIDS). The other two scenarios ('low AIDS' and 'medium AIDS') envisage populations of 108 and 101 million, respectively, in 2045. Average life expectancy also drops rapidly and significantly, by nearly 12 years (from 77 to 65—a 15 percent decline) in the 'medium' scenario. These projections demonstrate the potentially dramatic demographic impact that a generalised epidemic could have in Russia.

## Socio-economic Implications

Socio-economic impact analysis is based on the premise that once the epidemic takes hold, certain consequences are likely, even if they are not necessarily evi-

<sup>91</sup> Ruhl, C., V. Pokrovsky, and V. Vinogradov, *The Economic consequences of HIV in Russia*, The World Bank Group in Russia, 15 May 2002, and 12 November 2002, available at <http://www.worldbank.org/ru/eng/statistics/hiv/default.htm> and at <http://www.inweb18.worldbank.org/ECA/ECSDH.nsf/ExtECADocByUnid/956D6FOCB32FDEC185256C7800024AC2?Opendocument>.

<sup>92</sup> Nicolas Eberstadt, 'The Future of AIDS', *Foreign Affairs*, November/December 2002, pp. 22-45, accessed at <http://www.foreignaffairs.org/20021101faessay9990-po/nicholas-eberstadt/the-future-of-aids>.

<sup>93</sup> *Ibid.*

dent in the early stages. Without an accelerated response to HIV, the epidemic is likely to evolve from its concentration among intravenous drug users and other high-risk groups into a generalised epidemic that is predominantly heterosexually transmitted. An AIDS epidemic is a long wave event, and in its early stages there is little indication of its impact. However, over time, the numbers of people living with HIV grow, people living with HIV develop full-blown AIDS, and the human and economic costs of caring for these people, and of the demographic and labour force effects of increased mortality in the age cohorts of 15-50 years (with the highest labour force participation ratios), increase accordingly (see Table 5). Since HIV/AIDS is in its early stages in this region, estimates of its potential socio-economic impact must be based on evidence from other regions, and on projections adapted to reflect the specifics of Central and Eastern Europe and the CIS. While the epidemic in other parts of the world also began with low HIV prevalence rates, several are now facing generalised HIV/AIDS epidemics.

### Macroeconomic Impact of HIV/AIDS on Growth and Development

Maintaining a healthy growth rate is an important macroeconomic policy objective—particularly for transition countries that are seeking to alleviate poverty and regain lost ground. For example, the President of the Russian Federation has placed the ambitious goal of doubling Russia's GDP within the decade at the centre of his administration's economic platform. By increasing morbidity and mortality among what would otherwise be the labour force's most productive age groups, HIV/AIDS can distort population, labour supply, and productivity trends. Increased expenses on treatment and care can raise public and private consumption, thereby reducing the savings and investment needed for growth. Lower economic growth in turn means more poverty, fewer public health resources to combat HIV/AIDS, and in some cases a vicious circle that reduces prospects for sustainable human development.

The first step in projecting the long-term socio-economic impact of HIV/AIDS is to make assumptions about trends of HIV

prevalence rates, in order to forecast future illnesses and deaths. These projections, which are typically made for a 15-30 year time period, are disaggregated in terms of their impact on population growth, health expenditures, labour supply and productivity, and other economic parameters. These parameters are then used to model economic growth scenarios with and without HIV/AIDS.

At least twelve completed studies have examined the impact of HIV/AIDS on economic growth (Table 6) in a range of countries. Only two of these are specific to the Eastern Europe and CIS region; both focus on the Russian Federation. The other studies are from other regions (mostly

Country/region	Predicted impact	Author	Time-span
Africa and Sub-Saharan Africa	Annual GDP growth 0.56-1.47% lower than without AIDS; annual per-capita growth will be between + 0.17 % to -0.6% compared to without AIDS.	Over (1992)	1990-2025
Tanzania	Annual GDP growth falls from 3.9% without AIDS to 2.8-3.3%; annual per-capita growth falls from 0.7% without AIDS to 0.2-0.7%.	Cuddington (1993a)	1985-2010
Tanzania (As above but with dual labour market)	AIDS reduces real GDP by 11% to 28% over forecast period. Per-capita income change ranges from 3.6% growth to 16.1% decline over forecast period.	Cuddington (1993b)	1985-2010
Malawi As for Tanzania	Annual GDP growth rates reduced by 0.2-1.5%; annual per-capita GDP growth reduced by 0.1-0.3%.	Cuddington and Hancock (1993)	1985-2010
Malawi As for Tanzania	Annual GDP growth reduced by 3% to 9%; annual per-capita GDP growth reduced by 0-3%.	Cuddington and Hancock (1993b)	1985-2010
Botswana	Annual GDP growth falls from 3.9% without AIDS to 2.0-3.1%. After 25 years economy 24-38% smaller. In the best case annual per-capita GDP growth rises from 1.5% to 1.9% a year, average incomes 9% higher after 25 years. In the worst case, per-capita GDP growth will fall to 1% a year, and be 13% lower after 25 years.	BIDPA (2000)	996-2021
Sub-Saharan Africa	African economic growth has been reduced by 0.8% in the 1990s; per-capita growth was reduced by 1.2% per year 1990-1995.	Bonnel (2000)	1990-1997
South Africa	Real GDP is 0.3% lower in AIDS as opposed to no AIDS scenario in 2001 0.4% lower in 2006-2010.	Quatteck (2000)	2001-2015
South Africa	The difference in GDP growth is 2.6% in 2008; by 2010 the economy is 17% smaller than it would have been without AIDS. Per-capita income is 8% smaller.	Arndt and Lewis (2000)	1997-2010
Trinidad and Tobago and Jamaica	GDP in 2005 is 4.2% lower in Trinidad and Tobago and 6.4% lower in Jamaica than it would have been in the absence of AIDS.	Nicholls et al (2000)	1997-2005
Russian Federation	GDP reduced by up to 4.15% by 2010 and 10.5% by 2020 under pessimistic scenario. Long-term growth rates reduced annually by up to half a percentage point by 2010 and a full percentage point by 2020. Investment could decline by more than production, by 5.5% as of 2010 and 14.5% by 2020 in the pessimistic scenario.	Ruhl (World Bank), Pokrovsky and Vinogradov (2002)	2000 - 2020
Russian Federation	Under medium scenario, GDP falls by approximately 5% by 2020. Long-run results by low, medium and high scenarios are 6%, 11% and 14% respectively. Natural resource sector significantly impacted under an open-economy with implications for domestic capital flight (see Annex 1)	Sharp (UNDP) (2002)	2000-2045

Adapted from Barnett, 2003.

**Box 3: Modelling the macroeconomic impact of HIV/AIDS**

Linkages between AIDS and macroeconomic trends are numerous and complex. In addition to overwhelming health care systems, AIDS attacks the social, economic and demographic underpinnings of development. In countries experiencing generalised epidemics, AIDS disproportionately affects the most economically productive and sexually active population cohorts. The conceptual framework employed to simulate the macroeconomic impact of an HIV/AIDS epidemic contains demographic and economic elements. Labour efficiency units, capturing the effects of AIDS on labour productivity and supply, and the fiscal burden of AIDS-related health and social insurance costs, are the channels connecting the demographic and economic dimensions.

The results produced by a demographic model of Russia reflect the slow-onset nature of the AIDS epidemic, and show that significant mortality only begins to materialise after a decade. Maximum annual fatalities are reached within approximately twenty years. Average life expectancy drops rapidly and significantly, falling by up to 11.4 years (from 76.8 to 65.4, or 15 percent) in the 'medium' scenario. Based on these results, an economic model suggests that the AIDS epidemic decreases the aggregate long-run GDP level in Russia by some 6, 11, and 14 percent in the low, medium and high scenarios, respectively.

These models provide depth to claims that a generalised AIDS epidemic could have severe consequences for the Russian Federation. These include dramatic human costs in the form of rising mortality and morbidity rates, significant reductions in life expectancy and population levels, and rising long-run dependency ratios. This may also lead to diminished sectoral competitiveness, production, and exports, especially for the capital-intensive extractive sector, including natural gas and oil, in an open economy. Significant reductions in incomes and welfare could result.

*Based on Shombi Sharp, Modelling the Macroeconomic Implications of a Generalised AIDS Epidemic in the Russian Federation (Annex 1 of this report).*

then per-capita GDP could theoretically rise by 0.1 or 0.2 percent annually in the worst affected countries. Otherwise, per-capita GDP could fall between 0.35 and 0.6 percent annually.

Another model currently being developed asserts that these studies underestimate the economic impact of HIV/AIDS by not fully capturing the implications of the destruction of human capital<sup>94</sup>. By destroying existing human capital and impeding its transmission to subsequent generations, HIV/AIDS can weaken the foundations for economic growth and development. The application of this model to South Africa suggests that, if nothing is done to combat the epidemic, a complete economic collapse will occur within four generations. If spending on combating the disease is optimal and pooling (caring for children within extended families, thereby minimising the epidemic's social policy burden) is maintained, growth continues, although more slowly than would otherwise be the case. If pooling breaks down, and is replaced by nuclear families, growth will be slower still, even with optimal spending. If school-attendance subsidies are not possible, growth will be very sluggish. In all three cases, the additional fiscal burden of the interventions is considerable. These results reinforce the need for early action to prevent the spread of the epidemic.

Sub-Saharan Africa, and two from the Middle East and North Africa and Latin America). Despite the fact that they use different methodologies, all the models suggest that HIV/AIDS can have a negative impact on annual economic growth rates (between 0.2 and 1 percent annually in the case of Russia), which can significantly reduce GDP levels over time. The impact on per-capita GDP is less clear: it depends largely on whether the costs of responding to AIDS are financed from savings, and the skill levels of the most heavily affected population groups. These studies even suggest that, if the costs of responding to AIDS are not financed from savings and the epidemic is mostly concentrated among less-skilled workers,

Interpretations of these results need to reflect the limitations of the models that generate them. Incorporating an HIV/AIDS scenario into economic growth models means making assumptions about the rate at which HIV will spread from person to person, the number of infected persons, their skills and employment, time from illness to death, and the extent and costs of care that will be provided. The results depend on the type and accuracy of the assumptions. Also, to show even a small impact of HIV/AIDS on economic growth, the epidemic typically has to be projected out for 15-30 years. For policy makers who are struggling with short run development challenges, this time span can reduce the immediacy

<sup>94</sup>Bell C., Devarajan, H. Gersbach, 'The Long-run Economic Costs of AIDS: With an Application to South Africa', The World Bank, 2003, Washington D.C.

of AIDS's impact on economic growth. The potential negative implications of HIV/AIDS for economic growth become more real for policy makers when the sectoral and micro impacts of the epidemic—increased expenditures on treatment and care, higher worker absenteeism, and the costs of replacing skilled labour—are felt. This reinforces the importance of sectoral and micro monitoring of the impact of the epidemic.

### Sectoral Impacts

The epidemic could have important sectoral impacts in some countries. In Russia, for example, the epidemic could affect the critical extractive industries (oil, gas, non-ferrous metals), many of which make extensive use of migrant labour. International experience suggests that workers in these industries tend to face relatively high HIV risks. In South Africa - an economy that also depends on natural resource exports, and whose per - capita GDP exceeds Russia's by nearly 60 percent<sup>95</sup>- the extractive sector has been so affected by the epidemic that its leading firms, including such international giants as Anglo-American and De Beers, have taken leadership roles in providing antiretroviral treatment to their employees<sup>96</sup>.

Sub-national epidemiological trends within Russia suggest that HIV levels may be higher in areas where extractive industries are present. The Siberian regions of Irkutsk and Khanty-Mansi are home to large oil, gas, and gold industries-and report HIV prevalence rates that are triple national averages<sup>97</sup>, with heterosexual transmission accounting for 'more than half of all newly registered cases of HIV' in the latter<sup>98</sup>. Sharp (see Box 3 and Annex 1) uses a sector-based macroeconomic model to demonstrate that Russia's capital-intensive extractive industries could be highly vulnerable in a scenario combining a more open economy (after Russia's pro-

spective accession to the World Trade Organisation) and a generalised AIDS epidemic. The natural gas industry sees 11 percent, 22 percent, and 27 percent declines in exports; and 5 percent, 11 percent and 13 percent declines in production under low, medium, and high AIDS epidemic scenarios, respectively. Non-ferrous metallurgy loses nearly a third of its exports and a quarter of its production. Oil extraction loses 8 percent, 16 percent, and 19 percent in exports, respectively; and 6 percent, 13 percent, and 16 percent in output, respectively, in the three scenarios.

Not surprisingly, Russian and international companies working in the natural resource sector have already begun developing HIV/AIDS awareness and prevention activities in partnership with the regional authorities, NGOs, and UNAIDS.

### Households

HIV/AIDS can have profound effects on households. The death of a breadwinner can sharply reduce household income and welfare. Children in such households drop out of school to enter the labour force, take on new household duties, or care for younger siblings. Although households can develop mechanisms to deal with these shocks, the failure of children to complete formal education can relegate households to different socio-economic status compared to what would have happened otherwise. In cases where multiple household members contract HIV, this clustering of the disease often causes households to slowly disintegrate and disappear. These issues are particularly pressing in Russia and other CIS countries, where increases in male mortality during the 1990s and high divorce rates are putting pressures on many households—even before the AIDS epidemic gathers force.

AIDS can also change household compositions and structures. In countries with

*Sub-national epidemiological trends within Russia suggest that HIV levels may be higher in areas where extractive industries are present*

*In cases where multiple household members contract HIV, this clustering of the disease often causes households to slowly disintegrate and disappear*

<sup>95</sup> The Republic of South Africa's per-capita GDP (measured in purchasing-power-parity terms) in 2001 was \$11,290, compared to the Russian Federation's \$7,100. *Millennium Development Goals: A Compact among Nations to End Human Poverty*, Human Development Report, United Nations Development Programme, 2003 (New York), pp. 238-39.

<sup>96</sup> *Africa: Year-end 2002—Slow start to HIV/AIDS treatment roll-out*, UNOCHA IRIN plus News, 20 January 2003. See also Tony Barnett, Tsetsele Fantan, Bekezela Mbazili, Alan Whiteside, Debswana - a global benchmark in corporate HIV/AIDS Practice (UNAIDS, Best Practice Collection, November 2002). Online: [http://www.unaids.org/html/pub/publications/irc-pub02/jc769-debswana\\_en\\_pdf.htm](http://www.unaids.org/html/pub/publications/irc-pub02/jc769-debswana_en_pdf.htm)

<sup>97</sup> Presentation by Henning Mikkelsen, UNAIDS, at Russia's Annual National Conference on HIV/AIDS and Viral Hepatitis, Suzdal, Russia, 14-16 October 2003.

<sup>98</sup> 'AIDS: Let's face the problem,' Vadim Pokrovsky, *Meditsinskaya Gazeta*, 31 October 2003.

*The human development costs of HIV/AIDS go well beyond premature deaths*

high HIV prevalence, growing mortality rates in the 15-45 year age cohort have led to the emergence of new forms of households. These include elderly household heads with young children, or households headed by grandparents; large households with unrelated fostered or orphaned children; children-headed households; and single-parent households. Some evidence suggests that these new structures are not as efficient as traditional households, and are highly susceptible to poverty and deprivation<sup>99</sup>.

The available data on the impact of HIV/AIDS on household expenditures and consumption suggest that households experiencing an adult death spend 33 percent less on non-food items such as clothing, soap and batteries, and their food purchases also decrease<sup>100</sup>. A household survey in Thailand found that out-of-pocket medical expenses per HIV/AIDS patient equalled approximately six months of average household income. However, the foregone earnings of the deceased are the largest economic cost

of an HIV/AIDS related death. The foregone earnings of a person living with HIV who subsequently dies are generally much higher than for a person who dies from a non-AIDS related cause. This is because of the greater number of work years lost among people living with AIDS, prior to their premature deaths. Some studies also indicate that taking care of an HIV-infected person affects household labour supply behaviour<sup>101</sup>.

## Human Development Implications

HIV/AIDS has crucial human development dimensions. AIDS causes premature death and is already beginning to prevent the achievement of international and national development goals. The human development costs of HIV/AIDS go well beyond premature deaths, however. AIDS deaths are preceded by long, debilitating and painful illnesses. The disease also has long-term consequences in terms of decreased primary school enrolments and more child labour. This affects human capital, and since maternal education is generally correlated with child mortality, declining rates of female education today are likely to mean increased child mortality tomorrow.

### Inequality

The impact of HIV/AIDS on poverty can be looked at from both macro and micro perspectives. At the macro level, changes in Gini coefficients can be used to measure the impact of HIV/AIDS on inequality and relative poverty. There is to date little evidence of these impacts at the macro level in Central and Eastern Europe and the CIS. However, HIV/AIDS has the potential to exacerbate inequality. Not only do the wealthy have better access to health care—they are less likely to indulge in the high risk behaviour associated with contracting HIV. This may not be the case initially: in many countri-

**Table 7: Effects of declining life expectancy on the HDI in selected countries**

Countries	Human Development Index (HDI)	HDI 1-year life expectancy	HDI 2-years life expectancy	HDI 5-years life expectancy	HDI 10-years life expectancy
Albania	0.726	0.720	0.714	0.698	0.670
Armenia	0.743	0.734	0.732	0.716	0.688
Azerbaijan	0.736	0.730	0.724	0.708	0.680
Belarus	0.785	0.779	0.774	0.757	0.729
Bosnia-Herzegovina	0.268	0.263	0.257	0.241	0.213
Czech Republic	0.841	0.835	0.829	0.813	0.785
Georgia	0.738	0.734	0.727	0.711	0.683
Kazakhstan	0.741	0.735	0.729	0.713	0.685
Kyrgyz Republic	0.703	0.697	0.692	0.675	0.647
Latvia	0.788	0.782	0.777	0.760	0.732
Lithuania	0.801	0.796	0.790	0.773	0.746
Moldova	0.698	0.692	0.687	0.670	0.642
Poland	0.826	0.820	0.814	0.798	0.770
Romania	0.769	0.763	0.758	0.741	0.713
Russia	0.775	0.769	0.764	0.747	0.719
Slovakia	0.829	0.823	0.818	0.801	0.773
Tajikistan	0.658	0.652	0.647	0.630	0.602
Turkmenistan	0.758	0.752	0.747	0.730	0.702
Ukraine	0.743	0.737	0.732	0.715	0.687
Uzbekistan	0.694	0.688	0.683	0.666	0.638

<sup>99</sup> Shell, R., *Halfway to the Holocaust: The Economic, Demographic and Social Implications of the AIDS Pandemic to the Year 2010 in the Southern Africa Region*, Konrad Adenauer Stiftung occasional paper, 2000, Johannesburg.

<sup>100</sup> Ainsworth M., L. Frasen, and M. Over, 'Confronting AIDS: Evidence from the Developing World', the World Bank, 1998, Washington D.C.

<sup>101</sup> Pitayanon S., S. Kongsin, and W.S. Janjareon, 'The Economic Impact of HIV/AIDS Mortality on Households in Thailand', the World Bank, 2000, Washington D.C.

es (e.g., the United States, South Africa, Thailand), HIV/AIDS early in the epidemic was more concentrated among the wealthy and the better educated. Then, as the epidemic matures, it tends to migrate to and concentrate among low-income groups.

This shift in the concentration of the epidemic has inter- and intra-country implications. If, over time, HIV/AIDS becomes more closely associated with poverty and increases the vulnerability of poorer countries and poorer groups within countries, then the epidemic has the potential to exacerbate the 'poverty trap' (Bloom, 2002).

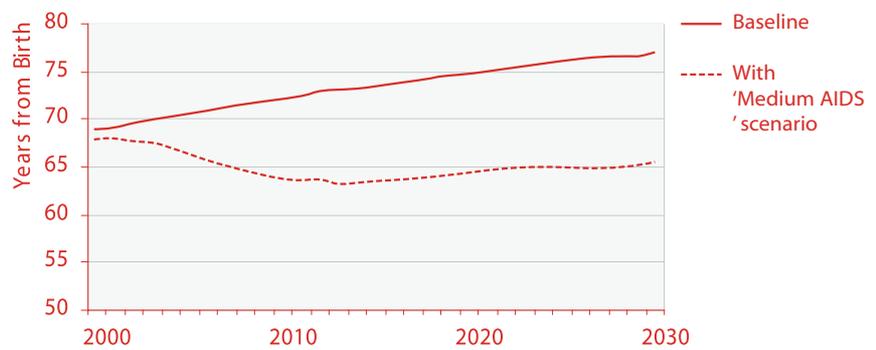
### Life Expectancy

A reduction in life expectancy is one of the clearest effects of AIDS on human development. AIDS's early death impact is reflected in UNDP's human development index (HDI) through its life expectancy component<sup>102</sup>. Because the epidemic in this region is still in comparatively early stages, we must look elsewhere for the effects of an HIV/AIDS epidemic. While the countries of Eastern Europe and the CIS are dramatically different from most countries in Africa or Asia, the development of generalised epidemics in other regions took only a decade. As deaths from AIDS increased in these countries, overall life expectancy and HDI rankings dropped sharply.

AIDS caused average life expectancy in Botswana to drop from 65 years in 1993 to 45 years in 1998. Although African conditions are different from those in the CIS, it is instructive to note that Botswana's per-capita GDP (in purchasing-power-parity terms) measured \$7,870 in 2001. This was higher than the \$7,620 reported for Belarus and Russia's \$7,100 figure, and well above Ukraine's \$4,350<sup>103</sup>. Life expectancy projections developed by the US Census Bureau offer a grim assessment for Botswana's future. Had

**Figure 14:**

*Russia, Impact of AIDS on Life Expectancy. Source: Sharp, 2002.*



HIV/AIDS been managed effectively, average life expectancy in Botswana in 2010 would have risen to 73 years. But if the pandemic is not reversed, Botswana's average life expectancy is forecast to drop to 29 years<sup>104</sup>.

How might changes in life expectancy affect the HDI of countries in this region? Table 7 shows the effects that reductions in life expectancy of one, two, five, and ten years could have on select countries in the region. Could such large changes in life expectancy really occur in this region? In one sense, they have already begun. Declines in life expectancy that began in the Soviet period during the 1980s have continued in many CIS countries during the post-communist period. As Table 8 shows (page 46), adverse mortality changes have taken place in five countries (Armenia, Belarus, Kazakhstan, Russia and Ukraine) that comprise three quarters of the population of the CIS. Russians on average have lost 3.6 years of life expectancy, Belarussians have lost three years of life expectancy, and Ukrainians have lost two years of life expectancy. In each case, the loss is greater for men than for women. Not coincidentally, these countries have three of the five highest HIV prevalence rates in the region. The epidemiological trends discussed in Chapter I strongly suggest that life expectancy in these countries will come under further pressure as AIDS takes hold.

*A reduction in life expectancy is one of the clearest effects of AIDS on human development*

<sup>102</sup>The HDI is an unweighted average of indices for per-capita GDP (in purchasing-power-parity terms), life expectancy, and education attainment. HDIs in this region in 2001 ranged between .89 for Slovenia and .657 for Tajikistan. See *Millennium Development Goals: A Compact among Nations to End Human Poverty*, Human Development Report, United Nations Development Programme, 2003 (New York), pp. 238-39.

<sup>103</sup>Ibid.

<sup>104</sup>[http://usaid.gov/pop\\_health/aids/Resources/731demographics.doc](http://usaid.gov/pop_health/aids/Resources/731demographics.doc)

Countries	HDI value		HDI rank		Life Expectancy at birth (years)	
	1990	2001	1990	2001	1990	2001
Armenia	0.831	0.729	47	100	71.8	72.1
Azerbaijan	0.770	0.744	62	89	71.0	71.8
Belarus	0.861	0.804	38	53	71.3	69.6
Georgia	0.829	0.746	49	88	72.8	73.4
Kazakhstan	0.802	0.765	54	76	68.8	65.8
Kyrgyz Republic	0.689	0.727	83	102	68.8	68.1
Moldova	0.758	0.700	64	108	68.7	68.5
Russian Federation	0.862	0.779	37	63	69.3	66.6
Tajikistan	0.657	0.677	88	113	69.6	68.3
Turkmenistan	0.746	0.748	66	87	66.4	66.6
Ukraine	0.844	0.766	45	75	70.5	69.2
Uzbekistan	0.695	0.729	80	101	69.5	69.3

Source: For 2001 data: UNDP's Human Development Report (2003), Millennium Development Goals: A Compact Among Nations to End Poverty, p.242ff. For 1990 data: UNDP's Human Development Report, 1993, p.135ff. Data for countries in which adverse mortality changes have taken place are italicised.

### HIV/AIDS and the Millennium Development Goals

The consequences of AIDS for the region's human development prospects can also be analysed in terms of the epidemic's potential impact on prospects for realising the Millennium Development Goals (MDGs). The importance of these consequences has been acknowledged by UN member states in the call through Millennium Development Goal 6 to the halt and reverse the spread of AIDS (as well as tuberculosis, malaria, and other dangerous infectious diseases). This goal underscores

both the importance of reducing the prevalence of HIV, and its potential effects on prospects for achieving the other goals. Table 9 shows how the HIV/AIDS epidemic might affect prospects for realising the other MDGs.

The millennium development goals include achieving universal primary education by 2015 and 'measured progress' towards gender equality and the empowerment of women by eliminating disparities in primary and secondary education by 2005. These goals will be harder to achieve in AIDS-affected countries. Growing numbers of children will be orphaned or have to work to offset the lost income of deceased breadwinners. Once children are orphaned or otherwise drop out of school, their chances for education and accumulating human capital can easily slip away. Girls are more likely to be taken out of school, widening gender disparities.

AIDS will make the goal of reducing mortality rates for infants and children by two thirds (MDG5) particularly hard to realise. A mother living with HIV who does not receive treatment has about a 30 percent chance of transmitting HIV to her infant. Most infected children do not reach their fifth birthday. In addition, some mothers of uninfected children will die of AIDS, and orphans have higher mortality rates than other children. The economic and social stresses associated with having AIDS in a household further reduce life chances for infants and children.

Rates of mother-to-child HIV transmission are relatively low throughout the region. But if the epidemic becomes generalised, the numbers of women and children living with HIV/AIDS, and of orphans, will increase dramatically. Effective and cheap solutions are available: a single dose of Neviraprine markedly reduces the chances of mother-to-child transmission. But Nevirapine or AZT are only available through public or donor provision in a small subset of the countries in the region. However while these medicines may save children from premature death due to AIDS, they will still lose their mothers. Although the extent of the epidemic can not be predicted accurately, prudence requires the adoption of serious measures to face the deteriorating conditions that are almost certain to come.

Development goal/Target	Effect of HIV/AIDS	Global and national impact
1) Eradicate extreme poverty and hunger. <i>Reduction by one-half of the number of people living in extreme poverty.</i>	AIDS increases poverty especially at the household level; it can do serious damage to human capital.	Will slow global progress, some national impact, but population declines reduce this, main impact at community/household level. <b>Makes goal difficult to achieve.</b>
2) Achieve universal primary education. <i>Ensure that all boys and girls complete primary school.</i>	AIDS reduces supply of education services through teacher deaths and other educational resources; more children will have to drop out of school to work to compensate for breadwinners' lost income.	Worst affected countries will see declining enrolment especially among most vulnerable groups. <b>Goal harder to achieve in some countries.</b>
3) Promote gender equality and empower women <i>Eliminate gender disparities in primary and secondary education by 2005, and at all levels by 2015.</i>	Girls are more likely to be kept out of school to care for younger children or sick relatives.	Disparities will not be reduced without targeted interventions. <b>Goal harder to achieve.</b>
4) Reduce child mortality <i>Reduce by two-thirds the mortality rate among children under five.</i>	Infant and child mortality will continue to increase for the next decade and possibly longer.	The target will not be met and in some countries there will be deterioration over the period.
5) Improve maternal health <i>Reduce by three-fourths the maternal mortality ratio by 2015.</i>	Little impact recorded to date.	<b>Goal harder to achieve.</b>
<i>Access through primary health-care systems to reproductive health services for all individuals of appropriate ages no later than 2015.</i>	Demand from HIV/AIDS patients will put pressure on the public health care system, competing with other illnesses; additional human and financial resources will be required.	Will require more resources than previously envisaged. <b>Target may be more difficult to achieve. Global Fund for AIDS, TB and Malaria might make a difference.</b>
6) Combat HIV/AIDS, malaria and other diseases <i>Halt and begin to reverse the spread of HIV/AIDS.</i>	Direct	Results on this goal are cross-cutting for achievement of the MDGs.

## Conclusions and recommendations

This chapter explores the AIDS's potential impact on the region's human development prospects by focusing on the possible consequences of a generalised epidemic on economies, societies, and households. It suggests the following conclusions.

First, the Western CIS and Northern Baltic countries that have the region's most disturbing epidemiological profiles also have the most unfavourable demographic trends, in terms of shrinking populations and labour forces, rising mortality and morbidity trends, and declining replacement rates. Dependency ratios, and the proportions of workers relative to social protection recipients, became quite unfavourable in many countries in the region during the 1990s. They will become even more unfavourable if millions of otherwise productive workers living with AIDS become disabled and die. The intensification of the epidemic will mean new strains on already overburdened social protection systems. They will also increase the importance of pension and tax reforms, and other (often controversial) measures needed to address increasingly unfavourable dependency ratios. By contrast, Turkey and some of the Central Asian countries (Uzbekistan and Tajikistan) have relatively young societies, strong population growth, and relatively favourable epidemiological profiles. But the countries of Central Asia and the Caucasus are also the region's poorest, with relatively limited health care capacity.

Second, the nascent modelling literature indicates that a generalised epidemic that causes premature morbidity and mortality in age cohorts with high labour force participation rates could reduce annual GDP growth by up to one percentage point in the case of Russia. Increased health expenditures associated with treating and caring for persons living with AIDS could absorb between one and three percentage points of GDP. While social and health insurance systems in some countries in the region might be able to meet this challenge, other countries—particularly the poorest CIS countries in Central Asia and the Caucasus—almost certainly would not.

### Box 4: Security implications of HIV/AIDS: The case of Russia

AIDS could have serious security implications. In the Russian Federation, they concern both direct demographic effects (in the form of continuing or accelerated shrinkage of male population cohorts available for service in the armed forces and security services), and possible accelerated depopulation of Russia's most effected regions, some of which border other states.

The current Russian government plans call for a million-man army, partly professional, to be maintained for an indefinite period of time. However, after 2005, the numbers of 17-18 year-old men eligible for military duty will decline sharply, due to significant declines in birth rates in late 1980s and early 1990s. Premature deaths and poor health linked to AIDS-related illnesses will further exacerbate Russia's military manpower shortage. Moreover, HIV infection risks for service men are higher than in the general population. Basic risk factors—age group (young males prone to risky behaviour), the military's risk-promoting culture, some pocket money that can be spent on drugs and commercial sex, long tours of duty in remote areas far from home and families—are particularly important for Russian service men.

The HIV/AIDS epidemic in Russia could further lower the already poor quality of personnel that currently enter the Russian army and other uniformed services. Only 11 percent of the men called up in the 2002 draft were deemed fully fit for military duty. In 2002, 5,000 draftees were turned away from military duty, having tested HIV positive, and 500 military personnel were released from service for the same reason. One in five draftees had no better than a basic primary school education. During the 2003 spring draft, every fourth new serviceman had less than nine years of school, and thus could not be sent for the advanced military training required for operating modern combat equipment. These concerns provide additional arguments for putting the HIV/AIDS issue on the front burner, and for emphasising the introduction of comprehensive policy responses.

*Box based on Vladimir Frolov, 'The National Security Implications of the HIV/AIDS Epidemic in Russia' (Annex 2 of this report).*

Third, household sizes and composition in the region will undergo important changes as a result of the epidemic. Single parent households, households managed by the elderly, and households consisting of grandparents taking care of AIDS orphans will become more important. In addition to exacerbating the vulnerability of many households—which in a number of CIS countries are already suffering from the 'crisis of the family'—these changes will require new approaches to social policy.

Fourth, a generalised AIDS epidemic could raise national security issues. In addition to weakening military capacity, HIV/AIDS can threaten plans for military reform and modernisation. This could be a particular issue for countries with relatively large, unreformed military establishments like the Russian Federation, Turkey, and Ukraine. It may also raise issues for countries

*Girls are more likely to be taken out of school, widening gender disparities*

like Estonia and Latvia that are introducing high HIV prevalence rates into the North Atlantic Treaty Organisation. The presence of a generalised epidemic in one country could raise tensions in neighbouring countries, which might feel obliged to tighten border controls or resort to other actions that could be perceived as unfriendly.

These conclusions point to the following policy recommendations:

- *There is a clear need for new research directions that can better capture the dynamics of the epidemic's impact on households, enterprises, economic sectors, and macroeconomic growth prospects, and national security. Work done by specialists on these areas needs to be better informed by the research of epidemiologists and public health specialists—and vice versa. The same goes for medium- and long-term social policy development, including military reform.*

- *The scope of the current generation of tax, pension, and social policy reforms that have been (or are now being) introduced in the Northern Baltic and some Western CIS countries may not be adequate to address the higher dependency ratios that would come with large reductions in labour forces due to higher mortality rates. Policy makers may need to consider more ambitious social policy reforms.*

- *Antiretroviral and other AIDS therapies are both necessary and affordable. But in much of the region, the opportunity costs of ensuring broad access to these therapies are substantial. Policy makers need to raise awareness and encourage dialogue about this question, to ensure that limited health care resources are used as effectively as possible.*

- *Both government and private companies have to invest in the development of prevention and care programmes in industries and work places.*



# Chapter IV: Human Rights and HIV/AIDS in Central and Eastern Europe and the CIS

*AIDS is a human rights issue. Access to HIV/AIDS treatment is key to realising the fundamental human right to health. Under international human rights law, states have an obligation to take positive legislative, budgetary and administrative measures that progressively advance the right to the highest attainable standard of health. This commitment should be matched by resources, including from donors and the international community*<sup>105</sup>.

— Mary Robinson, UN High Commissioner for Human Rights (1997-2002)

Responses to the HIV/AIDS epidemic can only be effective if governments and societies robustly embrace and protect the human rights of the members of marginalised groups that are most at risk. As the previous chapters have demonstrated, the criminalisation and stigmatisation of the high risk behaviours that promote the spread of HIV generate significant negative public health side effects that transcend considerations of morality. In most CIS and East European countries, a better balance needs to be struck between treating HIV/AIDS as a public health issue versus the prosecution of those engaging in the high risk behaviours with which the disease is associated. The cost of failing to rebalance policy will be millions of innocent lives lost—many of whom (e.g., children of mothers living with HIV) will be victims of decisions made by others.

Policy rebalancing towards the adoption of human rights-based policies faces two serious challenges in this region. First, many countries in Eastern Europe and the CIS continue to struggle with the legacy of state illegitimacy and individual disempowerment inherited from the communist period. Second, while most of the states of the region have made extensive progress in passing

human rights legislation and creating the formal structures associated with the rule of law, the gap between theory and practice is not closing fast enough to fully protect the human rights of the members of marginalised groups that are most at risk.

## HIV/AIDS and Human Rights

HIV/AIDS often inspires fear and hostility. This is not surprising: sexually transmitted diseases, injecting drug use, and the trans-border diffusion of epidemics are seldom topics of polite conversation or informed public discourse. The traditional sexual mores prevailing in many East European and CIS countries at the start of the transition presented further obstacles to open, honest discussion of HIV/AIDS as a public health issue.

It has been too easy, therefore, for policy makers and publics to adopt moralistic, short-sighted approaches to HIV/AIDS. A number of countries in the region initially responded to the epidemic by tacitly or explicitly ignoring (in some cases revoking) human rights protections nominally afforded to its victims. Punitive policies were introduced in order to 'contain' HIV and the 'anti-social' behaviour associated with its spread.

Such instincts must be resisted, on both humanitarian and effectiveness grounds. Criminalisation may or may not be effective in reducing of injecting drug use or sex work. But it has devastating epidemiological and human rights consequences. It pushes sex workers, injecting drug users, people living with HIV/AIDS, and other groups that are most at risk from the epidemic further into the social margins. Once there they have little incentive to refrain from such risky behaviours as sha-

*Responses to the epidemic can only be effective if governments and societies robustly embrace and protect the human rights of the members of marginalised groups that are most at risk*

<sup>105</sup> 'United Nations Entrenches Human Rights Principles in AIDS Response.' Joint UNAIDS/OHCHR press release, 10 September 2002. See [http://www.unaids.org/whastnew/press/eng/pressarc02/Humanrights\\_100902.html](http://www.unaids.org/whastnew/press/eng/pressarc02/Humanrights_100902.html).

*In many East European and CIS countries, the appropriate human rights response is complicated by the disempowering legacy of communism*

ring needles or having unprotected sex. Public health authorities cannot reach those who are most in need of assistance, reducing the effectiveness of prevention and treatment policies. Realistically, effective responses to HIV/AIDS can only be pursued if states decisively protect the civil and human rights of those most vulnerable to the epidemic, as well as to educate others in order to reduce social opprobrium.

Respecting the human rights, and responding to the concerns, of people living with HIV/AIDS and others in marginalised, high-risk communities must be vital elements of any effective response to the epidemic. Such concerns can only be articulated, understood, and addressed when the individuals and communities with the most at stake are included in policy making processes, and when supportive environments for dialogue and mutual understanding are established. An emphasis on protecting human rights can create such an environment by reducing the vulnerability experienced by people living with HIV/AIDS, injecting drug users, men who have sex with men, sex workers, ethnic minorities, and other groups that might not otherwise enjoy the full benefit of the law.

In many East European and CIS countries, the appropriate human rights response is complicated by the disempowering legacy of communism. Alienation from the state was a key factor behind the collapse of the old order in the late 1980s and early 1990s. Pervasive social controls and the cynicism and apathy they generated atomised societies and hindered the development of the grass roots organisations needed to articulate individual and community concerns, even in the democratising polities that emerged during the transition.

In the Central European countries, the democratisation experiment has been relatively successful. Measures to protect human rights have been put in place, competitive electoral processes have taken hold, and the position of independent media has by and large been consolidated. Relatively free discussions of ideas and policy issues have become institutionalised, and law enforcement agencies are subject to parliamentary

and judicial control. The democratisation and capacity building these countries needed for accession to the European Union has also meant significant progress in creating the appropriate policy environment for responding to the HIV/AIDS threat.

In other parts of the region, democratisation has been less robust. The armed conflicts and sharp declines in incomes recorded during the first (and, less frequently, the second) half of the 1990s have weakened and distorted democratisation processes. In some countries, democracy is not recognised as the official model for political development. Competitive electoral regimes, independent media and judiciaries, and vibrant civil societies are absent. Law enforcement agencies are not subject to effective social control. Such conditions raise doubts about the significance of formal guarantees of human rights.

People living with HIV/AIDS, sex workers, injecting drug users, and members of other marginalised groups can be forgiven for harbouring doubts about whether their governments and societies value and want to help them. They likewise do not always believe that governments and societies understand and are willing to address the underlying causes of unsafe behaviour—vulnerability, poverty, exclusion—or the sexual behaviours associated with the spread of HIV.

Such beliefs must be changed in order to afford public health systems access to these people, and thereby employ measures that can slow the spread of HIV. Marginalised communities must come to believe that the state is willing and able to protect their human and civil rights. The key legal issues that arise in this context are consent to testing, disclosure of HIV status, and antidiscrimination.

**Testing and disclosure.** The basic need for sound epidemiological data (which are a public good) means that HIV testing should be widely encouraged. Diagnostic procedures should be subsidised, and the information they produce should be well managed.

Compulsory HIV testing, however, violates the right to decide what can be done

*People living with HIV/AIDS, sex workers, injecting drug users, and members of other marginalised groups can be forgiven for harbouring doubts about whether their governments and societies value and want to help them*

with one's own body. When combined with involuntary disclosure of test results (which violates the right to privacy), compulsory testing increases the chances that the identity of people living with HIV/AIDS will be revealed without their permission, thereby facilitating official or unofficial discrimination. International standards and practices recognise that there are very few circumstances in which testing should be required, or in which unauthorised disclosure of HIV status is permitted. The failure to guarantee these rights reduces the number of people who seek HIV testing, and keeps members of high-risk groups outside the reach of public health systems.

Despite this, members of at-risk groups throughout the region continue to face officially mandated compulsory testing. In Belarus, for instance, HIV testing is compulsory for 'drug addicts, homosexuals and bisexuals, sex workers, prisoners entering a correctional facility, and foreigners who plan to stay in the country for more than three months'<sup>106</sup>. A similarly sweeping law exists in Armenia<sup>107</sup>, and other countries have identified specific groups that face compulsory testing<sup>108</sup>.

Some countries in the region (such as the Kyrgyz Republic<sup>109</sup>) have statutes that specifically ban the release of confidential HIV information. Legislation in other countries does not mention HIV specifically, but HIV is presumably included in the category of medically sensitive information that public health workers are expected to keep confidential. In practice, guarantees of HIV confidentiality are often flouted. In Russia and Ukraine, persons testing positive for HIV during treatment are registered with the

#### Box 5: Restrictive policies: Well intended but ill performing

Obstacles to the adoption of comprehensive human rights-based approaches to HIV in the region are apparent in restrictive policies that have yet to be repealed or have even been adopted in recent years. In Russia, a federal law bans the use of methadone to treat heroin addiction, thus depriving many injecting drug users of a vital harm reduction service. Needle exchange projects are technically illegal as well, due to policymakers' belief that they encourage drug use. Recent trends toward weakening human rights protection that was introduced in the early 1990s in the Russian Federation are also worrisome. In the spring of 2003, for instance, Moscow legislators proposed amending federal health laws in order to introduce compulsory testing for various diseases (including HIV and tuberculosis) for injecting drug users, sex workers, street children, the homeless, and others deemed to be at high risk for HIV. Some federal lawmakers in Russia have been advocating the recriminalisation of sex between men, arguing that such a prohibition would reduce the spread of HIV.

International experience points to the weaknesses of these proposals, and shows that policymakers' wishes to eradicate such risky behaviour as needle sharing and sex never come to fruition. Instead, the suppression of human rights pushes such behaviour underground and puts even greater numbers of people at risk for disease and death.

*Box based on contribution from David Barr*

public health authorities, and often have the diagnosis 'HIV infection' written in their medical charts.

**Anti-discrimination.** HIV status should not be a basis for denying equal access to health care and employment. But since people living with HIV do not benefit from specific anti-discrimination protection in most countries, proving and seeking redress for HIV-related discrimination can be quite difficult. A recent UN report found that 20 percent of the East European and CIS countries had not passed general anti-discrimination legislation, and half had not passed anti-discrimination laws designed to protect vulnerable groups<sup>110</sup>. Members of at-risk groups (irrespective of whether they are living

*HIV status should not be a basis for denying equal access to health care and employment*

<sup>106</sup> These categories are contained in guidelines established by the Belarus Ministry of Health.

<sup>107</sup> Article 11 of the Armenian criminal code prescribes compulsory HIV testing for prisoners, patients with sexually transmitted infections, pregnant women, children born to women living with HIV, injecting drug users, and all those who are returning to Armenia after having been away for three consecutive months.

<sup>108</sup> All pregnant women are automatically tested for HIV in Russia and Ukraine. The laws in those two countries do not specify other groups for compulsory testing, but prisoners and drug users are among those who are often tested without their consent.

<sup>109</sup> Article 145, Paragraph 2 of the Kyrgyz Republic's criminal code makes the release of confidential information regarding HIV punishable to up to two years in prison. However, people with HIV face possible criminal penalties under Article 258, according to which a person is criminally liable if s/he does not disclose information that can be potentially dangerous to the health of others.

<sup>110</sup> *Report of the Secretary General: Progress towards implementation of the Declaration of Commitment on HIV/AIDS*, UN General Assembly, 58th session, 25 July 2003, New York, p. 11.

*In order to be effective, policies regarding HIV/AIDS must be sensitive to differing cultures and traditions and must include at-risk individuals in decision-making processes*

with HIV) often face discrimination that is rarely countered decisively by officials. A recent survey of NGOs providing harm reduction services throughout the region found that drug users are often 'informally discouraged or prohibited from receiving primary health care'<sup>111</sup>.

Discrimination against people living with HIV or belonging to at-risk groups largely reflects a lack of information about HIV transmission, as well as opprobrium vis-à-vis homosexuality, drug use, and sex work. Unfortunately, comprehensive programmes to inform, educate, and sensitise publics have been few and far between. Governments that are free of malign intent in this respect may nonetheless be guilty of benign neglect.

### **Human Rights Protection**

HIV/AIDS spreads most rapidly among the powerless and dispossessed. This is in part because the human rights of those most susceptible to HIV are often protected less vigorously than the rights of others. It must be broadly understood that policies that fail to protect an individual living with HIV from discrimination in access to health care, or violate his/her right to privacy or confidentiality, do not serve the public interest. The socio-economic and public health costs of HIV are significantly higher when people seek assistance after they have been infected and are dealing with HIV-related conditions. Policies need to focus on guaranteeing individuals the right to acquire knowledge about their HIV status in a confi-

dential manner, at a time and place of their own choosing.

In some countries in the region, public health services that might help members of vulnerable groups are not only unavailable—they are illegal<sup>112</sup>. Such harm reduction activities as needle exchanges and methadone substitution therapy, which can help reduce HIV transmission among injecting drug users, are either banned or allowed only on a limited basis in many countries<sup>113</sup>. As is described in Chapter I, the human rights of sex workers, prisoners, and other marginalised groups are routinely violated in many countries. The extent of these violations, and available response options, vary according to different cultural, social, and legal traditions. Public health infrastructure and socio-economic circumstances can also play a role. In order to be effective, policies regarding HIV/AIDS must be sensitive to differing cultures and traditions—and to perceptions of human rights that are woven into different legal, cultural, and gender roles. This can only be done by including at-risk individuals in decision-making processes.

### **National, Regional, and International Legal Protection of Human Rights**

Constitutions in most East European and CIS countries have maintained the formal guarantees of access to health care inherited from the socialist period<sup>114</sup>. In some respects, these guarantees were illusory even then: access to imported medicines

<sup>111</sup> 'Injecting Drug Users, HIV/AIDS Treatment and Primary Care,' Central and Eastern European Harm Reduction Network, 2002. Available at: [http://www.soros.org/harm-reduction/pub\\_files/CEEHRN\\_treatment\\_access.pdf](http://www.soros.org/harm-reduction/pub_files/CEEHRN_treatment_access.pdf).

<sup>112</sup> The State Drug Control Committee of the Russian Federation in late 2003 issued a non-binding recommendation to its regional departments urging the cessation of all 'harm reduction' activities. This recommendation was supported by a misleading analysis of international experience and the UN position. While the full outcome of this recommendation was not known at the time of publication, at least one region, the Republic of Buryatia, had taken action to enforce the recommendation. Other regions were preparing to follow suit.

<sup>113</sup> Methadone use is illegal in Russia and Ukraine. Except in Poland, where the government officially supports needle exchange for injecting drug users as a harm reduction strategy, progress is uneven in other countries. In Russia, Ordinance number 28 of the Ministry of Health (from 9 September 2002) supports harm reduction as a prevention measure, and some 80 projects were operating in the country in mid-2003. On the other hand, a recent letter by the State Committee on Drug Control to its regional divisions poses serious threats to harm reduction projects, particularly if the letter will be followed by an order. In other countries (e.g., Turkmenistan), harm reduction is forbidden outright. Most projects are operated by NGOs, both local and international, with occasional support from government agencies.

<sup>114</sup> For example, the current Russian, Polish and Azerbaijani constitutions (all enacted in the 1990s) guarantee citizens the 'right' to education, health care and housing, often using the same language that was prominent in their countries' communist-era constitutions..

or forms of treatment often required the payment of bribes, communist party membership, or informal (but not necessarily fair) connections. Still, these guarantees were not without value, and in many East European and CIS countries the transition has not eroded attachment to such collective rights. This positive legacy of the Soviet period, when combined with regional and international human rights conventions, could facilitate the promotion of de facto recognition of the human and civil rights needed to empower the individuals and communities most threatened by HIV/AIDS.

International human rights agreements can help governments apply the appropriate human rights lens to the development of HIV/AIDS programmes. They can facilitate the use of procedural, institutional, and social mechanisms to confront the epidemic. Most of their provisions are based on the essential rights outlined in the 1948 Universal Declaration of Human Rights. The following are among the key human rights agreements that can be considered when developing comprehensive HIV/AIDS policies:

- *Covenant on Civil and Political Rights (including the Optional Protocol to the Covenant on Civil and Political Rights);*
- *Covenant on Economic, Social, and Cultural Rights;*
- *Convention Against Torture and Other Cruel, Inhuman or Degrading Treatments or Punishments;*
- *Convention on the Rights of the Child;*
- *Convention on the Elimination of Discrimination Against Women; and*
- *Convention on the Elimination of all forms of Racial Discrimination.*

As members of the United Nations and parties to these human rights treaties, countries in the region are obliged to promote respect for human rights without discrimination. International human rights treaties are binding on member states that have signed and ratified them; these countries are expected to integrate the conventions' provisions into domestic law. Although most

countries in the region are signatories to all of these agreements, de facto legal compliance with these conventions is incomplete, and human rights violations continue. This does little to address the vulnerability of injecting drug users, sex workers, and members of other marginalised communities.

The the Declaration of Commitment passed at the United Nations General Assembly Special Session on AIDS (UNGASS) in June 2001 is the most prominent international agreement related to HIV/AIDS. The 1996 International Guidelines on HIV/AIDS with changes from 2002 are a guidance document for the international governments<sup>115</sup>.

The UNGASS **Declaration of Commitment** is of particular importance. The meeting at which the Declaration was developed was unprecedented; never before had member states gathered for a special session to discuss a specific threat to global health. 189 Delegations to the General Assembly (including all the countries in the region) approved the Declaration, thereby recognising the complexities of the epidemic and committing their governments to meet a set of goals aimed at stemming the spread of HIV and assisting those already infected. The Declaration addresses a range of HIV/AIDS issues including prevention; care, support and treatment; national, regional, and sub-regional strategies; reducing vulnerability; and research and development.

The UNGASS Declaration also emphasises human rights: it commits signatory countries to a series of target dates based on the assumption that 'respect for the rights of people living with HIV/AIDS drives an effective response.' By 2003, for instance, member countries were to 'ensure the full enjoyment of all human rights and fundamental freedoms by people living with HIV/AIDS and members of vulnerable groups; in particular to ensure their access to, inter alia education, inheritance, employment, health care, social and health services,

*International human rights agreements can help governments apply the appropriate human rights lens to HIV/AIDS programmes*

<sup>115</sup> Other relevant international documents include the Central Asian Declaration on HIV/AIDS (May 2001); the European Union Programme for Action: Accelerated Action on HIV/AIDS, Malaria and Tuberculosis in the Context of Poverty Reduction (May 2001); The United Nations Millennium Declaration (September 2000); the World Summit for Social Development (July 2000); and the Baltic Sea Declaration on HIV/AIDS Prevention (May 2000).

prevention, support, treatment, information and legal protection, while respecting their privacy and confidentiality; and develop strategies to combat stigma and social exclusion connected with the epidemic<sup>116</sup>.

Few policy makers or human rights advocates expected all countries, or even a majority of them, to have realised such ambitious goals by the end of 2003. The hope instead is that member states will have at least developed plans enabling them to move forward in implementing realistic and human rights-based HIV/AIDS policies. Some countries are lagging much further behind than others, however, and UN and NGO officials have begun to seek information about their efforts<sup>117</sup>.

### **International Guidelines on HIV/AIDS and Human Rights**

In September 1996, the Second International Consultation on HIV/AIDS and Human Rights was convened by the Joint UN Programme on HIV/AIDS (UNAIDS) and the Office of the UN High Commissioner for Human Rights (UNCHR). The meeting led to the formulation of the so-called International Guidelines on HIV/AIDS and Human Rights<sup>118</sup>. In 2002, following the Third International Consultation on HIV/AIDS and Human Rights, UNAIDS issued a comprehensive document revising Guideline 6 of the original International Guidelines<sup>119</sup>.

The Guidelines urge national governments to identify and revise public health laws that block effective strategies for HIV/AIDS prevention and care. Governments should 'review and reform public health laws to ensure that they adequately address public health issues raised by HIV/AIDS; and be 'consistent with international human rights obligations.' Similarly, other legal reforms are suggested to eliminate

discrimination against vulnerable populations with the goal of '[ensuring] privacy, confidentiality and ethics in research involving human subjects, [emphasising] education and conciliation, and [providing] for speedy and effective administrative and civil remedies.' Governments are further urged to 'ensure, through political and financial support, that community consultation occurs in all phases of HIV/AIDS policy design, programme implementation and evaluation'.

Guideline 6, entitled 'Access to Prevention, Treatment, Care and Support,' was revised in light of 'significant developments' since the original guidelines were published in terms of the 'right to health' and 'advances in the availability of diagnostic tests and HIV/AIDS-related treatments, including antiretroviral therapies.' The new text specifically mentions that effective HIV-prevention technologies include 'condoms, lubricants, sterile injection equipment [and] antiretroviral medicines.' It further declares that '[based] on human rights principles, universal access requires that these goods, services and information not only be available, acceptable and of good quality, but also within physical reach and affordable to all.'

These Guidelines urge individual governments to cooperate closely with relevant UN agencies and programmes, in particular UNAIDS, to help them gather information from around the world regarding HIV-related human rights issues. Sharing effective, human rights-based strategies within HIV/AIDS policies is seen by many as one of the most important mechanisms for strengthening human rights standards globally. In return, UNAIDS and UNCHR pledged to provide 'technical cooperation' regarding the 'promotion and protection of human rights in the context of HIV/AIDS,' if so requested by member states.

*The implementation of effective HIV-related legislation and policies is hampered by widespread disinterest, intolerance, and discrimination*

<sup>116</sup> 2001 UNGASS Political Declaration, Point 58.

<sup>117</sup> Some of the criteria to be used when evaluating countries' implementation efforts can be found in 'Implementation of the Declaration on HIV/AIDS: Core Indicators', UNAIDS, Geneva. Available at: [http://www.unaids.org/UNGASS/docs/JC869-Broch%20CoreIndic\\_en.pdf](http://www.unaids.org/UNGASS/docs/JC869-Broch%20CoreIndic_en.pdf).

<sup>118</sup> International Guidelines on HIV/AIDS and Human Rights, UNCHR. res. 1997/33, U.N. Doc. E/CN.4/1997/150 (1997).

<sup>119</sup> Available at <http://193.194.138.190/hiv/g6.pdf>.

Not surprisingly, Russian and international companies working in the natural resource sector have already begun developing HIV/AIDS awareness and prevention activities in partnership with the regional authorities, NGOs, and UNAIDS.

## Legal Guarantees: Theory and Practice

Notwithstanding these guarantees, links between official HIV policies and their application in East European and CIS countries are often less than robust. Laws intended to protect the rights and health of people living with (or most at risk of contracting) HIV are often not enforced. In some cases, this is because countries are financially unable to comply with their own legislation on providing effective health care services to people living with HIV/AIDS. In other cases, however, the implementation of effective HIV-related legislation and policies is hampered by widespread disinterest, intolerance, and discrimination. Since the members of the marginalised groups that are most affected by HIV are largely powerless, there is little political interest in taking official measures to guarantee their legal rights (summarised in Table 10). Prisoners, injecting drug users, sex workers, women, and members of ethnic minorities are disproportionately poorer and often less able to build effective social networks. They are victims of violence and abuse (sometimes perpetrated with the collusion of the police), and public officials are not always interested in preventing such violations. UN member states are nonetheless expected to prohibit and protect against such violations, in order to be in compliance with existing human rights agreements.

### Injecting drug users

Many East European and CIS governments have responded to increased drug use by implementing punitive anti-drug laws and policies. This approach has greatly increased the number of injecting drug users in prison—where drug use and needle-sharing are rampant, con-

Table 10: Human Rights of Vulnerable Populations	
<b>Injecting drug users</b>	<b>Right to life.</b> This includes such health care issues as treatment, care and support for those living with HIV; access to appropriate HIV prevention information and services to help protect one's health (including drug treatment services); freedom from violence and abuse; and freedom from arbitrary arrest and detention. <b>Right to non-discrimination and equality</b> in access to health care, legal representation and support, housing and social interactions. <b>Right to self-autonomy.</b> This includes privacy and confidentiality concerning one's body; consent to testing for HIV and other diseases; consent to treatment; and the ability to make one's own decisions regarding abortion and other reproductive issues.
<b>Prisoners</b>	<b>Right to life.</b> This includes such health care issues as treatment, care and support for those living with HIV; access to appropriate HIV prevention information and services to help protect their health; and freedom from violence, abuse, torture and 'other degrading treatment.' <b>Right to self-autonomy.</b> This includes privacy and confidentiality about one's body; consent to testing for HIV and other diseases; and consent to treatment. <b>Right to privacy.</b> This includes keeping HIV status confidential from other inmates and prison staff who have no compelling need to know.
<b>Sex Workers</b>	<b>Right to life.</b> This includes such health care issues as treatment, care and support for those living with HIV; access to appropriate HIV prevention information and services to help protect their health; freedom from violence and abuse; and freedom from arbitrary arrest and detention. Female sex workers are often denied the right to make reproductive choices. <b>Right to non-discrimination and equality</b> in access to health care, legal representation and support, housing, and social interactions. <b>Freedom of speech and expression.</b> The right to openly discuss sexual issues and publish and disseminate information that can protect one's health.
<b>Women</b>	<b>Right to life.</b> This includes access to health care services, including information that can help protect their own health. Many women are unaware that condom usage can prevent the transmission of HIV and other sexually transmitted infections, and they may also not be aware of reproductive health interventions that can prevent mother-to-child transmission of HIV. <b>Right to self-autonomy.</b> This includes privacy and confidentiality about one's body; consent to testing for HIV and other diseases; consent to treatment; and the ability to make one's own decision regarding abortion and other reproductive issues. <b>Right to non-discrimination and equality.</b> Women may be discriminated against because of their own HIV status or that of other family and community members.
<b>Young people and children</b>	<b>Right to life.</b> This includes access to health care services and information; protection from violence and abuse; and freedom from sexual exploitation by adults. <b>Right to education.</b> This may not be denied because of HIV status or that of other family and community members. <b>Right to non-discrimination and equality.</b> Young people may be discriminated against because of their own HIV status or that of other family and community members.
<b>Ethnic Minorities</b>	<b>Right to life.</b> This includes health care issues such as treatment, care and support for those living with HIV; access to appropriate HIV prevention information and services to help protect their health; freedom from violence and abuse; and freedom from arbitrary arrest and detention. Some ethnic minorities, in particular Roma, are pressured to give up their right to independent reproductive choice <sup>120</sup> . <b>Right to non-discrimination and equality</b> in access to health care, legal representation and support, employment, housing and social interactions.

doms are generally unavailable, and treatment and other services for drug users are lacking. The injecting drug users that manage to avoid incarceration remain at heightened risk for HIV because fear of harassment or arrest often prevents them from seeking out appropriate social services—which might include prevention information.

Among injecting drug users, the right to protect one's health is compromised most severely by laws restricting or forbidding the supply of harm reduction services. Such services focus on preventing

<sup>120</sup> *Avoiding the Dependency Trap: Roma in Central and Eastern Europe, A Regional Human Development Report* (UNDP, 2002, Bratislava; <http://roma.undp.sk>). Also see 'Body and Soul: Forced Sterilisation and Other Assaults on Roma Reproductive Freedom,' Centre for Reproductive Rights, January 2003, New York, available at: [http://www.crlp.org/pub\\_bo\\_slovakia.html](http://www.crlp.org/pub_bo_slovakia.html).

the transmission of HIV and other blood born diseases by providing hassle-free access to clean needles, thereby eliminating the devastating transmission possibilities associated with sharing injection equipment. Harm reduction policies can also offer those who want to stop using drugs some realistic options. Methadone substitution programmes, for instance, have proved to be successful in treating heroin addiction. Many countries continue to ban the use of methadone, however, reflecting the belief that harm reduction services 'promote drug use' and referring to their international anti-drug trafficking obligations.

*The pervasive stigmatisation of drug users is the main reason that harm reduction services are spurned by some public health authorities interventions in the region*

The pervasive stigmatisation of drug users is the main reason that harm reduction services are spurned by some public health authorities in the region. Some governments and the media strongly disapprove of such behaviour; the focus is more often on drug-related crime, overdoses, and unruly young people. Since there is little public sympathy for illicit drug users, violent acts committed against them may be condoned by the general population, and need not be reported to the law enforcement agencies. This stigmatisation and criminalisation of drug users, and the concomitant failure to acknowledge their basic human rights, is fuelling the region's HIV/AIDS epidemic and is placing millions of other people at greater risk.

In many countries, the provision of such harm reduction services as needle exchanges and methadone maintenance would require legislation to either remove existing bans on such services or

to implement enabling policies<sup>121</sup>. Even in countries with relatively progressive laws concerning some aspects of harm reduction (such as Ukraine), a lack of resources and lingering discrimination (from the police and sometimes community members) limit the number of viable projects<sup>122</sup>.

### Sex workers

Sex work is criminalised in much of the region, and in those countries where it has been legalised<sup>123</sup>, sex workers are marginalised and susceptible to harassment from the law enforcement authorities. They are also victims of physical violence from clients and pimps. Sex workers rarely report such incidents, because many do not trust the authorities' impartiality and discretion in such matters.

Even in countries where sex work is not a crime, awareness of HIV among sex workers is thought to be relatively low—as is condom usage. In some countries, local NGOs support sex workers by providing condoms, counselling services, and drug treatment information and assistance, as requested<sup>124</sup>. The numbers and quality of these organisations vary greatly, however, and they are less effective in countries where sex workers fear harassment from authorities.

Negotiating safer sex—in particular condom usage—is also problematic, even for those sex workers who are aware of the risks of contracting HIV and other sexually transmitted diseases. Sex workers rarely enjoy access to adequate

<sup>121</sup> In Russia, for example, needle exchanges are not mentioned in any legal code. Methadone is considered a Schedule 1 narcotic drug along with other opiates such as heroin and morphine, and its use is therefore tightly restricted. As a result, methadone substitution is illegal in Russia even though such programmes have been shown to be effective in treating addiction elsewhere in the world. Methadone is classified similarly in Hungary—and substitution programmes are technically illegal there as well. More progressive laws regarding harm reduction are on the books in Poland, where the 1997 Law on Countering Drug Addiction made methadone treatment officially legal, and needle exchange is considered a vital HIV prevention strategy for injecting drug users.

<sup>122</sup> The 1992 Ukrainian law 'On Prevention of AIDS and Social Protection of the Population' guarantees access to sterile injecting equipment.

<sup>123</sup> Laws regarding sex work vary throughout the region. It is considered a misdemeanour in Azerbaijan. In Poland, sex work is not illegal in itself—but profiting from it is. Sex work is not illegal under the current Russian criminal code, but this does not mean it has been legalised. It is just not defined by the existing legislation; as such, sex work does not feature in the Russian Criminal Code, although it is considered a crime under the Code on Administrative Offences. Sex workers (like other migrant workers) who work in cities in which they are not officially registered (under the *propiska* system) also risk harassment and expulsion.

<sup>124</sup> Most harm reduction projects in the region include outreach programmes for sex workers, often conducted by current or former sex workers themselves.

medical treatment even if they are not living with HIV; with the virus, obtaining such access can be next to impossible. In some countries, public health authorities have responded by introducing discriminatory policies against this vulnerable group. For example, sex workers (and injecting drug users) in Russia and Ukraine are often tested without their consent when entering treatment facilities or pre-trial detention centres.

The surge in recent years of trafficking, primarily of women and girls, is a related issue of great concern for a number of East European and CIS countries<sup>125</sup>. In order to avoid poverty at home, victims fall prey to unscrupulous agents who promise them safe travel to good jobs in Central and (primarily) Western Europe. Once smuggled abroad, however, they are forced into sex work. Even if they manage to escape, their future is bleak because they are poor and in another country illegally. When discovered by the local authorities, these women are usually shipped home, where they may be shunned by family members and society in general because of the widespread stigma association with sex work in general.

The health, dignity, and safety of sex workers and women victimised by trafficking must be treated as serious public health concerns. Already marginalised by virtue of being poor, female (although some victims of trafficking are male), and powerless, they are often unable to protect themselves from HIV. Some NGOs are active in trying to combat trafficking. But without robust support from law enforcement and public health authorities, as well as international cooperation directed at the criminal groups that profit from trafficking, such efforts are unlikely to be more than marginally effective.

#### **Box 6: Unintended Consequences: Punitive Drug Policies Fuel the HIV Epidemic in Russia and Ukraine**

The criminalisation of injecting drug use in Central and Eastern Europe and the CIS countries often precludes the adoption of the balanced public health approaches needed to reach those who are most at risk of contracting—and spreading—HIV. While the benefits of criminalisation injecting drug use may be unclear, the costs are not. UNAIDS figures show that the numbers of people living with HIV in Russia, Ukraine, and Estonia—the hardest hit countries in the region—have increased exponentially during the past few years. All the relevant data indicate that injecting drug use is the key driver of the epidemic.

The first UN drug convention was enacted in 1961, before the global HIV epidemic began and at a time when the social and medical understanding of the links between drug use, addiction, law enforcement, and public health was more limited than is the case today. Instead, international organisations increasingly recognise the need for pragmatic approaches to drug use and public health<sup>126</sup>. Nonetheless, governments in Russia and Ukraine (and elsewhere in the region) have tried to implement repressive policies aimed at creating a 'drug free society'. Not only do many of these policies violate basic human rights principles—they are having catastrophic unintended public health consequences.

Drug policies in Russia and Ukraine place a heavy emphasis on law enforcement institutions, including the police. This criminalisation approach deprives public health authorities of the financial and legal support needed to pursue effective HIV prevention and treatment policies. Actual and potential drug users are thereby denied access to the information and resources needed to safeguard their health. Drug users are also more likely than ever to contract HIV (and other blood-borne diseases) from needle-sharing and other forms of risky behaviour. Furthermore, the stigmatisation that comes with criminalisation ensures that drug users continue to face social marginalisation, further reducing access to basic health care and other social services.

It is not too late for international and national policymakers to reconsider their emphasis on law enforcement over public health. Adoption and strengthening of antidiscrimination and equal-protection laws to guarantee the civil liberties and human rights of drug users and people living with HIV are a key first step. Drug use should be viewed by national governments primarily as a matter of public health, not law and order. Government policies should be constructed to reflect this reality. Programmes concerning drug use and HIV should encompass a full range of pragmatic, inclusive, and accessible harm reduction services, ranging from education and drug treatment to substitution therapy and needle exchange. International drug conventions and national legislation should support the legalisation of needle exchanges and methadone substitution therapy. The participation of drug users and their representatives should be encouraged at all levels of decision making when national and international drug use policies are developed.

Whether criminalisation reduces the amount of injecting drug use may be a matter of debate. There can be no debate about its unintended side effects, however: criminalisation of injecting drug use is a major driver of the epidemic.

*Box based on contribution from International Harm Reduction Development Programme, Open Society Institute, New York, 2003.*

<sup>125</sup>The number of women and girls who have been trafficked and subsequently forced into sex work or sexual slavery is difficult to determine. According to the Angel Coalition (The Anti-Trafficking Coalition of Russia and the Commonwealth of Independent States), some 500,000 Russian and Ukrainian women were trafficked to the West between 1991 and 1998. Other sources indicate that Russian women have been transported to at least 50 countries to work in the sex industry. See "Angel Coalition" website, <http://www.angelcoalition.org/trafficking.html>.

<sup>126</sup>See, for example, *Preventing the Transmission of HIV among Drug Abusers: A Position Paper of the United Nations System* (Annex to the Report of 8th Session of the UN Administrative Coordination Committee's Subcommittee on Drug Control, 28-29 September 2000, Vienna). This report is available at <http://ceb.unsystem.org/documents/SCDC/acc-2000-17.pdf>.

*Civil society groups can best articulate the needs of people living with or at risk of HIV*

*Ethnic minorities across the region are economically disadvantaged, less well educated, more prone to discrimination and more vulnerable to HIV*

### Men Who Have Sex With Men

Although homosexuality occurs in all cultures, men who have sex with men suffer extensive discrimination in many East European and CIS countries. While homosexuality has been formally decriminalised in some countries, it remains illegal in others; and even where it is legal (such as in Russia), opprobrium toward homosexuality remains widespread. Denied empathy or acceptance from society, many gay men (and women) choose to remain 'in the closet'. Gay men who feel unable to reveal their sexuality are less likely to avail themselves of sexual education information, support groups, or condoms.

Marginalised by their sexuality, men who have sex with men are more vulnerable to exploitation and violence. Male rape and physical abuse are persistent problems in prisons and the armed forces in many countries of the region. Many gay men are nonetheless unwilling to seek help from authorities, who in many cases condone or themselves perpetuate the abuse. Male sex workers face additional discrimination, not to mention much more serious risks of contracting HIV<sup>127</sup>. Governments seeking to prevent generalised HIV/AIDS epidemics would do well to reach out to gay communities, in order to help their members protect themselves (and more broadly society) from the fear and ignorance that spreads HIV. Passage and implementation of anti-discrimination laws are good places to start.

### Roma and Ethnic Minorities

In general, ethnic minorities across the region are economically disadvantaged, less well educated, and more prone to stigma and discrimination than the gene-

ral population. As such, they are more vulnerable to HIV and enjoy less access to health care and legal assistance.

Of the ethnic minorities in East European and CIS countries, Roma generally fare the worst<sup>128</sup>. They are often victims of poverty, discrimination, and social exclusion. Roma are much more likely than members of majority communities to live in substandard housing, to face chronic unemployment, to have poor access to public services, and to attend inferior (often segregated) schools<sup>129</sup>. Roma also face the higher risks of incarceration and drug use that are associated with HIV<sup>130</sup>. Official drug and HIV prevention efforts are rarely tailored to Roma cultures, further reducing the likelihood that Roma will benefit from information and harm reduction services.

### Civil Society

Countries that have had success in stemming the spread of HIV/AIDS have done so thanks to sustained engagement from NGOs and more generally civil society<sup>131</sup>. Key cornerstones of effective responses to HIV—confidentiality, counselling, support and community empowerment, efforts to overcome stigma and discrimination, harm reduction practices, patient treatment literacy—have been developed and are implemented by community-based organisations. NGOs are typically flexible and cost-effective. They are staffed by committed people with strong community ties, people who are willing to make personal sacrifices for the good of their communities. Involving people living with HIV/AIDS in policy, planning, and programme implementation also helps to break the stigmatisation and discrimination associated with HIV/AIDS, as well as educate the public about the disease.

<sup>127</sup> HIV-related issues faced by gay men are discussed at greater length in 'The Determinants of the HIV/AIDS Epidemics in Eastern Europe,' Monitoring the AIDS Pandemic (MAP) Network, 1998, pp. 22-24. Online: <http://www.hsph.harvard.edu/xfbcenter/MAPreports.htm>

<sup>128</sup> See *Avoiding the Dependency Trap: A Regional Human Development Report*. UNDP, 2002, Bratislava.

<sup>129</sup> 'Drugs, AIDS, and Harm Reduction: How to Slow the HIV Epidemic in Eastern Europe and the Former Soviet Union' International Harm Reduction Development programme, the Open Society Institute, 2001, New York.

<sup>130</sup> Some 65 percent of prisoners in Bulgaria are Roma—a percentage that many times exceeds the proportion of Roma in the country. See *HIV/AIDS and the Roma in Central East Europe*, UNDP-Romania, November 2003, Bucharest, <http://www.undp.ro/aids>.

<sup>131</sup> 'Civil society' is understood to mean the relatively autonomous realm, occupying the political space between the individual and household and the state. It includes non-governmental organisations (NGOs), community based organisations (CBOs), and other voluntary, professional, and public groups that help to hold the state accountable and check its powers.

Civil society groups can best articulate the needs of people living with or at risk of HIV. They can suggest effective methods to meet the needs of at risk groups. They are often best suited to deliver HIV-related services, because of these services' highly sensitive and individualised nature. Civil society groups can monitor progress in the implementation of national and sub-national HIV/AIDS projects, as well as government compliance with international obligations. In order to effectively play these roles, NGOs must be included in regional, global, national, and local policy processes. This was explicitly recognised by the East European and CIS governments when they signed the UNGASS Declaration in 2001.

Communism's aftermath has not provided particularly fertile soil for the flowering of civil societies. Still, the collapse of the Soviet system was accompanied by the rise of independent social movements in many Central and East European countries. The process often started with unofficial initiatives focusing on such single issues as peace, human rights, environmental protection, or the preservation of historical monuments. The legalisation of NGOs that came with the introduction of political pluralism and free elections saw these movements splinter into many smaller groups, many of which initially received extensive support from external donors. The relatively favourable epidemiological trends for HIV/AIDS reported by the EU accession countries are due in part to the successful development and evolution of their civil societies.

Following the dissolution of the Soviet Union in 1991, NGOs in CIS countries underwent a period of rapid development. By 1995, some 3,500 civic groups were registered in Moscow alone, and thousands more existed in other parts of

the Russian Federation<sup>132</sup>. But NGOs in CIS countries remain heavily reliant on external donors, and relations between civil society and state organs are too often non-cooperative. This is particularly the case of some countries in Central Asia—a region that began the transition with what one observer described 'the effective non-existence of civil society'<sup>133</sup>. The extent of progress during the ensuing decade remains a matter of some dispute—particularly for civil societies outside of Kazakhstan and the Kyrgyz Republic<sup>134</sup>.

Polish NGOs were among the first in the region to respond to HIV/AIDS epidemic. Some 80 percent of government activities and funds in the area of prevention are now sub-contracted to NGOs<sup>135</sup>. In Kazakhstan, however, many of the AIDS service-oriented NGOs emerged only recently, and they do not seem to be playing a major role in the development of the national AIDS prevention strategy. Until early 2003 in Belarus, NGOs could only participate in the National AIDS Committee as observers<sup>136</sup>. In Uzbekistan, state-owned public health institutions are still the main executing agencies for HIV/AIDS prevention programs, despite the widespread understanding that government agencies are not able to deliver necessary prevention activities as effectively as NGOs.

Much of this has to do with governments. The critical role of civil society and NGOs in mitigating the HIV/AIDS epidemic is widely recognised by policy makers in Central and Southeast European countries. In many CIS countries, by contrast, NGO engagement in HIV/AIDS related activities is limited to those in which the state is either not interested, or for which it can not procure funding. NGOs seeking to work with

*NGOs in CIS countries remain heavily reliant on external donors, and relations between civil society and state organs are too often non-cooperative*

<sup>132</sup> *Nations in Transition: Civil Society, Democracy and Markets in East Central Europe and the Newly Independent States*, Freedom House, 1995, Washington, D.C., p. 115.

<sup>133</sup> R. Kangas, 'State Building and Civil Society in Central Asia', in *Political Culture and Civil Society in Russia and the New States of Eurasia*, ed. V. Tismaneanu, M.E. Sharpe, 1995, New York, p. 271.

<sup>134</sup> See E. Cook, 'Comparative Analysis of NGOs and Mass Media in Russia and Great Britain', BBC World Service Trust, Nov. 2002-Jan. 2003, online in Russian: All-Russian Public Organizations 'Social Initiatives for Youth', <http://www.dimsi.net>; and C. Marsh, *Making Russian Democracy Work: Social Capital, Economic Development and Democratization* (Lewiston, NY: Mellen Press, 2000). See also *How to Build Inclusive Policy Process: Institutionalising Dialogue between governmental and Non-governmental actors, Practice from the CIS*, UNDP, 2002, Bratislava.

<sup>135</sup> UNDP HIV/AIDS Results, online: UNDP, <http://www.undp.org/hiv>.

<sup>136</sup> Interview with N. Kamlik, The Positive Movement, (Minsk, Belarus, March, 2003).

*Effective responses to HIV/AIDS require creating an appropriate regulatory environment for NGOs*

governments sometimes face barriers in the form of legislation that does not permit government agencies to subcontract NGOs for certain activities and programmes, or transfer funds to NGO accounts. At the same time, NGOs in many CIS countries have yet to surmount obstacles that make them less-than-ideal partners for governments, particularly in the HIV/AIDS field. These include inadequate skills, knowledge, management experience, and funding; high staff turnover; and a mistrust of the authorities that is not always justified.

Developing an effective response to HIV/AIDS therefore requires creating an appropriate regulatory environment for NGOs. Such an environment should be based on respect for freedom of association, assembly, and expression. It should be transparent and supportive, have clear, helpful guidelines for NGO operations, and allow for flexibility with donor agencies.

*Meeting the challenge of HIV/AIDS is fundamentally a matter of governance*

In too many countries of the region, regulations pertaining to NGOs and their activities are scattered across the national legislation and confuse rather than promote engagement by groups representing the interests of at-risk communities<sup>137</sup>. Although legal frameworks in most countries envision only limited grounds denying registration, these are sometimes invoked to prohibit registration of NGOs seeking to work in the HIV/AIDS area. NGOs representing gay and lesbian communities were denied registration in a number of Central and East European countries before Council of Europe membership brought a halt to such practices. In some CIS countries that are not members of the Council of Europe, such practices apparently still continue, to varying degrees. On the other hand, the Global Fund requirement that NGOs participate in the country cooperation mechanisms that develop and implement national HIV/AIDS programming is likely to make governments more interested in effective cooperation with NGOs.

## Conclusions and recommendations

While poverty and social exclusion may lie at the heart of epidemic, it is the inability of East European and CIS governments to reach out to those most at risk from HIV/AIDS that is the gravest threat to an effective response. Meeting the challenge of HIV/AIDS is thus fundamentally a matter of governance. This goes well beyond the task of building capacity within public health institutions: problems of using state structures to protect those most at risk are closely tied to the region's overall democratisation agenda.

Human rights guarantees are keys to protecting those most at risk from HIV/AIDS, particularly in terms of consent to testing for HIV, disclosure of HIV status, and antidiscrimination legislation. Without passage and implementation of these laws, members of at risk communities are unlikely to avail themselves of HIV testing and counselling, nor having contracted the infection will they seek treatment for it. Not only does such behaviour introduce obstacles into the monitoring and tracking of the epidemic: it ensures that those most in need of help do not seek it.

Virtually all East European and CIS governments are signatories to international conventions guaranteeing human rights for their citizens in general and people living with HIV/AIDS in particular. But many of these countries have yet to fully overcome the legacies of the communism, which reduced state legitimacy and disempowered individuals and communities. It is in this sense that developing an effective response to HIV/AIDS is inseparable from the region's democratisation agenda.

Applying the human rights lens to the HIV/AIDS underscores the importance of developing truly multisectoral responses. Better public health infrastructure will not help health ministries com-

<sup>137</sup> NGOs in this region are more likely to engage in commercial activities than NGOs in Western Europe and North America.

bat the epidemic if police forces and judiciaries treat injecting drug users as criminals, or if education systems and national leaders do not aggressively seek to overcome the ignorance and fear that surrounds AIDS and traditional attitudes toward homosexuality.

Although the numbers of NGOs in the region are growing, many governments have not yet managed to fully engage them in national and sub-national programming to combat HIV/AIDS. This is a major weakness, since civil society groups can often best articulate the needs of people living with or at risk of HIV. They can suggest effective methods to meet the needs of these groups, and are often best suited to deliver HIV-related services, because of these services' highly sensitive and individualised nature. Civil society groups can monitor progress in the implementation of national and sub-national HIV/AIDS projects, as well as government compliance with international obligations.

Many East European and CIS governments have constructed the legal frameworks needed to protect the human rights of those most threatened by HIV/AIDS. What is often lacking now seems to be the will to move forward. Governments increasingly seem caught between the recognised inadequacy of 'traditional' public health approaches (based on full disclosure, name-based tracking, and notifying those who may have been exposed to HIV) on the one hand versus the enormity of the task of mobilising other government bodies, NGOs, and the private sector to mount a broad-based campaign against the epidemic on the other.

These conclusions suggest a number of policy recommendations.

- *The implementation of human rights guarantees requires a rebalancing of social priorities, away from intolerance and law enforcement approaches that exclude injecting drug users, sex workers, ethnic minorities and homosexuals from the social mainstream. Injecting drug use and sex work must instead be viewed through a public health lens, in order to facilitate the deployment of harm reduction projects (e.g., needle exchanges, methadone*

*substitution therapy). Exclusionary policies based on claims of morality effectively deny the human rights of at risk groups and exacerbate the public health threat posed by the epidemic.*

- *An effective state response to the epidemic must reach out to representatives of at-risk communities. Many of these countries' human rights guarantees will remain abstractions for these communities if their representatives are not included in initiatives directed at the epidemic.*

- *Obstacles to greater engagement in HIV/AIDS programming by civil society groups must be identified and removed. In addition to improving the legal framework for NGO activities, such efforts should include training for NGO staff and initiatives to improve dialogue between state and non-state actors.*

- *Multisectoral policy responses to the epidemic need to go beyond the creation of inter-ministerial commissions that accompany the development of national HIV/AIDS strategies and action plans. They must be reinforced by commitment from political and other top leaders to ensure that the rights of marginalised groups are respected by all state agencies.*



# Chapter V: Developing an Effective Response to HIV/AIDS

Responding to the epidemic means acknowledging its existence and finding the commitment to confront it. Because many people living with HIV in the East European and CIS countries are not yet visibly ill, the extent of the problem is not fully evident, and is therefore more easily denied. The epidemic is nonetheless real and growing. A concerted, well-financed effort to halt its spread and assist those already infected is required. This effort requires leadership from the highest levels of government, civil society, and the business community. Without coordinated and high-level leadership, it is unlikely to succeed.

Many of the East European and CIS countries possess extensive (although often decaying) social and public health infrastructures. This inheritance, if properly financed and refocused on HIV/AIDS, can provide a platform for attacking the epidemic. But it must be combined with high-level leadership, a reconsideration of the policy emphasis on criminalisation and law enforcement, and a greater willingness to reach out to representatives of at risk groups. The response should be multisectoral, reflecting the fact that HIV/AIDS is a broad threat to human development, rather than solely a health issue. More attention should be paid to NGOs (particularly those involving members at risk groups), as well as to business leaders and media, and to funding consumables (condoms, clean needles) under harm reduction programmes.

Expanded funding opportunities, notably those made available through the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM), are prompting governments to develop plans to scale up prevention and treatment efforts. GFATM applications require the inclusion of civil society and others groups in the development of an HIV/AIDS response plan. They also require multisectoral responses: in

addition to public health authorities, other government agencies and civil society groups must participate in the design and implementation of policies and programming to combat HIV/AIDS.

This chapter first describes the governance response necessary to confront the HIV epidemic and analyses how governments in the East European and CIS region are meeting this challenge. It addresses questions of funding levels and prospects, and explains the logic of the harm reduction philosophy that must be the backbone of an effective response. The chapter explores various policy issues associated with the nexus of HIV prevention and AIDS treatment, and concludes with a discussion of the importance of leadership at the top, and at the grass roots, for an effective response. This theme is developed further in Annex III, which is devoted to UNDP's 'Leadership for Results' programme.

## Governance Foundations of Response

### High-level political commitment

The Millennium Declaration of 2000 and the Declaration of Commitment adopted at the 2001 UN General Assembly Special Session on AIDS in 2001 described in the previous chapter lay the foundation for appropriate global, regional, and national responses to the HIV epidemic. The UNGASS Declaration is an urgent call to recognise HIV as a threat to human development and human rights, stating that:

Strong leadership at all levels of society is essential for an effective response to the epidemic. Leadership by governments in combating HIV/AIDS is essential and their efforts should be complemented by the full and active participation of civil society, the business community and the private sector<sup>138</sup>.

*The response to the epidemic should be multisectoral, reflecting the fact that HIV/AIDS is a broad threat to human development, rather than solely a health issue*

<sup>138</sup>'Declaration of Commitment', UN General Assembly Special Session on AIDS, 25-27 June 2001, New York.

The UNGASS Declaration acknowledges that HIV constitutes a serious obstacle to the realisation of the global development goals adopted at the UN's Millennium Summit of 2000. The Millennium Summit Declaration specifically mentions the goal of halting and reversing HIV infection rates by 2015 as a precondition for achieving better human and economic development<sup>139</sup>. Two other documents of regional significance build on the UNGASS and Millennium declarations: the Declaration of the Commonwealth of Independent States for Expanded Regional Response, and the Southeast European Declaration on HIV/AIDS Prevention and Care<sup>140</sup>.

*Governments must create mechanisms for engaging civil society and private sector partners in rapid yet sustainable ways*

The Programme of Urgent Response of the CIS Member States to the HIV/AIDS Epidemic was adopted at the CIS summit on 30 May 2002<sup>141</sup>. It contains activities and policy objectives with proposed implementation dates, and assigns responsibilities for implementation. The declaration envisions by 2003 the development, adoption, and strengthening of multisectoral response strategies, including national AIDS prevention strategies. It also calls for financial plans drawing on national budgets and international donor support to fund them. By 2003 maximum access to free, voluntary and confidential HIV/AIDS counselling and testing, initially for half of the populations of the CIS countries, was to be ensured. The declaration also calls for revisions of national legislation, and stronger international and intergovernmental cooperation to build capacity in relevant state institutions. The declaration sanctions the introduction of monitoring mechanisms that would include people living with HIV/AIDS and other vulnerable groups, as well as the private sector.

Similar pledges were made in the Southeast European Declaration on HIV/AIDS Prevention and Care, which was signed at a conference on HIV/AIDS held in Bucharest in June 2002 by representatives of governments of Albania, Bosnia-Herzegovina,

Bulgaria, Croatia, (then) Federal Republic of Yugoslavia, Kosovo, Macedonia, Moldova, and Romania.

The Moscow and Bucharest events have been followed by a number of other meetings that have focused on concrete needs and assigning responsibilities for meeting them.

### **Multisectoral national programming and responses**

International experience shows that in order to prevent a generalised epidemic, the response of national governments must extend beyond the health sector. A multisectoral response requires engagement from all relevant government agencies beyond the health care sector, as well as NGOs and the private business. Governments must create mechanisms for engaging civil society and private sector partners in rapid yet sustainable ways. Sectoral bodies responsible for education, justice, commerce, and transport (in addition to health) need to be engaged in the battle against HIV/AIDS, according to the logic of their mandates. Their activities should be coordinated by national AIDS committees, and lead to the creation of national HIV/AIDS programmes and plans that integrate large scale HIV prevention and AIDS treatment activities into national policy and development planning. Such an approach can help mobilise large pools of government and international resources. It can build integrated visions and action plans that cut across sectors, and offer community and civil society representatives (especially advocates for marginalised groups) real possibilities for institutionalised inclusion and engagement.

National HIV/AIDS plans should also focus on improving the quality of epidemiological data by developing good surveillance systems. They should make education and prevention activities more effective, and increase access to care and treatment. Public education campaigns

<sup>139</sup> Resolution A/Res/552. United Nations Millennium Declaration, par. 19, 18 September 2000, New York.

<sup>140</sup> 'Southeastern Europe Declaration on HIV/AIDS Prevention and Care', adopted at the Southeastern Europe Conference on HIV/AIDS (6-8 June 2002), Bucharest. Text available online at: SEERECON <http://www.seercon.org/news/n20021128.htm>.

<sup>141</sup> 'Programme of Urgent Response of the CIS Member States to the HIV/AIDS Epidemic', adopted by the CIS Summit (May 30, 2002, Moscow).

to destigmatise HIV/AIDS and protecting the human rights of at risk groups should be included. National plans should be robustly multisectoral and define the roles of each sector involved. And they should be implemented according to well defined timelines with adequate financing.

According to a recent UN report, 40 per cent of the East European and the CIS countries had not developed full-fledged national HIV/AIDS Plans by mid-2003<sup>142</sup>. Of the countries that had done so, problems remained with their implementation and financing. These countries must also address competing and urgent health care and other priorities.

### Involving at risk communities

The need to involve people living with HIV/AIDS (or at risk of contracting HIV) has been internationally recognised as an important part of the response to HIV since the earliest years of the epidemic. The UNGASS Declaration recognises the important role that people living with HIV/AIDS can play in combating the epidemic<sup>143</sup>.

The extent to which people living with HIV/AIDS are engaged in the response to HIV/AIDS varies from country to country in the region, with most of this engagement beginning in the mid-1990s. In 1995, a group of people living with and affected by HIV in Poland established the 'Be With Us' association in Warsaw. They sought to speak up for their rights, and the rights of their friends, partners and families affected by HIV/AIDS. By 1997 they were able to set up a 24-hour AIDS crisis hotline that was funded by the national AIDS centre. They organised in that year a national meeting

of people living with HIV/AIDS that has since become an annual event<sup>144</sup>. The success of this initiative resulted in the creation of a resource centre that shares Polish expertise with service providers from 11 other countries in the region.

Similar groups have since been established in Estonia<sup>145</sup> and the Russian Federation<sup>146</sup>. The Russian Network of People Living with HIV/AIDS, which was launched in 1999 with help from UNAIDS, now links over 150 people living with HIV/AIDS from 25 Russian regions. The All-Ukrainian Network of People Living with HIV/AIDS, which was established in 2000, in November 2002 was one of the co-organisers of the International Conference on Care, Treatment and Support for People Living with HIV/AIDS<sup>147</sup> that was held in Kyiv. Most recently, in May 2003 a conference, entitled Choosing Life, Choosing Action: Increasing Advocacy Possibilities for Rights of People Living with HIV/AIDS in the Newly Independent States' gathered HIV activists from across the former Soviet space was held in Minsk. But despite these successes, NGOs representing the interests of people living with HIV/AIDS in the region continue to face numerous political, financial, and social obstacles—particularly in CIS countries<sup>148</sup>.

In many countries of the region (Russia, Poland, Hungary), the first wave of HIV/AIDS struck the gay community. At the time, homosexuality was criminalised and men were sent to prisons<sup>149</sup>. Sex between consenting male adults was decriminalised in much of the region in the mid-1990s, often as a condition for membership in the European Union or Council of Europe. Whether this decriminalisation has led to significant reductions in homophobia remains an open question.

*The need to involve people living with HIV/AIDS (or at risk of contracting HIV) has been internationally recognised as an important part of the response to HIV*

<sup>142</sup> Report of the Secretary General: Progress towards implementation of the Declaration of Commitment on HIV/AIDS, UN General Assembly, 58th session, 25 July 2003, New York, p. 14.

<sup>143</sup> UNGASS Declaration of Commitment (2001), paras 33.

<sup>144</sup> UNDP, Factsheet HIV/AIDS in Poland, Online: UNDP, <http://www.undp.org/hiv/poland.pdf>

<sup>145</sup> For example, ESPO Society for people living with HIV/AIDS in Estonia. (See Center on AIDS Information and Support, <http://www.aids.ee>.)

<sup>146</sup> Club 'Positive', online in Russian: Info Plus Educational Center, <http://infoplus.aids.ru/lavka/products/161.html>.

<sup>147</sup> See All-Ukrainian Network of People Living with HIV/AIDS, online: LGVS, <http://www.lgvs.org.ua>

<sup>148</sup> R. Dudnik, M. Bijl, 'Involvement of People Living with HVI/AIDS: Reality or Fiction?' (AFEW) Poster presentation, International Harm Reduction Conference, Chiang-Mai, Thailand, 2003.

<sup>149</sup> According to some anecdotal evidence, in 1993 there were 73 men in Russian prisons who were convicted of consensual sexual intercourse with adult men in accordance with article 121 (1) of the Criminal Code. A. Wolfy, *History of Homosexuality in Russia*, online in Russian: <<http://www.gay.ru/wolfy/history/15.html>>. This legislation was amended in May of 1993.

*The financial burdens associated with prevention versus therapy is a powerful argument for the adoption of early and robust preventive measures*

### Financing the response

Inadequate funding is often a key obstacle to developing an appropriate national response to HIV/AIDS. In July 2003, the Futures Group on behalf of the World Bank and UNAIDS prepared preliminary estimates for the funding required to confront HIV/AIDS in Eastern Europe and the CIS<sup>150</sup>. The estimates, which were intended to illustrate the level of funding that developing a comprehensive response to the epidemic would require, were conservative in that they did not assume rapid expansion in health service infrastructure. But they were optimistic in assuming that access to such essential services as voluntary counselling and testing and anti-retroviral therapy would be nearly universal by 2007. The estimates include funding required from national governments, international donors, foundations, and the private sector, as well as via out-of-pocket expenditures.

These estimates, which are intended to serve as the basis for planning an expanded and effective response to AIDS, indicated that the costs of the effective scaling up of essential HIV/AIDS prevention, care, and treatment programmes would

rise from about \$300 million in 2001 to \$1.5 billion by 2007. Country needs will vary with population size, the severity of the epidemic, and unit costs of prevention and care activities. Of the total US\$1.5 billion required in 2007, the largest projected needs will be in the Russian Federation, Ukraine, and Kazakhstan. Some 40 percent of this funding would be needed for prevention, 55 percent for care and treatment, and 5 percent for policy, administration, research and evaluation. Condom promotion and distribution programmes, by contrast, would require only 6.3 percent of total funding by 2007, while workplace education and testing programmes were forecast to absorb 7 percent. The contrast in the financial burdens associated with prevention (expenditures on condoms, education and testing) versus (antiretroviral therapy) is a powerful argument for the adoption of early and robust preventive measures.

### External financing

The Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM) was created in 2002 on the initiative of UN Secretary General Kofi Annan. As of mid-2003 some \$417 million had been awarded to East European and CIS countries, out of total approvals of \$2 billion (Table 11)<sup>151</sup>.

The Global Fund co-finances the implementation of well-managed, participatory, multisectoral national HIV/AIDS programmes. A country coordinating mechanism (national partnership) must be created in order to submit an application to the Global Fund. If the application is successful, the country coordinating mechanism monitors programme implementation and ensures coordination with other national and donor-funded HIV/AIDS activities. When properly implemented, the requirement of community involvement in these mechanisms can ensure that governments include representatives of at risk groups in national programmes.

As with other funding mechanisms, the

#### Box 7: Financing AIDS Treatment in Russia

The World Bank's 2003 loan to the Russian Federation and the assistance pledged from the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM) do not include resources for treating HIV. Senior health officials in Russia are well aware that people living with HIV are increasingly developing AIDS. Under Russian law, treatment is to be funded from the federal budget. But the 118 million rubles (\$4 million) in annual budgetary allocations in 2003 sufficed to cover only some 500 patients (given annual per patient treatment costs of 200,000-250,000 rubles). In reality, not more than 1,000 citizens of the Russian Federation, most of whom reside in the prosperous Moscow area, are treated with finances provided by regional budgets.

The absence of federal fiscal resources for AIDS is inconsistent with federal law, and litigation over this issue seems inevitable. Since 50 percent of the people living with HIV develop clinical symptoms within eight years of infection, half of all those infected with HIV before 2001—at least 100,000 people—will develop AIDS by 2008. But this lack of funds for treatment raises a more difficult issue: does being tested for AIDS is sensible, since treatment is unlikely to be affordable in any case?

*Box based on contribution from UNDP Country Office, Russia*

<sup>150</sup>*Averting AIDS Crises in Eastern Europe and Central Asia: A Regional Support Strategy* (World Bank, Washington, 2003).

<sup>151</sup>Some two thirds of these disbursements are to be used for HIV/AIDS programmes. *Report of the Secretary General: Progress towards implementation of the Declaration of Commitment on HIV/AIDS*, UN General Assembly, 58th session, 25 July 2003, New York, p. 18.

GFATM is under-financed. As of mid-2003, some \$3.4 billion had been committed to the Global Fund by 34 countries for activities through 2008, of which \$944 million was to be allocated during 2001-2002. But as of May 2003, only \$853 million had been paid into the Global Fund. GFATM resources remain well below the estimated \$10.5 billion needed to adequately address HIV care and prevention needs through 2005. The Russian Federation has pledged \$20 million to the Fund. While this is commendable, Russia is only allocating some \$6 million annually to its domestic HIV programs; and as of mid-2003, it had only contributed \$3 million to the Fund.

Four CIS countries have sought to co-finance their activities directed at HIV/AIDS, other sexually transmitted infections, and tuberculosis via the World Bank's Multi-country HIV/AIDS programme. Ukraine's \$60 million loan application was approved in 2002, and the Russian Federation's \$150 million loan was approved in 2003. As of mid-2003 applications from Moldova and Belarus were pending.

**Harm reduction**

Experience from other regions shows that harm reduction activities must form a critical part of the response to HIV/AIDS<sup>152</sup>. Such approaches emphasise community outreach, needle exchanges, methadone substitution therapy, education, and access to medical and other drug treatment services. Harm reduction views helping people become drug-free as a valuable but long-term goal that should not preclude measures to lessen interim risks, including the risk of HIV, hepatitis infection and drug overdose. These include steps to help intravenous drug users protect themselves from drug-related harm.

Numerous studies (described below) have documented the effectiveness of harm reduction programmes. But in many countries, wide gaps still exist between what has been scientifically proven and what is politically feasible. In the United States, for example, despite numerous reports showing the effectiveness of

**Table 11: Global Fund Allocations for East European and CIS Countries**

Country	Round	Disease	Total Budgets (USD), first two years	Total Budgets (USD)
Armenia	Second	HIV/AIDS	3,166,641	7,249,981
Belarus	Third	HIV/AIDS	6,818,796	17,369,100
Bulgaria	Second	HIV/AIDS	6,894,270	15,711,885
Croatia	Second	HIV/AIDS	3,363,974	4,945,192
Estonia	Second	HIV/AIDS	3,908,952	10,246,580
Georgia	Second	HIV/AIDS	4,018,332	12,125,644
	Third	Malaria	645,700	806,300
Kazakhstan	Second	HIV/AIDS	6,502,000	22,360,000
Kyrgyz Republic	Second	HIV/AIDS	4,958,038	17,073,306
	Second	Tuberculosis	1,212,835	2,771,082
Macedonia	Third	HIV/AIDS	4,348,599	6,309,972
Romania	Second	HIV/AIDS	21,801,000	28,192,765
	Second	Tuberculosis	16,870,000	20,167,821
Moldova	First	HIV/TB	5,257,941	11,719,047
Russian Federation	Third	HIV/AIDS	31,596,308	88,742,355
	Third	Tuberculosis	6,341,210	10,800,827
Serbia	First	HIV/AIDS	2,718,714	3,575,512
	Third	Tuberculosis	2,428,986	4,087,979
	Third	Tuberculosis	6,341,210	10,800,827
Tajikistan	First	HIV/AIDS	1,474,520	2,425,245
	Third	Tuberculosis	1,521,040	3,071,150
Ukraine	First	HIV/AIDS	24,970,211	92,152,744
Uzbekistan	Third	HIV/AIDS	5,182,832	24,497,920
<b>Total</b>			<b>172,342,109</b>	<b>417,203,234</b>

harm reduction approaches from the U.S. Centres for Disease Control and Prevention, the National Institutes of Health, and the National Academy of Sciences, need-exchange and other harm reduction approaches remain politically controversial. However, the more evidence that is gathered that harm reduction is effective

**Box 8: OSI Harm Reduction Programme in Russia**

The International Harm Reduction Development (IHRD) programme of the Open Society Institute (OSI) began working in the region in 1995. It focuses on innovative harm reduction measures with a special emphasis on human rights, public health, and common sense. IHRD has initiated or expanded harm reduction services and HIV prevention projects in 22 countries, with support from OSI's national foundations in terms of advocacy, funding, and oversight. Since 1995 the program financed over 200 projects servicing the needs of intravenous drug users, commercial sex workers, and linguistic and ethnic minorities. In 2000, OSI established a partnership with the UK's Department for International Development to implement the Harm Reduction Bridging Programme in Russia, where some 80 harm reduction projects are currently being funded. In addition to supporting NGOs, OSI and other donors also focus on capacity building in public health schools and professional medical associations. This programme has helped develop a critical mass of well-trained public health specialists and educators in many countries of the region.

*Box based on contribution from International Harm Reduction Development Programme, Open Society Institute, New York, 2003.*

<sup>152</sup> See, for example, N. Hunt, 'A Review of the Evidence-Base for Harm Reduction Approaches to Drug Use', online: Forward Thinking on Drugs < <http://www.forward-thinking-on-drugs.org/review2.html>>.

*Harm reduction is resisted in many CIS countries—where HIV prevalence rates are highest, and where harm reduction is most needed*

*Traditional criminal justice approaches to drug control do not stem the tide of drug use or the associated social and health risks*

ve, the greater the acceptance for these approaches worldwide. Strong collaborative networks of harm reduction agencies are active in Asia, Australia, Europe, North America, and South America<sup>153</sup>. Multilateral agencies, including WHO, UNDP, and UNAIDS support harm reduction as an appropriate response to the global AIDS epidemic.

Acceptance of harm reduction activities varies across Eastern Europe and the CIS. Many of the countries in Central and Southern Europe, including Poland, Bulgaria and the Czech Republic, have already developed a strong positive track record with harm reduction approaches. Unfortunately, harm reduction remains controversial and is resisted in many CIS countries—where HIV prevalence rates are highest, and where harm reduction is most needed. Existing programmes serve as models of effectiveness, but inadequate resources limit their impact. Without increased support, the promise of harm reduction in reducing HIV risk and improving the lives of drug users cannot be realised.

In some countries, advocacy efforts undertaken by harm reduction projects have had some very promising results. But an effective response to the HIV threat requires much more. In many countries, the inclusion of harm reduction NGOs in policy processes remains on paper, as suspicion and intolerance continue to dominate official attitudes toward their clients. Moreover, harm reduction activities and AIDS service provision need to be better integrated. Not all harm reduction projects are equally well informed about HIV treatment needs, or have the ability to adequately refer clients for HIV care.

## Harm reduction and drug use

Injecting drug use is the primary factor driving new HIV infections in Eastern Europe and the CIS. This epidemic of intravenous drug users is an epidemic of the young: according to some research, the average age at first injection in the region is anywhere from 12 to 19 years<sup>154</sup>. As many as 25 percent of intravenous drug users in Eastern Europe and Central Asia appear to be under 20 years old<sup>155</sup>. These children deserve attention and care, irrespective of how society feels about drug use. Stigmatising them could mean letting a generation of children die—a generation on which the promise of transition depends. Their drug use, the reasons behind it, and its consequences must be addressed with effective methods, even if those methods may make some people uncomfortable.

From a harm reduction perspective, all positive behavioural changes—such as using clean injecting equipment—constitute meaningful progress. Though this may seem like a minor step in addressing the social effects of drug use, such changes can have powerful and widespread public health benefits, particularly in terms of reducing HIV transmission. Just as important, perhaps, they symbolically reassure at risk adolescents and young adults that they are vital members of society whose well being is treasured.

Research clearly shows that traditional criminal justice approaches to drug control do not stem the tide of drug use or the associated social and health risks<sup>156</sup>. By contrast, harm reduction methods work—particularly in terms of attenua-

<sup>153</sup>The Central and Eastern European Harm Reduction Network, founded in June 1997 by harm reduction professionals and activists during a meeting in Warsaw, now includes some 180 members from the region.

<sup>154</sup>Surveys among injecting drug users in Almaty show that 76 percent had first injected drug by the age of 19, with 30 percent first trying before their fifteenth birthday. In Ukraine and Saint Petersburg (in the Russian Federation), up to 20 percent of injecting drug users are teenagers, with the youngest being around 12 years old. Source: 'Structural Collapse Sets the Scene for the Rapid Spread of HIV/AIDS Among Young People in Eastern Europe: A UNAIDS Press Background for World AIDS Day' (1999). Online: <http://gbgm-umc.org/programs/wad99/easteuro2.html>.

<sup>155</sup>K. Dehne, *The Determinants of the AIDS Epidemic in Eastern Europe* (Geneva, Monitoring the AIDS Pandemic Report, 1999).

<sup>156</sup>See N. Hunt, *A Review of the Evidence-Base for Harm Reduction Approaches to Drug use, Forward Thinking on Drugs* (<http://www.forward-thinking-on-drugs.org/review2-print.html>; date accessed 28 November 2003); *Drug Policies = Death: HIV/AIDS in Central and Eastern Europe. A report by the Drug Law and Health Policy Network on the Current Impact of Law and Policy on Spread of HIV in Central and Eastern Europe and Former Soviet Union* (2002), online: Drug Policy Institute <[http://www.drugpolicy.org/docUploads/drugpolicies\\_death.pdf](http://www.drugpolicy.org/docUploads/drugpolicies_death.pdf)>.

ting the public health side effects of injecting drug use.

Numerous studies confirm that needle exchange programmes decrease needle sharing, reduce HIV prevalence, and connect members of marginalised groups with drug treatment and other services<sup>157</sup>. These studies also conclude that such programmes do not lead to higher rates of illegal drug use or injection<sup>158</sup>. One study of 81 cities around the world compared HIV infection rates among injecting drug users in cities that had needle exchange programmes with those that did not. In the 52 cities without such programmes, HIV infection rates increased by an average of 6 per cent annually. In the 29 cities with needle exchange programmes, HIV infection rates decreased by an average of 6 per cent annually<sup>159</sup>. Providing an injecting drug user with clean needles, condoms, and safer sex information is significantly more cost effective than treating a person with AIDS<sup>160</sup>.

### Substitution therapy

Substitution or maintenance therapy is a long-term approach used to reduce opiate use and such associated harms as crime, death, and disease. Substitution therapy seeks to reduce or eliminate opiate use by stabilising those with dependencies for as long as is necessary to help them avoid previous patterns of drug use

and associated harm, including the sharing of injecting equipment.

Methadone treatment, the most common form of substitution therapy, has been shown to be effective in reducing drug-related harm without negative health consequences. Compared to users of illegal opiates, people who receive methadone spend less time in jail and in the hospital. They are less likely to contract HIV, they commit fewer crimes, and they live longer<sup>161</sup>. Because medications used for substitution therapy are tightly controlled, treatment brings users into regular contact with the health care system—which, since so many intravenous drug users are living with HIV, is extremely important. Methadone is also cost effective, with annual patient costs in the region generally below \$1,150 (and sometimes as low as \$20)<sup>162</sup>.

An estimated half million people receive substitution therapy worldwide, over half of whom live in countries belonging to the European Union<sup>163</sup>. European countries in which methadone is most widely available, such as the United Kingdom, also report low HIV prevalence rates among intravenous drug users<sup>164</sup>. In East European and CIS countries, however, use of substitution therapy remains highly limited. Some 6,500 people in the region (most of whom are in Central and South Eastern Europe) are currently using substitution therapy. By contrast, nine count-

*Needle exchange programmes decrease needle sharing, reduce HIV prevalence, and connect members of marginalised groups with drug treatment and other services*

<sup>157</sup> See, for example, *Innovative Approaches to HIV Prevention: Selected Case Studies*, UNAIDS, 2000, Geneva (<http://www.unaids.org/en/in+focus/topic+area/injectiondrug+use>). See also D. Des Jarlais, P. Friedman, J.P. Grund, et al., 'HIV Risk Behaviour among Participants of Syringe Exchange Programs in Central and Eastern Europe and Russia', *The International Journal of Drug Policy* 13(2002): 165-170.

<sup>158</sup> See, for example, 'Drugs, AIDS and Harm Reduction: How to Slow the HIV Epidemic in Central and Eastern Europe', International Harm Reduction Development programme, Open Society Institute, 2001, New York.

<sup>159</sup> *Multi-city Study on Drug Injecting and Risk of HIV Infection*, World Health Organisation International Collaborative Group, 1994, Geneva.

<sup>160</sup> See for example, *Return on Investment in Needle and Syringe Programs in Australia*. Commonwealth Department of Health and Ageing (Commonwealth of Australia, Sydney, 2002).

<sup>161</sup> See, for example, E. Belin et al., 'High Dose Methadone Reduces Criminal Recidivism in Opiate Addicts', *Addiction* (1999); 7 (1): 19-29; J. Ward et al., *Key Issues in Methadone Maintenance Treatment* (University of New South Wales Press, 1992, New South Wales): 41-61; Central and East European Harm Reduction Network, 'Injecting Drug Users, HIV/AIDS Treatment and Primary Care in Central and Eastern Europe and the Former Soviet Union', 2000, Vilnius (<http://www.ccehrn.lt/index.php?itemld=1667>); and CIDAD Group of Experts in Demand Reduction, *Drug Substitution Treatment for Opiate Use* (2001), online: CIDAD, <http://www.cidad.oas.org>.

<sup>162</sup> 'Injecting Drug Users, HIV/AIDS Treatment and Primary Care in Central and Eastern Europe and the Former Soviet Union', International Harm Reduction and Development programme, 2002, New York, p. 24.

<sup>163</sup> *Substitution Treatment: A Key Component of Drug Treatment*, European Monitoring Centre for Drugs and Drug Addiction, 2001, Lisbon; U. Solberg, 'Maintenance Therapy in the European Union and in Norway', presented at Fifth Conference of European Opiate Addiction Treatment Association, Oslo, 2002.

<sup>164</sup> G. Stimson, 'AIDS and Injection Drug Use in the United Kingdom, 1987-1993: The Policy Response and the Prevention of the Epidemic', *Social Science and Medicine* 41(5): 699-716.

ries—Albania, Armenia, Azerbaijan, Belarus, Kazakhstan, Russia, Tajikistan, Turkmenistan, and Uzbekistan—do not offer substitution therapy at all, despite the fact that most of the people living with HIV live in these countries. The fact that substitution therapy is most available in those countries in the region where

it is least necessary—and least available where it is most needed—is worthy of special attention.

International experience strongly suggests that broader application of substitution therapy will reduce the numbers of injecting drug users, lower crime and HIV prevalence rates, help connect injecting drug users with health care systems where they can be treated for HIV and other health problems, and allow injecting drug users to develop more constructive lives for themselves and their communities. Unfortunately, substitution therapy often makes public health and other policy makers uncomfortable because it is seen as condoning drug use. The alternative view is to see substitution therapy as a way to effectively control drug use and the ills that accompany it. In any case, regardless of how uncomfortable one may feel about substitution therapy, rising HIV prevalence rates leading to a generalised epidemic can only be seen as considerably more threatening.

Many NGOs working on youth and children's issues, particularly violence and child abuse, have recently appeared in the region<sup>166</sup>. Because of their newness, many of these NGOs often lack the tools and funding needed to meet the challenges posed by growing injecting drug use among young people. Problems of building effective relationships with marginalised youth (growing numbers of which live on the streets), who distrust adult advice and guidance on any subject—particularly sex and drugs—are a major challenge<sup>167</sup>.

### International agencies

Multilateral and bilateral development agencies working in the East European and CIS countries, as well as relief agencies and international NGOs working on

#### Box 9: Methadone Substitution Projects in the Kyrgyz Republic

According to UNODC estimates<sup>165</sup>, there were some 80,000-100,000 injecting drug users (1,644-2,054 per 100,000 of population) in the Kyrgyz Republic in 2001. This was the highest level among the Central Asian countries, and the numbers have almost certainly grown since then. Heroin at this time was widely available and inexpensive: a dose cost \$0.50 in Osh and \$2 in Bishkek. The Kyrgyz Republic, and particularly the Osh province, is located along the drug trafficking route from Afghanistan. This is not an easy environment for potential injecting drug users who face the daily reality of easy money from drug smuggling and abuse.

Despite this, only 0.3 percent of these drug users had access to methadone programmes. After years of disputes between Ministry of Health, Ministry of Interior, State Commission on Drug Control, UNDP, and the Soros Foundation-Kyrgyzstan, two pilot methadone substitution projects were launched in the Kyrgyz Republic in 2002. One was in Osh (supported by UNDP); the second was in Bishkek (supported by the Soros Foundation-Kyrgyzstan). These were the first such projects in the CIS. The project in Osh has enjoyed the support of the province's governor, who launched the project and encouraged the heads of regional police bodies, representatives of all regional and city services (public health, education, employment and social protection, and culture), as well as NGOs, to support this initiative. The provincial administration also helps with employment support and social rehabilitation of the project's clients.

Some forty per cent of the project's clients are people living with HIV/AIDS. The project's average client is 34 years old, in poor health, has a criminal record, and has been taking drugs for 8-10 years. In addition to people living with HIV/AIDS, the project also services sex workers. Virtually all clients had undergone repeated treatment for drug addiction at other facilities, without success.

The project reported some important successes in its first two years of operations. Some of the clients were able to recover physically and restored their relationships with their families. Half got new jobs, and some serve as peers to other clients, becoming in this way a big family supporting each other in every day's victories and failures. The establishment of a rehabilitation centre where clients could easily obtain social support is now a major priority for the project.

*Prepared by Mamasabyr Burhanov, Chief, Osh Regional Narcological Dispensary*

<sup>165</sup> 'Preliminary Assistance to Harm Reduction: Express Assessment of Drug Abuse in Central Asia', UNODC, 2001, Vienna.

<sup>166</sup> In 1996 the first shelter for young people opened its doors in Bishkek (Kyrgyzstan). In 1997 the National Centre for the Prevention of Child Abuse started working in Moldova. For more information visit Child Abuse and Neglect Network in EE, online: < <http://www.canee.net>>.

<sup>167</sup> Some of the best harm reduction work with youth has been done in Russia by Médecins Sans Frontières-Holland and the AIDS Foundation East-West (AFEW) in collaboration with the Focus Foundation. In Central Asia, the work of the Accord Centre for Community Development in Almaty, together with Street Kids International and the Open Society Institute's International Harm Reduction Development programme, deserve special mention.

HIV/AIDS issues, have been major sources of information and funding for national HIV/AIDS prevention programmes. They have also been the main supporters of the NGOs working in this area.

UNDP and other UN agencies work on HIV/AIDS and associated issues in the region, mobilising resources, coordinating national responses, and building capacity for effective responses. In Ukraine, some 300 individuals have participated in UNDP's 'Leadership for Results' project, which focuses on building capacity in the NGO and local government communities to facilitate the implementation of the national strategic plan. In Uzbekistan, UNDP is helping the national health system to provide prevention and information services, with a special focus on risk and vulnerability factors. In Poland, UNDP provided financial assistance to help a group of people living with HIV/AIDS set up a small NGO in Warsaw. Within two years, the group had established a 24-hour AIDS hot line, financed by the National AIDS Centre.

### **Involving the Private Sector**

The private sector's contribution in fighting HIV in East European and CIS countries is primarily a matter of bringing business communities' skills and non-monetary resources to bear on reversing this epidemic. The private sector can respond to HIV/AIDS by implementing HIV workplace prevention and care programs, injecting business' innovation and efficiency into HIV/AIDS programming, and providing leadership and advocacy in lobbying for more vigorous responses by governments and others actors.

The 'Race for Life' that is held annually in Kyiv and organised by the United Nations in cooperation with the local business community, as well as with many other national and international partners, is an example of a highly successful event that is made possible by private sector participation. This three kilometre event (run or walk) is devoted to raising public awareness about HIV/AIDS, encouraging compassion and support for people living with

HIV/AIDS, and raising money for the Kyiv AIDS clinic. More than 30 companies made in-kind or financial contributions to the Race for Life, and several thousand people took part in the event. Thanks in part to this private sector participation, the Race for Life in 2003 was the UN's largest annual public event in Ukraine.

### **Education and risk reduction for youth**

There is a strong possibility that the HIV/AIDS epidemic in East European and CIS countries will spread from injecting drug users and their sexual partners into a generalised epidemic transmitted through heterosexual sexual contact. Preventing such an outcome means taking immediate actions to reduce harm from drug use and sex. It also means taking longer-term steps to educate youth about sexual risk, and improving access to the tools needed to reduce risk. Measures to reduce drug related harm and sexual risk are often complementary and can play an important role in HIV prevention efforts.

Disseminating information about how to avoid HIV and distributing condoms are essential components of HIV prevention. By themselves, however, such activities do not produce the kind of behavioural changes needed to stay uninfected. Young people need places to go where they can feel safe in discussing sexuality, peer pressure, and problems in negotiating safer sexual practices. Issues of poverty, violence, trafficking, substance dependency, and sexual abuse must also be addressed if young people are to avoid HIV.

Changing behaviour is not easy and requires on-going attention and support. But young people can be successfully encouraged to remain abstinent, delay initiation of sexual activity, or, if sexually active, to use condoms. Research shows that young people are more likely to use services that are designed and managed by other young people, that are culturally appropriate and affordable, and which respect the principle of confidentiality. Peer counselling, appropriate advertising<sup>168</sup>, school-based sexual education, and youth-friendly services that are con-

*The private sector can respond to HIV/AIDS by implementing HIV workplace prevention and care programs, injecting business' innovation and efficiency into HIV/AIDS programming*

*Young people can be successfully encouraged to remain abstinent, delay initiation of sexual activity, or, if sexually active, to use condoms*

<sup>168</sup>The marketing techniques that are successful in selling music and soft drinks can also be effective in promoting condom use, utilising health services, and reducing HIV-related stigma.

veniently located have been found to be especially effective when integrated with other youth services.

### Voluntary counselling and testing

Expanding voluntary counselling and testing services are cornerstones of the UN System's Strategic HIV/AIDS Plan for 2001-2005, and of the UNGASS goals of reducing HIV prevalence among young people and infants. Despite this, access to voluntary testing is severely limited in many East European and CIS countries testing,

largely it is unaffordable for many people living with HIV or who are in danger of contracting the disease. Where testing is state-funded, it is generally mandatory.

## AIDS treatment

While prevention can help avert the future threats to human development posed by the epidemic, it can not change the fact that millions of people in Eastern Europe and the CIS are already living with HIV. Only treatment can mitigate the risks this poses for households, businesses, communities, societies, and economies. Treatment for people living with AIDS has substantial positive effects on human development. By giving people living with AIDS a chance for longer, healthier, more normal lives, treatment keeps their children from becoming orphans. Treatment keeps households, businesses, and communities intact; it improves returns on social investments like education; it increases growth and human security; and it keeps to a minimum exacerbation of poverty. For countries like Russia and Ukraine with the region's highest HIV prevalence rates, the development of effective, affordable treatment regimes is becoming particularly urgent.

Policy makers in the region's low-income countries now in the early phases of the epidemic may view prevention as the priority, and treatment as an unaffordable luxury. But while there are certainly trade-offs between preventing HIV and treating AIDS, important complementarities are present as well. The prospect of treatment brings people living with HIV into contact with the public health authorities, and provides access to HIV counselling and testing with its proven prevention benefits<sup>169</sup>. Because the proper use of antiretroviral therapy reduces viral burdens, people living with AIDS may be less infectious and, therefore, less likely to transmit HIV to others<sup>170</sup>. Treatment can also help reduce stigmatisation and disc-

#### Box 10: Voluntary vs. mandatory testing in the US

Throughout the 1980s, legislators and government officials in the United States proposed mandatory HIV testing measures. The most extreme proposals called for testing all citizens; others would have required HIV tests for people seeking employment in certain 'sensitive' fields (health care and education). Most of these were never passed because of feasibility concerns and strong opposition from civil liberties groups.

However, two U.S. states, Illinois and Louisiana, did enact and enforce laws mandating premarital HIV testing. Illinois' experience provides a cautionary lesson for all governments considering similar policies based on mandatory testing. In 1988, the year in which Illinois' premarital testing law was enacted, the state's marriage rate plummeted to 6.7 per 1,000 persons, the country's lowest (the 1987 Illinois marriage rate was 8.3 per 1,000 residents). Meanwhile, the number of marriage licenses issued in border areas of neighbouring states surged. These facts strongly suggest that thousands of Illinois residents chose to avoid the testing requirements by marrying elsewhere. Public health officials quickly realised that the law was not a cost-effective way to identify those with HIV. Out of some 250,000 premarital HIV tests administered while the Illinois law was in effect, only 52 cases of HIV were reported. Not only did the law place additional financial burdens on those seeking licenses (costs of the tests ranged from \$35 to \$100)—it also deprived local governments of marriage license fees by driving people out of state.

Illinois' failed experiment draws attention to other, more serious flaws in mandatory HIV testing policy. The law was seen as intrusive and an invasion of privacy by nearly all people seeking to get married, regardless of whether they were at significant risk for HIV. Legal experts also argued that the statute violated the U.S. constitution in several respects, including the 14th amendment's guarantee of equal protection under law. More problematic was its effect on those at greatest risk for HIV: for them, the consequences of testing positive in such a system (which included state-mandated monitoring, partner notification, potential loss of job and family support) far outweighed any potential benefit, especially since at the time there was no state support for therapeutic options. Fearing discrimination and exclusion, those most vulnerable were therefore driven away from the public health system—the opposite of what was intended. Their access to vital prevention information and resources was limited further.

Box based on contribution from David Barr

<sup>169</sup> See *HIV Voluntary Counselling and Testing: A Gateway to Prevention and Care, Case Studies*, UNAIDS, June 2002, Geneva. See also *The Impact of Voluntary Counselling and Testing: A Global Review of the Benefits and Challenges*, UNAIDS, 2001, Geneva.

<sup>170</sup> Musicco M., A. Lazzarin, A. Nicolosi et al., 'Antiretroviral Treatment of Men Infected with Human Immunodeficiency Virus Type One Reduces the Incidence of Heterosexual Transmission: Italian Study Group on HIV Heterosexual Transmission', *Archives of Internal Medicine*, 1994, 154:1971-1976.

rimination. Perhaps most importantly, support for treatment engages governments with people living with HIV/AIDS. Since many people living with HIV/AIDS are marginalised, they are unlikely to cooperate in prevention efforts unless they believe that they are cared for in their communities. Keeping people living with AIDS healthy may be the single most effective way of showing that they count, that their lives are valued.

### Antiretroviral therapy

The development of highly active antiretroviral therapy has dramatically lowered morbidity and mortality rates in those countries where it is widely available. In New York City, which has the highest prevalence of HIV and AIDS in the United States, death rates from AIDS and new AIDS cases have been cut in half since the introduction of antiretroviral therapy. Similar reductions are seen everywhere that therapy is available.

Supplying and applying antiretroviral therapy is a complicated undertaking for health care systems, providers, and patients. Unlike treatment for tuberculosis, antiretroviral therapy does not cure HIV, and therapy is life long. A combination of drugs must be used with firm regularity, and a reliable supply of drugs must be available. Preventing the development of transmissible drug resistant HIV stra-

ins requires strict adherence to the regime. (Indeed, because improper use of antiretroviral therapy can generate transmissible drug resistant HIV strains, some public health officials have cautioned against their widespread use<sup>171</sup>). In countries such as the United States, where antiretroviral therapy is readily available, transmission of drug-resistant HIV is now seen in 10-20 percent of new HIV infections<sup>172</sup>. Managing the side effects of antiretroviral therapy is complex, and requires effective, on-going communication between doctors and patients.

The World Health Organisation (WHO) has recently added 12 antiretroviral therapy treatments to its model list of essential drugs<sup>173</sup>, and now recommends the provision of antiretroviral therapy even in resource-poor settings. WHO has also issued guidelines to assist public health officials and resource-constrained health care providers in their use of antiretroviral therapy<sup>174</sup>. Under these parameters, an estimated 6 million people in the developing world should be receiving treatment immediately. Only 300,000 are doing so, however<sup>175</sup>, and a third of this group are in Brazil<sup>176</sup>. In the East European and CIS countries, an estimated 80,000 people currently meet the guidelines' criteria for needing antiretroviral therapy today. Only an estimated 7,000 are receiving it<sup>177</sup>.

<sup>171</sup> See, for example, *Guidelines for the Use of the Antiretroviral Agents in Adults and Adolescents*, presented at a panel on clinical practices for the treatment of HIV, convened by the U.S. Department of Health and Human Services and the Henry J. Kaiser Family Foundation, November 2003. Online: NIH AIDS Info [http://aidsinfo.nih.gov/guidelines/default\\_db2.asp?id=50](http://aidsinfo.nih.gov/guidelines/default_db2.asp?id=50).

<sup>172</sup> See, for example, H. Solomon, 'Changing Patterns in Transmission of Drug-Resistant HIV-1', report from the first IAS Conference on HIV Pathogenesis and Treatment (Medscape Protals INC, 2001). Online: Medscape, <http://www.medscape.com>. See also S. Sternberg, 'Drug-Resistant HIV Strains Raising Rapidly' (USA Today, 19 December 2001). Online: USA Today <http://www.usatoday.com/news/health/aids/2001-12-18-aids-drug-resistance.htm> (date accessed 1 December 2003).

<sup>173</sup> The WHO Model List of Essential Medicines can be found at <http://mednet3.who.int/eml/modelList.asp>. To meet the goal of treating 3 million people living with HIV by 2005, on 1 December 2003 the WHO added three new generic products for first-line AIDS treatment to its list of medicines meeting WHO standards of quality, safety and efficacy. See 'WHO Adds New Fixed Dosage Combination to Its List of Quality Products for AIDS Treatment', 1 December 2003. Available at <http://www.who.int/mediacentre/releases/2003/pr90/en/>.

<sup>174</sup> 'Scaling Up Antiretroviral Therapy in Resource Limited Settings, Guidelines for a Public Health Approach'. World Health Organisation, Geneva, 2002, p. 25.

<sup>175</sup> 'Two Years After UN Historic Session on HIV/AIDS, New Reports Show Progress, but the Member Nations Fall Short of Goals'. UNAIDS press release, 23 September 2003, available online at [http://www.unaids.org/html/pub/Media/Press-Releases01/UNGASS\\_Pressrelease\\_2003\\_en\\_doc.htm](http://www.unaids.org/html/pub/Media/Press-Releases01/UNGASS_Pressrelease_2003_en_doc.htm).

<sup>176</sup> According to the Brazilian Ministry of Health, in 1999 approximately 90,000 people living with HIV were receiving antiretroviral treatment through the public health system. See AIDS/Drugs Policy, Ministry of Health, Brazil. Available at [http://www.aids.gov.br/assistencia/aids\\_drugs\\_policy.htm](http://www.aids.gov.br/assistencia/aids_drugs_policy.htm).

<sup>177</sup> *Injecting Drug Users, HIV/AIDS Treatment and Primary Care in Central and Eastern Europe and the former Soviet Union*. This publication can be downloaded from: [http://www.soros.org/initiatives/ihrd/articles\\_publications/publications/ceehrn\\_20020701/ceehrn\\_injecting.pdf](http://www.soros.org/initiatives/ihrd/articles_publications/publications/ceehrn_20020701/ceehrn_injecting.pdf).

### Treatment to prevent mother-to-child HIV transmission

An estimated 800,000 newborns worldwide contract HIV each year from their mothers, accounting for 16 percent of all new infections. Children exposed to HIV in this way stand a roughly 3-in-10 chance of becoming infected<sup>178</sup>. Infant mortality rates are an important measure of human development, and avoiding rising mother-to-child transmission rates will be key to responding to the epidemic in the region. Although this transmission mode is not a major driver of the epidemic in Eastern Europe and the CIS, UNAIDS data indicate that its importance is growing.

*Preventing mother-to-child transmission in infants is only half the battle; treating their mothers is the other half*

Programmes to reduce mother-to-child transmission rates can be extremely effective and inexpensive. Approved approaches to preventing mother-to-child transmission, as described by UNAIDS, focus on preventing HIV among prospective parents, and on preventing unwanted pregnancies among women living with HIV. Preventing mother-to-child transmission and caring for infected mothers and infants require that women of child bearing age and their partners have access to HIV prevention services, reproductive health and family planning services, and antenatal/maternity clinics. These services

should include voluntary HIV counselling and testing, birth control and termination services, and the availability of antiretroviral drugs and other interventions to prevent HIV infection.

Antiretroviral therapy is extremely effective in reducing the risk of mother-to-child transmission. In developed countries, the use of a three-part treatment regimen with the drug AZT along with voluntary counselling and testing, as well as the use of elective caesarian delivery, has made mother-to-child transmission a rare event. In developing countries, clinical studies indicate that shorter courses of AZT or a one-dose regimen of nevirapine can be highly effective. With minimal side effects and at very low cost (less than \$5 per birth), the risk of mother-to-child transmission can be substantially reduced.

Preventing mother-to-child transmission in infants is only half the battle; treating their mothers is the other half. Without their mothers, children cannot be expected to grow and mature into responsible, caring and loving adults. The UN-sponsored MTCT-Plus initiative that seeks to provide antiretroviral therapy and infection treatment to mothers participating in MTCT programmes is particularly noteworthy in this respect<sup>179</sup>.

#### Box 11: Dialogue with producers increases access to antiretroviral drugs

The **Accelerated Access Initiative** is a public/private partnership that since 2000 has been linking UN agencies and six major pharmaceutical companies. The partnership works to increase access to HIV care, treatment, and support. Negotiations have focused on making high quality antiretroviral medicines (including generics) more affordable in low- and middle-income countries, as well as on providing technical support to help countries expand their capacity to deliver care and treatment. In May 2000, an agreement was reached on a set of principles to guide governmental negotiations on preferential medicine pricing and procurement agreements. Eighteen countries, including Romania and Ukraine, have reached agreement with manufacturers that have significantly reduced drug prices.

*Box based on information from UNDP Country Offices in Ukraine and Romania*

#### Access to antiretroviral treatment

The results of a survey conducted in 2002 by the Central and Eastern European Harm Reduction Network indicate that, of the 7,000 people receiving the recommended triple combination antiretroviral therapy<sup>180</sup> in the region<sup>181</sup>, 58 percent are in Romania, where the many children infected through medical procedures in the 1980s are receiving treatment subsidised by international aid programmes. Another 19 percent are in Poland. Access to antiretroviral therapy is broadest in Central and South Eastern Europe, where some form of antiretrovi-

<sup>178</sup> *Prevention of Mother-to-Child Transmission of HIV: Selection and Use of Nevirapine*, WHO Technical Notes, 2001, available at WHO/HIV\_AIDS/2001.03 WHO/RHR/01.21.

<sup>179</sup> See <http://www.mtctplus.org/index.html>.

<sup>180</sup> This reference denotes the use of three different types of antiretroviral medications, to prevent the development of resistance to any single antiretroviral medication.

<sup>181</sup> *Injecting Drug Users, HIV/AIDS Treatment and Primary Care in Central and Eastern Europe and the former Soviet Union*. This publication can be downloaded at: [http://www.soros.org/initiatives/ihrd/articles\\_publications/publications/ceehrn\\_20020701/ceehrn\\_injecting.pdf](http://www.soros.org/initiatives/ihrd/articles_publications/publications/ceehrn_20020701/ceehrn_injecting.pdf).

ral therapy is often available at no cost. Hungary, Croatia and Bulgaria are examples of countries providing treatment to a large share of their (relatively small) infected populations.

In the CIS countries, only some 3,000 of the 250,000 registered HIV/AIDS patients are benefiting from antiretroviral therapy. Of those 3,000, some 70 percent are on monotherapeutic regimens administered in the Russian Federation, which make extensive use of the AZT that is manufactured in Russia. Monotherapy has been shown to provide very limited benefits to some patients—and to cause drug resistance in all patients over a short period of time. This practice creates the danger of widespread transmission of drug-resistant strains of HIV, and needs to be closely monitored.

Although cost remains the single greatest barrier to antiretroviral therapy, considerable progress has been made in making this therapy more affordable. Whereas the annual per-patient costs of a three-drug regimen of antiretroviral therapy were initially some \$10,000, high-quality drug regimens can now be obtained for as little as \$300 a year. New mechanisms to reduce drug prices and provide funding to purchase drugs have been developed. These include the Global Fund to Fight AIDS, Tuberculosis, and Malaria, and UNAID's Accelerated Access Initiative<sup>182</sup>, as well as several initiatives developed by pharmaceutical companies. The companies holding the patents on these drugs have registered most of their antiretroviral products in the region.

**Access to quality generic HIV-related drugs in CIS countries**

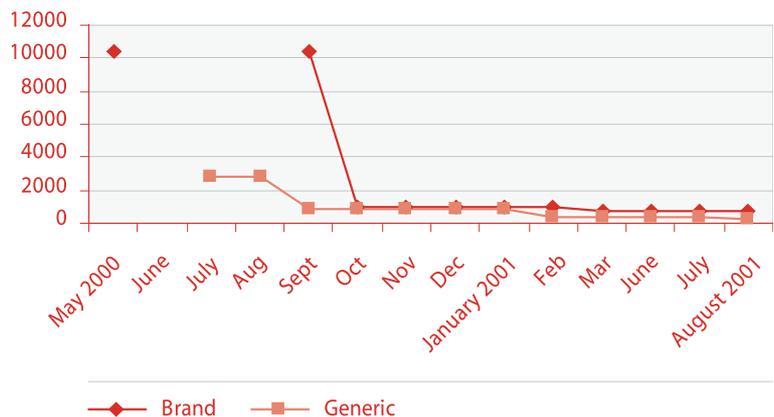
The introduction of generic drugs has been the single most important factor in reducing the price of HIV treatment. As imports of generic antiretroviral medicines into the region expand, questions about their use and quality must be addressed. The first phase of the World Health Organisation's 'Access to Quality

HIV/AIDS Drugs and Diagnostics' project (which was completed in March 2002) published a list of 16 drugs, including 11 antiretroviral treatments and generic and research-based pharmaceutical products, that met WHO's recommended standards for quality and compliance with good manufacturing practices. A further 13 suppliers and 100 products were under review as of mid-2003. This is an important step. However, national governments must also play an important role in ensuring the quality of generic products.

A number of Central and East European countries—particularly Hungary, Poland, and Slovenia—have strong niches in global pharmaceuticals markets. Pharmaceutical production is also developing rapidly in a number of CIS countries, along with the general economic recovery that began in 1999-2000. Russia and Ukraine have pharmaceutical manufacturing capacity that, in principle, could be used to produce large amounts of antiretroviral drugs. (This would most likely be under license from multinational producers, although Russia does produce some of its own antiretroviral products<sup>183</sup>). In addition to providing treatment to millions of people living with AIDS, the expansion of the CIS economies' pharmaceutical sector could provide income, jobs, and economic development for the region.

*Access to antiretroviral therapy is broadest in Central and South Eastern Europe*

**Figure 15:** *Prices decreases Fluconazole (50 mg tab) due to generic imports (Ukraine)*



<sup>182</sup> See <http://whqlibdoc.who.int/publications/2002/9241210125.pdf>.

<sup>183</sup> Ukraine has some 27 pharmaceutical factories, including some that have the potential to become 'good manufacturing practice' compliant. See *Reforms in Pharmaceutical Industry of Ukraine*, TACIS, [http://europa.eu.int/comm/europeaid/projects/tacis/publications/general/case\\_studies/project\\_08.pdf](http://europa.eu.int/comm/europeaid/projects/tacis/publications/general/case_studies/project_08.pdf).

But despite these possibilities, access to generic antiretroviral medicines in many CIS countries remains limited, and prices remain high. This is particularly the case in Russia where current needs are greatest. However, some progress is evident—and much of it is due to the activities of people living with HIV/AIDS. In addition to the work done in this respect by the All-Ukrainian Network of People Living with HIV/AIDS (see Box 12), the Georgian Group of People Living with HIV/AIDS has been able to organise the import of antiretroviral generics directly from the Indian pharmaceutical manufacturer Cipla.

### Diagnostic Testing, Treatment, and Prevention of Opportunistic Infections

Antiretroviral therapy is not the only necessary treatment for AIDS. Because HIV weakens the immune system, bodily sys-

tems are open to attack by disease-causing organisms that take ‘opportunistic’ advantage of a weakened immune system. These ‘opportunistic’ infections are what ultimately cause illness and death from AIDS. Fortunately, many of the most common opportunistic infections can be treated and, in some cases, prevented. Opportunistic infections prophylaxis is extremely effective. It can significantly improve the quality and longevity of life for people with AIDS, often at much lower costs than antiretroviral therapy.

While the cost and complexity of antiretroviral treatments may slow their availability, many drugs that act as prophylaxis against opportunistic infections can be made available immediately at low cost, and do not require sophisticated health care infrastructures. For example, cotrimoxazole, an antibiotic used to prevent and treat pneumocystis carinii pneumonia (PCP—a common and deadly AIDS-related pneumonia), as well as other bacterial infections, costs only \$8-17 per patient annually. The drug is extraordinarily effective and can help to prolong the life of people living with HIV for years.

PCP treatment and other forms of prophylaxis, as well as CD4 cell testing (which provides important information about the health of a patient’s immune system and, therefore, the risk of developing opportunistic infections), are generally more available than antiretroviral therapy in East European and CIS countries. But they too remain out of reach for many. Data from the 2002 CEEHRN survey indicate that fewer than half (44 percent) of 99 reporting harm reduction programmes with clients living with HIV reported that their clients have access to affordable prophylaxis<sup>184</sup>. Half of the organisations reported that their clients had no access to CD4 cell testing. The study also found large discrepancies between access to PCP prophylaxis and CD4 cell testing as reported by governments, versus access as reported by harm reduction programmes. Albania, Armenia, Azerbaijan, the Kyrgyz Republic, Tajikistan, and Turkmenistan report no access to either PCP prophylaxis or CD cell testing. In other countries, prophylaxis and diagnostic testing are only

#### Box 12: Improving access to generic antiretrovirals: The case of Ukraine

Since the introduction of antiretroviral generics in Ukraine, representatives of people living with AIDS have urged the government to make them widely available. Key advocacy roles have been played by the Médecins sans Frontières-Holland project in Ukraine and the All-Ukrainian Network of People Living with HIV/AIDS. Their activities show how empowering people with HIV/AIDS can lead to more progressive HIV policies.

In November 2002, two main generic antiretroviral manufacturers from India (Cipla and Ranbaxy) submitted applications to register their products in Ukraine with the Ministry of Health’s Pharmacological Centre, which by law must review such applications within 210 days. At the same time, the Médecins sans Frontières-Holland project received permission from the Pharmacological Centre to import unregistered generic antiretroviral products for immediate use in a pilot project in southern Ukraine.

Despite this permission, imports were fraught with bureaucratic difficulties that caused delays and treatment interruptions. These imports nonetheless helped to accelerate approvals for the generic companies. In March 2003, the first generic antiretroviral medicines from Cipla were registered in Ukraine. Ranbaxy’s application was approved one month later. Between the two companies, a dozen generic antiretroviral drugs are now approved for sale in Ukraine.

Advocacy work then turned to ensuring that the generic antiretrovirals are on the lists of drugs for state procurement, expanding and supporting distribution networks, and monitoring supply continuity and sustainability.

*Box based on contribution from UNDP Country Office, Ukraine*

<sup>184</sup> *Injecting Drug Users, HIV/AIDS Treatment and Primary Care in Central and Eastern Europe and the former Soviet Union*. This publication can be downloaded from: [http://www.soros.org/initiatives/ihrd/articles\\_publications/publications/ceehrn\\_20020701/ceehrn\\_injecting.pdf](http://www.soros.org/initiatives/ihrd/articles_publications/publications/ceehrn_20020701/ceehrn_injecting.pdf).

available in a few urban areas, which may not be where the majority of infected people live. For example, in Belarus, PCP prophylaxis and CD4 cell testing are available in Minsk, which has only 13 percent of the country's HIV cases. These tests are not available in Gomel, which reports two thirds of Belarus' HIV cases.

### Leadership and empowerment

As Chapter IV pointed out, leaders in East European and CIS countries have a special role to play in ensuring that the human rights of people living with HIV/AIDS—or who are at particular risk of contracting the disease—are protected. But an effective leadership response to the epidemic goes well beyond politics and the human rights agenda. Engagement by leaders in the arts, media, culture, sport, and other walks of life are needed to raise public awareness about HIV/AIDS, attack the stigma associated with the epidemic, and encourage the engagement of others. Such a response can inform people living with HIV/AIDS (or who are at risk of contracting the disease) that their inclusion into the social mainstream is desired. This realisation in turn can empower individuals from marginalised communities, to become leaders themselves in their local communities and organisations.

Leadership from the top is therefore key to generating the grass roots leadership and engagement needed for an effective response. UNDP's 'Leadership for Results' programme (described in Annex III) provides such a vehicle for leadership and empowerment.

## Conclusions and recommendations

Effective responses to the epidemic must:

- *be multidimensional—they must inform, include, and lead.*
- *recognise that the epidemic is a threat to human development, not just a public health issue.*
- *be multisectoral, combining capacity building in the public health infrastructure with engagement from other government ministries, local authorities, and civil society groups.*

- *be based on a defence of the human rights of people living with HIV/AIDS and other marginalised groups.*

- *identify and mobilise the required financial and human resources from domestic and international sources.*

- *seek both to prevent the spread of the epidemic and improve access to treatment for people living with AIDS.*

- *be informed by the logic of the harm reduction approach to the epidemic, particularly in terms of injecting drug use, but also in terms of voluntary counselling and education.*

- *focus on leadership, both at the highest levels and at the grass roots, in order to galvanise and engage those who would otherwise remain on the sidelines.*

Many East European and CIS countries are now gaining access to important new funding sources to support their anti-HIV/AIDS activities, chiefly from the Global Fund to Fight AIDS, Tuberculosis, and Malaria, and from the World Bank. These funds, the release of which requires recipient countries to develop inclusive country coordinating mechanisms to participate in and monitor the implementation of funded activities, have the potential to catalyse multisectoral national responses to the epidemic. These funds, if used well, could remove one of the key obstacles to effective responses.

According to WHO guidelines, some 80,000 people living in Central and East European and CIS countries should be receiving treatment for AIDS, but only 7,000 are doing so. This is despite the fact that new initiatives to lower the costs of antiretroviral therapy and treat opportunistic infections have dramatically expanded access to treatment. Some 70 percent of the approximately 3,000 people in CIS countries who are receiving antiretroviral therapy are doing so in the Russian Federation. This therapy consists primarily of monotherapeutic regimens that make extensive use of AZT that is manufactured in Russia. Monotherapy has been shown to provide very limited benefits to some patients—and to cause drug resistance in all patients over a short period of time.

*Engagement by leaders in the arts, media, culture, sport, and other walks of life are needed to raise public awareness about HIV/AIDS*

These conclusions suggest the following policy recommendations:

- *Policy makers need to robustly support such harm reduction activities as needle exchange programmes and methadone substitution therapy. The issue is not whether such activities promote drug use—it is whether they are effective in preventing HIV. While the answer to the former question may be ambiguous, the answer to the latter question is clearly positive.*

- *Although policy frameworks in the region are becoming more multisectoral, further progress in this respect is needed. National HIV/AIDS strategies and programmes do feature the formal coordination of security, justice, education, and transport industries. But in many countries efforts to improve de facto coordination, as well as include local authorities and civil society groups, need to be strengthened.*

- *More aggressive support for treatment initiatives could generate large payoffs in the region. While there are trade-offs between preventing HIV and treating AIDS, important complementarities are present as well, and WHO guidelines suggest that all East European and CIS countries should be able to take advantage of these complementarities. The prospect of treatment brings people living with HIV into contact with the public health authorities, and can make people living with AIDS less likely to transmit HIV to others. Support for treatment also connects governments with people living with HIV/AIDS. Keeping people living with AIDS healthy is the single most effective way of showing that their lives are valued.*

- *The extensive use of monotherapeutic anti-retroviral regimens in the Russian Federation poses a non-trivial risk of generating and transmitting drug-resistant strains of HIV. This risk needs to be closely monitored by the appropriate Russian and international authorities.*

- *UNDP's 'Leadership for Results' programme, which has produced important outcomes in Ukraine (as well as other countries in the developing world), offers a successful model that can be applied elsewhere in the region.*

# Chapter VI: Conclusions

The steps that need to be taken to combat the HIV/AIDS epidemic in the countries of Central and South Eastern Europe and the CIS have been set forth in the previous chapters. They reflect the logic of:

- **Information:** providing better quality epidemiological data, educational information, counselling, voluntary HIV testing;
- **Inclusion:** reaching out to injecting drug users, sex workers, prisoners, ethnic minorities, and other at risk groups, by providing them with access to harm reduction services and ensuring that their voices are heard in policy formulation and implementation; and
- **Leadership:** enabling and empowering leaders from all sectors and walks of life to commit to change, in order to build effective grass roots responses.

Some developing and developed countries from other regions have achieved notable successes in responding to the epidemic. These success stories provide an important backdrop against which the recommendations of the previous chapters should be considered.

## What Works? Success stories

Most governments' initial responses to HIV are blunt and reactive. Public officials want to be perceived as taking strong measures to prevent the virus from spreading. The most appropriate strategies therefore seem to be identifying those with HIV and then restricting their interaction with the rest of society. Not only does such a response seem obvious and logical from a basic prevention perspective: it is also consistent with traditional public health policy frameworks applied to other potentially fatal infectious diseases including tuberculosis and, more recently, severe acute respiratory syndrome (SARS).

More than 20 years of international experience in HIV/AIDS policy making shows that such approaches are destined to fail in every respect. Unlike tuberculosis and SARS, HIV is not easily transmittable; unlike syphilis and tuberculosis, it is not

curable; and to a greater extent than almost every other disease, HIV/AIDS is accompanied by deep-rooted fear, misconceptions, discrimination.

Significant similarities are apparent in the policies adopted in the countries that have had the most successes in responding to the epidemic. Perhaps the single most important policy element has been that the human rights of people living with HIV and members of vulnerable populations are, for the most part, respected. Consistent protection of human rights in the HIV/AIDS realm has beneficial ramifications beyond ensuring privacy and non-discriminatory access to education and housing. It also has an invaluable public health effect, in that individuals who trust their health care providers, law enforcement authorities and other government officials are far more receptive to outreach, education, and HIV prevention and support programs.

Recognising this connection did not come easily, especially in the epidemic's first decade. Today, though, few international public health experts in the countries that have had the most success in combating the epidemic (principally Western Europe, North America, and certain other countries) would deny the absolute necessity of individual rights being a key to an effective public health response to HIV. The challenge ahead is to convince policy makers in Eastern Europe and the CIS countries that have relatively limited experience with protecting human rights.

### Industrial countries' experience

When policy makers in the United States and Western Europe recognised the extent and potential severity of AIDS in the 1980s, their first instinct was to identify infected people as quickly and directly as possible. This approach, which is consistent with standard public health strategies, was believed to be the most effective step toward containing the virus. Policy makers were also reacting to growing panic and misinformation about HIV/AIDS; publics believed (and in many cases still believe) that the virus could be

*HIV/AIDS is accompanied by deep-rooted fear, misconceptions, discrimination.*

spread through casual contact and could therefore be easily contracted.

Throughout the decade, legislators and government officials in the United States proposed mandatory HIV testing. The most extreme proposals called for testing all citizens. Others would have required HIV tests for people seeking employment in certain 'sensitive' fields (health care and education). Most of these measures never passed because of feasibility concerns and strong opposition from civil liberties groups.

*Upholding the rights of at-risk groups remains complicated when legislators routinely seek to erode legal protections in the name of morality*

However, two U.S. states did enact and enforce laws mandating premarital HIV testing<sup>185</sup>. The experience of the state of Illinois provides a cautionary lesson for governments considering mandatory testing. In 1988, the year Illinois' premarital testing law was enacted, the state's marriage rate plummeted from 8.3 to 6.7 per 1,000 persons, the country's lowest<sup>186</sup>. Meanwhile, the number of marriage licenses issued in border areas of neighbouring states surged, strongly suggesting that thousands of Illinois residents chose to avoid the testing requirements by marrying elsewhere. Public health officials quickly realised that the law was not a cost-effective way to identify those with HIV<sup>187</sup>. In addition to placing additional financial burdens on those seeking licenses, the law also deprived local governments of marriage license fees by driving people who wished to get married out of state.

Illinois' failed experiment also drew attention to other, more serious flaws in mandatory HIV testing. The law was seen as intrusive and an invasion of privacy by nearly all people seeking to get married, regardless of whether they were at significant risk for HIV. Legal experts also argued that the statute violated the U.S. constitution in several respects, including the 14<sup>th</sup>

amendment's guarantee of equal protection under law. For those Illinois residents most at risk for contracting HIV, the consequences of testing positive in such a system (state-mandated monitoring, partner notification, potential loss of job and family support, among others) far outweighed the potential benefits—especially since at the time there were no state-funded therapeutic options. Fearing discrimination and exclusion, the most vulnerable were therefore driven away from the public health system: an outcome that was diametrically opposed from that which was intended.

Despite unambiguous opposition to mandatory testing from nearly all leading public health and human rights organisations in the United States, proposals to require HIV testing policy continue to surface regularly<sup>188</sup>. This serves as an important reminder that upholding the rights of at-risk groups such as prisoners, injecting drug users, sex workers and men who have sex with men remains complicated when legislators routinely seek to erode legal protections in the name of morality. For the most part, though, key rights of people with HIV in the United States—including the right to privacy, housing, and employment—have been protected by the judicial system and important anti-discrimination laws such as the Americans with Disabilities Act. (The notable exception is the right to health, which is denied to the nearly 20 percent of the U.S. population that does not have health insurance. A disproportionately large percentage of this group is poor and black—which not coincidentally are the populations in which HIV continues to spread today even while infection rates fall among other at-risk groups.)

Other countries provide more consistent examples of how protecting human rights

<sup>185</sup> Illinois and Louisiana both passed premarital testing laws. Illinois' law was repealed in 1989 after 18 months; Louisiana's lasted little more than half a year in 1988. Two other states, Missouri and Texas, passed laws in the 1980s requiring premarital HIV testing if the U.S. Centres for Disease Control and Prevention (CDC) recommended mandatory testing. The CDC has never recommended such policies, however, so neither law (Texas' was repealed in 1991) has ever been enforced.

<sup>186</sup> Edward Walsh, 'Facing HIV Test for Marriage License, Illinois Couples Voted With Their Feet,' *The Washington Post*, 19 September 1991, p. A3.

<sup>187</sup> The state charged \$35 for an HIV test and counselling, while private physicians charged up to three times as much. Out of some 250,000 premarital HIV tests administered while the Illinois law was in effect, only 52 cases of HIV were reported.

<sup>188</sup> In the late 1990s, for example, proposals to require premarital HIV testing were considered by several states, including Arizona, Indiana, Mississippi, South Carolina, Tennessee, and Texas. None have been passed to date.

and creating compassionate environments for vulnerable populations have been vital elements of successful prevention strategies. Experts attribute low HIV infection rates throughout Western Europe over the course of the epidemic to policymakers' early recognition of the need to work closely with high-risk groups in devising pragmatic, rights-based strategies.

In the Netherlands, an extensive network of harm reduction programs provides injecting drug users and sex workers with easy access to clean needles, condoms, HIV education and information materials, and treatment facilities. Dutch law enforcement authorities focus on regulating and monitoring risky behaviour, rather than on condemning, harassing, or arresting those who engage in it. HIV testing is voluntary and confidential even among high-risk groups, discrimination based on HIV status is illegal.

Switzerland, another country with a large drug using population, also faced the possibility of a generalised HIV epidemic in the 1980s. Government officials responded by decriminalising the possession of illicit drugs for personal use as part of an effort to win the trust of injecting drug users. Policy makers were then able to more effectively connect injecting drug users with the public health system, which in turn funds and operates comprehensive harm reduction programmes that guarantee confidentiality. In a referendum in 1999, voters approved legislation allowing those with heroin dependencies to receive regulated doses of the drug on a prescription basis. This was seen as a logical step toward limiting HIV transmission.

Australia has been one of the world's most aggressive defenders of the rights of people with HIV and nearly all vulnerable populations<sup>189</sup>. Some of the most innovative harm reduction strategies were initiated in Australia in the 1980s—often in the face of initial public opposition. Several Canadian cities, notably Vancouver, have also been at the vanguard of harm reduction initiatives.

Historical and current epidemiological trends in these countries differ. Policy makers in all of them, however, resisted panic induced, misinformed calls to treat HIV as a public health menace requiring the violation of individual rights. As a result, publics in these countries have become less judgemental and fearful of people with HIV. This in turn has helped to combat the stigmatisation felt by those at risk, and made it easier to voluntarily disclose their HIV status or seek out prevention and treatment services. Likewise, laws prohibiting discrimination against vulnerable populations such as drug users, men who have sex with men, and migrant workers are generally enforced and accepted throughout society.

The results are telling. According to UNAIDS, HIV prevalence rates in these nations remain lower than in most other countries where HIV first appeared in the 1980s. In the Netherlands (0.2 percent of the adult population was living with HIV at the end of 2001), Switzerland (0.5 percent), Australia (0.1 percent), Canada (0.3 percent) and the United Kingdom (0.1 percent)<sup>190</sup>. To be sure, the countries of Eastern Europe and the CIS are not as wealthy as these West European countries, and traditions of democracy, civil activism, and tolerance are weaker. Still, the West European experience offers an unambiguous guide to the path forward—one that has been adopted, by and large in the Central European countries now acceding to the European Union. The sooner the rest of the region can take this path, the better.

### Developing country experience

A number of developing countries have also succeeded in preventing the spread of the disease. A comprehensive programme in Thailand that featured a 100 percent condom programme targeting brothels, broad-based awareness efforts, and strong human rights protection reduced the number of new infections by 80 percent. Through public education campaigns, universal access to antiretroviral drugs, and other measures, Brazil has seen

*Experts attribute low HIV infection rates throughout Western Europe to policymakers' early recognition of the need to work closely with high-risk groups in devising pragmatic, rights-based responses*

<sup>189</sup> Applicants for migration to or permanent residency in Australia represent a glaring exception. Since 1989, all applicants over the age of 15 have been required to undergo an HIV test. Testing positive does not necessarily disqualify an applicant from consideration, however.

<sup>190</sup> These data are 2001 figures obtained from UNAIDS 2002 country epidemiological reports. They are available online at <http://www.unaids.org/en/geographical+area/by+country.asp>.

*There is a clear need for building data collection capacity in public health systems*

significant declines in risk behaviour, reductions in new infections, and increased demand for voluntary counselling and testing. Condom use among drug users increased from 42 percent to 65 percent from 1999 to 2000. In Uganda, with strong support from the president and a multi-component HIV prevention programme including extensive condom promotion and education, HIV prevalence among pregnant women in urban areas declined by nearly two-thirds over the course of the 1990s. National HIV prevalence rates were cut nearly in half. The fact that both developed and developing countries have been able to develop and implement effective strategies for combating HIV/AIDS is a hopeful sign for Eastern Europe and the CIS.

Brazil, with a per-capita GDP of \$7,360 in 2001—roughly comparable to Belarus's \$7,620 and Russia's \$7,100<sup>191</sup>—is particularly worth considering. It offers an excellent example of how political will can triumph over limited infrastructure to provide care to people living with HIV. In 1989, the Brazilian government pledged to provide AIDS treatment to all who needed it<sup>192</sup>. In 1996, with the introduction of highly active anti-retroviral therapy, the Brazilian government responded to its inability to provide this therapy to patients because of the high price of drugs, by challenging the pharmaceutical industry. The government threatened to ignore pharmaceutical patents and start producing generic anti-retroviral medicines. Some of the companies dramatically reduced prices, others introduced generic products.

By 2002, 115,000 people were receiving antiretroviral therapy in Brazil. AIDS-related deaths have dropped by half, as have hospitalisations<sup>193</sup>. The sharp decline in the prevalence of new HIV infections has led UNAIDS to revise its estimates of the future scope of the epidemic in Brazil<sup>194</sup>. The annual per-patient cost of antiretroviral therapy in Brazil also dropped by 54 percent during 1997-2001 to \$2,223. Cost

savings in reduced hospital admissions and infections are estimated at more than \$1 billion<sup>195</sup>. The programme has also been effective in reducing rates of tuberculosis and other opportunistic infections. Should similar savings be captured in Western CIS countries, the economic and health care benefits would be quite significant.

## Conclusions

The countries of Central and South Eastern Europe and the CIS clearly do not face identical epidemiological trends. Factors such as per-capita GDP, existing public health infrastructure, and demographic trends also ensure that the epidemic's human development consequences will be different for different countries. The Western CIS countries of the Russian Federation, Ukraine, Belarus, and Moldova, and the Northern Baltic states of Estonia and Latvia, seem to be headed for the most serious problems. UNAIDS data for these countries show HIV prevalence rates ranging from 0.4 percent (for Latvia in 2001) to 1.0 percent or above for Estonia, Russia, and Ukraine in 2003. With the exception of Russia, rapid growth in prevalence in these countries is also being reported. Despite relatively high income levels, these countries' unfavourable demographic trends (aging societies, shrinking populations) suggest that AIDS will have major human development implication. In these countries—which contain the bulk of the region's population—the epidemic will not be defeated any time soon. It will have to be managed.

## Information

Because the public health data in many Southeast European and CIS countries leave much to be desired, there is a clear need for building data collection capacity in public health systems. But the information needed goes well beyond better data collection. HIV/AIDS needs to be discussed, and not only among health care professionals. The epidemic must become the sub-

*Greater efforts to inform must extend to education as well—into school curriculum, and into voluntary testing and counselling*

<sup>191</sup> *Millennium Development Goals: A Compact Among Nations to End Human Poverty*, Human Development Report, United Nations Development Programme, 2003 (New York), p. 238.

<sup>192</sup> See AIDS/Drugs Policy, Ministry of Health, Brazil, [http://www.aids.gov.br/assistencia/aids\\_drugs\\_policy.htm](http://www.aids.gov.br/assistencia/aids_drugs_policy.htm).

<sup>193</sup> *Ibid.*

<sup>194</sup> *A Commitment to Action for Expanded Access to HIV/AIDS Treatment*, International Treatment Access Coalition, World Health Organisation, Geneva, December 2002.

<sup>195</sup> *Ibid.*

ject of informed public debate—as must the harm reduction, the decriminalisation of intravenous drug use, and prison reform that is so clearly needed for a meaningful response. Only in this way can the ignorance and stigmatisation surrounding the epidemic be defeated.

Greater efforts to inform must extend to education as well—into school curriculum, and into voluntary testing and counselling. Likewise, publics need to be better informed about the good news concerning new forms of AIDS treatment. Not only is antiretroviral therapy becoming increasingly affordable: virtually everyone in the region should have access to prophylaxis against opportunistic infections. The antibiotic cotrimoxazole can treat and prevent *pneumocystis carinii pneumonia* (PCP—a common and deadly AIDS-related pneumonia), as well as other bacterial infections, for only \$8-17 per patient annually. Thanks also to financing from the Global Fund and the World Bank, the cost barrier to AIDS treatment is becoming much less important. Better information, and greater engagement by health officials and governments in general, is needed to raise the numbers of people in the region who should (according to WHO guidelines) be receiving AIDS treatment to 80,000 people, up from the 7,000 who are doing so.

Some countries have responded effectively to the epidemic. In addition to the developed countries of Western Europe and North America, these success stories include Brazil, Thailand, and Uganda. Closer to home, most of the Central and South Eastern European countries continue to report low prevalence rates. While in some South East European countries this may reflect the fact that the epidemic is at an early stage, in other countries (Poland, Romania) the epidemic is quite mature but nonetheless remains under control. The countries in the Western CIS and Northern Baltics that report the most alarming epidemiological trends need to be informed about how, exactly, their neighbours have been able to respond effectively to the epidemic.

### **Inclusion**

Many countries in Central and South Eastern Europe have recorded important successes in halting and reversing the spread of the epidemic. The Central European countries in particular have been able to

leverage progress in building vibrant democracies that protect human rights, and the state capacity needed for EU accession into effective responses to HIV/AIDS. Governments in these countries have reached out to NGOs representing people living with HIV/AIDS, have helped to empower NGOs representing their interests, and have permitted (often encouraged) the introduction of harm reduction services. Experience confirms that civil society groups can often best articulate the needs of people living with or at risk of HIV. They can suggest effective methods to meet the needs of these groups, and are often best suited to deliver HIV-related services, because of these services' highly sensitive and individualised nature. Civil society groups can monitor progress in the implementation of national and sub-national HIV/AIDS projects, as well as government compliance with international obligations.

Inclusion is also important in developing genuinely multisectoral responses. Better public health infrastructure will not help health ministries combat the epidemic if police forces and judiciaries treat injecting drug users as criminals, or if education systems and national leaders do not aggressively seek to overcome the ignorance and fear that surrounds AIDS and traditional attitudes toward homosexuality. Multisectoral policy responses need to go beyond the creation of inter-ministerial commissions that accompany the development of national HIV/AIDS strategies and action plans. They must be reinforced by commitment from political and other top leaders to ensure that the rights of marginalised groups are respected by all state agencies.

Inclusion also means more robust support for treatment for people living with AIDS. While there are trade-offs between preventing HIV and treating AIDS, important complementarities are present as well, and WHO treatment guidelines suggest that all East European and CIS countries should be able to take advantage of these complementarities. The prospect of treatment brings people living with HIV into contact with the public health authorities, and can make people living with AIDS less likely to transmit HIV to others. Support for treatment also connects governments with people living with HIV/AIDS. Keeping people living with AIDS healthy is the single most effective way of showing that their lives are valued.

*Civil society groups can often best articulate the needs of people living with or at risk of HIV and monitor progress in the implementation of HIV/AIDS projects*

*Multisectoral policy responses need to go beyond the creation of inter-ministerial commissions*

*Fundamental reforms of prison systems are needed, in order to reduce overcrowding, better align punishments with crimes, and help to guarantee the rights of prisoners*

*Leadership is needed to think and act courageously about the social policy crisis that is approaching in the Western CIS and Northern Baltic countries*

This link between success in combating the epidemic and inclusion is an extremely positive association, one that bodes well for the future. Still, a relatively successful transition outcome does not in itself guarantee an effective response. This is apparent in the case of Estonia, which combines one of the region's most successful transitions (including a vibrant NGO sector) with some of its highest HIV prevalence rates. Relatively high per-capita GDP (in excess of \$11,000, in purchasing power parity terms) and political democracy can not make up for a lack of commitment to responding to the epidemic at the highest levels of the polity and society.

### **Leadership**

Reasonable people may disagree about the relative weights of crime and punishment, the appropriate legal response to social deviance, or tolerance of 'immoral' behaviour. But the growing socio-economic threat posed by HIV/AIDS strongly suggests that policy makers in many of these countries—particularly in the Western CIS and the Northern Baltics—can no longer afford abstract, moralistic approaches to could become a devastating public health problem.

In addition to speaking openly about the medical facts of HIV/AIDS, the region's leaders must speak openly about the socio-economic conditions that promote its spread. Fundamental reforms of prison systems are needed, in order to reduce overcrowding, better align punishments with crimes, and help to guarantee the rights of prisoners. To the extent possible, the principle of equivalence—under which prisoners receive the same quality health as the rest of the population—should be adopted. Calling attention to the inhumane conditions in which the region's prisoners find themselves, or to the counter-productive criminalisation of injecting drug use and sex work—this requires courage. It requires leadership.

Leadership is also needed to think and act courageously and imaginatively about the social policy crisis that is approaching in the Western CIS and Northern Baltic countries. In addition to having the region's most disturbing epidemiological profiles, these countries also have shrinking populations and labour forces, rising mortality and morbidity trends, and declining replacement rates. Dependency ratios, and the proportions of workers relative to social protection

recipients, became quite unfavourable in many countries in the region during the 1990s. The intensification of the epidemic will mean new strains on already overburdened social protection systems. They will also increase the importance of pension and tax reforms, and other (often controversial) measures needed to address increasingly unfavourable dependency ratios. Household sizes and composition are most likely to undergo important changes in these countries. Single parent households, households managed by the elderly, and households consisting of grandparents taking care of AIDS orphans will become more important. In addition to exacerbating the vulnerability of many households—which in a number of CIS countries are already suffering from the 'crisis of the family'—and creating new social policy strains, these changes will require new approaches to social policy.

Leadership is required to point out that a generalised AIDS epidemic in this region could raise national security issues. In addition to weakening military capacity, HIV/AIDS can threaten plans for military reform and modernisation. This could be a particular issue for countries with relatively large, unreformed military establishments like the Russian Federation, Turkey, and Ukraine. It may also raise issues for countries like Estonia and Latvia that bringing high HIV prevalence rates into the North Atlantic Treaty Organisation. The presence of a generalised epidemic in one country could raise tensions in neighbouring countries, which might feel obliged to tighten border controls or resort to other actions that could be perceived as unfriendly.

Governments increasingly seem caught between the recognised inadequacy of 'traditional' public health approaches (based on full disclosure, name-based tracking, and notifying those who may have been exposed to HIV) on the one hand versus the enormity of the task of mobilising other government bodies, NGOs, and the private sector to mount a broad-based campaign against the epidemic on the other. New methods for galvanising engagement, and new sources of leadership and empowerment, must be found. UNDP's 'Leadership for Results' programme has the potential to do just this.

# Annex 1: Modelling the Macroeconomic Implications of a Generalised AIDS Epidemic in the Russian Federation

Shombi Sharp<sup>196</sup>

## Introduction

The threat of a generalised HIV/AIDS epidemic in the Russian Federation has been well established in the preceding pages and need not be reiterated here. While the human costs of such an epidemic are certain to be severe, these questions are rarely examined from a purely economic perspective. Within the context of constrained budgets and public spending choices, the costs of relative inaction must be weighed against the cost-benefit profiles of specific policy interventions. The long-wave nature of an AIDS epidemic and the concomitant potential for high returns to early intervention underscore the need for sober analysis in this respect.

The macroeconomic implications of AIDS are numerous and complex. In addition to overwhelming health care resources, AIDS attacks the social, economic and demographic underpinnings of human development. Within a generalised epidemic scenario, AIDS disproportionately affects the sexually active and most economically productive population cohorts. This can lead to:

- *Reductions in labour force numbers and productivity;*
- *Reductions in the numbers of workers and savers relative to the total population;*
- *Increases in wages and other costs resulting from shrinking labour forces;*
- *Lower public revenues and reduced national savings (private and public); and*
- *Increased spending on health care and social welfare, which can reduce national savings, investment, and growth.*

## Models

The conceptual frameworks used to estimate the macroeconomic impact of an AIDS epidemic contain demographic and economic elements. Labour efficiency units, capturing the effects of AIDS on productivity and labour supply, and the fiscal burden of AIDS-related health and social insurance costs, are the explicit channels linking the demographic to the economic spheres. This exercise models both a baseline 'no-AIDS' and a 'with AIDS' scenarios in this way, under three different sets of assumptions. The results of each are compared, in order to consider divergences in growth paths and other aspects of the epidemic. Illustrative demographic projections assuming 'low', 'medium', and 'high' HIV prevalence paths are used to allow for alternative scenarios. Adult prevalence is assumed to reach 3 percent, 6 percent, and 8 percent, respectively, within 20 years before declining<sup>197</sup>.

---

<sup>196</sup> Adapted from Sharp, S., *Modelling the Macroeconomic Implications of a Generalized AIDS Epidemic in the Russian Federation*, Department of Economics, University of Colorado, May 2002, Boulder. Shombi Sharp is the Assistant Resident Representative, UNDP Russian Federation, responsible for Governance and HIV/AIDS programming. A copy of the full paper is available upon email request to shombi.sharp@undp.org.

<sup>197</sup> The medium scenario is based on an unpublished 'middle-range' projection provided to the author by Dr. Nicholas Eberstadt, November 2001 and used with his permission. A version of this projection also served as a basis for analysis in Eberstadt's 'The Future of AIDS,' *Foreign Affairs*, November/December 2002.

## Demographic Model

The Spectrum modelling software package<sup>198</sup> is used to project the epidemiological path and demographic impact of the epidemic by generating a baseline 'without AIDS' demographic projection for the Russian Federation. This projection is derived from UN demographic data for the base year under an optimistic 'fast recovery scenario', including parameters for Russian life expectancy, fertility and mortality rates. This baseline is then subjected to hypothetical AIDS epidemics with the prevalence paths described above, in order to demonstrate the demographic impact that such epidemics would yield.

A classic injecting drug use epidemic begins at a female-to-male ratio in the neighbourhood of 0.1, rising slowly to 0.4 after several decades. A generalised epidemic also begins at low rates, but rises much faster and further, peaking at 1.2 to 1.4 (i.e., more women than men are newly infected) within 20 years<sup>199</sup>. To simulate the counter-factual generalisation of the factual injecting drug use epidemic in Russia, a 'transitional' sex-ratio parameter is constructed as a weighted average of the 'IDU' and 'hetero' values. Seven years into the projection, the constructed transitional value of 0.47 as of 2001 appears to be notably similar to the actual Russian value of 0.5 for that year, lending some credibility to the approach.

## Economic Models

Two growth models are used to translate demographic changes into economic impact: a Solow and Ramsey model, and a computable general equilibrium model based on a multi-sector social accounting matrix of the Russian economy. AIDS-related labour supply and productivity shocks, captured in labour efficiency units across five-year age cohorts, are introduced in each model. Health care and social insurance dissavings customised to Russia's social system are also calculated.

Population Outcomes by Scenario (millions of people)			
Year	Baseline (no AIDS)	Low AIDS	Difference (Baseline and with AIDS)
1995	144.86	144.86	0
2020	134.87	131.39	-3.48 mIn (2.6%)
2045	117.16	107.58	-9.58 mIn (8.2%)
% Change 1995 - 2045	-19%	-26%	
Year	Baseline (no AIDS)	Medium AIDS	Difference (Baseline and with AIDS)
1995	144.86	144.86	0
2020	134.87	127.97	-6.9 mIn (5.1%)
2045	117.16	100.77	-16.39 mIn (14%)
% Change 1995 - 2045	-19%	-44%	
Year	Baseline (no AIDS)	High AIDS	Difference (Baseline and with AIDS)
1995	144.86	144.86	0
2020	134.87	125.76	-9.11 mIn (6.8%)
2045	117.16	96.49	-20.67 mIn (17.6%)
% Change 1995 - 2045	-19%	-48%	

<sup>198</sup> The Spectrum package was developed by The Futures Group (1999) and is available on line at <http://www.futuresgroup.com>.

<sup>199</sup> See 'Estimating and Projecting the Size and Impact of the HIV/AIDS Epidemic in Generalized Epidemics: The UNAIDS Reference Group Approach,' John Stover, The Futures Group International, and Karen A. Stanekki, U.S. Census Bureau, p. 7, 2001, accessible at [www.futuresgroup.com/Documents/PAAStover02.pdf](http://www.futuresgroup.com/Documents/PAAStover02.pdf).

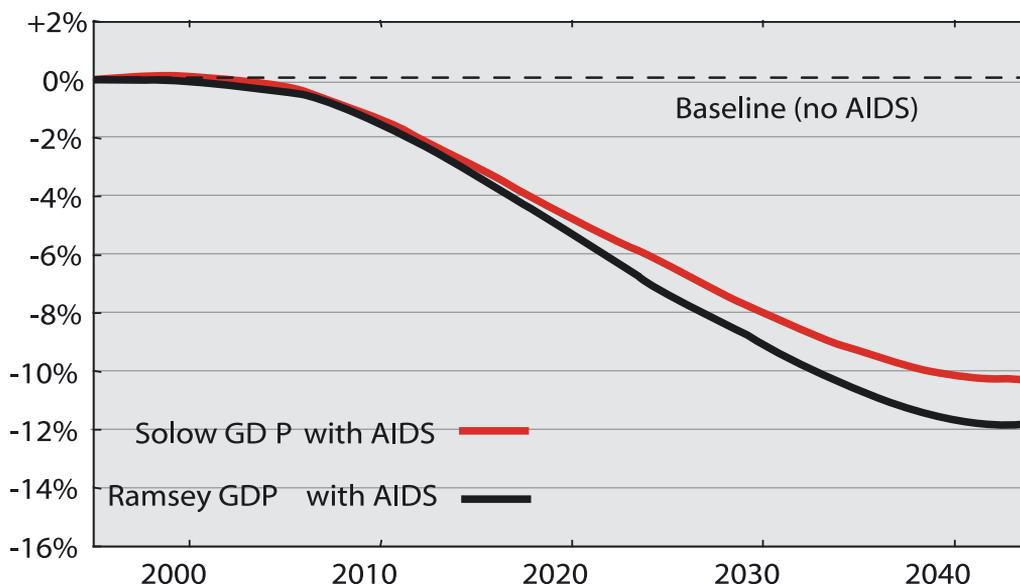
A) *Solow-Swan and Ramsey Models*: analysis begins with a classic single-sector, closed economy Solow-Swan growth model where the savings rate is exogenously assumed. This approach is used in a number of existing papers investigating the impact of HIV/AIDS in other countries. A neoclassical production function is introduced to capture declining marginal returns to factor inputs, combined with a standard Cobb-Douglas production function exhibiting constant returns to scale. Determinants of general equilibrium in the Solow-Swan model include the savings rate, population growth, and technological change.

While the Solow-Swan approach is illustrative, the use of an exogenously determined savings rate presents additional abstraction. Endogenising savings would be somewhat more realistic. This paper therefore follows on Bloom and Malaney (1998), who construct a standard single-sector, closed economy Ramsey growth model to estimate the macroeconomic impact of the Russian 1990-1994 'mortality crisis'. Whereas the Solow-Swan model is 'myopic' in outlook, the Ramsey model contains households that altruistically maximise their 'dynastic utility' across an infinite horizon of future generations. The amount a household member consumes at any given time, and thus its savings rate, is endogenously determined by expectations about the number of household members at all points in the future. This is crucial to our examination of the impact of AIDs-related demographic change on savings and investment.

B) *Computable general equilibrium (CGE) model*: The CGE approach allows for simulations that are based on detailed microeconomic data provided in the form of an augmented multisectoral input-output table, or social accounting matrix (SAM). The SAM captures balanced resource flows across sectors of an economy in a given 'base' year, thereby customising output to nuanced economic conditions present in the country of study. CGE models can also be disaggregated to investigate the sectoral effects of changing structural parameters with potential policy implications. In this sense, CGE models represent a powerful 'simulation laboratory' setting.

This paper uses a CGE approach to model the economic impacts of AIDS on the Russian economy. Comprising 35 sectors and differentiating between skilled and unskilled labour, our model is calibrated to a 1997 World Bank social accounting matrix for the Russian economy, the most current data available for this purpose. Different scenarios are parameterised to allow for either a closed or an open economy; in the latter case

**Figure 16:**  
*Russia, Cumulative Impact of AIDS on GDP levels (%; 'Medium AIDS' scenario)*



international capital flows are driven by relative returns to capital. The impacts of AIDS in the CGE framework are investigated based on a combination of previous work in this area, demonstrated macroeconomic effects of AIDS, and insights into the structure of Russian health and disability finance.

## Demographic Results

The curvature of demographic impact remains relatively proportional across the low, medium, and high scenarios. The slow-onset nature of an AIDS epidemic is apparent in the fact that significant increases in mortality rates begin to materialise only after a decade, reaching maximum annual fatalities within approximately twenty years.

In comparing 'with' and 'without AIDS' demographic projections for Russia over the 1995-2045 period, a 19 percent decline in population even in the 'without AIDS' baseline scenario immediately stands out. This reflects a combination of sub-replacement fertility rates and already high mortality rates. The baseline projections are similar to the 'medium recovery' scenarios projected by the WHO over the same time period, as fertility rates are not expected to recover to the point of population replacement.

These figures demonstrate that a generalised epidemic in Russia could produce dramatic demographic effects. Even average life expectancy drops rapidly and significantly, falling by up to 11.4 years (from 76.8 to 65.4, or some 15 percent) in the 'medium' scenario. Such results would exacerbate the impact of already declining population and efficiency labour levels.

On the other hand, although Russia's overall population is falling rapidly, the labour force (which has a direct effect on labour efficiency units), declines only slightly. This is because the youth and elderly dependency ratios move in opposite directions, essentially cancelling each other out. As is expected, the AIDS epidemic increases elderly dependency ratio for the first several decades. Unlike epidemics in sub-Saharan Africa or the Caribbean, however, this impact is offset by even greater declines in youth dependency ratios resulting from sub-replacement fertility rates. We therefore would expect to see only moderate per-capita efficiency labour supply effects over time. It is not until around 2015 that elderly dependency rates begin to climb dramatically as the working population 'thins out'.

## Economic Results

### Solow and Ramsey Aggregative Models

Aggregative models reveal several interesting results, driven by AIDS-related demographic and fiscal shocks. Although the impact of AIDS on aggregate economic levels is significantly negative and sustained, per-capita income and output levels are less affected. The inclusion of the endogenous savings dynamics in the Ramsey model yields some transitional effects, but does not dramatically alter growth outcomes. There are two possible explanations for this. First, the time preference parameter may not sufficiently high, and may therefore provide too little incentive for households to adjust current savings and consumption in the face of the epidemic. A second explanation may lie in the composition of the population decline, in which countervailing youth and elderly dependency ratios reflect the offsetting impacts of a declining economy and an evenly declining population. Current households in the Ramsey model therefore experience only a mild incentive to increase consumption and lower investment, as future household members will be sharing a proportionately similar per-capita 'economic pie.'

The epidemic in the first seven years of simulation is still in the early stages. HIV rates are increasing rapidly, but significant numbers of AIDS cases have not yet materialised. AIDS-related mortality and productivity losses subsequently hit drive an expanding wedge between the baseline and with-AIDS growth paths from that point. With the Ramsey and Solow paths converging, the 'with AIDS' scenarios settle at a steady-state growth rate similar to that in the baseline, although at much reduced aggregate levels.

The AIDS epidemic decreases the aggregate long-run GDP level in Russia by approximately 6 percent, 11 percent, and 14 percent in the low, medium, and high scenarios, respectively. The Ramsey outcome is 0.25-2.0 percent lower than Solow, with the difference increasing with epidemiological severity. The epidemic reaches maximum impact on annual growth over the twenty years from 2015 to 2035. Annual GDP growth is reduced by approximately 0.2 percent, 0.4 percent, and 0.53 percent in the low, medium, and high scenarios, respectively. Impact on per-capita GDP levels is, however, muted and temporary, falling 0.5 per cent at most for several decades before recovering. Thus, AIDS-related declines in aggregate output and incomes are much larger than average living standards as represented by per-capita GDP.

### CGE Model

Results from the CGE model suggest that sectoral impacts of a generalised epidemic could be quite severe. Set in a static CGE environment with 35 productive sectors, the AIDS shock reflects a rational expectations 'announcement effect' of an arbitrarily selected 2020 impact profile. Labour efficiency units fall by 3.3 to 8.5 percent and direct health care and social insurance spending consumes savings of 0.41 to 1.05 percent of total government spending, depending on prevalence projections. Three economic scenarios are explored by varying assumptions about capital mobility to approximate differences in temporal, policy, and structural conditions. With a capital value share of 0.604, the baseline economy is heavily capital intensive. The tax structure is distorted and uneven, with massive subsidisation of relatively inefficient sectors.

The 'short-run' scenario, which is characterised by immobile sector-specific capital and a closed economy, fails to adjust to the AIDS shock. Capital loses productivity as output shrinks, with the overall capital share rising. Output and returns to output fall broadly but unevenly across sectors, with declines of up to -10 percent and -8 percent, respectively. Economic welfare decreases by 3.1 to 7.8 percent, depending on the HIV prevalence scenario. Skilled and unskilled wages rise by up to 8.4 and 8.3 percent, respectively, as labour gets scarcer at the margin.

With domestic capital mobility but no international capital flows, capital allocation improves in the 'static' scenario and return to economic activity equilibrates across all sectors at -1 percent with low prevalence and -2 percent with medium and high prevalence. While output and exports decline in most sectors, a few sectors, such as oil extraction and gas, benefit from reallocated domestic capital and improve performance on both measures.

Barriers to capital mobility are removed in the 'long-run' open economy scenario. In this, the most economically efficient set of assumptions, returns on capital equilibrate to 2 percent (1.5 percent rounded) as domestic capital seeks the internationally competitive returns on the margin. Capital flight equivalent to 3.5 percent, 7.1 percent, and 8.8 percent of the Russian capital stock (in the low, medium and high prevalence scenarios, respectively) has a dramatically negative impact on domestic production, which falls across the board. The natural resource extractive sector proves especially vulnerable under these conditions. The natural gas industry faces declines in exports of -11% to -27% while production falls from -5% to -13%. The oil industry loses -8% to -19% in exports and from -6% to -16% in output.

The CGE results suggest that the sectoral impacts associated with generalised AIDS epidemics could be quite serious. The vulnerability of capital intensive, extractive industries in the steady-state scenario, where capital mobility produces significant capital flight, is of special interest. This effect becomes more relevant as Russia's economy 'opens' further, particularly given Russia's prospective WTO accession. Russia's tax structure exacerbates losses in output with heavy subsidisation of relatively uncompetitive sectors, although the tax reforms introduced since 1997 are likely to have mitigated this to some extent. Wages rise in every scenario (as would be expected with reduced labour supply), although the steady state dampens wage hikes with efficient capital allocation.

### Conclusion

The demographic and economic analyses presented here suggest that a generalised AIDS epidemic could have severe consequences for the Russian Federation. These include:

- *Dramatic human costs of rising mortality and morbidity rates, including significant reductions in life expectancy and population levels, with increasing long-run dependency ratios.*
- *Reductions in sectoral competitiveness, including production and export levels, especially for capital intensive extractive sectors in an open economy with capital flight.*
- *Significant declines in aggregate macroeconomic activity.*

These conclusions should be taken with several caveats. First, this analysis has been conducted as an illustrative exercise and should not be taken in a predictive sense, both in terms of the hypothetically constructed generalised epidemics and the highly conditional economic modelling. Second, Russia's prevailing policy framework, in which antiretroviral treatment is not widely available, has been assumed constant. Significant improvements in access to effective AIDS treatment would mean added fiscal and health care costs, as well as possible further reductions in savings and investment. This would further exacerbate the effects of the epidemic. But broader access to antiretroviral treatment could also attenuate the declines in labour force supply and productivity, thereby offsetting some the aggregate and per-capita declines in output and incomes.

## Annex 2: The National Security Implications of the HIV/AIDS Epidemic in Russia

Vladimir Frolov<sup>200</sup>

### Overview

The overall impact of a generalised HIV/AIDS epidemic on a country's national security will need to be measured in a number of specific areas, with the effects in some areas being determinants in others. These include:

- *the demographic consequences of the epidemic, particularly its impact on young men and other male cohorts, prevalence rates among military personnel, and among men eligible for military service;*
- *the macroeconomic effects of the epidemic, especially its fiscal implications, its medium- and long-term impact on economic growth (which influences the resources that can be allocated to national security), and the country's overall competitiveness;*
- *infection trends and transmission mechanisms affecting the armed services, and effects on military strategy and the composition and deployment of the armed forces and other uniformed services; and*
- *the impact of HIV/AIDS on the country's foreign policy, its relationships with neighbouring states, and its overall international position.*

The cumulative effect in all those areas determines the overall national security implications for a country affected by an AIDS epidemic. As the demographic and the economic consequences of the epidemic are examined in other parts of this report, this section looks into their direct national security implications for the Russian Federation.

### *The demographic impact of HIV/AIDS on Russia's national security*

The best available projections of the epidemic's likely future trajectory in Russia forecast dramatic increases in the total number of HIV cases and prevalence rates among the working age adult population until 2025. The World Bank projects the cumulative number of registered HIV cases in Russia in 2020 at 5.4 million in the 'optimistic scenario'<sup>201</sup> and at 14.5 million in the 'pessimistic scenario'. A study by Nicolas Eberstadt of the American Enterprise Institute projects total HIV cases in 2025 at 4 million in a 'mild epidemic', 13 million in a 'moderate', and 19 million in a 'severe' HIV/AIDS epidemic in Russia<sup>202</sup>.

The corresponding increases in mortality rates and possible net population losses as a result of this generalised HIV/AIDS epidemic in Russia are projected at 3, 9, and 12 million people by 2025 (Ebersdat's three scenarios), or at 5 million and 13 million by 2020 (in two World Bank scenarios<sup>203</sup>).

In light of Russia's continuing 'natural' population decline, the HIV/AIDS epidemic is likely to bring Russian population numbers down much further and faster. Most studies pro-

---

<sup>200</sup> At the time of submission, Vladimir Frolov was the deputy staff director of the Committee on Foreign Affairs of the Russian State Duma. The views expressed here are the author's own and do not reflect the position of the Committee or any of its members.

<sup>201</sup> Ruhl, C., V. Pokrovsky, and V. Vinogradov, *The Economic consequences of HIV in Russia*, The World Bank Group in Russia, 15 May 2002, 12 November 2002, available at <http://www.worldbank.org/ru/ECA/Russia.nsf/ECADocByUnid/56435B1EA108E164C3256CD1003FBE54>.

<sup>202</sup> Nicolas Eberstadt, 'The Future of AIDS', *Foreign Affairs*, November/December 2002, pp. 22-45, accessed at <http://www.foreignaffairs.org/20021101faessay9990-po/nicholas-eberstadt/the-future-of-aids>.

<sup>203</sup> *Ibid.*

ject a net population loss due solely to mortality from AIDS at approximately 20 million people over a 20-30 year period. Eberstadt's model projects Russia's population in 2025 at 120 million (140 million without the AIDS factor), while Shombi Sharp of UNDP-Russia estimates Russia's population in 2045 to be at 96.5 million in a "high AIDS" scenario (117 million without AIDS)<sup>204</sup>.

The impact of the epidemic is highly concentrated among men mostly in the service-age cohorts (75 percent of all registered cases). Young men of draft age (18-27) comprise about 64 percent of registered cases<sup>205</sup>. According to Vadim Pokrovsky of the Russian Federal AIDS Centre, in some of Russia's most affected regions, up to 8 percent of the young population (15-25 years old) is now living with HIV<sup>206</sup>. Although the number of HIV cases among women is rising, HIV/AIDS in Russia continues to be a largely male, and particularly young male, phenomenon with corresponding negative consequences for the readiness of young recruits and reservists.

The impact of these alarming trends on Russia's national security will manifest itself both in a continuing and accelerated shrinkage of the male population cohorts available for military service and in the quickening depopulation of Russia's most affected regions, some of which border other states.

Current Russian government plans call for a million-man army, partly professional, to be maintained for an indefinite period of time. However, after 2005, Russia is projected to experience sharp declines in the numbers of 17-18 year-old males eligible for military duty. This is largely due to very significant drops in birth rates in the late 1980s and early 1990s. The epidemic is also likely to diminish the quality of the pool of men eligible for military duty.

According to Russia's latest census, population figures are declining in 76 of the 89 regions that make the Russian Federation<sup>207</sup>. In some regions of the Far North and the Far East, the population has declined by 10-15 percent. The border regions most affected by AIDS appear to be Irkutsk oblast, the Buryat republic, Altay krai, Primorsky krai, and Orenburg oblast. All report prevalence rates in excess of 200 cases per 100,000 inhabitants. Among these five, only Orenburg is experiencing net population inflows. Orenburg also shares a relatively benign border with Kazakhstan, although it is a major transit route for extremely cheap narcotics from Afghanistan and Central Asia (which contributes to the region's relatively high rates of HIV in the region).

In the four other above-mentioned regions in Eastern Siberia and the Far East, depressed economies and underdeveloped infrastructures are generating significant net population outflows. HIV/AIDS may not become the primary source of population declines in these regions, but could contribute to these outflows. HIV/AIDS can also make these regions even less economically attractive for investors, thus perpetuating vicious cycles of diminishing socio-economic opportunity. All four of these regions border with China, which has large surplus populations in its border areas. Although the threat of Chinese aggression seems remote at the moment, uncontrolled Chinese migration into the bordering Russian territories is becoming a serious socio-political issue for the local and regional governments. Their proximity to China suggests that Irkutsk oblast, the Buryat republic, Altay krai, and Primorsky krai are likely to be most affected by rural China's rapidly spreading HIV/AIDS epidemic. Thus, their stalled development and a shrinking population (due in part to HIV/AIDS), could become a factor in Russia-Chinese relations.

<sup>204</sup> Sharp, S., *Modelling the Macroeconomic Implications of a Generalised AIDS Epidemic in the Russian Federation*, Department of Economics, University of Colorado, May 2002, Boulder.

<sup>205</sup> Michael Wines, 'Rise of HIV in Russia is Quickening, Official Says', *The New York Times*, 22 May 2003.

<sup>206</sup> *Ibid.*

<sup>207</sup> Andrei. Kamakin, 'The numbers are in' (Raschet Okonchen), *Itogi* 17 (359) (April 29, 2003) in Russian.

### *The Economic Consequences of HIV/AIDS for Russia's National Security*

Most studies project that HIV/AIDS will negatively affect Russia's long-term economic growth rates and labour productivity, due to the social and budgetary consequences of a generalised AIDS epidemic given forecast prevalence rates.

The World Bank estimates that by 2010 Russia's GDP will be 4.15 percent lower than without the epidemic, while by 2020 the cumulative GDP losses will be around 10.5 percent. Annual growth rates will be reduced accordingly by 0.5 percent by 2010, and by a full percentage point by 2020<sup>208</sup>.

In Sharp's macroeconomic model cumulative GDP losses through 2045 amount to 6, 11, and 14 percent in mild, moderate, and severe epidemic scenarios, respectively. The heaviest economic toll of HIV/AIDS will be observed in 2015-2035<sup>209</sup>. Eberstadt forecasts Russia's growth rates and GDP volume to be stagnant for the next 25 years<sup>210</sup>.

National security spending will be affected by the massive antiretroviral treatment programme that will be required. Specific outlays will depend on the actual cost of essential drugs. The World Bank estimates annual antiretroviral therapy costs for Russia to be \$3,000-\$9,000 per year. It then projects federal budget outlays for national treatment programmes to reach 7 trillion rubles (about \$210 billion) by 2010, 32.3 trillion rubles by 2015, and 40.3 trillion rubles by 2020<sup>211</sup>. This is clearly unsustainable, as such spending levels leave no room for funding essential national security needs. Even if treatment costs are lowered to more feasible levels (to less than a \$100 dollars per patient per year, a figure that appears difficult but realistic), national budgetary outlays for purchasing the essential retrovirals and other drugs will be likely to remain extremely high (Murray Feshbach projects them at \$28.5 billion in 2020)<sup>212</sup>.

These macroeconomic projections indicate that the AIDS epidemic will significantly reduce the Russian Federation's resources for national security needs. The projected increase in budgetary spending on treatment programs and the simultaneous slowing of economic growth will reduce the resources available for military modernisation programmes. The goal of devoting 3 percent of GDP to defence spending (including essential research and development for, and procurement of, future weapons systems) appears difficult to achieve and even more difficult to maintain.

The actual amount of resources that would be devoted to national security needs during a generalised AIDS epidemic would depend on a variety of political and economic factors, including the nature of the external threats to Russia's security. A benign security environment would allow the Russian government to devote a larger portion of its revenues to combating HIV/AIDS. A more hostile external environment would require larger defence budgets at the expense of HIV treatment programmes. This could produce a return to restrictive policies vis-à-vis people living with AIDS, reminiscent of old Soviet approaches to combating sexually transmitted diseases.

### *The Impact of HIV/AIDS on Russia's Armed Forces*

Members of the armed forces are usually at higher HIV infection risk than the general population. In Africa, HIV infection rates among military personnel exceed rates recorded among civilian populations by 10-50 percent<sup>213</sup>. Some of the factors fuelling the epidemic among African militaries are obviously not present in Russia (such as large-

<sup>208</sup> Ruhl, C., V. Pokrovsky, and V. Vinogradov, *The Economic consequences of HIV in Russia...*

<sup>209</sup> Sharp, S., *Modelling the Macroeconomic Implications of a Generalised AIDS Epidemic in the Russian Federation*, Department of Economics, University of Colorado, May 2002, Boulder.

<sup>210</sup> Eberstadt, 'The Future of AIDS...'

<sup>211</sup> Ruhl, C., V. Pokrovsky, and V. Vinogradov, *The Economic consequences of HIV in Russia...*

<sup>212</sup> Murray Feshbach, 'A Country on the Verge,' *The New York Times*, 31 May 2003.

scale armed conflict and massive peace-keeping operations on territories heavily affected by HIV/AIDS). However, the basic risk factors—age group (young males prone to risky behaviour), a professional culture that encourages risk taking, pocket money that can be spent on drugs and commercial sex, long tours of duty in remote areas without families, high risk of contact with human blood during combat and training—are fully relevant for Russia's armed forces.

AIDS will reduce combat readiness for units through expedited retirement of experienced and well trained personnel, additional spending on training replacements, and inevitably lowered standards of combat training. A generally less combat ready and less operationally effective force will result. These trends will be inconsistent with the Russian government's plans to significantly improve the combat training of the Russian Armed Forces and raise overall levels of combat readiness of the fully equipped and deployed units.

There are no open statistics of the number of HIV cases within the Russian military and other uniformed services. The Ministry of Defence is simply saying that the number of servicemen with HIV, particularly among the young draftees, has significantly increased in the last few years<sup>214</sup>. In 2002, 5,000 draftees were turned away from military duty, having tested HIV positive, and 500 military personnel were released from service for the same reason<sup>215</sup>.

The potential scale of the problem is apparent in the data on the number of drug addicts (the main HIV/AIDS transmission route in Russia) who appear at draft induction points. The Ministry of Defence indicates that this number has grown by 600 percent in the last seven years, or by some 38 percent annually<sup>216</sup>. Although current regulations prohibit drafting people with a drug dependency and all draftees are tested for HIV/AIDS, this does not stop the flow of drugs into military units, particularly in Russia's southern regions that are flooded by cheap narcotics from Central Asia. The armed forces are equally vulnerable to heterosexual HIV transmission.

The HIV/AIDS epidemic in Russia could further lower the already poor quality of the personnel currently entering the Russian army and other uniformed services. During the 2002 draft only 11 percent of those drafted were deemed fully fit for military duty. The rest had service limitations due to health reasons. One in five draftees had just basic primary school education<sup>217</sup>. During the spring 2003 draft, every fourth new serviceman had finished less than nine years of school, and thus could not be sent for the advanced military training required for operating modern combat equipment. The draft was able to fill only 96 percent of the available positions in combat units<sup>218</sup>.

Demographic trends through 2045 do not augur well for maintaining a large Russian army, as AIDS will further decrease the available pool of young healthy male inductees. The social impact of the epidemic, including the destruction of families and growing numbers of orphans, must also be taken into account. From this perspective, the decreasing quality of human resources available to the Russian military could undermine military discipline and combat cohesiveness.

Projected mortality rates due to the HIV/AIDS epidemic in Russia make maintaining a conscript army unrealistic. Even a partly professional one million man army does not

<sup>213</sup> Mendelson, S., J. Sawyer, and C. Wallander, *The Security Implications of HIV/AIDS in Russia*, PONARS Policy Memo \_ 245, CSIS, February 2002 Washington DC.

<sup>214</sup> 'Russian Defense Ministry Bemoans Poor Health of Conscripts', *Interfax—AVN*, 10 January 2003.

<sup>215</sup> 'Okolo 5,000 prizivnikov ne popali v armiju iz-za SPIDA', *Izvestia.ru*, 17.04.2003.

<sup>216</sup> 'Russian Defense Ministry Bemoans Poor Health of Conscripts', *Interfax—AVN*, 10 January 2003.

<sup>217</sup> Balzer, H., 'Demography and Democracy in Russia: Human Capital Challenges to Democratic Consolidation', in *Demokratizatsiya: The Journal of Post-Soviet Democratization*, Volume 11, Number 1, Winter 2003.

<sup>218</sup> Kruglov, O., and M. Zimmerin, 'V Vooruzhennye Sily Pribylo Novoe Popolnenie', *Nezavisimoye Voyennoye Obozrenie*, 26 June 2003, accessed at [http://www.nvo.ng.ru/forces/2003-06-27/7\\_prizyv.html](http://www.nvo.ng.ru/forces/2003-06-27/7_prizyv.html).

appear to be realistic, in light of probable infection rates. There simply will not be enough healthy young men for such a force by 2010. This shortfall will greatly increase competition for skilled labour between the military and the civilian sectors. This will heighten conflicts between basic security needs and economic development. However, a transition to a fully professional military force would not necessarily resolve the problem of competing for diminishing human and financial resources if Russia were to be in the grips of a generalised epidemic. Further reductions in the number of active-duty personnel and combat ready units would probably have to be considered.

The transition to a professional army in Russia must therefore be accompanied by effective programmes for combating the spread of HIV/AIDS among military personnel, programmes that must be integrated into the overall military reform framework. Such programmes need to include regular psychological counselling to resist drugs, as well as safe sex education with the obligatory inclusion of free condoms into regular soldier supply kits. Otherwise, the risk of HIV infection among professional servicemen might significantly rise, particularly in remote garrisons and in regions with cheap drugs and commercial sex workers. Professional soldiers' earnings are likely to be higher than median civilian incomes in remote and economically depressed regions of Russia. Military installations might therefore become magnets for the drug dealers and sex workers who represent the primary HIV transmission modes in Russia. Thus, in the absence of a determined effort to organise effective HIV prevention programmes for military personnel, the substantial financial investments needed for the transition to a professional military could be largely absorbed by the costs of treating AIDS.

### *The Impact of HIV/AIDS on Russia's Foreign Policy.*

HIV/AIDS might significantly affect Russia's foreign policy in a number of areas:

- *The resources needed to pursue an active foreign policy may be not be forthcoming, due to slowing economic growth and the need to combat the epidemic and its socio-economic consequences.*
- *The political leadership may be unable to focus on foreign policy issues, or foreign policy making and coordination processes may be disrupted by the impact of the epidemic.*
- *Russia's influence in international organisations could decline.*
- *Russia's foreign debt burden could grow.*
- *Russia could become more dependent on major donor nations and even some large corporations that provide financial and technical assistance to fight the epidemic.*
- *The risk of external aggression and territorial claims by neighbouring states, due to Russia's weakened military capabilities linked to the epidemic, could grow.*

Eberstadt estimates that an uncontrolled epidemic could further isolate Russia from the global economy as a result of a negative impact on decisions by foreign investors. The epidemic could also further exacerbate Russia's already negative international financial reputation, with corresponding adverse consequences for essential inflows of foreign capital and labour.

If current projections of AIDS's negative impact on economic growth rates and GDP volumes prove correct, Russia will probably lag further behind the most developed countries, including neighbouring China, and even India. Russia's overall economic potential could be insufficient for an active, assertive, multidimensional foreign policy in a world that would be dominated by more robust powers. The shrinking resource base might deprive Russia's foreign and military policies of some effective instruments, like foreign aid or the capacity to intervene in regional or local conflicts.

The risks of external aggression against Russia precipitated by the depopulation of large swaths of Eastern Siberia and the Russian Far East appear to be only marginally higher with than without the epidemic. Such depopulation is driven primarily by negative socio-economic trends, although HIV/AIDS will probably exacerbate them. The prospect of an international armed intervention into Russia to safeguard critical industrial and defence infrastructure (particularly WMD facilities) against internal unrest and social chaos linked to the epidemic seems even less likely.

A more realistic scenario might entail mounting pressure on the Russian government by leading world powers, especially EU member states, to take drastic measures to contain the epidemic and prevent it from spreading outside the Russian Federation. HIV/AIDS could complicate President Putin's initiative for visa-free travel between Russia and the EU, although the implementation of joint projects to fight the disease in Russia and in neighbouring EU states could neutralise this.

Gauging the specific impact of HIV/AIDS on Russia's national security requires further study in each of the areas outlined above. It is clear, however, that the epidemic needs to be thought of as a major national security issue affecting every aspect of Russia's security for the next 50 years. Viewing the epidemic through the national security perspective will also make it easier to focus the attention of the country's political leadership on the approaching crisis.

## Annex 3: The 'Leadership for Results Programme'— UNDP's Role in the UN System Response to HIV/AIDS

The United Nations Development Programme (UNDP) has been identified, among UNAIDS and the UN System, as the key partner for capacity development in global efforts to reduce the epidemic. UNDP has also been tasked with helping countries efforts to meet their commitments made at the United Nations' Millennium Summit in 2000 (which approved the Millennium Development Goals as global development targets), and the UN General Assembly's Special Session (UNGASS) on HIV/AIDS in 2001. UNDP assists countries in four key areas of the UNGASS Commitment: (1) preventing new infections; (2) improving care, support and treatment for those infected and affected by HIV/AIDS; (3) reducing vulnerability, especially among groups that have high or increasing rates of infection or who are at greatest risk of infection; and (4) mitigating the socio-economic impact of HIV/AIDS. Through its role in the UN's resident coordinator system, UNDP also helps country level responses to HIV/AIDS to be coherent and mutually reinforcing.

Unless the critically important sixth Millennium Development Goal (halting and reversing the spread of HIV/AIDS by 2015) is reached, other key MDG targets—relating to poverty, hunger, education, gender equality, child mortality, maternal health, environmental sustainability and global development partnerships—are unlikely to be attained. UNDP focuses on the creation of the enabling policy, legislative and resource environments that are needed for an effective, multisectoral response to the epidemic.

UNDP's corporate HIV/AIDS strategy works to develop national capacities for achieving sustainable results within a development paradigm that addresses the social, political, and economic factors fuelling the epidemic. It is based on three broad categories of action: leadership and capacity development; development planning, implementation, and HIV/AIDS response; and advocacy and communications. These categories can be custom fitted to the needs of countries at different stages of the epidemic and response. The 'Leadership for Results' programme plays a key role in this strategy.

### 'Leadership for Results': From Commitment to Action

Developing the capacity of leaders and the institutions and communities they serve to create sustainable responses to key development issues is at the heart of UNDP's historical mandate. The HIV/AIDS epidemic will not be halted without outstanding leadership teams acting in concert around the globe. Leaders and their teams, whether in government, the UN system, or civil society, must be aligned—in their mission, their values, their strategies, and their approach to bringing it altogether.

The 'how' of leadership is too often implicit, and is not well-addressed. UNDP's 'Leadership for Results' programme makes this 'how' explicit by applying this logic to HIV/AIDS policy support and programme development, in terms of leadership and capacity development; development planning, implementation, and HIV/AIDS response; and advocacy and communications.

The 'Leadership for Results' programme is a large scale, multi-dimensional strategic policy framework that helps a broad range of actors and sectors work together to meet common goals, increase the speed and effectiveness of HIV/AIDS strategy implementation, and meet the UN system's MDG and UNGASS commitments. The programme's objectives include:

- *Building leadership capacity to respond to HIV/AIDS in a strategic, coordinated, multisectoral manner in all relevant stakeholders. In addition to government, NGOs, and the private sector, these include leaders from media, cultural, and spiritual institutions.*

- *Strengthening stakeholders' understanding of the fundamental drivers of the epidemic, particularly in terms of its impact on human development and poverty reduction, but also in terms of themes like gender and human rights. The goal is to shift the response paradigm and thereby help leaders to meet the epidemic's challenges more effectively.*

UNDP's 'Leadership for Results' programme is supporting capacity development for leaders from all governmental levels and sectors in countries around the world. Ukraine was included among the first six 'flagship' programme countries in 2002<sup>219</sup>. Top leadership in Ukraine and other flagship countries signalled their support for the programme by continuing a second phase of leadership work in 2003<sup>220</sup>.

In Ukraine, more than 300 individuals representing all key stakeholders participated in the programme's first phase during 2002. The programme focused on strengthening skills, awareness, and sensitivities that leaders need to manage large-scale, multisectoral responses. In Ukraine, this meant bringing key stakeholders together to identify factors promoting or hindering the effective implementation of the national strategic plan on HIV/AIDS. Ukraine's 'Leadership for Results' programme developed strong partnerships between UN agencies, NGOs, the government, and private sector, in order to better publicise the leadership roles played by women and people living with HIV/AIDS in Ukraine's response to the epidemic. In addition to identifying and propagating role models for inclusive leadership, the programme has worked with the media to provide a more accurate but still human portrait of the epidemic, to counteract the ignorance and stigmatisation often apparent in public attitudes.

## Leadership for Results: Conceptual Frameworks

### *Systems Thinking*

The conceptual framework that unpins UNDP's 'Leadership for Results' programme rests on answers to the following questions:

- *Will we work from a health perspective or a development perspective?*
- *Scale: projects or programmes?*
- *What effect do we want to achieve: short-term temporary fixes or sustainable long-term transformations?*
- *With which partners will we work: government, NGOs, civil society, private sector, others?*
- *On what basis will we work with them: as equal partners, to co-create a response? Or to deliver interventions and technology transfers?*

The infectious disease paradigm can be contrasted with the reproductive health paradigm in the public health approach to sexually transmitted infections. The infectious disease paradigm is germ-focused and reductionist. Interventions are based on managing the movement and transmission of the infection. Although this paradigm is clearly important, it cannot by itself effectively respond to the HIV/AIDS epidemic. This approach does not address human social and cultural norms or the power relations that lie behind the behaviours that causes HIV to spread. By contrast, the reproductive health model makes interventions at both levels. Safe blood banks should be established, but they need to be supported by the creation of an enabling environment that ensures that people actually have access to safe blood.

<sup>219</sup>The other five flagship countries were Cambodia, Ethiopia, Nepal, South Africa, and Swaziland. Botswana, China, Ghana, Haiti, India, Malaysia, and Senegal were also included in the programme in 2003.

<sup>220</sup>Regional activities under this programme were also begun in 2003 by UNDP's Regional Bureau for Europe and the CIS.

## Five Frameworks

Five conceptual frameworks underpin UNDP's 'Leadership for Results' programme. These frameworks are based on intuitive concepts, rather than on intellectual constructs. They are useful and easily transferable tools for transformation, helping participants develop leadership capacity, and help countries achieve results in the response to HIV/AIDS. They have been effective in communicating to all levels of society and across diverse cultures.

### Five Frameworks for Generating Leadership through Deeper Understanding and Alignment:

1. Leadership Competencies and Distinctions
2. Emotional Intelligence Framework
3. Four-Quadrant Framework
4. Likert's Levels of Organisational Development
5. Dynamic Planning Process

This approach focuses on generating the breakthrough insights needed to generate new commitments, behaviour, and results for individuals, institutions, and societies. It finds critical leverage points and intervenes at that nexus in order to effect the greatest change with minimal energy and resources. At issue is the difference between technology transfer and large-scale transformation.

### 1. Transformational Leadership: Competencies and Distinctions

Leadership is a conscious process. It begins with clarity about one's own personal goals and how these fit with the mission and strategy of the organisation. Leadership requires that a person be highly self aware, be able to manage herself in stressful and complex environments, be able to 'read' other people, empathise with their needs, and lead others to get the job done. Leaders need to know what inhibits effective individual and team performance, and how to address these obstacles. Leadership also requires a deep understanding of how social systems and the people in them work together to achieve complex and challenging goals.

Effective leadership development means that people learn how to change, not just what to change. A successful leadership development process results in sustained behavioural changes for the individuals involved. They develop the emotional intelligence (described below in greater detail) needed to improve their ability to lead others. A successful leadership development process also results in a shared language of leadership—mechanisms for leaders to communicate with one another about what is required in order to realise a strategy.

Successful leadership development processes also improve understanding, working relationships, and collective effectiveness among representatives of the 'constituent' groups involved. When a leadership development process is successful, people with overlapping goals have a better sense of how the various parts of a system fit together. Better understanding from a systems perspective, coupled with a shared language of leadership and development, increases the likelihood of achieving shared goals.

What separates leaders from followers is the language they use, the environments they create, their interpretations of given situations, and how this is communicated to others. When faced with challenging—perhaps even overwhelming—situations (such as the HIV/AIDS epidemic), effective leaders draw on tools that help them perceive the situation differently and enable others to respond based on the openings they create.

Leadership addresses individuals' core ways of understanding and interacting with the world, which in turn generate and shape leadership competencies. These distinctions

**Transformational Leadership:  
Generating Shared Commitments for a Common Future**

- Leadership is being, speaking, listening, and acting in ways that enable a community to effectively meet the challenges it faces.
- Transformation occurs when individuals recognise, acknowledge, and give up automatic 'ways of being' in favour of making something new possible.
- The certainty with which leaders act comes from their commitment.
- Transformational leadership is centred in self and expressed in community.
- Not acting, in the context of a system, is itself an action.
- Building successful coalitions requires finding common goals instead of focusing on what's different.

focus on identifying and clarifying the dissonance between people's ideas, principles, and actions that create ineffective work patterns, or morale and motivation issues.

For example, the same event can be perceived, and acted upon, as both a 'breakdown' and 'breakthrough'. People can be supported in learning skills and developing competencies that allow them to act in different ways in response to challenges. This means seeing possibilities and creating opportunities in situations where most people might only perceive failure.

Leadership Competencies	Leadership Distinction
Creating possibility in the face of 'impossibility'	Breakthrough versus breakdown
Giving meaning to any endeavour	Responsibility versus accountability
Regenerating commitment in the face of breakdowns	Experience versus interpretation
Creating coaching relationships	Authentic appreciation and regard
Keeping the action moving	Results focus versus process orientation
Enrolling others in one's vision	Empowerment: individuals can make a difference

Not only can this approach lead to greater success and accomplishment professionally: it can generate the strength of commitment needed to carry leaders through difficult and challenging periods. These kinds of competencies are critical for leaders who work in the response to HIV/AIDS, where apparent 'breakdowns' occur frequently, and it is easy to become discouraged and cynical.

## 2. Emotional Intelligence

Important competencies for effective management and leadership are associated with emotional intelligence. This concept was introduced into the business management lexicon some ten years ago by Daniel Goleman<sup>221</sup> to describe a set of competencies that are highly correlated with both individual and institutional success, and are consistent across gender, cultural and hierarchical categories. Emotional intelligence describes abilities distinct from but complementary to academic intelligence or the purely cognitive capacities measured by IQ. These qualities enable leaders to better deal with their own internal responses and state of mind, as well as how they manage others. Emotionally intelligent leaders are able to:

<sup>221</sup> Goleman, D., *Emotional Intelligence*, Bantam Books, 1995, New York.

- *act in ways that leave the people around them (partners, team members, employees, community members, etc.) feeling stronger and more capable;*
- *manage themselves effectively under stress and/or when dealing with ambiguous circumstances; remain calm and stay focused; and*
- *stay in touch with what the people they lead are thinking and feeling, in order to motivate and energise them.*

In collaboration with Daniel Goleman and Richard Boyatzis, Annie McKee and Fran Johnston combined the best modern research findings with innovative management concepts to develop a framework that leads to profound positive change in individuals and organisations<sup>222</sup>. This framework identifies four emotional intelligence ‘factors’: self-awareness, self-management, social awareness, and relationship skills. These four emotional intelligence factors are descriptors of competencies related to leadership potential for both people and organisations.

<p><b>SELF-AWARENESS</b></p> <p>Emotional Self-Awareness Accurate Self-Assessment Self-Confidence</p>	<p><b>SOCIAL AWARENESS</b></p> <p>Empathy Organisational Awareness</p>
<p><b>SELF-MANAGEMENT</b></p> <p>Self Control Transparency Adaptability Achievement Initiative Optimism</p>	<p><b>RELATIONSHIP MANAGEMENT</b></p> <p>Inspiration Influence Focus on Developing Others Change Catalyst Conflict Management Teamwork and Collaboration</p>

### 3. Four-Quadrant Framework: Aligning Values and Actions

The HIV/AIDS epidemic is a complex social phenomenon that must be acknowledged and addressed collectively by every level and sector of society. Its manifestations are symptoms of complex social dysfunctions that require complex understanding. Additionally, in order for our actions to accurately reflect values and principles, we need frameworks that allow us to ask the right questions, see the bigger picture, and work towards sustainable results.

The Four-Quadrant Framework<sup>223</sup> facilitates awareness of the interactions between attitudes and actions, individuals and groups, and social systems and societal structures. It deepens understanding of the HIV/AIDS epidemic by demonstrating the links between individual and group attitudes, or between norms and consequent actions by individuals and groups. In planning for an expanded, extraordinary response at individual, community and societal levels, we need to understand and employ these dynamics in order to produce the desired results. The Four-Quadrant Framework lends itself very well to mapping exercises that graphically plot current reality in terms of: (1) individual attitudes that fuel the epidemic; (2) individual behaviour; (3) our values, norms, and culture; and (4) systemic and sectoral response.

<sup>222</sup> Goleman, D., R. Boyatzis, and A. McKee, *Primal Leadership: Realizing the Power of Emotional Intelligence*, Harvard Business School Press, 2002, Cambridge, Mass.

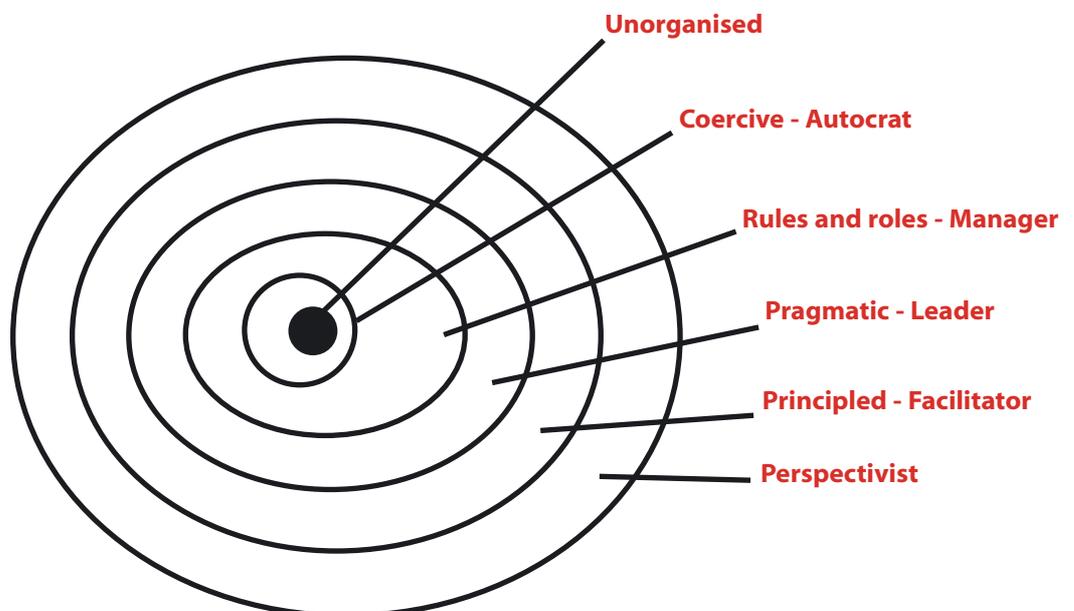
<sup>223</sup> Adapted from the work of the noted social scientist Ken Wilber.

The Four-Quadrant Framework helps to understand the HIV/AIDS epidemic in its social, economic and cultural context, in a given country or locale. Mapping exercises look specifically at situations that may be relevant to HIV, factors that promote its transmission or impede its spread, and that promote or impede achieving the best possible quality of life for those living with HIV/AIDS or for their families, friends and communities. Societal and individual values and actions need to play a stronger role in our strategic planning. Strategic planning processes can be more than simply technical exercises: they should be effective, empowering, transformative processes that align values and actions.

#### 4. Likert's Levels of Organisational Development

This organisational development model is based on the Rensis Likert scale and further developed and refined by Dennis Emberling. It explains how organisations as entities tend to be governed by certain ground rules and assumptions. It describes how organisations evolve through different stages, and how—through strategic and conscious effort—they can change their focus, goals, and operating structures to become more self-aware, principled, and effective.

#### Levels of Organisational Development



1. COERCIVE (also called 'authoritarian exploitative'): The most primitive organisational form, exploitative and despotic. The attitude of the leader (as dictator) is that employees are animals and machines to be used; more can be found to replace them.

2. RULES AND ROLES (also known as 'benevolent authoritarian'): Bureaucracy at its lowest form, paternalistically benevolent. Bosses are managers, not leaders. They tend to micromanage, creating the environmental for typical bureaucratic behaviour: play it safe (risk aversion), look good (but don't necessarily be or do good), obey rules no matter what (show no initiative or creativity), don't make mistakes. Process is emphasised over outcomes. Continuity and reliability can be positive aspects of this level.

3. **PRAGMATIC:** Here the focus is narrowly on results, in contrast to the narrow focus on process in (2) above. The desired result is the objective, sometimes ruthlessly and expediently achieved—the end justifies the means. This level often has unintended consequences. Bosses are charismatic and heroic leaders, lead by example, and consult extensively with their teams.

4. **PRINCIPLED:** The position of the leader is reversed. The leader is at the back, not the forefront, acting as a facilitator. The means are as important as the ends: how you achieve results is as important as getting the result. Attention is paid to sustainability and development. Organisation and leadership are values-based. The leader's job is to empower others and facilitate their development.

5. **PERSPECTIVIST:** This involves intellectual humility, the ability to see through multiple lenses and apply different solutions to different problems without attachment to one approach or perspective. Principles are important but not adhered to blindly or dogmatically. At stage 4, we may become blinded by our values and become intolerant zealots, believing that our values are 'the truth'. In this stage, the intellectual and philosophical perspective can shift to respond to the needs of the situation. Leadership totally decentralises and only appears when needed.

Likert's organisational development model also applies to human and leadership development. Understanding the 'personality' or 'style' of an organisation helps to better understand the roles we play as members of that community. It also provides opportunities to help transform that organisation, to help to achieve its goals.

This model can serve as a framework for developing more effective and responsible leaders at all levels of society. This model is used in the 'Leadership for Results' programme to explore the interactions between individual and institutional attitudes, goals, and practices, in order to achieve sustainable results in combating HIV/AIDS.

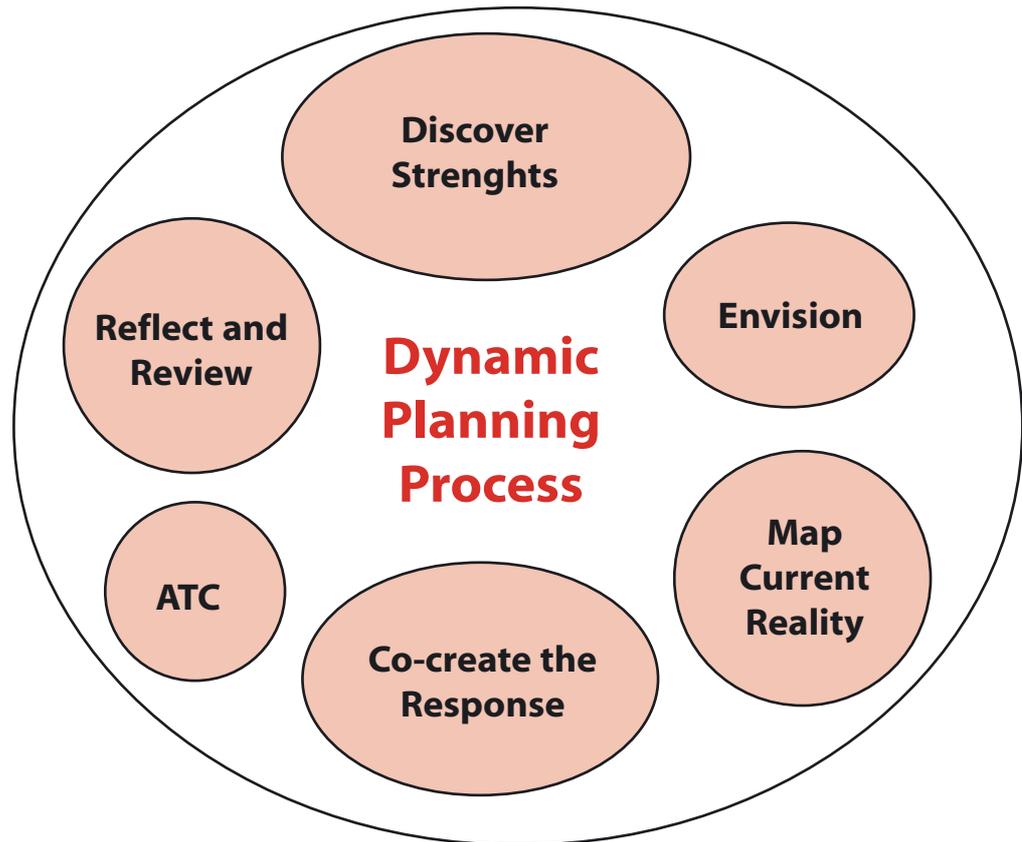
## 5. Dynamic Strategic Planning Processes

This model deepens and expands the scope of planning processes. It is based on years of research on effective, empowering planning models, most notably the work on appreciative inquiry done at Case Western University. Planning processes typically extrapolate future outcomes from the present, based on the past. The 'Leadership for Results' programme believes that, in order to address a major challenge like HIV/AIDS, we should begin by deciding what we want to create in the future and working back to the present to extrapolate how to achieve those goals. This solution-focused approach to planning (as opposed to a problem-based approach) creates space for innovation, commitment, and positive accountability.

The 'Leadership for Results' programme advocates a five-step approach ('discover strengths', 'envision', 'map current reality', 'create the response/act', and 'reflect/review') to dynamic strategic planning. This process is designed to help create integrated, decentralised, participatory plans for effective responses to the HIV/AIDS epidemic, primarily at the national level, but at sub-national levels as well. It incorporates planning (as traditionally understood) with a period of pre-planning reflection and visioning. In contrast to normative planning processes, in which activities are planned according to universal norms that apply to all beneficiaries, (irrespective of their conditions or situations), this strategic planning process reflects an issue's underlying determinants, which vary according to the persons and situations concerned.

Effective strategic planning processes must be flexible enough to allow for innovative applications across a wide variety of settings and constituencies. This process is able to meet these challenges: it is an empowering, highly interactive, inclusive,

dynamic cycle of reflection and action. It builds on current strengths, accesses people's vision and commitment for sustainable results, identifies gaps between the vision and current reality, and works together to co-create and implement multi-sectoral responses.



### Leadership for Results Programme Components

#### *Leadership Development Initiative*

UNDP's leadership development initiative has the following characteristics:

**PROGRAMME PARTICIPANTS:** 100-250 key leaders are identified to take part in each country programme. These include members of government, NGOs, the private sector, and the UN and UNDP. Guidelines used to select participants include: current leadership or advocacy positions; personal commitment to making a difference in the HIV/AIDS epidemic; fluency in national languages and English; ability to commit to the entire process; national and sub-national representation; representation of different ministerial sectors; 50 percent women; 25 percent civil society; and meaningful participation (at least 5 percent) of people living with HIV/AIDS.

**LEADERSHIP DEVELOPMENT PROCESS:** Country programmes typically follow a sequential process that start with interviews and surveys, three separate four-day seminars held over a six- to nine-month time period, and 'breakthrough project' work in between seminars. Each seminar includes individual leadership development activities, as well as group activities related to strategy implementation and goal achievement within the country.

**BREAKTHROUGH INITIATIVES AND ACTION LEARNING:** During the first workshop, participants identify and select real organisational issues or opportunities that are not already effectively addressed. These issues become the focus of special action learning projects that are conducted during the programme. The participants form action teams that use their initiatives as laboratories for trying out the ideas and methods they acquire in the workshops. Consultations take place within each action team on a monthly basis, if not more frequently. During these half-day meetings team members further develop their skills in project design and management, conflict resolution, and conducting focused and effective meetings.

**CHANGE AGENT TRAINING:** The leadership development initiative focuses on identifying and further developing local capacity to lead large-scale multisectoral HIV/AIDS programmes. Eight to ten individuals in each country are identified to further develop skills and capacities in order to act as change agents. They are trained to serve as expert resource persons in leadership development workshops. They also act as mentors to support workshop participants' action learning projects. Profiles of potential change agents include the following characteristics:

- *A demonstrated capacity to lead social movements and/or large-scale programmes*
- *Personal commitment to making a difference on the HIV/AIDS epidemic*
- *Commitment to social transformation in their country*
- *Sensitivity to social inequalities, particularly issues related to gender and marginalised groups*

### **Community Capacity Enhancement**

How can individuals, communities, and systems that are paralysed and silent be helped to respond effectively to the epidemic? Donors and other organisations in many CIS countries have too often 'disempowered' local communities by (intentionally or not) 'training' them to rely on these organisations for support and funding. Even 'participatory' assessments of assistance rendered by organisations to communities are too often manipulated: community representatives have 'learned' how to give the answers needed to access funds, creating a form of learned dependency. However, if interactions between organisations and communities reflect the belief that the necessary knowledge, capacity, and experience already exists within communities—and must only be properly accessed and channelled—then it becomes possible to engage in a process of mutual respective learning.

#### **MULTI-LEVEL ENTRY POINTS FOR TRANSFORMATION**

**Individual:** Develop self-awareness, self-esteem, self-regulation, relationship skills and social skills, tolerance, compassion, respect for self and others, vision.

**Community:** Use of social contracts and community conversations to explore the relationships and experiences of HIV/AIDS between men and women, between people living with HIV/AIDS and those who are not infected, between generations, between rural and urban peoples, and between rich and poor.

**Systems and Structures:** Provide suitable political, legal, ethical, and financial environments for an effective response. When planning strategic responses, take into account the country's status vis-à-vis: peace/war, economy, development, structures for governance and accountability, treatment and care facility availability, presence of UN agencies, NGOs, and foundations.

This is the basic premise of the ‘community capacity enhancement’ (CCE) approach, which was used in Swaziland, South Africa, and Cambodia to promote large-scale community mobilisation to respond to HIV/AIDS. The CCE approach also employs the concept of social contracts—silent social agreements about certain behaviours and attitudes, and about identifying social capital. Facilitators (local and regional) accompany a community through a ‘community conversation’ by helping community members explore issues and concerns of their everyday lives.

This approach to capacity development can unleash energy and hope, empower without creating dependency, and create space for socially sustainable transformation that can achieve startling results. This approach translates key UNGASS goals (reducing infections, vulnerability, and impact of the epidemic, improving care and support) into a simpler, more straightforward, more human formula: Hope + Transformation = Results.

Combining ‘hope’ with ‘transformation’ in order to achieve ‘results’ means addressing such key inter-related issues as sex, shame, fear, death, denial, silence, stigma, and discrimination. In order to begin to truly address these issues and their linkages, communities must be able to honestly discuss them. This requires work at several levels: individually, in order to transform attitudes and behaviour; at the community level, where social contracts can be forged; and at the level of systems and structures, strengthening facilities and channelling resources.

Identifying the key strategic entry points shown in the box above is key to mobilising an effective, large-scale response. For example, community conversations or the HIV/AIDS leadership development programme can kindle an individual’s hope, creating an entry point for personal commitments and social contracts to be made. This in turn creates natural entry points to begin the ‘community capacity enhancement’ process, which creates the necessary focus, will, and momentum for people to influence their society’s structures and systems.

‘Community capacity enhancement’ objectives include:

- *Reinforcing individuals’ and communities’ abilities to better understand the epidemic, to reflect, and to initiate changes to respond effectively.*
- *Exploring community perspectives on how to live with and respect people living with HIV/AIDS, and how to involve them in community response to the epidemic.*
- *Helping individuals and organisations to facilitate local responses to HIV/AIDS that integrate care and prevention, without losing sight of other priority concerns such as coping strategies, orphans and vulnerable children, and the like.*
- *Sustaining local action by increasing the capacity to care, change, and find hope within individuals, families, and communities.*
- *Facilitating the dissemination of lessons learned and change between individuals, organisations, and communities.*

The ‘community capacity enhancement’ approach is based on the recognition that communities have capacities to care, change, and sustain hope in the midst of the HIV/AIDS epidemic. Local responses to the epidemic need to reflect local realities and concerns. The creation of ‘spaces’ of trust and mutual respect, where grass-roots interaction can stimulate the sustainable community changes that are needed for HIV/AIDS prevention, care, and reducing the impact of the epidemic, is critical. This process can be accelerated by a facilitation team approach (from within the national/cultural community), which respects and includes all relevant actors.

The application of the ‘community capacity enhancement’ approach starts from listening to the perspectives and interests of the community itself. Through processes of inclusive interaction, collective or social learning occurs, power relations shift, changes are initiated, and ownership and responsibility for change is strengthened. Local capacities

and resources—skills, knowledge, values, tradition, social capital, material resources—are mobilised.

The ‘community capacity enhancement’ approach focuses on building capacity for local responses, as well as for transferring and sharing lessons learned with others. This process, once started, continues to share itself, from community to community, and among ever growing pools of skilled implementers and facilitators, contributing to an expanded response to HIV/AIDS. The following are fundamental to the approach:

- *The belief that communities are able to identify needed changes, own those changes, and transfer the knowledge of how to generate these changes to other communities.*
- *Respect for differences, and mutual trust.*
- *Sensitivity to local, family, and community experiences. This means working on the basis of invitation and commitment, rather than by decree or imposition.*
- *Facilitation rather than the intervention of ‘experts’. Participatory approaches featuring opportunities for listening, inclusion, agreements, and expressions of concerns must be emphasised.*
- *Learning must be continuously facilitated and mutual (facilitators with communities; communities with facilitators; communities with communities; between community members; and organisation to organisation).*
- *Implementation teams must be formed at the organisational and community levels.*

### **Arts and Media Mobilisation**

The importance of the arts and media, in shaping public attitudes and perceptions, and in creating icons and positive role models that can influence behaviour, cannot be underestimated. To reach the critical mass needed to turn the tide in the response to HIV/AIDS, traditional arts and the media can promote a more sensitive understanding of the epidemic, and can mobilise and support strong leadership.

UNDP’s ‘Leadership for Results’ programme organised special workshops for artists and media professionals in 2003 in Ukraine, as well as in Ethiopia, Cambodia, Swaziland, and Nepal. These workshops sought to engage social communicators in exploring and innovating in order to transform national responses to HIV/AIDS. These workshops challenge artists and media professionals (including musicians, journalists, editors, radio and TV personalities, as well as traditional media) to reinvent cultural icons and messages, in order to help transform society. Workshop participants dig into their cultural heritage to find the cultural levers needed for an effective response to the epidemic, and to help individuals and communities break out of traditional forms of behaviour. These workshops can help media and artists to destigmatise the epidemic and to convey the humanity and courage displayed by people living with HIV/AIDS, as well as to communicate successes and lessons learned from HIV/AIDS projects.

### **‘Leadership for Results’ in Ukraine**

Taking advantage of Ukraine’s status as a flagship country in the ‘Leadership for Results’ programme, UNDP-Ukraine engaged some 300 leaders from government, civil society, the private sector, and the media in nine-month leadership development programmes during 2002-2003.

Participants at the inception of the programme focused on identifying Ukraine’s major challenges and strengths in dealing with HIV/AIDS. Challenges identified included widespread stigma, taboos against talking about sexual issues, denial, ignorance, and a lack of individual initiative resulting from the Soviet years. Strengths included growing national pride, a tradition of forming mutual support communities, and generally high levels of education that create receptiveness to new ideas. Despite the country’s 1 per-

cent prevalence rate, the fact that HIV seemed not to have spread beyond key at-risk groups meant that Ukraine still had the opportunity to pull back from the brink.

By identifying the drivers of HIV/AIDS in Ukraine, as well as the strengths they could tap in developing a response, the leaders in the programme were able to formulate breakthroughs—innovative initiatives with positive impact. One such breakthrough initiative was the creation of a singles club for people with HIV/AIDS in one of the most highly affected regions of the country, where people from six cities can come together and feel comfortable communicating freely. This initiative reached out to people living with HIV/AIDS and sent a message of hope to others. Another initiative, developed by a participant who decided to stop using drugs after attending the Leadership Development workshops, was the creation of the Rubikon Theatre, which produces plays about drug use and HIV/AIDS, and in which drug users play leading roles. The plays are performed for people with HIV/AIDS and their families, drug users, medical workers, and school-children. The participant who founded the theatre now serves as a role model for others, working in prevention efforts and forming partnerships with other organisations.

Other breakthrough initiatives included Ukraine's first-ever voluntary testing campaign by and for men who have sex with men; workshops for people working with those affected by HIV/AIDS and conducted by government employees; the development of educational materials for children (including computer games, a website, and cartoons that are aired on a government television channel reaching 10 million viewers); the creation and distribution of prevention booklets for ethnic minorities; and a partnership between NGOs and government to contact and provide support for individuals dying of AIDS in their homes. Participants reported stronger connections between government and non-governmental organisations as a result of these initiatives, signalling the growth of the enabling environment needed for more such partnerships.

Some 50 individuals associated with Ukraine's media have participated in the leadership development programmes. This has generated breakthrough initiatives in a number of areas. These include quantitative and qualitative changes in media coverage of the epidemic: coverage of HIV/AIDS has increased, and the way in which the epidemic is portrayed has changed—from a purely negative approach to one that conveys a sense of life and hope. These changes have helped increase awareness and reduce the stigma associated with HIV/AIDS. Most importantly, they have moved the debate about HIV/AIDS from a simple focus on prevention and disseminating information to analyses directed at addressing the drivers of the epidemic.

The 'Leadership for Results' programme also facilitated partnerships between the government and NGOs in creating an applied human rights programme to deal with the underlying issues affecting the spread of HIV/AIDS. The applied human rights programme supports government, civil society, and the private sector in translating rights in principle into rights in practice for injecting drug users, commercial sex workers, and people living with HIV/AIDS. The programme does this by ensuring access to social, legal, and medical services, in order to reduce their vulnerability and empower these individuals to help halt the spread of the epidemic. The programme has recorded breakthroughs in several areas, including improving access to basic services for people with HIV/AIDS; access harm reduction services (including needle exchanges) for injecting drug users; expanded research on drug use and addiction; extended HIV/AIDS awareness campaigns; self-help groups for female sex workers; and home-based care for people living with HIV/AIDS. As such, the impact of the applied human rights programme goes well beyond HIV/AIDS issues per se: it addresses poverty, gender issues, and drug use. These breakthroughs were made possible by partnerships UNDP formed with the government, civil society organisations and other UN agencies.

UNDP-Ukraine is moving to scale up its leadership development programmes in 2004. These programmes will be expanded to all 12 Ukrainian regions during 2004-2006, and additional programmes will be developed specifically for young people. UNDP-Ukraine and its partners will also expand the applied human rights programme to reach out to injecting drug users and sex workers nationwide.

## Annex 4: Glossary

**ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS):** The most severe manifestation of infection with the human immunodeficiency virus (HIV). The Centers for Disease Control and Prevention (CDC) lists numerous opportunistic infections and neoplasms (cancers) that, in the presence of HIV infection, constitute an AIDS diagnosis. There are also instances of presumptive diagnoses when a person's HIV status is unknown or not sought. This was especially true before 1985 when there was no HIV-antibody test. In 1993, CDC expanded the criteria for an AIDS diagnosis to include CD4+ T-cell count at or below 200 cells per microlitre in the presence of HIV infection. In persons (aged 5 and older) with normally functioning immune systems, CD4+ T-cell counts usually range from 500 to 1500 cells per microlitre. Persons living with AIDS often have infections of the lungs, brain, eyes and other organs, and frequently suffer debilitating weight loss, diarrhoea, and a type of cancer called Kaposi's sarcoma. Since AIDS is a syndrome, it is incorrect to refer to it as the AIDS virus.

**ACUTE HIV INFECTION:** The four-to-seven week period of rapid viral replication immediately following exposure. The number of virions produced during primary infection is similar to that produced during several subsequent years of established, asymptomatic infection. An estimated 30–60 per cent of individuals with primary HIV infection develop an acute syndrome characterized by fever, malaise, lymphadenopathy, pharyngitis, headache, myalgia, and sometimes rash. Following primary infection, seroconversion and a broad HIV-1 specific immune response occur, usually within 30 to 50 days. It was previously thought that HIV was relatively dormant during this phase. However, it is now known that, during the time of primary infection, high levels of plasma HIV RNA can be documented.

**AIDS CARRIER:** Any person living with HIV/AIDS. This term is stigmatizing and offensive to many people living with HIV/AIDS. It is also incorrect; the effective agent is HIV.

**AIDS-DEFINING ILLNESS:** Any of a series of health conditions that are considered, in isolation or in combination with others, to be indicative of the development of AIDS. Those conditions occur at a late stage of HIV infection. Quite often, it is only at this particular stage that many individuals discover that they are infected by HIV. Such conditions may be grouped in four categories: opportunistic infections; brain and nerve diseases; certain cancers; and AIDS wasting syndrome.

**AIDS-related deaths:** Deaths linked to AIDS-related diseases such as tuberculosis, pneumonia and diarrhea

**ANTENATAL:** Occurring before birth

**ANTIRETROVIRAL MEDICINE:** Drug used to kill or inhibit the multiplication of retroviruses such as HIV.

**ANTIRETROVIRAL THERAPY:** A treatment that uses antiretroviral medicines to suppress viral replication and improve symptoms. Effective antiretroviral therapy requires the simultaneous use of three or four antiretroviral medicines as specified in the WHO 'Guidelines for a Public Health Approach, Scaling up antiretroviral therapy in resource-limited settings' (June 2002).

**BEHAVIOURAL SURVEILLANCE:** Surveys of HIV-related behaviour involve asking a sample of people about their sexual and, sometimes, their drug-injecting behaviour. The sample may be restricted to a certain age group, and to men or women.

**BRAND NAME DRUG:** Drugs may carry a brand name (also called a proprietary name or trade name, which is marked with ® for 'Registered'). This is given by the manufacturer and is used for promotion and sales.

**CD4 (T4) or CD4+ CELLS:** 1. A type of T cell involved in protecting against viral, fungal and protozoal infections. These cells normally orchestrate the immune response, signalling other cells in the immune system to perform their special functions. Also known as T helper cells. 2. HIV's preferred targets are cells that have a docking molecule called

'cluster designation 4' (CD4) on their surfaces. Cells with this molecule are known as CD4-positive (or CD4+) cells. Destruction of CD4+ lymphocytes is the major cause of the immunodeficiency observed in AIDS, and decreasing CD4+ lymphocyte levels appear to be the best indicator for developing opportunistic infections. Although CD4 counts fall, the total T cell level remains fairly constant through the course of HIV disease, due to a concomitant increase in the CD8+ cells. The ratio of CD4+ to CD8+ cells is therefore an important measure of disease progression.

**EPIDEMIC:** A disease that spreads rapidly through a demographic segment of the human population, such as everyone in a given geographic area; a military base, or similar population unit; or everyone of a certain age or sex, such as the children or women of a region. Epidemic diseases can be spread from person to person or from a contaminated source such as food or water.

**EPIDEMIOLOGY:** The branch of medical science that deals with the study of incidence, distribution and control of a disease in a population.

**ESSENTIAL DRUGS:** Essential medicines (as defined by the WHO Expert Committee on the Selection and Use of Essential Medicines) are those that satisfy the priority health care needs of the population. They are selected with due regard to public health relevance, evidence on efficacy and safety, and comparative cost-effectiveness. Essential medicines are intended to be available within the context of functioning health systems at all times in adequate amounts, in the appropriate dosage forms, with assured quality and adequate information, and at a price the individual and the community can afford. The implementation of the concept of essential medicines is intended to be flexible and adaptable to many different situations; exactly which medicines are regarded as essential remains a national responsibility.

**GENERIC DRUGS:** All drugs carry a generic name—an INN (International Non-proprietary Name)—which is the official name given to the molecule/medicine.

**HIGHLY ACTIVE ANTIRETROVIRAL THERAPY (HAART):** The name given to treatment regimens recommended by leading HIV experts to aggressively suppress viral replication and progress of HIV disease. More recently, a new drug has been developed to prevent the virus from entering the cell. The usual HAART regimen combines three or more different drugs such as two nucleoside reverse transcriptase inhibitors and a protease inhibitor, two NRTIs and a non-nucleoside reverse transcriptase inhibitor or other combinations. These treatment regimens have been shown to reduce the amount of virus so that it becomes undetectable in a patient's blood.

**HIGH-RISK GROUPS/GROUPS WITH HIGH-RISK BEHAVIOUR:** These terms should be used with caution as they can increase stigma and discrimination. They may also lull people who don't identify with such groups into a false sense of security. 'High-risk group' also implies that the risk is contained within the group whereas, in fact, all social groups are interrelated. It is often more accurate to refer directly to 'sex without a condom', 'unprotected sex', 'needle-sharing', or 'sharing injecting equipment', rather than to generalize by saying 'high-risk group'.

**HIV DISEASE:** During the initial infection with HIV, when the virus comes in contact with the mucosal surface, and finds susceptible T cells, the first site at which there is truly massive production of the virus in lymphoid tissue. This leads to a burst of massive viremia with wide dissemination of the virus to lymphoid organs. The resulting immune response to suppress the virus is only partially successful and some virus escapes. Eventually, this results in high viral turnover that leads to destruction of the immune system. HIV disease is, therefore, characterized by a gradual deterioration of immune functions. During the course of infection, crucial immune cells, called CD4+ T cells, are disabled and killed, and their numbers progressively decline.

**HIV INCIDENCE:** HIV incidence (sometimes referred to as cumulative incidence) is the proportion of people who have become infected with HIV during a specified period of time. UNAIDS normally refers to the number of people (of all ages) or children (0–14) who have become infected during the past year.

**HIV PREVALENCE RATE:** the proportion of individuals in a population who have HIV at a specific point in time. UNAIDS normally reports HIV prevalence among adults, aged 15–49.

**HIV PREVALENCE:** Total number of people cumulative with a specific disease or health condition living in a defined population at a particular time.

**HIV-INFECTED:** As distinct from HIV-positive (which can sometimes be a false positive test result, especially in infants of up to 18 months of age), the term HIV-infected is usually used to indicate that evidence of HIV has been found via a blood or tissue test.

**IMMUNE DEFICIENCY:** A breakdown or inability of certain parts of the immune system to function, thus making a person susceptible to certain diseases that they would not ordinarily develop.

**INFORMED CONSENT:** The permission granted by an individual or patient undergoing any kind of intervention (such as an operation or a vaccine trial), or a participant in a research study (including medical research) after he/she has received comprehensive information about the study. This is a statement of trust between the institution performing the research procedure and the person (e.g. a patient) on whom the research procedures are to be performed.

**INJECTING DRUG USERS (IDUs):** This term is preferable to drug addicts, which is seen as derogatory, often resulting in alienation rather than creating the trust and respect required when dealing with those who inject drugs.

**MSM (Men who have sex with men):** This includes men who report either homosexual or bisexual contact.

**NEVIRAPINE (NVP):** A non-nucleoside reverse transcriptase inhibitor used in HIV infection in combination with at least two other antiretroviral drugs; used in prevention of mother-to-child transmission in HIV-infected patients.

**PEOPLE LIVING WITH HIV/AIDS (PLWHA):** With reference to those living with HIV/AIDS, it is preferable to avoid certain terms: AIDS patient should only be used in a medical context (most of the time, a person with AIDS is not in the role of patient); the term AIDS victim or AIDS sufferer implies that the individual in question is powerless, with no control over his/her life. It is preferable to use 'people living with HIV/AIDS (PLWHA)', since this reflects the fact that an infected person may continue to live well and productively for many years. Referring to PLWHA as innocent victims (which is often used to describe HIV-positive children or people who have acquired HIV medically) wrongly implies that people infected in other ways are somehow deserving of punishment. It is preferable to use PLWHA, or 'people with medically-acquired HIV', or 'children with HIV'.

**PERINATAL TRANSMISSION:** Transmission of a pathogen, such as HIV, from mother to baby before, during, or after the birth process. Ninety percent of children reported with AIDS acquired HIV infection from their HIV-infected mothers.

**RETROVIRUS:** A type of virus that, when not infecting a cell, stores its genetic information on a single-stranded RNA molecule instead of the more usual double-stranded DNA. HIV is an example of a retrovirus. After a retrovirus penetrates a cell, it constructs a DNA version of its genes using a special enzyme called reverse transcriptase. This DNA then becomes part of the cell's genetic material.

**SECOND GENERATION SURVEILLANCE:** Built upon a country's existing data collection system, second generation HIV surveillance systems are designed to be adapted and modified to meet the specific needs of differing epidemics. For example, HIV surveillance in a country with a predominantly heterosexual epidemic will differ radically from surveillance in a country where HIV infection is mostly found among men who have sex with men (MSM) or injecting drug users (IDUs). This form of surveillance aims to improve the quality and diversity of information sources by developing and implementing standard and rigorous study protocols, using appropriate methods and tools.

**SENTINEL SURVEILLANCE:** This form of surveillance relates to a particular group (such as men who have sex with men) or activity (such as sex work) that acts as an indicator of the presence of a disease.

**SEROCONVERSION:** The development of antibodies to a particular antigen. When people develop antibodies to HIV, they 'seroconvert' from antibody-negative to antibody-positive. It may take from as little as one week to several months or more after infection with HIV for antibodies to the virus to develop. After antibodies to HIV appear in the blood, a person should test positive on antibody tests.

**SEROPREVALENCE:** As related to HIV infection, the proportion of persons who have serologic (i.e. pertaining to serum) evidence of HIV infection at any given time.

**SEROSTATUS:** A generic term that refers to the presence/absence of antibodies in the blood. Often, the term refers to HIV antibodies.

**SEX WORKER:** This term is preferable to 'prostitute', 'whore' and 'commercial sex worker', which have negative connotations. The term 'sex worker' is non-judgemental and recognizes the fact that people sell their bodies as a means of survival, or to earn a living.

**SEXUALLY TRANSMITTED INFECTION (STI):** Also called venereal disease (VD), an older public health term, or sexually transmitted diseases (STDs). Sexually transmitted infections are spread by the transfer of organisms from person to person during sexual contact. In addition to the 'traditional' STIs (syphilis and gonorrhoea), the spectrum of STIs now includes HIV, which causes AIDS; Chlamydia trachomatis; human papilloma virus (HPV); genital herpes; chancroid; genital mycoplasmas; hepatitis B; trichomoniasis; enteric infections; and ectoparasitic diseases (i.e. diseases caused by organisms that live on the outside of the host's body). The complexity and scope of STIs have increased dramatically since the 1980s; more than 20 organisms and syndromes are now recognized as belonging in this category.

**SURVEILLANCE:** The ongoing and systematic collection, analysis, and interpretation of data about a disease or health condition. Collecting blood samples for the purpose of surveillance is called serosurveillance.

**TRANSMISSION:** In the context of HIV disease: HIV is spread most commonly by sexual contact with an infected partner. The virus can enter the body through the mucosal lining of the vagina, vulva, penis, rectum, or, rarely, the mouth during sex. The likelihood of transmission is increased by factors that may damage these linings, especially other sexually transmitted diseases that cause ulcers or inflammation. HIV also is spread through contact with infected blood, most often by the sharing of drug needles or syringes contaminated with minute quantities of blood containing the virus. Children can contract HIV from their infected mothers during either pregnancy or birth, or post-natally, through breast-feeding. In developed countries, HIV is now only rarely transmitted by transfusion of blood or blood products because of screening measures.

**VERTICAL TRANSMISSION:** Transmission of a pathogen such as HIV from mother to fetus or baby during pregnancy or birth.

Sources: Essential Drugs and Medicines Policy Department (EDM), Policy, Access and Rational Use (PAR), and Quality Assurance & Safety: Medicines, WHO; UNAIDS; and the US Department of Health and Human Services.

## Annex 5: Bibliography

- Ainsworth M., et al., *Confronting AIDS: Evidence from the Developing World*, World Bank, Washington D.C., 1998.
- Barnett, T., and Whiteside A., *AIDS in the Twenty-first Century: Disease and Globalisation*, Palgrave, London, 2002.
- Belin, E. et al., 'High Dose Methadone Reduces Criminal Recidivism in Opiate Addicts', *Addiction*, 1999.
- Bell, C., et al., *The Long-run Economic Costs of AIDS: With an Application to South Africa*, World Bank, Washington D.C., 2003.
- Bloom, D. and Lyons J., *Economic Implications of AIDS in Asia*, UNDP Regional Bureau for the Asia and the Pacific, New Delhi, India, 1993.
- Bloom, D. and Lyons Joyce, *Economic Implications of AIDS in Asia*, New Delhi, India, 1993.
- Bloom, D.E., et al., *Health, wealth, AIDS and Poverty*, Working paper, ADB, UNAIDS, 2002.
- Bonnel, R., *Economic Analysis of HIV/AIDS*, World Bank, Washington DC, 2000.
- Centre for Reproductive Rights, *Body and Soul: Forced Sterilisation and Other Assaults on Roma Reproductive Freedom*, New York, January 2003.
- Centre on public opinion research, *Behavioural Surveillance among Injecting Drug Users in Nine Cities in Kazakhstan*, Almaty, 2002.
- Conroy, M., 'Abuse of drugs other than alcohol and tobacco in the Soviet Union', *Soviet Studies* 1990, 42-43.
- Cook, E., 'Comparative Analysis of NGOs and Mass Media in Russia and Great Britain', *BBC World Service Trust*, November 2002 – January 2003.
- Csepe, P. et al., 'HIV risk behaviour among gay and bisexual men in Budapest, Hungary' *International Journal of Sexually Transmitted Diseases and AIDS*, March 2002, 13(3):192-200.
- Deany, P., *HIV and Injecting Drug Use: A New Challenge to Sustainable Human Development*, UNDP, New York, 2000.
- Dehne, K., *The Determinants of the AIDS Epidemic in Eastern Europe*, Monitoring the AIDS Pandemic Report, Geneva, 1999.
- Eberstadt, N., 'The Future of AIDS', *Foreign Affairs*, November/December 2002.
- European Centre for the Epidemiological Monitoring of AIDS, *End Year Report 2002*, Paris, 2003.
- European Centre for the Epidemiological Monitoring of AIDS, *HIV/AIDS Surveillance in Europe*, December 2002.
- European Monitoring Centre for Drugs and Drug Addiction, *Substitution Treatment: A Key Component of Drug Treatment*, 2001.
- Farmer, P., *Infections and Inequalities*, University of California Press, Berkeley, 1999.
- Freedom House, *Nations in Transition: Civil Society, Democracy and Markets in East Central Europe and the Newly Independent States*, Washington, D.C., 1995.
- Golubkova, A. et al., 'Behaviour of injecting drug users that leads to HIV infection', *Epidemiology of Infectious Disease*, 2000.
- Hammers, F., Downs, A., *HIV in Central and Eastern Europe*, Lancet, 2003.

International Harm Reduction and Development programme, *Injecting Drug Users, HIV/AIDS Treatment and Primary Care in Central and Eastern Europe and the Former Soviet Union*, New York, 2002.

Jarlais, D., et al., 'HIV Risk Behaviour among Participants of Syringe Exchange Programs in Central and Eastern Europe and Russia', *The International Journal of Drug Policy* 13(2002).

Kangas, R., *State Building and Civil Society in Central Asia*, Tismaneanu, V., M.E. Sharpe, New York, 1995.

Kelly, J.A. et al., *High levels of HIV risk behaviour among men who have sex with men in Russia, Hungary, and Bulgaria*, 2002.

Kongsin S, and Watt C., *Conducting a Household Survey on Economic Impact of Chronic HIV/AIDS Morbidity in Rural Thailand: Methodological Issues*. AIDS and Economics Symposium, IAEN Symposium for Durban Conference on HIV/AIDS, 2000.

Lisbon, U. and Solberg, *Maintenance Therapy in the European Union and in Norway*, presented at Fifth Conference of European Opiate Addiction Treatment Association, Oslo, 2002.

MacPherson, M. et al., *The Impact on Economic Growth in Africa of Rising Costs and Labor Productivity Losses Associated with HIV/AIDS*, HIID, Boston, 2000

Marsh, C., *Making Russian Democracy Work: Social Capital, Economic Development and Democratization*, Lewiston, Mellen Press, NY, 2000.

McKee, M., 'Substance use and social and economic transition: the need for evidence', *International Journal of Drug Policy* 13, 2002.

Médecins sans Frontières, *Health Promotion in the Russian Prison System: Prisoner Survey 2000*, Holland, November 2000.

Ministry of Health of Belarus, *Report to WHO EURO*, Minsk, 2001.

Ministry of Health of Ukraine, 'HIV Infection in Ukraine', *Information Bulletin No. 22*, Kyiv, 2003

Monitoring the AIDS Pandemic Network, *The Determinants of the HIV/AIDS Epidemics in Eastern Europe*, 1998.

Musicco M., Lazzarin, A. Nicolosi et al., 'Antiretroviral Treatment of Men Infected with Human Immunodeficiency Virus Type One Reduces the Incidence of Heterosexual Transmission: Italian Study Group on HIV Heterosexual Transmission', *Archives of Internal Medicine*, 1994, 154.

Open Society Institute, *Drugs, AIDS, and Harm Reduction: How to Slow the HIV Epidemic in Eastern Europe and the Former Soviet Union*, International Harm Reduction Development programme, New York, 2001.

Pitayanon S., Kongsin, S. and Janjareon W.S., *The Economic Impact of HIV/AIDS Mortality on Households in Thailand*, World Bank, Washington D.C., 2000.

Pokrovsky V., 'AIDS: Let's face the problem', *Meditsinskaya Gazeta*, 31 October 2003.

PSI Russia, *The Study of Sexual Behaviour of Male CSW's in Moscow*, 1999.

Robalino D, Jenkins C and Maroufi K., *The Risks and Macroeconomic Impacts of HIV/AIDS in the Middle East and North Africa*, Policy Research Paper # 2874, Middle East and North Africa Region, Human Development Group, World Bank, 2002.

Robalino D., *International Evidence on the Impacts of HIV/AIDS on Domestic Savings Rate*, Policy Note, World Bank, Washington DC, 2002.

Roberts, M., Rau, B. and Emery, A., *Private Sector AIDS Policy: Businesses Managing AIDS, A Guide for Managers*, Family Health International, AIDSCAP Project, 1996.

- Rotily, M. et al., 'Surveillance of HIV infection and related risk behaviour in European prisons: a multicenter pilot study', *European Journal of Public Health*, 2001.
- Rühl C, Pokrovsky V, Vinogradov V., *The Economic Consequences of HIV in Russia*, World Bank, Moscow, Russia, 2002.
- Sharp, S., *Modelling the Macroeconomic Implications of a Generalised AIDS Epidemic in the Russian Federation*, Masters Thesis, Department of Economics, University of Colorado, Boulder, May 2002.
- Shell, R., *Halfway to the Holocaust: The Economic, Demographic and Social Implications of the AIDS Pandemic to the Year 2010 in the Southern Africa Region*, Konrad Adenauer Stiftung occasional paper, Johannesburg, 2000.
- Solomon, H., *Changing Patterns in Transmission of Drug-Resistant HIV-1*, report from the first IAS Conference on HIV Pathogenesis and Treatment, Medscape Protals INC, 2001.
- Stern, Vivien, *A Sin Against the Future: Imprisonment in the World*, Northeastern University Press, Boston, 1998.
- Stimson, G., 'AIDS and Injection Drug Use in the United Kingdom, 1987-1993: The Policy Response and the Prevention of the Epidemic', *Social Science and Medicine* 41(5).
- UN General Assembly, *Report of the Secretary General: Progress towards implementation of the Declaration of Commitment on HIV/AIDS*, 58th session, New York, 25 July 2003.
- UNAIDS et al., *The Technical Report: Development, adaptation and field testing of the tools for measuring of biological and behavioural markers used in HIV surveillance in the groups of injecting drug users in the selected cities of the Russian Federation*, St. Petersburg, 2002.
- UNAIDS, *AIDS Epidemic Update*, Geneva, December 2002.
- UNAIDS, *AIDS Epidemic Update*, Geneva, December 2003.
- UNAIDS, *AIDS, Poverty Reduction and Debt Relief: A Toolkit for Mainstreaming HIV/AIDS Programs into Development Instruments*, UNAIDS/World Bank, Geneva, Switzerland, 2001.
- UNAIDS, *HIV Voluntary Counselling and Testing: A Gateway to Prevention and Care, Case Studies*, Geneva, June 2002.
- UNAIDS, *Innovative Approaches to HIV Prevention: Selected Case Studies*, Geneva, 2000.
- UNAIDS, *The Impact of Voluntary Counselling and Testing: A Global Review of the Benefits and Challenges*, Geneva, 2001.
- UNCHR, *International Guidelines on HIV/AIDS and Human Rights*, res. 1997/33, U.N. Doc. E/CN.4/1997/150, 1997.
- UNDP, *Avoiding the Dependency Trap: Roma in Central and Eastern Europe*, Regional Human Development Report, Bratislava, 2002.
- UNDP, *How to Build Inclusive Policy Process: Institutionalising Dialogue between governmental and Non-governmental actors, Practice from the CIS*, Bratislava, 2002.
- UNDP, *Millennium Development Goals: A Compact among Nations to End Human Poverty*, Human Development Report, New York, 2003.
- UNGASS, *Declaration of Commitment*, 2001.
- UNHCR, *2002 UNHCR Population Statistics*, Geneva, 2003.
- UNICEF and IOM, *Overview of HIV/AIDS in South Eastern Europe. Epidemiological data, vulnerable groups, governmental and non-governmental responses*, January 2002.
- UNICEF, *Social Trends in Transition, HIV/AIDS and Young People, Quality of Learning in Schools*, Social Monitor, Florence, 2002.

UNODC, *Global Illicit Drug Use Trends 2003*, Vienna, 2003.

UNODC, *Preliminary Assistance to Harm Reduction: Express Assessment of Drug Abuse in Central Asia*, Vienna, 2001.

Vannappagari, Vani, and Robin Ryder. *Monitoring Sexual Behaviour in the Russian Federation. The Russia Longitudinal Monitoring Survey*. Report submitted to the U.S. Agency for International Development. Carolina Population Centre, University of North Carolina at Chapel Hill, North Carolina. April 2002.

Vickerman, P., Watts, C., 'The Impact of an HIV prevention intervention for injecting drug users in Svetlogorsk, Belarus: Model Predictions', *International Journal of Drug Policy* 13, 2002.

Ward, J. et al., *Key Issues in Methadone Maintenance Treatment*. University of New South Wales Press, New South Wales, 1992.

WHO, *A Commitment to Action for Expanded Access to HIV/AIDS Treatment*, International Treatment Access Coalition, Geneva, 2002.

WHO, *Multi-city Study on Drug Injecting and Risk of HIV Infection*, International Collaborative Group, Geneva, 1994.

WHO, *Prevention of Mother-to-Child Transmission of HIV: Selection and Use of Nevirapine*, Technical Note, 2001.

WHO, *Scaling Up Antiretroviral Therapy in Resource Limited Settings, Guidelines for a Public Health Approach*, Geneva, 2002.

Wilson, T. et al., 'A Case-control Study of Beliefs and Behaviours Associated with Sexually Transmitted Disease Occurrence in Estonia', *Sexually Transmitted Diseases*, 2001, 28.

World Bank, *Averting AIDS Crises in Eastern Europe and Central Asia: A Regional Support Strategy*, Washington, 2003.

World Bank, *Confronting AIDS: Public Priorities in a Global Epidemic*, Policy Research Report, Oxford University Press, New York, 1997.

World Bank, *Making the Transition Work for Everyone: Poverty and Inequality in Europe and Central Asia*, Washington DC, 2000.

World Bank, *Transition: The First Ten Years – Analysis and Lessons for Eastern Europe and the Former Soviet Union*, Washington DC, 2002.

