EBOLA RECOVERY IN SIERRA LEONE

BUILDING A SAFE HEALTHCARE WASTE MANAGEMENT SYSTEM

Over 12 months, the project will pilot a medical waste management system for the safe, effective and environmentally safe disposal of infectious waste.

It will help stop the spread of infectious diseases, boost defenses against future epidemics and protect communities and the environment against damaging pollutants.

Expected results:

A new national policy and regulatory framework for the safe and effective disposal of healthcare waste.

Better national and local capacity to safely treat and dispose of infectious waste from healthcare facilities within three pilot districts. Capacities of clinical staff, environmental and cleaning staff at all selected facilities will be strengthened through trainings and mentoring to change waste disposal practices, from generation and segregation of waste, to the sterilization and disposal of waste.

A new public-private partnership for healthcare waste management that will reduce the burden on the Ministry of Health to manage healthcare waste.

The project will be led by UNDP in collaboration with the WHO and other UN Agencies, the Centre for Disease Control, a range of civil society partners and business in support of the Ministry of Health and Sanitation (MOHS) and the Environmental Protection Agency (EPA).

Why it matters:

Limited infection prevention and control, including the inadequate and unsafe disposal of healthcare waste, contributed to the rapid spread of Ebola in Sierra Leone in 2014. 296 health care workers were infected, and 221 of them died.

The management and treatment of healthcare waste was challenging before the Ebola outbreak. Safe, modern equipment that meets international standards was unaffordable and unfeasible for Sierra Leone due to the lack of available infrastructure and trained staff.

When Ebola hit, infectious healthcare waste posed far more serious health risks, especially to staff working in and around Ebola Treatment Centers (ETCs). Waste
volumes grew exponentially, through Ebola’s spread, and as far more personal protection equipment and disposable items were needed for healthcare workers.

For the past few decades, infectious healthcare waste in was burned in open pits, barrels, or simple brick oven-type incinerators. Yet infectious healthcare waste has a high moisture content, meaning some may not burn at all, and so may still contain infectious pathogens.

Burning infectious waste also releases highly damaging and dangerous pollutants that can impact patients, health and waste workers, surrounding communities and the environment.

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**Project activities**

The project supports the Ministry of Health’s six-year health recovery strategy to run until 2020, by strengthening infection control and prevention measures by establishing safe, healthy work settings for healthcare workers, patients and nearby communities.

The pilot project will initially cover three districts to be determined by:

- the need and volume of healthcare waste generation;
- the availability of infrastructure (i.e. water supply) to meet coverage demands;
- the capacity and commitment of healthcare facilities to incorporate waste management; technologies (i.e. autoclaves) into their facilities; and,
- the alignment with the governments health systems strengthening plans.

**Develop a national healthcare waste management policy and regulatory framework** for the collection, processing and disposal of healthcare waste. This will bring together business and government agencies to monitor and regulate healthcare waste management, and to document environmental impacts.

**Establish centralised, district level hubs for the processing of healthcare waste**, including the collection of healthcare waste from surrounding healthcare facilities.

**Support priority healthcare facilities in improving their infrastructure and capacity** for the treatment of infectious healthcare waste, using non-burn waste treatment technologies such as autoclaves, rather than burning healthcare waste.

**Establish a private public partnership** for healthcare waste management that will reduce the burden on the Ministry of Health to manage healthcare waste. Stringent regulatory frameworks and monitoring systems will be established to ensure the safe disposal of healthcare waste. As healthcare waste management is a nascent sector in Sierra Leone, the project will work to strengthen and build the capacity of a select group of pre-qualified private sector companies to participate in the competitive tendering process, in addition to continued technical assistance of the successful vendor to manage and safely dispose of healthcare waste.

**Budget**

A tentative Budget of US $1,500,000 with a duration of 12 months
Why UNDP?

UNDP has extensive experience in introducing non-incineration technologies for healthcare waste disposal in Argentina, Latvia, Lebanon, Senegal and the Philippines. With partners, UNDP has also developed regional healthcare waste management programmes for Ghana, Madagascar, Tanzania and Zambia.

UNDP’s contributions to strengthening Ebola and non-Ebola related healthcare waste management in Ebola Treatment Centres and other health facilities throughout the crisis provides unique and valuable insight in Sierra Leone’s relevant recovery needs. Additional units were installed in EVD affected Liberia and Guinea, giving UNDP a unique insight into the requirement for a regional approach to waste management to strengthen border security and infection control.