

Ghana Country Profile: Health Care Waste Management (HCWM) in the Context of COVID-19

September 2020

Background Information on HCWM

Population	30,417,856 ¹
National entities in charge of HCWM	Ministry of Health, Ministry of Environment
Municipal solid waste (MSW) generation	3,538,000 tonnes/year ²
Health care waste (HCW) generation	Unknown
On-site vs. off-site treatment	On-site and off-site
Health care waste exports?	No
National solid waste management law	The Criminal Code, 1960 (Act 29) 296(1)
National solid waste strategy	The National Sanitation Policy (MLGRD, 1999 & revised 2010) ³
National HCW management law	Hazardous and Electronic Waste Control and Management Act, 2016
National HCW policy	Health Care Waste Management Policy for Ghana, September 2019
National HCW management strategy	National Guidelines for Health Care Waste Management in Ghana, September 2019
National guidelines or standard operating procedures (SOPs) for HCWM	Health Care Waste Management Policy for Ghana, September 2019

Policy and Planning Environment

- Waste management in Ghana is a multi-sectoral effort with the Ministry of Sanitation and Water Resources, Ministry of Local Government and Rural Development (MoLGRD) and the Environmental Protection Agency (EPA) playing key roles as implementers and regulator respectively. The overall responsibility for implementation is discharged through the District, Municipal and Metropolitan Assemblies which are directly under the MoLGRD.²

- The main goal of the HCWM policy is to provide direction for effective, efficient and safe management of health care waste through the adoption of best available technologies and best environmental practices to prevent injuries, infections and other hazards, and to protect and promote public health and the environment for sustainable development.
- The Health Facilities Regulatory Agency was set up to license facilities for the provision of public and private health care services. It has an important responsibility for proper healthcare waste management in health facilities.²

Legal Framework

Ghana has signed and ratified the Basel, Stockholm, and Minamata Conventions. Ghana has also signed the Bamako Convention (a treaty of African nations prohibiting the import of any hazardous waste, including radioactive waste as well as clinical waste from health care in hospitals, medical centers and clinics).

The following laws are relevant in the context of HCWM²:

- The Constitution of the Republic of Ghana, 1992
- The Environmental Protection Agency Act, 1994 (Act 490)
- Environmental Assessment Regulations, 1999 (LI 1652)
- The Local Government Act, 1993 (Act 462)
- National Building Regulations, 1996 (LI 1630)
- Town and Country Planning Act, 1945 (CAP 84)
- Food and Drugs Law 305b (1992)
- Mortuaries and Funeral Facilities Act, 1998 (Act 563)
- The Criminal Code, 1960 (Act 29)
- Public Health Act of Ghana, 2012 (Act 851)
- Hazardous and Electronic Waste Control and Management Act, 2016 (Act 917)

¹ The World Bank

² A Global Snapshot of Solid Waste Management to 2050, World Bank, 2018

³ Health Care Waste Management Policy for Ghana, Ministry of Health, September 2019

Snapshot of COVID-19 Health Care Waste Situation

Declaration of the pandemic	March 12, 2020
Number of cumulative confirmed cases as of Sept 18, 2020	45,714
Number of HCFs surveyed	8
Pre COVID-19 HC waste generated (among surveyed)	1.8 kg/bed/day
HC waste during COVID-19 (among surveyed)	2.1 kg/bed/day
Percent increase (approximate)	16%
Types of COVID-19 waste generated	PPE (gloves, masks, gowns), diagnostic samples, cultures, swabs and disposable medical devices
Changes to HCWM policy	Yes
Most common HCW treatment technology	Autoclave/incinerator
Service disruptions due to COVID-19 (among surveyed)	No ⁴
Emergency treatment/disposal procedures in place	Yes ⁵
Special COVID-19 training in place	Yes
Collection capacity surpassed?	Unknown
Treatment capacity surpassed?	Unknown
Disposal capacity surpassed?	Unknown

Legal Framework (cont'd)

The existing legal documents which directly provide additional guidance on health care waste management include:

- The National Sanitation Policy (MLGRD, 1999 & revised 2010).
- Health Care Waste Management Policy and Guidelines (MOH, 2006).
- Guidelines for Management of Health Care and Veterinary Waste, (EPA, 2002).

Institutional Framework

- The Ministry of Local Government and Rural Development, through the Metropolitan, Municipal and District Assemblies, conducts environmental monitoring inspections and enforces compliance with environmental standards/regulations and guidelines established by the MOH, EPA and other national regulatory agencies on health care waste management.
- The Ministry of Environment, Science, Technology and Innovation is responsible for the formulation and coordination of policies governing the environment.
- The Environmental Protection Agency is responsible for licensing transportation of hazardous waste on public roads, licensing waste treatment and disposal facilities, and monitoring.

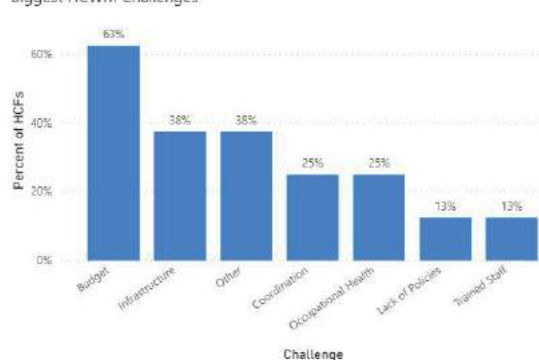
Programs and Actions in Place during COVID-19

UNDP, in partnership with the Ministry of Health, Ghana Health Service, and other partners are implementing a project to promote the use of best environmental practices and technologies for safe and effective HCWM, including the adoption of non-incineration waste treatment technologies. One benefit of these efforts is to reduce the risk of COVID-19 infections.

HCWM Challenges during COVID-19

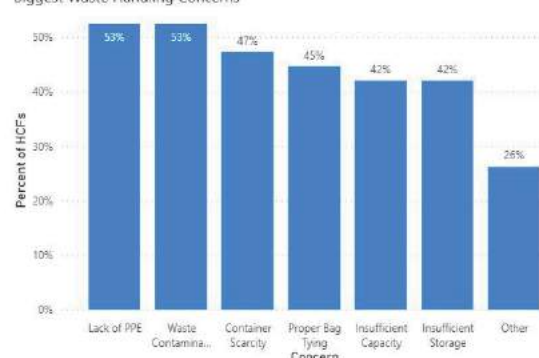
The HCF survey respondents cited the greatest challenges for HCWM as a **lack of dedicated funding** for operations, lack of **infrastructure**, and lack of **coordination**:

Biggest HCWM Challenges



The respondents also identified the **lack of PPE, waste contamination, container scarcity and improperly tied bags** as major concerns for waste handlers:

Biggest Waste Handling Concerns



Options for Improvement/Opportunities

- Enact national legislation to enforce the existing policy guidelines.
- Ensure funding to increase capacity of HCW collection, transportation, storage, treatment, and disposal systems.
- Provide adequate containers, HCW bags and PPE for waste handlers to avoid service disruptions.
- Increase training for personnel at HCFs regarding proper waste segregation, handling and final disposal.
- Conduct continued monitoring to identify any new challenges.

⁴ Two surveyed government officials responded that there were service disruptions during the COVID-19 pandemic. However, all eight HCFs reported no service disruptions.

⁵ Emergency procedures in place among surveyed HCFs include: On-site open burning, sending untreated HC waste to landfills and using industrial furnaces to incinerate HC waste