

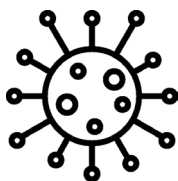
ENSURING EFFECTIVE HEALTH CARE WASTE MANAGEMENT DURING THE COVID-19 EMERGENCY RESPONSE

The outbreak of COVID-19 as a global pandemic has overstretched health systems in affected countries. In a normal health delivery situation, most of the waste generated in health care facilities is comparable to domestic waste and usually called “non-hazardous” or “general health care waste”. Only about 25% is considered as hazardous requiring special treatment processes to reduce risks of infection to patients, hospital staff and nearby communities, as well as pollution of the environment. This scenario is changing in the context of the COVID-19 pandemic, as according to [WHO \(2020\)](#), materials and general waste contaminated with the COVID-19 virus from an infected patient is considered as infectious waste, therefore requiring that safety measures for infectious waste are applied. Experiences from China and other countries show that the pandemic and its treatment processes have also led to an increase in volumes of health care waste as well as elevated risk to workers. This therefore requires the prioritisation of effective health care waste management in service delivery during this period.

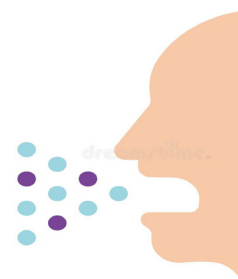
According to [WHO \(2020\)](#), COVID-19 virus is transmitted through exposure to respiratory droplets and contact with infected person. However, droplets may also land on surfaces where the virus could remain viable; thus, the immediate environment of an infected individual can serve as a source of transmission. This makes the wards and quarantine stations where such patients are kept are potentially infectious areas, with materials used also potentially infectious.

Currently, the use of PPEs and other consumables which are mostly single use items in providing care for COVID-19 patients has increased. For instance, the use of gloves, face masks, cotton and needles for injections and laboratory testing of the cases has caused a sky-rocketing increase in potentially hazardous waste from these medical procedures. Due to the means of transmission (droplets from spluttering or sneezing, coughing or coming into contact with hard surfaces where virus are deposited), this waste could easily be contaminated either by health care providers, patients or caregivers, thereby exposing this same group of persons and nearby communities to risks of infection if appropriate processes for Infection Prevention and Control (IPC) and Health care waste management (HCWM) are not followed.

Attention Medical Waste



Effectiveness in HCWM in this case includes observing proper waste segregation at source (using the right bins and colours), observing personal protection protocols during waste transportation from wards, and finally, the treatment/sterilisation of infectious waste before going to a landfill OR incinerating under acceptable temperatures (850 degrees and above).



Ghana already has a Policy and Guidelines on HCWM that have been updated in 2019 to adhere to international best practices and should be used in this context. A brief on specific HCWM processes and actions that should be mainstreamed in the activities of facilities managing emergency situations is being submitted separately.

Why is it important to ensure effective HCWM in responding to the COVID-19 pandemic?

- Reduce the spread of infection among health workers, facility cleaning staff, waste management staff, patients and nearby communities;
- Prevent a post-pandemic reoccurrence of infections in nearby communities through high exposures to improperly managed and disposed health care waste with traces of the COVID-19 virus;
- Build an effective end-to-end health care delivery system.

Not prioritizing safe management of infectious health care waste from facilities with suspected and confirmed COVID-19 cases could:

- Increase exposure and infection rate among frontline health care workers who generate the waste, auxiliary staff such as orderlies at the facilities, other patients and visiting family members – with a potential trickle-down effect on their families back home.
- Increase the spread of the disease among actors in the waste management chain such as staff of waste collection companies, those managing waste treatment plants in health facilities, and scavengers at temporary waste holding site and municipal waste dump/disposal sites - if such waste is not properly disinfected or treated before disposal. If these susceptible groups are not protected, they may affect the members of their immediate communities as well.
- Lead to dumping of untreated infectious waste at municipal waste disposal facilities and increase the risk of infection for nearby communities.
- Lead to indiscriminate burning of infectious waste under unacceptable temperatures – releasing toxic substances (dioxins and furans) into the atmosphere.
- Affect the country's case incidence making case containment difficult.

In Ghana, UNDP in partnership with the Ministry of Health, Ghana Health Service and other partners has been implementing a project to promote the use of best environmental practices and best available techniques for effective HCWM, including the adoption of non-incineration waste treatment technologies. UNDP and its partners intend to build on and scale up the gains achieved by this project with a mix of interventions, with the objective to reduce risk of COVID-19 infections by promoting safe and effective health care waste management.



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