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How to Manage COVID-19 Healthcare Waste

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COVID-19 has swept through the world in a very short period, causing widespread concern for many countries. The surprise global effect of COVID-19 has caused a shortage in certain supplies, such as gloves, gowns and masks. Fortunately, COVID-19 infection, has largely been contained and impacts have been minimal on Pacific Island communities.

Large volumes of solid waste, such as personal protective equipment, are being generated in response to the pandemic. In contrast to previous epidemics (e.g. the Ebola crisis of 2014-2016), patients do not produce large quantities of biohazard or pathological waste. If there is a silver lining to be observed in this pandemic, this is certainly it.

During the COVID-19 outbreak in Hubei Province, People's Republic of China (PRC), infectious medical waste increased by 600% from 40 tons per day to 240 tons per day. This quickly overwhelmed existing medical transport and disposal infrastructure around hospitals. Pacific Island Countries may face similar challenges should the infection spread through the community. Additional waste management systems and facilities may be needed.

Management of Healthcare Facilities Waste Potentially Contaminated with COVID-19

The U.S. Centers for Disease Control and Prevention (CDC) has recommended that control of COVID-19 waste be handled through routine procedure, with personal protective equipment standard to infection control. Medical waste generated in healthcare facilities treating COVID-19 patients is no different than waste coming from facilities without COVID-19 patients. CDC's guidance states that management of laundry, food service utensils, and medical waste should be performed in accordance with routine procedures. There is currently no evidence to suggest that facility waste needs any additional disinfection.

<u>Please note:</u> Any waste that has been in contact with a facility that is housing a COVID-19 patient or a person who has been exposed to the coronavirus, including decontamination materials, should be treated as medical waste.

Management of Household Waste Potentially Contaminated with COVID-19

Suggested guidance on management of household waste below comes from European Centre for Disease Prevention and Control technical report "Infection prevention and control in the household management of people with suspected or confirmed coronavirus disease (COVID-19)", dated 30 March 2020.

- An individual waste bag should be placed in the patient's room.
- Paper tissues and face masks used by the patient should be immediately put in the waste bag that was placed in the patient's room.
- Gloves and face masks used by the caretaker and by the cleaner should be immediately put in a second waste bag, placed near the door to the patient's room, when the caretaker or cleaner leave.
- The waste bags should be closed before they are removed from the patient's room and replaced frequently; they should never be emptied in another bag.
- These waste bags can be collected and placed in a clean general garbage bag; the closed patient waste bags can be put directly in the unsorted garbage. No special collection activity or other disposal method is necessary.
- After handling waste bags, strict hand hygiene should be performed: use water and soap or alcohol-based hand disinfectants.







COVID-19 Health Care Facility Waste Mana

Health Care Facility Waste Management

Segregating waste at source should be observed



Treat corona virus waste as normal infectious waste



Storage areas must be clean, secure, and protected from elements, pests, disease vectors, and the public



Collect the bags regularly, and transport waste collected in leak-proof bags, while sharps must be in puncture proof containers



Health and Safety of Waste Management Collection and Facility Operators

Taking measures to protect the health and safety of workers and providing them assurance about how employers are addressing the risks related to the COVID-19 crisis are essential for increasing workers' confidence and ensuring continuity of waste management services. Good practices communicated by stakeholders in the waste management sector include:

- Adapting the organisation of staff to avoid passing on infection among teams, i.e. respecting distancing between
 individuals, reducing to the minimum the number of workers present in the same area;
- Ensuring the availability and appropriate use of adequate personal protective equipment (PPE) as well as of suitable disinfecting products;
- Ensuring strict adherence to enhanced hygiene standards, including frequent change and cleaning of PPE and professional clothing; replacing professional gloves in the event of breakage or any incident of potential contamination; sanitizing regularly facilities, vehicle cabins and clothes;
- Ensuring that where masks are usually worn, strict protocols on how to put and take off PPE are followed, thus avoiding incidental contact and contamination;
- Where appropriate, encouraging specific working conditions for vulnerable people, such as elderly workers and persons with specific chronic health problems.

The European Union Pacific Waste Management Programme (PacWastePlus) has compiled the following list of references containing suggestions and guidelines in dealing with healthcare waste management issues created by **COVID-19**:

- https://www.cdc.gov/coronavirus/2019-ncov/index.html
- https://www.cdc.gov/coronavirus/2019-ncov/hcp/faq.html#Waste-Management
- https://www.ecdc.europa.eu/en/publications-data/infection-prevention-control-household-management-covid-19
- https://www.osha.gov/SLTC/covid-19/
- https://www.adb.org/sites/default/files/publication/578771/managing-medical-waste-covid19.pdf
- https://www.scmp.com/news/china/society/article/3065049/coronavirus-china-struggling-deal-mountain-medical-waste-created
- https://ec.europa.eu/info/sites/info/files/waste management guidance dg-env.pdf
- https://osha.europa.eu/en/highlights/covid-19-guidance-workplace
- https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-covid-19
- https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/licensing/covid19/20p2231-infomation-for-the-waste-and-recycling-industry.pdf
- https://www.acrplus.org/en/municipal-waste-management-covid-19