

Pandemic and disaster waste: Current trends across the Asia Pacific region



Waste issues during pandemic and disasters: Integrated waste management systems needed

Collection of waste, waste segregation, recycling, storage of waste, waste exchange, final disposal

Disaster waste management systems

Medical waste management systems

Household waste management systems

Debris and rubble

Hazardous wastewater

Sanitation waste

PPE waste

Hazardous Wastewater Infectious
Sanitation/
sewerage

Hazardous household waste Lockdown household waste

Cumulative stress on systems, technology and capacity

Household waste: More, and more hazardous

In Thailand, the amount of household waste has risen by 15% during lockdown to 6,300 tonnes a day nationwide

Recycling initiatives halted during lockdown

PPE for waste management staff was inadequate

Hazardous waste risk at household level increased due to contaminated PPE - face masks, tissues etc.

UNEP note that household waste should be properly segregated. In Bangkok, special red bins have been placed at district offices, health service centres, and hospitals only for face masks

Reducing waste volumes is key. A campaign to encourage food delivery and other services to use less plastic was rolled out

Service providers should have trained workers provided with PPE. They should use designated vehicles for handling household medical waste and be familiar with the safe use of disinfecting equipment.

Medical waste: More, and more PPE

In Hubei Province, medical waste increased by 600% from 40 to 240 tonnes per day.

Estimated Infected Persons



3.4 kilograms



Increase in Infectious Medical Waste per Day of Outbreak^a

In China the transport and disposal infrastructure elements of the waste management system were the first to break down.

Every country risks increased trafficking, illegal recycling, and illegal dumping of medical waste during this period

Fact Sheets from UNEP describe: 1. Preferred technologies — autoclave, sterilization, twin chamber incineration, engineered hazardous landfill. 2. Stop-gap solutions: de-Montford incinerators and barrel incinerator with air induction; 3. emergency —only solution - onsite pit burial.

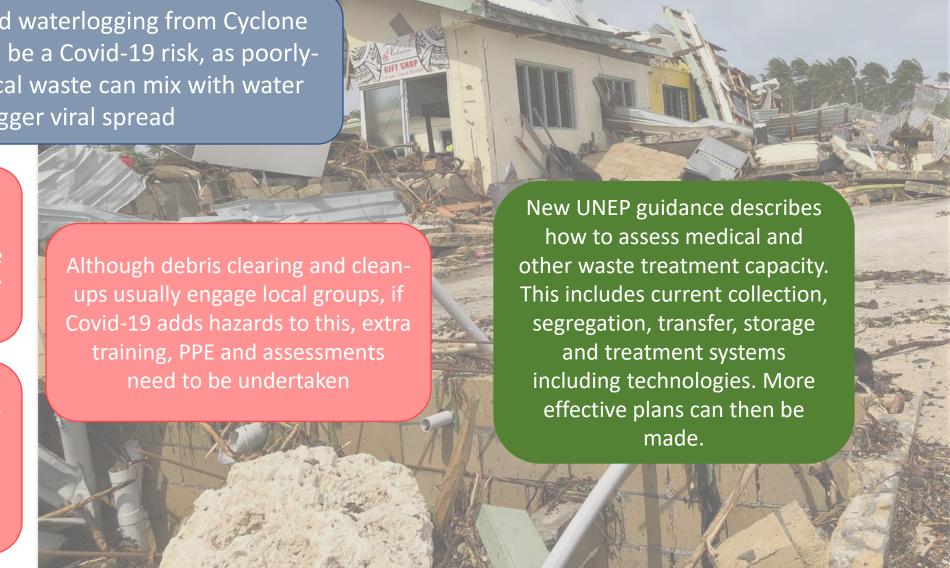
Open burning and uncontrolled dumping are not suitable.

Disaster waste: More hazardous

In India, widespread waterlogging from Cyclone Amphan is feared to be a Covid-19 risk, as poorlymanaged biomedical waste can mix with water and trigger viral spread

Scaling up waste management systems in emergency response is difficult to do rapidly during lockdown

Current contingency and disaster plans may not consider increased hazardous waste mixed with disaster waste







1 Introduction to COVID-19 waste management

2 National medical waste capacity assessment

3 How to choose your waste management technology to treat COVID-19 waste

4 Policy and legislation linked to COVID-19 and pandemics

5 Links to Circularity – Non-healthcare waste

6 Linkages of Air Quality and COVID-19

7 Household medical waste management strategies

9. Disaster/Conflict Affected States and Vulnerable Humanitarian Operations

NO UNCONTROLLED DUMPING, NO OPEN
BURNING
Protect the environment and our health

https://www.unenvironment.org/resources/working-environment-protect-people-uneps-covid-19-response

10. COVID-19, WASTEWATER, AND SANITATION

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Thank you



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