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Household medical waste management strategies

**NO UNCONTROLLED DUMPING,
NO OPEN BURNING**

Protect the environment and our health

For more information visit unep.org or contact **Kevin Helps** (Head, GEF Unit, Chemicals and Health Branch, UNEP) kevin.helps@un.org

The problem

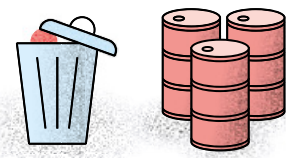
As COVID-19 spreads to the developing world, with limited access to medical support, increased numbers of cases will have to self-medicate at home. Proper management of household medical waste will therefore become key to stop further spread of the COVID-19 virus and avoid putting others, including waste workers, at risk.



Medical and healthcare waste at household level includes contaminated and non-contaminated personal protective equipment, expired and discarded medicines, injection needles and other sharps, and any other healthcare related waste.



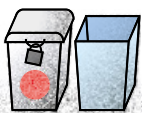
Household waste gets contaminated if medical and other hazardous waste is not segregated. Non-segregation will increase the volume of hazardous waste that requires special collection, storage, and treatment processes. This waste can pose significant risks to human health and the environment if improperly handled. It also reduces the opportunity for recovery and recycling of otherwise non-hazardous waste from households.



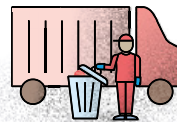
Chemicals are also used to reduce the risks of COVID-19 contamination at the household level. Increased use of these chemicals poses a risk in their own right and so should be managed responsibly.

Guidance

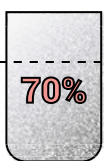
During the COVID-19 pandemic, additional waste needs to be segregated at the household level in dedicated containers (medical waste bins) that must be properly covered, in line with national and local waste management and/or [WHO guidelines](#)



If there is a suspected or confirmed COVID-19 case in a household or people are in quarantine, then waste must be considered potentially contaminated and handled with care. The waste container should be sealed, temporarily stored, and collected at the first opportunity to prevent the risk of spread of the disease



Service providers should put in place specialized teams of trained workers that are provided with personal protective equipment. The waste company should use designated vehicles for handling household medical waste and be familiar with the safe use of disinfecting equipment. They should also play a role in helping to inform the public on how to handle household medical waste and promote segregation at the household level.



To reduce direct contact with medical waste, any bag liner should be sealed before the bag is 70% filled. Waste handlers should ensure they wash hands thoroughly after sealing any bags. For extra safety, the bag can be put in another bin liner of a specific, recognizable colour (often yellow).

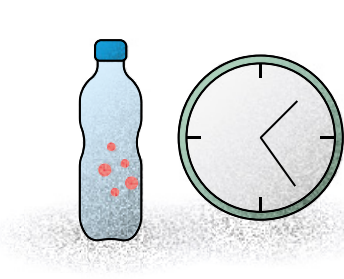


Caution: Open dumping and open burning of medical household waste causes serious pollution that poses threats to human health and the environment and should therefore be avoided. Waste management is an urgent and essential public service during the pandemic to minimize possible secondary impacts upon health and the environment. For more information, check the Factsheets on waste treatment technologies and on air quality.

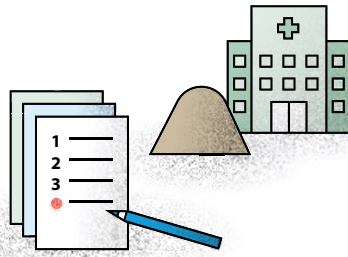


Stored waste should be kept safe from possible scavengers. Temporary storage at the household level avoids further overloading of the medical and regular waste management systems.

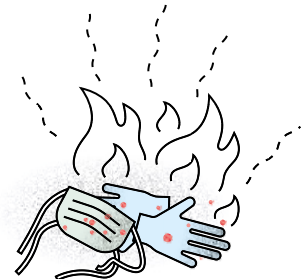
Facts



It is unclear at this time how long the virus can live on different surfaces. There are several studies ongoing with often conflicting results.

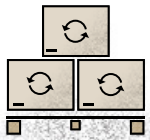


Although no global data exist on the increase in the amount of waste generated due to the pandemic, it is likely that the figure will be similar to hospitals where a six-fold increase in medical waste generation has been reported.

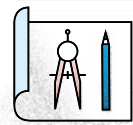


Over 3 billion people worldwide lack access to controlled waste disposal facilities. Absence of household level segregation of potential COVID-19 related medical waste and lack of healthcare waste treatment capacity could lead to increased uncontrolled dumping and open burning of waste.

Way forward



Municipal waste management systems need to be properly organized and equipped to deal with household medical waste, including information and advice on clear labelling. Advice should also cover areas such as source segregation of waste, transportation, disinfection, storage and treatment.



Guidelines for household-level segregation and storage of healthcare waste need to be developed in line with national waste management and/or health care guidance. They should be practical, easily understood and based on access to locally available materials such as packaging.



Householders are instrumental in segregating medical and healthcare waste at the source. This should be promoted through easy access to practical guidance and public awareness campaigns based on [WHO guidelines](#) and [Stockholm Convention guidance](#).



The existing medical waste treatment capacity at the local and national level needs to be assessed and treatment capacity used or expanded accordingly. For more information, check the UNEP COVID-19 factsheet on inventory.

“In COVID-19, people must know how to protect themselves - from immediate contamination but also long-term health risks caused by toxic pollutants. Treat household medical waste responsibly: don't dump, don't open burn.”

Tessa Goverse, Coordinator, Chemicals, Waste and Air Quality Programme, UNEP