Waste management standards

09 March 2023

Key points

- Solid waste management is a joint responsibility of field coordination (camp coordination and camp management), as well as the WASH and health sectors.
- In urban and out-of-camp settings, national systems should be employed and, where necessary, strengthened.
- Ensure that refugee communities are involved in solid waste collection at household and community level.

1. Overview

Uncontrolled accumulation of garbage is unhealthy, and promotes rodent and insect borne disease.

Because most of the garbage that persons of concern generate is organic, it is frequently not considered a problem: the issue tends to be neglected, even though the volume and weight of household and market-place garbage can be significant, and includes non-organic materials such as packaging, cans and plastics.

At the beginning of an emergency, hygiene and waste disposal are usually poor, so vermin and other pests, including rodents, proliferate rapidly.

If food is distributed to refugees in metal cans, their disposal should be given particular attention, not only for aesthetic reasons but because they pose a health hazard (injuries to children, potential breeding sites for mosquitoes, etc.). In addition, they are not biodegradable.

The medical waste generated by health centres is also a hazard (used syringes and needles, contaminated bandages, laboratory specimens, etc.). Access to medical sanitary services should
be well controlled, and waste should be treated separately, without delay. 

Routines should be established for the storage, collection and disposal of garbage. This is particularly important in high-density sites.

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2. Main guidance

Emergency standard

- **Storage.** One (100 litre) container should be provided per 10 families. Metal 200 litre drums cut in half are often used. If possible, containers should have lids and drainage holes in the bottom. Containers should be placed throughout the site at a maximum distance of 15 metres from each dwelling. It is not economical or practical to use concrete bins: they are difficult to empty, encourage rodents, and disperse garbage round the area.

- **Collection and transportation.** Garbage should be collected regularly from containers, at least twice a week. Camps near a city may benefit from local refuse services. It is expensive to use tractors with trailers and this should be a last option, employed only in large and densely populated camps. Wheelbarrows or carts, hauled by hand or animals, are usually more appropriate.

- **Frequency of collection.** UNHCR field staff and their partners must ensure that domestic, market, commercial, and medical waste collection points are emptied at least twice a week and more frequently if required. This is an essential requirement, to break fly-breeding cycles and ensure waste does not fester and become a nuisance.

- **Market waste.** UNHCR field staff and partners must ensure that waste from market places is collected and managed in a timely, efficient, and hygienic manner. Special arrangements may be required for slaughterhouse and fish waste.

- **Hazardous substances.** Lead-acid batteries, used paints and oils, and broken electrical equipment can pose serious risks to public health and the environment, even in small quantities. In all settings, UNHCR field staff and their partners must make arrangements to collect such waste separately. Prioritize interventions that prevent hazardous substances from entering the domestic waste stream over management of relatively inert domestic waste.

- **Medical waste.** UNHCR health partners must ensure that all medical waste is collected, handled, treated and disposed of with the least possible risk to health-care staff, waste management staff, and persons of concern. All infectious waste, non-infectious waste, sharps, and hazardous waste must be managed in strict compliance with national protocols and (in their absence) global WHO protocols. Transporting waste creates additional risks and it is highly recommended that medical waste is therefore managed and disposed of on-site, using simple methods.
Longer-term standard

The same standards apply to emergency and long term situations.

Annexes

UNHCR, indicators guidance

UNHCR Hygiene Promotion Guidelines 2017

3. Links

UNHCR, WASH Manual, 2020
WHO/WEDC Technical note no. 7: Solid waste management in emergencies (2013)
WHO: Overview of technologies for the treatment of infectious and sharp waste f...
WHO: Safe management of wastes from health-care activities (2014)
Sphere Project, Sphere Handbook
WHO: Management of wastes from immunisation campaign activities (2004)

4. Main contacts

Contact DRS/Wash Unit. At: HQWASH@unhcr.org.