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**Annex 4**

# **Summary of Sanitation Requirements during Disasters\***

## **During evacuation**

### *Water*

Minimum 3 liters (0.8 US gal) per person per day in cold and temperate climates. Minimum 6 liters (1 1/2 US gal) per person per day in hot climates. Water from suspected sources must be boiled or disinfected.

### *Waste disposal*

All-purpose trench: depth 60 cm (2 ft); width 45 cm (1 ft 6 in); length 3 m (10 ft) per 1000 persons.

### *Food*

Non-perishable, not requiring cooking.

## **During relief operations**

### *Tent camps*

#### Site:

- slope of land and nature of soil favoring easy drainage;
- protected from adverse weather conditions;
- away from mosquito breeding-places and refuse dumps;
- away from commercial and industrial zones.

\* Source: M. Assar. *Guide to Sanitation in National Disasters*, pp. 113-115. The World Health Organization, 1971.

**Layout:**

- area 3-4 hectares per 1000 persons (330-440 ft<sup>2</sup> per person);
- width of roads 10 m (33 ft);
- minimum distance between tent pegs and edge of road 2 m (7 ft);
- minimum distance between tents 8 m (26 ft);
- minimum floor area in tent 3 m<sup>2</sup> (33 ft<sup>2</sup>) per person.

**Water distribution:**

- minimum capacity of tanks 200 liters (50 US gal);
- maximum distance from farthest tent 100 m (330 ft).

**Refuse containers:**

- metallic with tight lid;
- capacity 50-100 liters (13-26 US gal);
- 1 for every 4-8 tents or 25-50 persons.

**Latrine accommodation:**

- 5-6 seats per 100 persons;
- distance from tents 30-50 m (100-160) ft).

**Washing:**

- ablution bench, doubled-sided, 3 m (10 ft) long;
- 2 for every 100 persons.

*Buildings*

**Accommodation:**

- minimum floor area 3.5m<sup>2</sup> (40 ft<sup>2</sup>) per person;
- minimum air space 10m<sup>3</sup> (350 ft<sup>3</sup>) per person;
- minimum air circulation 30m<sup>3</sup> (1100 ft<sup>3</sup>) per person per hour;
- minimum distance between beds 75 cm (2 ft 6 in).

**Washing:**

- 1 hand basin for every 10 persons, or 1 wash bench, 4-5 m (13-17 ft) in length, for every 100 persons;
  - 1 shower head for 50 persons in temperate climates, 1 for every 30 persons in hot climates;
  - separate blocks for men and women.
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