

Health Risks Associated with Stagnant Water



Pools of standing or slow-flowing water provide a breeding ground for many insects, including mosquitoes that can transmit diseases. Poor and inadequate sanitation facilities due to the emergency can also increase the risk of disease transmission. Stagnant pools should not be considered a safe source of potable water. In addition, efforts should be made to eliminate standing water or pools of water which are immediately adjacent to housing structures.

Mosquitoes are considered possible vectors for disease. Different species of mosquitoes transmit different diseases and will breed in different types of water collections. A natural disaster may alter the typical disease transmission patterns and periodicity normally seen in an area.

Two of the key water-associated diseases seen in areas most affected by Typhoon Haiyan (Yolanda) are dengue and leptospirosis.

Dengue Fever

The viruses that cause dengue fever and dengue haemorrhagic fever are transmitted by the mosquito *Aedes aegypti*, and, to a lesser extent by *Aedes albopictus*. *Aedes aegypti* breeds mainly in water collections in artificial containers in the environment of human settlements, but not in groundwater pools and puddles, nor in swamps or other large natural bodies of water.

Effective prevention and control of epidemic dengue requires control of vectors. Prevention of mosquito-breeding in drinking-water containers should involve covering, emptying and cleaning of domestic water storage containers on a weekly basis.

Additional prevention and control measures include:

- preventing mosquitoes from accessing egg-laying habitats by environmental management and modification;
- disposing of solid waste properly and removing artificial man-made habitats;
- applying appropriate insecticides to water storage outdoor containers;
- using of personal household protection such as window screens, long-sleeved clothes, insecticide treated materials, coils and vaporizers;
- improving community participation and mobilization for sustained vector control;
- applying insecticides as space spraying during outbreaks as one of the emergency vector control measures;
- active monitoring and surveillance of vectors should be carried out to determine effectiveness of control interventions.

Leptospirosis

Human infection with *Leptospira* occurs through direct contact with the urine of infected animals or by contact with a urine-contaminated environment, such as surface water, soil and plants. The causative organisms have been found in a variety of both wild and domestic animals, including rodents, insectivores, dogs, cattle, pigs and horses. *Leptospira* can gain entry through cuts and abrasions in the skin and through mucous membranes of the eyes, nose and mouth. Human-to-human transmission occurs only rarely.

Populations should avoid wading through stagnant water that may be leptospirosis-infected, protecting open wounds and cuts, and seeking immediate health care for the development of illness or symptoms.

For more information, please visit:

World Health Organization, Water Sanitation Health,

http://www.who.int/water_sanitation_health/hygiene/envsan/emergencies_qa10/en/

World Health Organization, Disease Control in Emergencies,

http://www.who.int/diseasecontrol_emergencies/publications/who_hse_gar_dce_2011_4/en/.

World Health Organization, Leptospirosis

http://www.searo.who.int/entity/emerging_diseases/topics/Zoonoses_Leptospirosis-brochure.pdf

<http://www.who.int/zoonoses/diseases/leptospirosis/en/>

World Health Organization, Dengue

<http://www.who.int/mediacentre/factsheets/fs117/en/>

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Health Cluster Website: http://www.wpro.who.int/philippines/typhoon_haiyan/en/