

## Environmental Health



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Haiti is one of the countries where the environment is the most degraded. This degradation has caused severe social, economic and health consequences over the years. In addition, the degradation of watersheds and the deforestation leaves the population vulnerable to flooding.

In the last years Haiti has gone through critical situations related to natural disasters affecting mainly Port-au-Prince, Gonaives, Cap-Haitien, St Marc, Port-de-Paix, Hinche as well as towns and villages in the North West and Artibonite departments.

Insufficient and poor-quality water and sanitation present a major health risk in Haiti. PAHO/WHO estimates that diarrhea accounted for 16% of under-5 deaths in Haiti before the earthquake.

50% of the rural population and 33% of the urban population do not have access to an improved water source. 84% of the rural population and 62% of the urban population do not have improved sanitation facilities. 75% of the demand for energy is satisfied by wood or charcoal. Less than 10% of the solid waste in Port-au-Prince is collected.

The earthquake of January 12, 2010 damaged Haiti's already weak power, water and sanitation systems and created enormous challenges among displaced populations living in temporary settlements.

Water quality, Sanitation and hospital waste management were a priority due to the heavy load of medical activities and surgeries.

The WASH Cluster estimated that a total of 1.1 million displaced people in Port-au-Prince, Leogane, Petit Goave, Gressier and Jacmel required emergency latrines. The interim plan was to provide 12,950 latrines by April (for approximately 650,000 people) and 21,000 more within six months (moving toward the goal of 1 latrine for every 100 people).

PAHO/WHO's environmental health activities were crucial as they were about improving access to safe water, sanitation and hygiene in order to prevent infections and the spread of diseases.

The situation in the camp and the upcoming rainy season pose additional threats and challenges to maintaining safe standards of sanitation. Diarrhea and water-borne diseases are an immediate and a longer-term threat, as well as vector-borne diseases such as malaria and dengue.

### Activities carried out :

- **Water quality:** PAHO/WHO is working with National Organization for Drinking Water and Sanitation (DINEPA) and with the Ministry of Health (MSPP) and Director for Health Promotion and Environmental Protection (DPSPE) on water quality guidelines including a water safety plan. PAHO/WHO is supporting the Ministry of Public Work and Telecommunication (MTPTC) with chlorination chemicals for the water distributed to temporary camps (over one million liters of water were chlorinated every day and about 50 water tankers were providing water to healthcare settings and to the affected population). PAHO has been providing laboratory assistance for the Water Society in Port-au-Prince to re-start water quality control activities. In addition PAHO/WHO is carrying out water analysis at the filling stations to ensure quality, jointly with Technischen Hilfswerks (THW), a German NGO and the Health Cluster.
- **Sanitation:** PAHO/WHO is collaborating with National Organization for Drinking Water and Sanitation (DINEPA) and the United Nations Children's Fund (UNICEF) WASH Cluster on sanitation issues including the safe disposal of excreta, the construction of excreta disposal lagoons, and the provision and collection of waste disposal bags.
- **Health Care Waste:** PAHO/WHO is collaborating with the National Organization for Drinking Water and Sanitation (MSPP/DPSPE), Direction of Pharmacy and Medicines (MSPP/DPM), Direction of Health Service Organization (MSPP/DOSS), UNICEF, UNFPA, JSI and MTPTC/SMCRS in the triage, collection and safe disposal of health care waste. PAHO/WHO sits on the National Committee for the Security of Injections (CNIS), and is supporting the MSPP in the implementation of the National Policy on the Security of Injections and Waste Management (SIGD). PAHO/WHO has paid for two pits to be dug in Truitier Municipal dump and contracted trained and vaccinated SMCRS agents to collect and dispose health care waste in these pits. PAHO/WHO has provided public health institutions and NGOs with 20,000 plastic bags for safe disposal of medical waste and 1,000 sharp containers for disposal of needles and sharp items. PAHO is partnering with the Ministry of Health to design a training program for waste management in shelters in Fond Parisien (Haiti-Dominican Republic border).



**Pan American  
Health  
Organization**  
Regional Office of the  
World Health Organization

# HAITI

PAHO/WHO Technical Cooperation

in the aftermath of the earthquake 2010-2011

## Environmental Health



- Vector Control: PAHO/WHO is supporting the National Malaria Control Program in both outbreak analysis and control. PAHO/WHO has been distributing about 20,000 mosquito nets to health care facilities.
- Outbreak control: PAHO/WHO is working closely with national authorities and partners of the Health Cluster, to monitor and prevent outbreaks. One of the first priorities of the MSPP was to set up Early Warning Systems in selected sites with rapid response capacity including field laboratories. National Directors of Epidemiology of Haiti and the Dominican Republic conducted a joint visit in order to reactivate the surveillance network on the border. 52 government-defined sentinel sites were identified to monitor diseases, 12 of which are located in the metropolitan area. This early warning system was put in place thanks to the support of the following partners: Center for Disease Prevention and Control (CDC), the Cuban Brigades, CIDA, and MSF. Active surveillance in temporary camps was also initiated. Three mobile teams are conducting investigations (from MSPP, CDC and PAHO/WHO). The epidemiology team, coordinated by Ministry of Health, provides a weekly report on the epidemiological situation. The Dominican Republic provided one kit of reagents to confirm measles/rubella; and additional reagents to diagnosis measles/rubella and diphtheria were purchased by PAHO.

### Next steps:

- Continue to support Haiti's Ministry of Health in the epidemiological monitoring and surveillance to detect any possible outbreaks.
- Continue to assist in water quality standard setting and in the identification of long term solutions for laboratory analysis. PAHO/WHO will also support the improvement in water quality of water networks in different regions in order to have more long term solutions to the delivery of potable water.
- Assist MSCRS and MSPP in finding medium and long term solution to the health care waste management problems.
- Support the UNFPA project on Reproductive Health in setting up appropriate health care waste management systems in the departments identified.
- Assist the National Malaria Control Program in Hygiene Promotion activities related to vector control
- Support the development of a short and medium term emergency response plan for malaria and dengue, in view of the rainy season. 937,000 long lasting insecticide-treated bed nets are being distributed to prevent malaria