

WATERBORNE DISEASES

QUESTIONS:

- 1. Why do we see an increase in the number of infectious diseases during floods?**

Floods can affect the environment in different ways: water supplies can be contaminated; floodwaters can promote the breeding and spread of insects and / or microorganisms, and can affect public services (ex. garbage collection). These can increase the risk for more infections.

Lack of clean water will lead to poor hygiene practices such as decreased hand washing and unsafe food handling practices. This is typically seen in evacuation centers where the spread of infection is rapid and difficult to contain.

- 2. My 12-year old son had been diagnosed with Leptospirosis. How could he have acquired the infection? Can my other children be infected too?**

Leptospirosis is acquired when a person's mucosal surface or an open wound comes in contact with water or soil that is contaminated by urine from infected animals like rats, cats and dogs. This is the reason why we see an increase in the incidence of leptospirosis soon after the floods. Majority of the cases are due to exposure to rat's urine. If the other household members were also exposed to the same environment, then it is possible for them to also be infected. Urine of infected individual may also transmit the virus.

In most cases, it is either asymptomatic or very mild. Among symptomatic patients, fever, severe muscle pain especially of the legs, redness of the eyes, abdominal pain and headache may be seen. Blood tests are necessary to confirm the diagnosis. Antibiotics are given to control the infection. In around 10% of symptomatic patients, complications affecting the kidneys and the liver may be seen. Since early treatment (before the 7th day of illness) with antibiotics may shorten the course and prevent complications, early consultation is highly recommended to those who were exposed.

- 3. My daughter had severe watery diarrhea for two days and her doctor is considering the possibility of cholera. How can one differentiate between cholera and viral gastroenteritis? Both diseases present with diarrhea and vomiting. However, in severe cases of cholera, patients have abrupt onset of profuse, painless diarrhea which can cause severe dehydration and this may lead to death in a few hours. The stools are often called rice water stools, which have a fishy odor. Both diseases may be acquired when one takes in contaminated food or water. For both gastroenteritis and cholera, the mainstay of treatment is replacement of fluids and electrolytes although more aggressive treatment is warranted for cholera. Antibiotics are used to shorten the course of cholera.**

- 4. My child was having fever for nine days. Initially, he was suspected to have dengue and now they are saying it is typhoid fever. How and where could he have acquired the infection? Do I need to isolate my sick child? He received typhoid vaccine 4 years ago. Why wasn't he protected?**

Some signs and symptoms of typhoid fever and dengue can overlap, which leads to difficulties in diagnosis. Fever in dengue may last for 5-7 days while the duration of fever in typhoid is usually longer specially if untreated. Dengue is transmitted by mosquito bites while typhoid fever is acquired by ingestion of contaminated food and water. Aside from prolonged fever, the symptoms of typhoid include abdominal pain, diarrhea or constipation.

Attention to hygiene within the household can prevent transmission and need for isolation. Typhoid vaccines can protect as many as 50-70% of recipients.

5. My 8-year old daughter was having low grade fever, vomiting and abdominal pain with dark colored urine for five days. When she developed yellowish skin, she was diagnosed to have Hepatitis A. Is she infectious? How could she have acquired it? How is it different from Hepatitis B? She had one dose of Hepatitis A vaccine. Why wasn't she protected?

Hepatitis A is a viral illness primarily affecting the liver. It is acquired through intake of contaminated food and water. In contrast, the mode of acquisition of Hepatitis B is through contact with contaminated blood or body fluids.

Patients can pass out Hepatitis A virus through their stools 2 weeks before and 1 week after the onset of the yellowish discoloration of the skin, so hygienic measures are important to prevent transmission. To ensure protection through vaccination, the patient must receive the full course of two doses.

6. Why are fungal skin infections so common after floods? Is there a way to prevent these from occurring?

Fungal skin infection usually develops when the skin is moist or inadequately dried, especially in the intertriginous areas (“singit” and the interdigital areas). Keeping the skin dry is a simple way of preventing these problems.