Hurricanes, Floods, and Leptospirosis

Leptospirosis is a bacterial disease that occurs worldwide and can cause serious illnesses such as kidney or liver failure, meningitis, difficulty breathing, and bleeding. Cases of leptospirosis can increase after hurricanes or floods when people may have to wade through contaminated water or use it for drinking or bathing.

How do people get leptospirosis?
People can get leptospirosis when they have contact with water or soil containing urine or other body fluids from infected animals or if they directly touch the urine from an infected animal. A variety of animals can spread leptospirosis, including rodents, dogs, livestock, and wildlife. During a hurricane or heavy rain, animal urine in the soil or on other surfaces can run into floodwater, contaminating it. Streams and other natural water sources can also be contaminated.

What are the symptoms of leptospirosis?
Symptoms usually start from 5 to 14 days after contact with the bacteria that causes leptospirosis. However, symptoms can begin anywhere from 2 to 30 days after contact. Early symptoms can include:
- Fever
- Headache
- Muscle aches
- Red eyes
- Vomiting
- Diarrhea
- Abdominal pain
- Jaundice (yellowing of the skin and eyes)
- Skin rash
- Cough

Who is at risk?
Leptospirosis most often affects people who work outdoors or with animals, or those who take part in recreational activities involving water or soil, like swimming, boating, and gardening. After floods or heavy rains, anyone who has been in contact with floodwater, contaminated freshwater (rivers and streams) or soil could be at risk for infection. Some activities that increase your risk of leptospirosis include:
- Drinking from potentially contaminated water sources, including floodwater, streams, rivers, or unsafe tap water.
- Bathing or wading in floodwater or contaminated fresh water, especially when putting your head under water or if you have an open wound or scratch.
- Eating food that has been exposed to contaminated water or potentially urinated on by rodents.

How can I avoid leptospirosis?
The most important way you can prevent leptospirosis is to avoid touching or drinking water that may be contaminated. If that is not possible, follow these steps to reduce your risk of leptospirosis:
- Treat water to make it safe to drink by boiling or using an appropriate chemical treatment, especially if it has been collected from a source that could be exposed to urine from animals or contaminated by floodwater runoff.
- Cover cuts or abrasions with waterproof bandages or other coverings that seal out water.
- Do not wade, swim, bathe, submerge your head in, or swallow floodwater or any fresh water source that may contain animal urine or be contaminated by floodwater runoff.
- Wear waterproof protective clothing, shoes or boots near floodwater or other water or soil that may be contaminated with animal urine.
- Prevent rodent infestation by keeping food, water and trash in closed containers, and trapping any rodents you see.
- Avoid eating food that rodents may have had access to.

How is leptospirosis treated?
If you have symptoms of leptospirosis, contact a doctor right away. If your doctor thinks you have leptospirosis, they will likely give you antibiotics. Treatment is most effective when started as soon as possible.

What if my doctor has question?
If your doctor has questions about leptospirosis, they can visit www.cdc.gov/leptospirosis/health_care_workers/index.html

For more information contact CDC-INFO: 1-800-CDC-INFO (1-800-262-6536)/TTY 1-888-232-6348

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