PREVENTING WATERBORNE ILLNESS

Cooperative Extension Service  ※  University of Illinois at Urbana-Champaign  ※  Disaster Resource

In the aftermath of floods, public health officials often monitor for waterborne illnesses, especially in communities where drinking and wastewater treatment plants go off-line for a period of time.

Waterborne illnesses caused by various bacteria, viruses and protozoa usually occur as a result of inadequately treated drinking and wastewater. Symptoms for these illnesses range from fever and malaise to gastro-intestinal symptoms such as diarrhea and stomach aches.

Sometimes floodwaters churned up a lot of debris from river bottoms and carried loads of organic and inorganic materials to the surface. Alternating turbulence and stagnation of river waters also created hospitable conditions for the growth and movement of many pathogenic (disease causing) microorganisms.

Most waterborne illnesses cause common symptoms. There is abdominal discomfort or cramping, fever, vomiting and diarrhea (characteristics of each depend on the pathogen). Loss of weight and fatigue may accompany several of the viral illnesses.

Normally, the human intestinal tracts contains many types of harmless bacteria that the body routinely eliminates. However when humans have prolonged exposures to the pathogens, such as in disaster situations or changes in personal hygiene habits, the pathogens can become opportunistic and cause illness. Generally, the incidence of waterborne illness in the United States is low compared to other major causes of illness. But when a natural disaster hits, waterborne agents can cause widespread illness and discomfort and in some cases, death.

The chart on the following page specifies more commonly experienced waterborne illness, the source of the infecting agent, where the agents are likely to be found in the water supply, and some general symptoms of each illness. If any of these symptoms persist, it is best to see a physician. Let the doctor know that your existing water system has been compromised due to a natural disaster, and advise the physician as to the source and type of water you are presently using. Since only 50 percent of waterborne disease agents are identified, you can increase the accuracy of your diagnosis if you can tell your doctor about changes in your drinking and bathing habits due to an interruption or change in your water service.

If your water supply was completely shut down during a natural disaster, the procedure for returning it to use varies depending on whether you receive water from a municipal supply or form a private source such as a well.

Municipal Water

Before water services in your municipality can be turned back on, the Environmental Protection Agency or Health department in your state must