Public Health Advisory: Recreational Waters Potentially Contaminated Due to Flooding

Recreational waters may be contaminated following flooding across West Virginia. Heavy rains and flooding can cause sewage and pet, livestock and wildlife waste to flush into natural waters used for recreation. Harmful microorganisms found in animal and human waste, including bacteria, viruses and parasites, pose a significant risk to human health. If flooding significantly impacts wastewater treatment plants, untreated or partially treated wastewater can overflow or bypass the treatment system and flow into rivers and streams. Additionally, broken sewer lines and overflow from private septic system may also contaminate recreational waters resulting in elevated bacteria levels.

Local Health Departments (LHDs) that are aware of wastewater treatment plants affected by flooding should conduct bacteriological testing for E. coli (Escherichia coli) at regulated bathing beaches. If unsafe levels are detected, an advisory must be issued prohibiting recreational water use until bacteria levels drop to a safe level as outlined in “Recreational Water Facilities” in the West Virginia Code of State Rules, §64-16-7.3f. The WV Bureau for Public Health also recommends posting advisories at public access points downstream of damaged waste water treatment plants to alert the public of potentially high bacterial levels. These postings should remain until sampling can be completed to confirm that there are no health concerns.

What are the health risks?

The most common waterborne illnesses are gastrointestinal and may cause vomiting, diarrhea or nausea. These illnesses result from swallowing water contaminated by disease causing microbiological organisms. Less commonly, skin, ear and eye infections can result from contact with contaminated water. Although recreational water users may inadvertently swallow water, deliberately drinking from rivers, streams or lakes is never recommended. People who have a weakened immune system may get sick from much lower levels of harmful organisms than healthy people, and should avoid any contact with natural bodies of water. Children are more likely to swallow water and are at greater risk of infections due to their developing immune systems.

General recommendations regarding the recreational use of water:

- Look for posted public health advisory signs alerting of potentially high bacterial levels.
- Avoid swimming in warm, slow moving, stagnant water or next to storm water drains. Choose recreational areas that are next to open waters or away from urban areas.
- Avoid swimming in water that is muddy, discolored, cloudy or smells bad.
- Keep your head out of the water.
- Avoid swimming if you have an open wound or infection.
- Wash or shower thoroughly with soap and clean water after contact or swimming in flooded surface waters.
- If you suspect the water is contaminated at a regulated beach, please contact your Local Health Department so appropriate follow-up can be taken.
- Children and those with a weakened immune system are more susceptible to infection and should avoid contact with potentially contaminated water.

Providers should be alert for gastrointestinal illness in association with recreational water exposure and report possible cases or outbreaks to their LHD. Clinically appropriate laboratory testing is suggested for persons who give a history of exposure to potentially contaminated recreational waters.