



Waterborne illnesses are caused by bacteria (*Shigella*, *E.coli*, *Campylobacter*), viruses (norovirus) or parasites (*Cryptosporidium*, *Giardia*) in the water. Drinking or swallowing contaminated water can result in vomiting, diarrhea and abdominal pain. Swimming or soaking in contaminated water can cause these symptoms as well as skin rashes and ear infections. Children, pregnant women, and people with weak or compromised immune systems are most at risk from waterborne illness. There are two categories of waterborne illness, recreational and drinking.

Recreational Water Illness

Recreational water is water that is used for swimming, boating, water skiing, and other recreational activities.

All recreational water facilities at your camp, whether natural (lakes, ponds, bathing beaches, etc.) or man-made (pools/spas, water parks), require a permit from the [local health department](http://www.dhhr.wv.gov/localhealth/pages/map.aspx) (<http://www.dhhr.wv.gov/localhealth/pages/map.aspx>) where the camp is located. Your camp's recreational water facilities require proper maintenance, including chlorination, filtration, and regular testing of the water. Personnel responsible for recreational water maintenance must have adequate training for that responsibility and be aware of the requirements of the [WV Legislative Rule governing recreational water facilities](http://apps.sos.wv.gov/adlaw/csr/rule.aspx?rule=64-16) (<http://apps.sos.wv.gov/adlaw/csr/rule.aspx?rule=64-16>).

Rivers and streams may be contaminated by human or animal feces as a result of natural surface run-off, therefore lakes and ponds used at the camp for recreational water activities are considered "bathing beaches" and require regular water monitoring for bacteria to comply with regulations. Consult your [local health department](http://www.dhhr.wv.gov/localhealth/pages/map.aspx) (<http://www.dhhr.wv.gov/localhealth/pages/map.aspx>) for questions.

Prevention of Recreational Water Illness

The Centers for Disease Control and Prevention (CDC) recommends practicing the Triple A's (Awareness, Action, Advocacy) of healthy swimming found at [CDC Healthy Swimming](http://www.cdc.gov/healthywater/swimming) (<http://www.cdc.gov/healthywater/swimming>).

Awareness – Taking steps to protect from Recreational Water Illnesses

- Campers and staff with diarrhea should not be allowed to swim. Bacteria and parasites are shed in the feces, and an ill person with diarrhea can release small amounts of fecal matter into the water and make other people sick
- Discourage campers and staff from swallowing water and getting water in their mouths.
- Campers and staff should go to the bathroom and shower with soap before swimming. They should wash their hands after using the toilet. Germs on the body end up in the water.

For camps with preschool children:

- Wash hands after changing diapers.
- Take children on bathroom breaks or check diapers often. Waiting to hear "I have to go" may mean that it is too late.
- Change diapers in a bathroom or a diaper-changing area and not at poolside.



Action

In accordance with the [WV Legislative Rule governing recreational water facilities \(http://apps.sos.wv.gov/adlaw/csr/rule.aspx?rule=64-16\)](http://apps.sos.wv.gov/adlaw/csr/rule.aspx?rule=64-16) , make sure that pools and hot tubs are maintained properly under the supervision of a qualified recreational water facility operator, and that lakes and ponds used for swimming are properly monitored for compliance. Contact your [local health department \(http://www.wvdhhr.org/phs/LHD.pdf\)](http://www.wvdhhr.org/phs/LHD.pdf) for any questions.

Advocacy

Teach and encourage campers and staff to learn about healthy swimming. More information can be found at [CDC Health Swimming \(http://www.cdc.gov/healthywater/swimming/index.html\)](http://www.cdc.gov/healthywater/swimming/index.html).

Drinking Water

Public drinking water is usually safe because it is properly treated with chlorination and filtration and carefully monitored by water operators. However, naturally occurring, or surface water (streams, ponds, lakes) must be treated before it is used for drinking or cleaning. Your camper may need to learn how to treat surface water to make it safe. Boiling, filtration, and disinfection are used for this purpose.

Ways to Make Surface Water Safe to Drink

- Boiling is the safest way to sanitize drinking water. The water must come to a rolling boil for at least 1 minute.
- If boiling is not possible a combination of disinfection and filtration is the best option. The manufacturer's guidelines for the type of disinfectant and/or filtration device being used need to be followed.
- Camp staff should supervise campers as they carry out any of these processes.
- Additional information on disinfecting small amounts of water is available from the [WVBPH Office of Environmental Health Services \(http://www.wvdhhr.org/phs/forms/SG-81_Disinfecting_Small_Quantities_of_Water.pdf\)](http://www.wvdhhr.org/phs/forms/SG-81_Disinfecting_Small_Quantities_of_Water.pdf).
- In addition to treating water, campers should pay attention to good sanitation practices: Wash hands before handling food or water, eating or drinking, and after using the toilet. Bury human waste eight (8) inches deep and at least two hundred (200) feet away from natural water.



WATER SAFETY INFORMATION

www.wvcampsafety.com



Please Use the Links Provided For Additional Information:

1. Centers for Disease Control and Prevention (CDC):

- <http://www.cdc.gov/healthywater/drinking/travel/index.html>
- http://www.cdc.gov/healthywater/drinking/travel/backcountry_water_treatment.html
- <http://www.cdc.gov/healthywater/swimming/>

2. National Institute of Health:

- <http://health.nih.gov/topic/FoodborneDiseases>

3. WVBPH-Food and Waterborne Diseases Page:

- <http://www.dhhr.wv.gov/oeps/disease/FnW/Pages/default.aspx>

4. WVBPH-Office of Environmental Health Services:

- **Recreational Water** - <http://www.wvdhhr.org/phs/pools/index.asp>
- **Drinking Water**- <http://www.wvdhhr.org/oehs/eed/c&e/regulations.asp>