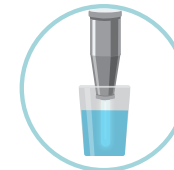
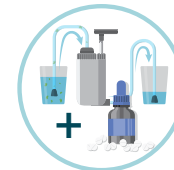
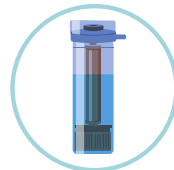
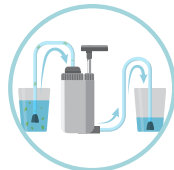


Water treatment while hiking, camping, and traveling

When visiting places with unknown water quality, you may need to treat water to make sure it's safe to drink. **Boiling water is the most reliable way to kill germs.** If you cannot boil your water, the next best option is to use a filter (especially if water is cloudy) and then use another treatment method. Follow instructions on the treatment product's label, including the contact time for disinfectants. This guide can help you decide which treatment method or combination of methods to use to make your water safe to drink.



TYPE OF GERM	BOIL (for 1 min., or 3 mins. at elevations above 6,500 feet)	FILTER	PURIFIER	CHLORINE TREATMENT (disinfectant)	IODINE (disinfectant)	CHLORINE DIOXIDE (disinfectant)	COMBINING FILTER AND DISINFECTANT	UV LIGHT USED IN CLEAR WATER
BACTERIA (such as <i>Campylobacter</i> , <i>Salmonella</i> , <i>Shigella</i> , <i>E. coli</i>)	✓	✓ 0.3 micron or smaller filter	✓	✓	✓	✓	✓ 0.3 micron or smaller filter, plus disinfectant	✓
VIRUSES (such as norovirus, hepatitis A, enterovirus, rotovirus)	✓	✗	✓	✓	✓	✓	✓	✓
PARASITE <i>Giardia</i>	✓	✓ Filter certified for "cyst" and "oocyst" reduction	✓	!	!	✓	✓ Filter certified for "cyst" and "oocyst" reduction, plus chlorine dioxide	✓
PARASITE <i>Cryptosporidium</i>	✓	✓ Filter certified for "cyst" and "oocyst" reduction	✓	✗	✗	!	✓ Filter certified for "cyst" and "oocyst" reduction, plus chlorine dioxide	✓



Centers for Disease Control and Prevention
National Center for Emerging and Zoonotic Infectious Diseases

Learn more: www.cdc.gov/healthywater/drinking/travel/backcountry_water_treatment.html

- ✓ **EFFECTIVE**—will remove or kill this type of germ
- ! **SOMEWHAT EFFECTIVE**—may remove some germs of this type, but water could still be unsafe
- ✗ **NOT EFFECTIVE**—will not remove or kill this type of germ