

Water treatment is important to maintaining your health in the outdoors. Not all water sources are unsafe, but why play intestinal roulette when water treatment is simple and effective.

The two most popular methods of treating water are a water filter, which works by physically straining out parasites and bacteria, and a water purifier, which also combats viruses that are too tiny for most filters to catch. To help improve the treatment process, prefilters remove large particles from water. This accessory comes with many pump-style products or it can be bought separately. The following are a few examples of filters and purifiers. The effort required for each varies, as does the time for water to be ready to drink.

Ultraviolet (UV) Light Purifiers – These pen-style devices require you to simply push a button and stir.

PROS:

Treatment is easy and water is quickly drinkable.

No element cleaning and replacement are ever needed.

CONS:

Requires batteries.

Silty or cloudy water impairs effectiveness.

Pump Filters and Purifiers – Drop the intake hose into your source and the outlet hose into your water bottle, then work the pump.

Pump mechanisms differ, as do flow rates.

PROS:

You can process precisely the amount of water you need.

Water can be pulled from seeps and shallow water sources.

The internal element or cartridge is replaceable.

CONS:

Pumping can be a chore.

Field cleaning of the element is required.

Weight and bulk are greater than other treatment methods.

Bottle Filters and Purifiers – Offering fill-and -sip simplicity, these bottles have built-in filtration or purification elements.

PROS:

Treatment is easy and water is quickly drinkable.

The element or cartridge is replaceable.

On average, lighter and cost less than pump and gravity filters.

CONS:

Water quantity is limited by bottle size.

Field cleaning of the element is required.

Gravity Filters and Purifiers – Fill a reservoir, find a suitable place to hang and wait.

PROS:

Gravity does the work for you.

You can easily process large quantities of water for a big group.

The element or cartridge is replaceable.

CONS:

Treatment process is slower than pumping.

Shallow water sources can make it challenging to fill.

Field cleaning of the element is required.

Alternate Methods

 Water neutralizing tablets or drops (typically iodine- or chlorine-based) can be an effective water treatment system. They are easy to use, inexpensive, and light weight. But, the wait time can be at least 30 minutes and they impart a chemical taste. Boiling water for one to three minutes is also an effective method.

Water Treatment Safety Tips

- Even the best filter or purifier isn't effective if you don't take some basic precautions:
- Separate dirty and clean water containers.
- Pay close attention to directions.
- Seek out non-cloudy, sediment free water because sediment impairs treatment effectiveness.
- Keep your hands clean to prevent contamination.
- Keep camp, toilet, and dishwashing areas at least 200 feet from any water source.

Source: www.rei.com/learn/expertadvice/water-treatment-backcountry.html

