Late summer and early fall can be an especially hazardous time of year with regard to ensuring safe drinking water while backcountry camping. This is because water sources have had a couple of summery months to warm up, making the water more hospitable to dangerous pathogens. While it’s tempting to quench your thirst straight from a stream or a lake, it’s definitely wise to resist that urge. If you’re prepared, you can treat your drinking water in pretty short order.

The fastest and easiest way to treat water is with a pump microfilter. A decent filter (that is, a filter with pores smaller than 0.3 microns, such as ceramic) is very reliable with regard to removing both protozoa and any gritty sediment; it only takes a couple of minutes and a minimal amount of exercise to get a litre or two of water into your bottles.

You can make the task of pumping water a little faster and easier by seeking out relatively clean water whenever possible. Look for clear, flowing water, or deep water away from a shoreline (if you have a boat). The cleaner the water source, the easier it will be to filter.

Alternately, a gravity filter can be a good way to treat water for a group in camp.

Chemical treatments are convenient back-ups for filters (which can break). Chlorine and iodine drops and tablets are conveniently lightweight and straightforward to use. They are also more effective at eliminating viruses than filters. These treatments do, however, take a little time to act—which can be frustrating on a hot day when you’re thirsty! If you’re treating using chemicals, have two bottles on hand. As soon as the first is empty, fill it and treat the water so that it’s safe to drink by the time you empty your second bottle.
The most reliable, and arguably the most convenient, way to treat water is to boil it. You're likely to pack a pot on almost all of your camping trips, so you're pretty much set up to bring your water to a rolling boil for one full minute. If you treat your water by boiling it, fill your bottles in the evening. This way, your potable water can cool overnight, and you'll be prepared with safe, clean water for the next day.

It is important to note that none of these methods can absolutely guarantee that your water is safe to drink, especially if the water you intend to drink is chemically polluted. Be aware of what hazards are likely to affect the water where you are camping so that you can take the appropriate precautions. To learn more, visit the Health Canada website.