

## Drinking Water

One of the places I like to go camping in at the Black Mountain Backpack Camp in the Montebello Open Space Preserve. You have to carry in all your gear, and it's a one and a half mile hike, and you can't drive your car in. Most people want a gallon or two of water for an overnight stay, and since a gallon of water weighs about 8 pounds you don't want to have to carry your water in with you. Fortunately, there's a water supply at the backpack camp.

But the water is "non-potable." This means it may have micro-organisms in it that can cause illness, so you have to treat it before you drink it. According to the Center for Disease Control, there are several methods for treating water:

- *Boiling*: Boil the water for 1 minute at sea level. (At elevations above 6,500 feet, boil for 3 minutes.) According to the CDC, "boiling is the surest method." However, you have to let the water cool down before you drink it, and you have to carry a stove and enough fuel to boil the water.

- *Disinfecting*: Use a chemical water treatment such as bleach or commercial water treatment tablets. Be sure to choose a chemical treatment that works against Giardia, one of the most common water-borne diseases. Some people find that chemical treatments leave an unpleasant taste.

- *Filtration:* Use a portable water filter. Be sure to use a filter that will take out parasites and bacteria. The water filter shown below will remove parasites, bacteria, and even viruses if used properly. Many backpackers prefer to use water filters because the water tastes better, and you don't need to carry extra fuel to boil water.



Years ago when I first started hiking and camping, you could still drink untreated water from many streams and springs. Unfortunately, nowadays humans have had such an impact on the outdoors that almost all water sources need to be treated before drinking from them.