

# Disinfection

Following are answers to frequently asked questions about bacterial contamination of drinking water.

**Q.** My water is contaminated. Why hasn't it made me sick?

**A.** Coliform or other bacteria will not necessarily make you ill. However, since these organisms have been able to enter your water system other disease-causing organisms (bacteria, viruses, and protozoa) could enter as well. To prevent illness, we advise that you boil your water for one minute before drinking.

**Q.** Can water tests pinpoint the exact source of contamination?

**A.** No. Water tests show that coliform bacteria have entered your water system, either at the source or between the source and the faucet. The tests don't identify the source.

**Q.** What should I do if my drinking water is contaminated?

**A.** Boil for one minute all water used for drinking; making ice, juice or baby formula; and for washing fruits and vegetables. Look at the location and construction of your water source and try to identify and eliminate the source of contamination.

**Location.** Wells and springs should be isolated, preferably uphill from septic systems and other potential contamination sources, such as barnyards and pastures.

**Construction.** Dug wells and springs should be made of concrete and have tight-fitting, lipped covers and sealed joints. Drilled wells should have casings that extend 18 inches above ground, surrounded by mounded clay to prevent surface water from entering.

**Q.** I disinfected my well and consulted with the Health Department, but my water is still contaminated. What should I do now?

**A.** You may need to hire an environmental engineer or hydrogeologist to find the problem. Lists of water system consultants and water treatment options are available from the Department of Health.

## How to disinfect your water system—

Use a chlorine bleach solution to disinfect your water supply after construction or repair work (including replacing the pump), or when a water test shows contamination.

Before you begin, disconnect or remove any water treatment devices, such as activated carbon filters, water softeners or reverse osmosis units. Highly chlorinated water can make them less effective or even damage them.

For a dug or drilled well, add one gallon of household laundry bleach for every 525 gallons of water. This means using one gallon of bleach for every 10 feet of 36-inch-diameter dug well or every 350 feet of 6-inch-diameter drilled well.

For an overflowing spring, use fast-dissolving 65 percent calcium hypochlorite pellets (3 ounces for every 100 gallons of water or about 2 feet in depth). Pellets are available at pool supply or hardware stores. *Caution: The pellets should contain ONLY calcium hypochlorite—NOT algicides, chlorine stabilizers/conditioners, acids or other disinfectants. (These may be acceptable to use in swimming pools, but are not safe for drinking water.)*

Whenever possible, run the chlorinated water through a garden hose back into the well for an hour so the chlorinated water washes down the inside of the casing. Scrub the sides of a dug well or spring with a clean brush and a chlorine solution (mix one part household laundry bleach to four parts of water). Use rubber gloves and eye protection.

After you recap the well, open one faucet at a time throughout the house. Run the water until you smell a strong chlorine odor, then turn tap off. *Caution: Strong chlorine solutions may damage rubber and polybutylene gaskets and fittings.*

It takes time for chlorine to disinfect, so it's important to keep the chlorinated water in your system for 12 hours. After 12 hours, connect a hose to a tap or outside faucet and drain the chlorinated water to a safe, outdoor location. Don't drain highly chlorinated water onto a lawn or garden or into the septic system. Dispose of the water onto a safe area, such as

*Continued on other side.*



DEPARTMENT  
OF HEALTH

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