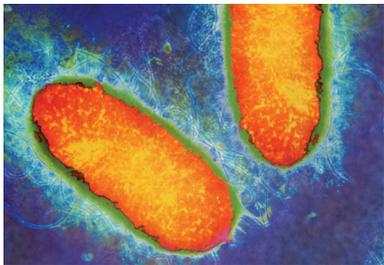


WHY DISINFECT??

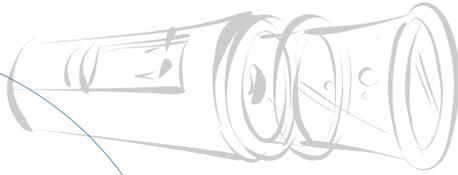
Surface water and water from unprotected wells, or wells too close to a sewage disposal system, are likely to be contaminated with intestinal wastes from birds, animals, and man. This type of contamination is referred to as fecal coliform bacteria and/or E. Coli.

Whenever surface water is used for drinking and household purposes, or when any question arises concerning the safety of your water supply, action should be taken to purify the water. Inside, you will find a step-by-step guide to disinfecting your drinking water source to ensure you and your family are drinking the safest water possible.



Fecal coliform bacteria.

Design By Hollie Wynne ©



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ALASKA DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

ADEC
DRINK IT PURE

Disinfection Procedures for Surface Water and Well Water Sources



TEL: (907) 451-2108

SURFACE WATER DISINFECTION

- **Method One** — Boil water for one (1) minute. Allow to cool. If the water has a flat taste, pour it back and forth between two clean containers two or three times.
- **Method Two** — Add two drops of fresh, unscented chlorine bleach, such as Clorox or Purex (containing 5.25 to 6% available chlorine) to each quart of water. If water is not clear, add three (3) drops to each quart of water. Mix thoroughly and allow to stand for 30 minutes before drinking. If larger quantities of water are to be disinfected with chlorine bleach, use this table for proper dos-

Gallons of Water	5	10	20	30	40	50
Clear Water	1/4 tsp. *	1/2 tsp.	3/4 tsp.	1 tsp.	1 1/4 tsp.	1 1/2 tsp.
Cloudy Water	1/2 tsp.	1 tsp.	1 1/2 tsp.	2 tsp.	2 1/2 tsp.	3 tsp.

*tsp.—Teaspoon

Note: If a tablespoon is used for measuring, use 1 tablespoon for each three teaspoons.

DISINFECTION OF WELLS AND SMALL DISTRIBUTION SYSTEMS

Please read all the instructions before proceeding.

- 1.) During this procedure the water will not be drinkable so plan to disinfect late at night or at other times when there is little need for water. Obtain one-half gallon fresh household bleach (unscented) which contains 5-6% sodium hypochlorite. Large diameter or very deep wells may require more chlorine. Dilute the chlorine in a large bucket of water.
- 2.) Remove the sanitary seal and pour the chlorine solution down the well casing. Using a clean hose, run water down the casing until you smell chlorine in the water from the hose. Turn off the hose and replace the sanitary seal.
- 3.) Let the water run at each tap in the distribution system until you smell the chlorine, then turn off the water. The goal is to get the chlorine solution to all parts of the plumbing. Do the same for hot water taps and flush toilets until chlorinated. If there are any in-line filters, they should be removed, and replaced with new filters after the disinfection is completed. (Carbon filters are notorious for breeding bacteria.)
- 4.) Hold the chlorine in the pipes for a minimum of two (2) hours, preferably overnight.
- 5.) Let the water at each tap flush out the chlorine solution until you can no longer smell it at any of the taps. Your well and distribution system should now be disinfected.
- 6.) Follow-up sampling should be done after all trace of chlorine is gone to insure that the disinfection procedure was successful. ADEC Drinking Water personnel will advise public water suppliers of their sampling requirements.

NOTE: Large amounts of chlorine can damage the resin in water softeners, so if there is a softener, it should be by-passed before disinfecting the plumbing. Contact the manufacturer or distributor for the correct method for disinfecting the softener.