

WHAT IS DISINFECTION?

Disinfection is the process by which chlorine is added to a water system in amounts sufficient to kill bacteria and to oxidize organic materials which serve as food for bacteria.

When does a water system need disinfection?

1. After construction of a new water supply.
2. After making repairs to an existing water supply.
3. After a water system has been unused for a period of time.
4. When the results of a coliform bacteria test indicate contamination.

Well Disinfection Procedure:

1. Into the well, introduce one of the following per 1000 gallons of water in the entire system:
one gallon of 5% bleach or
half gallon of 10% bleach or
For guidance on estimating the total gallons of water in the system please see the next page.
2. Starting with the faucet furthest to the well, flush the line until a strong chlorine smell can be detected. Continue with each outside faucet.
3. Flush each inside faucet hot and cold until a strong chlorine smell is detected.
Note: It is very important that you run the chlorine through every line/faucet connected to the system. Leaving even one line/faucet out of the chlorination procedure may mean inadequate disinfection which may result in doing the entire procedure over.
4. Circulate the water from the tank back to the well for a minimum of two hours. Attach a garden hose to a hosebib located after the tank and return the hose to the well. See the diagram on the following page.
5. After circulation do not run the pump or use water for a 12 hours; then proceed to Step 6.
6. Flush the well. Run the pump until the level of chlorine is less than 2 ppm or cannot be detected by smell. Flush the pressure tank and all lines inside and out until chlorine is less than 2 ppm or cannot be detected by smell. Note: It is important to avoid running highly chlorinated water in large volumes into septic tank, ponds, streams, or landscaping.
7. Forty-eight hours after Step 6, take a follow up well sample to the laboratory for bacteria test. Note: It is recommended to retest the well again and at least one time per year after.

Please call if you have questions.

Guidelines for Estimating Total Gallons of Water in the System

1. Gallons in Well:

Use the following numbers as estimates (based on approximately 300' of standing water):

- 4" well has 200 gallons
- 6" well has 450 gallons
- 8" well has 800 gallons
- 10" well has 1200 gallons
- 12" well has 1800 gallons

2. Gallons in Tank:

This information should be posted on the tank or in the well system records.

3. Gallons in Distribution System:

Add approximately 300 gallons per house.

4. Total Gallons of Water in System =

Gallons in Well + Gallons in Tank + Gallons in Distribution System

Use this value in step one on the previous page.

Diagram for recycling water from the tank back to the well:

