The water sample collected from your water supply will be tested for coliform bacteria (an indicator bacteria not normally found in groundwater). The results - "Present / Absent" - will be reported to you as soon as possible. If the results indicate that bacteria is "Present" (Unsatisfactory), please follow the procedures listed below to disinfect your private water supply system. Note that well disinfection should be performed annually.

**CHLORINATION PROCEDURE**

- **GOAL:** To ensure potable water supply disinfection with the application of a chlorine solution.

- **OBJECTIVE:** Removal of bacteria, indicated by the coliform bacteria group, by treatment with 100 ppm (parts per million) of chlorine solution; this is equivalent to 100 milligrams of chlorine per liter of water.

- **INSTRUCTIONS:**
  
  - For deep wells (greater than 250 feet) or for wells with a high static water level (a larger water column), Calcium Hypochlorite (ITH) tablets may be substituted for the bleach solution to ensure even dispersion. Mix eight (8) to 10 ounces of Calcium hypochlorite with five (5) gallons of water.
  
  - Or mix two (2) gallons of household bleach with five (5) gallons of water. Use caution: exposed electrical connections are dangerous and should be avoided.
  
  - If a sanitary seal (gasket) is present, pour the chlorination solution down the vent pipe of the well.
  
  - If a pitless adapter is present (newer wells), remove the cap and pour into the well opening.
  
  - If possible, disperse the solution by inserting a garden hose, attached to an outside tap located at the structure served by the well, into the well. Lift and lower the hose for approximately 15 minutes to effectively mix the solution and disinfect the sides of the well.
  
  - Let the solution remain in the well for at least 24 hours. Use as little water as possible; large amounts of chlorine can upset the balance of your septic tank. It is important that the chlorine solution not be diluted during this period. Drinking/cooking water can be kept in open gallon-size containers as the chlorine will volatilize and dissipate over time, reducing the concentration of chlorine in the water. Bathing or washing in heavily chlorinated water can burn skin, hair, and damage clothes.
  
  - After 24 hours, turn on all inside taps and fixtures until a chlorine odor is detected, then turn all taps off for a second 24-hour period.
  
  - Once the second 24 hour period has passed, open the outside taps to flush the chlorine solution from the well system. Use outside taps for this process to avoid overloading the septic system. This step may require several days to complete, depending on the volume of water being treated. Do not attempt to flush the entire system in one day.
  
  - When the chlorine odor and taste has diminished, the system can return to normal use.
  
  - The water supply can be retested once the chlorine has been completely flushed from the system.

- **POSITIVE SAMPLE RESULTS:** Resample the water supply twice; the second sample should be collected at least five days after the first sample collection event.

Questions? Please visit [www.loudoun.gov](http://www.loudoun.gov) OR contact Loudoun County Environmental Health at 703-777-0234.