

Shock Chlorination

Disinfecting Your Well

Well disinfection is necessary following a positive bacteria test (coliform), new well construction, any repairs, or after flooding. Before chlorinating, it is important to check the integrity of the water source to prevent future contamination. Well construction must prevent entry of surface water, debris, insects, and animals. The well casing and concrete slab should be sealed and the well cap or sanitary seal must be secure.

INSTRUCTIONS

1. Thoroughly **clean** all accessible surfaces removing any loose debris. Then wash the area with a strong chlorine solution (1 quart of household bleach per 5 gallon of water).
2. Determine the amount of water in the well. **Calculate** the amount of chlorine (**unscented household bleach**, ~ 5%) needed. Remove the well cap. Use the table below and **add** the appropriate amount of bleach. A minimum of 50 ppm chlorine solution is required.

WATER DEPTH (FEET)	WELL DIAMETER					
	2"	4"	6"	8"	24"	36"
20'	3 pints	3 pints	1/2 gal.	1/2 gal.	2 gal.	3 gal.
40'	3 pints	3 pints	1/2 gal.	3/4 gal.	-	-
80'	3 pints	1/2 gal.	1/2 gal.	3/4 gal.	-	-
100'	3 pints	1/2 gal.	3/4 gal.	1 gal.	-	-

*If depth and diameter are unknown, 1 gallon of bleach can be used.
Extra bleach does not necessarily mean extra disinfection and can be a health hazard in itself.*

3. Run water from an outside faucet through a hose until a strong chlorine smell can be detected. Place the end of the hose in the well allowing the water to run down the sides of the casing and **circulate** for at least 15 minutes. Replace the well cap.
4. Turn off the hose and enter the home opening each tap, one at a time, until chlorine can be detected. *Please include hot water faucets, toilets, bathtubs, washing machine, etc.*
5. Once the chlorine odor reaches all outlets, let the water system **stand** ~ 8 hours. *Preferably overnight. Refrain from any water use during this time.*
6. **Flush** the system of chlorine by turning on an outside faucet letting it run until the chlorine smell dissipates. Finally, run the indoor faucets until the water is clear and the chlorine smell is gone. Do not run any unnecessary water into the septic system or allow the chlorinated water to drain into a stream or pond. *The well can not be flushed too much!*
7. The water should be retested to determine if it's safe to drink. It is recommended that over the next several weeks two additional samples are taken and the results are satisfactory. **Repeated chlorination and/or a well professional should be called if problems remain.**