

## Standard Procedures for Disinfecting Wells

1. The amount of chlorine necessary to disinfect a well is determined by the amount of water in the well. To determine the amount of water in the well, use the chart below.

Well size diameter in inches	3 <sup>3</sup>	4 <sup>3</sup>	5 <sup>3</sup>	6 <sup>3</sup>	8 <sup>3</sup>	10 <sup>3</sup>	12 <sup>3</sup>	24 <sup>3</sup>	36 <sup>3</sup>	48 <sup>3</sup>
Gallons per foot of water	0.37	0.65	1	1.5	2.6	4.1	6	23.5	52.8	93.9

***The amount of disinfectant required for each 100 gallons of water:***

3 cups laundry bleach (5.25% chlorine) **Or**

2 ounces of hypochlorite granules (70% chlorine)

**8 ounces = 1 cup; 16 cups = 1 gallon;**

**1 ounce = 1 heaping tablespoon granules; 16 ounces = 1 pound**

2. Determine the amount of laundry bleach to use by multiplying the gallons of water in the well by .03. To determine the amount of hypochlorite granules to use, multiply the gallons of water in the well by .02.

### Calculation Example: 36 inch diameter well, 40 feet deep

1. 40 ft X 52.8 gallons per foot of water (from chart above) = 2112 gallons.
2. 2112 gallons X .03 (using liquid bleach) = 63.36 cups of bleach, OR 2112 gallons X .02 (if using granules) = 42.24 ounces of hypochlorite granules.
3. 63.36 cups of bleach = 3.96 gallons of bleach. (63.6 cups ÷ 16 cups per gallon); OR 42.24 ounces = 5.28 cups of granules. (42.24 ounces ÷ 8 ounces per cup)

3. Mix the calculated chlorine with about 10 gallons of water. Remove well cap and splash solution around the interior of the well. Be certain that the solution has contacted all parts of the well using the entire amount of disinfectant. Seal top of well and allow a contact time for at least two hours.

4. Next, attach a hose to a faucet or hydrant and wash down the well casing and pipes as the water is returned to the well. The re-circulating water must have a strong chlorine odor. If not, add more chlorine.

**Note:** Before disinfecting system, temporarily remove or bypass any carbon filter system.

5. Open each and every faucet or hydrant in the system one at a time starting with the closest faucet to the well. Let it run until the water has a strong chlorine odor at the faucet before turning it off and going to the next one. Be sure to include bathtubs, sinks, showers, washing machine, dishwasher, utility sinks and toilets. Add more chlorine if odor is weak at any faucet.

6. Once the chlorine reaches all faucet points, close faucets and turn off water. Let the chlorinated water stand in the well and distribution system at least overnight. Discharge water to waste until water is free of chlorine, starting at the furthest faucet from the well. Damage to a septic system can be avoided by first discharging chlorinated water outside through a hose and then clearing all faucets of chlorinated water (avoid grass and shrubbery). **DO NOT** allow the well to run dry. *This may damage the well and pump.*

7. A water sample can be taken again once the well has been flushed of all chlorine bleach.



LaSalle County  
Health Department  
Environmental Health  
717 Etna Road  
Ottawa, IL 61350  
815-433-3366  
[www.lasallcounty.org/hd](http://www.lasallcounty.org/hd)