Sampling after Disinfection

After disinfection, sample the water for total coliform and E. coli bacteria to confirm that the water is safe to drink. Wait about 5 days after disinfection before sampling. While waiting for the results, any water for human consumption should be boiled (rolling boil) for at least 1 minute, or use an alternative source.

IF the sample result indicates that both coliform bacteria and E. coli are absent, confirm that disinfection has been effective by 2 additional samples, one in the next 2 to 4 weeks, another after 3 to 4 months. To check the safety of your water over the long term, continue to monitor bacterial quality at least twice a year, or more often if you suspect any changes in your water quality.

IF the sample result indicates either coliform bacteria and/or E. coli present, it is recommended that the well owner seek advice from the Department of Environment and Labour or a certified professional. In the meantime, continue to use boiled water or an alternative source for human consumption activities.

Final Notes

You may experience some temporary inconveniences as a result of the disinfection process such as dirty or discoloured water, staining, or sedimentation problems. However, the water should clear with time. In some cases, a few days may be necessary. Do not use the water for aquariums or pets during this time. Check with your physician about other uses of the water, such as bathing, if you have allergies or other medical concerns.

Please note that under some conditions, such as biofilm buildup in a well, more than one disinfection may be required.

If you have any questions about disinfecting your well, or wish to have a certified person do the work for you, please contact your local Department of the Environment and Labour Office for information, or check the certified contractor list at:
www.gov.ns.ca/nse/water

TABLE 1-1

Depth of water in well		Amount of unscented household bleach[1]	
		Drilled Well	Dug Well
metres	feet	Casing Diameter 15 cm (6 inches)[2]	Casing Diameter 92 cm (36 inches)[2]
1	3	40 mL	1.5 L
3	10	120 mL	4.5 L
5	15	200 mL	7.5 L
10	30	400 mL	15.0 L
30	100	1.2 L	
50	150	2.0 L	
100	300	4.0 L	

Notes:

1 Assumes liquid bleach with approximately 5.2% hypochlorite. This will produce about 100 mg/L of chlorine solution when mixed with the water in the well.

2 For wells with other casing diameters, contact your local Department of Environment and Labour Office

Example Calculation for a Drilled Well:

Measurements:

- Well diameter = 150 mm (6 in)
- Well depth = 60 m (200 ft)
- Depth to water from surface = 10 m (30 ft)

Calculations:

- Depth of water in well = 60 - 10 = 50 m or depth of water in well = 200 - 30 = 170 ft
- From Table 1-1, required volume of bleach to get 100 mg/L solution is about 2 litres