

# Taking care of your well

While regular testing is an important way to check the safety of your drinking water, you can prevent problems and protect the quality of your drinking water by properly maintaining your well. As a private well owner, you are responsible for preventing surface water and other foreign materials from entering your well.

If your drinking water has repeated poor results, consider contacting a licensed well contractor to professionally check your well and plumbing system. A licensed well contractor will be able to give you some options for fixing the problem.

## Drilled Wells

*Secure drilled wells draw from a deep water source and have lower risk of contamination.*

- The well casing should extend at least 40 cm (16 inches) above ground to prevent contamination especially by snow melt and flooding
- The well cap should be sound and tight and any vent openings should be screened to keep insects and mice out.
- The earth around the well casing should be mounded with heavy soil (clay) to keep any standing water, drainage, or spring runoff away from the well casing.
- When a well is drilled, the bore hole is larger than the casing that is put into it. This extra space around the casing, called the *annular space* is sealed with compounds like bentonite clay by the well driller. A depression in the ground around the edge of the casing can indicate that the sealant has shrunk, collapsed, or cracked. If you can move the casing around by pushing it, that's a bad sign. Cracking and gaps allow run-off and surface water to move down the outside of the well casing and contaminate your drinking water. A faulty annular seal should be repaired.

## Dug Wells

*While disinfecting a dug well can be successful, keep in mind that this may not be a long term solution. Consider installing a permanent treatment system in the house to disinfect your drinking water. Chlorinators and ultra-violet light systems are effective treatment devices. Untreated dug wells should be sampled more frequently.*

Dug wells are most commonly constructed from 36" diameter concrete rings stacked one on top of the other. The well is capped with a concrete cover that usually has a small square hatch in the centre. Dug wells are usually drawing from a shallow water table.

*Because the joints between rings and around the hatch are not usually watertight, the well is easily susceptible to surface water contamination, particularly after heavy rain, storms or spring snow melt.*

- Make sure that surface drainage is kept away from the well. Swales may need to be constructed uphill of the well to divert drainage away.
- The earth around the well casing should be mounded with heavy soil (clay) to keep any standing water, drainage, or spring runoff away from the well casing.
- All large-diameter wells should be capped with a safe cover to prevent unwanted access by water, vermin or other contaminants to the well.
- Animals and other sources of contamination should be kept at least 30 metres (100 feet) away from the well.