

Where does my water come from?

This brochure has been prepared for property owners with homes or other establishments served by individual wells. That means your water comes from out of the ground underneath your property. In Carroll County generally, water from rainfall or snow melt trickles down through the soils on your property and eventually finds its way into the fractures in the underlying bedrock. When your well was drilled, the borehole intersected some of these fractures. If a well is properly sited and constructed, it will provide a perpetual supply of water that has been adequately filtered by natural systems.

What should I know about my well?

All that you can see of your well is the part that sticks up out of the ground. This is called the wellhead and it has three visible parts:

- (1) The **casing**. This is the larger metal or plastic pipe usually around 6 inches in diameter. It should extend at least eight inches above the ground surface. Underneath the ground, it should extend down at least 20 feet and into the bedrock. When your well was drilled, the space outside the casing was filled with cement to make sure that contaminants could not easily get into your drinking water.
- (2) The **well cap**. Current well regulations require the cap to be screened and vented. Unlike old style one-piece well caps, sealed and vented caps keep insects out and help prevent contamination.
- (3) The **electrical conduit**. This is the smaller pipe that comes out of the ground and connects to your well cap. The electrical wires to your well pump enter the well through the conduit. The connection between the conduit and the well cap must be securely joined. When you open the cap, there should be some kind of sealing material like caulk in this pipe around the wires, again to keep insects from entering the well.

If any part of the wellhead becomes damaged, it must be repaired by someone able to do the work correctly (for example, only a licensed well driller is qualified to repair well casing).

Inside the well, there is a water line and a well pump. The water line inside the well connects to another water line that goes from the well to your house through a plumbing connector called a **pitless adapter**.

After a well driller constructs a well, he must submit a **completion report** to the Health Department. This form provides detailed information about a well's construction and geology. It also tells you how much water the well was able to produce when its yield was tested.

What should I do to maintain my well?

When a well is first connected as a water supply, it must be disinfected. This process is done with liquid household bleach (sodium hypochlorite). On deeper wells this may need to be supplemented with pool shocking crystals (calcium hypochlorite). The goal of the chlorination process is to kill any bacteria that may have been introduced while the well was being drilled or when the plumbing work was being done. The same process should be completed whenever major plumbing work is completed (well pump, water line, pressure tank replacement, etc.). Also, if water treatment equipment was installed to address water quality issues, it must be maintained. The disinfection process may be found on our website.

How do I know that my water is safe to drink?

A well must be tested for bacteria, nitrates, and a few other things when it is put into service. Two consecutive safe bacteriological samples are required for the Health Department to issue a Certificate of Potability (COP) for a well. In some cases, treatment devices may have been required in order to meet water quality standards.

While the COP gives you some assurance that the water is safe to drink, it may be appropriate to retest your water from time to time, especially after major plumbing work has been completed or if you wish to verify that a water treatment device is working. When plumbing work prompts a retest, wait at least two weeks after disinfecting the well and water supply before having a certified water sample collector collect a sample. Taste, odor, and color changes also may suggest testing is in order.

Carroll County Health Department

**Bureau of
Environmental Health**

**Useful information
about your well**



Public Health
Prevent. Promote. Protect.

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