



# HOW TO PROTECT YOUR WELL

Your family's health depends on a safe, reliable source of water for drinking, bathing and other needs. Your well is also valuable because it represents a large financial investment. Learn more about protecting your health and investment.



## HAVE YOUR WELL TESTED

Testing your well is important, simple and inexpensive. Call your county health department for details. In Greene County, the number is 417-864-1673, and the Springfield Greene County Health Department website has a list of tests, prices, and illustrated step-by-step instructions at <http://health.springfieldmo.gov/index.aspx?NID=146>

### Here are some common-sense, effective things you can do:

Find out what kind of well installation you have (see box). Below-ground (pit) installations are more easily contaminated. Having a well casing that sticks up above ground level will help prevent surface water pollution. If your well is in a pit or otherwise below ground, it is important to prevent water from standing over the seal at the top of the well.

**Find out** how old your well is. Older wells are subject to problems, especially because they may only be cased a shallow depth. More rigid well construction standards have been in effect since 1987.



### IMPORTANT FACTS

Most local groundwater comes from rain that has fallen nearby, within a few miles or closer. Sinkholes and fractures often allow surface water to mix with ground water with little or no filtration. The sources of pollution that could harm our wells are often located in our neighborhood or even on our own property.

**Check your** well casing and seal to be sure there are no cracks or holes in the casing and no open holes in the seal. A screened vent pipe should extend up out of a sanitary seal installation (see box) to prevent a vacuum from forming inside the well when the pump kicks on. A vacuum can suck contamination into the well.

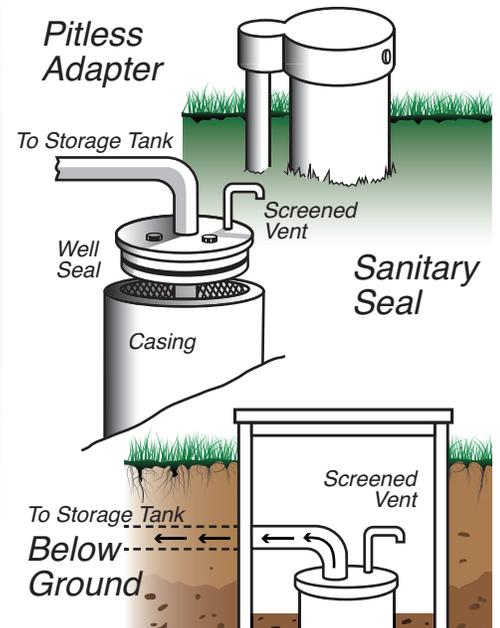
**If you must** create a possible pollution source on your property, be sure to place it as far as possible from the well. Minimum separation distances are: septic tank—50 feet; septic drain (absorption) fields, manure pits, livestock/ poultry yards, cesspools, unplugged abandoned wells—100 feet; bulk fuel storage, chemical storage, municipal lagoons—300 feet.

**Never store** materials in your well house or near a well. Many wells have been contaminated by spills or leaks of such materials.

**Be careful** to prevent back-flow (see circle on back). Never have hoses submerged in wash basins, stock tanks, or swimming pools.

**Have your well** tested for coliform bacteria and nitrates at least yearly. Keep a record of these tests which screen for possible pollution.

## COMMON TYPES OF WELL CONSTRUCTION

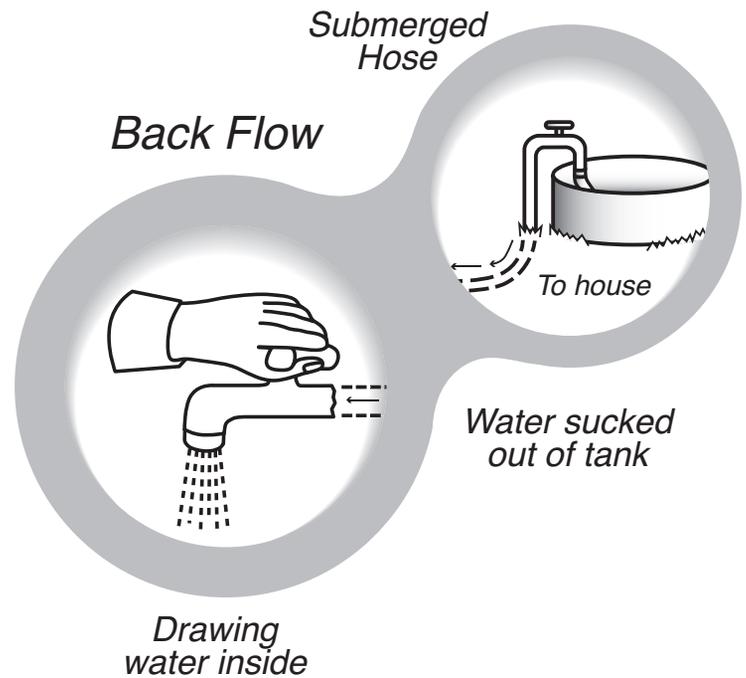


**If your well** gets cloudy or tastes different after a rain, or if the quality changes suddenly anytime, it could be a sign of pollution. Get your well tested as soon as possible.

**Before hiring** someone to drill a new well, ask friends and neighbors to recommend a driller. Only hire a driller who is permitted by the state of Missouri and make sure your well receives a state certification number. To find a driller or to check certification of your well go to [www.dnr.mo.gov/mowells](http://www.dnr.mo.gov/mowells).

**If you have** an abandoned well on your property, the well needs to be plugged as required by state law to keep it from polluting your current well, or those of your neighbors.

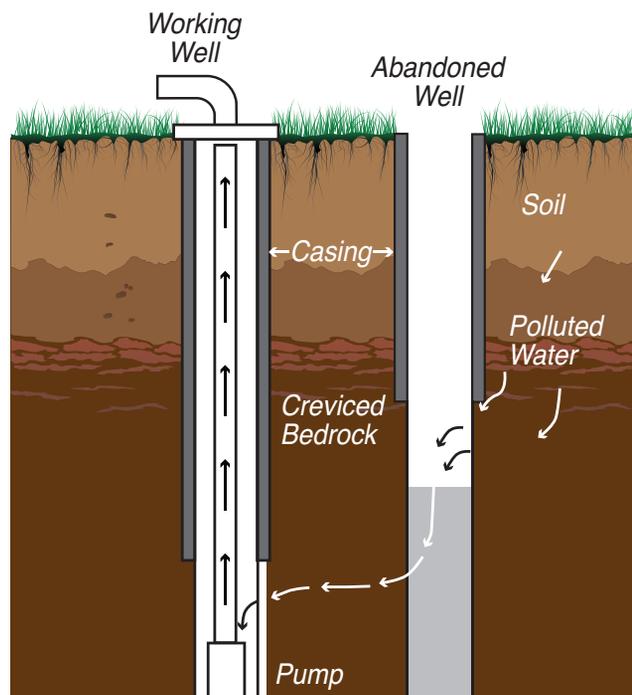
**Although** most people get their water from drilled wells, some homes use hand-dug wells, cisterns, or springs. These water sources are easily contaminated and require special protection measures. Call your local health department for more information.



## ABANDONED WELLS [The Hidden Danger]

The open borehole of an abandoned well can easily allow contamination to flow into groundwater aquifers. These deep water-bearing layers of rock are our water supply. Once polluted, they are difficult, or even impossible, to clean.

**Abandoned wells must be plugged by a certified well driller or pump installer and reported to the Missouri Department of Natural Resources to prevent such pollution.** In some cases, cost-share assistance is available to homeowners who want to plug a well on their property. Technical advice is available from **MDNR Missouri Geological Survey, 573-368-2165.**



*COLIFORM* bacteria are commonly found in warm-blooded animals, in soil and on vegetation. Their presence in a well may indicate that contaminated water has seeped into the well.

*NITRATES* are chemicals found in fertilizers, sewage and animal waste. Nitrates are especially hazardous to infants. The Public Health Service recommends that drinking water contain no coliform bacteria and 10 parts per million or less of nitrates.



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The mission of the Watershed Committee of the Ozarks is to sustain and improve the water resources of Springfield and Greene County through education and effective management of the region's watersheds.

Numerous other publications are available from the Watershed Committee at [www.watershedcommittee.org](http://www.watershedcommittee.org)