

**WEST VIRGINIA DEPARTMENT OF HEALTH
AND HUMAN RESOURCES
BUREAU FOR PUBLIC HEALTH
OFFICE OF ENVIRONMENTAL HEALTH SERVICES
FACT SHEET**

Private Well Owners - Four Steps to Water Well Safety

The West Virginia Department of Health and Human Resources (WV DHHR) regulates private well construction through WV Legislative Rules, 64CSR19 Water Well Regulations and 64CSR46 Water Well Design Standards. Private wells provide a clean, safe source of water to many citizens of West Virginia.

Water is the most abundant and important substance on Earth. It is essential to life and is a major component of all living things. There is approximately 326,000,000 cubic miles of water on the earth, existing in three states: solid, liquid, and gas. The sources for this water storage are the oceans, icecaps & glaciers, ground water, fresh-water lakes, inland seas, soil moisture, atmosphere, and rivers. The following are the percentage for each water source:

| Water Source | Water Volume (Cubic Miles) | Per Cent of Total Water |
|--------------------|-------------------------------|----------------------------|
| Oceans | 317,000,000 | 97.24% |
| Glaciers & Icecaps | 7,000,000 | 2.14% |
| Ground Water | 2,000,000 | 0.61% |
| Fresh Water Lakes | 30,000 | 0.009% |
| Inland Seas | 25,000 | 0.008% |
| Soil Moisture | 16,000 | 0.005% |
| Atmosphere | 3,100 | 0.001% |
| Rivers | 300 | 0.0001% |
| Total Water Volume | 326,000,000 | 100% |

Note: Information obtained from http://www.srh.noaa.gov/jetstream/atmos/11_water.htm

It is important to remember that ground water comprises 99% of the Earth's available fresh water and only about 2.8% of the Earth's water is fresh water. Of all of the water on Earth, only 0.3% is readable available and can be used by humans.

The location and installation of a well is crucial to protecting water from contamination. Because many factors determine the best place to locate a well, it is recommended that the homeowner follow recommendations from the WV DHHR and the certified water well driller.

To find a certified water well or pump installer contractor in your area, contact you local health department or visit the Office of Environmental Health Services website at www.wvdhhr.org/oehs.

1. HAVE YOUR WATER TESTED

As a private well owner, it is your responsibility to make sure that your water is safe to use. There are many factors that could contaminate your water: sewage, animals, chemicals, household plumbing, and some naturally occurring substances. At high levels, pollution in your water can put your family's and animals' health at risk. Contact your local health department or the Office of Environmental Health Services for guidance in selecting tests. If you have any questions about the safety of your well water, you should have your water tested at a certified lab.

For a list of certified labs, contact the West Virginia Office of Laboratory Services at 304-558-3530 or visit their website at:

<http://www.wvdhhr.org/labservices/shared/docs/EnvMicro/waterqualitylabs.pdf>

2. UNDERSTAND THE RESULTS OF THE TESTING

Once you have had your well water tested and received the results, you will need to understand the results. Many times the certified lab that does the testing will explain if your well poses any health concerns. If you still have questions after speaking to the certified lab, you can contact your local health department who should be able to help you interpret well testing results and assist you with any additional questions you may have.

3. FIX ANY PROBLEMS

If you learn your water is contaminated, determine the source of the problem first and address it as soon as possible. You may need to disinfect your water, have a new well drilled, replumb or repair your system. Consult your local health department or certified water well driller for help. You might consider installing a water treatment device to remove contaminants. There are many home water treatment devices. Different types remove different contaminants. No one device does it all. Get a copy of the Environmental Protection Agency's "*Home Water Treatment Units*" pamphlet by calling 800-426-4791.

4. MAINTAIN YOUR WELL

Annual well maintenance is essential to keep your water safe. Well owners are encouraged to perform an annual water test, periodically check to make sure their well and pumping system is functioning properly, and repair their system as soon as a problem is discovered. Proper well maintenance should include checking the casing, well cap, and electrical conduit for cracks and other entry points for potential contaminants. When the well is no longer in use, make sure to have a certified water well driller to properly close the old well to help prevent the contamination of the water table.

To help keep track of maintenance, it is recommended that you create and maintain a "well maintenance log." The log should include the location of the well, construction, and contractor details, as well as results of any water tests.

For additional information contact the:
West Virginia Department of Health and
Human Resources
Bureau For Public Health
Office of Environmental Health Services
Environmental Engineering Division
Capitol and Washington Streets
1 Davis Square, Suite 200
Charleston, West Virginia 25301-1798
Phone 304-558-2981
Website @ <http://www.wvdhhr.org/oehs/>

**For additional Local Health Department
information, please contact:**