

## INTERPRETATION & EXPLANATION OF RESULTS

The amount of risk associated with a drinking water contaminant depends on the nature of the specific contaminant, individual susceptibility and the concentration present in the water. For interpretation and explanation of test results contact your local health department. NOTE: Local county health departments have varying fees for sample collection.

County	Phone Number	County	Phone Number
Barbour	457-1670	Berkeley	267-7130
Boone	369-7967	Braxton	765-2851
Brooke	737-3665	Cabell	523-6483
Calhoun	354-6101	Clay	587-4269
Doddridge	873-1531	Fayette	574-1617
Gilmer	462-7351	Grant	257-4922
Greenbrier	645-1539	Hampshire	496-9640
Hancock	564-3343	Hardy	530-6355
Harrison	623-9308	Jackson	372-1093
Jefferson	728-8415	Kanawha	348-8050
Lewis	269-8218	Lincoln	824-3330
Logan	792-8630	Marion	367-1746
Marshall	845-7840	Mason	675-3050
McDowell	448-2174	Mercer	324-8836
Mineral	788-1321	Mingo	235-3570
Monongalia	598-5131	Monroe	772-3064
Morgan	258-1513	Nicholas	872-5329
Ohio	234-3682	Pendleton	358-7565
Pleasants	684-2461	Pocahontas	799-4154
Preston	329-0096	Putnam	757-2541
Raleigh	252-8531	Randolph	636-0396
Ritchie	643-2917	Roan	927-1480
Summers	466-3388	Taylor	265-1288
Tucker	478-3572	Tyler	337-2001
Upshur	472-2810	Wayne	272-6761
Webster	847-5483	Wetzel	337-2001
Wirt	275-3131	Wood	485-1416
Wyoming	732-7941		

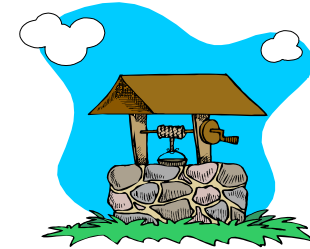
### Further information:

The West Virginia Bureau for Public Health, Office of Laboratory Services, is dedicated to the promotion, protection and assurance of the health of citizens of West Virginia. For additional information on water testing, fees or an explanation of results, you are invited to contact:

OFFICE OF LABORATORY SERVICES  
 Environmental Chemistry Laboratory  
 4710 Chimney Drive, Suite G  
 Charleston, WV 25302  
 Phone (304)965-2694

WV Department of Health and Human Resources  
 Bureau for Public Health  
 Office of Laboratory Services  
 Environmental Chemistry Laboratory  
 4710 Chimney Drive, Suite G  
 Charleston, West Virginia 25302

# DRINKING WATER FROM HOUSEHOLD WELLS



For more information contact:

WV Department of Health and Human Resources  
 Bureau for Public Health  
 Office of Laboratory Services

ENVIRONMENTAL CHEMISTRY LAB  
 4710 CHIMNEY DRIVE, SUITE G  
 CHARLESTON, WV 25302  
 Phone: 304-965-2694

OR

ENVIRONMENTAL MICROBIOLOGY LAB  
 167 11<sup>TH</sup> AVENUE  
 SOUTH CHARLESTON, WV 25303  
 Phone: 304-558-3530

OR

BARDANE REGIONAL ENVIRONMENTAL  
 MICROBIOLOGY LAB  
 1498 WILTSHIRE ROAD, SUITE 6  
 KEARNEYSVILLE, WV 25430  
 Phone: 304-725-5832

*Healthy people in healthy communities*

---

## Water is important to everyone.

Almost 80% of the earth's surface is covered by water. Ninety-seven percent of the water on earth is salt water, containing salts and minerals, which humans cannot drink. It is too difficult and expensive to remove the salt. Two percent of the water on earth is glacier ice at the North and South Poles. This is fresh water, but it is too far away from where people live to be usable. Less than one percent of all the water on earth is fresh water that we can actually use. Although this fresh water never wears out, it can become contaminated.

Most people in our country receive their water from a public water system which is regulated under federal and state laws to produce water that provides protection to human health. But more than 15% of American public (40million people) obtain their water from household wells and springs. Unfortunately, there is no legislation that regulates these water sources, prior to consumption. Therefore it is imperative that each homeowner be aware of the risks their water may carry.

## Potential sources for contamination.

The actual presence of contaminants in your well will be affected by local geology and climate, your water system's construction, the extent of human activity in the area and your proximity to contamination sources.

Ask yourself these questions:

- Is there livestock nearby?
- Are pesticides being used on nearby agricultural croplands or nurseries?
- Do you use lawn fertilizers near the well?
- Is your well 'downstream' from your neighbor's septic system?
- Is your well located near a road that is frequently salted or sprayed with de-icers during the winter?
- Do you or your neighbors dispose of household wastes or used motor oil in the backyard, even in small amounts?
- Does your well have proper protection from surface runoff?

---

## Five basic steps will help you determine and maintain the adequacy of your drinking water.

- Identify potential sources of contamination.
- Have your water tested periodically.
- Have the test results interpreted properly and explained clearly.
- Establish and implement a regular maintenance schedule for your well and keep accurate, up-to-date records.
- Remedy any problems, as necessary.

## Testing your well water.

Household wells should be tested periodically. You can contact your county health department or the West Virginia Bureau for Public Health to obtain the names of certified laboratories that can perform these tests. These guidelines are recommendations:

- Once each year test for coliform bacteria, nitrate and sodium. It is best to test for these contaminants during the spring and summer following rainy periods. These tests should also be conducted after repairing or replacing an old well or pipes and after installing a new well or pump.
- Every three years test for sulfate, chloride, iron, manganese, hardness, pH, total dissolved solids, and corrosion index.
- If your home plumbing contains lead materials, brass fittings or lead solder, test your water as soon as possible. Congress has restricted the use of lead in new or replacement plumbing materials.
- If a new baby is expected in the household it is a good idea to test for nitrate in the early months of pregnancy, before bringing an infant home, and again during the first six months of the baby's life. Nitrate has been known to react with the hemoglobin in the blood to produce an anemic condition known as 'blue baby'.
- If someone in your family becomes ill, or the taste, odor or color of your water changes, your water supply may be contaminated.

---

## WHEN TO TEST YOUR WATER

All wells should be tested for arsenic, barium

CONDITIONS OR NEARBY ACTIVITIES	RECOMMENDED TEST
Recurrent gastrointestinal illness	Coliform bacteria
Household plumbing contains lead	pH, Lead, Copper
Radon in indoor air or region is radon rich	Radon
Scaly residues, soaps don't lather	Hardness
Water softener needed to treat hardness	Hardness, Manganese, Iron
Stained plumbing fixtures, laundry	Iron, Copper, Manganese
Objectionable taste or smell	Hydrogen Sulfide, Corrosion, Metals, Coliform bacteria
water appears cloudy, frothy or colored	Turbidity, Detergent, TDS
Corrosion of plumbing	Corrosion, pH, Lead
Rapid wear of water treatment equipment	pH, Corrosion
Nearby area of intensive farming	Nitrate, Pesticides, Coliform bacteria
Coal or other mining operations nearby	Metals, pH, Corrosion
Gas drilling operation nearby	Chloride, Sodium, Barium, Strontium, Chromium
Odor of gasoline or fuel oil and nearby gas station or buried fuel tanks	Volatile Organic Compounds
Dump, junkyard landfill, factory or dry-cleaning operation nearby	Volatile Organic Compounds, TDS, pH, Sulfate, Chloride, TOC, Metals
Salty taste, or near heavily salted road	Chloride, TDS, Sodium
All wells	Arsenic, Barium