Dear Well Owners Network Member:

Everywhere you look there seems to be talk about living well, healthy living, or living your best life and being your best self. Living well should start with having a healthy water well and septic system. As a well owner, you are in charge of these systems and the quality of your water. We are here to help you through it this spring and beyond with an easy to-do list and discount on water testing!

Let's get started....

**First things first, Well Water Testing!**

Testing your water is important to ensuring your water quality is safe for you and your family. Remember that you are solely responsible for the quality of your drinking water, so it is up to you to decide when and how to test your water.
Recommended Testing

At a minimum, your water should be tested every year for bacteria, anything of local concern or any contaminants that you are monitoring from previous test results.

Testing more than once a year may be warranted in special situations:

- Someone in your household is pregnant or nursing
- There are unexplained illnesses in the family
- Your neighbors find a dangerous contaminant in their water
- You note a change in water taste, odor, color or clarity
- There is a spill of chemicals or fuels into or near your well

If you have a situation that is mentioned above, follow comprehensive testing recommendations below or call the wellcare® Hotline at 888-395-1033 for assistance on what to test for.

Comprehensive Testing

If you have noticed a change in your water or you have not tested in several years, do a comprehensive test to find out if there are any contaminants of concern. Even if there is no contaminant found, this will give you a baseline that you can check against in the future.

Water Samples

You will need to collect water samples for the laboratory you choose to test your water. The laboratory usually provides specific sampling instructions and clean bottles in which to collect the water sample. Do not rinse lab containers or fill them to overflowing. Check to see if the sample must be refrigerated or treated with special chemicals.

You may need to take a sample from the tap with the first flush of water in the morning or after the tap has been allowed to run for a period of time. If you suspect a problem somewhere in your home plumbing, you may need to take samples from several points: before and after water enters the hot water tank, for example, or at the inlet and outlet of a filtering device.

Again, carefully follow the instructions provided by the laboratory. We have provided an example at right for taking samples. Sampling is...
the most important part of testing. A carelessly collected sample can give you inaccurate results.

Finding a Testing Lab

We have provided water testing resources for each U.S. state and Canadian province to assist well owners in those areas obtain lists of certified water testing laboratories. These lists can be found by using our interactive map.

OR check out this deal from Tap Score!

Special Savings on Well Water Testing from Tap Score

Tap Score is a service for easy home water testing and reporting created by SimpleWater. SimpleWater's mission is to give you easier, more informative and lower cost well water testing options through their network of professionally certified environmental testing labs.

How it works - Purchase the right Tap Score package for your needs securely through their site. The package is mailed to you. Everything you need is included in the box. It takes under two minutes to collect your sample following the detailed instructions provided. The label to the certified lab near you is provided and shipping is free. Tap Score emails your results when they are ready.

Tap Score generously provides our Network members with a dedicated 10% discount on water test kits, but for a limited time they are providing you with a 20% discount from March 15 - April 15, 2020!

Order here and use this code at checkout: WCN2020SPECIAL.

Limited time discount cannot be combined with the dedicated discount. Discounts are only available on the Well Water Test Kits on Tap Score's website.

Hotline HOT Topic: Understanding Your Well Water Test Results
Many well owners contact our wellcare® Hotline to ask for help understanding their water test results. The often confusing measurements, limits and standards make it tough to determine if your water is safe or if it needs some type of treatment.

**Figuring Out the Measurements**

Most substances in water are measured as a concentration: a specific mass of a specific chemical within a specific unit or volume of water. The confusing part is that different terms can be used to reflect the exact same measurement.

- part per million/ppm = milligram per liter of water = mg/L
- part per billion/ppb = microgram per liter of water = ug/L

So what do these terms really mean? Basically, they refer to very small amounts of a substance within about a quart of water. A liter amounts to 1.05 quarts. These are very diluted concentrations. For example, the recommendation for sodium in drinking water is no more than 20 parts per million. By comparison, the salt content of seawater is 32,000 parts per million.

**Translating Your Test Results**

Cross-reference your test results with the chart below which lists commonly tested contaminants, how it is regulated or not, and the maximum levels in all the measurements you are likely to see. Regulated contaminants are typical for public water supplies; well owners should also use these as guidelines. However, your state may have stricter standards. Check with your local health department, state environmental agency, or contact the wellcare® Hotline for assistance.
Laboratories have detection limits, or levels below which contaminants cannot be reliably detected. That does not necessarily mean that the contaminant is not present. There could be so little present that it cannot be reliably detected with the laboratory equipment or testing procedures being used.

The important question is whether the contaminant poses a health threat at that particular concentration. Compare your water test results to the federal standards in the table to assess the potential for health problems. If in doubt, contact your local or state health department or environmental agency, the local extension service, your well contractor, or the wellcare® Hotline at 888-395-1033.

After you get your first test results, you would be wise to follow up with a second test taken at a different time before you decide on any water treatment. This is because there is a certain margin of error in water testing and contamination problems may vary. Use bottled water until the

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>MCL</th>
<th>Secondary</th>
<th>Candidate</th>
<th>PPM or mg/L</th>
<th>PPB or ug/L</th>
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</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>X</td>
<td></td>
<td></td>
<td>0.01</td>
<td>10</td>
</tr>
<tr>
<td>Atrazine</td>
<td>X</td>
<td>0.003</td>
<td>3</td>
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<td></td>
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<tr>
<td>Bacteria</td>
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<td>Barium</td>
<td>X</td>
<td>2</td>
<td>2000</td>
<td></td>
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<tr>
<td>Benzene</td>
<td>X</td>
<td>0.005</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cadmium</td>
<td>X</td>
<td>0.005</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chromium</td>
<td>X</td>
<td>0.1</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chlorine</td>
<td>X</td>
<td>4</td>
<td>4000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper</td>
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<td>1.3</td>
<td>1300</td>
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<td></td>
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<tr>
<td>Cryptosporidium</td>
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<td>Zero</td>
<td>Zero</td>
<td></td>
<td></td>
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<tr>
<td>Fluoride</td>
<td>X</td>
<td>4</td>
<td>4000</td>
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<tr>
<td>Giardia lamblia</td>
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<td>Zero</td>
<td>Zero</td>
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<tr>
<td>Iron</td>
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<td>0.015</td>
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<td>0.020</td>
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<tr>
<td>Nitrate*</td>
<td>X</td>
<td>10</td>
<td>10000</td>
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<td></td>
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<tr>
<td>Nitrite</td>
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<td>1000</td>
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<tr>
<td>Perchlorate</td>
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<tr>
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<td>Sulfate</td>
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<tr>
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<td>0.005</td>
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<td>THMs</td>
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<tr>
<td>Toluene</td>
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<td>1</td>
<td>1000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
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<td>500</td>
<td>500000</td>
<td></td>
<td></td>
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<tr>
<td>Uranium</td>
<td>X</td>
<td>0.03</td>
<td>30</td>
<td></td>
<td></td>
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</tbody>
</table>

* Although your testing laboratory may report nitrate as N, it can also be reported as nitrate NO3. If your result is reported as nitrate NO3, you should refer to the maximum level of 45 ppm, which is equivalent to 10 ppm nitrate as N. Some states may set limits for nitrate and nitrite even lower than those set by the EPA. Check with your local health department or state environmental agency for maximum levels used in your state.

**Next Steps**

Laboratories have detection limits, or levels below which contaminants cannot be reliably detected. That does not necessarily mean that the contaminant is not present. There could be so little present that it cannot be reliably detected with the laboratory equipment or testing procedures being used.

The important question is whether the contaminant poses a health threat at that particular concentration. Compare your water test results to the federal standards in the table to assess the potential for health problems. If in doubt, contact your local or state health department or environmental agency, the local extension service, your well contractor, or the wellcare® Hotline at 888-395-1033.

After you get your first test results, you would be wise to follow up with a second test taken at a different time before you decide on any water treatment. This is because there is a certain margin of error in water testing and contamination problems may vary. Use bottled water until the
second results are in.

**There is a major exception to this rule.** Any positive test for bacteria, such as fecal coliforms and E. coli, or microorganisms, such as cryptosporidium or Giardia lamblia, demands immediate disinfection of your well and water supply. These organisms can make you very sick. Do not use this water for anything, including brushing your teeth or bathing, until testing shows the water is safe to use. Contact your local health department, well contractor, or the wellcare® Hotline at 888-395-1033 for help.

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**It's Time to Service Your Water Treatment Systems!**

This is the time of year that we also recommend servicing any water treatment systems you have. If you don't have a water treatment company or professional that does this for you, follow the manufacturers recommendations. Don't have water treatment? That's okay, not all well water needs treatment. The only way to know if you need treatment is to test. Use our recommendations in the water testing article above.

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**Your Well Inspection To-Do List**

Well maintenance is more than just water testing and servicing water treatment. It also requires well inspection by you and a professional and best practices.

Here's your spring well inspection to-do list:

- **Inspect your wellhead.** Check the well covering, casing, well cap or seal to make sure all are in good condition, leaving no cracks or other entry points for potential pollutants like pesticides and nitrates from nearby farm and livestock field runoff.
- **Check around your well for overgrowth and make sure the area around the well is free and clear of plants, roots, leaves, and the soil**
slopes away from your well.

- Keep paint, chemicals, fuel, oil, etc., far away from the well as they can be a future source of groundwater contamination.
- Look for leaks inside and outside your home. Find more tips for finding and fixing leaks during Fix a Leak Week, March 16-22 and on their website.
- Have the well system, including the pump, storage tank, pipes and valves, and water flow inspected every 5 years by a licensed well contractor.
- If you have no inspection record and cannot determine the age of the well, have it inspected immediately by a licensed well contractor.
- Have any old unused wells on the property closed properly by a licensed well contractor.

For more information on well inspection and maintenance download our free Well Owner’s Manual. It is also available in Spanish from the same link. In this publication you can also find a place to keep records of any water testing and well maintenance. If you prefer a hard copy, contact Charlene Bean.

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**Tips for a Healthy Septic System**

Homeowners with both wells and septic systems must take care to maintain these systems to ensure a properly functioning septic system and the safety of their well water. Septic systems require regularly scheduled maintenance just like wells. See our tips below.

Proper maintenance of a septic system includes:

- Regular inspection every 1 to 2 years
- Have the system pumped every 3 to 5 years, depending on demand
- Conserving water to reduce the amount of demand placed on the system
Protecting Your Septic System All Year

Everyone in the household must consider what is flushed into the septic system as they can reduce or damage the natural function of the septic system. Avoid flushing items that can clog the system or chemicals that can contaminate ground and surface water, and potentially damage the biological components of the system.

DO NOT flush grease, fats, oils, bandages, feminine hygiene products, disposable diapers, wipes - even ones that say 'flushable', pharmaceuticals or medicines, paper towels, kitty litter, cigarette butts, coffee grounds, dental floss, hair, paint, pesticides, varnish, thinners, waste oil, or other chemicals. Ideally ONLY water and household detergents are flushed into the system.

The septic system's drain field must also be protected. The following strategies are recommended to protect the field and prolong its functional life:

- Do not drive over the drain field with cars, trucks or heavy equipment.
- Do not plant trees or shrubbery in the drain field area as roots can plug or damage the wastewater distribution lines.
- Do not cover the drain field with hard surfaces such as concrete or asphalt. Grass is the best cover because it will help prevent erosion and help remove excess water.
- Divert surface runoff water from roofs, patios, driveways and other areas away from the drain field.

A properly maintained septic system poses no threat to the groundwater that supplies a household well. However, wastewater from a failing septic system can carry contaminants such as nitrates, harmful bacteria and viruses into groundwater and potentially the well.

For more information download our free wellcare® information sheet on Your Septic System.

Want more tips on #LivingWell?

Check out the Water Well Trust Facebook page!

Still Have Questions?

We can help! Call the wellcare® Hotline at 888-395-1033, complete an online form, send us an email, or chat with
us live! Hablamos español también!