

# WELL WATER & INDIVIDUALS WITH COMPROMISED IMMUNE SYSTEMS

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High levels of certain contaminants found in drinking water may not affect a healthy person. However, it could be detrimental to a patient with a weakened immune system. Patients that are at higher risk of developing certain waterborne diseases include but are not limited to:

- Those with HIV/AIDS
- Cancer and transplant patients who are taking certain immunosuppressive drugs
- Anyone with inherited diseases that affect the immune system (e.g., congenital agammaglobulinemia, congenital IgA deficiency)

The risk of developing severe disease will vary depending on the person's degree of immune suppression. Discuss concerns with your doctor to determine whether your medical condition makes it advisable to follow recommendations in this information sheet.

## Contaminants of Concern

The information provided below is specific to the most common water quality concerns for those individuals with compromised immune systems. Please note that this is a limited list of contaminants of concern. Not all these contaminants will pertain to your area or water system but should be discussed with your doctor.

**Microorganisms** include bacteria, protozoa, algae, and fungi. Although viruses are not considered living organisms, they are sometimes classified as microorganisms. Microorganisms can only be seen through a microscope. Since we cannot see them without one, it is necessary to test your water for them.

**Cryptosporidium is a microscopic parasite that causes the diarrheal disease cryptosporidiosis. It is one of the most common causes of waterborne disease.** Although exposure to cryptosporidium is especially dangerous for people with weakened immune systems, there have been outbreaks and incidences in healthy populations as well. It is highly infectious, resistant to chlorine, and difficult to filter. Symptoms of cryptosporidiosis include:

- Watery diarrhea
- Nausea
- Abdominal cramps
- Vomiting
- Dehydration
- Fever

Additionally, individuals should also be aware of adenovirus, E. coli and fecal coliforms, giardia lamblia, legionella, mycobacterium avium complex (MAC), pseudomonas aeruginosa, salmonella, and turbidity. Discuss these additional contaminants with your doctor to see if testing is advised.

## Water Testing

Contamination of well water can occur if a well is not properly constructed or if there is a contamination source nearby (e.g., farms, contaminated water bodies, landfills). Shallow wells and spring fed wells are more susceptible to contamination since water is drawn from the ground surface.

Private well owners are responsible for maintaining their wells to make sure their water supply is safe. Well water testing should be performed annually or more frequently if recommended by your doctor. You should also have your well system inspected every five years by a licensed well contractor to confirm the well's construction is still sound. See our [wellcare®](#) information sheet on [Well Maintenance](#) to learn more.

It is best to have a comprehensive water test performed before using your water for drinking and cooking. Review our [wellcare®](#) information sheet on [Well Water Testing](#) and contact the [wellcare®](#) Hotline or your local health department for contaminants of local concern such as arsenic, nitrate, PFAS, and radon.

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 calling the [wellcare®](#) Hotline at 888-395-1033. Check with individual laboratories to get pricing. Ask how soon you should expect results and about the information that will be provided with your test results. Discuss the test results with your doctor.

## Water Treatment

Treatments to reduce microorganisms include boiling your water, distillation, filtration, and ultraviolet lights. These technologies may have a wide range of effectiveness. Look for treatment systems that are certified by [NSF](#) or [Water Quality Association \(WQA\)](#). Certified water treatment professionals can help you select the right treatment. To locate a certified water treatment professional in your area, visit [WQA's website](#).

It is imperative to maintain treatment devices and change filters as specified by the manufacturer or your water treatment professional.

You should also retest your water after treatment is installed and after maintenance to confirm the effectiveness of the device.

***NOTE: Boiling your water can be effective to kill microorganisms, but it can also concentrate certain contaminants like nitrate and heavy metals. You must test your water first to determine if these contaminants are present in your water.***

## Actions You Should Take

### Report all possible cases

- ✓ Local or state health departments should be informed of waterborne disease cases to improve investigating efforts.

### Inform yourself

- ✓ Know where your water comes from – a public water supplier, community water system, or a private well.
- ✓ Find out about contaminants in your area and any possible health risks.
- ✓ Contact your doctor, especially if you are at risk from waterborne exposures.
- ✓ If you are on well water, contact the wellcare® Hotline at 1-888-395-1033 or visit our [website](#) for information on how to test your well water.

### Learn more

- ✓ Join the wellcare® Well Owners Network to learn more about your well and well water. For more information and to join visit our [website](#).

### Share with your neighbors

- ✓ Share this information with other well owners in your area.

## Additional Guidance

You can find additional guidance from the following resources:

Centers for Disease Control and Prevention (CDC). General Information for Immunocompromised Persons.

[https://www.cdc.gov/cryptosporidium/about/?CDC\\_AAref\\_Val=https://www.cdc.gov/parasites/crypto/gen\\_info/infect\\_ic.html](https://www.cdc.gov/cryptosporidium/about/?CDC_AAref_Val=https://www.cdc.gov/parasites/crypto/gen_info/infect_ic.html).

Centers for Disease Control and Prevention (CDC). Prevention & Control - Immunocompromised Persons.

[https://www.cdc.gov/cryptosporidium/prevention/?CDC\\_AAref\\_Val=https://www.cdc.gov/parasites/crypto/gen\\_info/prev ent\\_ic.html](https://www.cdc.gov/cryptosporidium/prevention/?CDC_AAref_Val=https://www.cdc.gov/parasites/crypto/gen_info/prev ent_ic.html).

Environmental Protection Agency (EPA) and Centers for Disease Control and Prevention (CDC). Guidance for People with Severely Weakened Immune Systems. <https://nepis.epa.gov>.

HealthLinkBC. Preventing Water-Borne Infections For People with Weakened Immune Systems.

<https://www.healthlinkbc.ca/sites/default/files/documents/healthfiles/hfile56.pdf>.

## **For More Information on Well Water & Immunocompromised Individuals**

Contact your licensed well contractor, local health department, state environmental agency, or the [wellcare®](#) Hotline.



## **Information to help maintain and protect your water well system:**

[wellcare®](#) is a program of the [Water Systems Council \(WSC\)](#). WSC is the only national organization solely focused on protecting the health and water supply of an estimated 23 million households nationwide who depend on private wells (according to the U.S. EPA).

This publication is one of more than 100 [wellcare®](#) information sheets available FREE at [www.watersystemscouncil.org](http://www.watersystemscouncil.org).

Well owners and others with questions about wells and well water can contact the [wellcare®](#) Hotline at 1-888-395-1033 or visit [www.wellcarehotline.org](http://www.wellcarehotline.org) to fill out a contact form or chat with us live!

## **JOIN THE WELLCARE® WELL OWNERS NETWORK!**

By joining the FREE [wellcare®](#) Well Owners Network, you will receive regular information on how to maintain your well and protect your well water.

Contact us at 1-888-395-1033 or visit [www.wellcarehotline.org](http://www.wellcarehotline.org) to join!