

# wellcare<sup>®</sup> information for you about **What You Need to Know if You Are Told to Boil Your Drinking Water**

## Why Should You Boil Your Drinking Water?

Boiling is one method for temporarily removing bacteria such as *E. Coli* from water used for drinking, food preparation, dishwashing or toothbrushing. These organisms are more commonly found in lakes and rivers than in well water, but can impact well water if flooding occurs in an area.

You may be asked to boil your water:

- following natural events that disrupt your water supply, such as a flood, earthquake, or power outage;
- following a disruption to the water system or power loss, due to a line break or system repairs; or
- when otherwise instructed to do so by your local health department or state Department of Health.

## Preparing for Emergencies

Be prepared for unexpected events or weather emergencies by keeping bottled water on hand, or by regularly storing water for emergencies. Stored water should be kept in a cool place, and needs to be replaced every two months. Other safe sources of water around your home can be obtained by melting ice cubes or draining your hot water tank.

## How to Disinfect Your Water by Boiling

- Step 1** Filter the water through clean cloths, if it is cloudy, and allow it to settle.
- Step 2** Bring the water to a full boil in a metal or glass container.
- Step 3** Boil the water vigorously (at or near 100° C) for one full minute. At higher altitudes, water reaches its boiling point at a lower temperature. Therefore, you should increase the boiling time to three minutes if you live in an altitude greater than one mile above sea level.
- Step 4** Keep the water covered while it cools.
- Step 5** Store water in a cool place, tightly covered and in a clean container.
- Step 6** To improve the taste of boiled or stored water, you may add a pinch of salt per quart/liter of water boiled or add oxygen back to the water by pouring it back and forth between two containers.

### Caution:

Boiling water is not always recommended, such as when nitrate, arsenic, lead, or other toxic metals or chemicals are present in the water. High levels of nitrate can lead to blue baby syndrome in infants under six months of age, and can be fatal.

For more information on the health effects of nitrate, arsenic, lead, and pesticides, see the wellcare<sup>®</sup> information sheets on these topics.

## When Boiling Your Drinking Water is *not* Recommended

You should not boil water if any of the following are present:

- toxic metals, such as lead
- chemicals, such as pesticides or solvents
- nitrate
- arsenic

Boiling the water will not remove these substances and, in fact, boiling water concentrates the levels of these contaminants, due to evaporation that occurs during boiling. Distillation and other treatment devices will remove metals, chemicals, nitrate, and arsenic from water. During distillation, the water is boiled for 20 minutes, and only the condensed vapor is used.

### For more information about boiling your drinking water

Federal Emergency Management Agency (FEMA). Guidelines for Managing Water Supplies. Retrieved January 4, 2007 from [www.fema.gov/plan/prepare/watermanage.shtm](http://www.fema.gov/plan/prepare/watermanage.shtm)

U.S. Environmental Protection Agency. Emergency Protection of Drinking Water. Retrieved December 28, 2006 from [www.epa.gov/safewater/faq/emerg.html](http://www.epa.gov/safewater/faq/emerg.html)

Washington State Department of Health. (October 2001). Treatment of Drinking Water for Emergency Use. Retrieved December 29, 2006 from [www.doh.wa.gov/ehp/dw/Publications/DOH\\_Emer\\_Water\\_102802.pdf](http://www.doh.wa.gov/ehp/dw/Publications/DOH_Emer_Water_102802.pdf)

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### For more information on your drinking water

The following websites provide up-to-date information on efforts to protect drinking water supplies and steps you can take as a private well owner. In addition, you may contact the wellcare® hotline at 1-888-395-1033.

Underwriters Laboratories Inc. Drink Well™ Well Water Testing [www.uldrinkwell.com](http://www.uldrinkwell.com)  
U.S. Environmental Protection Agency [www.epa.gov](http://www.epa.gov)  
Water Quality Association [www.wqa.org](http://www.wqa.org)

### For more information about wells and other wellcare® publications

wellcare® is a program of the Water Systems Council (WSC). WSC is a national nonprofit organization dedicated to promoting the wider use of wells as modern and affordable safe drinking water systems and to protecting ground water resources nationwide. This publication is one in a series of wellcare® information sheets. There were more than 60 available at the time this document was published. They can be downloaded FREE from the WSC website at [www.watersystemscouncil.org](http://www.watersystemscouncil.org). Well owners and others with questions about wells or ground water can also contact the wellcare® hotline at 1-888-395-1033 or visit [www.wellcarehotline.org](http://www.wellcarehotline.org)



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