

# Water Emergency Preparedness

By Green Area Water & Sanitary Authority

## **Why do I need an emergency supply of water?**

A disruption of your water service, whether it's a planned outage, or something out of your control, having fresh water available is essential. In fact, you can only go about three days without it. But water isn't only for drinking, it's also needed for doing things like cooking, bathing, and brushing your teeth.

## **How much water do I need?**

One gallon per person, per day. However, some people may need more water, such as children, the elderly, nursing mothers, someone who is sick, or if you live in a warm climate.

If you have pets, plan on one quart to one gallon per pet.

At a minimum, you should store at least three days' worth of water.

## **How should I store my emergency supply of water?**

Your emergency supply of water should be stored in a cool, dry place away from sunlight. It should also be kept away from toxic substances, such as pesticides, gasoline, or other similar substances.

Tap water that you store should be labeled "drinking water" and include the storage date. Replace the water every six months.

If you purchase bottled water, keep it in the original container and observe the expiration date.

Tap and purchased water may also be kept in the freezer. Be sure to leave a couple of inches of air space at the top of the container to allow for expansion as the water freezes, and only use plastic containers – no glass.

## **What types of containers can I use to store my emergency water supply?**

Always use food grade plastic or glass containers when storing water. Containers can be purchased, or they can be containers that previously held other beverages, such as soft drinks, juice, or water.

Do not use containers that previously held milk, as they can be hard to clean, which can cause bacteria to grow and contaminate the water.

Never use containers that once held toxic chemicals.

### **How do I clean containers for water storage?**

1. Wash the container with hot, soapy water then rinse thoroughly.
2. Sanitize the container by using 1 teaspoon of unscented liquid household chlorine bleach to one quart (4 cups) of water. Use bleach that contains 5%-9% sodium hypochlorite. Shake the container well, ensuring that the bleach mixture makes contact with the entire interior surface of the bottle. Wait thirty seconds then pour out the bleach mixture.
3. Let the container air dry or rinse with clean water before adding water for storage.

### **What are good sources of water for storage?**

In preparation for a possible water outage, bottling water yourself, ahead of time, through your tap is a safe, inexpensive option for storing water. Be sure to follow the instructions above, for disinfecting water storage containers.

You can also purchase bottled water.

Whichever option you choose, be sure to store the water appropriately. See “How should I store my emergency supply of water,” above.

### **Where can I find water sources in an emergency?**

If you find yourself in a situation where you need water, but don't have any stored, there are water sources around the home.

#### ***Inside the home***

- Melted ice cubes that were made with water that has not been contaminated
- Liquid from canned fruits and vegetables
- Water heater tank\*
- Toilet tank (NOT the bowl), as long as it has not been treated with toilet cleaner\*

If you know there may be a potential disruption to your water service, you can fill bathtubs and sinks ahead of time.

Don't use water from pools, spas, radiators, hot water boilers, or waterbeds.

#### ***Outside the home***

- Rainwater\*
- Streams, rivers, and other moving bodies of water\*
- Ponds and lakes\*
- Natural springs\*

\*Before consuming water from these sources, be sure to properly disinfect first.

## How do I disinfect water so it's safe to drink?

### **Boiling**

Boiling is a safe way to kill viruses, bacteria, and parasites. Note: boiling will not remove toxic chemicals, fuel, and heavy metals.

Before boiling, check the water clarity. If the water is cloudy, filter through a coffee filter, paper towel, or clean cloth. If you don't have anything to use as a filter, you can let the water settle, then draw off the clear water on top.

Bring water to a rolling boil for one minute, then let cool. (Boil for three minutes if above 6,500 feet.)

Store the boiled water in a sanitized container and cap it tightly with a lid.

To make the water more palatable, you can add a pinch of salt or aerate it by pouring the water from one container to another, then let it sit for a few hours.

### **Disinfect with bleach**

Before disinfecting with bleach, check the water clarity. If the water is cloudy, filter through a coffee filter, paper towel, or clean cloth. If you don't have anything to use as a filter, you can let the water settle, then draw off the clear water on top.

Only use regular, unscented chlorine bleach and follow the instructions on the bottle for disinfecting water. If there are no instructions, check the label for the active ingredient sodium hypochlorite. The concentration should be between 5% and 9%.

The Center for Disease Control recommends the following measurement guide for determining how much bleach is needed to disinfect water. Note: If the water is cloudy, murky, colored, or very cold, double the amount of bleach listed below.

#### **1 quart or liter of water**

- If you have a dropper: Add 2 drops of bleach
- If you have something that measures in milliliters (mL): Add 0.1 mL of bleach
- If you have a measuring spoon: Add a tiny amount (too small to measure)

#### **1 gallon of water**

- If you have a dropper: Add 8 drops of bleach
- If you have something that measures milliliters (mL): Add ½ mL of bleach
- If you have a measuring spoon: Add a little less than ⅓ teaspoon

#### **5 gallons of water**

- If you have a dropper: Add 40 drops of bleach
- If you have something that measures milliliters (mL): Add 2½ mL of bleach
- If you have a measuring spoon: Add ½ teaspoon of bleach

After you have added the recommended amount of bleach, stir the bleach and water mixture well, then let stand for 30 minutes before drinking.

Store the disinfected water in a sanitized container and cap it tightly with a lid.

### **Filters**

When purchasing a water filter, be sure to read the description of which contaminants are filtered out, as not all water filters remove bacteria or viruses. Water ran through a filter may still need additional treatment to be safe.

Always follow the manufacturer's directions.

References: [U.S. Centers for Disease Control and Prevention](#) and [Ready](#)