### Estimated Completion Time

This presentation can be customized to fit your needs and time allowance. Ideally 30 minutes.

- 20 minutes of presentation and 10 minutes of questions
- 15 minutes of presentation and 15 minutes of questions

### OBJECTIVES

At the conclusion of this presentation the audience will be able to:

- Store water for their family
- Purify water

The topics that will be discussed in this unit are:

- How much water their family needs
- Methods of purifying water

### Setting the Stage

Open by discussing by asking how many people have water stored for them and their family in case of a disaster. Talk about how quickly water can become a precious resource following many disasters. It is vital that all household members learn how to shut off the water at the main house valve so that you don’t lose clean water which you could use. The effects of gravity may drain the water in your hot water and toilet tanks unless you trap it in your house by shutting off the main house valve (not the street valve in the cement box at the curb – this valve is extremely difficult to turn and requires a special tool). Label this valve with a tag for easy identification, and make sure all household members know where it is located. In addition to storing water, be aware of your surroundings and where you can find other sources of water. Available water sources include hot water heaters, toilet tanks, streams, lakes, rivers, etc. Consider adding a water filter to your kits so that you can safely use water you find.
### PERSONAL PREPAREDNESS

#### Prepare in a Year

**Slide 1**
Insert your Agency logo on the first slide

**Slide 2**
Ask your audience how much water they think they need for their family for 2 weeks.

For your household, we recommend at least two weeks’ worth of water. That’s one gallon per person per day to take care of drinking, cooking and hygiene needs. You might need less depending on your cooking methods and if you’re using wet wipes for hygiene. Plan to drink at minimum one quart of water per person per day. Remember to have water for your pets, too!

**Slide 3**
When storing safe water (water that has been treated to make it safe to use), it is best to use food-grade water storage containers, which do not transfer toxic substances into the water they are holding.

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**Store Water**

How much water do you think you should store per person in your family for 2 weeks?

**Answer:** For your household, we recommend at least two weeks’ worth of water. That’s one gallon per person per day to take care of drinking, cooking and hygiene needs.

**Store Water**

What containers should I use?

- Plastic containers with a screw-cap lid, such as two-liter soda pop bottles or food-grade plastic jugs, work great.
- Don’t use glass bottles or old bleach bottles (or any container that has held a toxic substance).
- Avoid the use of plastic milk jugs. (They are difficult to seal tightly, and their plastic becomes very fragile and brittle over time).

**TIP:** Purify water by adding 5-10% bleach.

- For 1 gallon of water:
  - 8 drops
  - 5 mL
  - 1/16 teaspoon
FDA-approved food-grade storage containers can be found at surplus or camping supply stores. Contact the manufacturer if you are not sure if a storage container is food grade. If you are not able to use a food-grade water storage container, be sure the container you choose:

- Has a top that can be closed tightly
- Is made of durable, unbreakable materials (i.e., not glass)
- If possible, use a container with a narrow neck or opening so water can be poured out.

DO NOT USE containers that previously have been used to hold liquid or solid toxic chemicals (bleach, pesticides, etc.)

### Cleaning and Sanitizing a Water Storage Container Before Use

Before filling with safe water, use these steps to clean and sanitize water storage containers:

- Wash the storage container and rinse completely with water.
- Sanitize the container with a solution made by mixing 1 teaspoon of unscented liquid household chlorine bleach in one
quart of water. Use bleach that contains 5–6% sodium hypochlorite.

Cover the container tightly and shake it well. Make sure the sanitizing bleach solution touches all inside surfaces of the container.

Wait at least 30 seconds and then pour the sanitizing solution out of the container.

Let the empty sanitized container air-dry before use OR rinse the empty container with safe water (water that has been treated).

Pour clean water into the sanitized container and cover with a tight lid.

<table>
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<th>Slide 4</th>
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<tr>
<td>If you don’t have safe bottled water, you should boil your water to make it safe to drink. Boiling is the surest method to kill disease-causing organisms, including viruses, bacteria, and parasites.</td>
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You can improve the flat taste of boiled water by pouring it from one container to another and then allowing it to stand for a few hours, OR by adding a pinch of salt for each quart or liter of boiled water.

**If the water is cloudy:**
### Personal Preparedness

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<tr>
<td>Filter it through a clean cloth, paper towel, or coffee filter OR allow it to settle.</td>
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<tr>
<td>Draw off the clear water.</td>
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<td>Bring the clear water to a rolling boil for 1 minute (at elevations above 6,500 feet, boil for three minutes).</td>
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<tr>
<td>Let the boiled water cool.</td>
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<tr>
<td>Store the boiled water in clean sanitized containers with tight covers.</td>
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<tr>
<td><strong>If the water is clear:</strong></td>
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<tr>
<td>Bring the clear water to a rolling boil for 1 minute (at elevations above 6,500 feet, boil for three minutes).</td>
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if you don’t have safe bottled water and if boiling is not possible, you often can make small quantities of filtered and settled water safer to drink by using a chemical disinfectant such as unscented household chlorine bleach.

Disinfectants can kill most harmful or disease-causing viruses and bacteria, but are not as effective in controlling more resistant
organisms, such as the parasites Cryptosporidium and Giardia.

Chlorine dioxide tablets can be effective against Cryptosporidium if the manufacturer’s instructions are followed correctly.

If the water is contaminated with a chemical, adding a disinfectant will not make it drinkable.

You may also be able to make water safe by distilling it or by boiling water and collecting the steam in a clean container so it turns back into water.

Slide 5
Talk about your local resources as well as resources that are available on the internet.