



STORING WATER IN THE HOME INSTRUCTION PACKET

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Objective: The residents of the Colonies will be able to understand and practice safety measures for storing water in the home.

Summary: The key points of instruction: the value of storing water safely, methods of treating water in the home, and safe and dangerous methods of storing water in the home.

Introduction

TO DO

- Compare the appearance and odor of river water with that of drinking water.

(a glass of river water, a glass of drinking water)

- Analyze the level of chlorine in drinking water using equipment for analyzing swimming pool water.

(equipment for analyzing swimming pool water)

TO SAY

- We need water in order to live.
- There is a limited amount of water.
- Safe and clean water helps to keep us healthy.
- We can not distinguish between contaminated and safe water solely by its taste, appearance or odor.
- Drinking water is treated with chemicals, including chlorine, in order to purify it. Let's analyze these samples of water in order to see if they contain sufficient chlorine.

Why?

- Exchange ideas that include:
 - germs may be introduced and cause illnesses
 - your family may become ill
 - the family may become ill with diarrhea, cholera, or hepatitis
 - clean water will help you and your family stay healthy and strong

- Why is it important to keep the water that is used for drinking and cooking safe? What can happen if we do not keep it safe?
- Today we will learn how to keep the water that we keep in our house safe.

How to Purify Our Water

- There are different ways to make sure that your water is safe for drinking. Two of the best ways are: boiling the water or adding chlorine.
- Boiling is a good method of purifying your water if you have something with which to heat the water or you only need to purify a small amount.
- Boiling water is one of the simplest and safest ways of purifying water. Put the water in a clean pot and let it boil for ten minutes.
- Adding liquid bleach to water is a good way to purify the water if you are purifying a lot of water or if you have no way to boil the water. It is also economical, you only need a few drops of chlorine to purify the water.
- Find the label on the bottle of liquid bleach and where to find the identification 5.25 percent sodium hypochlorite.

(bottle of liquid bleach)
- Show how to treat water with liquid bleach.

(clean container, eyedropper, teaspoon, liquid bleach, mixing spoon or cap so you can shake the container, watch, clear glass)
- Choose a liquid bleach that contains 5.25 percent sodium hypochlorite. Look for these words on the label. The brand (for example Clorox, Purex, Silvex, etc.) is not as important as the indication of 5.25 percent sodium hypochlorite.
- Make sure that the bleach that you choose is a pure bleach and not a mixture of bleach and soap.
- In order to clean the water adding bleach, first put the water in a clean container.

- Calculate the quantity of bleach that is needed for containers of different sizes.

(1 gallon, 5 gallons, 50 gallon container, 1 liter, 30 liters, paper and pencil)

- Using an eyedropper or teaspoon, measure the appropriate quantity of bleach for the quantity of water.

- 8 drops of bleach for each gallon of water

- 1/2 teaspoon of bleach for each 5 gallons of water

- 1 teaspoon of bleach for each 10 gallons of water

- 5 teaspoons of bleach for each 50 gallons of water

- 3 drops of bleach per liter

- 1 teaspoon of bleach for each 30 liters

- Mix the bleach with the water and let it sit for 20 minutes (capped).

- The water should smell or taste of bleach. If not, repeat the process.

- The taste or smell of bleach is a sign of safety. If the water does not still taste or smell like bleach, DO NOT USE THE WATER.

- Show how to add air to the water.

(two jars, clean water)

- To improve the taste of the water, add air by emptying the water from one clean container into another.

- When the clean water is stored correctly, the bleach will last almost 24 hours. After that the bleach will evaporate (it will be used up).

- Put numbers on your water containers so that you can alternate them. This way the water will not get old.

- Show water bought at the store.

(bottle of water from the store)

- Water from the store. Almost all the water that you buy at the store has been treated by “carbon filtering” which removes the bleach. Once you open the bottle, it is important to keep it refrigerated and closed so that it will not become infected with germs.

Storing the Water

- Once you have purified the water, it is important to keep it clean and properly stored.

- Start with clean containers. Don't use containers for chemicals or oil.

- If possible, use plastic barrels that contain wax or food products.

- Buy barrels only from vendors of good reputation. Some local health departments inspect the vendors of barrels.

- Plastic containers do not break or absorb heat as easily as those made of metal or fiberglass. Choose plastic containers whenever possible.

- Plastic barrels that contain chemicals or oil should be thrown away.

- Use new containers and clean them completely, let them dry in the sun, and rinse them with bleach before using them.

- Clean the containers for storing water before each time that you refill them.

- Show the variety of containers

(open container, closed container, container with a narrow neck, portable cooler)

- Show a portable cooler with a lid and a spout.

- Avoid using containers without a lid that let microbes get into the water. Keep water containers tightly closed. Containers with a narrow neck do not let the water have much contact with air.

- Do not touch the water any more than is absolutely necessary. Touching the water with your hands can contaminate it with germs. A closed container with a spout reduces the possibility that you will contaminate the water.

- During the hot summer months, be sure that small children do not play in the water that you will be using for drinking and cooking. Germs start to grow immediately when someone touches the water.

- Make sure that you only keep purified water for 24 hours so that germs do not form.

- Store your water containers in an enclosed and shady spot in order to protect them. Shade will help the bleach to last longer. The enclosed space will protect the water from wind and airborne particles.

- Number and alternate your water containers so that the water will not get stale.

Review

Let's go over the correct and dangerous ways to store water. Tell me if these are correct or dangerous:

- using a ladle
- using closed containers
- using plastic containers

- children playing in the water
- using containers with oil
- keeping bleach in the water

How do you purify water using liquid bleach?

1. Use a clean container
2. Measure the liquid bleach carefully
3. Stir
4. Wait 20-30 minutes
5. Test for bleach--smell and taste
6. Do this every 24 hours

Pamphlets

- “Cómo Pevenir Enfermedades Purificando el Agua”
- “Purificando Agua en Casa”

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