

Water Treatment: Chlorine



60 minutes total

Lesson Description



In this lesson, participants study how to use chlorine to treat their drinking water. This lesson will also focus on how a Community WASH Promoter can verify that a household is using chlorine correctly, consistently, and continually.

Learning Outcomes



At the end of this session participants will be able to:

1. Demonstrate correct use and dosing of chlorine to treat water.
2. Describe how a Community WASH Promoter can verify the correct, consistent, and continued use of chlorine.

Materials



- All the chlorine products available locally
- Safe storage container
- Flip chart paper
- Markers

Preparation



- Bring all the different chlorine products available locally to the front of the group.
- Bring a safe storage container to the front of the group
- Optional: Write the learning outcomes on flip chart paper

Introduction

5 minutes



1. Ask the participants to discuss with a partner: "What do you know about chlorine?" If they don't know what it is, ask them to discuss what they think it could be.
2. Ask the larger group: "What can you tell me about chlorine?" *Chlorine is a popular chemical used to disinfect drinking water. When added to water, chlorine release hydrochloric acid which reacts with microorganisms and kills them. There are several different types and it comes in liquid or tablet form. In the correct dosing, chlorine is harmless to human consumption.*
3. Present the lesson description or learning outcomes.

How to use a ceramic pot filter

15 minutes



1. Bring the chlorine options available locally to the front of the group.

2. Ask the participants if they have seen these products before, and ask them what they know about them already.
3. Ask participants: “Can someone describe to me how to use chlorine?” Ask them to explain not only how to use it but the dosing.
4. Explain to participants that chlorine can be very effective, as long as certain rules are applied. These rules are very important for the chlorine to be effective.
5. Write the following titles of the rules on the board in front of the group and explain them as you write them. The rules are:
 - I. **Always Read.** Always read the instructions for dosing. Some products will have different size of tablets, or higher concentration of chlorine than others. It is crucial to always make sure you are dosing properly.
 - II. **Sit for 30 mins.** The chlorine needs time to work and kill all the pathogens before you can drink the water.
 - III. **Clear water.** The water needs to be as clear as possible. If the water is too turbid, the user will need to do sedimentation before treating it.
 - IV. **Chlorine can be dangerous.** Chlorine can be dangerous to people, especially children. Store chlorine in a cool, dry place. Do not use a different bottle to store chlorine, someone may mistake it for something else.
 - V. **Safe Storage.** To use chlorine, you need to have a container to store water safely so that it does not get re-contaminated. This container should have a lid and a tap.

How a CWP can verify the correct use of chlorine



15 minutes



1. Explain to participants that they should now know how to effectively use chlorine to treat drinking water. In their role as Community WASH Promoters, it will be up to them to motivate beneficiaries to use chlorine correctly, consistently, and continually.
2. Explain to participants that for any water treatment technology to be effective, it needs to be used correctly, consistently and continually. We call this the 3 ‘C’s.
3. Write the words: correct, consistent, and continued on a flip chart paper and explain their meaning.
 - Correct: the household is using and maintaining the technology, following the instructions by the manufacturer.
 - Consistent: all members of the household are using water treated by the technology throughout the day and from season to season.
 - Continued: all members of the household are using treated water every day over the long-term.
4. Explain to participants that as Community WASH Promoters, they need to also be “WASH Detectives”. As a “WASH Detective” they need to try to find out if the user is using chlorine correctly, consistently, and continually. Explain to participants that you will be practicing being a WASH Detective later in the week.

5. Ask participants: "What are some ways that we can check if the user is using chlorine correctly, consistently, and continually?" *To collect that information, you can either make observations or ask questions.*
6. Put two flip chart papers on the wall in front of the group. At the top of the two papers draw an eye for the first paper and an interrogation mark for the second one.
7. Explain to participants that sometimes, asking people questions is not enough. Many people may want to tell you information that is not necessarily true because they want to impress you on how well they have been using chlorine. At this point it is important to acknowledge that you are there to help them use chlorine correctly. You will need to make observations to make sure that the user is using it correctly, regardless of what the user is telling you.
8. Divide the participants into 2 large groups. Assign 1 group 'observations' and the other 'questions'.
9. Ask participants to work with a partner to make a list of either: things you can observe, or possible questions (depending on their assigned group) to ask the user that would indicate if the user is using chlorine.
10. Ask the participants to share their answers with the larger groups. Write their answers down on the respective flip chart papers.

Possible answers:

<i>Observations</i> 	<i>Questions</i> 
<ul style="list-style-type: none"> -They have chlorine in the house -They can demonstrate the correct way and dosing of chlorine to treat water -The storage container is clean -There is water in their storage container -Using a portable chlorine tester -You can smell chlorine in their storage container -Ask local vendors for sales records of chlorine products 	<ul style="list-style-type: none"> -Are you using chlorine to treat your water every day? -Where do you buy your chlorine? -How much chlorine do you use in a month? -Do you like using chlorine? -Where do you store your chlorine? (if it is not easily accessible, it means they are most likely not using it every day) -How long have you been using chlorine? -What water do you drink when you are not at home? -What water do your children drink when they are at school? - What source of water do you use? (during the wet / dry season?)

Review

5 minutes



1. Take down the posters of the observations and questions.

2. Ask the participants to work with a partner and discuss how chlorine works to make water safe to drink.

Reflections on Lesson