



# Global Handwashing Day Toolkit

## October 15



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## Introduction to Global Handwashing Day

Every October 15!

**Handwashing with soap is the most effective and inexpensive way to prevent diarrheal and acute respiratory infections, which take the lives of millions of children in developing countries every year.**



Global Handwashing Day (GHD) was created by the Global Public-Private Partnership for Handwashing to:

- Foster and support a global culture of handwashing with soap.
- Shine a spotlight on the state of handwashing in every country.
- Raise awareness about the benefits of handwashing with soap.

Global Handwashing Day was originally created for children and schools, but can be celebrated by anyone promoting hand washing with soap. Each year, over 200 million people are involved in celebrations in over 100 countries around the world. Global Handwashing Day is endorsed by a wide array of governments, international institutions, civil society organizations, NGOs, private companies, and individuals.

### Global Handwashing Day Info:

Refer to this Toolkit and the GHD Public-Private Partnership website

<http://www.globalhandwashingday.org/> for all the information you need to plan for this day including; an excellent *Planners Guide* (in English & Spanish), and a place where you can share your plans.

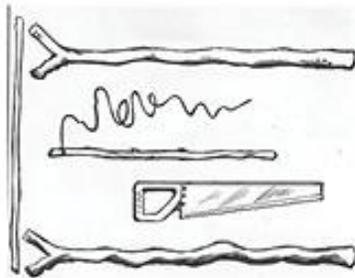
Volunteers across all disciplines and at all posts are encouraged to participate in Global Handwashing Day and to send stories and photos to PC/Washington at [oghhsupport@peacecorps.gov](mailto:oghhsupport@peacecorps.gov). **Start planning now for a successful event!**

## How to Build a Tippy Tap

Follow the easy steps below.

### Materials needed:

- Two wooden branches of 2 meter length, with Y-shaped end
- Two thinner sticks of ~1 meter length.
- A saw to cut the wood.
- A nail
- A pair of pliers
- A lighter
- A shovel
- Two lengths of rope (0.5 m and 1 m)
- A 5 liter container
- A piece of soap
- A screwdriver
- A bag of gravel



### 1. Cutting the wood

- Cut two branches of wood of ~2 meter length, which have a Y-shape at the end.
- Cut two thinner branches, each of ~1 meter length.

### 2. Making the hole

Mark the location for the hole on the container, around 12 cm below the cap



### 3. Heating the nail

Hold the nail with a pair of pliers, and heat the nail with a lighter

### 4. Making the holes

With the hot nail, make the hole in the container, and a second hole in the cap



### 5. Inserting the rope

Put the rope, which is attached to the stick, through the hole in the cap



### 6. Knotting the rope

Make a knot in the rope which cannot pass through the hole.



### 7. Putting it together

Screw the cap back on the container. The stick is now connected to the container with the rope.



### 8. Making the hole through the soap

Using a screwdriver, make a hole through the soap by slowly rotating and pushing the screwdriver through the soap



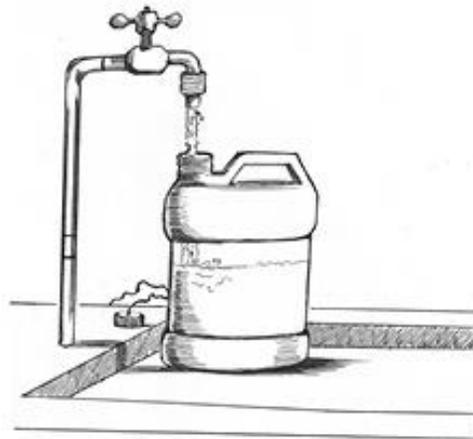
### 9. Inserting the rope

Put the second piece of rope through the hole in the soap, and tie a piece of wood to it.



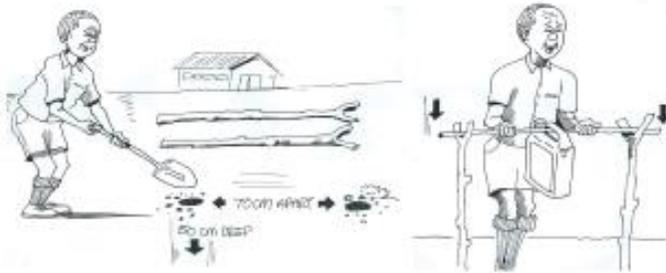
### 10. Filling the container

Fill the container with water, up to the level of the hole.



### 11. Putting the poles in the ground

Using a shovel put the poles in the ground to a depth of 50cm. The distance should be about 70 cm.



### 12. Hanging up the container

- Put the stick through the handle of the container, and put the stick between the poles.
- Adjust the length of the rope such that the end of the stick is about 15cm above the ground.



### 13. Adding the soap

Tie the rope with the soap to the stick.



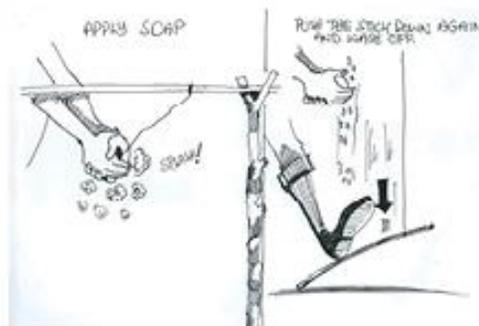
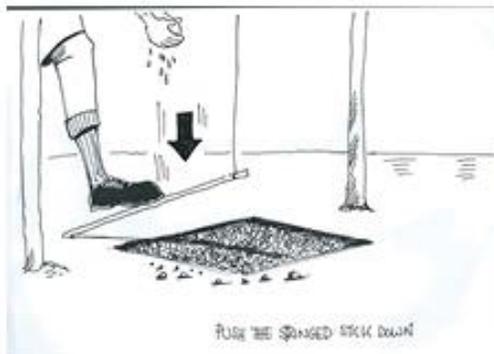
### 14. Gravel soaks away

- Between the two poles, below the container, dig a hole of 40 x 40 cm, and 10 cm deep. Fill the hole with gravel.
- The water soaks away in the hole, and prevents a mud hole from forming. The gravel also keeps mosquitoes from breeding.



### Using the Tippy Tap

- Push the stick down with your foot. This tips the container, which makes water run out of the hole.
- Wet your hands and release the stick. Apply soap to your hands. Push the stick down again and clean your hands.



Adapted from: Mark Tiele Westra Werkgroep OntwikkelingsTechnieken (WOT) University of Twente, the Netherlands

# EQUIPMENT

## Wooden Spoons

Or some other stirring stick.

## Molds 3 large pots, bowls, or buckets

The best molds are shallow wooden boxes that have no openings on the bottom or sides but are open on the top, and can be pulled apart gently.

Molds can also be made from small gourds or coconut shells. Use cloth or waxed paper to line the molds so that soap can be easily removed.

## Measuring Cups

An accurate weighing scale (lye is measured by weight).

They should be made of stainless steel, fired clay, or cast iron. Do not use equipment made from aluminum because the lye will damage it. Use one big bowl for the fat.

# INGREDIENTS

## Using Dirty or Rancid Fat

Fresh oil or fat is costly. Dirty oil or rancid fat can be used to make soap, but must be cleaned first. To clean, melt oil or fat in an equal amount of water and bring to a boil. Let it cool, and skim off the oil or fat. If it still smells bad, do it again with new water. If the oil or fat has dirt in it, melt it and pour it through a fine cloth until it is clean.

## Oil or Fat

3 liters (13 cups) of oil or 2.75 kilos (6 lbs) of hard fat

## Water

1.2 liters (5 cups)

## Perfume

Different oils and fats will give different results. The best way to know what fat or oil to use is to experiment with what is available.

It must be "soft" water, such as rain or spring water. To "soften" hard water (well or river water), add ¼ teaspoon of lye for each liter of water. Stir and let sit for a few days. Solids will sink to the bottom. Pour off the softened water for use.

Perfume or essential oils give soap an attractive scent. For 4 kilos of soap, use one of the following: 4 teaspoons of saffron oil, 2 teaspoons of citronella or lavender oil, or 1 teaspoon of clove or lemon oil. For soap that promotes healthy skin, add 1 or 2 teaspoons of oil of neem, moringa, jatropa, or baobab.

Lye is also called caustic soda or sodium hydroxide.

## Warning

Lye can burn the skin and eyes. To be safe, it must combine with the fat and set for several weeks. While making soap, wear safety glasses, long gloves, clothes that cover the arms and legs, and closed shoes. If you get burned by lye, wash the skin right away with cold water, then put on citrus juice or vinegar to cool and disinfect the burn.

## Lye

370 grams (13 ounces)

# RECIPE

- 1 Add lye to water – never the other way around. The mixture will heat up. Let it cool to body temperature. Do not put fingers in the solution or it will burn. To test the temperature, feel the outside of the container.
- 2 Melt any solid fat in the oil/fat mixture.
- 3 Pour the lye water slowly into the oil/fat mixture, stirring it constantly in one direction. Then add perfume or essential oil. The mixture must be stirred for at least half an hour after all the lye has been added. The mixture should become thicker. When the spoon causes lines to appear on top of the thick solution, it is ready to pour in the molds.
- 4 Pour the mixture into lined molds and leave to set undisturbed for 2 days. If it has not set or if it has grease on top, leave it longer.
- 5 When the soap has set, remove it from the molds and cut it into bars using a knife or a wire.
- 6 Stack the bars on trays and let them sit for 4 to 6 weeks. Do not use the soap too soon – it still burns!
- 7 When the soap is finished, you can shave it from the bar in curls. Touch the soap to the tip of your tongue to check its quality. If it has a slight bite or burn, it is good. If it is very sharp and burns, there is too much lye. If it has no bite, there is not enough lye. Cover the soap so it does not lose moisture.

## PROBLEMS?

If the soap you made was not successful, it may have been because:

- The fat or oil was rancid or dirty and not cleaned enough.
- The lye water was too hot or too cold when it was poured into the oil/fat mixture.
- The mixture was stirred too fast or not long enough.

### If the soap is not good, try again:

- Cut the soap into bits. Put it in a pot with 12 cups (2.8 liters) of water. Use gloves to touch the soap.
- Bring it slowly to a boil. Boil for 10 minutes, stirring at times.
- If the soap had too little lye (no bite at all), add a small amount of lye. If the soap had too much lye (sharp bite), add some pre-boiled, strained and cooled fat. Stir until the spoon causes lines to appear on top of the thick solution.
- Pour into molds. Let stand 48 hours. Cut into bars, stack the bars on trays and let them sit for 4 to 6 weeks.

## Handwashing School Lesson and Pledging Poster

*Brianna del Castillo and Jon Skaggs, Peace Corps/Costa Rica*

Brianna and Jon held an event at the local elementary school for a group of 30 kindergarteners, ranging from 4 to 5 years old with the collaboration of the teacher and a school counselor. They prepared a presentation on the importance of washing hands and on when and how to wash. After the discussion, the children made a promise to wash their hands and they sealed the contract by placing their right hand in paint and stamping their handprint on a large poster board with handwashing slogans. When the children finished stamping their handprint on the paper, they moved to the hand wash station, where Brianna, Jon and the teachers were waiting to help each child correctly wash their hands. By the end of the activity, the students had a colorful banner to hang in their classroom with each of their



handprints as a promise and a reminder to always wash their hands. They will also make sure the teacher is aware of proper hand washing methods so she may oversee the

application of these techniques among her students in the future! The school staff loved the activity so much that they ended up repeating it for the entire 1st grade in addition to the kindergarten classes.

## Puppet Show

*Elisa Molina, PC/Costa Rica*

Elisa conducted global handwashing day activities in her community with her partners including a puppet show, instruction, and a poster "contract" to continue hand washing behaviors, in cooperation with UNICEF and the local school. She put together a user-friendly 2-page article (newsletter format) that talks about what they did in Spanish. Overall the activity went great. The day after the activity, Elisa was biking around the town and passed by a small group of kids that were playing outside. One of the little girls stopped her and said, "*Maestra, maestra, I practiced today how to wash my hands at home*". Elisa then worked with service providers at the next school to ensure that soap is available for the kids at hand washing times, and she created a kids club (first and second graders) that will be in charge of doing advocacy and monitoring activities related to hand washing in the school.



## Glitter Hand Washing

*From Peace Corps/Suriname*

The following lesson plan uses glitter to represent germs and how washing hands in a communal bowl of water isn't enough to remove all the germs. It is made up largely of questions, with the audience providing the answers. Possible answers (including some incorrect answers) that you might expect are given in italics after each question. Be sure to clarify any incorrect answers.

**Note:** See below for alternative materials to glitter and adaptations to this activity.

Supplies:      Bowl or Bucket for hand washing  
                    Soap  
                    Glitter

- Introductions, Greetings
- What are germs?
  - *They're bad*
  - *They cause illness*
  - *Microbes: minute life form; a microorganism, especially a bacterium that causes disease*
- What kind of illnesses do germs bring?
  - *Colds*
  - *Diarrhea (major cause of child mortality)*
  - *Conjunctivitis*
  - *Respiratory infections (major cause of child mortality)*
  - *Malaria (incorrect answer)*
  - *HIV/AIDS (incorrect answer)*
- Where are germs?
  - *On hands*
  - *In the dirt*
  - *In the air*
  - *On animals*
  - *In poop*
  - *Everywhere*
- How do germs make you sick?
  - *They get inside and multiply*
  - *They hurt your body*
- So what do you need to do to avoid germs and getting sick?
  - *Wash your hands until they're clean*
  - *Use a disinfectant—soap or ash bleach (this answer works, but isn't the point of the lesson)*
  - *Cover your mouth when you sneeze/cough*
- Ok. So now we're going to do an experiment. Do you know what an experiment is? An experiment is like an example. We're going to do an example of hand washing to see what you should do to wash your hands until they're clean. Do you know what glitter is? (*Show the audience the glitter.*) This glitter is going to represent germs. If you can wash it all off until it's clean, you can wash all the germs until they're clean.

- Can you see germs?
  - *No, they're too little*
- So how do you know if your hands are clean or if they have germs on them?
  - *You can't*
- Look at my hands. Are they clean, or do they have germs on them?
  - You'll probably get a range of answers, but clarify that you don't know if there are any germs because you can't see them.
- You can't see germs and so you can't know if they are there or not. That's why you should always wash your hands until they're clean. Now, I need some volunteers (*2-4 depending on the size of the group*). I'm going to put this glitter on your hands to represent the germs. We can't see germs, but we can see the glitter. If you can wash off all the glitter, you can wash off all the germs. (*Put a good amount of glitter on each volunteer's hands, telling them to rub it all over their hands- on the backs, in between their fingers, etc. Have them show the class.*)
- Look at how dirty their hands are! Gross! There are many germs. Gross! Now, we're going to see if we can wash them. Here is a bowl of water like everyone uses before they eat. Wash your hands like normal in the bowl. (*Often, when the people see there is still glitter on their hands they'll try to wash again and again. Don't let them do this, as it loses its effect.*)
- Let's see your hands again. Gross! There is still glitter! There are still germs even though you just washed your hands.
- If you eat now without washing your hands, what can happen?
  - *You can get sick*
  - *You'll eat the germs*
- So what does that mean?
  - This question is often a hard one, as people often have a hard time drawing conclusions like this, but it's good for them to think about it. The answer you want is that the bowl of water isn't enough to wash your hands clean.
- So, if the bowl isn't enough, what do you need to do to really wash your hands until they're clean?
  - *Wash your hands with soap.*
  - *Use bleach (not incorrect, but not the point of the lesson)*
- That's right. Wash your hands with soap. Let's try it. First let me show you. (*Wash your own hands, showing and explaining each step as you go along. Many people have never washed their hands this way before, so it's good to be as specific about the process as possible. Explain the following steps.*)
  - Get your hands wet
  - Put soap on your hands
  - Rub the soap all over your hands - on the backs of your hands, between your fingers, everywhere.
  - Wash it clean with clean water from a kettle or bottle
  - *Have the volunteers repeat this process, correcting them along the way if necessary*
- Now look at your hands. Is there any glitter left? Are there any germs left?
  - *No (if there is, they didn't wash well enough and should try again)*
- So now, when you used soap and clean water, you got all of the germs off. So, we saw that just using the bowl of water isn't enough. There were still germs. But now, with soap and clean water, they are clean. If you eat now, you won't get sick.
- So what do you have to do to wash your hands until they're clean?
  - *Wash them with soap*

- Yes, that is it. And when should you wash your hands?
  - *Before you eat*
  - *After you go to the bathroom or you wash or change a child who has gone to the bathroom*
  - *Before you cook*

### **Glitter Hand Washing Adaptation**

In PC/Guatemala, Volunteers will put glitter on their hands and then narrate a story, having 2-3 other Volunteers (PCVs, teachers or students) be actors in the story, one person went to the bathroom and didn't wash his hands afterwards, another is sick and sneezes on his hands, another rides the bus and touches all the surfaces. Then they get to school and shake all the kids' hands or give them high-fives. They then ask the kids to reflect on what they have on their hands, what it represents, etc., and then do the hand washing practice.

### **Alternatives to Glitter: Chalk Dust, Charcoal Dust or Cooking Oil**

In PC/Benin, Volunteers have done a similar activity but using chalk dust, charcoal dust or cooking oil instead of glitter. The oil is particularly effective at demonstrating the importance of soap. If you just use water, nothing will happen, but when you use soap you can easily wash the oil and dirt off your hands. You can then explain the reason handwashing with soap is important: because there is naturally a little bit of oil on our hands that our bodies produce that dirt and germs stick to. You need to add soap when you wash your hands, which sticks to the oil, and pulls the dirt, germs and oil off our hands.

### **Hot Pepper Handwashing**

From Peace Corps/Mali

1. Ask participants to rub hot pepper over their hands. Emphasize that the hot pepper REPRESENTS things you can't see that can make you sick. The hot pepper itself will not cause diarrheal disease.
2. Have participants wash their hands with water in a communal bowl, the traditional method of pre-meal cleansing.
3. Ask participants if their hands look and feel clean, to which most people will answer "yes".
4. Now instruct the group to rub their eyes with their hands. The entire group will refuse for fear of getting hot pepper in their eyes. Ensure that children do not touch their eyes at this point!
5. Emphasize the key message of the activity: even when hands look clean and feel clean after washing with only water, substances remain on their hands which can harm them.
6. Ask participants to wash their hands well with soap\* and then rub their eyes, or ask if they would be more comfortable touching their eyes now that they have thoroughly cleaned their hands because the harmful substance has been completely removed.
7. This activity connects previous knowledge that hot pepper cannot be washed off with water to the idea that unseen germs can remain on seemingly clean hands, and can cause harm to the body.

## Teaching Coughing Etiquette

From Peace Corps/Mali PCV Cary Fontana

My villagers always seemed to be sick with the common cold and an accompanying cough, especially kids and teens. I constantly watched them cough on people near them or onto their hands. Coughing on other people and coughing on your hands followed by greeting are the two easiest means of transmission. This is compounded by the still sparse use of soap. I knew that to rectify this behavior I would need to help them realize how their means of dealing with a cough can get other people sick and provide an easy memorable solution.

I decided to teach a lesson on it in the kid's health and sanitation class I had already started. The forum was already provided and I had my target audience. First, I asked them questions about how they thought a cough spread. They replied by saying germs cause it. I showed them how coughing on your hand and greeting someone could spread those germs. Then I offered them a simple solution that many people advocate in America: coughing into your arm where it bends at the elbow. Doing this means the germs do not end up on your hand or cast into someone's face.

The kids really took to the idea. Four kids from my host family who are in the class demonstrated even more interest so I constantly asked them what to do when you have a cough, and they demonstrated the motion. They even independently introduced it to my host mom.

## Handwashing Outreach Competition

Peace Corps/Albania for Global Handwashing Day 2010 created a sample lesson plan for kindergarten age children in Albanian language and sent it to all Volunteers. They then ran a contest to see which Volunteer contacted the most children, youth and adults for the topic.

## Handwashing Poster Competition

Hold a school-based poster competition leading up to Global Handwashing Day in which students create illustrated signs demonstrating the steps to proper handwashing, the key times to wash hands, or with positive messages about its importance. Gather a jury of community members from health and education to serve as judges of the competition and award simple prizes for the winners, such as bars of soap plus a sticker or ribbon to attach to the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> place posters. Display all the posters around the community on October 15!

## Hand Washing Songs

Many Volunteers have found that it's easiest to get children to wash their hands for the required time when they are taught to finish a song. Some have used the happy birthday song.

*In Nicaragua, they use the Pin Pon song, which teaches about hygiene:*

Pin Pon es un muñeco  
muy guapo de cartón,  
se lava su carita  
con agua y con jabón

Se desenreda el pelo  
con peine de marfil,  
y aunque se da estirones  
no llora ni hace así.

Cuando le dan la sopa  
no ensucia el delantal  
pues come con cuidado  
parece un colegial

Apenas las estrellas  
comienzan a salir  
Pin Pon se va a la cama  
y se acuesta a dormir

Pin Pon dame la mano  
con un fuerte apretón,  
pues quiero ser tu amigo  
Pin Pon Pin Pon Pin Pon  
PIN-PON

*This hand washing song was adapted by Peace Corps Trainees in Niger in 1996/7 and continues to be sung by community members. Hausa is spoken by 20-35 million in West Africa! Hand washing Song to the Tune "Stop in the name of Love"*

English Translation:

Hey, before you eat  
think about one thing  
wash your hands, with soap  
wash your hands, with soap  
without soap  
you will get germs  
wash your hands, with soap  
wash your hands, with soap  
Because, health is wealth!  
wash your hands, with soap  
wash your hands, with soap

Hausa:

Kai ! kahin ku ci abinci  
Ku tuna da abu guda  
Wanke hannuwanku - da sabuni  
Wanke hannuwanku - da sabuni  
In ! babu sabuni  
Zaku samu kwayar cuta  
Wanki hannuwanku - da sabuni  
Wanki hannuwanku - da sabuni  
Saboda, Lahiyar jiki, arziki ne ! (Hausa proverb—Health is Wealth)  
Wanki hannuwanku - da sabuni  
Wanki hannuwanku - da sa

## Clean Hand/Dirty Hand Skit

Adapted from the Choose Soap Campaign  
([www.choosesoap.org](http://www.choosesoap.org))

### THE IDEA

This is a mini-drama put on by youth to show community members a day in the life of 2 hands. It's important to get audience participation – especially at the most disgusting moments when the dirty hand character is refusing to clean itself with soap.

### WHAT YOU WILL NEED

Plain T-shirt with clean hand drawn on it, or very clean white clothing  
Plain T-shirt with dirty hand drawn on it, or very dirty clothing  
Broom, bucket, cloth & other cleaning items.  
Simple local food/ snacks laid out on a table.  
Handwashing materials (bucket, water with pouring cup, soap, clean towel)  
Latrine set (optional)  
Script for Activity

### THE PERFORMANCE

The two actors present themselves to the audience. One is wearing a large white t-shirt with a dirty hand printed on it. The Agent announces his name as: "Dirty Hand!" and growls at the front row.

The other actor is wearing a clean white t-shirt and says "I'm Clean Hand" and smiles. He makes a big show of his clean white t-shirt.

They say together: "It's early morning!" and begin miming a sequence of daily activities that get hands dirty that could include:

- waking up (exaggerated yawning, fake dressing, splashing water on face, etc)
- sweeping the yard (use local broom to sweep around the 'stage' area, including under the feet of audience members)
- tending to animals (they make noises to indicate the animal they are feeding)

- wiping a child's dirty bottom (perhaps a volunteer from the audience can provide the child)
- cleaning a toilet (use bucket and cloth to wipe around cut-out of latrine)
- using a toilet

Throughout this sequence Dirty Hand keeps on returning to a plate of prepared food that has been set up on a table near the audience. He fingers the food and then attempts to offer it to the audience. Every time he does this, Clean Hand encourages the audience to shout out NO!

At the end of the sequence Clean Hand brings out two bowls of water for them to wash their hands in.

Clean Hand uses water and soap then shows his clean hands to the audience who are encouraged to clap and cheer.

Dirty Hand washes his hands with just water. He holds his hands up for inspection: they are still dirty.

He then moves to the food table again.

Clean Hand offers him a bar of soap to use. He washes his hands properly this time.

He then pulls off the dirty hand t-shirt he has been wearing to reveal a second t-shirt with the CHOOSE SOAP Logo. He throws away the t-shirt with dirty hand print on and together both the Change Agents pass the food around to the audience.

## Resources for Continued Handwashing Programming

Did you and your community love doing activities for Global Handwashing Day? Do you want to build on that excitement with longer-term programming? Check out these great resources to help you.

Peace Corps Training Package Sessions:

- [Handwashing and Other Hygiene Practices](#)
- [Small Doable Actions for Hygiene Promotion](#)
- [WASH in Schools](#)

IRC: [Life Skills-Based Hygiene Education: A guidance document on concepts, development and experiences with life skills-based hygiene education in school sanitation and hygiene education programmes](#). (Delft, The Netherlands, IRC International Water and Sanitation Centre, 2004). This document outlines many resources for working with schoolchildren on hygiene, including behavior change principles and lesson ideas.

[UNICEF Raising Clean Hands campaign](#):

[http://www.unicef.org/wash/schools/files/rch\\_cta\\_advocacypack\\_2010.pdf](http://www.unicef.org/wash/schools/files/rch_cta_advocacypack_2010.pdf).

[Child Hygiene and Sanitation Training \(CHAST\)](#): This handbook and training materials, developed by Caritas, targets children ages 5-15 using a child-to-child approach. CHAST toolkits include colored posters, songs, and storytelling activities.

[Sanitation and Cleanliness for a Healthy Environment](#), by Jeff Conant, Hesperian Foundation