

Amhara National Regional State  
Health and Education Bureaus

---



# Training Manual for Preparing Parents, Teachers and Student for Making WASH Friendly Schools







# I. Introduction

---

Since December 2004, the Ministries of Health, Education and Water Resources, Government of Ethiopia have been actively engaged in addressing the issues of hygiene, sanitation and water by officially endorsing a National Hygiene and Sanitation Strategy, Key Principles for achieving 100% coverage, a National Hygiene and On-site Sanitation Protocol, and a national Memorandum of Understanding (MoU) on hygiene and sanitation between the three key Ministries of Health, Education and Water Resources. A notable influx of external financial and technical support has helped to intensify efforts to meet these ambitious goals by 2012.

Amhara Region followed the national example with the Regional Bureaus of Health, Education and Water Resource Development signing a MoU and also establishing a Regional WASH Steering Committee in February 2007.

To support the implementation of the National Hygiene and Sanitation Strategy and achievement of Universal Access Plan (UAP), the Water and Sanitation Program of the World Bank (WSP), together with the USAID/ Hygiene Improvement Project (HIP), reached agreement with the Amhara Bureau of Health to pioneer a “Learning-by Doing” Program (*officially the Program to Support At Scale Implementation of the National Hygiene & Sanitation Strategy through “Learning by Doing” in the Amhara Region*).

In October 2006, over 100 stakeholders from all sectors in Amhara came together to develop a common action agenda for hygiene and sanitation improvement. Nine priority items were agreed upon by the group, including School Sanitation and Hygiene. A follow-up meeting generated an exciting list of possibilities for School Hygiene and Sanitation. Regionally, the energies of the Environmental Health Department of the Regional Health Bureau and woredas throughout Amhara have been focused on pioneering the implementation of the “Learning by Doing” Community-led Total Behavior Change in Hygiene and Sanitation Program. Woredas are committing to ending open defecation forever, to achieve Health, Wealth, and Dignity through Community-led Total Behavior Change.

The time is now to address the role of schools as part of community action, by launching the WASH Friendly Schools Initiative. The Bureaus of Education and Health brought together key stakeholders in June 2009 to agree on the essential elements of and path to WASH Friendly Schools for Amhara. From this meeting flowed a guidance document containing the fundamentals for creating WASH friendly schools, adapted from successes and best practices in various other countries, which serves as a key rallying point for stakeholders to shape an approach best suited for Amhara’s schools.

This training guide is one of several useful annexes of the Guide to WASH Friendly Schools. Other useful tools available for use include the WASH Reading Materials, WASH Picture Book, and Student WASH Club Guide.

The USAID Hygiene Improvement Project (HIP) is a six-year (2004-2010) project funded by the USAID Bureau for Global Health, Office of Health, Infectious Diseases and Nutrition, led by the Academy for Educational Development (contract # GHS-I-00-04-00024-00) in partnership with ARD Inc., the IRC International Water and Sanitation Centre, and the Manoff Group. HIP aims to reduce diarrheal disease prevalence through the promotion of key hygiene improvement practices, such as hand washing with soap, safe disposal of feces, and safe storage and treatment of drinking water at the household level.

---

**USAID Hygiene Improvement Project**

Academy for Educational Development  
1825 Connecticut Avenue, NW  
Washington, DC 20009-5721  
Tel. 202-884-8000; Fax: 202-884-8454  
[hip@aed.org](mailto:hip@aed.org) - [www.hip.watsan.net](http://www.hip.watsan.net)

July 2010

# Table of Contents

---

<b>Acknowledgements</b> .....	<b>7</b>
<b>Introduction</b> .....	<b>8</b>
<b>Enabling Environment for WASH-Friendly Schools</b> .....	<b>10</b>
<b>How to Use This Guide</b> .....	<b>11</b>
<b>Objectives and Schedule</b> .....	<b>13</b>
<b>Session 1: Introduction to the Training</b> .....	<b>15</b>
1.a Who Are We? (10 min.).....	15
1.b Why Are We Here? (5 min.) .....	15
1.c What Are We Going to Do? (15 min.) .....	15
<b>Session 2: Discovering the Hygiene, Water, and Sanitation Situation in Our School</b> .....	<b>17</b>
2. a Why Are Clean Drinking Water, Using Latrines, and Washing Hands Important? (10 min.)	17
2. b School Ignition: Walkabout for Discovery, Reaction, Mapping (3 hours) .....	18
2. c Shit/Feces Calculation (20 min.) .....	19
<b>Session 3:</b> .....	<b>22</b>
<b>Understanding the WASH Problem—How Bad Is It?</b> .....	<b>22</b>
3. a Results of WASH Surveys (45 min.).....	22
3. b Consequences of Feces Contamination and Poor WASH Infrastructure and Poor Hygiene Practices (30 min.).....	25
3.d Wrap-up of the Problem (20 min.).....	26
<b>Session 4: What Can We Do about the WASH Problem?</b> .....	<b>27</b>
4. a The “F” Routes of Feces Contamination and How to Block Them (1hour 30min.).....	27
<b>Session 5: Three Critical WASH Practices—Hand Washing with Soap</b> .....	<b>32</b>
<b>(Time: 2 hours 15 min.)</b> .....	<b>32</b>
5.a Overview of Three Key Practices and Simple Techniques (Tippy Taps, SODIS) (20 min.)	33
5. b Why Hand Washing Is Important (20 min.).....	34
5. c How to Wash Hands Correctly (Demonstration) (20 min.).....	35
5. d How to Make a Water-Saving Hand Washing Device (1 hour 15 min.) .....	36
<b>Session 6: Three Critical WASH Practices—Making Drinking Water Safe from Source to Mouth</b> ....	<b>40</b>
6. a Water Safety Chain (20 min.).....	40
6. b Pros and Cons of Different Water Treatment Methods (30 min.).....	43
6. c Demonstration—SODIS Method of Purifying Water (30 min.).....	44
6. d SODIS in School Calculation Exercise (30 min.).....	44

<b>Session 7: Three Critical WASH Practices—Using Hygienic Latrines: Models for Schools .....</b>	<b>47</b>
<b>Session 8: How to Make Our School WASH-Friendly.....</b>	<b>51</b>
8. a    Introduction to Elements of a WASH-Friendly School (40 min.).....	51
8. b    Planning for Making Our School WASH-Friendly (1 hour) .....	53
<b>Session 9: Wrap Up, Pledges, and Next Steps .....</b>	<b>56</b>
<b>Session 10: Supplementary Half-Day Training Session for Teachers Only .....</b>	<b>57</b>
10. a    Integrating WASH Themes into Classroom Teaching.....	57
10. b    WASH School Clubs .....	58
10. c    Action Planning .....	59
10. d    Wrap Up .....	59

# Acknowledgements

---

This document has evolved from experiences in Madagascar and Ethiopia, countries where the Hygiene Improvement Project has had at-scale programs. HIP is especially indebted to the entire WASH-Friendly Schools (*Ecoles Amies de WASH*) team in Madagascar that first developed a guide, including the ministries in charge of education, health and water, UNICEF, HIP/Madagascar, WaterAid, Office National pour la Nutrition, many regional and district level school officials and dedicated teachers.

In Ethiopia, HIP was able to pilot this training guide as part of its Community-led Total Behavior Change in Hygiene and Sanitation Program in the Amhara region, with the World Bank's Water and Sanitation Program and the Amhara Bureaus of Health and Education. Feedback from regional, zonal and district administration and WASH officials, trainers, teachers, parents and youth leaders helped to strengthen and improve the training guide and adapt it to another African context quite diverse from Madagascar.

Additional thanks to HIP's partners, IRC International Water and Sanitation Centre and The Manoff Group, for reviewing drafts of this training guide and the accompanying *WASH-Friendly Schools Basic Guide for Directors, Teachers, Students, Parents, and Administrators*.

# Introduction

---

The WASH (water, sanitation, and hygiene) in Schools movement is gaining momentum, evidenced by an increase in international and local attention and funding, the development of school-based resources, and implementation designs for schools all over the world, including a “Call to Action for WASH in Schools,” launched in April 2010.<sup>1</sup> The objective is to create and maintain “WASH-Friendly” Schools that have safe and healthy environments, including adequate hygiene and sanitation facilities that allow children to be healthier, more attentive learners. Since it is estimated that fewer than half of the schools in the world have access to drinking water, and even fewer have access to adequate sanitation, this situation has become critical.

USAID’s Hygiene Improvement Project (HIP) model for WASH-Friendly Schools has emerged from experiences in Madagascar and Ethiopia where HIP has worked with various government and NGO partners to integrate hygiene improvement into the education sector. The first iteration of the approach in Madagascar was based on a model promoted by UNICEF, which HIP enhanced by *introducing the concept of “small doable actions”—breaking down the three key WASH practices (washing hands with soap, drinking clean water, using improved sanitation facilities) into doable steps*—and asking that households, schools, and health centers try to incorporate these steps at a feasible pace to eventually become “WASH-friendly.” HIP worked closely with the Ministry of Education, UNICEF, WaterAid, and others to develop a guide and support a national program to put into practice the Madagascar WASH-friendly schools model.

In Ethiopia, HIP has worked through the Ministry of Health and the Regional Bureaus of Health and Education in the Amhara Region, in partnership with the Water and Sanitation Program (WSP) of the World Bank, to bring community-led total behavior change in hygiene and sanitation to the Amhara Region. The “total” strategy includes WASH-friendly schools as part of any community’s hygiene and sanitation improvement approach. Two key elements of the broader approach—promoting improved hygiene and sanitation behaviors through small doable actions and the methodology and tools of the Community-Led Total Sanitation (CLTS) approach—were adapted for schools, much like the SLTS (School-Led Total Sanitation) approach developed in Nepal. Commitment for WASH-friendly schools was forged at the district level, and then district officials, development partners, parents, and educators rolled out the approach throughout the region, each doing their part to achieve WASH-friendly status. Using the *WASH-Friendly Schools Training Guide for Parents, Teachers and School Leaders*, groups of teachers, parents, and student leaders were trained in the issues and methodology and guided to develop coordinated action plans that specify the

---

<sup>1</sup> A “Call to Action for WASH in Schools” was launched at the Dubai International Humanitarian Aid Conference, April 5, 2010, by CARE, Dubai Cares, UNICEF, World Health Organization (WHO), Save the Children, and other key partners. [http://www.unicef.org/wash/index\\_53232.html](http://www.unicef.org/wash/index_53232.html)



implementation roles of government, parents, teachers, students, and others. They then returned to their respective schools and communities to implement the 13 steps necessary for creating a WASH-Friendly School. The material related to total community sanitation and hygiene comes from the *Woreda Resource Book for Total Hygiene and Sanitation*<sup>2</sup> produced by HIP for the Amhara Region in Ethiopia. Other pieces are adapted from the WASH-friendly schools guide developed in Madagascar with HIP assistance.

The present Training Guide and the companion *WASH-Friendly Schools Basic Guide for Schools Directors, Teachers, Students, Parents and Administrators* are now a tested package that HIP has adapted from country-specific models for use in schools, communities, governments, and organizations anywhere. As with all such endeavors, these two guides should be adapted and refined to be as useful as possible in different settings. We at HIP are especially pleased to be able to offer practical tools for implementing a model that connects two approaches that have shown to produce real hygiene improvement results: WASH-Friendly Schools and Total Sanitation and Hygiene. May these two complementary guides be useful to those working for the benefit of children in resource-poor environments who, like children everywhere, have the right to a safe, clean, and welcoming school environment.

---

<sup>2</sup> Woreda Resource Book for Total Hygiene and Sanitation, Amhara Regional Health Bureau, WSP, HIP, October 2008. <http://www.hip.watsan.net/page/2876>

# Enabling Environment for WASH-Friendly Schools

---

A supportive or enabling environment for WASH-friendly schools will be different in each context but might include some of the following elements:

- A champion organization such as UNICEF leading and convening
- A coalition of public and nongovernmental groups to coordinate and implement the program
- Agreed-upon criteria for WASH-friendly schools (this guide can be used as a model)
- A formal or informal agreement among key line ministries including the Ministry of Education, Health, Sports, Youth, Water, etc.
- Buy-in and participation of faith-based organizations —this is key as they provide education to a large proportion of youth

A WASH-friendly schools program might have all/some of these elements:

- Official policy or endorsement of the program
- A plan for identifying and training “WASH-friendly” evaluators of schools
- A plan for training teachers, school directors, parents, and students
- An agreed upon “award”—a flag, a plaque, a special symbol
- A WASH-Friendly School “brand” that can be used on T-shirts, stationery, websites
- Technical and financial resources to support rehabilitation or construction of child-friendly latrines with hand washing stations in schools

# How to Use This Guide

---

## **Who Are the Facilitators?**

Facilitators for carrying out this training should be people who are trained or experienced trainers, familiar and comfortable with a highly participatory approach and with the subject matter. They could be facilitators who have previous involvement with Community-Led Total Sanitation (CLTS), WASH in Schools, or other community WASH or education programs. Sometimes the Ministry of Education or Ministry of Health has a cadre of trained trainers available to carry out trainings such as this one. Each workshop should be carried out by two facilitators as a team.

## **Who Are the Trainees?**

This training is designed for representatives of the schools in the district or subregional level. The trainees should be teams comprised of the school director, one to two teachers, two to three parents, and one to two student leaders from each school. Ideally, the parents will be literate and already involved in the PTA or a similar group. Teachers and student leaders should have shown an interest in improving the school environment. The trainee group should not be bigger than 30 people from about six schools. Carrying out this training with “mixed” groups of parents, teachers, youth leaders, school, and ward/village/district leadership is vital to the success of the training. We do not recommend training groups of teachers only, parents only, etc. because WASH-Friendly Schools depend upon the interaction of various stakeholders. The learning and planning should happen together, so that each group sees its part and understands the interdependent nature of the challenging task.

## **How the Guide Is Organized**

This guide has nine sessions for a two-day workshop, with easy-to-follow instructions for the facilitator. Each session starts with Objectives, Materials/Preparation Necessary, and then provides the steps to follow to facilitate the session. Each step has an approximate time to help the facilitators with time management.

Handouts are included in some sessions. Facilitators should use their judgment about photocopying or reproducing the handouts on a flipchart. Decisions will depend on available budget, materials, and technical support.

## **Materials and Preparation**

*Facilitators will need these basics:*

- 2 flipchart stands
- Lots of flipchart paper
- Lots of different colored markers
- Masking tape to put flipcharts up on walls
- Regular scotch tape

*Different sessions will require:*

- Bowl of turmeric or glitter powder
- Basin
- Container of water that you can pour
- Soap
- An empty plastic bottle, a gourd, or an old jerry can
- A pen casing, a pawpaw (papaya) stem—anything that is hollow
- A sharp knife, a nail, or a screwdriver to make a hole in the vessel for the tube
- Copies of Water Safety Chain for each participant or
- Drawing of Water Safety Chain on flipchart without pictures
- Copies of picture of child defecating
- Prepared flipchart: Treatment Methods—Pros and Cons
- Transparent 1-1.5 liter plastic bottles with their lids or caps
- Pitcher of water
- Any instruction sheet for solar disinfection (SODIS) in local language if possible

*Facilitators must prepare:*

- Various flipcharts before each session (objectives, blank tables, small group tasks, etc.). These will be indicated in each session.
- Visits to nearby households for the latrine assessment exercise in Session 7. They will need to get permission from the household for trainees to come and assess the conditions of their latrine.



# Objectives and Schedule

---

## Objectives of the Training

Overall:

To build champions of WASH-friendly schools—parents, teachers, administrators, officials, youth leaders, everyone!—who each do his / her part in making schools WASH-friendly

Specifically:

Parents, teachers, and student participants will be able to:

- Discuss the importance of the three key WASH practices in schools
- Analyze and describe the WASH problem at their school
- Describe main routes and barriers for fecal-oral contamination
- Demonstrate the use of simple enabling technologies for practicing hygiene behaviors
- List the elements of a WASH-Friendly School
- Develop a plan of action for making their school WASH-friendly

## Workshop Schedule Overview

	DAY ONE	DAY TWO
AM	<p><b>Session 1: Introduction</b></p> <p><b>Session 2: Discovering the WASH Situation in Our School</b></p> <p>2. a Why Are Clean Drinking Water, Using Latrines and Washing Hands Important?</p> <p>2. b School Ignition—Walkabout for Discovery, Reaction, Mapping</p> <p>2. c Feces Calculation</p>	<p><b>Session 5: Critical WASH Practices—Hand Washing with Soap</b></p> <p>5.a Overview of Three Key Practices and Simple Techniques</p> <p>5.b Why Hand Washing is Important</p> <p>5.c How to Wash Hands Correctly</p> <p>5.d How to make a Water-Saving Hand Washing Device</p> <p><b>Session 6: Critical WASH Practices—Making Drinking Water Safe</b></p> <p>6.a Water Safety Chain</p> <p>6.b Pros and Cons of Different Water Treatment Methods</p> <p>6.c Demonstration—SODIS Method</p> <p>6.d SODIS in School Calculation Exercise</p>
	LUNCH	LUNCH
PM	<p><b>Session 3: Understanding the WASH Problem—How Bad Is It?</b></p> <p>3.a Results of WASH Surveys</p> <p>3.b Consequences of Feces Contamination</p> <p><b>Session 4: What Can We Do?</b></p> <p>4.a The “F” Route of Feces Contamination and How to Block Them?</p>	<p><b>Session 7: Critical WASH Practices—Using Hygienic Latrines</b></p> <p>Latrine Assessment Exercise in Community</p> <p><b>Session 8: How to Make Our School WASH-Friendly</b></p> <p>8.a Introduction to Elements of a WASH-Friendly School</p> <p>8.b Planning for Making Our School WASH-friendly</p> <p><b>Session 9: Wrap-up, Pledges, Next Steps</b></p>
	<b>SESSION 10: SUPPLEMENTARY ½ DAY TRAINING SESSION FOR TEACHERS ONLY</b>	
AM	<p>10.a Integrating WASH Themes into Classroom Teaching</p> <p>10.b WASH School Clubs</p> <p>10.c Action Planning</p> <p>10.d Wrap-up</p>	

# Session 1: Introduction to the Training

---

**(Time: 30 minutes)**

## **Session Objective**

- To get to know each other, agree on the purpose and objectives of this training workshop, and understand what we are going to be doing.

## **Preparations/Materials Needed**

- Workshop objectives on flipchart
- Workshop schedule on flipchart

### **1.a Who Are We? (10 min.)**

**Welcome** everyone to the workshop

**Introduce** yourself by name, job function, and place of origin, school you represent (if appropriate); ask everyone else to introduce themselves the same way.

### **1.b Why Are We Here? (5 min.)**

**Present** the purpose of this workshop on a flipchart:

*“To learn how to work as a team of parents, teachers, and students to make our schools “WASH-friendly”*

#### **Provide background**

Give a brief presentation to the participants on the local WASH program that is sponsoring WASH-friendly schools and how this workshop came to be.

#### **Present workshop objectives**

Write workshop objects on a flipchart and answer any questions. Some terms might be unfamiliar, so ask what words the participants don’t understand and explain them. Also explain that these words will become familiar during the two days together.

### **1.c What Are We Going to Do? (15 min.)**

**Present** the schedule on a flipchart or handout

**Explain** the activities for each session starting at the beginning and answer any questions

**Review** and resolve all logistical arrangements (meals, lodging, per diem, transportation, etc.)

**Say:** Here is how we'll spend the next two days:  
After we review together the current WASH conditions in our schools, and what we can do to improve them, we'll work in stakeholder groups and then together to plan to make our schools "WASH-friendly."

We'll talk in great detail about this term "WASH-friendly," but for now we'll say that a WASH-Friendly School is one where .....

The whole school community carries out the three key hygiene practices:

1. Using improved sanitation facilities
2. Washing hands with soap or ash at critical times (after using toilets, before eating)
3. Drinking safe water that has been treated, stored, and retrieved properly

**A WASH-Friendly School is a school that ...**

- is clean and safe
- has adequate, well maintained toilets or latrines for girls and boys and for teachers, with water, paper, or other material for anal cleansing
- has a place to wash hands with soap/ash and running water after using the toilets
- has enough treated, safely stored drinking water for the school community

**A WASH-Friendly School is a school where...**

- teachers give lessons on good hygiene practices in the classroom
- students participate actively in making and keeping their school WASH-friendly
- teachers, students, parents, and the whole community work together to promote good hygiene by ensuring that there are facilities and conditions for practicing improved hygiene in school and at home
- more girls will remain in school because they have separate, private, and clean sanitation facilities and don't have to leave school when menstruation begins



# Session 2: Discovering the Hygiene, Water, and Sanitation Situation in Our School

---

(Time: 3 hours 30 min.)

## Session Objectives

- Identify the effects of open defecation and fecal contamination on health and education
- Discover and map the current situation at the school—where students defecate, where they can wash their hands, and where they get their drinking water
- Calculate the amount of feces that are deposited into the school environment every week and month

## Preparations/Materials Needed

- Session objectives on a flipchart
- Flipchart and markers to make maps
- Copy of “Feces Calculation Worksheet” for each participant (on page 19)

## 2. a Why Are Clean Drinking Water, Using Latrines, and Washing Hands Important? (10 min.)

This introduction to the topic gets people thinking about and understanding the problem of open defecation and the importance of barriers (latrines, clean hands, safe water) to fecal contamination.

**Introduce** the session saying that we are going to be talking a lot about feces/defecation/shit and problems associated with feces in the environment, how this affects schoolchildren, and also about solutions that we can devise with our own resources.

**Ask** What do you already know or think about people defecating in the open? Is it practiced in your community? Why? Do you think it is a problem? Why or why not? Do you think this is an important topic? Help with answers as needed...

*Possible answers:*

- Feces is dangerous to our health
- Feces gets into our food, water, hands and then into our mouths
- Feces carries diseases and makes us sick
- It's disgusting to see and very unpleasant to smell

What are some sicknesses you know that can come from contact with feces that are deposited in the open?

*Possible answers:*

- Diarrhea/dysentery
- Stomachache
- Worms

Can you think of some things to do that help keep feces away from us and our children?

*Possible answers:*

- Use latrines and toilets
- Wash hands with soap to remove dirt and feces, especially at important times such as after defecation
- Protect our drinking water (filtering, boiling, or treating with chlorine solution)

Why do you think the problem of open defecation is especially serious for schools and schoolchildren?

- Children spend many hours in school and are in close contact—feces can be spread more easily
- Children who have diarrhea or worms can't learn well and often stay home sick

**Present** the session objectives by reading them from a flipchart

## 2. b School Ignition: Walkabout for Discovery, Reaction, Mapping (3 hours)

This is the “Walk of Shame” or “School Ignition” exercise that also happens in communities.

**Explain** The first activity will be to explore conditions at the school related to hygiene and sanitation practices and that the objective is to discover what the real situation is, or how bad the hygiene/sanitation problem is.

The walk will be led by a teacher or school director assisted by a trained facilitator.

*Note to Facilitator on Organizing the Walk of Shame:*

### **Organizing the Walk of Shame**

The Walk of Shame is a crisscrossing walk around the school compound and nearby surroundings, with the intention of observing, asking questions, and listening as conditions arise during the walk. In the process of walking through the schoolyard, observe and discuss open defecation sites, water sources, garbage, and animal dung in the schoolyard, and other unhygienic practices. Each time you encounter these bad practices, do not be polite: Point it out! Loudly! Ask, what is this? Why? Whose is this? Where is the latrine?

- Ask**           Where does the shit go? What happens when it rains? (The shit gets into our water, gets onto our food)
- Help**           the group make the discovery that

## **WE END UP EATING EACH OTHER'S SHIT!**

Participants should feel disgust and embarrassment at what they are discovering. They should be moved to change the situation.

Once you have discovered and discussed the disgusting aspects of the open defecation sites, tell them that they will now be able to make a good plan for the school. First thing to do is to make a map of the area and where these problem sites are.

### **Organizing the Mapping of the School**

A map is a useful tool for planning and for measuring progress. Once back in the training room, or outside in an open space, explain that the participants will create a map of the school that will show the area and all the problem spots they discovered during the walk.

Use a large sheet of paper, hand out different colored markers and ask participants to draw the outline of the school compound, put in the school buildings (simple squares are fine), and any other important structures, then add water sources, open defecation spots, latrines if there are any, and places that have a lot of animals. They can also add the surrounding houses and any latrines or water sources near the school.

Remind the participants that this is a fun art exercise. They are not being graded on geometry! There is no need to measure or ensure straight lines... this is a workshop game.

- Ask**           Where are the feces in relation to the children? What does this mean for them?  
How much shit do you think is around the school if children don't have latrines to use?

## **2. c Shit/Feces Calculation (20 min.)**

When you have finished the map exercise, go back to the training room and post the map on the wall.

- Explain**       Now that we have mapped the physical areas that are problematic, we are going to explore and analyze more deeply why open defecation poses serious problems for our children. That will help us come up with a plan of action.

- Ask**           people to give their reactions or share their thoughts when they look at this map (keep it open ended and let people just reflect)

**Say** We will now look at the problem more closely and even do some math

**Ask** How many students and teachers are at the school?

Then ask:

- How many times a day does a person defecate?
- What volume of feces does a person defecate at a time? (100 g is a good average volume)

**Explain** that they will now calculate the amount of feces deposited per week, month, and year within or near the school. Use the Feces Calculation Worksheet either as a handout for each person or copy it onto a flipchart for the whole group to do together.

*Note:* When calculating the amount of feces, it is better that the participants do the calculations themselves. Ask for volunteers who can multiply and add simple numbers. Give them pen and paper and guide them through the calculations. The volunteers will be announcing the amount per day, week, and month to the other participants. Your role will be to exclaim and exaggerate.

**Ask** The most important question to ask after this is:

### **WHERE DOES IT ALL GO?**

- into our food
- in our mouths
- into our classrooms
- into our drinking water
- onto our hands

**Help** everyone reach the conclusion that

*Basically students and teachers end up eating each others' shit!*



# Feces Calculation Worksheet

**Take 10 minutes in groups to calculate the amount of feces generated in a school**

How many times a day does a person defecate at school? A. \_\_\_\_\_

Volume of feces per evacuation (per shit) B. \_\_\_\_\_

Volume of feces per day (A x B) C. \_\_\_\_\_

Number of people in the school D. \_\_\_\_\_

Volume of feces per school per day (C x D) E. \_\_\_\_\_

**TOTAL AMOUNT OF FECES GENERATED  
PER WEEK BY ONE SCHOOL (E x 5)** \_\_\_\_\_

**PER MONTH BY ONE SCHOOL (E x 30)** \_\_\_\_\_

# Session 3:

## Understanding the WASH Problem—How Bad Is It?

---

(Time: 1 hour 35 minutes)

### Session Objectives

Understand how bad the WASH problem is at the school by doing the following:

- Interpret the results of recent surveys taken at schools on environmental hygiene (WASH) conditions (if surveys have been conducted)
- Determine what the acceptability and consequences of these conditions are

### Preparations/Materials Needed

- If WASH surveys have been conducted at the schools, put up the resulting information on flipchart paper in a simple way. Use separate sheets for survey results of each key practice: one sheet for feces disposal, one sheet for drinking water, one sheet for environment and personal hygiene conditions (hand washing facilities, solid waste disposal, building and ground safety, animal presence, etc.)
- Checklist for Minimum Standards for School on flipchart or copied for participants

### 3. a Results of WASH Surveys (45 min.)

**Note** If surveys have not been conducted for the participants' schools but have been for other schools, explain this and say that we are using the data from other schools for learning purposes but that they should organize a survey and redo this exercise with the data from their own schools. See the Survey Form in Annex E of the Basic Guide for WASH-Friendly Schools.

**Post** the flipcharts with survey data around the room like pictures in a gallery, one sheet for each key practice if that makes sense. Here are examples:

### Sample flipchart

#### Survey Results: Sanitation

##### Number of schools surveyed:

- Have toilet facilities
- Have enough latrines for students
- Have separate toilets for girls/boys
- Have washable latrine slabs
- Latrine has door or curtain

### Sample flipchart

#### Survey Results: Flipchart Two Hygiene

##### Number of schools surveyed:

- Have place to wash hands
- Hand washing place next to toilet
- Have soap for washing hands
- Have running water for hand washing
- Reminders to wash hands

**Highlight** the most shocking data (no latrines, no available water, whatever is really unacceptable and needs to be urgently addressed) by using different colors or writing on special cards or some other way.

**Ask** participants to walk around and look at these results, to ask questions if they don't understand the data, and to discuss among themselves what they see

**Invite** everyone to sit down and then ask the group:

- What are the main problems we can see?
- What are the possible consequences on the students? On girls?
  - Illnesses, absences, low level of learning, even dropping out
  - Girls may suffer more because of lack of latrines—they will drop out more quickly
- What are the consequences for the community?
  - Sick children make siblings sick, parents lose workdays and wages or agricultural productivity
  - If girls drop out because of lack of hygiene and sanitation facilities, the whole well-being of the community and of future generations is at stake. Educated girls/women are healthier and raise healthier children!

**Record** answers on a flipchart.

## Possible Handout or Reference:

### **Checklist for Minimum Standards for School Sanitation and Hygiene Facilities**

- ✓ Separate latrines for boys and girls
- ✓ “Child-friendly” facilities
- ✓ Latrines for male and female teachers
- ✓ 1 latrine per 25 girls and 1 for female staff
- ✓ 1 latrine + 1 urinal per 50 boys and 1 for male staff
- ✓ Hand washing stations next to latrines

Latrines should have:

- ✓ Walls and roof
- ✓ Ventilation
- ✓ Doors that lock from the inside, not the outside
- ✓ Washable slabs
- ✓ Anal cleansing material (paper, leaves, water)
- ✓ Wastebasket for used wiping material
- ✓ A place to wash hands after use
- ✓ Cleaning items such as broom, scrub brush, etc.

Hand washing stations should have (at least):

- ✓ Basin
- ✓ Source of running water for rinsing (tap, jug)
- ✓ Soap, ash, clean sand, or mud
- ✓ Soak pit to avoid standing water

See: Water, Sanitation and Hygiene Standards for Schools in Low-cost Settings (WHO, UNICEF 2009)

### 3. b Consequences of Feces Contamination and Poor WASH Infrastructure and Poor Hygiene Practices (30 min.)

**Explain** Now we will learn more about the dangers of feces contamination, of bad hygiene and sanitation practices, and most importantly, how to stop these.

**Read** the following story to the group, tell them to listen carefully and think about whether the things that happen in the story are common and what their own similar experiences have been. After the story they will answer some questions.

#### **The Sad Tale of Aster**

Mr. and Mrs. Alemu, uneducated farmers living in Kosober, had two daughters, seven and four years old. They have not started going to school and they spend most of their time playing in the field and backyard with many other children in the village. Some of these children have colds with badly runny noses, some have diarrhea, some pass roundworms whenever they defecate, some have skin problems (scabies). All these children play, pollute their environment, and pass illnesses from one to the other every day. It is not uncommon for children in the village to fall ill and die.

In this farm community, children are left behind while parents and other family members go to the farm every day for the whole day. The children eat leftovers—anything they can find in their own or their friends' houses. They never wash their hands before eating, but the elders don't either. Leftovers are normally left uncovered so flies, chickens, animals, and insects can get at the food. The water supply for this community is a pond where surface runoff is stored during the rainy season. Children sometimes go down to the pond to play and they also drink the water.

Eventually Aster, the four year old daughter of Mr. and Mrs. Alemu, started getting sick and never got better. The mother asked her elder daughter if Aster had eaten anything at neighbors' houses. No, the elder sister said, she ate only the leftover food from what we had last night. Has she vomited or had any unusual thing, asked the mother. Elder sister replied that she vomited only once in the afternoon, but she complained of stomach pains and had frequent diarrhea.

In the morning, Mrs. Alemu saw that that Aster was ill with a fever and stomach cramps. She told her husband that they had to take her to a health center or a health post. They left almost immediately but by the time they reached the health center Aster was very ill. Mrs. Alemu, while looking at her ill daughter, started to cry. She was scared they would lose her from this world.

*--By Kebede Faris, HIP/WSP Ethiopia*

**Ask** participants these (or similar) questions based on the story:

- Is this a common story? Ask participants who said yes to tell their stories
- What possible conditions actually caused Aster's illness?
- Where do you think she got the disease?
- Could it have been prevented? How?
- Who do you think is/are responsible to change conditions so that children like Aster will not die?
- How would these problems affect children who go to school?
- Do you think that the teacher or students have a role to play in preventing the illnesses?
- What could they do?

### 3.d Wrap-up of the Problem (20 min.)

**Review** everything that has emerged from the session on WASH problems, and

**Ask** participants to help you make a list of the extent of the WASH problem on a flipchart labeled "How Bad is the Problem?" including:

- Amount of feces deposited per week/month at the school
- Key problems that emerged from the school surveys
- Consequences of WASH-related illness on schoolchildren and young children (for example, low level of learning, many absences due to illness, passing infections at school from one to another, girls drop out because there are no toilets)

Wrap up by saying that there are solutions! We have already started to talk about them in this training, and we now will learn and think and plan about solutions (actions that parents, teachers, and students can take) in detail.



# Session 4: What Can We Do about the WASH Problem?

---

(Time: 1 hour 30 min.)

## Session Objectives

- Describe the “F” routes that feces take from one person to another as a result of open defecation (contamination routes)
- Identify the key barriers to blocking the “F” routes of fecal contamination

## Preparations/Materials Needed

- Write on a sideways flipchart paper the following words, like this:

FEET

FLIES

FINGERS

FIELDS

FLUIDS

FOOD

- Picture of young person defecating in the open (photocopy of the drawing at the end of this session)
- For each group: 6 pieces of A4 paper cut in half (or 4x6 cards)
- Markers for each group

## 4. a The “F” Routes of Feces Contamination and How to Block Them (1hour 30min.)

**Tell** participants that we have examined the problem of the practice of open defecation and begun to look at what the consequences are of this practice on the health and well being of children in school.

**Remind** participants of the Walk of Shame. What was the conclusion?

**EVERYONE IS EATING EACH OTHER’S SHIT!**

**Show** participants the picture of the young person practicing open defecation

**Ask**

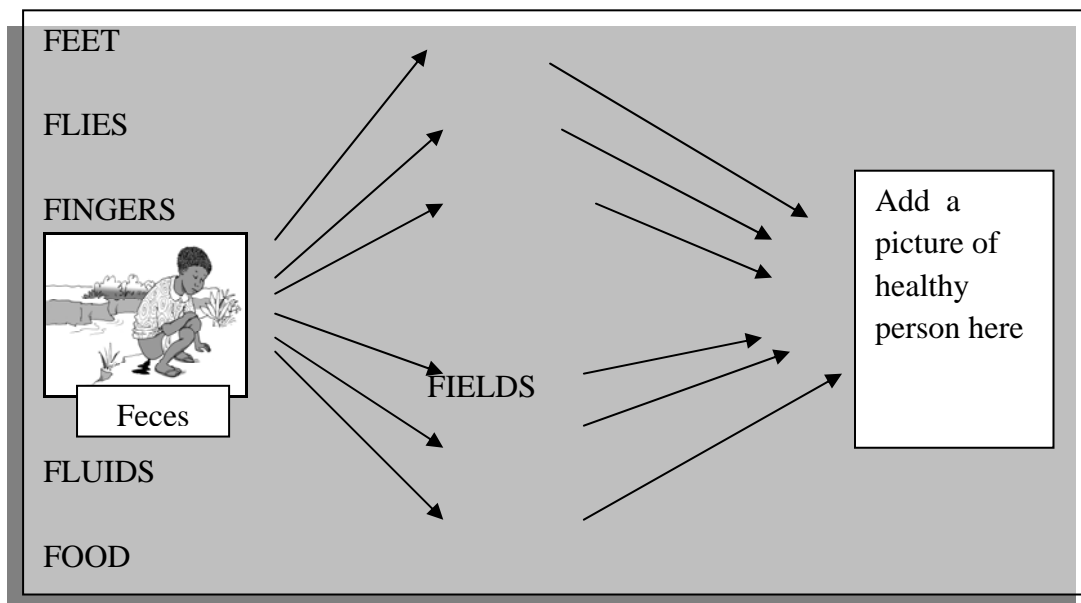
- What happens when someone defecates in the open?
- Where do the feces go?
- What happens when it rains?
- How do the feces get from this person/that spot into our mouths?

*Possible answers:*

- The rain carries feces into fields and streams and ponds
- People drink contaminated water
- People can walk through fields and track the feces into homes
- Flies can land on the feces and then land on food
- Hands can touch the feces and then touch others, or touch food

**Show** flipchart with the six words written on it

**Tape** open defecation picture to the left of the six “F” words written on the flipchart:



You can add another picture of a healthy person on the right of the flipchart, or draw a figure representing a healthy person who would be infected by feces via the six F's.

**Explain** This is the “F” Diagram, an easy way to remember the routes that feces can take from one person to another and into our mouths. It can also help us think of ways to block these routes.

**Ask** participants to give an example of feces transmission from one person to another for each “F”

For example:

- FEET:** someone walking in a pile of feces will carry it into a house
- FLIES:** land on feces, then land on uncovered food
- FINGERS:** touch feces when cleaning after defecation, then touch food or other people
- FIELDS:** can be places where people defecate and then walk in the shit
- FLUIDS:** runoff from fields and open defecation spots can go into streams where people get water; drinking water is stored unsafely and gets contaminated
- FOOD:** can be contaminated by unwashed hands or by flies landing on it

**Divide** participants into small groups of four to five persons

**Hand out** six pieces of cut A4 paper or six cards and a marker per group

**Give Group Task: Discuss what could prevent the spread of feces into our food and water supply?**

**Tell** each group to think of and discuss different ideas for blocking each “F” pathway and write down one key blocking or prevention behavior idea for each pathway on the flipchart

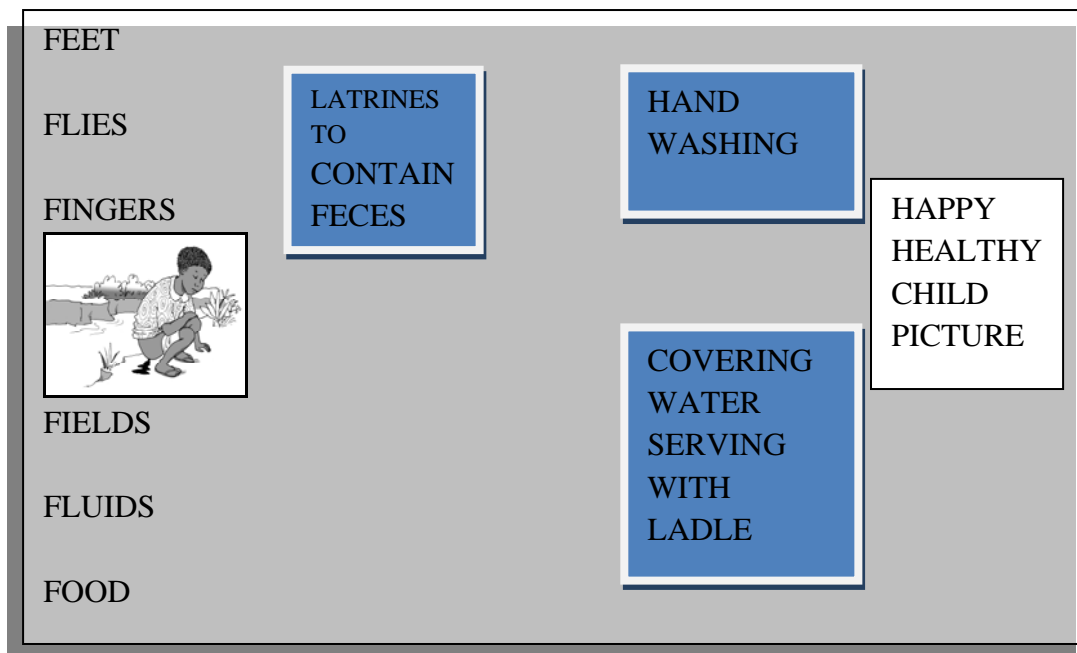
When groups have finished,

**Ask** one group to select and place/tape one prevention behavior written on the paper or card to block the corresponding “F” feces transmission route

**Tell** other groups to place a different response to “block” the other “F” transmission routes

**Possible Prevention Behaviors:**

- Proper latrine construction and use
- Proper hand washing with soap/ash after defecation
- Proper drinking water treatment and storage
- School compound sanitation, drainage, and proper waste management
- Proper washing of raw fruits and vegetables
- Proper washing and storage of food utensils
- Hand washing before preparing and eating food



**ASK** participants to say what one or two important points or things were learned from the session.

### Session Wrap Up

- The first defense against open defecation is proper latrine use by every member of the family, hand washing with soap or ash, and proper water storage and treatment.
- A safe latrine keeps the excreta away from people, as long as it has a cover or some other kind of seal to prevent flies and people from coming into contact with the feces.
- Latrines have the added advantage of providing privacy when they have walls and a door or curtain. Women and girls in particular really appreciate the privacy that latrines provide.
- After using the latrine, a person should wash his/her hands to prevent feces from making him/her sick.
- Feces can be made safe by burial in the ground. Even a shallow covering of soil over the top of the excreta will prevent flies from walking on the feces. Where no other type of feces disposal system is available, burial is a clean and convenient way of disposal. For example, a person working in the fields can bury his/her feces with a hoe. This is sometimes called the “cat method.”
- Care needs to be taken to make sure that all feces, including the feces of infants and children, are disposed of in a latrine or buried. Infants’ feces actually contain more contaminants than even adult feces.



# Session 5: Three Critical WASH Practices— Hand Washing with Soap

---

(Time: 2 hours 15 min.)

## Session Objectives

- Review the three key practices (safe water, latrine use, hand washing with soap/ash) and the simple techniques and technologies that make them easy to do
- Cite the reasons for hand washing and the critical times to practice it
- Practice correct hand washing
- Make a water-saving device (“tippy tap”) for hand washing

## Preparations/Materials Needed

- Prepared flipchart with “Key Practice and What We Need to Do About It” Table:

Key Practice	What We Need to Do About It

- Bowl of turmeric or glitter powder
- Basin
- Container of water that you can pour
- Soap
- An empty plastic bottle, a gourd, or an old jerry can
- A pen casing, a pawpaw (papaya), or small bamboo stem—anything that is hollow
- A sharp knife, a nail, or a screwdriver to make a hole in the vessel for the tube



## 5.a Overview of Three Key Practices and Simple Techniques (Tippy Taps, SODIS) (20 min.)

**Explain** From now on we will be learning about the solutions to the problems that are the consequences of open defecation. All these problems can be prevented, and some can be prevented easily.

**Ask** participants if they can now list the three key practices that must be the basis for any prevention program in homes, schools, and communities. Put the key practices on the left side of a divided flipchart (see diagram).

**Ask** participants what would be required to be able to carry out each practice and make a list on the right side of the flipchart

**Ask** if they can list locally made products or simple technologies that can be used (tippy taps, traditional water storage jars, basins, ash, locally made soap, etc.)

Key Practice	What We Need to Do About It
<b>1. Use improved latrines</b>	<ul style="list-style-type: none"> <li>• School latrines</li> <li>• Household latrines</li> <li>• Tools to bury feces if no latrines</li> </ul>
<b>2. Drink safe water</b>	<ul style="list-style-type: none"> <li>• Water</li> <li>• Treatment products (chlorine solution)</li> <li>• Storage containers</li> <li>• Covers/lids for storage containers</li> <li>• Cups</li> <li>• Ladles and places to hang them</li> </ul>
<b>3. Wash hands with soap/ash</b>	<ul style="list-style-type: none"> <li>• Soap</li> <li>• Ash</li> <li>• Running water (tap or jugs)</li> <li>• Basin</li> </ul>

Once the list is done,

**Add** SODIS or solar disinfection is an easy and cheap way to treat drinking water.

**Explain** Many solutions or actions can be done without a lot of outside resources and that is always a good place to start.

**Say** We will now learn about each key practice in detail and start to plan how to introduce the necessary products, technologies, and other critical things into schools to allow the students and teachers to practice improved hygiene.

**Note: Take a short break to set up the next session.**

## 5. b Why Hand Washing Is Important (20 min.)

**Start the session** with an activity as participants enter the room to make them aware of how easily and quickly hands can spread germs.

- Dip the palms of your hands into a bowl filled with turmeric powder or glitter or shake it onto your hands
- Shake hands with some participants, reapplying the turmeric/glitter as necessary
- Ask participants to greet each other and shake hands, too
- Touch other surfaces in the classroom, leaving a trail of turmeric/glitter

### **Ask**

1. What has happened to our hands and our friends' hands as we shake them?
2. Where else do you see the turmeric/glitter?
3. If the turmeric were feces or disease germs, how fast do you think contamination can occur?
4. How about in a school where there are many people close together?

**Highlight** these key points:

- Person to person contact spreads germs or feces contamination
- Germs can enter the body through the mouth
- Germs clinging to unclean hands can easily get in food and from food into mouths
- The number of germs on hands soars after using the toilet

### **Say**

Imagine you were about to sit down and enjoy a meal. Just before you started to eat, you noticed your hands were covered with turmeric/glitter. The turmeric represents just a fraction of the germs from feces present on our hands. Imagine that we could see our hands covered with millions of feces germs. Would you want to eat food with those hands? Would you continue eating? What would you do?

**WASH HANDS BEFORE EATING!**

### **Ask**

What might happen if you eat food without washing hands that are covered with germs?

What might happen if you prepared food with germ-covered hands?

**YOU CAN FALL ILL FROM THE FECES GERMS ON YOUR HANDS AND ALSO MAKE OTHERS ILL!**

### **Summarize the importance of hand washing by saying:**

Correct hand washing makes a huge difference to a person's health and well-being. Hands are used for anal cleansing after defecation. No matter what material is used for anal cleansing, hands still get contaminated from the feces, even if the feces cannot be seen or smelled. For this reason, both hands should always be washed using soap or ash after defecation or after going to a latrine.

Hands should also be washed before handling any kind of food. Both hands should be washed with water and a cleansing agent. Soap is the most pleasant (and effective) hand washing agent.

When soap is too expensive or is not available, these alternatives can be effective:

- Wood ash will also rub off any dirt and smells. The slight irritation you feel when you wash your hands with ash shows the cleansing power of ash
- Clean sand with water can be used for hand washing to help to rub off dirt

It is important that everyone always washes his or her hands after defecation and before handling food. However, most people do not wash their hands often enough, or only use water. Hand washing should be made as easy as possible by keeping the hand washing water and cleansing agent beside the latrine, and if possible, also outside the kitchen or food eating area.

**Conclude** Hand washing with soap or ash after defecation and before handling food or eating will improve everyone's health

## **5. c How to Wash Hands Correctly (Demonstration) (20 min.)**

**Prepare** Basin, container of water that you can pour, soap

**Ask** What is the correct way to wash hands? Collect a few ideas and say that we will watch a demonstration and help the volunteer.

**Ask** for one volunteer to demonstrate correct hand washing over the basin using soap. Someone pours the water liberally over the volunteer's hands. Have the group coach the volunteer on proper hand washing, correcting the technique if needed. Wastewater should be caught in the basin below.

**Note** You DO NOT want to try to save water in this demonstration. Pour water over the volunteer's hand, and use as much as is reasonably possible. This contrasts later with the savings from using the tippy tap.

**Emphasize** the importance of soap or agents to break down and lift feces and germs. The water does not have to be clean water, but it must be flowing water.

After the demonstration,

**Ask** what the correct steps to hand washing are and write up the list on a flipchart:

**How to Wash Hands**

1. To wash, wet hands with running water
2. Rub your hands and fingers well with the soap or ash at least three times
3. Clean between the fingers, under your fingernails, and up to your wrists to help control germs
4. It is the soap or ash combined with the scrubbing action that helps dislodge and remove germs
5. Rinse your hands well with running water (pour from a jug or tap)
6. Dry them in the air to avoid recontamination on a dirty towel

### 5. d How to Make a Water-Saving Hand Washing Device (1 hour 15 min.)

**Show** the water in the basin from the single hand washing

**Ask** If this is the amount of water needed for one hand washing, how many basins or other quantity would we need in a day if everyone washed at critical times?

**Calculate with the group and write numbers on the flipchart:**

How many times would one woman need to wash hands in a day?  
(This is only an example)

After defecation? \_\_\_\_\_ 2 \_\_\_\_\_

Before eating? \_\_\_\_\_ 3 \_\_\_\_\_

Before preparing food? \_\_\_\_\_ 3 \_\_\_\_\_

After cleaning a baby's bottom? \_\_\_\_\_ 6 \_\_\_\_\_

Other times \_\_\_\_\_ 2 \_\_\_\_\_

**TOTAL? 16 times**

Look again at the washbasin and imagine that amount of water times 16 (or whatever number), and that is only for ONE PERSON!

- Ask** How much water would be required for a classroom of 40 children? Would most schools be able to provide that amount of water just for hand washing?
- Explain** We will learn how build a hand washing device—a tippy tap— to help wash hands at the critical times *even when water is scarce*
- Show** A picture of a tippy tap and pass it around the room
- Separate** the group into four or five subgroups and give each group the materials to make a tippy tap:
- An empty plastic 1 or 1.5 liter water bottle, a gourd, or an old jerry can
  - A pen casing, a papaya stem, a straw - anything that is hollow
  - A sharp knife, a nail, or a screw driver to make a hole in the vessel for the tube
- Hand out** the instruction sheet and/or explain carefully to the groups what to do to make a tippy tap, using the instruction sheet as your guide. You can also write up instructions on a flipchart.

## **Instruction Sheet: Build a Hand Washing Device to Help Wash Hands** (*even when water is scarce*)

Follow the easy steps below...

### **FIND AN AVAILABLE VESSEL**

- An empty Highland bottle
- A gourd
- An old jerry can

AND A **HOLLOW TUBE** to make the spout...

- A pen casing
- A pawpaw stem
- Anything that is hollow

**You will also need a sharp knife, a nail, or a screwdriver to make a hole in the vessel for the tube.**

1. Decide on the design of your hand washing station before you begin working. Will your tippy tap sit, hang, hang and tip?
2. Wash the container and tube so they are free from visible dirt. Heat the knife, nail, or screwdriver to make piercing a hole for the tube easier.
3. Make a small hole for inserting the tube. Make it as low on the container as you can, about 2 cm (two finger widths) from the bottom. Be careful to make it smaller than the tube.
4. Slowly and carefully push the tube into the hole. Be very careful not to push the hole so big that it leaks.
5. Test the water flow:
  - When using a water bottle, unscrewing the cap allows water to flow, and it continues until it runs out or when the cap is tightly shut.
  - When using a jerry can or gourd, water comes out when the cap on the pen or plug in the tub is removed. If you don't have the original cap, just find an old stick to "plug" the flow.

### **Prepare a hand washing stand:**

Water-saving devices such as the one shown in the picture below can be made from a calabash, plastic bottle, or clay pot. The important thing to consider is that a hand washing facility must be available near the latrine so that latrine users will be able to access it easily. It should remind the user of the need for hand washing after defecation. Soap should be placed in a small dish on the stand.

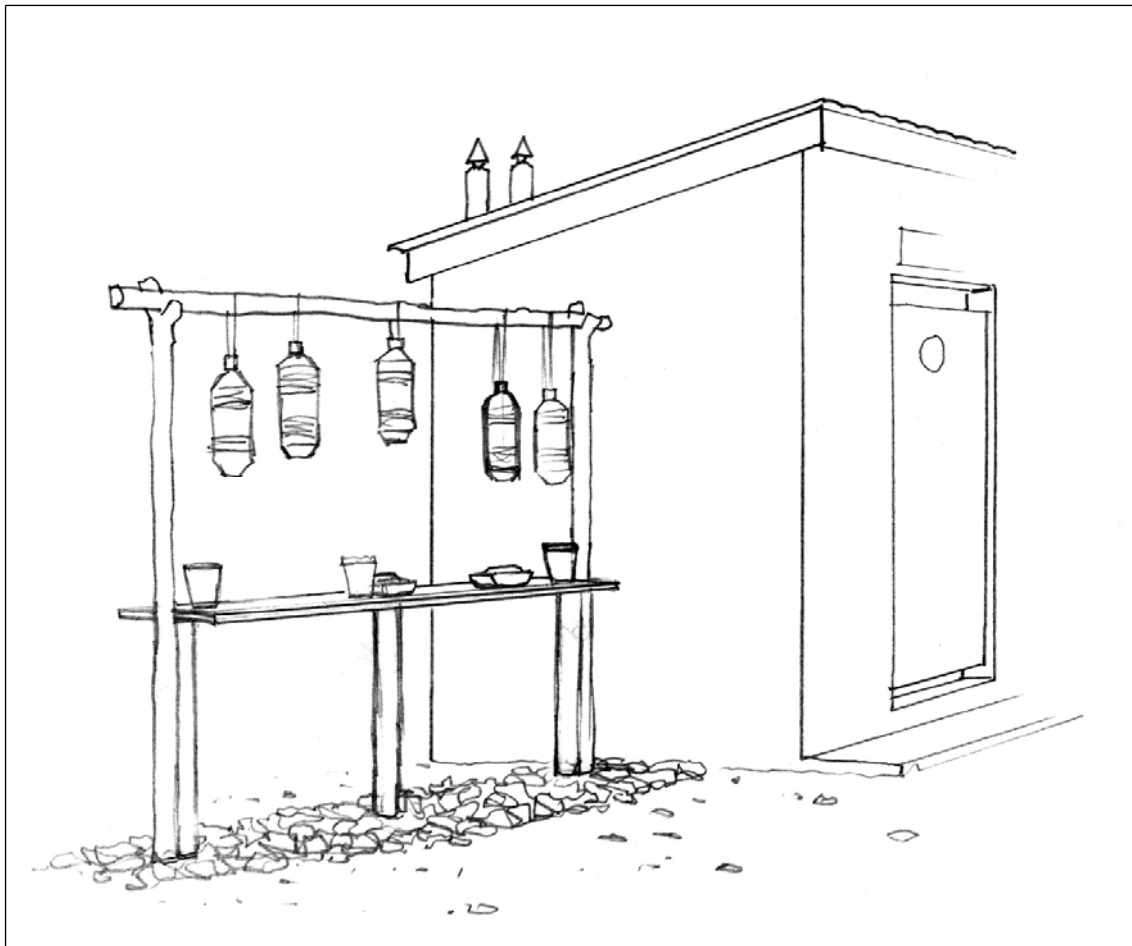


**Ask**

1. Do you think that hand washing devices and stations could be useful at schools? Why?
2. Where should they be located? (Near latrines, outside classrooms)
3. Is one enough? (Probably not —you can make 10 or more and hang them in a group from poles or stand them on a long platform)
4. What about soap availability at schools? What ideas do you have to make sure enough soap is always available?
5. What kind of teaching/learning opportunities do hand washing and making tippy taps present? (calculating water quantity, teaching science of germ transmission and prevention)

**Note**

Answers on a flip chart



# Session 6: Three Critical WASH Practices— Making Drinking Water Safe from Source to Mouth

---

**(Time: 1 hour 50 min.)**

## **Session Objectives**

Identify the links in the Water Safety Chain and the best ways to keep water safe

Discuss the pros and cons of different ways of treating drinking water to make it safe

Learn how to make drinking water safe through solar disinfection and safe storage

## **Materials Needed/Preparation**

- Copies of Water Safety Chain found on page 40 for each participant  
OR
- Drawing of Water Safety Chain on flipchart without pictures
- Prepared flipchart: Treatment Methods—Pros and Cons
- Transparent 1-1.5 liter plastic bottles with their lids or caps
- Pitcher of water
- An instruction sheet for SODIS in local language if possible

## **6. a Water Safety Chain (20 min.)**

Refer back to the three key practices and the picture of the child defecating and the “F” routes of contamination.

**Say** We have learned about the problem of defecating in the open, how to block the “F” routes, and one of three key practices, hand washing; now we will learn about keeping water safe from source to mouth, and how we can ensure that schools have safe drinking water for students and teachers.

**Ask** Two people to say where they get their water (what source)  
Two people to say how they transport water from the source to their home  
Two people to say how they store drinking water at home  
Two people to say how they serve drinking water at home

**Explain** These are links in what we call the Water Safety Chain, and each part needs to be protected from feces contamination to make it safe. Explain that it is called the Water Safety Chain because if hygiene breaks down at any one link in the chain, the water is no longer safe for drinking.

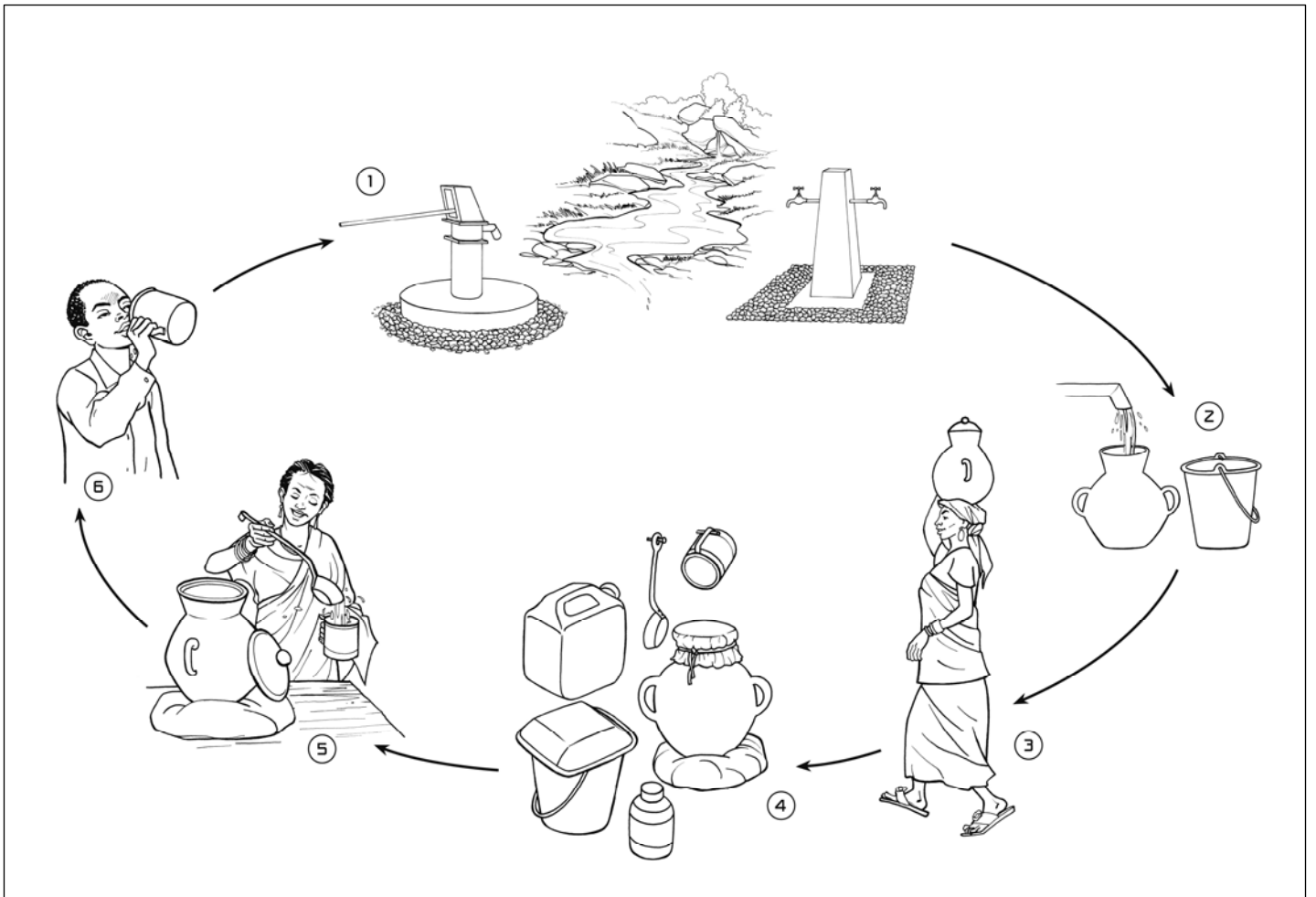
**Show** picture of Water Safety Chain drawn on flipchart or handed around (make copies from the drawing on page 40 of this guide if possible). Or if you can draw, put a large circle on the flipchart and sketch the participants' answers to the different links in the water chain (supply, transport, storage, serving) as they speak.

**Point** to each link (picture) in the Water Safety Chain

**Ask** How can dirt and feces enter the water at this point and contaminate it?  
What can you think of to do at this point in the water chain that will prevent feces from making the water "bad" or unsafe to drink?

**Make sure** the following points are covered in the discussion:

1. **Source of water:** Some water sources such as rivers, unprotected springs, or wells are already contaminated or have the potential to be contaminated. If a river is the only source, water should be collected upstream from any washing or bathing of people or animals. A well or spring should be fenced to keep animals away. The collection bucket and rope should be kept off the ground.
2. **Water fetching containers:** Water can also be contaminated if water containers such as clay jars, jerry cans, etc. are not properly washed. Ask how often and what methods people use to clean their containers. Explain that proper washing includes washing with soap, scrubbing with a clean abrasive, rinsing well with clean water, and drying in the sun.
3. **Safe transport to the home:** Even if it is fetched from a safe and protected source, water can also be contaminated during transport. Be certain to cover all containers properly using clean covers or screw caps.
  - A covered jerry can is the best
  - A covered clay jar can also protect the water
  - Open buckets are easy to contaminate and should be replaced by covered containers
4. **Storing water at home:** Water can also be contaminated at home when it is left open where animals can drink it and children can dip their hands in it. The safe way is to store it in a *narrow necked container* that can be covered with a screw cap or a hard cover. A clean jerry can is also a safe storage container.



**Water Safety Chain**  
*Keeping water safe from source to mouth*

## 6. b Pros and Cons of Different Water Treatment Methods (30 min.)

**Tell** participants that the ultimate safeguard to make water safe for consumption is the use of treatment methods at the point of use, just before drinking

**Ask** the group what ways they know of to make drinking water safe. Make a list of their responses. Add to their responses if they miss a method. The list should include:

- Boiling
- Use of chlorine solution
- Solar disinfection (SODIS) method
- Filter (ceramic)

**Divide** them into four groups for a quick group exercise. Assign one method to each group and ask them to note down together what they know about the pros and cons of that method.

**Ask** each group to share what they noted

**Prepare** a flipchart before the session with basic pros and cons and show it to the group after they have shared their answers. Discuss each method, pros and cons.

Treatment Method	Pros	Cons
<b>Boiling</b>	<ul style="list-style-type: none"> <li>• Every home and probably every school has a place to boil water</li> <li>• It's very cheap (if wood is cheap)</li> <li>• It's quick—water is safe when the big bubbles appear on the surface</li> <li>• It's effective—boiling kills everything</li> </ul>	<ul style="list-style-type: none"> <li>• Uses wood that may be scarce</li> <li>• Water can get recontaminated after boiling when it is poured into another storage container</li> </ul>
<b>Chlorine solution</b>	<ul style="list-style-type: none"> <li>• Effective</li> <li>• Leaves germ-killing residue in water</li> <li>• A little goes a long way</li> </ul>	<ul style="list-style-type: none"> <li>• Product might be too costly</li> <li>• Product might not be easily available</li> </ul>
<b>SODIS</b>	<ul style="list-style-type: none"> <li>• Practically no cost</li> <li>• Very simple, kids can do it</li> <li>• Effective—kills germs</li> <li>• Minimal material requirements</li> </ul>	<ul style="list-style-type: none"> <li>• Requires plastic PET bottles that may not be available</li> <li>• Most practical when there is sunlight—cloudiness makes it take longer</li> <li>• Water must be clear and should be poured through a cloth if it isn't</li> </ul>
<b>Filtering</b>	<ul style="list-style-type: none"> <li>• Very effective</li> <li>• Serves as treatment, storage, and serving device</li> </ul>	<ul style="list-style-type: none"> <li>• Costly</li> <li>• Not very common in many places</li> <li>• Candles (the filters) need replacing and are not always available</li> </ul>

**Ask** What treatment method seems most appropriate for schools? Why? Do you know of any schools currently treating their water? What has their experience been?

**Explain** We will now learn how to do “solar disinfection” or SODIS because that is a simple and easy method that schoolchildren themselves can be responsible for. It is also a method that households can use easily, and students can teach their families how to do it.

**Note** SODIS is a good method for smaller schools because of the number of bottles required per person. Bigger schools will need large ceramic filters or chlorine treatment in large containers to meet the needs of their population.

## 6. c Demonstration—SODIS Method of Purifying Water (30 min.)

### Materials

- Transparent 1 to 1.5 liter plastic PET water or soda bottles with their tops
- Pitcher of water

**Explain** SODIS is a method of disinfecting water **using sunlight**. With this method, ultraviolet light from the sun destroys harmful germs in the water

**Review** the “SODIS” instruction sheet, pointing to each step and reading the text aloud

**Demonstrate** how to fill the plastic bottle with water from the pitcher

**Demonstrate** how the bottle should be placed on a surface such as a roof or a platform

**Explain** This water is safe to consume after the bottle is exposed to sunlight (where no shadow falls)

- for six hours if it is sunny or
- for 48 hours (two days) if it is cloudy

SODIS water is safe for only 24 hours. After that, water should be used for cleaning, hand washing, or watering plants.

## 6. d SODIS in School Calculation Exercise (30 min.)

**Note: This can also be a classroom WASH lesson taught by teachers.**

The point of this calculation exercise is to come up with the number of bottles a classroom (or whole school) would need to treat via SODIS every day to meet the needs of the students and teachers.



**Ask** If SODIS is introduced in schools, how many bottles of treated drinking water would a classroom need every day?

**Lead** the group through these steps:

One student requires about 2 liters of drinking water a day at school. How many liters do your plastic bottles contain? (Usually 1.5 liters)

**Step One:** Participants first calculate how many bottles one student needs depending on the volume of local bottles

**Step Two:** Participants figure out (or are told by teachers in the group) how many students are in a classroom

**Step Three:** Participants calculate how many bottles a classroom would need to treat every day

**Calculate:**

Bottles for 1 student per day x number of students in a classroom = \_\_\_\_\_

(The answer could be 80 or more!)

**Ask** the group to think about how to carry out SODIS in schools by answering the following questions:

1. Where can the school obtain that large number of plastic bottles?
2. What would be required to be able to expose all these bottles to the sun? (stands for multiple bottles)
3. What would a class do with the SODIS bottles once the treatment is finished? (equip classrooms with jerry cans with screw caps, pour safe water into jerry cans, each student should have his/her own cup to drink from)

**Wrap up** by asking participants to think about how to introduce SODIS in schools and how students and parents could be involved. (collecting bottles, cleaning and filling them, building a SODIS stand with a platform where many bottles can be placed at once to avoid using roofs, etc.)

**Write** Answers on flipchart

(Or you could ask participants to write up ideas for introducing SODIS in schools on cards, collect them, read them, and stick up on the wall.)

## SODIS Instruction Sheet

The only **materials** needed for SODIS are:

### 1. Clean transparent plastic bottles with their lids.

- The bottles should hold no more than 2.5 liters each.
- Use only **transparent plastic** mineral water or soda **bottles**. You should not use green, brown, blue, or other colored bottles or glass bottles (because the color and glass do not allow the sun's rays to disinfect the water).
- **Lay** bottles of water down on their sides (rather than leave them standing).
- If your bottles **are very opaque or scratched**, discard them and use others.
- **Remove the labels** on the bottles because the labels block the sun's rays from disinfecting the water.

### 2. Clear Water

- You can only use the SODIS method with clear water.
- **You cannot treat turbid (murky or dirty) water with the SODIS method.** If the water is turbid, the chlorination method or the boiling method should be used.

After opening a bottle of water treated with SODIS, it should only be kept **for 24 hours**. After that, it should be discarded.

You should not drink water treated with SODIS directly from the bottle, putting your mouth on the bottle. To drink the water, **pour some in a clean glass or cup..**

You cannot use the SODIS method if it is raining all day long, because there is not enough sunlight to reach the water.

# Session 7: Three Critical WASH Practices— Using Hygienic Latrines: Models for Schools

---

(Time: 2 hours 30 min.)

## Session Objectives

- Define the critical elements of an improved latrine suitable for home/schools
- Visit and evaluate a latrine and plan how to improve it with local technical resources
- Review and discuss ways to encourage people to adopt new and improved hygiene behavior

## Materials Needed/Preparation

*Note: THIS SESSION REQUIRES ADVANCE PREPARATION.* The purpose of this exercise is for the participants to assess an existing latrine either at the school or in the community. You will need to organize the outing beforehand:

- If there are no latrines at the school or training site, ask people where there are households nearby with latrines in different states of repair.
- Contact households, explain the purpose of the training and the activity, and ask permission for participants to look at the latrine and do an assessment.
- Tell the households that the participants will share their findings with them.
- Write directions to each home or facility for the groups to use; include names of families to be visited.
- Make copies of the Latrine Checklist at the end of this session for each person or small group (or copy it onto a flipchart for the groups to see and copy).

**Remind** the participants what they learned during the Walk of Shame—that because there are open defecation sites, we are eating each other’s shit! Refer again to the picture of the child defecating, the “F” routes of contamination, and the three KEY PRACTICES.

**Say** We have learned about correct hand washing, we have learned about how to keep water safe from the source to the mouth, but if we look at the feces contamination cycle, what is actually the most important action we can all take to block this contamination?

**STOP OPEN DEFECACTION! USE LATRINES!!!**

**Explain** In this session we will talk about and think about the best ways to construct and improve latrines, especially in schools. While actual construction isn’t very complicated, it does require technical know-how and assistance that is beyond the reach of this workshop. Once back home, participants and schools

should seek out technical help from government agencies or specialized NGOs to make sure that their latrines are adequate for the needs of the school population and built safely according to accepted construction and environmental standards.

**Ask** What kinds of latrines are the participants familiar with? Make a list on a flipchart. Here are some possibilities:

- Pit latrines
- Holes in the ground
- Ecological “EcoSan” latrines
- Modern flush toilets/porcelain toilets

**Ask** What are some problems with latrines that you often run into? (Smelly, dirty, far from home or work, not private)

What do you think are the elements of “good” and “safe” and “effective” (i.e., “improved”) latrines? Make a list, too, and push them to think about different aspects:

- Hole that’s deep enough and reinforced
- Platform that is washable and stable
- Superstructure for privacy and protection from rain
- Door or curtain that provides good privacy and safety (especially for women and girls)
- Wiping materials available
- Ventilation
- Safe for children

### **Group Activity outside the Training Room**

**Explain** We will go out into the neighborhood/neighboring area and do some investigating about the state of latrines. *Hand out the Latrine Assessment Checklist at the end of this session and ask someone to read it out loud.* Any questions?

**Explain** We will make a brief report to the household you visit, explain what problems you’ve seen and why these are problems, and provide suggestions to the family to improve its latrine.

**Instruct** participants to form groups of \_\_\_\_ (depends on number of sites and participants), give each group the instructions of where to go, ask them to spend five minutes discussing and agreeing on what they will try to observe and assess, and who will do what (talk to the family, write notes).

**Send** participants out into the neighborhoods. Give the groups an hour for their excursion.

When the groups return, each one will give a brief presentation of what they saw in terms of problems and what they recommended to the family.

**Ask** Now that we have looked at and thought about the best kinds of latrines, what do you think schools need in terms of sanitation to cover the needs of students and teachers?

- Latrines with enough holes (one per 20 students)
- Separate latrines for boys and girls (female and male teachers, too)
- Latrines with slabs that can be cleaned
- Latrines with doors that can lock from the inside
- Hand washing stations near latrines
- A supply of wiping materials, water, and soap

**Ask** Who is responsible for building or improving latrines in schools? (Parents with help from local health or water/sanitation officials, schools with special funds, local NGOs, other \_\_\_)

What is the students' responsibility where latrines are concerned? (Organizing boy and girl teams for cleaning, making sure wiping material, soap, and water are present)

**Review** the *WASH-Friendly Schools Basic Guide* Annex D, Technical Section, for illustrations of school latrines that meet the criteria.

**Give** participants time to review the pictures.

**Ask** Does this type of latrine seem possible to build at your school(s)?  
What would make it hard to build these latrines?  
What might make it easier?  
Where could you get help?  
Where could you get the various materials?

## Latrine Assessment Checklist

Observe each aspect of the latrine and circle what you find. Make notes to remember details.

**Hole:** shallow... deep...reinforced...small...large...covered... water... worms/flies/bugs

**Platform:** wood.....concrete.....washable.....stable.....unstable

**Superstructure:** metal roof.....other roof.....walls.....strong.....weak

### **Roof:**

Sufficient height to stand comfortably inside?

yes.... no.....

### **Door or curtain:**

yes.....no.....

Good privacy with door and walls:  
(esp. for women and girls)

yes.....no.....

Locks from inside:

yes.....no.....

Locks from outside:

yes.....no.....

### **Wiping materials:**

available.....not available

Place to dispose wiping materials:

yes.....no.....

Disposal place is used:

yes.....no.....

Ventilation:

yes.....no.....

### **Smelly:**

yes.....no

Feces visible:

yes.....no

Safe distance (10 m) from water source:

yes.....no

Place to wash hands nearby:

yes.....no

Soap available:

yes.....no

### **Other observations:**

# Session 8: How to Make Our School WASH-Friendly

---

(Time: 2 hours)

## Session Objectives

- Define a WASH-Friendly School
- List the important elements of a WASH-Friendly School
- Become familiar with the process for a school to become WASH-friendly
- Become familiar with the *WASH-Friendly Schools Basic Guide*
- Define the roles of parents, teachers, and students in making a school WASH-friendly
- Plan how to start making your school WASH-friendly

## Preparations/Materials Needed

- Session objectives written on flipchart
- Copies of drawings of clean or WASH-friendly schools to pass around
- 10 copies of the *WASH-Friendly Schools Basic Guide* (or enough for each school group to have a copy)
- Prepared flipchart table: WHO and RESPONSIBILITIES/ACTIONS
- Planning Sheet, enough copies for everyone and some extras

## 8. a Introduction to Elements of a WASH-Friendly School (40 min.)

**Introduce** this session by saying that we are going to wrap up everything we have been learning and doing about improved WASH practices and see how to apply this knowledge to schools to make them WASH-friendly.

**Present** session objectives written on flipchart

**Ask** the group to explain the meaning of **WASH** (water, sanitation, hygiene)

Why is WASH important? (removes humans from contact with dangerous feces when people practice open defecation)

What are the three key WASH-friendly practices? (treating and storing drinking water safely, washing hands with soap at critical times, using improved latrines)?

**Ask** the group what they think a WASH-Friendly School should be or look like?

- Make a list** The list should have these elements (help the group if it needs it):
- Latrines for everyone with washable slabs, walls, doors, ventilation
  - Separate latrines for girls and boys
  - Hand washing stations by the latrines and by classrooms, with soap
  - A place to treat drinking water (i.e., SODIS stand)
  - Containers for safe drinking water in each classroom

This list should be easy for the participants. Once they have listed the physical elements, ask if it is enough to have products or infrastructure. Will the students know how to use these things correctly? Will the teachers themselves know?

- Ask** What else needs to happen in a WASH-Friendly School besides building or improving the structures?
- Teaching and learning
- How can this happen?
- Classroom lessons on WASH
  - Student-centered activities (WASH club, after school programs)
  - Parent involvement and school to community events or activities

**Explain** It is critical for a WASH-Friendly School to have teaching and learning about WASH going on. The teachers will have an additional training session after this one on how to incorporate lessons on water, sanitation, and hygiene themes into the classroom. Students can also teach and support WASH-friendly principles through activities, clubs, and being WASH promoters in their own families.

**Introduce** the WASH-Friendly Schools program by showing and distributing the *WASH-Friendly Schools Basic Guide*. Allow everyone a few minutes to look at it, especially if it has to be passed around.

**Explain** The guide contains all the information and steps required for creating a WASH-Friendly School. Schools must achieve certain standards in terms of WASH infrastructure and instruction spelled out in the *WASH-Friendly Schools Basic Guide*. An outside team will visit the school and assess it according to the Evaluation Grid, and if a school has met all the requirements, it will receive official WASH-friendly status with a plaque or flag and a ceremony.

**Answer** any questions from the group about WASH-friendly schools.



## 8. b Planning for Making Our School WASH-Friendly (1 hour)

**Explain** Now is the time to apply everything we have learned and make action plans for what we will do in and for our schools. First, we will break into three groups—one each for teachers, parents, and students. Each group will discuss and decide what the main role and activities are for the group. Then each group will report to the others for agreement, feedback, more suggestions, etc.

**Remind** the participants that one important job they have when they get back to their “home” school is to repeat certain ignition exercises with the school community: Walk of Shame, Mapping, and Feces Calculation. Each school should also have a more formal survey along the lines of the surveys used in this training. The survey forms can be found in the *WASH-Friendly Schools Basic Guide* in Annex E.

**Divide** the participants into the three groups (parents, teachers, or students) and give them 25 minutes to discuss. Ask each group to put the main points on a flipchart:

**WHAT ARE OUR MAIN RESPONSIBILITIES/ACTIONS?**

**WHAT SHOULD WE DO?**

Here are some examples:

Who	Responsibilities/Actions
<b>Teachers</b>	<ul style="list-style-type: none"> <li>• Sign WASH-Friendly School Pledge</li> <li>• Teach WASH lessons</li> <li>• Insert WASH into other subjects (math, science, language)</li> <li>• Organize students</li> <li>• Be club mentors</li> <li>• Act as role models and practice good hygiene</li> </ul>
<b>Parents</b>	<ul style="list-style-type: none"> <li>• Sign WASH-Friendly School Pledge</li> <li>• Organize building projects (latrines)</li> <li>• Participate in PTA</li> <li>• Make homes WASH-friendly</li> <li>• Work with children and reinforce lessons</li> <li>• Be role models and practice good hygiene</li> </ul>
<b>Students</b>	<ul style="list-style-type: none"> <li>• Sign WASH-Friendly School Pledge</li> <li>• Be active in WASH clubs</li> <li>• Help make and maintain things to enable good hygiene (SODIS and hand washing stations)</li> <li>• Work with younger students to teach good hygiene practices</li> <li>• Organize special events for the community on WASH themes (demonstrations, theater, WASH fairs)</li> </ul>

	<ul style="list-style-type: none"> <li>• Be ambassadors for good WASH practices in their homes</li> </ul>
<b>Local Government</b>	<ul style="list-style-type: none"> <li>• Sign WASH-Friendly School Pledge</li> <li>• Provide small budget</li> <li>• Evaluate school for meeting WASH-friendly criteria</li> </ul>

After 25 minutes, each group makes a report. Ask for questions, other ideas, suggestions.

**Explain** It will take time and work to make your school WASH-friendly, but it will be very worthwhile and you will see many rewards. Everyone must do his or her part. You can start the planning now, but once you get back to your home and school, you will need to meet with other teachers, students, and parents, share this action plan with them, have them agree, change, add, etc. depending on what the school's priority problems are. You will also need to meet the WASH-friendly evaluation team (if this has been established) or local government representatives for WASH in schools.

**Divide** the participants into small groups by school (teachers + parents + students from each school).

Ask each school group to fill out the Back Home Action Planning sheet to decide how to start making their school WASH-friendly.

**Assemble participants** for final wrap up.

**Ask** each group to briefly report how the planning exercise went and what they have decided to do. Did they have any difficulties? Are there any questions?

## Back Home Action Planning

What to Do (some examples of important actions)	Who's in Charge
Find out what government office is responsible for WASH in schools locally	
Carry out School WASH Survey	
Find out about local NGOs who can help build or finance latrines	
Find out what WASH classroom materials are available for teachers	
Lead the school community through "ignition" exercises to discover the extent of open defecation	
Review plans developed in the workshop, and devise your own WASH-Friendly School plan	
Make and sign your pledge to become WASH-friendly	

# Session 9: Wrap Up, Pledges, and Next Steps

---

**(Time: 20 min.)**

**Walk participants** through the workshop sessions to remind them of everything they've learned

**Explain** that it's time for everyone to take the formal

## **WASH PLEDGE**

(This can be hands dipped in paint and placed on a flipchart with names written underneath, or it can be everyone reciting an oath together, or whatever is traditionally done.)

**Ask** each person to think about what the next steps are that they personally will take when they get back home related to making the school WASH-friendly

**Share** with your neighbor what you plan to do. Then take a sampling of volunteers to share their commitments in plenary.

**End** with high energy on a positive note.

## **Formal End of Workshop, Part 1**

# Session 10: Supplementary Half-Day Training Session for Teachers Only

---

After the two-day workshop for teacher/student/parent teams from different schools, teachers should have an additional half-day training to prepare them for their role in making schools WASH-friendly. If the teams came from afar, the teachers may have to return with their team. In that case you will need a copy of the *WASH-Friendly Schools Basic Guide for Directors, Teachers, Students, Parents and Administrators* for each teacher. If you can obtain any lesson plans developed by NGOs, etc. try to have them on hand as well.

## Session Objectives

*(Write these up on a flipchart beforehand)*

Teachers will:

1. Agree on at least two ways to integrate WASH themes into classroom teaching and different subject areas
2. Define the elements of a WASH School Club and the teacher's role
3. Discuss and decide how they can train the other teachers when they return to their school

## 10. a Integrating WASH Themes into Classroom Teaching

<b>Welcome</b>	the teacher group to this session to prepare them for their special role in WASH in Schools
<b>Present</b>	session objectives on a flipchart to the group
<b>Introduce</b>	the session by asking, does [your country] have an official WASH curriculum? Probably not, but who has tried to teach anything WASH related? Get a few answers from several teachers.
<b>Explain</b>	There are many opportunities to insert WASH into the curriculum. It is critically important to find these opportunities, especially if your school is going to become WASH-friendly. WASH knowledge and skills are important life skills that can have an immediate impact on the well-being of the children (and their families) and also positively affect the next generations when your students grow up and become "WASH-friendly parents."
<b>Ask</b>	if anyone can think of an example of using WASH themes in the classroom during lessons.

(Possible answers: Feces calculation in math; water usage calculation for hand washing in math; reading and analyzing stories on health and hygiene themes; history assignments about water rights or other WASH subjects; germs, feces contamination and water cycle, solar disinfection, and more for science.)

## Group Exercise

- Divide** participants into pairs or groups of three. Assign one or two subject areas to each group according to what the common curriculum is and what their teaching strengths are. Main subjects to include:  
math, science, reading, writing, languages, history, geography, arts.
- Explain** For each subject, come up with two or more WASH lesson topics. Write down your ideas on paper. *Give groups about 10 minutes.*
- Ask** each group to report its lesson ideas to the others.
- Distribute** a copy of the *WASH-Friendly Schools Basic Guide for School Directors, Teachers, Parents and Administrators* and to each teacher (or by pairs if there aren't enough copies). Also distribute any lesson plans you might have found.
- Instruct** everyone to open the guide to Annex H (Classroom Lessons) and ask someone to read the list of topics that are covered in the annex. Then compare these to the ideas the group has come up with. There will be some overlap and some new or different ideas.
- Ask** the groups to give you the papers with the ideas written on them and tell them that you will type it all up and send it out to everyone as a reference.

## 10. b WASH School Clubs

- Explain** that WASH outside the classroom is as important as classroom WASH lessons. One excellent way to do WASH activities after school is through student-run WASH Clubs.
- Ask** What do you think a WASH school club does? Does anyone have such a club in their school? Any other clubs? How would they define it? What should the main elements be?
- Write** responses on a flipchart. They can include:
- Student-run
  - Extracurricular
  - Learning plus doing

- Way to create a school to community connection
- Make WASH fun
- Allows students to practice the good hygiene that they learn about in class
- Practical, hands-on activities
- Way of maintaining school WASH facilities
- Older students can mentor younger ones
- Can include big end-of-year event for the community

**Ask** What should the role of teachers be in these clubs?

- Advisors
- Facilitators
- Help with more difficult tasks

What would prevent such a club from being created?

- Students live far away
- Teachers have too much work
- It's always the same ones who come
- Materials are too expensive
- Teachers don't know how to build latrines and hand washing stations either

What can we do to deal with these barriers?

- .....
- .....ideas...

**Ask** teachers to refer to the *WASH-Friendly Schools Basic Guide* and turn to the section on WASH School Clubs (Annex I) and read.

## 10. c Action Planning

**Divide** participants into small groups or pairs and ask them to first think about, then share with each other, ideas for something they can do as soon as they get back, to begin setting up WASH Clubs.

**Ask** volunteers to share their ideas about what they can do.

## 10. d Wrap Up

**Thank** everyone for a wonderful workshop and wish them all the best in making their school **WASH-FRIENDLY**.