



## Teacher's Guide

## Welcome to the Scrub Club® for Kids!

Each year, more than 164 million school days are lost due to illness\*, which could be greatly reduced with proper handwashing. That's why NSF International created the Scrub Club® – to raise awareness about the benefits of handwashing and ultimately improve the health of children and reduce school sick days. The Partnership for Food Safety Education (PFSE) has partnered with NSF on this groundbreaking initiative.

### Scrub Club® to the Rescue

The Scrub Club® program is the first of its kind – a fun, interactive and educational Web site ([www.scrubclub.org](http://www.scrubclub.org)) that teaches children the proper way to wash their hands. The site consists of a Webisode, interactive games, educational music, downloadable activities for kids, educational materials for teachers and program information for parents.

### Cast of Characters

The Scrub Club® is a group of seven kids and **Ship-Shape** – the mysterious but lovable leader who watches over the hands of the world's children from his Bubble telescope – that join forces to fight off harmful germs and bacteria, teaching children the proper handwashing process along the way.



Each of the Scrub Club® kids represents one of the six steps of the handwashing process.

### **Scrub Club® Webisode**

The cornerstone of the Web site is a Webisode entitled, "The Good, the BAC® and the Ugly," which features The Partnership for Food Safety Education's loathsome but lovable character BAC (from its Fight BAC!® public education campaign) along with his rotten-tootin' sidekick Sal Monella in a wild west-themed adventure.

Note: The Scrub Club® is designed for children who are 3 to 8 years of age. Children in this age range are at different cognitive and developmental levels. To emphasize the importance of personal hygiene, NSF recommends that parents and educators aid in the educational process by viewing the Scrub Club® Web site with young children. Older school-age children will be able to navigate through the Web site with more autonomy so they can truly benefit from the fun and informative learning experience through individual Web site interaction. Overall, all children, parents, and educators will benefit from revisiting the Web site as new educational programs are introduced.

### **Handwashing: A Critical Issue**

#### **Statistics: School days missed**

Every year, more than 164 million school days are lost due to illness. It is believed that a great number of these days could be reduced if children merely washed their hands properly and regularly.

\*Source: "Vital Health and Statistics, Current Estimates from the National Health Interview Survey, 1995" (U.S. Centers for Disease Control and Prevention and the National Center for Health Statistics, 1998).

### **Opportunity to improve health of children**

A study of 305 Detroit school children found that youngsters who washed their hands four times a day had 24% fewer sick days due to respiratory illness and 51% fewer days due to upset stomach.

Source: Reuters New Media, [www.foodsafety.gov/~dms/fsehandw.html](http://www.foodsafety.gov/~dms/fsehandw.html)

### **Save money for schools**

School absences resulting from sick students and teachers are more than just disruptive, they can be expensive, too. Schools need to pay substitutes when teachers are sick and teachers need to spend extra time and resources helping sick students catch up. Parents are also affected because of lost work days and additional healthcare expenses due to having a child sick at home. With school district budgets as tight as they are these days, it makes financial sense to significantly limit school days missed due to avoidable illnesses.

## Facts: Infectious diseases

Here are some infectious diseases whose occurrences could be greatly reduced with proper and regular handwashing:

### Salmonella

*Salmonella* is a group of bacteria that can cause diarrheal illness in people and are usually transmitted to humans by eating contaminated foods such as raw and undercooked eggs, undercooked poultry and meat, dairy products, seafood, fruits and vegetables.

### E. Coli

Most types of *E. Coli* bacteria won't cause us harm, but there is one strain which causes approximately 73,000 cases of foodborne illness each year in the United States. *E. Coli* are common in all animals, so anytime we eat something, drink something, or touch our hands to something that has been either a part of or near where animals are, there is always the potential to ingest these bacteria.

### Shigella

The *Shigella* germ is actually a family of bacteria that can cause diarrhea in humans. Poor hygiene causes *Shigella* to be easily passed from person to person and accounts for an estimated 300,000 cases of illnesses each year.

### Campylobacter

*Campylobacter* is the most common bacterial cause of diarrhea in the U. S. It can be transmitted to people by eating raw and undercooked meat and poultry and by drinking raw milk and untreated water. It is best prevented by proper food handling and cooking, maintaining sanitary water supplies and practicing good hygiene.

### Influenza

*Influenza* (commonly called "the flu") is a contagious respiratory illness caused by *Influenza* viruses. An estimated 10% to 20% of U.S. residents get the flu each year. *Influenza* viruses are spread from person to person in respiratory droplets of coughs and sneezes. Cover your mouth and nose with a tissue when coughing or sneezing, and wash your hands often to help protect yourself and others from getting sick.

### How germs spread

Because their warm and moist environment is a conducive place for germs to live, hands are the most common way germs are spread. And since hands are always touching various objects, from noses to doorknobs, they pick up germs as well as spread them.

Germs can be spread both directly (e.g. you help a child blow his nose and immediately afterwards, you comfort a crying child, spreading germs from one to the other) and indirectly (e.g. one child places a marker in his mouth and sets it down, only for another child to pick up the same marker, and thus, the same germs).

## Facts about handwashing

The six steps of handwashing are:

- STEP 1. Wet hands with warm, running water.
- STEP 2. Apply soap.
- STEP 3. Rub hands together vigorously for 20 seconds.
- STEP 4. Don't forget to wash under the fingernails.
- STEP 5. Rinse away all soap.
- STEP 6. Dry hands thoroughly with a paper towel or hand dryer.

Instances when handwashing is a must:

- After going to the bathroom
- After playing with pets
- Before eating
- After cleaning up spills
- After diapering a child
- Before and after preparing or serving food
- After playing outdoors
- After coughing or sneezing into hands or a tissue

## Meet the Scrub Club®

### Scrub Club® characters

The Scrub Club® is a group of seven "soaperhero" kids that – when summoned from distant space by their fearless and spotless leader, Ship Shape – join forces to fight off harmful germs and bacteria, teaching children the proper handwashing process along the way.

Each of the Scrub Club® kids represents one of the six steps of the handwashing process:



**Step 1: Hot Shot and Chill** – A brother and sister duo, Hot Shot and Chill turn into hot and cold faucets and then combine to make the warm water essential for proper handwashing.



**Step 2: Squeaks** – The absent-minded professor of the group, Squeaks turns into various forms of soap, from bars of all sizes to pumps of all kinds.



**Step 3: Taki** – Outgoing and friendly, Taki turns into a clock that counts down the required 20 seconds for thorough handwashing.



**Step 4: Scruff** – Scruff is an intense guy with a heart of gold who reminds kids that hands aren't clean until the nails are clean.



**Step 5: Tank** – The strong silent type, Tank turns into a sink and serves as a reminder to rinse away germs.



**Step 6: P.T.** – An artsy girl with a dry sense of humor and cool sense of style, P.T. transforms herself into patterned paper towels.

## Villains



**BAC** – The lovable kingpin of all bacteria, BAC is everywhere and has millions of germs, infections and diseases at his disposal. Some of his more notable sidekicks are:



**Sal Monella** – A contagious cowboy who rustles up trouble with his slimy stampedes.



**E. Coli** – The notorious king of all bacteria, “Big E” will make your tummy shake, rattle and roll.



**Shigella** – A diseased diva who tours hand to hand playing contagious concerts.



**Campy Lobactor** – A washed up “BAC act” that is better left washed away. His routine is no laughing matter.



**Influenza Enzo** – Simply put, he gives kids a fever they can't refuse.

## Scrub Club® Web site

The Scrub Club® Web site is an entertaining multimedia educational experience which includes:

- Webisodes featuring our “soaperheroes” fighting BAC
- Games that educate kids about proper handwashing
- Downloadable music, poster, screensaver and activities
- Educational curriculum for teachers

## The Scrub Club® Curriculum

### Intro for Curriculum:

What follows is a simple two-day classroom activity that will help you underscore the importance of washing your hands the right way (and that will help transform your students into “soaperheroes” themselves!). By incorporating the Scrub Club® characters, Webisode cartoon and handwashing song, we believe that you'll find this critical health and safety issue has been made more engaging and effective than ever before.

### Day One

Begin by asking your class to name some of the ways that we can generally keep ourselves from getting sick, (e.g. go to the doctor, eat the right foods, exercise, get shots, etc.) List their ideas on chart paper.

Next, inform the class that one of the best ways to keep yourself from getting sick is to wash your hands. Ask them what they know about hand washing, and again, list their ideas on chart paper.

Introduce the six steps of proper handwashing:

- STEP 1. Wet hands with warm, running water.
- STEP 2. Apply soap. (Either bar of soap or pump soap will do.)
- STEP 3. Rub your hands vigorously, between fingers too, for 20 seconds.
- STEP 4. Don't forget your fingernails. If you don't have a nail brush, be sure to pay extra close attention to your fingernails.
- STEP 5. Rinse away all the soap.
- STEP 6. Dry hands with paper towel or warm air dryer.

Finally, explain how germs can be spread with the following demonstration:

**I want to tell you a story to help you see how germs can spread if we don't wash our hands the right way.**

**[Hold up a ball.]**

**I'm holding this ball.**

**Now let's pretend that I have a cold.**

**[Pretend to sneeze.]**

**Oh no! I forgot to cover my mouth when I sneezed.**

**[Put several stickers on the ball and say that they represent germs.]**

**Now look at all the germs that have stuck to the ball!**

**Now say it's time for recess and ask "Tommy" to play catch.**

**[Toss the ball to a student.]**

**Oh no! Now "Tommy" has touched the ball. That means some of the germs have gone from my hand, to the ball, and are now on him!**

**[Take some stickers off the ball and put them on the student's hand.]**

**Later "Tommy" wants to play tag. He tags "Sarah" on the hand. Oh no, "Sarah!" When "Tommy" tagged you some of the germs from his hand went on to you!**

**[Take some stickers and place them on the student.]**

**Now "Sarah" goes to lunch. She forgets to wash her hands. She picks up her sandwich, her hand touches the sandwich – and what happens to the germs? That's right. Now they're on the sandwich that she's eating. YUCK! And when those germs get inside of you, they can make you really sick!**

**And that's why we must always remember the right way to wash our hands.**

**[Review the six steps.]**

## Day Two

After a brief review of what you talked about in Day One, tell the class that today you're going to watch a cartoon on the computer that's all about why we wash our hands and how to wash them the right way.

Go to [www.scrubclub.org](http://www.scrubclub.org) and click on the Webisode entitled, "The Good, the BAC and the Ugly." Watch the Webisode (this should take approximately 10 minutes if you skip the games imbedded in the cartoon).

When the Webisode is over, ask your students:

1. Why is it important to wash our hands?
2. What important things do we need to remember when we wash our hands?

Review the six steps given in Day One, in order. NOTE: to assist you, it may be helpful to play the Scrub Club® handwashing song. Simply download it from at [www.scrubclub.org](http://www.scrubclub.org), or call 1-800-NSF-MARK and request a copy.

Time for practice! Reinforce the importance of washing your hands the right way (and the story that played out in the Webisode) with this experiment:

1. Start by having your students rub a small amount of petroleum jelly (i.e. Vaseline) all over their hands (tell them that the petroleum jelly represents germs/bacteria).
2. Now have them try washing their hands by following every step of the handwashing process, except Step Two (without soap the petroleum jelly won't come off, even if the water is warm.)
3. Now, as the Scrub Club® reminds you to do at the end of the Webisode, go back through the handwashing process and remember to include soap. (It works!)

Also consider having a chart to send home with your students so they can record each time they wash their hands properly over the course of the week. At the end of the week they could bring it back and receive a Scrub Club® certificate.