



Hand Hygiene: Teacher's Resources

Proper hand hygiene is one of the most important steps in avoiding getting sick and spreading germs to others. Hand washing is especially important in schools to keep students and staff healthy. Respiratory infections, influenza, and stomach viruses/diarrheal disease are three of the top reasons why students miss school. The occurrence of all three of these illnesses can be reduced through proper hand washing with soap and clean, running water.

Furthermore, school-based hand washing programs are associated with fewer student absences. In addition, children who have been taught hand washing at school bring that knowledge home to parents and siblings and this can help family members get sick less often and miss less work and school.

The Chatham County Schools Hand Hygiene program's goal is to provide hand hygiene education to all students, grades K-8 as part of Positive Behavioral Intervention and Supports (PBIS) at the beginning of the 2015-2016 school year. This packet contains three, short 15-minute lessons (K-2, 3-5, and 6-8). These lessons are designed to establish hand washing as an expected behavior in the classroom, explain to students the importance of hand washing for health, and to have students practice proper hand washing technique.

We realize that each school and classroom has their own structure for PBIS, and can determine best how to incorporate hand washing into school wide and classroom expectations.

Accompanying these lessons, each school has received a set of posters for the hallways, and stickers to use as part of your school's incentive structure. These materials have been provided to the school principal and will be distributed to classrooms.

In this resource packet:

- K-2 Lesson Plan
- K-5 Lesson Plan
- 6-8 Lesson Plan
- Hand Hygiene Related North Carolina Essential Standards

Hand Hygiene

Kindergarten - 2nd Grade Lesson

Objective: Students will be able to:

- Understand that hand washing is an expected behavior in the classroom.
- Explain the importance of hand washing for health.
- Demonstrate proper hand washing technique.

Relevant North Carolina Essential Standards:

- K.PCH.1: Apply measures for cleanliness and disease prevention.
 - K.PCH.1.1: Use steps of correct hand washing at appropriate times throughout the day.
- 1.PCH.1: Apply measures for cleanliness and disease prevention.
 - 1.PCH.1.1: Recognize that germs produce illness and can be spread from one person to another.
 - 1.PCH.1.1: Use measures for preventing the spread of germs.
- 2.PCH.1: Apply measures for cleanliness and disease prevention.

Materials

- Spray bottle with water
- Ball
- Stickers
- Copies of student pledge
- (Optional) Copies of parent/guardian pledge
- (Optional) Poster board or sheet of paper
- (Optional) Markers

Supporting Information:

- Hand washing message needs to be reinforced several times throughout the day, especially before lunch and after restroom.
- Teach by example.
- Keeping copies of the student pledge, or the students' list of times to wash their hands displayed in the classroom can serve as a reminder for students to wash their hands.

Introduction

- Explain that you are going to talk about hand washing. (Tie hand washing to school or classroom expectations if applicable.)
- We wash our hands to remove germs:
 - Germs are everywhere.
 - Germs are so small that you cannot see them.
 - Germs can make you sick.
 - You can get rid of them by washing your hands.

* Story from Scrub Club Teacher's Guide (<http://www.scrubclub.org/home.aspx>)

Additional content adapted from GloGerm Educational Worksheets for K-2 (<http://www.glogerm.com/worksheets.html>)

Demonstration: How Germs Spread

- Tell students the following story: “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 I ask “Tommy” to play catch. [*Toss the ball to 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 “Jenny” on the hand. Oh no, “Jenny!” When “Tommy” touched you some of the germs from his hand went on to you! [*Take some sticker sand place them on the student.*] Now “Jenny” 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. *
- Explain this is why we must always remember to wash our hands the right way.

Practice Hand Washing

- Explain the four steps to proper hand washing:
 - Wet: First wet your hands with water and add soap.
 - Scrub: Scrub your hands. Make sure to scrub all the surfaces, the fronts of your hands, backs of your hands, and even under your finger nails. Scrub for about 20 seconds, or two rounds of the “Happy Birthday” song.
 - Rinse: Rinse hands with running water. This removes the soap and germs.
 - Dry: Dry your hands with a clean towel or paper towel.
- Have students practice going through the four steps (wet, scrub, rinse, dry). For “scrub” have student sing “Happy Birthday” twice through.

When to wash

- Tell students, now that we know how to wash our hands, we need to know when we should wash our hands. Have student brainstorm the times they should wash their hands. Make sure students cover the following:
 - Before preparing, touching or eating
 - After using the bathroom
 - After touching an animal
 - After touching garbage
 - After sneezing, coughing or blowing your nose
- *Optional: Student answers on the board or piece of poster paper, leave this up in the room as a reminder for students. This can also be posted with student pledges if you plan to post those in the classroom.*

Student Pledge/Take Home

- Distribute the student pledge. Have students sign the hand washing pledge. You may want to post one or all of the activity sheets in the classroom to serve as a reminder of the pledge.
- (Optional) Distribute the parent/guardian pledge to students and encourage them to talk to their parent or guardian about proper hand hygiene. Have them put the pledge on the fridge, bathroom mirror, or other prominent spot in the house to remind all household members to wash their hands.

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Hand Hygiene

3rd – 5th Grade Lesson

Objective: Students will be able to:

- Understand that hand washing is an expected behavior in the classroom.
- Explain the importance of hand washing for health.
- Demonstrate proper hand washing technique.

Relevant North Carolina Essential Standards:

- 3.PCH.1: Understand wellness, disease prevention, and recognition of symptoms.
 - 3.PCH.1.1: Classify behaviors in terms of whether they are related to physical, social, mental, and emotional health.
 - 3.PCH.1.2: Classify behaviors in terms of whether they do or do not contribute to healthy living.
- 4.PCH.1: Understand wellness, disease prevention and recognition of symptoms.
 - 4.PCH.1.1: Recognize that germs produce illness and can be spread from one person to another.
- 5.PCH.1: Understand wellness, disease prevention and recognition of symptoms.
- 5.PCH.4: Apply measures for cleanliness and disease prevention

Materials:

- Bowl of water
- Pepper
- Soap
- Copies of student pledge
- (Optional) Copies of parent/guardian pledge

Supporting Information:

- Hand washing message needs to be reinforced several times throughout the day, especially before lunch and after restroom.
- Teach by example.
- Keeping copies of the student pledge, or the students' list of times to wash their hands displayed in the classroom can serve as a reminder for students to wash their hands.

Introduction

- Explain that you are going to talk about hand washing. (Tie hand washing to school or classroom expectations if applicable.)
- Ask students if they know why we wash our hands. Use student answers to cover the following information:
 - We wash our hands to remove germs
 - Germs are so small that you cannot see them and they can be found almost everywhere.

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Additional content adapted from GloGerm Educational Worksheets for K-2 (<http://www.glogerm.com/worksheets.html>)

- Washing your hands can help to get rid of germs can make you sick.
- There are many types of germs (e.g. bacteria and viruses).
- Bacteria and viruses cause illness and disease. Some illnesses and diseases that are caused by bacteria and viruses are very serious.
- Some examples of illnesses and disease caused by bacteria and viruses are: colds, flu, pneumonia, hepatitis A, and shigellosis.
- Washing your hands is the best way to prevent these illnesses and diseases.

The Steps of Hand Washing

- Explain the four steps to proper hand washing. For each step, have students brainstorm why that step is important to remove germs.
 - Wet: First wet your hands with water and add soap.
 - Why: Using soap is more effective than using water alone because the soap lifts germs from the skin.
 - Soap Demonstration: Sprinkle black pepper in a bowl of water. The pepper will float on top. Explain that the pepper represent germs. In the center of the bowl add a few drops of dishwashing soap. Watch the pepper disperse when the soap is added. Explain, just like the soap pushed the pepper germs away, when you wash your hands soap helps remove the germs from your hands. Discuss the importance of using soap when washing hands.
 - Scrub: Scrub your hands. Make sure to scrub all the surfaces, the fronts of your hands, backs of your hands, and even under your finger nails.
 - Why: The friction, meaning the rubbing together of your hands, helps pull dirt and germs off of the skin. To remove dirt and germs you should scrub for about 20 seconds, or two rounds of the “Happy Birthday” song.
 - Rinse. Rinse hands with running water.
 - Why: This removes the soap, dirt and germs that you have scrubbed off.
 - Dry. Dry your hands with a clean towel or paper towel. Always throw your paper towel in the trash!
 - Why: The friction, remember the rubbing of the towel on your hand, removes germs that were not already rinsed away.

Hand Washing Practice

- Have students practice going through the four steps (wet, scrub, rinse, dry). For “scrub” have student sing “Happy Birthday” twice through.

When to Wash

- Tell students, now that we know how to wash our hands, we need to know when we should wash our hands. Have student brainstorm the times they should wash their hands. Make sure students cover the following:
 - Before preparing, touching or eating
 - After using the bathroom
 - After touching an animal
 - After touching garbage
 - After sneezing, coughing or blowing your nose

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Additional content adapted from GloGerm Educational Worksheets for K-2 (<http://www.glogerm.com/worksheets.html>)

- *Optional: Student answers on the board or piece of poster paper, leave this up in the room as a reminder for students. This can also be posted with student pledges if you plan to post those in the classroom.*

Student Pledge/Take Home

- Distribute the student pledge. Have students sign the hand washing pledge. You may want to post one or all of the activity sheets in the classroom to serve as a reminder of the pledge.
- (Optional) Distribute the parent/guardian pledge to students and encourage them to talk to their parent or guardian about proper hand hygiene. Have them put the pledge on the fridge, bathroom mirror, or other prominent spot in the house to remind all household members to wash their hands.

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Hand Hygiene

6th – 8th Grade Lesson

Objective: Students will be able to:

- Understand that hand washing is an expected behavior in the classroom.
- Explain the importance of hand washing for health.
- Demonstrate proper hand washing technique.

Relevant North Carolina Essential Standards:

- 6.PCH.1: Understand wellness, disease prevention and recognition of symptoms.
 - 6.PCH.1.2: Differentiate between communicable and chronic diseases.
 - 6.PCH.1.4: Select methods of prevention based on the modes of transmission of communicable diseases.
- Science 7.L.1: Understand the processes, structures and functions of living organisms that enable them to survive, reproduce and carry out the basic functions of life.
 - 7.L.1.1: Compare the structures and life functions of single-celled organisms that carry out all of the basic functions of life including: 1) Euglena, 2) Amoeba, 3) Paramecium, 4) Volvox
- 7.PCH.1: Understand wellness, disease prevention, and recognition of symptoms.
- Science 8.L.1: Understand the hazards caused by agents of disease that effect living organisms.
 - 8.L.1.1: Summarize the basic characteristics of viruses, bacteria, fungi, and parasites relating to the spread, treatment, and prevention of disease.
 - 8.L.1.2: Explain the difference between epidemic and pandemic as it relates to the spread, treatment and prevention of disease.
- 8.PCH.1: Understand wellness, disease prevention, and recognition of symptoms.

Materials:

- Set of index cards (assuming class of 20, 2 labeled “D,” 9 labeled “N,” and 9 labeled “C,” adjust according to class size)
- Copies of student pledge
- (Optional) Copies of parent/guardian pledge

Supporting Information:

- Hand washing message needs to be reinforced several times throughout the day, especially before lunch and after restroom.
- Teach by example.
- Keeping copies of the student pledge, or the students’ list of times to wash their hands displayed in the classroom can serve as a reminder for students to wash their hands.

Introduction

- Explain that you are going to talk about hand washing as a way to prevent disease. (Tie hand washing to school or classroom expectations if applicable.)
- Discuss:
 - That illnesses and diseases are caused by bacteria and viruses.
 - Bacteria and viruses can cause illnesses such as: upper respiratory tract infections (colds), influenza (flu), pneumonia, and several different strains of the stomach flu.
 - These bacteria and viruses can be passed from person to person. This is called a communicable disease.
 - Many diseases are preventable if we take the proper measures to prevent them.
 - Washing your hands is a prevention method that works against many illnesses and diseases.

Demonstration: How Disease is Spread

- Distribute index cards to students. Instruct students to not share the letter on their card. Explain you are going to do a quick activity. This activity has 3 rounds, give approximately 1 minute per round:
 - Round one: Students find another person and describe how they felt the last time **they were sick**. When both are done, each person writes their name on the other person's card.
 - Round 2: Students find a different person and describe the last time they **took care of someone who was sick**. When both are done, each person writes their name on the other person's card. Give students one minute to complete the task.
 - Round 3: Students find a different person and share **ways they prevent themselves from getting sick**. When both are done, each person writes their name on the other person's card and returns to their seat.
- Instruct the two (or more depending on class size) people with the "D" cards to stand. Explain to the students they have just participated in an activity that represents the way diseases are spread. The two students with the "D" cards had a communicable disease (e.g. flu, norovirus, pertussis).
- "D" card students then read aloud the names on their cards. Those individuals stand. Of those students, those who have a "C" (clean hands) card may sit back down and those with an "N" (non-washed hands) card remain standing. These students are now sick.
- Have then "N" card students who are now standing read the names on their cards. Those who have a "C" (clean hands) card may sit back down and those with an "N" (non-washed hands) card remain standing. These students are now sick too.
- Explain that 50% of students do not wash their hands after going to the bathroom. This exercise demonstrated how disease can easily spread through the school community. Proper hand washing can help prevent the spread of diseases.

How to Wash

- Review the four steps to proper hand washing:
 - Wet: First wet your hands with water and add soap.
 - Scrub: Scrub your hands. Make sure to scrub all the surfaces, the fronts of your hands, backs of your hands, and even under your finger nails. Scrub for about 20 seconds, or two rounds of the "Happy Birthday" song.

- Rinse. Rinse hands with running water. This removes the soap and germs.
- Dry. Dry your hands with a clean towel or paper towel. Always throw your paper towel in the trash!
- Have students practice going through the four steps (wet, scrub, rinse, dry). For “scrub” have student sing “Happy Birthday” twice through.

When to wash

- Tell students, now that we know how to wash our hands, we need to know when we should wash our hands. Have student brainstorm the times they should wash their hands. Make sure students cover the following:
 - Before preparing, touching or eating
 - After using the bathroom
 - After touching an animal
 - After touching garbage
 - After sneezing, coughing or blowing your nose
- *Optional: Student answers on the board or piece of poster paper, leave this up in the room as a reminder for students. This can also be posted with student pledges if you plan to post those in the classroom.*

Student Pledge/Take Home

- Distribute the student pledge. Have students sign the hand washing pledge. You may want to post one or all of the activity sheets in the classroom to serve as a reminder of the pledge.
- (Optional) Distribute the parent/guardian pledge to students and encourage them to talk to their parent or guardian about proper hand hygiene. Have them put the pledge on the fridge, bathroom mirror, or other prominent spot in the house to remind all household members to wash their hands.

Hand Hygiene

Related North Carolina Health Education Essential Standards

Education students on hand hygiene and how germs are spread, along with teaching proper hand washing skills is a vital part of preventing the spread of communicable diseases, like the flu, in schools. The following North Carolina Health Education Essential Standards relate to germ theory and hand hygiene.

Kindergarten *Hand Hygiene* Related Essential Standards

	Essential Standard	Clarifying Objectives	
Healthful Living K.PCH.1	Apply measures for cleanliness and disease prevention.	K.PCH.1.1	Use steps of correct hand washing at appropriate times throughout the day

1st Grade *Hand Hygiene* Related Essential Standards

	Essential Standard	Clarifying Objectives	
Healthful Living 1.PCH.1	Apply measures for cleanliness and disease prevention.	1.PCH.1.1	Recognize that germs produce illness and can be spread from one person to another.
		1.PCH.1.2	Use measures for preventing the spread of germs.
Healthful Living 1.PCH.2	Understand wellness, disease prevention, and recognition of symptoms.	2.PCH.2.1	Illustrate symptoms of sickness and measures for getting well.

2nd Grade *Hand Hygiene* Related Essential Standards

	Essential Standard	Clarifying Objectives	
Healthful Living 2.PCH.1	Apply measures for cleanliness and disease prevention.	--	--

3rd Grade *Hand Hygiene* Related Essential Standards

	Essential Standard	Clarifying Objectives	
Healthful Living 3.PHC.1	Understand wellness, disease prevention, and recognition of symptoms.	3.PHC.1.1	Classify behaviors in terms of whether they are related to physical, social, mental, and emotional health.
		3.PHC.1.2	Classify behaviors in terms of whether they do or do not contribute to healthy living.
Healthful Living 3.PCH.2	Apply measures for cleanliness and disease prevention	--	--

4th Grade *Hand Hygiene* Related Essential Standards

	Essential Standard	Clarifying Objectives	
Healthful Living 4.PCH.1	Understand wellness, disease prevention and recognition of symptoms.	4.PCH.1.2	Recognize methods that prevent the spread of germs that can cause communicable diseases.
Healthful Living 4.PCH.2	Understand the body systems, organs, functions, and their care.	4.PCH.2.1	Identify the basic components and functions of the respiratory system.

5th Grade *Hand Hygiene* Related Essential Standards

	Essential Standard	Clarifying Objectives	
Healthful Living 5.PHC.1	Understand wellness, disease prevention and recognition of symptoms.	--	--
Healthful Living 5.PCH.4	Apply measures for cleanliness and disease prevention	--	--

6th Grade *Hand Hygiene* Related Essential Standards

	Essential Standard	Clarifying Objectives	
Healthful Living 6.PHC.1	Understand wellness, disease prevention and recognition of symptoms.	6.PCH.1.2	Differentiate between communicable and chronic diseases.
		6.PCH.1.4	Select methods of prevention based on the modes of transmission of communicable diseases.

7th Grade *Hand Hygiene* Related Essential Standards

	Essential Standard	Clarifying Objectives	
Science 7.L.1	Understand the processes, structures and functions of living organisms that enable them to survive, reproduce and carry out the basic functions of life	7.L.1.1	Compare the structures and life functions of single-celled organisms that carry out all for the basic functions of life including: <ul style="list-style-type: none"> • Euglena • Amoeba • Paramecium • Volvox
Healthful Living 7.PCH.1	Understand wellness, disease prevention, and recognition of symptoms.	--	--

8th Grade *Hand Hygiene* Related Essential Standards

	Essential Standard	Clarifying Objectives	
Science 8.L.1	Understand the hazards caused by agents of disease that effect living organisms.	8.L.1.1	Summarize the basic characteristics of viruses, bacteria, fungi, and parasites relating to the spread, treatment, and prevention of disease.
		8.L.1.2	Explain the difference between epidemic and pandemic as it relates to the spread, treatment and prevention of disease.
Healthful Living 8.PCH.1	Understand wellness, disease prevention, and recognition of symptoms.	--	--