

# Infectious & Communicable Diseases Curriculum Support Package

Grades 7-12

July 2020



# hpePublicHealth.ca

# Purpose of this Resource

The purpose of this guide is to provide educators and schools with resources to integrate infection control in classrooms and to assist educators, school staff, vice-principals and principals with the enhancement of student learning and achievement by improving teaching practices.

Hastings Prince Edward Public Health has created the following support package to align with the Ontario Curriculum, Grades 7-12: Health and Physical Education, Interim Edition (re-issued 2018). We would like to acknowledge Toronto Public Health, Canadian Red Cross and Ontario Public Health Units who worked on the original version.

#### For More Information:

Hastings Prince Edward Public Health 179 North Park Street Belleville, Ontario K8P 4P1

Tel: 613-966-5500 ext. 349

Toll-free: 1-800-267-2803 ext. 349

Fax: 613-966-4363 hpePublicHealth.ca

We are committed to providing accessible publications, programs and services to all. For assistance, please call 613-966-5500; TTY: 711 or email <a href="mailto:accessibility@hpeph.ca">accessibility@hpeph.ca</a>. For more information, please visit hpePubicHealth.ca.



# hpePublicHealth.ca

# Contents

Objectives:	4
Interactive Activities:	4
Activity 1: Handwashing Video	4
Activity 2: Cough and Sneeze Etiquette Video	4
Activity 3: Cough-Sneeze Etiquette Scenarios	5
Activity 4: Stop the Spread! Research Questions	7
Activity 5: Hand Hygiene! Research Questions	9
Activity 6: Keeping a Physical Distance	11
Activity 7: Word Scramble	12
Activity 8: Word Search	14
Activity 9: How Clean Are Your Hands? (Glo-Germ)	16
Activity 10: How to wash your hands	17
Activity 11: How to apply hand sanitizer	18
Activity 12: Chain of Infection Review	19

# Objectives:

To educate students about the spread of germs.

To increase the frequency of students using good hand hygiene and cough sneeze etiquette.

To improve hand washing techniques of students.

To increase students' knowledge of why the flu shot and routine immunizations are important to their health.

# Interactive Activities:

Activity 1: Handwashing Video



Activity 2: Cough and Sneeze Etiquette Video



For more videos, please visit our Infection Control in Schools web page: hpePublicHealth.ca/infection-control-schools/

# Activity 3: Cough-Sneeze Etiquette Scenarios

- Scenario 1: You are standing in a crowded bus. You are feeling very tired and starting to feel sick. You start to cough and you use your fist to cover your mouth. You then use that hand to hold onto the hand strap.
- Scenario 2: You are sitting with a group of friends while taking a break from a soccer game. All of a sudden, you start sneezing repeatedly. The sneezing comes as a surprise and you do not cover your mouth. You even sneeze on your friend sitting in front of you.
- Scenario 3: You are playing basketball with your friends. You are just getting over a cold and you cough occasionally. When you cough, you do it in your sleeve then properly clean your hands with alcohol-based hand rub.

# **Activity 3: Answers**

#### **Scenario One:**

You are standing in a crowded bus. You are feeling very tired and starting to feel sick. You start to cough and you use your fist to cover your mouth. You then use that hand to hold onto the hand strap.

What helped to stop the spread of germs?

• You tried to cover your mouth when you coughed.

What could be done better next time?

- You could use a tissue or your elbow to cover your mouth when you cough or sneeze.
- Use an alcohol-based hand rub to clean your hands.
- To prevent germs from spreading, do not touch objects with the hand you used to cover your cough or sneeze.

#### Scenario Two:

You are sitting with a group of friends while taking a break from a soccer game. All of a sudden, you start sneezing repeatedly. The sneezing comes as a surprise and you do not cover your mouth. You even sneeze on your friend sitting in front of you.

What helped to stop the spread of germs?

Nothing was done to prevent the spread of germs in this scenario.

What could be done better next time?

- You could sneeze into your elbow.
- Use an alcohol-based hand rub to clean your hands.
- Apologize to your friends if you sneeze on them.
- The person being sneezed on should properly clean or wash their hands and rinse their face (with water only).

#### **Scenario Three:**

You are playing basketball with your friends. You are just getting over a cold and you cough occasionally. When you cough, you do it in your sleeve then properly clean your hands with alcohol-based hand rub.

What helped to stop the spread of germs?

- Using your sleeve to cover your mouth when coughing and sneezing.
- Cleaning your hands with an alcohol-based hand rub after each time you cough.

What could be done better next time?

Stay home when you feel sick to prevent passing germs to friends.

# Activity 4: Stop the Spread! Research Questions

1. What is cough and sneeze etiquette and why is it important?

2. What are the steps to proper cough and sneeze etiquette?

# **Answer Key for Activity 4:**

### Question 1: What is cough and sneeze etiquette and why is it important?

Cough and sneeze etiquette refers to simple hygiene practices everybody can take to prevent passing on respiratory infections like cold and flu. It is an important way to prevent germs from spreading.

### Question 2: What are the steps to proper cough and sneeze etiquette?

- Turn away from the people around you
- Cough or sneeze into a disposable paper tissue or in your shirt sleeve
- Throw the tissue away in a garbage can
- Properly clean your hands using soap and warm water or an alcohol-based hand rub as soon as possible
- Avoid touching or handling any objects with either hand until you have washed your hands

# Ac

ctivity 5: Hand Hygiene! Research Questions
1. What is proper hand hygiene and why is it important?
2. When is the best time to clean your hands?
3. What are the steps to properly cleaning your hands?

# **Answer Key for Activity 5:**

# Question 1: What is proper hand hygiene and why is it important?

Hand hygiene is the single most effective way to prevent the spread of germs that can cause illness.

# Question 2: When is the best time to clean your hands?

- Before and after eating
- After playing (indoors or outdoors)
- After going to the bathroom
- After coughing and sneezing
- After touching a pet
- After being near someone who is sick

# Question 3: What are the steps to properly cleaning your hands?

- 1. Wet your hands with warm water
- 2. Gently apply soap to produce lather
- 3. Rub for 20 seconds to remove germs
- 4. Rinse away germs
- 5. Dry your hands with a paper towel
- 6. Turn off tap with a paper towel

# Activity 6: Keeping a Physical Distance

# What is physical distancing?

In order to keep yourself and others as healthy as possible, it is important to practice measures that will contribute to that effect. One of those measures is called physical distancing.

Physical distancing refers to methods to reduce the frequency and closeness of contact between people.

Question: Can you think of examples where you should practise physical distancing? To get you started, here are some examples. Can you think of others?

1.	At the shopping mall
2.	At the library
3.	At a restaurant
4.	
5.	
6.	
<b>7</b> .	
8.	

1. coinIften

2. etBcriaa

3. Vsuir

# Unscramble the following words.

4. Hdna rnaeStiiz

6. nHasd

5. aSop nda teraW

7. Tntywe secnSod

8. odCl nda ulF

9. zneSee

	10. ahsW urYo Hdsan
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

# **Answer Key for Activity 7:**

# Unscramble the following words.

- 1. coinlften
- 4. Hdna rnaeStiiz
- 7. Tntywe secnSod

- 2. etBcriaa
- 5. aSop nda teraW
- 8. odCl nda ulF

- 3. Vsuir
- 6. nHasd

- 9. zneSee
- 10. ahsW urYo Hdsan

- 1. Infection
- 2. Bacteria
- 3. Virus
- 4. Hand Sanitizer
- 5. Soap and Water
- 6. Hands
- 7. Twenty Seconds
- 8. Cold and Flu
- 9. Sneeze
- 10. Wash your Hands



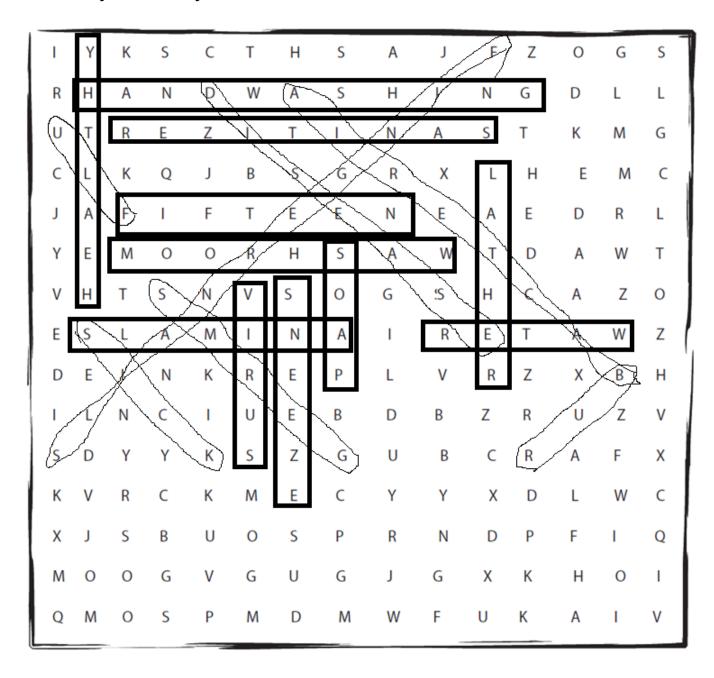
# Activity 8: Word Search

Find and circle the 18 words in the puzzle below:

Animals	Fifteen	Germs	Lather
Sick	Virus	Bacteria	Fingernails
Handwashing	Rub	Sneeze	Washroom
Disease	Flu	Healthy	Sanitizer
Soap	Water		

													_	
ı	Y	K	S	C	Т	Н	S	Α	J	F	Z	0	G	S
R	Н	Α	N	D	W	Α	S	Н	1	N	G	D	L	L
U	Т	R	Е	Z	1	Т	1	N	Α	S	Т	K	M	G
С	L	K	Q	J	В	S	G	R	Χ	L	Н	Е	M	С
J	Α	F	1	F	Т	Е	Е	N	Е	Α	Е	D	R	L
Υ	Ε	M	O	O	R	Н	S	Α	W	Т	D	Α	W	Т
٧	Н	Т	S	N	٧	S	0	G	<u>.</u> 'S	Н	C	Α	Z	О
Е	S	L	Α	М	1	N	Α	1	R	Е	Т	Α	W	Z
D	Ε	1	N	K	R	Е	Р	L	V	R	Z	Χ	В	Н
ı	L	N	C	1	U	Е	В	D	В	Z	R	U	Z	V
S	D	Y	Υ	K	S	Z	G	U	В	C	R	Α	F	Х
K	٧	R	C	K	Μ	Е	С	Υ	Υ	X	D	L	W	С
Х	J	S	В	U	O	S	Р	R	N	D	Р	F	1	Q
М	O	0	G	V	G	U	G	J	G	Χ	K	Н	O	1
Q	M	Ο	S	Р	М	D	M	W	F	U	K	Α	1	٧

# **Answer Key for Activity 8:**



# Activity 9: How Clean Are Your Hands? (Glo-Germ)

There are several different ways of using the fluorescent products to demonstrate proper hand washing technique; use the method that works well for you. Please contact HPEPH to sign out a Glo-Germ Kit

#### Materials:

- Glo-Germ Gel
- UV Flashlight
- Hand washing facilities
- Soap
- Paper towel

#### Instructions:

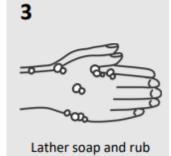
- 1. Ask for 3 volunteers.
- 2. Apply fluorescent lotion/gel/powder to the hands of the 3 volunteers small amount, about the size of a quarter, into the palm of one hand and spread over both hands as if applying hand lotion.
  - Ask one of the volunteers to wash their hands using lots of soap and water and NO friction (scrubbing/lathering), then remove soap under the water and pat hands dry with the paper towel.
  - Ask the second volunteer to wash his/her hand using NO soap, only water. Friction can be used, then dry hands with paper towel.
  - Ask the third volunteer to wash his/her hands as if he/she was a surgeon washing properly using a little soap and lathering (using friction) for at least 20 seconds. After that, rinse hands and dry well with paper towel.
- 3. When all three volunteers come back, shine the UV light/bar over the first volunteer's hands. Show the class, reminding them that this person only used soap and water and did not lather.
  - Shine the UV light/bar over the second volunteer's hands. Show the class, reminding them that this person did not use soap, only water and friction.
  - Shine the UV light/bar over the third volunteer's hands. Show the class, reminding them that person washed his/her hands the right way, using the right technique.
- 4. Ask the class why the last person hands are so much cleaner than the other two volunteers' hands (Answer: You need soap AND friction to physically remove microorganisms from the hands).
- 5. Go over the six steps to washing hands:
  - 1. Wet your hands with warm water
  - 2. Gently apply soap to produce lather
  - 3. Rub for 15-20 seconds to remove germs
  - 4. Rinse away germs
  - 5. Dry your hands with a paper towel
  - 6. Turn off tap with a paper towel

# How to wash your hands

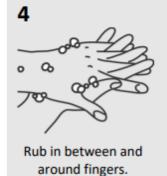




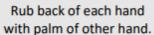




hands palm to palm.









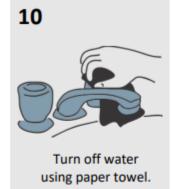
Rub fingertips of each hand in opposite palm.



Rub each thumb clasped in opposite hand.









# How to use hand sanitizer





Apply 1 to 2 pumps of product to palms of dry hands.





Rub hands together, palm to palm.



Rub in between and around fingers.



Rub back of each hand with palm of other hand.



Rub fingertips of each hand in opposite palm.





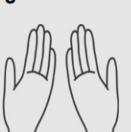
Rub each thumb clasped in opposite hand.





Rub hands until product is dry. Do not use paper towels.

8



Once dry, your hands are clean.

# Activity 12: Chain of Infection Review

## **Vulnerable People**

# (Susceptible Hosts)

- Babies
- Children
- Elderly
- People with weakened immune systems
- Unimmunized people





#### **Germs**

#### (Agent)

- Bacteria
- Viruses
- Parasites

# **How Germs Get In**

# (Portal of Entry)

- Mouth
- · Cuts in the skin
- Eyes
- Nose



# Chain of Infection

# Where Germs Live

#### (Reservoir)

- People
- Animals/Pets (dogs, cats, birds, reptiles)
- Wild animals
- Food
- Soil
- Water

# **Germs Get Around**

#### (Mode of Transmission)

- Contact (hands, phones, door handles)
- Droplets (when you speak, sneeze or cough)





# **How Germs Get Out**

# (Portal of Exit)

- Mouth (vomit, saliva)
- Cuts in the skin (blood)
- During diapering and toileting (stool)

 ${\it Adapted with permission from Ottawa\ Public\ Health}.$ 

