

Bug Out!

Expect
THE UNEXPECTED
+ Canadian Red Cross

Activity Booklet
For students aged 12–13
Grades 7 to 8



Get The Facts On Germs



Canadian Red Cross



Funded in part by the Government of Ontario

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Bug out!

Get the Facts on Germs.

*This Activity Booklet
belongs to:*

Your health is important! Knowing about germs and what you can do to prevent the spread of illness will keep you and your family healthy and safe throughout the year.

This Booklet includes many activities that you can do with your teacher and classmates – or at home with your family. The activities are fun to do and you'll learn how easy it is to stop germs from spreading.

Here are some of the things you will learn about:

- What are germs and how are they spread?
- Are germs good or bad for us?
- How can we stop getting sick?
- What's the best way to wash our hands?
- If we cough or sneeze, why do it in our sleeve?
- When do we stay home and why?

When you complete the Activity Booklet you'll receive a special participation certificate from your teacher.

Enjoy the activities and don't forget to have fun!



Acknowledgements

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Table of contents

Let's stop bacteria and viruses from spreading!	1
Activity 1: Research Topics	1
Topic #1: Bacteria and Viruses	2
Topic #2: Immunization	4
Topic #3: Epidemics and Pandemics	5
Topic #4: Infection Prevention.....	7
Topic #5: Infectious Disease of Historical Significance	11
Activity 2: What you don't know may hurt you!	13





Let's stop bacteria and viruses from spreading!

Activity 1:

In this activity, you will learn about bacteria and viruses that are harmful to your health. You will also learn how they are spread and ways to help prevent you and others around you from becoming ill.

The focus of your work will be researching and working together in groups.

Read the following instructions carefully to find out how to keep yourself, your family and your classmates healthy and safe.

1. You can choose a group or your teacher will put you into groups and assign a research topic.
2. Upon selection of your topic, you can brainstorm ideas on preparing a report or presentation.
3. Turn to the section assigned to your group and start reading up on the subject. Each topic comes with internet links to help you get your research started. Be sure to visit to your school library or local public library to learn even more on your topic.
4. Answer the questions under your assigned topic and then prepare a presentation to your classmates.
5. Don't forget to have fun!



Activity 1



The following resources will help you start your research:

- Ministry of Health and Long-Term Care, Government of Ontario
• http://www.health.gov.on.ca/english/providers/program/pubhealth/handwashing/handwashing_mn.html
- City of Ottawa Public Health
• http://ottawa.ca/residents/health/emergencies/pandemic/black_spot/video_en.html
- Public Health Agency of Canada
• <http://www.phac-aspc.gc.ca/id-mi/index.html>
- Centers for Disease Control and Prevention
• <http://www.cdc.gov/>
• <http://www.bam.gov/>
• <http://www.cdc.gov/germstopper/materials.htm>
- Mayo Foundation for Medical Education and Research Web site
• <http://www.mayoclinic.com/health/infectious-disease/ID00004>
- Center for Infectious Disease Research and Policy
• <http://www.cidrap.umn.edu/>

Topic #1: Bacteria and Viruses

Questions:

1. What are bacteria and viruses?

2. What are some examples of illness and disease caused by bacteria and viruses?

Bacteria or virus		Illness
Bacteria:		
Virus:		





3. How are bacteria and viruses spread?

4. How can we stay healthy and protect ourselves from illnesses?

5. What are some interesting facts you learned about bacteria and viruses?



Activity 1



The following resources will help you start your research:

- Ministry of Health and Long-Term Care, Government of Ontario
 - http://www.health.gov.on.ca/english/public/pub/pub_menus/pub_immun.html
- Public Health Agency of Canada
 - <http://www.phac-aspc.gc.ca/im/index.html>
- Centers for Disease Control and Prevention
 - <http://www.bam.gov/>
 - <http://www.cdc.gov/germstopper/materials.htm>
- The World Health Organization
 - <http://www.who.int/topics/en/#/>
 - <http://www.who.int/mediacentre/factsheets/fs211/en/index.html>

Topic #2: Immunization

Questions:

1. What is immunization?

2. Who should get immunized and why?

3. Immunizations have helped improve the health of people all over the world. What are some of the big historical breakthroughs?





4. Name some vaccine-preventable diseases?

5. What are some interesting facts you learned about immunization?

The following resources will help you start your research:

- Ministry of Health and Long-Term Care, Government of Ontario
• www.health.gov.on.ca/pandemic
- Public Health Agency of Canada
• http://www.phac-aspc.gc.ca/influenza/pandemic_e.html
- Centers for Disease Control and Prevention
• <http://www.bam.gov/>
• <http://www.cdc.gov/>
- The World Health Organization
• <http://www.who.int/csr/en/>

Topic #3: Epidemics and Pandemics

Questions:

1. What is the difference between a pandemic and an epidemic?

Activity 1



2. List some examples of previous epidemics.

3. List some examples of previous pandemics.

4. What can you and your family do to stay healthy?





5. What are some interesting facts you learned about epidemics and pandemics?

Topic #4: Infection Prevention

There are a number of ways you can prevent illness. Choose one of the following topics and answer the appropriate questions:

1. Hand Hygiene
2. Cough and Sneeze Etiquette
3. Social distancing

The following resources will help you start your research:

- Ministry of Health and Long-Term Care, Government of Ontario
• http://www.health.gov.on.ca/english/providers/program/pubhealth/handwashing/handwashing_mn.html
- Centers for Disease Control and Prevention
• <http://www.bam.gov/>
• <http://www.cdc.gov/cleanhands/>
- The World Health Organization
• <http://www.euro.who.int/document/che/06DENweb.pdf>

1. Hand Hygiene

1. What is proper hand hygiene and why is it important?

Activity 1



2. When is the best time to clean your hands?

3. What are the steps to properly cleaning your hands?

4. What are some interesting facts you learned about hand hygiene?





The following resources will help you start your research:

- Centers for Disease Control and Prevention
 - <http://www.cdc.gov/flu/protect/covercough.htm>
 - <http://www.bam.gov/>
- Other
 - <http://www.coughsafe.com/>
 - <http://www.health.state.mn.us/divs/idepc/dtopics/infectioncontrol/cover/faq.html>
 - <http://www.cdc.gov/flu/protect/covercough.htm>

2. Cough and Sneeze Etiquette

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

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

3. What are some interesting facts you learned about cough and sneeze etiquette?



Activity 1



The following resources will help you start your research:

- Canadian Centre for Occupational Health and Safety
• http://www.ccohs.ca/oshanswers/diseases/good_hygiene.html
- Centers for Disease Control and Prevention
• <http://www.cdc.gov/flu/protect/covercough.htm>
• <http://www.bam.gov/>
- Other
• <http://www.globalsecurity.org/security/ops/hsc-scen-3/flu-pandemic-distancing.htm>

3. Social Distancing

1. What is social distancing?

2. What are some of the ways to practice social distancing when you or when others around you are sick?

3. What are some interesting facts you learned about social distancing?





The following resources will help you start your research:

- Public Health Agency of Canada
• <http://www.phac-aspc.gc.ca/id-mi/index.html>
- Centers for Disease Control and Prevention
• <http://www.cdc.gov/ncidod/dvbid/plague/index.htm>
• <http://www.cdc.gov/ncidod/EID/vol12no01/05-0979.htm>
- World Health Organization
• <http://www.who.int/mediacentre/factsheets/fs267/en/>
- Other
• http://meme.essortment.com/spanishflu_reiz.htm
• http://en.wikipedia.org/wiki/Mary_Mallon
• <http://history1900s.about.com/od/1900s/a/typhoidmary.htm>

Topic #5: Infectious Disease of Historical Significance

There are a number of infectious disease outbreaks that have had historical significance. Choose one of the following topics to research and answer the following questions:

1. The bubonic plague
2. The Spanish Flu
3. The New York Typhoid Outbreak (turn of the 20th Century):
The story of “Typhoid Mary”

Questions:

1. How was the disease spread?

2. What caused the disease?



Activity 1



3. What do we know today that could have helped prevent the severity of the illness or spread of the disease?

4. Why is the disease of historical importance? What prevention measures were learned by health officials at the time?

5. What are some interesting facts you learned about the disease?





Activity 2: What you don't know may hurt you!

In this activity, you will learn about the ways you can prevent the spread of illness and disease by reviewing and analysing a scenario.

Read the following instructions to find out how to proceed.

1. Choose a group or get into groups as assigned by your teacher.
2. Together, read the first scenario.
3. Review the questions and discuss the possible answers with your group.
4. As a group, agree on the answers and write them down in your Student Activity Booklet.
5. Prepare to share your answers with the rest of the class.

The answers to the questions can be found through your research topics or the presentations made by your classmates during Activity 1.





Scenario 1: Severe Flood

It is five o'clock in the afternoon and an emergency management worker knocks on your door to inform your family that there is a severe flood warning issued for your region. Your family must evacuate to a designated shelter in a neighbouring community.

Since you are prepared, having taken Canadian Red Cross emergency preparedness education, you immediately start making preparations for your emergency evacuation by grabbing your portable emergency evacuation kit and leaving a note on the kitchen table stating your names and where you are being evacuated to.

As it is the fall, your region is in peak flu season, and there has been an increase of sick people within your community.

While at the shelter, you are provided with emergency sleeping arrangements, food, water as well as other personal services. After a day, you notice an elderly person staying at the shelter is getting ill, and three others (two children and one adult from the same family) need to be transported to the local hospital.

Questions:

1. What actions should the shelter take to prevent the further spread of illness amongst families staying at the shelter?





2. What actions can you and your family take to prevent getting ill while staying at the shelter?

Scenario 2: Local Outbreak

The notice has been issued to members of your community regarding an outbreak of the mumps amongst a small number of school-aged children.

The public health nurse comes to your school to investigate the outbreak and through the interview process, the nurse notes that you have been in contact with an infected classmate.

After all interviews have been conducted, the school issues a note to all families about the outbreak and the importance of immunization.

Questions:

1. What are the actions you and your family should take to prevent getting the mumps?

Activity 2



2. Even if you're immunized, what can you and your family do to protect other people in your community?



Red Cross Fundamental Principles

In 1965, the seven Fundamental Principles were adopted by the 20th International Conference. They were developed to link together the International Committee, Federation and National Societies.

Our network is vast, but our approach is simple. All Red Cross programs and activities are guided by the Fundamental Principles of Humanity, Impartiality, Neutrality, Independence, Voluntary Service, Unity and Universality. These principles allow us to provide help immediately to whomever needs it, wherever they are, whatever their race, political beliefs, religion, social status, or culture.

Humanity

The International Red Cross and Red Crescent Movement, born of a desire to bring assistance without discrimination to the wounded on the battlefield, endeavours, in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, co-operation and lasting peace amongst all peoples.

Impartiality

It makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress.

Neutrality

In order to continue to enjoy the confidence of all, the Movement may not take sides in hostilities or engage at any time in controversies of a political, racial, religious or ideological nature.

Independence

The Movement is independent. The National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so that they may be able at all times to act in accordance with the principles of the Movement.

Voluntary Service

It is a voluntary relief movement not prompted in any manner by desire for gain.

Unity

There can only be one Red Cross or one Red Crescent Society in any one country. It must be open to all. It must carry on its humanitarian work throughout its territory.

Universality

The International Red Cross and Red Crescent Movement, in which all Societies have equal status and share equal responsibilities and duties in helping each other, is world-wide.



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