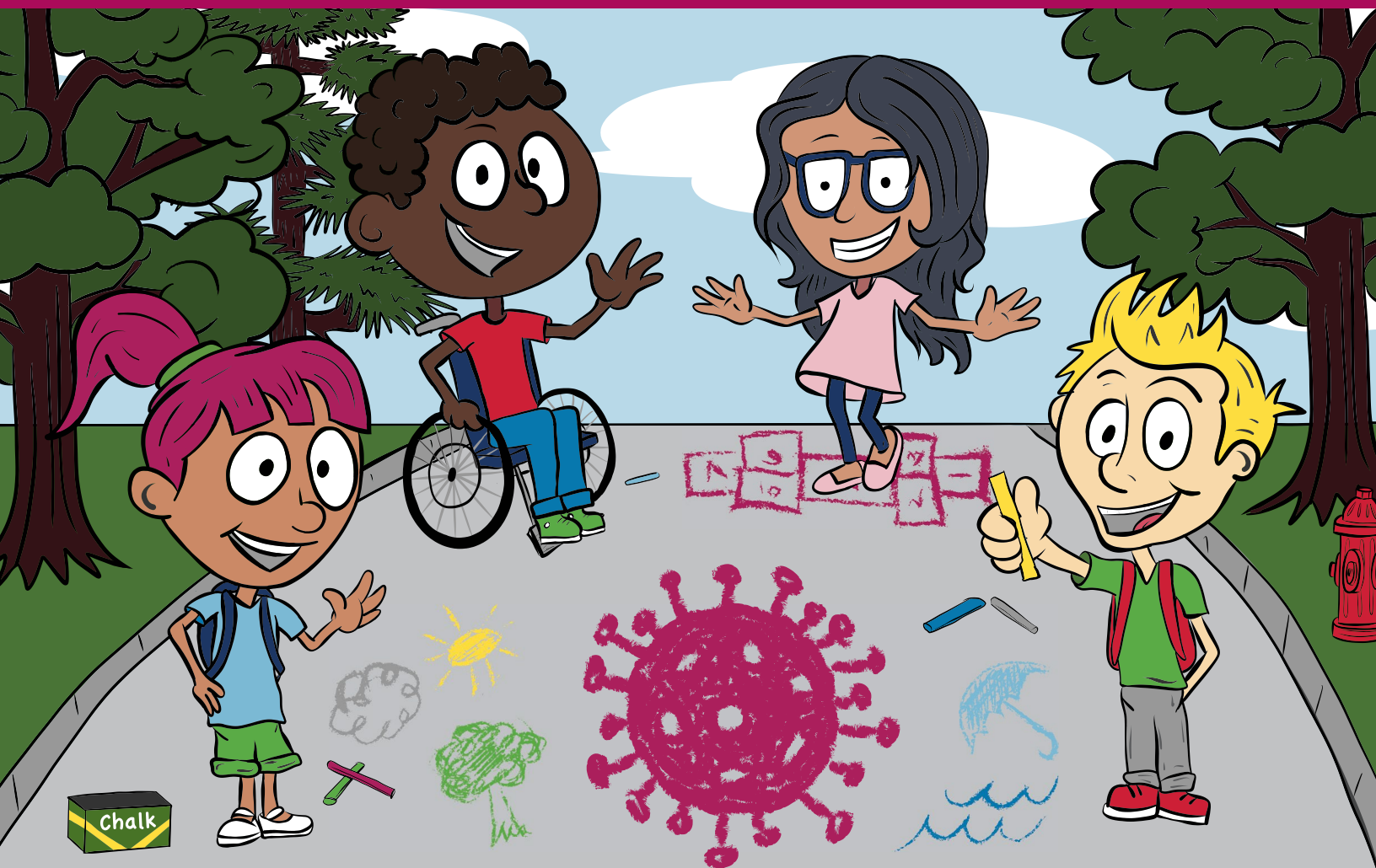


# Student Tools for Emergency Planning (STEP) Program

Supplemental Hazard Lesson: Pandemics  
Instructor Guide



FEMA







# STEP SUPPLEMENTAL HAZARD LESSON: PANDEMICS



The STEP Pandemics Supplemental Hazard Lesson will help students to:

- Learn what pandemics are and their causes
- Understand steps to take to stay safe and healthy
- Relate what they learn to COVID-19

**Time: (30 min)**

<p><b>Key Messages</b></p> 	<ul style="list-style-type: none"> <li>• A pandemic is an outbreak of an existing or new disease that spreads around the world. Pandemics affect a large number of people.</li> <li>• Most people will not have immunity to new diseases, and vaccines or treatments may take time to develop.</li> <li>• There are many steps to take to protect yourself from getting sick. These include washing or sanitizing your hands frequently, not touching your face, wearing a mask, and not getting too close to other people.</li> <li>• Diseases can spread in different ways: Directly, from a sick person to another person; indirectly, from a non-living object to a person; and by people who may not have any symptoms.</li> <li>• If you do get sick, tell your parents and stay home so that you don't get others sick.</li> </ul>
<p><b>Skills</b></p> 	<ul style="list-style-type: none"> <li>• Health</li> <li>• English</li> <li>• Writing</li> <li>• Preparedness</li> <li>• Real World Problem Solving</li> </ul>
<p><b>Activities</b></p> 	<ul style="list-style-type: none"> <li>• Helping Us Stay Healthy podcast</li> <li>• Pandemics discussion and Qs/As</li> <li>• Pandemic cartoon completion</li> </ul>
<p><b>Materials</b></p> 	<ul style="list-style-type: none"> <li>• Internet to stream or download podcast</li> <li>• Copies of podcast script and cartoon activity</li> <li>• Pencils and crayons, colored pencils, or markers for each student</li> </ul>

## PANDEMICS LESSON

This lesson takes a closer look at what pandemics are and how to stay healthy during one. These activities will help students build on what they may know about COVID-19 to understand what causes pandemics and steps they can take to prevent disease transmission.



**Safety Tip:** *Discussing disasters can trigger a strong emotional response in some students who have experienced a pandemic. Let the students know that it's normal to feel anxious or stressed out sometimes and that everyone reacts differently to stressful situations. Suggest they talk to parents or other trusted adults if they are feeling upset. See page 7 of the STEP Instructor Guide for advice on safeguarding students as well as the book list on page 42 for resources on emotional resilience.*

### Activity 1: Podcast: Helping Us Stay Healthy

**Instructor Script:** *A pandemic is an outbreak of a disease that spreads around the world. Sometimes it's a disease we already know about, but other times, it's caused by a new germ we haven't seen before. Pandemics affect a large number of people. Although people get sick, there are ways to help yourself stay healthy. One pandemic you probably know about is COVID-19. We call it COVID-19 because its official name is "coronavirus disease," and it caused a new outbreak in 2019. Researchers and doctors are working all the time to learn more about germs and treatments for the illnesses they cause.*

*First, we're going to listen to a podcast about a girl named Brianna who goes to work with her dad. He works in a lab at the Centers for Disease Control and studies diseases. As you listen to the podcast, follow along with the printout. Make sure you listen carefully because every once in a while the printout is missing an important word. Write it in when you hear it.*

**Teaching Tip:** *Having students fill in missing words can help them focus on the podcast and improve their listening skills. You may need to stop the podcast momentarily to allow students time to write the word.*

**Action:** Hand out print copies of the activity or have students complete the PDF on their devices. Play the podcast audio file.

### Discussion Questions

**Instructor Script:** *The podcast gave us an introduction to pandemics and some ways to stay healthy. Let's talk a little more about this.*

**Action:** Begin a general group discussion on pandemics.



QUESTIONS	POTENTIAL ANSWERS
If you get a cold and pass it on to people in your class, is that a pandemic?	No. While colds are caused by germs that can spread just like pandemics, they only make fairly small groups of people ill, such as your class or your family. They don't have the potential to spread around the world.
What are some things you know about COVID-19?	<p>It is caused by the coronavirus, started in 2019, and made people sick around the world.</p> <p>Wearing masks, staying at least six feet apart from other people, and not gathering inside with people who aren't part of your family helped slow the spread of COVID-19 down.</p> <p>Vaccines were created in record time to help immunize people against the virus.</p>
What are some ways to protect yourself from getting sick if there's a pandemic?	<p>While there may be different safety measures for various kinds of pandemics, we know some basic rules can help keep people healthy no matter kinds of germs cause the disease:</p> <ul style="list-style-type: none"> <li>• Wash your hands often with soap and water for at least 20 seconds, which is about as long as it takes to sing the Happy Birthday song twice.</li> <li>• Do not touch your eyes, nose, and mouth.</li> <li>• Stay at least six feet away from people who are not part of your household.</li> <li>• Cover your mouth and nose with a mask when out in public. Masks can keep germs from your mouth and nose from spreading through the air to people near you. They can also help you from breathing in other people's germs.</li> <li>• Clean and disinfect things and surfaces you touch frequently, like your phone, door knobs, and light switches.</li> <li>• Stay at home as much as possible to prevent the disease from spreading.</li> </ul>
Do you think pandemics affect all groups of people equally or might some be more likely to get sick?	<p>The different diseases caused by pandemics can make some people sicker than others. With COVID-19, children do not get as sick as adults, especially those who are over age 65. We don't know why that is yet.</p> <p>But other diseases may affect young children and older adults more. This may be because children's immune systems are still developing, and as people grow old, their immune systems weaken. Your immune system fights off germs that get inside your body.</p>
How might an emergency kit help during a pandemic? What kinds of things are important to have in it in case you get sick?	<p>Having several days of food and water in your emergency kit means you don't have to go out to buy it if you are sick. This can help you avoid crowds and can keep you from spreading your illness to others.</p> <p>Here are some things in your kit, in addition to food and water, that might help:</p> <ul style="list-style-type: none"> <li>• Thermometer to measure your temperature</li> <li>• Soap and hand sanitizer</li> <li>• Disinfecting wipes</li> <li>• Masks</li> <li>• Prescription medicines</li> <li>• Pet-related items</li> </ul>



## Activity 2: Germ Patrol



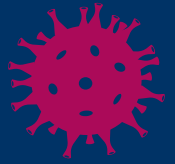
**Instructor Script:** *This next activity will let you get a little creative and share what you've learned about pandemics today. Remember Brianna from the podcast? She's going to the park on warm spring day not long after her dad took her to work with him. At the park she sees a few of her friends, and they talk about what they've learned about staying healthy.*

*Your job is to complete what each kid might say next. You can write or type it right into their speech bubble. There's no one right answer here, so be creative and use your imagination.*

**Action:** Hand out print copies of the activity or have students complete the PDF on their devices.

# STEP SUPPLEMENTAL HAZARD LESSON

## PANDEMICS



### Helping Us Stay Healthy Listening Activity



#### WORD BANK

Immunity

Lab

Viruses

Microscopes

Diseases

Healthy

Washing

Pandemic

Germs

Mask

**Brianna:** Hi, I'm Brianna. Today is Take Your Child to Work Day, and I'm going to work with my dad. I've been to the \_\_\_\_\_ where he works once on the weekend, but today, all the scientists he works with will be there.

He works at the Centers for Disease Control and Prevention, which everyone shortens to its initials, CDC. The CDC helps to protect our health. It does research on \_\_\_\_\_ and how to control and cure them. My dad studies pandemics. That word might sound familiar because of the recent one that made so many people sick. I'm going to let my dad explain since he's the expert.

**Dad:** Brianna, I'm so glad you are able to come with me to work today! You are absolutely right, my job is to study pandemics. A \_\_\_\_\_ is an outbreak of a disease that spreads around the world and can make a lot of people sick. Some of these diseases are new to humans so we have not developed \_\_\_\_\_. This means most people won't be able to fight it off easily.

**Brianna:** Is that what happened with COVID-19?

**Dad:** Yes, it is. Pandemics can be caused by \_\_\_\_\_ like bacteria and viruses. Coronavirus Disease 2019, or COVID-19 as most people call it, is called a novel pandemic because this is the first time that humans have gotten sick from this specific virus. Although you can't go into the labs, you can see through a window how scientists are studying germs that make people sick.

**Brianna:** Wow, they are wearing masks and protective clothing over their whole bodies. I can only see their eyes! I see scientists looking into \_\_\_\_\_. We did that at school, and it made tiny things look huge.

**Dad:** That's what they're doing here. Bacteria or \_\_\_\_\_ are too small to see with your eyes, but a microscope magnifies them so much that you can observe what they look like.

There are a couple of other things that can cause pandemics. Fungi is one. Mushrooms and mold are examples of fungi. Most can't make you sick, but some can. Another cause of pandemics can be parasites. These are organisms that live on or inside other living things and feed off them. Some can cause disease.

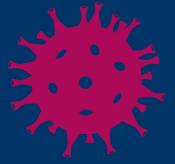
**Brianna:** I hate getting sick and feeling yucky. Is there anything I can do so I stay well in a pandemic?

**Dad:** Absolutely. Some of the same things you do to prevent getting a cold. Some diseases can spread through droplets that our bodies create when we talk, breathe, cough, or sneeze. We call this "direct transmission." Some diseases can spread through "indirect transmission," like when many people touch the same things, such as doorknobs or computer mice.

You can help slow the spread of disease by \_\_\_\_\_ your hands and using hand sanitizer often. Cover your mouth and nose with the inside of your elbow when you cough or sneeze. Try hard not to touch your eyes, nose,

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## PANDEMICS



or mouth because those are the places germs can get into your body. When you feel sick, don't go to school or hang out with your friends.

There are more things you can do during a pandemic to protect yourself. Make sure you stay at least six feet apart from other people. That means no crowding together when you're playing or standing in line. You can also be asked to wear a \_\_\_\_\_ so you don't spread germs when you talk or breathe.

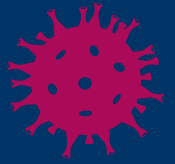
**Brianna:** Dad, I'm so proud that you work to help people stay \_\_\_\_\_. I really like seeing where you work. Can you show me the cafeteria now? I'd really like a snack!

### Don't forget!



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### Germ Patrol Activity

**Directions:** Join in the conversation with Brianna and her friends. Help them complete their sentences by writing or typing what you think they might continue to say in their speech bubble.

Lots of us are swinging on the monkey bars. That means we're all touching the same surfaces. When I get home, the first thing I'm going to do is \_\_\_\_\_.

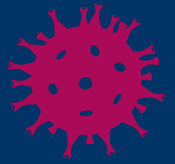
I had so much fun at work with my dad. When I go with him again, I'd like to learn about \_\_\_\_\_.

My grandma made me a mask with balloons printed on one side and dogs on the other. Sometimes when I wear it I get hot, but I know it's important to wear it during a pandemic because \_\_\_\_\_.

My mom said that if I start to feel sick I can't go \_\_\_\_\_.

# STEP SUPPLEMENTAL HAZARD LESSON

## PANDEMICS



### Helping Us Stay Healthy Listening Activity Answer Key



#### WORD BANK

Immunity  
Lab  
Viruses  
Microscopes  
Diseases  
Healthy  
Washing  
Pandemic  
Germs  
Mask

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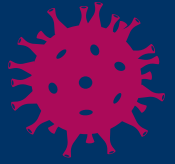
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### Germ Patrol Activity Answer Key

**Directions:** Join in the conversation with Brianna and her friends. Help them complete their sentences by writing or typing what you think they might continue to say in their speech bubble.

**These answers are open-ended. Some answers might include:**

