

10th Grade Social Science

Week 2 Optional Learning Activity

Directions: Follow all instructions to complete the activity on the responsibilities of countries when it comes to pandemics.

Instructions for Pandemics Text Sets

Compelling Question: Do certain countries have a greater responsibility to address global issues than others?

Supporting Questions:

- How do pandemics spread internationally?
- What impact do pandemics have on society? What impact do they have on relations between groups of people?
- In what ways must countries work together to stop the spread of pandemics?

Extension Questions:

- Have governments learned from past pandemics better ways to handle our current situation with COVID-19?
- Have citizens learned from past pandemics better ways to handle our current situation with COVID-19?
- If yes, how do you know? If no, why do you think they haven't?

Follow these steps for each article:

1. Read each article

- Number the paragraphs
- Make notes, write questions you have, make connections on the readings

2. Mark the text:

Social

Political

Economic

3. After you read:

- Ask yourself, can you summarize what you just read? If not, you might need to go back!
- Write a 5-10 sentence summary of the article
- Take the quiz

Make connections: Answer the following questions (short answer) on a separate piece of paper

1. How do pandemics spread internationally?
2. What impact do pandemics have on society?
3. What impact do they have on relations between groups of people?
4. In what ways must countries work together to stop the spread of pandemics?
5. Have governments learned from past pandemics better ways to handle our current situation with COVID-19?
6. Have citizens learned from past pandemics better ways to handle our current situation with COVID-19?
7. If yes, how do you know? If no, why do you think they haven't?

Final question: Answer in a longer response using textual evidence.

- Do certain countries have a greater responsibility to address global issues than others?

Primary Sources: The Black Death, 1348

By Henry Knighton, adapted by Newsela staff on 03.30.17

Word Count **1,101**

Level **1170L**



A miniature from a 14th century Belgium manuscript showing people burying the dead from the Black Death in Tournai, Belgium.

*The Black Death was one of the most devastating pandemics or plagues that spread death to many countries. From 75 million to 200 million people in Eurasia and Europe died in the years between 1346 and 1353. The Black Death is thought to have come from rats and originated in the plains of Central Asia, where it then traveled along the Silk Road, maybe with Mongol troops, reaching Crimea by 1343. Cargo ships bringing riches from the east also brought rats that had a bacteria, *Yersinia Pestis*, in their blood. Fleas on the rats bit them and drank the blood filled with *Yersinia Pestis*. The fleas then jumped onto humans and bit them causing the *Yersinia Pestis* to begin killing the humans by attacking the lungs and turning them to liquid. A cough spread the bacteria to other humans. The bacteria could also stop the blood from clotting, causing victims to bleed to death. Touching the blood or body of a sick person also spread the Black Death, which got its name because many victims were covered with black boils. There is controversy about the nature of the disease: it may have been pneumatic (lung) plague or bubonic (clotting) plague.*

The Black Death arrived in Europe by sea in October 1347, when 12 Genoese trading ships docked in Sicily after a long journey through the Black Sea. The people who gathered on the docks to greet the ships were met with a horrifying surprise: most of the sailors aboard the ships

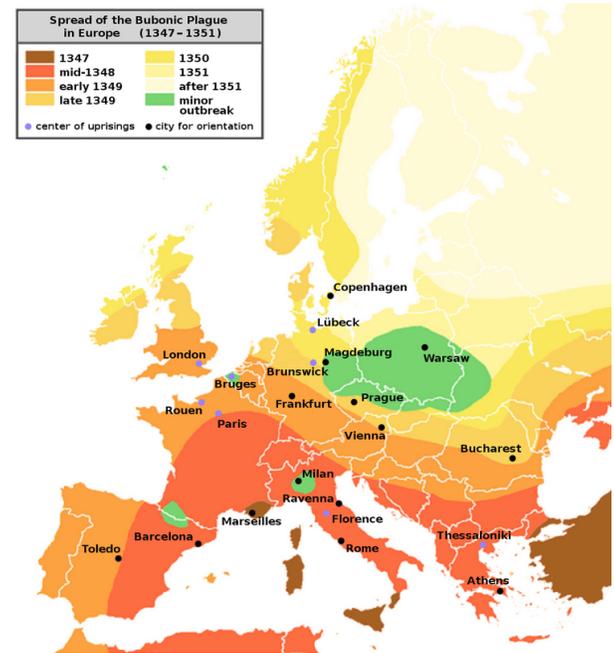
were dead, and those who were still alive were gravely ill. The "death ships" were ordered out of the harbor, but it was too late, and thousands in Sicily died. The expelled ships brought the disease to other ports in Italy and France and over the next five years, the mysterious Black Death would kill almost half of the population of Europe, or 25 million people.

_Here is an account from Henry Knighton, an Augustinian priest at St. Mary's of Leicester in England, who died about 1396. He wrote several books about the history of England. This piece is about the Black Death. _

"This Most Terrible Plague Came To The Coast Of England"

In 1348 and 1349, there was a universal mortality of people throughout the world. It began first in India, then Tarsus, Turkey, then it reached the Muslims and finally the Christians and Jews. The pope's advisors, the Roman Curia, believed that 48 million people have suffered a sudden death in those distant countries of Asia in the space of one year, from Easter to Easter. This did not include the death of Christians. When the king of Tarsus, a Muslim leader, saw this sudden loss of life among his people, he and his nobles set out to travel to the pope at Avignon, France, to become Christians and be baptized by the pope. For he believed that the vengeance of God had weakened his people because they did not accept Jesus Christ as the son of God. However, when he had completed 20 days of his journey, he heard that the fatal plague had killed many Christians, too. However, as they turned back to return to Tarsus, the Christians, who had been following in the rear, attacked and killed about 2,000 of them. On a single day 1,312 people died in Avignon, according to a calculation made before the pope's presence. On another day more than 400 died.

Then this most terrible plague came to the coast of England. It went through Southampton and came to Bristol, where cruel death took just two days to burst out all over town and almost the whole town was wiped out.



"The Monstrous Plague Came Upon Them"

In the same year, a deadly sickness killed sheep throughout the country. In one place more than 5,000 sheep died in a single pasture, and their bodies were so decayed that no animal or bird would touch them. Because there was the fear of death, animals were sold at a low price. Sheep and cattle roamed through the fields eating the corn and no one chased them out.

The Scots, hearing of the cruel plague of the English, declared that it was the hand of God that was punishing them. So the Scots, believing that the English were overwhelmed by the terrible vengeance of God, gathered in the forest of Selkirk with the intention of invading England. However, the monstrous plague came upon them with sudden cruelty and within a short space of time around 5,000 died, so the rest, weak and strong alike, decided to retreat to their own country. But the English, following, surprised them and killed many of them.

"Almost 90 Percent Of Both Men And Women Died"

At that time, there was such a great shortage of priests everywhere that many churches did not have enough for masses, services, prayers for dying or funerals. The plague moved through Dorset seaport, on to Devon, Somerset and up to Bristol. As a result, the people of Gloucester denied admission to people from Bristol, believing that the breath of those who had lived among the dying would spread the sickness. But in the end Gloucester, and then Oxford and London too, and finally the whole of England were so violently attacked that almost 90 percent of both men and women died. Cases in the courts of King came to a stop, for all parties feared the spread of the plague. When the Churchyards were not large enough to bury the dead, so fields were designated for the burials of the dead.

Hardly anyone dared to have anything to do with the sick. They fled from the things left by the dead, which had once been precious but were now poisonous to health. People who one day had been full of happiness on the next were found dead. Victims had little black pustules scattered over the skin of the whole body. Of these people, very few, indeed hardly any, recovered life and health. The plague, which began in Bristol on the feast of the Assumption of the Virgin [15 August] and in London around Michaelmas [29 September], raged for more than a year in England and completely emptied many rural settlements of human beings.

In the following year, it laid waste to the Welsh and English in Wales, and then it moved to Ireland, where the English residents were cut down in great numbers. But the native Irish living in the mountains and uplands were scarcely touched until 1357, when it took them unawares and killed them, too.

Quiz

- 1 Based on the map, which of the following conclusions can be made?
- (A) Southern Europe experienced minor outbreaks of the plague.
 - (B) No European country was spared from the plague.
 - (C) Major cities in Europe did not experience outbreaks of the plague.
 - (D) Northern Europe was the most affected by the plague.
- 2 Which of the following is shown by the map but NOT emphasized in the article?
- (A) the speed with which the plague was able to spread
 - (B) the large percentage of the population affected by the plague
 - (C) the westward movement of the plague through Europe
 - (D) the slower spread of the plague through northeastern Europe
- 3 Why might Roman Catholic leaders have initially downplayed the effects of the plague?
- (A) The plague originated in Muslim areas.
 - (B) The plague was something they had already experienced.
 - (C) They thought the plague couldn't kill any more people.
 - (D) They were told by the king of Tarsus that the plague was over.

- 4 Read the sentence from the section "Almost 90 Percent Of Both Men And Women Died."

The plague moved through Dorset seaport, on to Devon, Somerset and up to Bristol.

Which option accurately compares the map and the selection from the article?

- (A) The map shows that in many areas the plague spread from rural areas to major cities like those in the selection.
 - (B) The map offers a closer look at the reasons why the plague spread across the cities in the selection.
 - (C) The selection gives a small example of the spread of the plague from port cities like those shown on the map.
 - (D) The selection explains the spread of the plague through cities in England that are highlighted by the map.
- 5 Based on details in the text, including the introduction, how must the plague have affected trade between nations?
- (A) Trade would have increased due to shortages.
 - (B) Trade would likely have drastically decreased.
 - (C) Trade would probably not have been affected in any way.
 - (D) Trade would have been disrupted, but only for a short time.

6 Read the sentence from the section "This Most Terrible Plague Came To The Coast Of England."

However, as they turned back to return to Tarsus, the Christians, who had been following in the rear, attacked and killed about 2,000 of them.

Does this sentence support a CENTRAL idea of the article? Why or why not?

- (A) Yes, it demonstrates that records at the time were very accurate.
- (B) Yes, it emphasizes the number of deaths that occurred from the plague.
- (C) No, it does not demonstrate the spread of the plague in Europe.
- (D) No, it does not emphasize the violent deaths of the time period.

7 Which example from the text supports the idea that government actions were affected by the plague?

- (A) There was a shortage of priests.
- (B) People were buried in fields, not churchyards.
- (C) People fled from objects left by the dead.
- (D) In England, court cases came to a stop.

8 The CENTRAL ideas of the article are developed by:

- (A) explaining how plagues affecting both animals and humans were connected by the English
- (B) describing the speed with which the plague spread and its impact across England
- (C) outlining the long history of the relationship between the Scots and the English
- (D) providing details about what people tried to do to cure others of the plague in England

The 1918 flu pandemic that killed millions

By History.com, adapted by Newsela staff on 12.18.17

Word Count **1,009**

Level **1180L**



Image 1. American Red Cross nurses tend to flu patients in temporary wards set up inside Oakland (California) Municipal Auditorium, 1918. Photo by: Edward A. "Doc" Rogers. From the Joseph R. Knowland collection at the Oakland History Room, Oakland Public Library.

The influenza or flu pandemic of 1918 to 1919, the deadliest in modern history, infected an estimated 500 million people worldwide -- about one-third of the planet's population at the time -- and killed an estimated 20 million to 50 million victims. More than 25 percent of the U.S. population became sick, and some 675,000 Americans died.

The 1918 flu was first observed in Europe, the United States, and parts of Asia, before swiftly spreading around the world. Surprisingly, many victims were young, otherwise healthy adults. At the time, there were no effective drugs or vaccines to treat this killer flu strain or prevent its spread. In the U.S., citizens were ordered to wear masks, and schools, theaters and other public places were closed. Researchers later discovered what made the 1918 pandemic so deadly: The influenza virus invaded victims' lungs and caused pneumonia.

Flu facts

Influenza, also called the flu, is a virus that attacks the respiratory system. The virus is highly contagious. When an infected person coughs, sneezes, or talks, respiratory droplets are generated

and transmitted into the air and can then be inhaled by anyone nearby. Additionally, a person who touches something with the virus on it and then touches his or her mouth, eyes, or nose can become infected.

Flu outbreaks happen every year and vary in severity, depending in part on what type of virus is spreading. Flu viruses can develop and change quickly. In the U.S., "flu season" generally runs from late fall into spring. In a typical year, more than 200,000 Americans are hospitalized for flu-related complications, including pneumonia, ear and sinus infections, and bronchitis.

During the last three decades, between 3,000 and 49,000 people have died annually because of the flu, according to the Centers for Disease Control and Prevention (CDC). Some people such as young children, people over age 65, and pregnant women face a higher risk of getting sick. Also vulnerable are people with certain medical conditions, such as asthma, diabetes, or heart disease. A flu pandemic, such as the one in 1918, occurs when an especially virulent new influenza strain for which there's little or no immunity appears and spreads quickly from person-to-person around the globe.

The flu strikes far and wide

The first wave of the 1918 pandemic occurred in the spring and was generally mild. The sick, who experienced such typical flu symptoms as chills, fever and fatigue, usually recovered after several days, and the number of reported deaths was low. However, a second, highly contagious wave of influenza appeared in the fall of that same year. Victims died within hours or days. Their skin turned blue and their lungs filled with fluid, causing them to suffocate.

It's unknown exactly where the particular strain of influenza that caused the pandemic came from. It became known around the world as the "Spanish Flu" because Spain was one of the earliest countries to be hit hard by the disease.

One unusual aspect of the 1918 flu was that it struck down many previously healthy younger men and women – a group normally resistant to this type of illness. In fact, according to journalist Gina Kolata, more U.S. soldiers died from the 1918 flu than died in battle during World War I (1914-1918).

Although the death toll of the 1918 flu is often estimated at 20 million to 50 million victims worldwide, other estimates run as high as 100 million. The exact numbers are impossible to know due to a lack of medical record-keeping in many places. What is known, however, is that few locations were immune. In the U.S., victims ranged from residents of major cities to those of remote Alaskan communities.

Fighting the flu

When the 1918 flu hit, doctors and scientists were unsure what caused it or how to treat it. Unlike today, they had no effective vaccines or antivirals, drugs that treat the flu.

Complicating matters was the fact that World War I had left parts of America with a shortage of physicians and health workers. Moreover, many of these medical personnel then came down with the flu themselves. In some areas, hospitals were so overloaded with flu patients that schools and private homes had to be converted into makeshift hospitals, some of which were staffed by medical students.

Officials in some communities quarantined the sick. They ordered citizens to wear masks and shut down public places, including schools, churches and theaters. People were advised to avoid shaking hands and to stay indoors. Libraries put a halt on lending books, and laws were even passed to make spitting illegal.

The flu takes a heavy toll on society

The flu took a heavy human toll, wiping out entire families and leaving countless widows and orphans in its wake.

The outbreak was also detrimental to the U.S. economy. Many businesses were forced to shut down because so many employees were sick. Basic services such as mail delivery and garbage collection were affected, and in some places there weren't enough farm workers to harvest crops.

Flu pandemic finally ends

By the summer of 1919, the flu pandemic came to an end. Those people who were infected had either died or developed immunity. Almost 90 years later, in 2008, researchers announced they'd discovered what made the 1918 flu so deadly. It was a group of three genes that enabled the virus to weaken a victim's bronchial tubes and lungs, so that pneumonia easily developed.

Since 1918, there have been several other influenza pandemics, although none have been quite as deadly. One pandemic from 1957 to 1958 killed around 2 million people worldwide, including some 70,000 in the United States. Another flu pandemic from 1968 to 1969 killed approximately 1 million people, including some 34,000 Americans. More than 12,000 Americans died during the H1N1 (or "swine flu") pandemic that occurred from 2009 to 2010.



Quiz

- 1 Which of the following BEST represents the response of the medical profession toward the flu pandemic of 1918?
- (A) The medical profession wanted to treat the flu virus but did not know how to do so.
 - (B) The medical profession ran out of antiviral drugs because it had just discovered how to make them.
 - (C) The medical profession tried to stop the flu virus by administering a flu vaccine to healthy people, but the vaccine was not effective.
 - (D) The medical profession was not able to stop the flu virus solely because most doctors and nurses contracted the virus.

- 2 HOW does the author introduce the idea that it took a while for the 1918 flu pandemic to become deadly?
- (A) by citing statistics about how many people were killed by the flu virus
 - (B) by describing the different places where the flu virus first appeared
 - (C) by comparing what happened in the two waves of the flu virus
 - (D) by explaining how the death toll went up when healthy young people died from the flu virus

- 3 HOW do the first and last paragraphs of the article relate to each other?
- (A) The first paragraph explains that millions of people in the U.S. died as a result of the 1918 flu pandemic, and the last paragraph explains why they died.
 - (B) The first paragraph explains that the 1918 flu pandemic killed millions of people worldwide, and the last paragraph explains how other flu pandemics later killed millions of people in the U.S.
 - (C) The first paragraph explains why the 1918 flu pandemic was the deadliest in modern history, and the last paragraph compares the number of people who died in other flu pandemics in modern history.
 - (D) The first paragraph explains that the 1918 flu pandemic killed people around the world, and the last paragraph explains that the 1957 flu pandemic mostly killed Americans.

- 4 Read the sentences below from different sections of the article.

When an infected person coughs, sneezes, or talks, respiratory droplets are generated and transmitted into the air and can then be inhaled by anyone nearby.

Officials in some communities quarantined the sick.

HOW does the relationship between these two sentences help develop a key idea of the article?

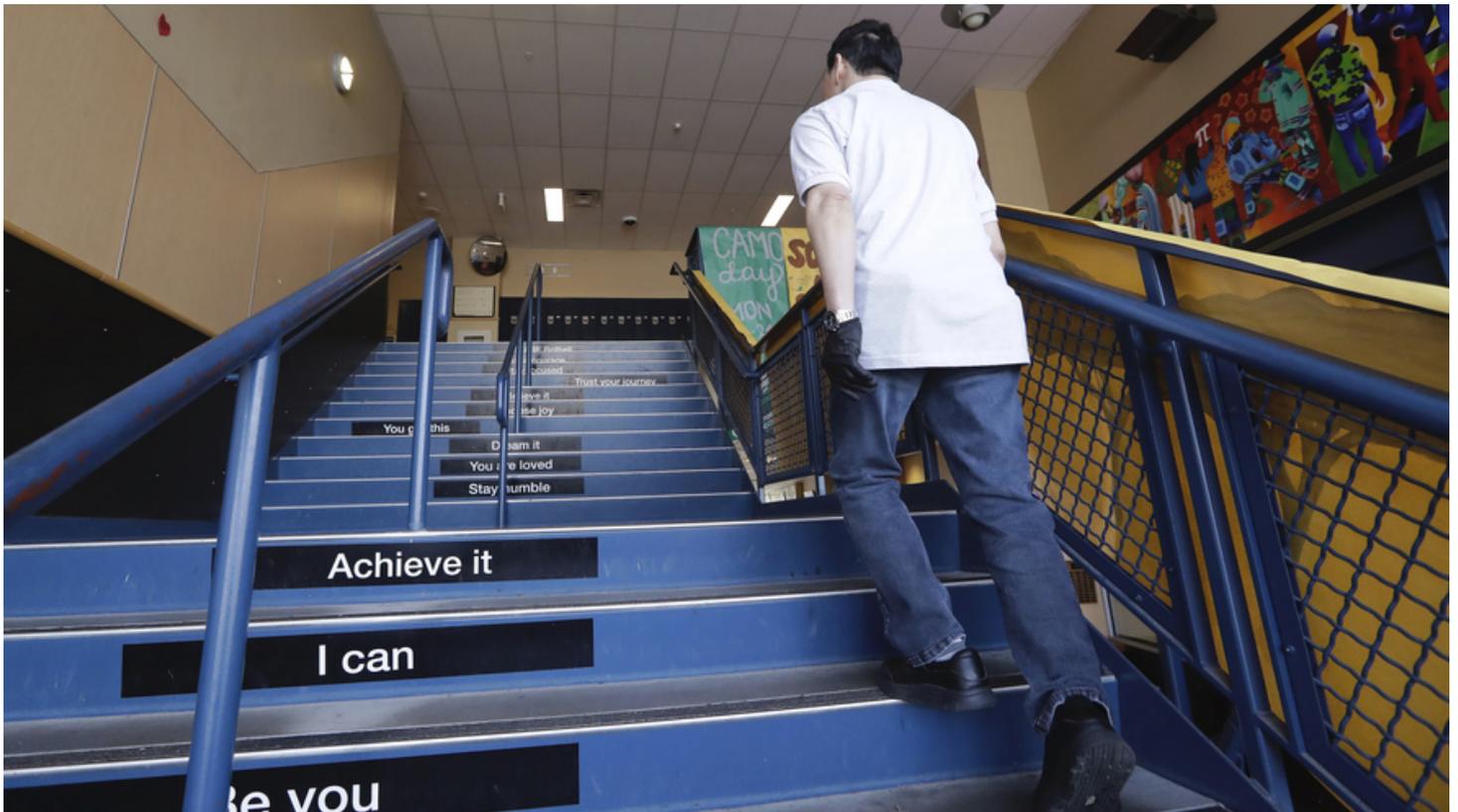
- (A) The first sentence helps explain why the flu virus was a problem, and the second sentence provides further information about that problem.
- (B) The first sentence helps explain why the flu virus was a problem and the second sentence explains one way people tried to solve this problem.
- (C) The first sentence describes how a person is infected by the flu virus, and the second sentence explains what causes a person to be infected by the flu virus.
- (D) The first sentence describes some symptoms of an infected person, and the second sentence explains where infected people are most likely to have those symptoms.

Canceled foreign trips and anxiety: U.S. schools prepare for coronavirus

By Hannah Natanson, Washington Post on 03.06.20

Word Count **1,096**

Level **MAX**



A school janitor walks up the stairs inside Bothell High School, which was closed for the day on February 27, 2020. The suburban Seattle, Washington, school was closed after a staffer's family member was placed in quarantine for showing symptoms of possibly contracting the new coronavirus. The school was to be cleaned and disinfected on February 27 while students stayed home. Photo: Elaine Thompson/AP Photo

Canceled international trips. Extra hand-washing and squirts of disinfectant between classes. Essay-length emails sent to parents, meant to reassure.

"A new disease is circulating," Northern Virginia school officials wrote of the novel coronavirus spreading around the world in a recent message to Fairfax County parents and staff. "It's natural for people to be concerned."

Hastened preparations are taking place in elementary, middle and high schools throughout the nation as Americans watch for the arrival of the coronavirus. The flulike illness, which originated in China, had infected more than 93,000 and killed 3,199 people worldwide as of March 4.

Officials at the Centers for Disease Control and Prevention (CDC) urged the public at the end of February to prepare for the virus' "inevitable" spread inside the United States - including in

schools.

Parents should "ask their schools about plans for dismissal" and for online classes, said Nancy Messonnier, director of the CDC's National Center for Immunization and Respiratory Diseases. "I contacted my local school superintendent this morning with exactly those questions."

Messonnier's comments spurred anxiety in Washington-area schools. Fairfax County school officials opened their inboxes on February 26 to find concerned messages from parents, according to spokeswoman Lucy Caldwell.

The school system - with 188,000 students, one of the largest in the nation - replied in website updates and emails with the same instructions it has offered since the coronavirus surfaced.

"Our key messages remain: wash your hands frequently and stay home when ill to prevent contagion," Caldwell said.

On the same day of the federal warnings, Fairfax County schools canceled international field trips and short-term visits to countries where residents have fallen ill from the coronavirus. As of February 26, school officials had suspended seven exchange programs arranged with countries including South Korea, Japan and Italy, Caldwell said.

The school system is also reviewing "emergency preparedness and response plans," Caldwell said - including the possibility of online classes. Several other school systems in the Washington region said they are doing the same.

Class closures are unlikely in the near future, experts said, because relatively few coronavirus cases have been diagnosed in the United States. There were 135 people with the virus in the United States as of March 4, and 42 of them had been aboard a cruise ship. No cases have been confirmed in the District of Columbia, Maryland or Virginia, authorities said.

School officials developed contingency plans for remote learning after weathering pandemics including SARS and the H1N1 swine flu, said Bob Farrace, spokesman for the National Association of Secondary School Principals.

"It could be webcam classes, it could be work students are submitting online, it could even be chat rooms that replicate a class," Farrace said. "If there is any silver lining to coronavirus, it's that maybe it will prompt even more schools to consider this stuff."

As schools consider virtual education, they should help parents plan for time stuck at home, said Samuel Scarpino, a Northeastern University assistant professor who studies epidemics. For example, he said, administrators should tell mothers and fathers to fill all medical prescriptions as soon as possible.

"No one tends to think of something like prescriptions," Scarpino said.

Socioeconomic status could dramatically alter how students experience the virus, said Harvard global health lecturer Jesse Bump.

Low-income families will be less able to adjust if schools suddenly close, ending services such as free or reduced-price meals, Bump said - and, if classes go online, households without WiFi will be at a severe disadvantage.

Authorities must be ready to step in if schools shutter, Bump said, because the closures will deprive communities of a crucial resource - at the very moment it's most needed.

"Schools are a focal point," he said. "They're a natural way to disseminate information."

Administrators in Maryland's largest school district experienced that in recent weeks. Hundreds of parents have phoned or emailed to share worries or ask questions about the virus, Montgomery County Public Schools spokesman Derek Turner said.

Some parents wanted to know whether officials would quarantine students whose families recently visited Asia. Another parent wondered whether a scheduled spring trip to South Korea could lead to quarantine.

Still another inquired whether school officials are spraying classroom surfaces with disinfectant or scrubbing down laptops.

"We don't have the capacity to wipe down everything that everyone touches every day," Turner said.

Parental anxiety in Montgomery County, which enrolls more than 165,000 students, is "palpable," Turner said. The school is working to forestall panic by sending families infection statistics and guidance provided by the CDC - a tactic adopted by school systems throughout Maryland and Virginia and in the District.

A February 13 email to parents in Loudoun County Public Schools, a Northern Virginia district with roughly 84,000 students, provided links to four government websites. It also repeated the email and phone number for the Loudoun County Health Department three times.

"Keeping parents informed," Loudoun schools spokesman Rob Doolittle said, "is an obligation we take very seriously."

None of the emails, though, prepared Rein Alyn for what happened to her daughter in February.

One day in mid-February, the Loudoun County third-grader - who is of Filipino and European descent - arrived home and told her mother the bus ride to school had been "really frustrating." A boy she knew, the 8-year-old said, called her "an Asian immigrant," even though she was born in the United States.

That meant she "had the coronavirus," the boy said. It meant she must be shunned.

It was the first time the child had encountered this kind of racism, her mother said.

Bump said that throughout U.S. history, people have manipulated fears of infectious disease to discriminate against minority groups.

"This is part of a long and ugly tradition," Bump said.

Rein, who emigrated from the Philippines at age 3 and served in the U.S. military, hopes the next email from Loudoun County will condemn coronavirus-related bullying. Doolittle said that the school system takes all reports of bullying "very seriously," but that officials "are not aware" of virus-driven harassment "occurring with any frequency."

Rein, 37 years old, also hopes the incident did not diminish her daughter's patriotism, highly valued in their military family. (Her husband served, too.) That evening, Rein explained to her daughter that some Americans may treat her differently because "her mom is from another country" - but that the United States is worth loving anyway.

That seemed to resonate. Rein warned her daughter she might hear more comments, should the coronavirus become widespread. To this, the girl made no reply.

Instead, Rein said, her daughter just shook her head.

Quiz

- 1 The following evidence was gathered to support the argument that U.S. schools are working to avoid and mitigate a potential coronavirus outbreak.

1. *On the same day of the federal warnings, Fairfax County schools canceled international field trips and short-term visits to countries where residents have fallen ill from the coronavirus.*
2. *The school system is also reviewing "emergency preparedness and response plans," Caldwell said — including the possibility of online classes.*
3. *The school is working to forestall panic by sending families infection statistics and guidance provided by the CDC — a tactic adopted by school systems throughout Maryland and Virginia and in the District.*

What additional piece of evidence helps create the MOST complete argument that U.S. schools are working to avoid and mitigate a potential coronavirus outbreak?

- (A) The flulike illness, which originated in China, had infected more than 93,000 and killed 3,199 people worldwide as of March 4.
- (B) Fairfax County school officials opened their inboxes on February 26 to find concerned messages from parents, according to spokeswoman Lucy Caldwell.
- (C) As of February 26, school officials had suspended seven exchange programs arranged with countries including South Korea, Japan and Italy, Caldwell said.
- (D) "If there is any silver lining to coronavirus, it's that maybe it will prompt even more schools to consider this stuff."

- 2 Read the following paragraph from the article.

Low-income families will be less able to adjust if schools suddenly close, ending services such as free or reduced-price meals, Bump said — and, if classes go online, households without WiFi will be at a severe disadvantage.

Which of the following conclusions can be drawn from the paragraph above?

- (A) School districts are working to provide internet access for students who lack it at home.
- (B) A coronavirus outbreak likely would affect low-income communities more than others.
- (C) If schools are forced to close because of coronavirus, they will deliver meals to low-income students.
- (D) In case of an outbreak, it would be better for schools to forgo classes than to conduct them online.

- 3 Which sentence BEST summarizes how the coronavirus has affected Asian American students?

- (A) It has caused some of them to face racial comments about carrying the coronavirus.
- (B) It has given them an opportunity to talk about their ancestry with their classmates.
- (C) It has not affected Asian American students in any specific way.
- (D) It has forced many of them to stay home from school.

- 4 What role does a quarantine play in the spread of infectious diseases?

- (A) It is aimed at limiting the number of states hit by infectious diseases.
- (B) It is aimed at reducing the spread of infectious diseases.
- (C) It has no effect on the spread of infectious diseases.
- (D) It has the potential to create new strains of infectious diseases.

Tracking the spread of coronavirus with a map

By PBS NewsHour, adapted by Newsela staff on 01.29.20

Word Count **680**

Level **1180L**



This map created by Johns Hopkins University's Center for Systems Science and Engineering on January 22 tracks the spread and location of the deadly novel coronavirus. Map: John Hopkins University Center for Systems Science and Engineering

A map created by U.S. researchers tracks in real-time a virus in China that has sickened almost 6,000 people and resulted in 132 deaths as of January 29. This new virus is a strain in the coronavirus family and has been linked to an outbreak of pneumonia. Global public health officials are concerned about its potential to spread around the world, which is why they are closely tracking it.

"Transparent Data Sources"

Researchers at Johns Hopkins University's Center for Systems Science and Engineering launched the map on January 22. They suggest that the virus may be growing faster than what sources have reported so far.

"We think it is important for the public to have an understanding of the situation as it unfolds, with transparent data sources," said Lauren Gardner. Gardner is a professor in civil and systems engineering at Johns Hopkins University and led the team that produced the map.

The map shows the official global death toll. It also plots out a higher infection rate, showing the virus has made 555 people sick as of January 22.

A Live-Animal Market In Wuhan, China

The outbreak is centered in Wuhan, China — a city of 11 million residents — where the virus was traced back to a live-animal market. Outside of China, cases have been reported so far this week in the U.S., Taiwan, Thailand, South Korea and Japan, the Centers for Disease Control and Prevention (CDC) reported.

Novel coronavirus belongs to a family of viruses linked to gastrointestinal and respiratory infections in pigs, dogs, bats, cats, poultry and other animals. When spread to humans, it triggers respiratory symptoms, affecting the lungs.

The virus spreads through water droplets that spew into the air when an infected person sneezes or coughs. Those droplets spread the virus when they are inhaled through a person's nose or mouth or wiped into their eyes, according to Daniel Kuritzkes. Kuritzkes is chief of the Division of Infectious Diseases at a hospital in Boston, Massachusetts.

Gardner said the map is a "very simple" collection of reported cases gathered from local sources.

Mapping Media Reports

To make the map, Gardner and her team combed through and compiled local Chinese media reports. The reports were then translated into English and their locations were mapped. As new reports come in, the map is updated, Gardner said.

Since there is much the public health community still does not know about novel coronavirus, "it's hard to keep it up to date," she said. People may not know they are infected until they show symptoms. Another important thing to keep in mind is that novel coronavirus in many ways resembles influenza, the common flu, so people may not realize they have it.

"There's not a lot of other global cases reported yet," Gardner said. "They'll happen because people travel."

The timing of the outbreak is opportunistic for the virus, and dangerous for people. This week, millions of people are embarking on international travel, particularly in and out of East Asia, for Lunar New Year celebrations — the world's largest annual human migration.

Extreme Measures To Fight The Outbreak

In China, authorities have taken extreme measures to prevent further spread of the virus. They suspended train and airplane travel from Wuhan along with bus, subway and ferry travel, a Chinese news agency reported. These measures effectively quarantined the city, isolating it from the rest of China.

"Public transport and other mass gatherings should be avoided," said World Health Organization (WHO) Director-General Tedros Adhanom.

As of January 24, there were two reported cases of the coronavirus in the U.S. One person in Washington state has been infected with the virus after traveling to Wuhan. A woman in Chicago, Illinois, was also diagnosed with the virus after traveling back to the U.S. from Wuhan.

The CDC increased its travel warning to U.S. residents and Great Britain issued an advisory against all, except essential, travel to Wuhan.

As the outbreak spreads beyond China, Gardner said her team will rely on WHO and CDC data to keep their map up to date.

Quiz

1 Read the paragraph from the section "Mapping Media Reports."

Since there is much the public health community still does not know about novel coronavirus, "it's hard to keep it up to date," she said. People may not know they are infected until they show symptoms. Another important thing to keep in mind is that novel coronavirus in many ways resembles influenza, the common flu, so people may not realize they have it.

Which of the following can be inferred from the paragraph above?

- (A) It is impossible to know if you have contracted novel coronavirus unless you go to a doctor to have your blood tested.
- (B) It is likely that many people have already contracted and are unknowingly spreading novel coronavirus.
- (C) The reported cases of novel coronavirus are spreading faster than Chinese and international health agencies can track them.
- (D) Anyone who has flu-like symptoms should immediately quarantine themselves and be tested for novel coronavirus as soon as possible.

2 Read the following statement.

Novel coronavirus is easily transmittable, so quarantining known carriers is critical.

Which sentence from the article BEST supports the statement above?

- (A) Global public health officials are concerned about its potential to spread around the world, which is why they are closely tracking it.
- (B) The outbreak is centered in Wuhan, China — a city of 11 million residents — where the virus was traced back to a live-animal market.
- (C) Since there is much the public health community still does not know about novel coronavirus, "it's hard to keep it up to date," she said.
- (D) They suspended train and airplane travel from Wuhan along with bus, subway and ferry travel, a Chinese news agency reported.

3 Which of the following BEST represents the Chinese government's approach to dealing with the novel coronavirus outbreak in the article?

- (A) They have isolated the city in which the virus originated from the rest of China.
- (B) They have prohibited people from traveling to China for Lunar New Year celebrations.
- (C) They have set up virus checkpoints at all major sea and air entry points into the country.
- (D) They have asked other countries to send experts and doctors to help address the crisis.

4 Why did the author conclude the article by describing international response to the outbreak and Lauren Gardner's plans to update her team's map?

- (A) to illustrate what virus and disease experts are hoping to learn from this outbreak
- (B) to help the reader understand what they can do to help to prevent the spread of the virus
- (C) to describe the effect of international efforts to help control the outbreak
- (D) to suggest that the virus will likely infect many more people before it is contained