# MIDDLE SCHOOL UNIT STORYLINE

## How can people help end pandemics?

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<td><strong>Lesson 1</strong></td>
<td></td>
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<td>2 days</td>
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<tr>
<td>How have our lives changed because of COVID-19?</td>
<td>There is an important pre-write in Lesson 0. In this lesson, we discuss as a group the changes in our lives and the lives of other people. We introduce the basic vocabulary of how we’ll refer to COVID-19 and the COVID-19 virus. We analyze data from the COVID-19 pandemic around the world and then develop a timeline of what has happened in our area, the country, and the world since the pandemic began. We add personal events to this timeline at home. We discuss our timeline and realize one of the most important events is missing: how the pandemic ends. We develop a Driving Question Board with our questions about the COVID-19 pandemic and how it will end. We wonder about other pandemics in the past and we watch a video about success in addressing the pandemic in Africa.</td>
<td>Prior to this lesson, students answer prompts to reflect on how both their and others’ lives have changed because of the COVID-19 pandemic. Students will be invited to consider how specific groups of people - friends, family, and strangers, both nearby and far away - have also been affected by COVID-19.</td>
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<tr>
<td>Anchoring phenomenon</td>
<td>Students share what has changed for them, friends, family, and other people due to the COVID-19 pandemic and construct a timeline of events.</td>
<td>*Lesson 0 includes a 15 min prewrite</td>
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*Navigation to the next lesson: We wonder what we could learn from other pandemics in history? Would they help us figure out how this is all going to end?*

| **Lesson 2**    |                             |                           |                          |
| 2 days          |                             |                           |                          |
| How can past pandemics help us learn about the COVID-19 pandemic? | We share what we know about COVID-19. Then, based on what we know, we brainstorm a list of criteria that we could use to compare epidemics and pandemics from the past to the COVID-19 pandemic to help us think about how the COVID-19 pandemic might end. In small groups, we analyze information about past public health crises and then look across the different cases. We find out that the 1918 influenza pandemic symptoms were similar to COVID-19 and the influenza virus caused a lot of cases of illness and death and affected people worldwide, similar to what happened with COVID-19. We also learn that communities responded to the 1918 pandemic by asking citizens to wear masks, closing schools and businesses, and practicing quarantine. Based on these criteria, we argue that the 1918 influenza pandemic is most relevant in trying to determine how the COVID-19 pandemic will end. | Students will compare their experiences, thoughts, and emotions to an imagined person of their same age from the 1918 influenza pandemic. They will be prompted to identify the emotions (self awareness) they feel while hearing the stories of individuals who experienced the 1918 influenza pandemic and be asked to reflect how the different experiences connect with or are different than their own (social awareness). |
| Investigation   |                             |                           |                          |
| Students read case studies of past pandemics and epidemics. | *Image courtesy of the National Museum of Health and Medicine* | |

*Navigation to the next lesson: Now that we have spent some time considering and writing about our own experiences and the experiences of others in what we think is a similar time - the 1918 influenza pandemic - we wonder if looking back at the 1918 flu more closely would give us some information about what to expect moving forward and to help us understand even more about the COVID-19 pandemic.*
### Lesson 3

**2 days**

**What can we learn from how the 1918 influenza pandemic ended?**

**Investigation**

Students analyze a timeline of the 1918 influenza pandemic and then explore data about the strategies used to end the pandemic when people did not even know what was making them sick.

We analyze a timeline of the 1918 influenza pandemic and realize how a public health crisis shapes other important aspects of society. We also note with surprise that the pandemic apparently ended, even though people didn’t know what they were dealing with. We see that distancing and other measures helped to decrease the death rates in some cities and, although the 1918 influenza seemed to go away on its own, it is in fact still with us as the seasonal influenza (also known as the seasonal flu). We define what it means for a pandemic to be over and decide to figure out how we can trace a pandemic and use patterns to better understand disease.

Students will return to their journals with an opportunity to reflect on how they feel about gatherings being limited in the pandemic. They will also be prompted to reflect on how cultural assets, their relationships, and technological tools have helped support them in this time.

**Navigation to the next lesson:** In 1918, scientists and doctors did not know what was causing people to get sick, and they did not have any specific treatments, or a vaccine. They tried masks and distancing, but how did they even know that people were getting each other sick? Let us back up and see how one person and figure out how they might have gotten sick during the COVID-19 pandemic.

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### Lesson 4

**2 days**

**How did people figure out how to flatten the curve if they did not know what was making people sick?**

**Investigation**

Students work with a card-based contact tracing simulation to figure out how the COVID-19 virus spreads through a group of people.

We realize that we have a lot more technology during the COVID-19 pandemic then we had during the 1918 influenza pandemic. We wonder how, in 1918, they figured out how to recommend effective guidelines to slow the spread of disease when they knew so little about what they were fighting. Comparing information about individuals (e.g., their jobs, who they interacted with, mask wearing) who were exposed to the disease and seeing different individual outcomes could help us understand how the disease is transmitted in order to recommend effective guidelines to reduce transmission. We engage in a simulation to experience contact tracing. Patterns emerge that can be used as evidence to support ideas about the mechanism of disease transmission, allowing for the proposal of practices to reduce transmission. We compare the assumptions made in a Contact Tracing activity to the actual data about contact tracing during the COVID-19 pandemic and notice that there are a number of people who do not want to participate in contact tracing. Students read an article about privacy laws and the lack of trust people have with providing their personal information.

In their SEL journals, students choose a prompt to respond to that supports them in reflecting on their experience with the Contact Tracing activity and how the lack of trust in sharing information with other people, companies, institutions, and governments impacts our ability to slow the spread of the COVID-19 virus.

**Navigation to the next lesson:** We see some patterns in the spread of the COVID-19 virus, but we still need to figure out how that virus is getting from one person to another.
Lesson 5
3 days

How does the virus get from person to person?

Investigation

We read about how a person can get infected when the COVID-19 virus gets inside their body. We wonder how that virus then gets into someone else's body. We zoom in on someone coughing or sneezing and see what stuff leaves their body - we learn these are respiratory droplets. We develop a model of how the virus spreads from person to person. We wonder if these droplets can stay up in the air, how far they travel from person to person, and how their spread is impacted by masks. We plan and carry out an investigation to figure out how far droplets can travel and how they are affected by masks. We have a Building Understandings Discussion, compare our findings to expert recommendations, and reflect on scientists' recommendations that people wear masks when they're going to be near others in times of pandemic disease spread.

If desired, in this lesson, students complete optional prompts reflecting on the idea of mask mandates as a solution for keeping people safe and whether or not those types of mandates are fair for everyone.

⇓ Navigation to the next lesson: We see that masks and social distancing can prevent the virus from spreading from person to person. At the beginning of Lesson 6, we revisit our Driving Question Board and decide we need to investigate our remaining questions about vaccines and how they slow and stop the spread of the COVID-19 virus.

Lesson 6
1 day

How do vaccines slow and stop the COVID-19 virus?

Investigation

We decide to investigate vaccines next since a lot of our remaining questions revolve around how vaccines might be able to slow and stop the spread of the COVID-19 virus. We annotate and discuss a reading about vaccines that helps us understand a little bit about how vaccines work and that they are highly effective in preventing cases and serious illness. We also analyze a simulation and model to help us understand that vaccines do not just protect vaccinated individuals, but also the people around them. We have a Building Understandings Discussion, compare our findings to expert recommendations, and reflect on scientists' recommendations that people wear masks when they're going to be near others in times of pandemic disease spread.

Students discuss who is part of their community using the relationships between Lesson 4 character cards to guide and motivate the discussion. Students have the option to complete a prompt about what community means to them.

⇓ Navigation to the next lesson: We have seen how masks, vaccines, and other strategies work and can protect us. We have also seen that these same methods can protect others and our community. The word “community” can mean a lot of different things. What does “community” mean when we are talking about the spread of the COVID-19 virus?
### Lesson 7

1 day

**Who is being protected?**

**Investigation**

*Students explore social networks of people to examine how protective measures and decisions affect groups of people.*

We wonder: Who is protected by the measures in the Swiss Cheese Model? Is it the people taking the actions, others in the community, ourselves, or is everyone protected when people take steps to slow the spread of the virus? We discuss our definitions of "community" from Lesson 6 to determine who is affected by our actions. Having realized that a lot of individuals and communities have struggled to implement these methods, we begin to wonder why this is so difficult. Students return to the character cards from Lesson 4 to help them define "risk" and "protection". They then work in groups to use some of the character cards to create a community plan designed to help protect their communities. Students then reflect on their plans to see whose voices were used and which voices were missing in the design of the community plans. Students end by reflecting on decisions that they have made during the COVID-19 pandemic.

Students add to their journals, reflecting on the decisions they make or have made during the pandemic and how the decisions could or did affect their communities.

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### Lesson 8

2 days

**How do personal decisions affect and protect communities?**

**Culminating Activity**

*Students explore how people tell stories to share information and protect communities.*

We revisit the Driving Question Board and explore stories of people in a range of communities—their experiences with, reactions to, and solutions for protecting their communities during the COVID-19 pandemic. In these stories, we see how people communicate and determine threats, risks, and protections as they develop the historical record and tell stories about community health, strength, and resilience in crisis.

We then create our own stories of the pandemic as a way to share information and to promote health and protection in our communities.

In this culminating lesson, students use their journals from the unit to find powerful words or phrases that help them craft their final stories and reflect on what community means to them.

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15 days total