

COVID-19

Current as of March 17, 2020

This is the most important slide.

Your most important sources of information are: (1) your doctor and (2) the CDC. Call your doctor if you have any symptoms that worry you, and explore the CDC's website (<https://www.cdc.gov/coronavirus/2019-ncov/index.html>) for the most accurate information about this outbreak. Follow advice from these two sources above anything else, including this slide deck (*which is not medical advice and should not be used in lieu of medical advice, of course*).

If you don't have a doctor, call your state/city/area hotline, or a local hospital or clinic, to ask where you can go if you have symptoms. **UW's COVID19 hotline is: 608-720-5300**

Definitions

SARS-CoV-2: This is the name of the virus found to be causing influenza-like illness and severe pneumonia in Wuhan, China, in late 2019. “SARS-CoV-2” stands for “Severe Acute Respiratory Syndrome Coronavirus 2.” The first severe acute respiratory syndrome coronavirus, SARS-CoV, emerged and cause disease in China in 2003.

COVID-19: This is the name given to the disease caused by the virus. “COVID-19” stands for “COronaVirus Disease 2019.”

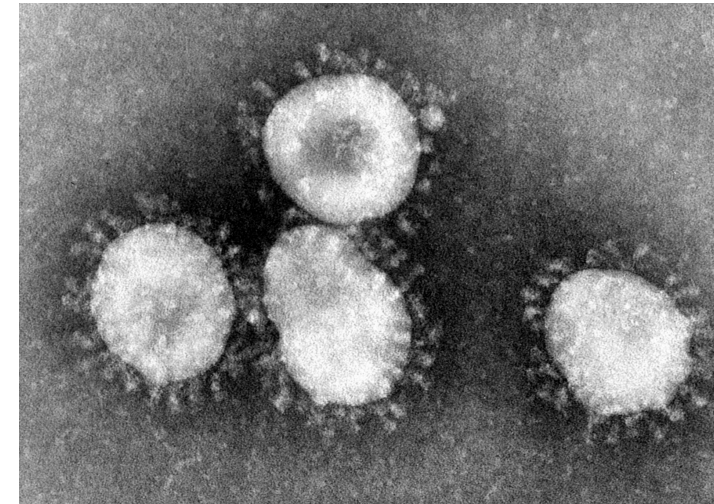
What is a coronavirus?

Coronaviruses are small, enveloped RNA viruses.

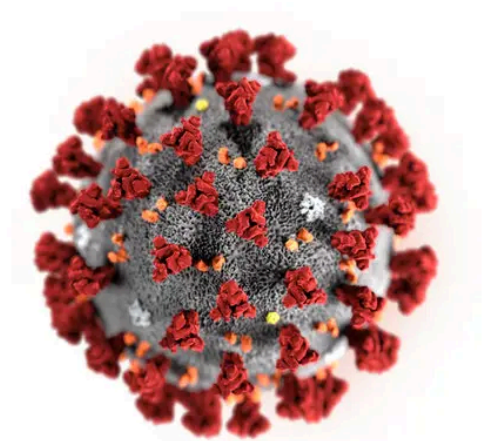
Being “**enveloped**” means it is surrounded by a thin membrane that can be destroyed by alcohol.

Being an RNA virus means **its genetic information is stored in RNA**, rather than in DNA like ours.

Some species of coronaviruses frequently infect humans and cause “common colds.” Three species of coronaviruses (SARS-CoV, MERS, and SARS-CoV-2) have spilled over into humans from animals and **can cause serious illness.**



Electron microscopy photo

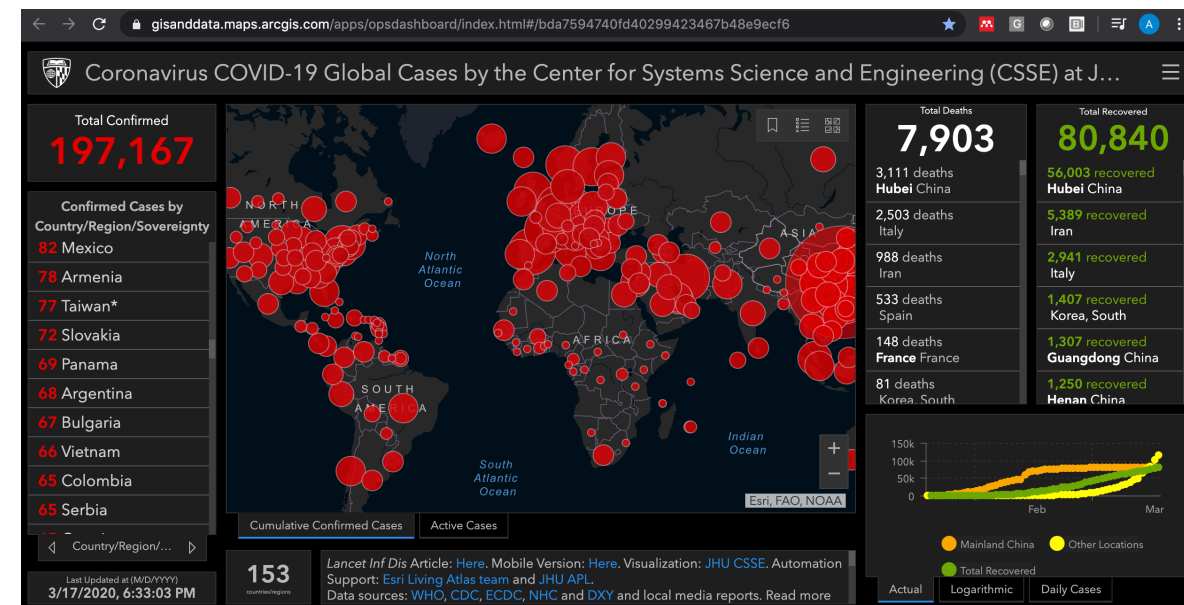


Artist rendering

What damage has SARS-CoV-2/ COVID19 caused to date?

This virus was discovered in Wuhan, China in late 2019. As of March 17, 2020, the virus is known to have infected 197,167 people in 153 countries. Of those known to be infected, 7,903 have died, and 80,840 have now recovered.

You can track daily new cases here:
<https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>



What makes SARS-CoV-2/ COVID19 so bad?

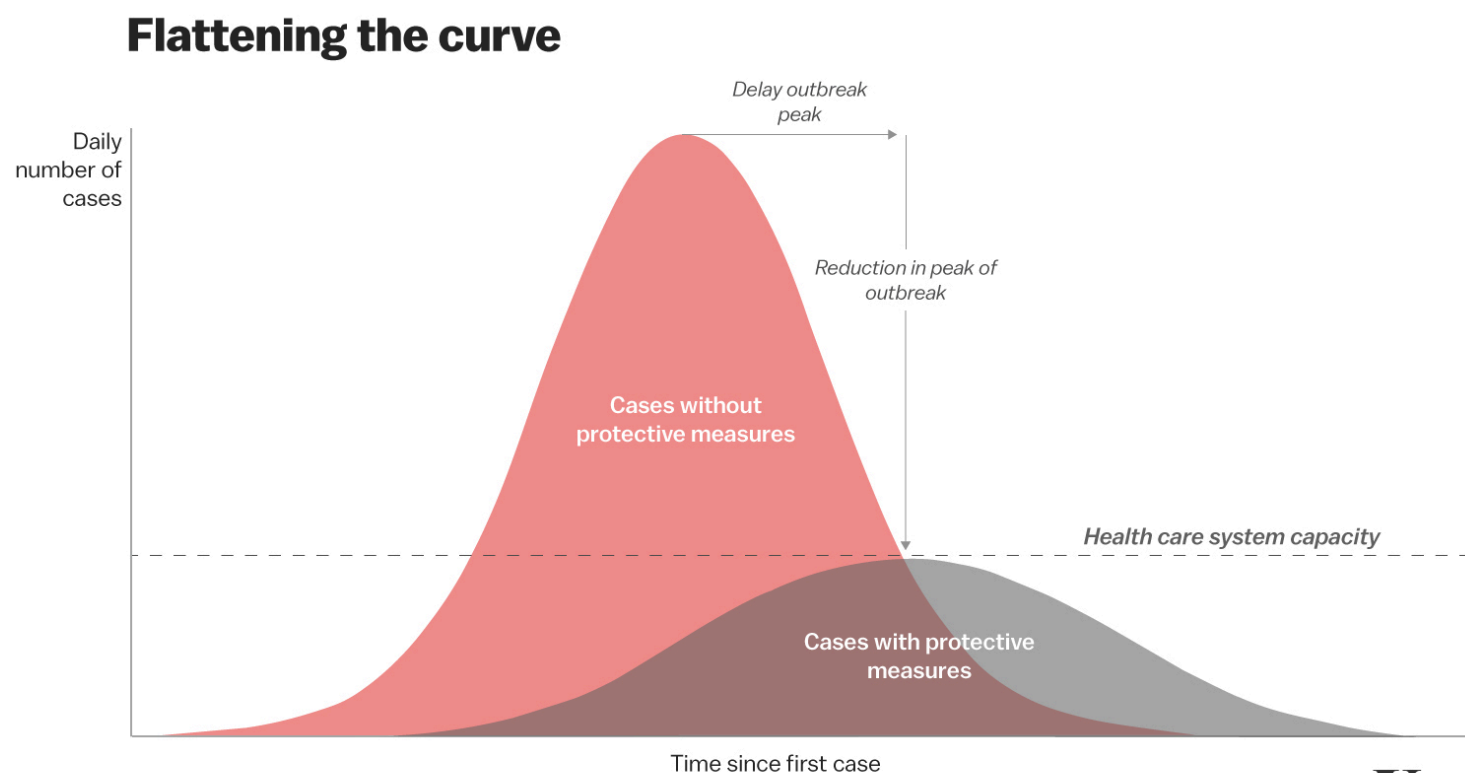
SARS-CoV-2 appears to spread more easily than the flu (influenza virus) does and less easily than measles does. **Each person infected with SARS-CoV-2 will spread the virus to 2-3 other people on average.**

We don't yet know what makes the difference between someone having mild disease or severe disease, but **people who are older, have medical problems, or are immunocompromised are more likely to have severe disease.** Young, healthy people have gotten the severe disease form, however.

How bad is SARS-CoV-2/ COVID19?

This coronavirus appears to be at least **5-10 times more deadly than flu**.

From the numbers we have now, it appears that **~80% of people who get the virus will only have mild disease, but the other 20% will need a hospital bed or ICU bed**. If a lot of people get infected all at once, that could overwhelm our healthcare system, making it more dangerous for anyone who gets sick. *(So it's really important to take measures to try to prevent yourself from getting infected for as long as possible!)*



Source: CDC

Vox

<https://www.vox.com/2020/3/10/21171481/coronavirus-us-cases-quarantine-cancellation>

How does SARS-CoV-2/ COVID19 spread?

We know **the virus spreads between people via secretions: droplets from coughing, mucus**, etc. If an infected person coughs into their hand, then shakes your hand, and then you touch your mouth or eat food without washing your hands, you will likely get the virus. You could also be infected by touching your face after touching a surface in public that an infected person touched or coughed on.

The virus may spread other ways—such as through feces—but none have been rigorously documented. *(Either way, wash your hands!)*

How can we prevent the spread of SARS-CoV-2/COVID19?

Wash your hands, for at least 20 seconds at a time, vigorously, and frequently! The combination of water, soap, and vigorous washing can rid your hands of viruses and other microbes.

Hand sanitizer is also useful (though hand-washing is better). **The sanitizer needs to be at least 60% alcohol to be effective**, per the CDC's recommendations.

Avoid **touching your face**.

Practice **social distancing!** [see next slide]

Have a plan in place for if you or someone in your household become sick (check out the CDC's recommended planning strategies: <https://www.cdc.gov/coronavirus/2019-ncov/community/home/get-your-household-ready-for-COVID-19.html>)

Social distancing

Avoid events and places in which **large groups of people gather**. Work or study from home if possible.

Try to keep **several feet of space between yourself and others** when out in public.

Avoid **handshakes and high-fives**.

Wash your hands after returning from a public space, like a grocery store. Try to avoid going to public spaces often (for example, stock up on food and supplies to limit grocery store trips).

*****The CDC recommends social distancing as the BEST way to prevent the spread of this virus—you can make a big difference by doing this!*****

Some frequently asked questions

There have been few/no cases in my area. Do I still need to practice social distancing?

Yes, you do need to practice social distancing. People can have the virus and have few or no symptoms, while still spreading the virus to others. People can have no symptoms for up to 14 days after contracting the virus, during which time they will still be spreading the virus everywhere they go.

Children don't usually get sick from the virus. Why do we need to close schools and stop playdates?

Children can contract the virus without getting sick, and kids can still spread the virus to other kids and adults (in fact, some evidence shows kids might spread the virus at really high rates). It is really important to have kids practice social distancing, too.

What to do if you get mildly sick

Call your doctor (don't schedule an appointment—going to the doctor's office could spread the virus) if you have these symptoms: **fever, cough, and shortness of breath.**

Stay home. Don't go to work or school.

If you live with others, try to **quarantine yourself away from healthy people.** If you live alone, have a friend/neighbor/family member call you several times a day to make sure you are not developing serious symptoms.

What to do if you get severely sick

If you develop any of these* warning symptoms, seek medical attention immediately:

- Difficulty breathing or shortness of breath
- Persistent pain or pressure in the chest
- New confusion or inability to arouse
- Bluish lips or face

***These are not the only warning symptoms: keep in touch with your medical provider about any changes or new symptoms you notice.**

Sources

1. <https://www.cdc.gov/coronavirus/2019-ncov/index.html>
2. <https://www.cdc.gov/coronavirus/2019-ncov/specific-groups/high-risk-complications.html>
3. http://www.cidrap.umn.edu/sites/default/files/public/php/185/185_factsheet_social_distancing.pdf
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5. <https://www.vox.com/2020/3/10/21171481/coronavirus-us-cases-quarantine-cancellation>
6. <https://www.statnews.com/2020/03/10/simple-math-alarming-answers-covid-19/>
7. <https://www.nature.com/articles/s41579-018-0118-9>
8. <https://www.who.int/health-topics/coronavirus>