The COVID-19 Pandemic

Sharon Nachman, MD
Chief, Division of Pediatric Infectious Diseases
Stony Brook Children’s Hospital
Stony Brook University Renaissance School of Medicine
What is a pandemic?

There are many types of human coronaviruses, including some that commonly cause mild upper-respiratory tract illnesses.

COVID-19 is a new disease, caused by a novel or new coronavirus that has not previously been seen in humans.

In COVID-19, ‘CO’ stands for ‘corona,’ ‘VI’ for ‘virus,’ and ‘D’ for disease.
WHERE ARE WE NOW?

From Johns Hopkins Coronavirus Resource Center (https://coronavirus.jhu.edu/map.html)
HOW DID WE GET HERE?

- First patients in China in Nov-Dec
- Began in the US as scattered cases in Jan.
- Feb-March: other countries outpace China as they get control
• 826,222 cases worldwide
• 174,467 in the U.S.
• 5,791 in Suffolk County
• Deaths: 40,636 worldwide, 3,416 in the U.S., 44 in Suffolk County
How COVID-19 Spreads

• The first infections were linked to a live animal market, but the virus is now spreading from person-to-person

• This type of transmission occurs via respiratory droplets, and disease transmission via infectious aerosols is currently uncertain

• The number of cases in the U.S. is rising due to both increased laboratory testing and reporting across the country, and rapid community spreads in many states and territories
WHO IS AT HIGHER RISK FOR SERIOUS ILLNESS FROM COVID-19?

• Older adults
• People of any age who have serious underlying medical conditions, such as:
  o Heart disease
  o Diabetes
  o Lung disease (ex. Asthma, COPD)
  o Obesity
Current symptoms reported have included mild to severe respiratory illness with **fever, cough, and difficulty breathing**.

Not everyone needs to be tested for COVID-19! Those with mild symptoms can follow isolation precautions alone.
The symptoms of COVID-19 are similar in children and adults. However, children with confirmed COVID-19 have generally presented with mild symptoms.

Reported symptoms in children include:

- Cold-like symptoms (fever, runny nose, and cough)
- Vomiting and diarrhea

It’s not known yet whether children with certain underlying medical conditions and special healthcare needs are at higher risk for severe illness.

There is so much more that we need to learn!
COVID-19 INCIDENCE IN CHILDREN

• Based on available evidence, children do not appear to be at higher risk for COVID-19 than adults

• While some children and infants have been sick with COVID-19, adults make up majority of the known cases to date, likely because they are more commonly tested
• About 4% of children were asymptomatic, 51% had mild illness and 39% had moderate illness.
• About 6% had severe or critical illness, compared to 18.5% of adults.
• The study also found infants had higher rates of serious illness than older children.
• Just under 11% of infants had severe or critical cases:
  • 7% of children ages 1-5,
  • 4% of those 6-10, 4% of those 11-15
  • 3% of those 16 and older
How to Protect Yourself

• Clean your hands often!
  o Wash with soap and water for at least 20 seconds
  o Use a hand sanitizer contains at least 60% alcohol
  o Avoid touching your nose, mouth and eyes with unwashed hands

• Avoid close contact
  o Distance between yourself and other people
HOW DO WE PROTECT OUR CHILDREN FROM COVID-19

- You can encourage your child to help stop the spread by teaching them to do the same things everyone should do to stay healthy
  - Clean hands
  - Avoid sick contacts
  - Clean and disinfect high-touch surfaces daily
  - Launder items including washable plush toys as appropriate
CAN SOMEONE WHO HAS HAD COVID-19 SPREAD THE ILLNESS TO OTHERS?

- CDC recommends that actively sick patients be isolated either in the hospital or at home (depending on how sick they are) until they are better and no longer pose a risk of infecting others.

- Current guidance for when it is OK to stop isolation is made on a case by case basis and includes meeting all of the following:
  - Fever free without the use of fever-reducing medications
  - The patient is no longer showing symptoms, including cough
  - The patient has tested negative on at least two consecutive specimens collected at least 24 hours apart

- Someone who has been released from isolation is not considered to pose a risk of infection to others.
Most people who get COVID-19 will be able to recover at home.

Stay home when you are sick, except to get medical care.

Use a separate room and bathroom for sick household members (if possible).

Clean hands regularly.

Provide your sick household member with clean disposable facemasks to wear at home, if available, to help prevent spread.

Clean the sick room and bathroom, as needed.

Avoid sharing personal items like utensils, food, and drinks.
IF MY CHILD HAS ASTHMA CAN THEY USE A NEBULIZER?

• People with moderate to severe asthma may be at higher risk of getting sick from COVID-19

• Take your asthma medication as prescribed. Make sure you have 30 days of medications and supplies on hand in case you need to stay home for a long time

• There is a concern that nebulizers used on patients with COVID-19 in the hospital could spread the virus in the air. That possible risk is to hospitalized patients with COVID-19, not to the patients themselves using their nebulizer at home as directed
Currently there is no evidence to support transmission of COVID-19 associated with food.

Coronaviruses are thought to be spread from person-to-person through respiratory droplets.

It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads.
WILL WARM WEATHER STOP THE OUTBREAK?

- It is not yet known whether weather and temperature impact the spread of COVID-19.

- Some other viruses, like the common cold and flu, spread more during cold weather months but that does not mean it is impossible to become sick with these viruses during other months.
GERMS are all around you.

Stay healthy.
Wash your hands.

www.cdc.gov/handwashing