

Pandemic: an update

Terminology (that can be confusing)

1. **COVID-19** is the disease caused by the newly identified coronavirus originating in China. It is an acronym derived from “coronavirus disease 2019”.

2. **SARS-CoV-2** is the name of the virus itself and is also an acronym and is derived from “severe acute respiratory syndrome coronavirus 2” and was initially referred to as 2019-nCoV which has been retired.

3. **Respirator** which is a highly protective (if properly fitted) N95 face mask should not be confused with a ventilator a machine that provides breathing support when the respiratory system fails

4. Disease prevention

- social distancing: 1 meter of separation, avoid large gatherings, avoid ill individuals, avoid others if ill
- hand hygiene: wash or sanitize frequently (and well, 20 seconds) and with good technique; avoid skin to skin contact with others
- personal hygiene: keep hands away from nose, eyes, mouth; cough/sneeze into crook of elbow
- alert others if a flu test is positive and/or anti-flu medicine is prescribed

Note that there is no mention of wearing a face mask by the WHO or CDC to protect against COVID-19. Masks are best reserved for individuals who are ill and can transmit disease by coughing. The mask catches respiratory droplets from infecting others. N95 masks are best reserved for individuals caring for individuals ill with COVID-19.

5. **Airborne transmission** should not be confused with transmission through respiratory droplets. When germs are suspended in air and can move through a bus, plane, hallway, or building they are very infectious. Airborne germs include chickenpox, measles, and tuberculosis. **Respiratory droplets** are relatively heavy liquid particles carrying germs. After a cough or sneeze these droplets fall to a surface within 6 feet of origin. Coronaviruses are transmitted in this fashion.

6. **Surface transmission** refers to respiratory droplets that contaminate a surface and an individual becomes infected by touching the surface and raising their hand to the mouth, nose, or eyes. There is experimental evidence that COVID-19 can be spread in this fashion as lab studies reveal the virus can remain viable for hours on a variety of surfaces.

Minnesota as of March 17th

1. 60 COVID-19 positive patients in 13 counties.

2. Testing materials remain in short supply. Testing priorities are hospitalized patients suspected of having COVID-19, ill healthcare workers who have suggestive symptoms, and ill persons in communal living (nursing homes, assisted living quarters, group homes).

USA as of March 17th

1. 4,226 COVID-19 positive patients in 49 states.

2. 75 deaths

3. The mortality rate by recent estimates is between 1 – 2% or 10 -20 times that of seasonal flu.

World as of March 17th

1. 197,830 *confirmed* patients on 6 continents

2. 7,944 total deaths

3. COVID-19 has overwhelmed hospitals and particularly intensive care units in countries with delayed or poor containment policies and limited testing (Italy, Iran). As a consequence rationing is occurring.