



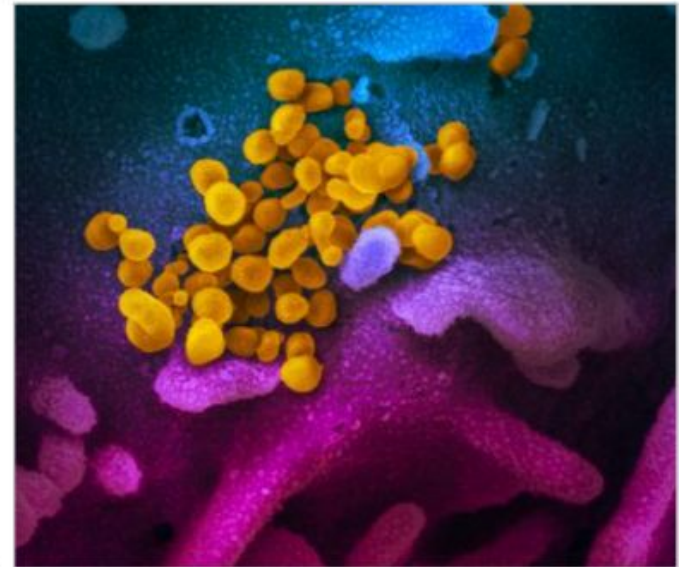
COVID-19 Prevention



COVID-19 (SAR-CoV-2)

- ▶ SARS-CoV-2 originated in bats
- ▶ Special coronaviruses have jumped species and can be transmitted between people
- ▶ This is the third coronavirus to have done so since 2002:
 - ▶ **Severe Acute Respiratory Syndrome (SARS)** CoV emerged in Guangdong, China, in 2002
 - ▶ **Middle Eastern Respiratory Syndrome (MERS)** CoV emerged in the Middle East in 2012
 - ▶ **SARS-CoV-2** emerged in Wuhan, China, in 2019

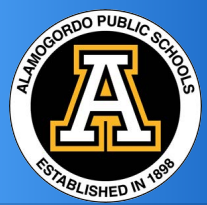
SARS-CoV-2 viruses coming out of cell



- ▶ Fever (temperature >100.4°F)
- ▶ Tiredness (fatigue)
- ▶ Chills
- ▶ Muscle pain
- ▶ Cough
- ▶ Loss of taste or smell
- ▶ Difficulty breathing
- ▶ Headache
- ▶ Sore throat

Source: US Centers for Disease Control and Prevention (CDC). Symptoms of Coronavirus. Accessed May 4, 2020.





What is MIS-C?

Multisystem inflammatory syndrome in children (MIS-C) is a condition where different body parts can become inflamed, including the heart, lungs, kidneys, brain, skin, eyes, or gastrointestinal organs. We do not yet know what causes MIS-C. However, many children with MIS-C had the virus that causes [COVID-19](#), or had been around someone with COVID-19.

Unique to New Mexico

12 % of New Mexico cases
are children

Vs.

5% of US cases are
children



Unique to New Mexico

64,130 (12.7%) children under 18 live in homes where head of household are grandparents or other relatives.



Transmission

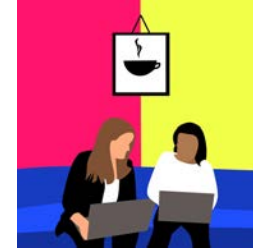
Prevention Starts with Education



Transmission is More Likely With Close Contact



Physical Contact



Shared environment (for example, offices and restaurants)

Close Contact
(within 6 feet for 15
minutes or more)

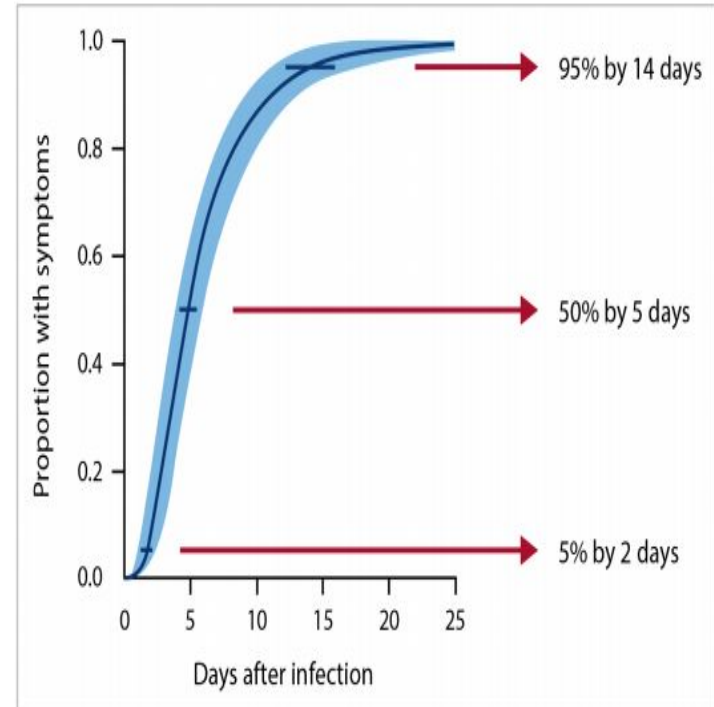
**Sharing Food and
bathrooms**



Sharing bed

Incubation Period

- ▶ The ***incubation period*** is the time from when someone is infected until symptoms develop
- ▶ The SARS-CoV-2 incubation period ranges from 2 to 14 days
- ▶ 50% of people will become ill by 5 days after they are infected





Infectious Period

The time during which someone infected with SARS-CoV-2 can transmit the virus to other people.

- ▶ The infectious period begins 2 days before the start of signs and symptoms of disease

- ▶ The end of the infectious period is defined as when:
 - It is at least 10 days after the onset of illness
 - AND symptoms are improving
 - AND there has been no fever within the past 3 days

- ▶ People who are asymptomatic can also be infectious. For these people, the infectious period is more difficult to define

CALENDAR DAYS

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Person infected



Incubation period

(ranges from 2-14 days, but typically 5 days)



Signs and symptoms

(mild illness, about 10 days)

(severe illness, 2 or more weeks)



Infectious period

Starts 2 days **PRIOR**
to symptoms

Most infectious
at **day 1**
of symptoms

Contagion lessens
with time

Image source: Center for Teaching and Learning, Johns Hopkins Bloomberg School of Public Health.

Types of Tests

01

Diagnostic Tests

Identify virus in the body (who has it?)

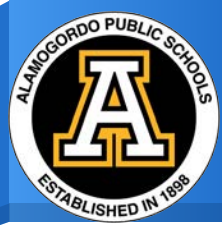
- ✓ These are polymerase chain reaction (PCR) tests (also called molecular tests)
- ✓ These tests give a sign that the virus is reproducing in your cells

02

Antibody Tests

Identify antibodies to the virus, usually in the blood (Who had it?) 10-14 days after infection

- ✓ Antibodies are made by your immune system to fight off viruses or bacteria
- ✓ Some antibodies (IgG) begin to develop when you are sick and can be identified after you recover
- ✓ Remember that no tests are perfect



Contact Tracing - Cases and Contacts

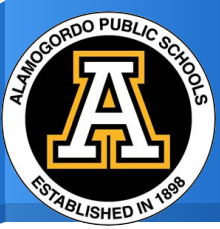
Case

- ▶ Someone who has COVID-19
- ▶ Usually has a positive laboratory test
- ▶ Suspect or probable case
- ▶ Someone exposed to a case who develops symptoms, even if they have not had a test yet

Contacts

(Here is our opportunity to prevent exposure and quickly notify those who have been exposed)

- ▶ Someone who had contact with a case while they were infectious
 - ▷ During their illness
 - ▷ 2 days before their illness began
- ▶ Three kinds of contact
 - ▷ Physical Contact
 - ▷ Close Contact: within 6 feet for 15+ minutes (10 or 30)
 - ▷ Proximate contact: more than 6 feet but in the same room for an extended period



Scenario

Student A

Elementary School

Tests positive,
second day of school

What do we do

Teacher B

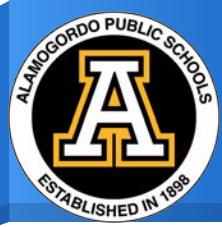
Middle School

Spouse tests
positive

Student C

Cheerleader

Exhibiting
Symptoms



Isolation Vs. Quarantine

Isolation

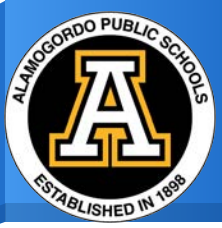
(Sick People) Keeps Sick people separate from healthy people

- ▶ Restricted to home or hotel
- ▶ Separate space in hospital to limit contact
- ▶ For duration of infectiousness
 - ▷ 2 days before onset
 - ▷ At least 10 days after onset of illness; symptoms must be improving and no fever within the past 3 days

Quarantine

(Healthy People) Restricts movement and contact of healthy people who have been exposed

- ▶ For 14 days since the last contact with the person who is infected



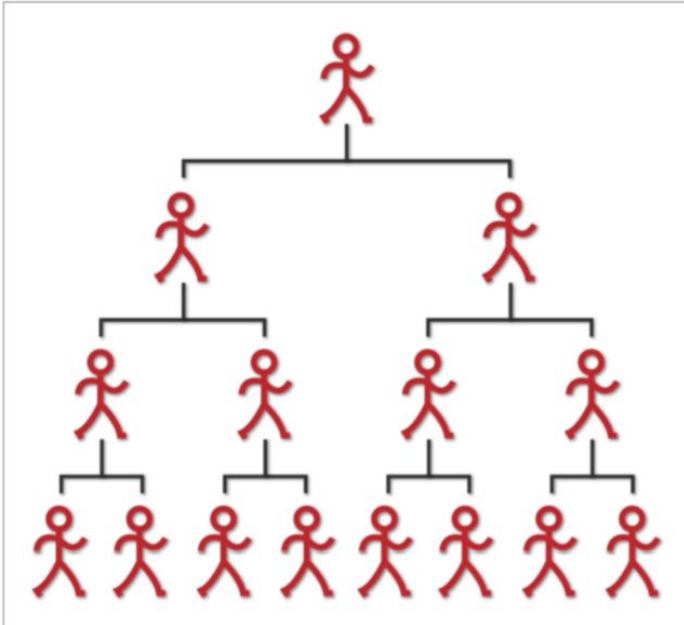
Reproductive Number

The number of people one infectious person will infect if everyone that person has contact with is susceptible

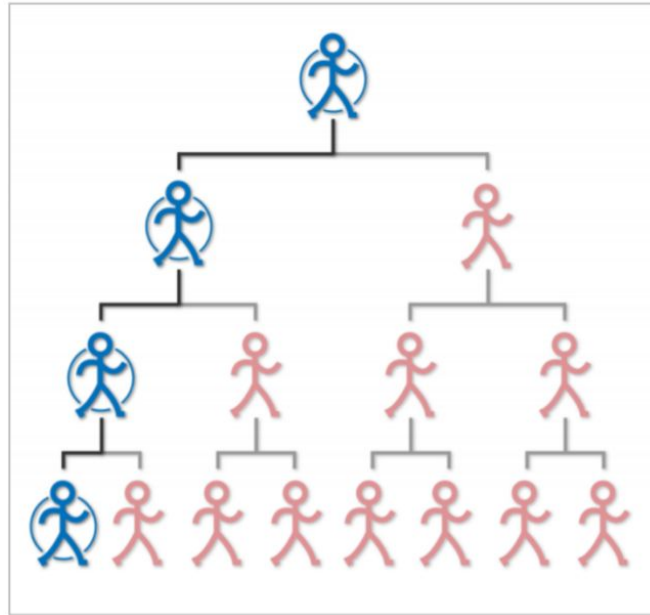
- ▶ This is a good way to measure how fast a disease can spread
- ▶ The higher the reproductive number, the more people will be infected

SARS-CoV-2d ($R_0=2$ to 3)

$R_0 = 2$



What happens if we stop each case from infecting just one person?





Prevention is Key

Although we had no control over what has happened or the requirements now placed on us, we continue to value education, now more than ever and we miss our students.

Through safe practices, we look forward to bringing our students back and moving forward with Resilience.