COVID Timeline:

Date of 1st symptom: _____

Count back 4-5 days: _____(date) is when you most likely were exposed to the virus

Date of 1st symptom minus 1-3 days is when you were most likely able to transmit it to others: _____

- **You can spread it 2-3 days BEFORE 1st symptom**
- **You have the highest likelihood of spreading it 1-2 days BEFORE 1st symptom**

If you might have been in close contact with someone COVID +

- Close contact defined by CDC is within 6 feet for 15 minutes or more with an infected person
- If you were not in close contact then self monitor for symptoms

If you were in close contact with someone COVID + (in their peak days of contagiousness- 1-2 days before symptoms)

- Get tested- rapid antigen results in hours- typically you pay or your insurance pays for this
- PCR test at a community based location or a CVS type location- first come first serve- paid through your insurance or provided by the state at no expense
- Call your primary Dr for a prescription to go to a hospital for an appointment PCR testing and not have to wait
- Until you get your results do isolate yourself at home

If you test COVID +: can resume normal work activities out of your home (when you meet these criteria)

- 10 days post first symptom
- Fever free for 24 hours without meds
- Improving lessening symptoms- does not need to be symptom free
- You do not need a negative antigen or PCR test to return to work or resume activities out of the house

Coronavirus Incubation Period

The incubation period for COVID-19 is thought to extend to 14 days, with a **median time of 4-5 days from exposure**

to symptoms onset.[1-3] One study reported that 97.5% of people with COVID-19 who have symptoms will do so within 11.5 days of SARS-CoV-2 infection.

Reference: Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease (COVID-19)

Updated Nov. 3, 2020
https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html

What Is an Incubation Period?

The incubation period is the number of days between when you're infected with something and when you might see symptoms. Health care professionals and government officials use this number to decide how long people need to stay away from others during an outbreak. It's different for every condition.

If you've been around someone who has the new coronavirus that causes COVID-19, you're at risk, too. That means you need to stay home until you know you're in the clear. Health professionals call this self-quarantine. But when will you know whether you have the disease? The answer depends on the incubation period.

What Is the Incubation Period for the New Coronavirus?

To learn the incubation period for the coronavirus, researchers studied dozens of confirmed cases of COVID-19 reported between Jan. 4 and Feb. 24, 2020. These cases included only people who knew that they'd been around someone who was sick.

On average, symptoms showed up in the newly infected person about 5 days after contact. Rarely, symptoms appeared as soon as 2 days after exposure. Most people with symptoms had them by day 12. And most of the other ill people were sick by day 14. In rare cases, symptoms can show up after 14 days. Researchers think this happens with about 1 out of every 100 people.

Some people may have the coronavirus and never show symptoms. Others may not know that they have it because their symptoms are very mild. Current studies might not include the mildest cases, and the incubation period could be different for these.

When Is the Coronavirus the Most Contagious?

Researchers estimate that people who get infected with the coronavirus **can** spread it to others 2 to 3 days before symptoms start and **are most contagious** 1 to 2 days before they feel sick.

How Long Should I Quarantine After I've Been Exposed to the Coronavirus?

The CDC says that if you might have come into contact with the virus and have no symptoms, you should self-monitor. This means watching for signs such as fever, cough, and shortness of breath. Stay out of crowded places, keep at least 6 feet away from other people, and wear a cloth face mask when you have to go out.

If you traveled recently or know that you came into contact with someone who has COVID-19, you should self-quarantine. Stay home for 14 days. It's very rare for symptoms to show up after that much time. Check your temperature twice a day, and watch for other symptoms. Stay away from other people, especially those who are at high risk of serious illness because of their age or another medical condition.

Reference: https://www.webmd.com/lung/coronavirus-incubation-period

Asymptomatic and Presymptomatic Infection

Several studies have documented infection with SARS-CoV-2, the virus causing COVID-19, in patients who never have symptoms (asymptomatic) and in patients not yet symptomatic (presymptomatic).[15-29] Since people who are asymptomatic are not always tested, the prevalence of asymptomatic infection and detection of

presymptomatic infection is not yet well understood. Current data, based on reverse transcription-polymerase chain reaction (RT-PCR) testing for SARS-CoV-2 and on serologic studies, suggest asymptomatic infections can be common and that the total number of infections is likely greater than the number of cases reported.[15,22-24,30,31] Patients may have abnormalities on chest imaging before the onset of symptoms.[16]

Asymptomatic and Presymptomatic Transmission

Increasing numbers of epidemiologic studies have documented SARS-CoV-2 transmission during the presymptomatic incubation period.[19,28,29,32] Studies using RT-PCR detection have reported low cycle thresholds, indicating larger quantities of viral RNA, among people with asymptomatic and presymptomatic SARS-CoV-2 infection. Likewise in viral culture, viral growth has been observed in specimens obtained from patients with asymptomatic and presymptomatic infection.[22,24,27,33] The proportion of SARS-CoV-2 transmission due to asymptomatic or presymptomatic infection compared with symptomatic infection is not entirely clear; however, recent studies do suggest that people who are not showing symptoms may transmit the virus.[22,24,34]

Reference: Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease (COVID-19)

Updated Nov. 3, 2020
https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html

Airborne Transmission or Close Contact Spread of Infections: Droplets or Aerosoled particles

The epidemiology of SARS-CoV-2 indicates that most infections are spread through close contact, not airborne transmission

Diseases that are spread efficiently through airborne transmission tend to have high attack rates because they can quickly reach and infect many people in a short period of time. **We know that a significant proportion of SARS-CoV-2 infections (estimated 40-45%) occur without symptoms and that infection can be spread by people showing no symptoms.** Thus, were SARS-CoV-2 spread primarily through airborne transmission like measles, experts would expect to have observed considerably more rapid global spread of infection in early 2020 and higher percentages of prior infection measured by serosurveys. Available data indicate that SARS-CoV-2 has spread more like most other common respiratory viruses, **primarily through respiratory droplet transmission within a short range** (e.g., less than six feet). **There is no evidence of efficient spread (i.e., routine, rapid spread) to people far away or who enter a space hours after an infectious person was there.**

Reference:

Scientific Brief: SARS-CoV-2 and Potential Airborne Transmission

Updated Oct. 5, 2020
https://www.cdc.gov/coronavirus/2019-ncov/more/scientific-brief-sars-cov-2.html

Unfortunately, with nearly 8 million confirmed cases and over 434,000 deaths, there is still confusion and a dearth of adequate research around the dynamics of transmissibility of SARS-CoV-2 in the general population.[3] **On June 8th, 2020, WHO official Maria Van Kerkhove said that asymptomatic transmission of the coronavirus was "very rare."** However, she later clarified this statement saying, **"the available evidence from contact tracing reported by Member States [of WHO] suggests that**

asymptomatically-infected individuals are much less likely to transmit the virus than those who develop symptoms."[4]

Reference: Asymptomatic and presymptomatic transmission of SARS-CoV-2: A systematic review

Christina Savvides[1,*] and Robert Siegel[2]

NIH Version 2. medRxiv. Preprint. 2020 Jun 17.
doi: 10.1101/2020.06.11.20129072

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7310638/

Seroconversion to IgG/M antibodies after COVID Positive Test:
The earliest IgG/IgM seroconversion in asymptomatic patients was observed at approximately 4 days after the first virus-positive test for symptomatic patients, the median time from symptom onset to IgG/IgM seroconversion was approximately 23 days
https://onlinelibrary.wiley.com/doi/10.1002/cti2.1182

Antibody seroconversion in asymptomatic and symptomatic patients infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)

Chuanhao Jiang
First published: 26 September 2020

https://doi.org/10.1002/cti2.1182

Deaths from all causes:

CDC and the National Center for Health Statistics
https://www.cdc.gov/nchs/products/databriefs/db328.htm

Johns Hopkins article on COVID and all deaths comparison
https://pjmedia.com/news-and-politics/matt-margolis/2020/11/27/johns-hopkins-study-saying-covid-19-has-relatively-no-effect-on-deaths-in-u-s-deleted-after-publication-n1178930

Surfaces

How long can the coronavirus stay airborne? I have read different estimates.

A study done by National Institute of Allergy and Infectious Diseases' Laboratory of Virology in the Division of Intramural Research in Hamilton, Montana helps to answer this question. The researchers used a nebulizer to blow coronaviruses into the air. They found that infectious viruses could **remain in the air for up to three hours.** The results of the study were published in the *New England Journal of Medicine* on March 17, 2020.

(this is a laboratory study not a case study, or RCT- less valued in research evidence)

How long can the coronavirus that causes COVID-19 survive on surfaces?

A recent study found that the COVID-19 coronavirus can survive up to **four hours on copper, up to 24 hours on cardboard, and up to two to three days on plastic and stainless steel.** The researchers also found that this virus can hang out as **droplets in the air for up to three hours before they fall. But most often they will fall more quickly.**

Reference:

COVID-19 basics

Symptoms, spread and other essential information about the new coronavirus and COVID-19

Updated: October 22, 2020
Published: March, 2020

https://www.health.harvard.edu/diseases-and-conditions/covid-19-basics#:~:text=A%20recent%20study%20found%20that,plastic%20and%20stainless%20steel.

What does the CDC's new definition of "close contacts" mean for me?

The CDC has expanded how it defines close contacts of someone with COVID-19. Until this point, the CDC had defined a close contact as someone who spent 15 or more *consecutive* minutes within six feet of someone with COVID-19. **According to the new definition, a close contact is someone who spends 15 minutes or more within six feet of a person with COVID-19 *over a period of 24 hours*.**

Close contacts are at increased risk of infection. When a person tests positive for COVID-19, contact tracers may identify their close contacts and urge them to quarantine to prevent further spread. Based on the new definition, more people will now be considered close contacts.

Many factors can affect the chances that infection will spread from one person to another. These factors include whether or one or both people are wearing masks, whether the infected person is coughing or showing other symptoms, and whether the encounter occurred indoors or outdoors. Though the "15 minutes within six feet rule" is a helpful guideline, it's always best to minimize close interactions with people who are not members of your household.

The CDC's new definition was influenced by a case described in the CDC's *Morbidity and Mortality Weekly Report* in which a correctional officer in Vermont is believed to have been infected after being within six feet for 17 ***non-consecutive*** minutes of six asymptomatic individuals, all of whom later tested positive for COVID-19.