

## DEFINITION

- Exposed (close contact) to a person who has been **diagnosed** (confirmed by testing) or **suspected** to have COVID-19.
- Patient is well and has no common COVID-19 symptoms (i.e., cough, fever, shortness of breath, muscle aches).
- Questions about COVID-19.

**Close Contact COVID-19 Exposure** is defined as:

- **Living in the same house** with a confirmed or suspected COVID-19 case.
- **Being within 6 feet (2 meters)** of a confirmed or suspected COVID-19 case for a total of 15 minutes or more during a 24 hour period. Examples of such close contact include kissing or hugging, sharing eating or drinking utensils, carpooling, close conversation, or performing a physical examination (relevant to healthcare providers).
- OR having **direct contact with infectious secretions** of a confirmed COVID-19 case (e.g., being coughed on).
- See CDC website: <https://www.cdc.gov/coronavirus/2019-ncov/>.

The following are **not Close Contact** exposures:

- Walking by a person who has COVID-19.
- Being outdoors and keeping safe distancing (6 feet; 2 meters).

**Congregate Setting** is defined as:

- A congregate setting is a place where a group of people live or work in close proximity to each other.
- Examples are correctional facilities, long term care facilities, homeless shelters, and meat-packing plants.

**Note to Triager:**

- During a time of community spread of COVID-19, patients with cough, fever, shortness of breath, or other compatible COVID symptoms should be suspected as having COVID-19.
- Triagers should use their clinical judgment, but generally will want to use the *COVID-19 - Diagnosed or Suspected* guidelines when a patient calls with cough, shortness of breath, or a combination of typical COVID symptoms and there is community spread.
- *Fully vaccinated* means that 2 or more weeks have passed after receiving a one-dose vaccine (e.g., Johnson and Johnson) or the second dose of a two-dose vaccine (e.g., AstraZeneca, Pfizer, Moderna).

This guideline was **last updated** 8/25/2021.

## INITIAL ASSESSMENT QUESTIONS

1. COVID-19 EXPOSURE: "Please describe how you were exposed to someone with a COVID-19 infection."

2. PLACE of CONTACT: "Where were you when you were exposed to COVID-19?" (e.g., home, school, medical waiting room; which city?)
3. TYPE of CONTACT: "How much contact was there?" (e.g., sitting next to, live in same house, work in same office, same building)
4. DURATION of CONTACT: "How long were you in contact with the COVID-19 patient?" (e.g., a few seconds, passed by person, a few minutes, 15 minutes or longer, live with the patient)
5. MASK: "Were you wearing a mask?" "Was the other person wearing a mask?" Note: wearing a mask reduces the risk of an otherwise close contact.
6. DATE of CONTACT: "When did you have contact with a COVID-19 patient?" (e.g., how many days ago)
7. COMMUNITY SPREAD: "Are there lots of cases of COVID-19 (community spread) where you live?" (See public health department website, if unsure)
8. SYMPTOMS: "Do you have any symptoms?" (e.g., fever, cough, breathing difficulty, loss of taste or smell)
9. PREGNANCY OR POSTPARTUM: "Is there any chance you are pregnant?" "When was your last menstrual period?" "Did you deliver in the last 2 weeks?"
10. HIGH RISK: "Do you have any heart or lung problems?" "Do you have a weak immune system?" (e.g., heart failure, COPD, asthma, HIV positive, chemotherapy, renal failure, diabetes mellitus, sickle cell anemia, obesity)
11. TRAVEL: "Have you traveled out of the country recently?" If Yes, ask: "When and where?" Also ask about out-of-state travel, since the CDC has identified some high-risk cities for community spread in the US. Note: Travel becomes less relevant if there is widespread community transmission where the patient lives.

## TRIAGE ASSESSMENT QUESTIONS

### See More Appropriate Guideline

COVID-19 lab test positive

*Go to Guideline: COVID-19 - Diagnosed or Suspected (Adult)*

[1] Lives with someone known to have influenza (flu test positive) AND [2] flu-like symptoms (e.g., cough, runny nose, sore throat, SOB; with or without fever)

*Go to Guideline: Influenza - Seasonal (Adult). Note: Patient is more likely to have flu than COVID-19 if they are living with someone who tested positive for influenza.*

[1] Symptoms of COVID-19 (e.g., cough, fever, SOB, or others) AND [2] HCP diagnosed COVID-19 based on symptoms

*Go to Guideline: COVID-19 - Diagnosed or Suspected (Adult). Note: Triager should use clinical judgment to decide whether a symptom guideline (e.g., Chest Pain, Fever, Headache) should also be used in adult patients.*

[1] Symptoms of COVID-19 (e.g., cough, fever, SOB, or others) AND [2] lives in an area with community spread

*Go to Guideline: COVID-19 - Diagnosed or Suspected (Adult). Note: Triager should use clinical judgment to decide whether a symptom guideline (e.g., Chest Pain, Fever, Headache) should also be used in adult patients.*

[1] Symptoms of COVID-19 (e.g., cough, fever, SOB, or others) AND [2] within 14 days of EXPOSURE (close contact) with diagnosed or suspected COVID-19 patient

*Go to Guideline: COVID-19 - Diagnosed or Suspected (Adult). Note: Triager should use clinical judgment to decide whether a symptom guideline (e.g., Chest Pain, Fever, Headache) should also be used in adult patients.*

[1] Symptoms of COVID-19 (e.g., cough, fever, SOB, or others) AND [2] within 14 days of travel from high-risk area for COVID-19 community spread (identified by CDC)

*Go to Guideline: COVID-19 - Diagnosed or Suspected (Adult). Note: Triager should use clinical judgment to decide whether a symptom guideline (e.g., Chest Pain, Fever, Headache) should also be used in adult patients.*

[1] Difficulty breathing (shortness of breath) occurs AND [2] onset > 14 days after COVID-19 EXPOSURE (Close Contact)

*Go to Guideline: Breathing Difficulty (Adult)*

[1] Dry cough occurs AND [2] onset > 14 days after COVID-19 EXPOSURE

*Go to Guideline: Cough - Acute Non-Productive (Adult)*

[1] Wet cough (i.e., white-yellow, yellow, green, or rusty colored sputum) AND [2] onset > 14 days after COVID-19 EXPOSURE

*Go to Guideline: Cough - Acute Productive (Adult)*

[1] Common cold symptoms AND [2] onset > 14 days after COVID-19 EXPOSURE

*Go to Guideline: Common Cold (Adult)*

COVID-19 vaccine reaction suspected (e.g., fever, headache, muscle aches) occurring during days 1-3 after getting vaccine

*Go to Guideline: COVID-19 - Vaccine Questions and Reactions (Adult)*

COVID-19 vaccine, questions about

*Go to Guideline: COVID-19 - Vaccine Questions and Reactions (Adult)*

### **Call PCP Within 24 Hours**

[1] CLOSE CONTACT COVID-19 EXPOSURE within last 14 days AND [2] needs COVID-19 lab test to return to work AND [3] NO symptoms

*Reason: COVID-19 viral test is recommended; return to work clearance, employee may need to discuss with their employee health department.*

*CA: 50, 22, 32, 614, 27, 31, 15, 13, 19, 1234, 1111, 1237, 617, 29, 20, 26, 1*

[1] CLOSE CONTACT COVID-19 EXPOSURE within last 14 days AND [2] exposed person is a first responder (e.g., police or paramedic) AND [3] NO symptoms

*Reason: COVID-19 viral test is recommended; exposed first responder; employee health should be notified.*

CA: 50, 22, 27, 31, 13, 15, 19, 1234, 1111, 1237, 617, 29, 20, 26, 1

[1] CLOSE CONTACT COVID-19 EXPOSURE within last 14 days AND [2] exposed person is a healthcare worker who was NOT using all recommended personal protective equipment (e.g., a respirator-N95 mask, eye protection, gloves, and gown) AND [3] NO symptoms

*Reason: COVID-19 viral test is recommended; exposed healthcare worker; employee health should be notified.*

CA: 50, 22, 27, 31, 13, 15, 19, 1234, 1111, 1237, 617, 29, 20, 26, 1

[1] Living or working in a correctional facility, long-term care facility, or shelter (i.e., congregate setting; densely populated) AND [2] where an outbreak has occurred AND [3] NO symptoms

*Reason: COVID-19 viral test is recommended when outbreaks occur in congregate setting. Note: Local public health should be notified.*

CA: 50, 22, 32, 614, 27, 31, 13, 15, 19, 1234, 1111, 1237, 617, 29, 20, 26, 1

### **Call PCP When Office is Open**

[1] CLOSE CONTACT COVID-19 EXPOSURE within last 14 days AND [2] NO symptoms

*Reason: COVID-19 viral test is recommended; Note: Home quarantine needed if not vaccinated. Follow local or state Public Health Department (PHD) guidance about staying at home, monitoring symptoms, etc.*

CA: 51, 22, 32, 614, 31, 13, 15, 19, 1234, 1111, 1237, 617, 29, 20, 26, 1

[1] Has NOT completed COVID-19 vaccine series AND [2] was at a large indoor or outdoor event (e.g., concert, festival, rally, wedding) or been in crowded indoor setting AND [3] within last 14 days

*Reason: COVID-19 viral test is recommended in unvaccinated people when there is community spread of COVID-19.*

CA: 51, 22, 32, 614, 12, 19, 1234, 1111, 1237, 617, 29, 20, 26, 1

### **Home Care**

[1] COVID-19 EXPOSURE AND [2] 15 or more days ago AND [3] NO symptoms

*Reason: Asymptomatic for 14 days. Risk of developing COVID-19 infection has passed. Reassure and discontinue quarantine.*

CA: 48, 18, 1234, 1233, 5, 1047, 90, 1

[1] Living in area with community spread (identified by local PHD) BUT [2] NO symptoms

*Follow local or state Public Health Department (PHD) guidance about staying at home, monitoring symptoms, etc.*

CA: 48, 14, 1234, 1233, 5, 617, 29, 1047, 20, 26, 1

[1] Travel from area with community spread (identified by CDC) AND [2] within last 14 days BUT [3] NO symptoms

*Follow local or state Public Health Department (PHD) guidance about staying at home, monitoring symptoms, etc.*

CA: 48, 16, 1234, 1233, 7, 617, 29, 1047, 20, 26, 1

[1] No COVID-19 EXPOSURE BUT [2] living with someone who was exposed and who has no symptoms of COVID-19

*Reason: no exposure, no symptoms.*

CA: 48, 1235, 1234, 1233, 5, 1047, 7, 1048, 34, 35, 90, 1

[1] Caller concerned that exposure to COVID-19 occurred BUT [2] does not meet COVID-19 EXPOSURE criteria from CDC

*Reason: no exposure and needs reassurance*

CA: 48, 21, 617, 1234, 1233, 5, 1047, 7, 1100, 1048, 90, 1

COVID-19 Testing, questions about

CA: 48, 1236, 1111, 1237, 617, 1101, 1102, 1103, 1071, 1048, 90, 1

COVID-19 Prevention and Healthy Living, questions about

*Note: How to protect you and your family; how to reduce anxiety and stress.*

CA: 48, 1047, 1048, 1049, 1050, 1051, 611, 90, 1

COVID -19 Disease, questions about

*Reason: No known exposure and no symptoms. Note: Refer most callers to CDC website: <https://www.cdc.gov/coronavirus>.*

CA: 48, 1235, 1234, 1233, 5, 1047, 7, 617, 1048, 10, 1100, 34, 35, 90, 1

## CARE ADVICE (CA) -

1. **Care Advice** given per COVID-19 - Exposure (Adult) guideline.
  
5. **COVID-19 - How it Is Spread:**
  - *COVID-19 is spread from person to person.*
  - **Respiratory Droplets:** The virus spreads from respiratory droplets that are produced when a person coughs, sneezes, shouts, or sings. The infected droplets can then be inhaled by a nearby person or land on the surface of their face or eyes. Droplets fall quickly to the floor or ground. This is **how most COVID is spread**.
  - **Surfaces:** Most infected people also have respiratory secretions on their hands. These secretions get transferred to healthy people on doorknobs, faucet handles, etc. The virus then gets transferred to healthy people when they touch their face or rub their eyes. This is a **less common cause** of spread.
  - **Aerosols:** Aerosols are tiny, invisible particles that can float in the air for 1 to 2 hours and travel more than 6 feet (2 meters). They only occur in a closed room with poor ventilation. Aerosols are a **rare cause** of COVID-19 spread.

7. **COVID-19 - Travel Guidelines:**
  - The Centers for Disease Control and Prevention (CDC) maintains a website with the latest recommendations regarding travel and your health.
  - Currently the CDC recommends against travel to many geographic areas with widespread and ongoing spread of COVID-19. See current list at <https://wwwnc.cdc.gov/travel/>.
  - *CDC Travel Health Website:* <https://wwwnc.cdc.gov/travel/>.
  - *CDC Travel FAQs:* <https://www.cdc.gov/coronavirus/2019-ncov/travelers/faqs.html>.
  
10. **COVID-19 - Going to the ER or Urgent Care Center:**
  - If you or your child needs to be seen for an urgent medical problem, do not hesitate to go.
  - ERs and urgent care centers are safe places. They are well equipped to protect you against the virus.
  - For non-urgent conditions, talk to your healthcare provider's office first.
  
12. **Reassurance and Education - Unvaccinated Person With Possible COVID-19 Exposure at Crowded Event and No Symptoms:**
  - **Get Tested:** The CDC recommends that unvaccinated people who have taken part in crowded indoor or outdoor events (e.g., concerts, festivals, rallies, weddings) should get tested immediately. If the test is negative, then testing should be repeated **5 to 7 days** after exposure.
  - **Monitor Your Symptoms:** Check your temperature two times a day until 14 days after the exposure. Watch for symptoms of COVID-19.
  - *Here is some more care advice and information that should help.*
  
13. **Reassurance and Education - Vaccinated Person With COVID-19 Exposure and No Symptoms:**
  - **Get Tested:** A person who had a COVID-19 exposure and is asymptomatic should get a COVID-19 viral test about **3 to 5 days** after exposure.
  - **Wear a Mask:** Wear a mask if you must be around other people until you get a negative test result.
  - **Monitor Your Symptoms:** Check your temperature two times a day until 14 days after the exposure. Watch for symptoms of COVID-19.
  - *Here is some more care advice and information that should help.*
  
14. **Reassurance and Education - Living in an Area With Community Spread:**
  - Although you live in an area with community spread of COVID-19, you do not currently have the most common symptoms of COVID-19 infection: cough, fever, and shortness of breath.
  - COVID-19 starts within 14 days of exposure.
  - Monitor your symptoms.
  - Call your healthcare provider if you develop a cough, fever, or shortness of breath.

15. **Reassurance and Education - Unvaccinated (or Partially Vaccinated) Person With COVID-19 Exposure and No Symptoms:**
- **Get tested:** An unvaccinated person who had a COVID-19 exposure and no symptoms should get a COVID-19 viral test immediately. If the test is negative, then testing should be repeated **5 to 7 days** after exposure..
  - **Stay at Home:** Stay at home (quarantine). Do not go to work until 14 days after the exposure.
  - **Monitor Your Symptoms:** Check your temperature two times a day until 14 days after the exposure. Watch for symptoms of COVID-19.
  - *Here is some more care advice and information that should help.*
16. **Reassurance and Education - Travel Back From an Area of Community Spread:**
- You do not currently have the most common symptoms of COVID-19 infection: cough, fever, and shortness of breath. COVID-19 starts within 14 days of exposure.
  - Since it's been less than 14 days since your travel back from an area or country of community spread of COVID-19, you still are at risk for getting sick with COVID-19.
  - Stay at home. Do not go to work until 14 days after the exposure.
  - **Monitor your symptoms until 14 days have passed.** Check your temperature two times a day.
  - Call your healthcare provider if you develop a cough, fever, or shortness of breath.
18. **Reassurance and Education - No Symptoms and Day 15 or Later:**
- COVID-19 starts within 14 days of exposure.
  - The most common symptoms are cough, fever, and shortness of breath.
  - If you have not had any symptoms by day 15, you should be safe from getting the coronavirus.
19. **Watch for Symptoms of Cough and Fever:**
- Watch for symptoms of cough and fever.
  - Measure your temperature 2 times each day, until 14 days after exposure.
  - Report any fever or other concerning symptoms to your healthcare provider.
20. **Home Isolation Needed if Symptoms Occur:**
- *Isolation will be needed if you develop symptoms within 14 days of COVID-19 exposure:*
  - Isolate yourself at home.
  - Do **Not** allow any visitors.
  - Do **Not** go to work or school.
  - Do **Not** go to religious services, child care centers, shopping, or other public places.
  - Living with a suspected COVID-19 patient implies that close contact has occurred. In this case, both patient and family members should stay at home in isolation and quarantine.



21. **Note to Triager - Caller Remains Worried After Education and Reassurance:**
- Encourage the caller to phone their healthcare provider (e.g., doctor, NP, PA) or public health department.
  - Discourage the caller from going to a healthcare facility unless warranted based on caller's symptoms.
22. **Alternate Disposition - Call Telemedicine Provider:**
- Telemedicine is often a good choice for care during this COVID-19 pandemic.
  - You can talk to a telemedicine provider, if your own doctor (or NP/PA) is not available.
26. **Call Back If:**
- Fever or feeling feverish occurs within 14 days of COVID-19 exposure
  - Cough or difficulty breathing occur within 14 days of COVID-19 exposure
  - Loss of taste or smell occur
  - Other symptoms you think might be from COVID-19 occur
  - You have more questions
27. **Alternate Disposition - Call Employee Health at Your Workplace Within 24 Hours:**
- You need to call and discuss this with the Employee Health Department for your workplace within the next 24 hours.
29. **COVID-19 - Should You Go to Work After Exposure?**
- If a person has had **close contact** exposure to COVID-19 in the last 14 days, it is recommended that they make plans to work from home until 14 days have passed.
  - Similarly, if a person has had travel from or is living in a **high risk area** (identified by CDC) it is also recommended that they make plans to work from home.
  - You should **talk to the employee health office** at your workplace.
31. **Note to Triager - COVID-19 Testing After Close Contact Exposure:**
- A person who had a close contact COVID-19 exposure and is asymptomatic should **get a COVID-19 viral test**.
  - **When:** Asymptomatic unvaccinated people with a close contact COVID-19 exposure should get the viral test right away and **5 to 7 days** after exposure. Vaccinated people with an exposure should get the viral test **3 to 5 days** after exposure. Testing right away after exposure isn't helpful because it may be too early in the incubation period and there isn't enough viral material for the test to detect.
  - **Where:** A doctor (or NP/PA) can order the test to be performed at a hospital laboratory. Some doctors can do this test in their office. Many clinics, retail clinics (such as CVS, Walgreens), and urgent care centers perform COVID-19 testing. Testing is also available at some local and state public health departments. Self-tests (such as Abbot BinaxNow) for use at home are now available in some drugstores (such as CVS, Walgreens).
  - **Exception:** People who have tested positive for COVID-19 within the past 3 months and recovered, as long as they do not develop new symptoms, do not need to get tested.
  - **What About a Standing Order?** Some call centers have worked with their medical leadership to allow triage nurses to order COVID-19 testing under a standing order policy.



32. **Alternate Disposition - Department of Health:**
- Your local, state, or provincial Department of Health can help you find out how to get tested.
  - Visit their website to see your best options for testing.
34. **FAQ - Can Someone Spread the Virus Who Is Not Sick?**
- The virus spreads through respiratory droplets produced when an infected person coughs or sneezes. The droplets can then be inhaled by a nearby person.
  - Therefore, an infected person is thought to be most contagious when they are sick and have symptoms of cough and fever.
  - It is possible that an infected person could spread COVID-19 before they start feeling sick. However, this is not the main way COVID-19 spreads.
35. **FAQ - Can I Get COVID-19 From Touching an Infected Surface?**
- It is possible that a person could get COVID-19 by touching an object like a doorknob or a phone, or surfaces like a table or desk.
  - However, this is not the main way COVID-19 spreads.
  - You can use a household cleaning spray or wipe (e.g., Clorox or similar) to clean the object or surface. *Follow the label instructions.*
  - Remember, wash your hands often with soap and water.
40. **Call EMS 911 Now:**
- Immediate medical attention is needed. You need to hang up and call 911 (or an ambulance).
  - *Triager Discretion:* I'll call you back in a few minutes to be sure you were able to reach them.
41. **Go to ED Now:**
- You need to be seen in the Emergency Department.
  - Go to the ED at \_\_\_\_\_ Hospital.
  - Leave now. Drive carefully.
42. **Go to ED Now (or PCP Triage):**
- **If No PCP (Primary Care Provider) Second-Level Triage:** You need to be seen within the next hour. Go to the ED/UCC at \_\_\_\_\_ Hospital. Leave as soon as you can.
  - **If PCP Second-Level Triage Required:** You may need to be seen. Your doctor (or NP/PA) will want to talk with you to decide what's best. I'll page the provider on-call now. If you haven't heard from the provider (or me) within 30 minutes, go directly to the ED/UCC at \_\_\_\_\_ Hospital.

43. **See HCP (or PCP Triage) Within 4 Hours:**
- **If Office Will Be Open:** You need to be seen within the next 3 or 4 hours. Call your doctor (or NP/PA) now or as soon as the office opens.
  - **If Office Will Be Closed and No PCP (Primary Care Provider) Second-Level Triage:** You need to be seen within the next 3 or 4 hours. A nearby Urgent Care Center (UCC) is often a good source of care. Another choice is to go to the ED. Go sooner if you become worse.
  - **If Office Will Be Closed and PCP Second-Level Triage Required:** You may need to be seen. Your doctor (or NP/PA) will want to talk with you to decide what's best. I'll page the on-call provider now. If you haven't heard from the provider (or me) within 30 minutes, call again. **Note:** If on-call provider can't be reached, send to UCC or ED.
- Note to Triager:**
- Use nurse judgment to select the most appropriate source of care.
  - Consider both the urgency of the patient's symptoms AND what resources may be needed to evaluate and manage the patient.
- Sources of Care:**
- **ED:** Patients who may need surgery or hospital admission need to be sent to an ED. So do most patients with serious symptoms or complex medical problems.
  - **UCC:** Some UCCs can manage patients who are stable and have less serious symptoms (e.g., minor illnesses and injuries). The triager must know the UCC capabilities before sending a patient there. If unsure, call ahead.
  - **OFFICE:** If patient sounds stable and not seriously ill, consult PCP (or follow your office policy) to see if patient can be seen NOW in office.
44. **See PCP Within 24 Hours:**
- **If Office Will Be Open:** You need to be examined within the next 24 hours. Call your doctor (or NP/PA) when the office opens and make an appointment.
  - **If Office Will Be Closed:** You need to be seen within the next 24 hours. A clinic or an urgent care center is often a good source of care if your doctor's office is closed or you can't get an appointment.
  - **If Patient Has No PCP:** Refer patient to a clinic or urgent care center. Also try to help caller find a PCP for future care.
- Note to Triager:**
- Use nurse judgment to select the most appropriate source of care.
  - Consider both the urgency of the patient's symptoms AND what resources may be needed to evaluate and manage the patient.
45. **See PCP Within 3 Days:**
- You need to be seen within 2 or 3 days.
  - **PCP Visit:** Call your doctor (or NP/PA) during regular office hours and make an appointment. A clinic or urgent care center are good places to go for care if your doctor's office is closed or you can't get an appointment. **Note:** If office will be open tomorrow, tell caller to call then, not in 3 days.
  - **If Patient Has No PCP:** A clinic or urgent care center are good places to go for care if you do not have a primary care provider. **Note:** Try to help caller find a PCP for future care (e.g., use a physician referral line). Having a PCP or "medical home" means better long-term care.

46. **See PCP Within 2 Weeks:**
- You need to be seen for this ongoing problem within the next 2 weeks.
  - **PCP Visit:** Call your doctor (or NP/PA) during regular office hours and make an appointment.
  - **If Patient Has No PCP:** A primary care clinic is where you need to be seen for chronic health problems. **Note:** Try to help caller find a PCP (e.g., use a physician referral line). Having a PCP or "medical home" means better long-term care.
47. **Home Care - Information or Advice Only Call.**
48. **Home Care:**
- You should be able to treat this at home.
49. **Call PCP Now:**
- You need to discuss this with your doctor (or NP/PA).
  - I'll page the on-call provider now. If you haven't heard from the provider (or me) within 30 minutes, call again.
50. **Call PCP Within 24 Hours:**
- You need to discuss this with your doctor (or NP/PA) within the next 24 hours.
  - **If Office Will Be Open:** Call the office when it opens tomorrow morning.
  - **If Office Will Be Closed:** I'll page the on-call provider now. **Exception:** from 9 pm to 9 am. Since this isn't urgent, we'll hold the page until morning.
51. **Call PCP When Office Is Open:**
- You need to discuss this with your doctor (or NP/PA) within the next few days.
  - Call the office when it is open.
52. **Go to L&D Now:**
- You need to be seen.
  - Go to the Labor and Delivery Unit or the Emergency Department at \_\_\_\_\_ Hospital.
  - Leave now. Drive carefully.
54. **Call Local Agency Within 24 Hours:**
- You need to discuss these issues further with someone from a local agency.
  - Call them within the next 24 hours.
90. **Call Back If:**
- You have more questions.
611. **Get a Flu Shot (Influenza Vaccine):**
- Protect yourself and your family from influenza by getting your annual flu shot (influenza vaccination).
  - All adults should get a flu shot every year. This year is more important than ever. *Reason:* Getting COVID-19 while you also have or are recovering from the flu may increase the chances of getting severe symptoms.

614. **Alternate Disposition - Local Clinic or Urgent Care Center:**
- Many clinics, retail clinics (such as CVS or Walgreens), and urgent care centers perform COVID-19 testing.
  - Call ahead or visit their website to schedule a test.
617. **COVID-19 - What Types of Tests Are Available?**
- There are two types of tests available for COVID-19: viral tests and antibody tests.
  - **Test for Current Infection - Viral Test:** A viral test tells you if you have the COVID-19 infection right now. A viral test is done with either a nasal swab or a saliva sample. **Symptomatic patients** should get a test within 3 days. Asymptomatic **unvaccinated people** with a close contact COVID-19 exposure should get the viral test should get tested immediately. If the test is negative, then testing should be repeated 5 to 7 days after exposure. **Vaccinated people** with an exposure should get the viral test 3 to 5 days after exposure.
  - **Test for Past Infection - Antibody Test:** An antibody test tells you if you have had COVID-19 before. Sometimes an antibody test may turn positive after a person has been vaccinated against COVID-19. This test is done with a blood sample. An antibody test may not be able to show if you have a current infection, because it can take 1 to 3 weeks for your body to make antibodies to the infection. We do not know yet if having antibodies to the virus can protect someone from getting infected with the virus again, or how long that protection might last. If an antibody test is needed, it is usually performed 2 to 3 weeks after the start of the infection.
  - Some test results come back right away or within hours. Some tests may take longer (1 to 3 days) depending on the type of test.
1047. **COVID-19 - How to Protect Your Family and Yourself From Getting Sick:**
- **Get the COVID-19 vaccine.** It is your best protection against this serious infection.
  - Avoid close contact with people known to have COVID-19.
  - Avoid closed spaces (indoors) when possible and all crowds (even outdoors).
  - Limit close contact with people outside your family unit.
  - Try to stay at least 6 feet (2 meters) away from anyone who is coughing.
  - Wash hands often with soap and water.
  - Alcohol-based hand cleaners are also effective.
  - Avoid touching the eyes, nose or mouth. Germs on the hands can spread this way.
  - Do not share eating utensils (e.g., spoon, fork).

1048. **COVID-19 - Face Masks for Prevention:**

- Face masks are important for reducing the spread of COVID-19. They also reduce the spread of influenza (flu). People with COVID-19 can have no symptoms, but still spread the virus.
- Because of the Delta variant (and other possible future variants) recommendations for wearing masks are pretty much the same for people who are vaccinated or unvaccinated. Mask wearing is even more important if you are in an area of high COVID-19 spread or if you have a weak immune system.
- **People Who Are Well (Not Sick With COVID-19) Should Wear Masks If:**
  - ... you are in an indoor public space (such as a church or a grocery store).
  - ... you are in a crowded outdoor setting (e.g., concert, music festival, rally).
  - ... you are traveling on a plane, bus, train, or other form of public transportation or in transportation hubs such as airports and stations.
  - ... you must be around someone who has symptoms of COVID-19 or has tested positive for COVID-19.
- **People Who Are Sick With COVID-19 Should Wear Masks If:**
  - ... you are around other people or animals (such as pets).
- **Exceptions:**
  - ... face mask or covering is optional if outdoors and you can avoid being within 6 feet (2 meters) of other people. Some examples are an outdoor walk or run.
  - ... face coverings also are not recommended for children under 2 years.
- **How to Select and Use a Face Mask:** Make sure your mask fits well (without gaps) and fully covers your nose and mouth. More information on how to select and use a mask is available at: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.html>.

1049. **Keep Your Mind Positive:**

- **Live in the Present:** Live in the present, not the future. The future is where your needless worries live.
- **Think Positive:** Use a mantra to reduce your fears, such as "I am strong". Stay positive.
- **Get Outdoors:** Take daily walks. Go to a park if you have one. Being in nature is good for your immune system.
- **Stay in Touch With Your Friends and Family:** Use regular phone calls and video chats to stay in touch with those you love. Schedule virtual video dinners with friends and family!

1050. **Keep Your Body Strong:**

- Get your body ready to fight the COVID-19 virus.
- Get enough sleep.
- Stay physically active. Walk or exercise every day. Take the stairs.
- Stay well hydrated.
- Eat healthy meals. Avoid overeating to deal with your fears.
- Avoid the over-use of anti-fever medicines. Fever helps fight infections and ramps up your immune system.

1051. **Ask for Help:**

- If you feel so sad or worried that you cannot function, reach out to your health care provider, local mental health center, or national helpline.
- **Canada:** In Canada, crisis and mental health support is available at: <https://www.canada.ca/en/public-health/services/mental-health-services/mental-health-get-help.html>.
- **United States - SAMHSA:** 1-800-662-HELP (4357). Website: [www.samhsa.gov/find-help/national-helpline](http://www.samhsa.gov/find-help/national-helpline).

1071. **Repeating a COVID-19 Viral Test:**

- **Negative Viral Test:** A repeat test is sometimes needed after a negative viral test. *Reason:* A test may be incorrectly negative; for example, if a person gets the test too soon after exposure. Further, if a person is exposed again or develops symptoms suggestive of COVID-19, then repeat viral testing should be performed.
- **Positive Viral Test:** After a positive test, repeat tests are generally not recommended for 90 days (3 months). *Reason:* Even after it is safe to stop isolation (usually 10 days), tests may stay positive. Further, re-infection appears to be rare during the initial 90 days after symptom onset of the preceding infection. However, if you have new symptoms of COVID-19 within 14 days of exposure to someone with COVID-19, you should self-isolate and call your health care provider.

1100. **Other COVID-19 Facts:**

- **Incubation Period:** Average 5 days (range 2 to 14 days) after coming in contact with a person who has COVID-19 virus.
- **No Symptoms, but Infected (Asymptomatic):** Approximately 30% of infected patients may have no symptoms.
- **Mild Infections:** About 80% of those with symptoms have a mild illness, much like a normal flu or a bad cold. The symptoms usually last 2 weeks.
- **Severe Infections:** About 20% of those with symptoms develop trouble breathing from viral pneumonia. Many of these need to be admitted to the hospital. People with complications generally recover in 3 to 6 weeks. Severe infections are much less common in people who are vaccinated.
- **Death Rate:** The adult death rate is approximately 1% to 3%. The death rate is lower in children and younger adults. It is higher in older adults. The risk of death is much lower in people who are vaccinated.
- **Treatment:** Treatment is supportive. Oxygen and IV fluids are used for hospitalized patients. On May 1, 2020 the U.S. Food and Drug Administration (FDA) granted temporary emergency use authorization (EUA) for the investigational antiviral remdesivir to treat COVID-19. Doctors can use this drug to treat patients who are hospitalized with COVID-19 who are severely ill. More research is needed to determine how well this drug works and for which patients.
- **Prevention - Vaccine:** Several vaccines have been approved and released for use in the United States and Canada. Additional vaccines are in development. The COVID-19 vaccine will reduce the chance of you getting COVID-19. If you get COVID-19, the COVID-19 vaccine will decrease the chance of you becoming severely sick or needing to be hospitalized.
- **Prevention - Medicine:** The malaria drug (chloroquine) was studied and found not to be helpful for this disease. It also had cardiac side effects. A monoclonal antibody therapy (REGEN-COV; casirivimab-imdevimab) has become recently (August 2021) available in the U.S. through an emergency use authorization (EUA) for asymptomatic people at high risk for severe disease who have had a close contact exposure. *Remember, social distancing and wearing masks have been proven to help prevent COVID-19!*

1101. **Understanding Viral Test Results:**

- Viral tests look for part of the virus (RNA or proteins) in the test sample. Since this test looks for actual parts of the virus, it can tell you if you are *currently infected* (active infection) and at risk of spreading the disease. A viral test is done using a nasal (nose) swab or saliva (spit).
- A **positive viral test** means that you most likely have an active COVID-19 infection and *can spread the infection to others*.
- A **negative viral test** means that you likely did NOT have an active COVID-19 infection at the time the test was done.
- *Note:* All tests can sometimes have a false (wrong) result. Some reasons for this include how the sample was collected, how long into the illness it was taken, and the type of test done. That is why it is important to discuss your results with your health care provider. The COVID-19 vaccine does NOT affect the results of the viral test.



1102. **Understanding Antibody Test Results:**

- Antibody tests (also called serology tests) are done on blood samples.
- COVID-19 antibody tests look for antibodies to the virus that causes COVID-19. Antibodies begin to form during an infection but can last as long as a lifetime. Therefore, an antibody test cannot tell the difference between an active infection and one you had sometime in the past.
- It is not yet known if antibodies protect you from getting COVID-19 again.
- A **positive antibody test** means that you most likely *have been*, or *are now*, infected with COVID-19. Sometimes an antibody test may turn positive after a person has been vaccinated against COVID-19. However, an antibody test is NOT a reliable way to determine if the vaccine worked for you.
- A **negative antibody test** means that you likely *never had* COVID-19 OR you *have not yet* formed antibodies to COVID-19.

1103. **Understanding Viral and Antibody Testing Together:**

- In some cases, your healthcare provider (HCP) may want to perform both antibody testing and viral testing together. The best source of information on understanding the test results will come from your HCP. Here is some information on how the two results can be used together.
- **Both Tests Are Positive:** You most likely have an *active infection* and can spread COVID-19 to others.
- **Both Tests Are Negative:** You likely do NOT have COVID-19 and likely never had a COVID-19 infection.
- **Viral Test Is Positive and Antibody Test Is Negative:** You most likely have an *active infection* and can spread COVID-19 to others. You have not yet developed antibodies to your active COVID-19 infection.
- **Viral Test Is Negative and Antibody Test Is Positive:** You likely do NOT have an active COVID-19 infection. You most likely had COVID-19 sometime in the past (or received the COVID-19 vaccine).

1111. **COVID-19 - Who Needs Testing?**

- **Symptoms:** All people who have symptoms of COVID-19 should get tested **within 3 days** of becoming ill.
- **Close Contact Exposure:** All people who have had close contact, within 6 feet (2 meters) for a total of 15 minutes or more in a 24-hour period, with someone confirmed to have COVID-19. This includes all people who live with someone confirmed to have COVID-19. **Unvaccinated** or partially vaccinated people should get tested immediately. If the test is negative, then testing should be repeated **5 to 7 days** after exposure. **Vaccinated** people get tested **3 to 5 days** after exposure.
- **Unvaccinated and Crowded Events:** The CDC recommends that unvaccinated or partially vaccinated people who have taken part in crowded indoor or outdoor events (e.g., concerts, festivals, rallies, weddings) should get tested immediately. If the test is negative, then testing should be repeated **5 to 7 days** after exposure.

1233. **COVID-19 - Exposure Risk Factors:**
- *Here are the main risk factors for getting sick with COVID-19.*
  - **Close contact with a person** who tested positive for COVID-19 AND contact occurred while they were ill. Close contact means being within 6 feet (2 meters) for a total of 15 minutes or more in a 24-hour period. This includes living with someone infected with COVID-19.
  - Living in or travel to an area where there is **high community spread** of COVID-19.
  - **International travel:** The CDC (<https://www.cdc.gov/coronavirus/2019-ncov/travelers>) has the most up-to-date list of where COVID-19 outbreaks are occurring.
  - **Not being fully vaccinated.**
1234. **COVID-19 - Symptoms:**
- COVID-19 most often causes a respiratory illness.
  - *The most common symptoms are:* cough, fever, and shortness of breath.
  - *Other less common symptoms are:* chills, fatigue, headache, loss of smell or taste, muscle pain, and sore throat.
  - Some people may have minimal symptoms or even have no symptoms (asymptomatic).
1235. **COVID-19 (Coronavirus Disease 2019) - Pandemic:**
- An outbreak of this infection began in China in December 2019.
  - The first patient in the United States occurred on January 21, 2020.
  - Four patients were confirmed in Canada on January 31, 2020.
  - The *World Health Organization* (WHO) declared COVID-19 a global public health emergency on January 30, 2020 and then a pandemic on March 11, 2020.
  - In the Summer and Fall of 2021 the **Delta variant** has become the most common COVID-19 variant.
  - The *Centers for Disease Control and Prevention* (CDC) is considered the source of truth for this guideline. This continues to be a rapidly changing situation and guidance from the CDC is being updated daily. See <https://www.cdc.gov/coronavirus/2019-nCoV/index.html>.
1236. **Note to Triager - COVID-19 Testing:**
- **For questions about testing**, it is often best to **direct the patient to their doctor** (or NP/PA), during office hours. Their doctor is the best resource for up-to-date information on testing. *Testing in a lab requires a doctor's order (as with all medical tests).*
  - Many clinics, retail clinics (such as CVS, Walgreens), and urgent care centers perform testing.
  - Testing is also available at some local and state public health departments.
  - Self-tests (such as Abbot BinaxNow) for use at home are now available in some drugstores (such as CVS or Walgreens).
  - *What about a standing order?* As testing becomes more widely available, call centers should talk with their medical leadership about triagers being able to use a standing order for testing.

### 1237. COVID-19 - Where to Go for Testing?

- Your doctor (or NP/PA) can order a COVID-19 test for you.
- Many clinics, retail clinics (such as CVS, Walgreens), and urgent care centers perform testing.
- Testing is also available at some local and state public health departments.
- Self-tests (such as Abbot BinaxNow) for use at home are now available in some drugstores (such as CVS, Walgreens).

## FIRST AID



N/A

## BACKGROUND INFORMATION

### Key Points

- An outbreak of this infection began in China in December 2019.
- The first patient in the United States occurred on January 21, 2020.
- Four patients were confirmed in Canada on January 31, 2020.
- The *World Health Organization* (WHO) declared COVID-19 a global public health emergency on January 30, 2020 and then a pandemic on March 11, 2020.
- In the Summer and Fall of 2021 the **Delta variant** became the most common COVID-19 variant.
- COVID-19 vaccination is recommended for all people aged 12 years and older, including people who are pregnant, breastfeeding, trying to get pregnant now, or might become pregnant in the future.
- The *Centers for Disease Control and Prevention* (CDC) is considered the source of truth for this guideline. This continues to be a rapidly changing situation and guidance from the CDC is being updated daily. See <https://www.cdc.gov/coronavirus/2019-nCoV/index.html>.

### Symptoms

The COVID-19 coronavirus most often causes a lower respiratory tract illness. More common symptoms are:

- Anorexia (40-84%)
- Chills (16-28%)
- **Cough** (59-82%)
- Fatigue (44-70%)
- **Fever** (83-99%)
- Loss of smell or taste (40-50%)
- Muscle pain (11-35%)
- **Shortness of breath or difficulty breathing** (31-40%)

Other symptoms may include:

- Diarrhea (2-5%)
- Headache (5-14%)
- Nausea or Vomiting (1-10%)
- Runny or Stuffy Nose (4%)
- Sore Throat (5%)
- Sputum production (14-34%)

Having two or more of any of these symptoms increases the likelihood that a person may have COVID-19.

Over 30% of infected adult patients have no symptoms (asymptomatic). Children and teens are even more likely to have no symptoms.

### **Cause**

It is caused by a novel (new) coronavirus (COVID-19).

Viruses change through mutation. New variants of the COVID-19 virus are expected to appear and spread.

In the Summer and Fall of 2021 the **Delta variant** has become the most common COVID-19 variant:

- The Delta variant spreads much faster than other variants.
- It may cause more severe illness and more hospitalizations.

The COVID-19 vaccines help protect against the delta variant.

- Infection with COVID-19 Delta variant occurs less often in people who are vaccinated.
- When it happens it is called a "breakthrough" infection.
- The risk of serious illness and hospitalization is much lower than if a person was not vaccinated.
- Current evidence suggests that vaccinated people who become infected with COVID-19 can spread the virus to others.

### **How it is Spread (Transmission)**

COVID-19 is spread from person to person.

- **Respiratory Droplets:** The virus spreads from respiratory droplets that are produced when a person coughs, sneezes, shouts, or sings. The infected droplets can then be inhaled by a nearby person or land on the surface of their face or eyes. Droplets fall quickly to the floor or ground. This is **how most COVID is spread**.
- **Surfaces:** Most infected people also have respiratory secretions on their hands. These secretions get transferred to healthy people on doorknobs, faucet handles, etc. The virus then gets transferred to healthy people when they touch their face or rub their eyes. This is a **less common cause** of spread.
- **Aerosols:** Aerosols are tiny, invisible particles that can float in the air for 1 to 2 hours and travel more than 6 feet (2 meters). They can occur in a closed room with poor ventilation. Aerosols are a **rare cause** of COVID-19 spread.

### **Exposure Risk Factors**

Risk factors for getting sick with COVID-19 are:

- **Close contact with a person** who tested positive for COVID-19 AND contact occurred while they were ill. Close contact is defined as being within 6 feet (2 meters) of an infected person for a total of 15 minutes or more in a 24-hour period. This includes **living with someone** infected with COVID-19.
- **Living in or travel from a city** or area where there is community spread of COVID-19. This carries a lower risk compared to close contact if one follows physical distancing recommendations. Community spread is now occurring in most of the US, especially in cities.
- **International Travel:** The CDC (<https://www.cdc.gov/coronavirus/2019-ncov/travelers>) has the most up-to-date list of where COVID-19 outbreaks are occurring.

## Reducing Exposure Risk - Going Out in Public

The risk of COVID-19 spread increases with how closely a person interacts with others, how many people there are, and the longer the interaction.

A person should bring the following with them whenever they go out:

- A cloth face-covering or other face mask that snugly fits over the mouth and nose
- Hand sanitizer with at least 60% alcohol

According to the CDC, if you are fully vaccinated, you can participate in many of the activities that you did before the pandemic:

- "To maximize protection from the Delta variant and prevent possibly spreading it to others, wear a mask indoors in public if you are in an area of substantial or high transmission.
- Wearing a mask is most important if you have a weakened immune system or if, because of your age or an underlying medical condition, you are at increased risk for severe disease, or if someone in your household has a weakened immune system, is at increased risk for severe disease, or is unvaccinated. If this applies to you or your household, you might choose to wear a mask regardless of the level of transmission in your area."

The CDC provides additional instructions and information at: <https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/going-out.html>.

## Reducing Exposure Risk - Travel

- Avoid all non-essential travel.
- If you must travel, go to the CDC website for updates on travel advisories: <https://www.cdc.gov/coronavirus/2019-ncov/travelers>.

## Incubation Period

The incubation period averages 5 days (range 2 to 14 days) after coming in contact with the secretions of a person who has COVID-19.

## Testing

There are two types of tests for COVID-19: viral tests and antibody tests.

- **Test for Current Infection - Viral Test:** A viral test tells us if a person has the COVID-19 infection right now. A viral test is done with either a nasal swab or a saliva sample.
- **Test for Past Infection - Antibody Test:** An antibody test tells us if a person had COVID-19 before. This test is done with a blood sample. An antibody test may not be able to show a current infection, because it can take 1 to 3 weeks for the body to make antibodies to the infection. We do not know yet if having antibodies to the virus can protect someone from getting infected with the COVID-19 virus again, or how long that protection might last. Sometimes an antibody test may turn positive after a person has been vaccinated against COVID-19. However, an antibody test is NOT a reliable way to determine if the vaccine worked.

The results usually come back in 1 to 3 days, but may take longer depending on testing kit or testing site availability.

*Who should get tested? When should testing be performed?*

- All people who have **symptoms of COVID-19**. Should get tested **within 3 days** of becoming ill.
- All people who have had **close contact**, within 6 feet (2 meters) for a total of 15 minutes or more in a 24-hour period, with someone confirmed to have COVID-19. This includes all people who **live with someone** confirmed to have COVID-19. Unvaccinated people should get tested immediately. If the test is negative, then testing should be repeated **5 to 7 days** after exposure. Vaccinated people get tested **about 3 to 5 days** after exposure.
- The CDC recommends that unvaccinated people who have taken part in **crowded indoor or outdoor events** (e.g., concerts, festivals, rallies, weddings) should get tested immediately. If the test is negative, then testing should be repeated **5 to 7 days** after exposure.

For questions about testing, it is often best to direct the patient to their doctor (or NP/PA) during office hours. Their doctor is the best resource for up-to-date information on testing.

## Complications

Complications include pneumonia, hypoxia, ARDS, respiratory failure, and death.

People with the following medical problems or conditions are at **HIGH RISK** of complications.

- **Age:** The risk for severe illness from COVID-19 increases with age, with older adults at highest risk.
- Cancer
- Chronic kidney disease
- Chronic lung disease (e.g., COPD, cystic fibrosis, moderate-severe asthma, pulmonary hypertension)
- Dementia and other neurologic conditions
- Diabetes
- Down syndrome
- Heart disease (e.g., coronary artery disease, heart failure)
- HIV infection
- Liver disease (especially cirrhosis)
- Overweight (BMI from 25 to 30) or obesity (BMI of 30 or higher)
- Pregnancy
- Sickle cell disease
- Smoking
- Solid organ transplant
- Stroke or cerebrovascular disease
- Weak immune system

The adult death rate for COVID-19 is approximately 1% to 3%. The death rate is lower in children and younger adults. It is higher in older adults.

People with O negative blood type may have a slightly lower risk of COVID-19 infection and severe COVID-19 illness. More research on this is needed. People with O negative blood type should still continue to wear a mask, social distance, and get vaccinated!

## Treatment

Treatment is supportive. Oxygen and IV fluids are used for hospitalized patients. Other treatments used in **hospitalized patients** include:

- Antiviral medicine *remdesivir*, under an emergency use authorization (EUA)
- Combination of *remdesivir and baricitinib*, under an emergency use authorization (EUA)

- *Steroid* medications

The following monoclonal antibody therapies are available through an emergency use authorization (EUA) for select **outpatients** at high risk for severe disease:

- Bamlanivimab
- Bamlanivimab-etesevimab
- Casirivimab-imdevimab

## Prevention

Social distancing and wearing masks have been proven to help prevent COVID-19.

COVID-19 vaccines are safe and effective. They reduce the chance of getting COVID-19. If a vaccinated person becomes infected, the chance of severe illness and hospitalization are less.

A monoclonal antibody therapy (REGEN-COV; casirivimab-imdevimab) has become recently (August 2021) available in the U.S. through an emergency use authorization (EUA) for asymptomatic people at high risk for severe disease who have had a close contact exposure.

## Vaccination

COVID-19 vaccination is recommended for all people aged 12 years and older, including people who are pregnant, breastfeeding, trying to get pregnant now, or might become pregnant in the future.

*Source:* CDC 08.11.2021

Several COVID-19 vaccines have been approved or are nearing approval for use in Canada and the United States:

- *AstraZeneca (Oxford)*: Approved for use in Canada in February 2021. For people 18 years and older. More information available at: <https://www.astrazeneca.com/covid-19.html>.
- *Johnson & Johnson (Janssen)*: Approved for use in the US in February 2021. Single shot. For people 18 years and older. More information available at: <https://www.jnj.com/coronavirus>.
- *Moderna*: Approved for use in Canada and US, December 2020. For people 18 years and older. More information available at: <https://www.modernatx.com/cove-study>.
- Novavax.
- *Pfizer (BioNTech)*: Approved for use in Canada and US, December 2020. For people 12 years and older. More information available at: <https://www.cvdvaccine.com/>.

There are other COVID-19 vaccines still in development.

## Quarantine vs. Isolation

The term **quarantine** means to keep someone who might have been exposed to COVID-19 away from others. Quarantine helps prevent the spread of COVID-19 because a person with COVID-19 can spread the virus before they get sick. Also, some people can get COVID-19 and have no symptoms.

How long should a person quarantine after being exposed to COVID-19? The best and safest approach is to stay at home and quarantine for 14 days. In December 2020, the CDC outlined two new optional strategies for determining quarantine duration for asymptomatic people after COVID-19 exposure:

- *Option 1*: Quarantine for only 10 days (without COVID-19 viral testing).
- *Option 2*: Get a negative viral COVID-19 test on day 5 to 7 after exposure and quarantine for only 7



days.

- With either option, continue to watch for symptoms and wear a mask for 14 days after the exposure.

The term **isolation** means to keep someone who is infected with COVID-19 away from others. Isolation helps prevent the spread of COVID-19 to people.

*How long should a person isolate after getting infected with COVID-19? A person must meet all 3 of these requirements to end the isolation period:*

- Fever gone for at least 24 hours off fever-reducing medicines **AND**
- Cough and other symptoms must be improved **AND**
- Symptoms started more than 10 days ago.

*Notes: Those that are severely ill with COVID-19 or have a weak immune system may need to isolate for longer than 10 days. If unsure if it is safe for you to leave isolation, check the CDC website or call your healthcare provider.*

### **Other Coronaviruses in Humans**

*Common coronaviruses* can cause colds and upper respiratory symptoms. These can be identified in currently available commercial respiratory testing panels (human coronaviruses HKU1, OC43, 229E, and OC43). These coronaviruses are completely different than the novel coronavirus addressed in this guideline.

Two other coronaviruses that previously have caused serious outbreaks are:

- *MERS-CoV*: Middle East Respiratory Syndrome (MERS)
- *SARS-CoV*: Severe Acute Respiratory Syndrome (SARS)

### **Animals and COVID-19**

- The main way COVID-19 spreads is from person to person. There is low risk of getting COVID-19 from a pet or other animal.
- It is possible for animals to catch COVID-19 from people. A few pets have tested positive for COVID-19 (including cats and dogs).
- The CDC recommends treating pets like other family members when trying to avoid spreading COVID-19. Do not let pets have close contact with other people or animals outside your household. A sick person should self-isolate and avoid contact with both people and pets.
- Call your vet if your pet gets sick or you have other questions.
- The CDC has more information on COVID-19 and animals at: <https://www.cdc.gov/coronavirus/2019-ncov/animals/pets-other-animals.html>.

### **Internet Resources**

- *Centers for Disease Control and Prevention (CDC)*: Coronavirus. <https://www.cdc.gov/coronavirus/>.
- *National Institutes of Health (NIH)*: Treatment Guidelines. <https://www.covid19treatmentguidelines.nih.gov/>.
- *Public Health Agency of Canada*: <https://www.canada.ca/en/public-health/services/diseases/coronavirus-disease-covid-19.html>.
- *World Health Organization (WHO)*: Coronavirus. <https://www.who.int/health-topics/coronavirus>.

### **Expert Reviewer**

- Lisa M. Koonin, DrPH, MN, MPH; Founder, Health Preparedness Partners; Pandemic preparedness

specialist.

- The Author and Editorial Team are extremely grateful for this subject matter expertise and critical review.

## REFERENCES

1. Babu KM, Brent J, Juurlink DN. Prevention of Opioid Overdose. *N Engl J Med*. 2019 Jun 6;380(23):2246-2255.
2. Blagev DP, Harris D, Dunn AC, Guidry DW, Grissom CK, Lanspa MJ. Clinical presentation, treatment, and short-term outcomes of lung injury associated with e-cigarettes or vaping: a prospective observational cohort study. *Lancet*. 2019 Dec 7;394(10214):2073-2083.
3. Bonow RO, Fonarow GC, O'Gara PT, Yancy CW. Association of Coronavirus Disease 2019 (COVID-19) With Myocardial Injury and Mortality. *JAMA Cardiol*. Published online March 27, 2020.
4. CDC COVID-19 Response Team. Severe Outcomes Among Patients with Coronavirus Disease 2019 (COVID-19) - United States. February 12 - March 16, 2020. *MMWR Morb Mortal Wkly Rep*. ePub: 18 March 2020.
5. Centers for Disease Control and Prevention (CDC). February 12 - March 28, 2020. Preliminary Estimates of the Prevalence of Selected Underlying Health Conditions Among Patients with Coronavirus Disease 2019 - United States. *MMWR Morb Mortal Wkly Rep*. ePub: 31 March 2020.
6. Cortegiani A, Ingoglia G, Ippolito M, Giarratano A, Einav S. A systematic review on the efficacy and safety of chloroquine for the treatment of COVID-19. *J Crit Care*. 2020 Mar 10. pii: S0883-9441(20)30390-7. doi: 10.1016/j.jcrc.2020.03.005. [Epub ahead of print].
7. Deeks JJ, Dinnes J, Takwoingi Y, et al. Cochrane COVID-19 Diagnostic Test Accuracy Group. Antibody tests for identification of current and past infection with SARS-CoV-2. *Cochrane Database Syst Rev*. 2020 Jun 25;6(6):CD013652. Cochrane COVID-19 Diagnostic Test Accuracy Group.
8. Deutsch A, Blasiak R, Keyes A, Wu J, Marmon S, Asrani F, Moy J, Russo M, McLellan BN. COVID toes: Phenomenon or epiphenomenon? *J Am Acad Dermatol*. 2020 Nov;83(5):e347-e348.
9. Dinnes J, Deeks JJ, Adriano A, et al. Cochrane COVID-19 Diagnostic Test Accuracy Group. Rapid, point-of-care antigen and molecular-based tests for diagnosis of SARS-CoV-2 infection. *Cochrane Database Syst Rev*. 2020 Aug 26;8:CD013705.
10. Ebell MH, Lundgren J, Youngpairoj S. How long does a cough last? Comparing patients' expectations with data from a systematic review of the literature. *Ann Fam Med*. 2013 Jan;11(1):5-13.
11. Eccles R. Understanding the symptoms of the common cold and influenza. *Lancet Infect Dis*. 2005 Nov;5(11):718-25.
12. Ettman CK, Abdalla SM, Cohen GH, Sampson L, Vivier PM, Galea S. Prevalence of Depression Symptoms in US Adults Before and During the COVID-19 Pandemic. *JAMA Netw Open*. 2020 Sep 1;3(9):e2019686.
13. Fosbøl EL, Butt JH, Østergaard L, et al. Association of Angiotensin-Converting Enzyme Inhibitor or Angiotensin Receptor Blocker Use With COVID-19 Diagnosis and Mortality. *JAMA*. 2020 Jul 14;324(2):168-177.

14. Freedman MS, Ault K, Bernstein H. Advisory Committee on Immunization Practices Recommended Immunization Schedule for Adults Aged 19 Years or Older - United States, 2021. *MMWR Morb Mortal Wkly Rep.* 2021 Feb 12;70(6):193-196.
15. Gibani MM, Toumazou C, Sohbati M, et al. Assessing a novel, lab-free, point-of-care test for SARS-CoV-2 (CovidNudge): a diagnostic accuracy study. *Lancet Microbe.* 2020 Sep 17.
16. Godwin SA, Cherkas DS, Panagos PD, Shih RD, Bynny R, Wolf SJ. Clinical Policy: Critical Issues in the Evaluation and Management of Adult Patients Presenting to the Emergency Department With Acute Headache. *Ann Emerg Med.* 2019 Oct;74(4):e41-e74.
17. Grohskopf LA, Alyanak E, Broder KR, et al. Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices - United States, 2020-21 Influenza Season. *MMWR Recomm Rep.* 2020;69(8):1-24. Published 2020 Aug 21.
18. Guan WJ, Ni ZY, Hu Y, et al. Characteristics of Coronavirus Disease 2019 in China. *N Engl J Med.* 2020;382(18):1708-1720.
19. Hansen CH, Michlmayr D, Gubbels SM, Mølbak K, Ethelberg S. Assessment of protection against reinfection with SARS-CoV-2 among 4 million PCR-tested individuals in Denmark in 2020: a population-level observational study. *Lancet.* 2021 Mar 27;397(10280):1204-1212.
20. Huang C, Wang Y, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet* published online. January 24, 2020. [https://doi.org/10.1016/S0140-6736\(20\)30183-5](https://doi.org/10.1016/S0140-6736(20)30183-5).
21. Hui DS. Epidemic and Emerging Coronaviruses (Severe Acute Respiratory Syndrome and Middle East Respiratory Syndrome). *Clin Chest Med.* 2017 Mar;38(1):71-86.
22. Jiang F, Deng L, Zhang L, Cai Y, Cheung CW, Xia Z. Review of the Clinical Characteristics of Coronavirus Disease 2019 (COVID-19). *J Gen Intern Med.* 2020;35(5):1545-1549.
23. Lai CKC, Lam W. Laboratory testing for the diagnosis of COVID-19. *Biochem Biophys Res Commun.* 2021 Jan 29;538:226-230.
24. Lauer SA, Grantz KH, Bi Q, et al. The Incubation Period of Coronavirus Disease 2019 (COVID-19) From Publicly Reported Confirmed Cases: Estimation and Application. *Ann Intern Med.* 2020;172(9):577-582.
25. Lee Y, Min P, Lee S, Kim SW. Prevalence and Duration of Acute Loss of Smell or Taste in COVID-19 Patients. *J Korean Med Sci.* 2020 May 11;35(18):e174.
26. Li Q, Zhou L, Zhou M, Chen Z, et al. Preliminary Report: Epidemiology of the Avian Influenza A (H7N9) Outbreak in China. *N Engl J Med.* 2013 Apr 24. [Epub ahead of print].
27. Little P, Stuart B, Hobbs FD, et al. An internet-delivered handwashing intervention to modify influenza-like illness and respiratory infection transmission (PRIMIT): a primary care randomised trial. *Lancet.* 2015;386(10004):1631-1639.
28. Ludvigsson JF. Systematic review of COVID-19 in children show milder cases and a better prognosis than adults. *Acta Paediatr.* 2020 Mar 23. doi: 10.1111/apa.15270. [Epub ahead of print].
29. Mizumoto K, Kagaya K, Zarebski A, Chowell G. Estimating the asymptomatic proportion of coronavirus disease 2019 (COVID-19) cases on board the Diamond Princess cruise ship, Yokohama, Japan, 2020. *Euro Surveill.* 2020;25(10):2000180.

30. Oliver SE, Gargano JW, Marin M, et.al. The Advisory Committee on Immunization Practices' Interim Recommendation for Use of Moderna COVID-19 Vaccine - United States, December 2020. *MMWR Morb Mortal Wkly Rep.* 2021 Jan 1;69(5152):1653-1656.
31. Oliver SE, Gargano JW, Marin M, et.al. The Advisory Committee on Immunization Practices' Interim Recommendation for Use of Pfizer-BioNTech COVID-19 Vaccine - United States, December 2020. *MMWR Morb Mortal Wkly Rep.* 2020 Dec 18;69(50):1922-1924.
32. Pascarella G, Strumia A, Piliago C, et al. COVID-19 diagnosis and management: a comprehensive review [published online ahead of print, 2020 Apr 29]. *J Intern Med.* 2020;10.1111/joim.13091.
33. Paules CI, Marston HD, Fauci AS. Coronavirus Infections - More Than Just the Common Cold. *JAMA*, Published online January 23, 2020.
34. Phelan D, Kim JH, Chung EH. A Game Plan for the Resumption of Sport and Exercise After Coronavirus Disease 2019 (COVID-19) Infection. *JAMA Cardiol.* 2020 May 13.
35. Pollock NR, Jacobs JR, Tran K, et.al. Performance and Implementation Evaluation of the Abbott BinaxNOW Rapid Antigen Test in a High-Throughput Drive-Through Community Testing Site in Massachusetts. *J Clin Microbiol.* 2021 Apr 20;59(5):e00083-21.
36. Pringle JC, et.al. COVID-19 in a Correctional Facility Employee Following Multiple Brief Exposures to Persons with COVID-19 - Vermont, July-August 2020. *MMWR* October 21, 2020 / 69. Early Release.
37. Radonovich LJ Jr, Simberkoff MS3, Bessesen MT, et.al. N95 Respirators vs Medical Masks for Preventing Influenza Among Health Care Personnel: A Randomized Clinical Trial. *JAMA.* 2019 Sep 3;322(9):824-833.
38. Rasmussen SA, Smulian JC, Lednicky JA, Wen TS, Jamieson DJ. Coronavirus Disease 2019 (COVID-19) and Pregnancy: What obstetricians need to know. *Am J Obstet Gynecol.* 2020 Feb 24. pii: S0002-9378(20)30197-6. doi: 10.1016/j.ajog.2020.02.017. [Epub ahead of print].
39. Rothberg MB, Haessler SD, Brown RB. Complications of viral influenza. *Am J Med.* 2008 Apr;121(4):258-64.
40. Rothman RE, Irvin CB, Moran GJ, et.al. Public Health Committee of the American College of Emergency Physicians. Respiratory hygiene in the emergency department. *Ann Emerg Med.* 2006;48(5):570-82.
41. Song Z, Xu Y, et.al. From SARS to MERS, thrusting coronaviruses into the spotlight. *Viruses.* 2019 Jan 14;11(1).
42. Struyf T, Deeks JJ, Dinnes J, Takwoingi Y, et.al. Cochrane COVID-19 Diagnostic Test Accuracy Group. Signs and symptoms to determine if a patient presenting in primary care or hospital outpatient settings has COVID-19 disease. *Cochrane Database Syst Rev.* 2020 Jul 7;7(7):CD013665.
43. Uyeki TM, Bernstein HH, Bradley JS, et.al. Clinical Practice Guidelines by the Infectious Diseases Society of America: 2018 Update on Diagnosis, Treatment, etc. of Seasonal Influenza. *Clin Infect Dis.* 2019 Mar 5;68(6):895-902.
44. Wang AZ, Schaffer JT, Holt DB, Morgan KL, Hunter BR. Troponin Testing and Coronary Syndrome in Geriatric Patients With Nonspecific Complaints: Are We Overtesting? *Acad Emerg Med.* 2020 Jan;27(1):6-14.

45. Wang W, Xu Y, Gao R, Lu R, Han K, Wu G, Tan W. Detection of SARS-CoV-2 in Different Types of Clinical Specimens. JAMA. 2020 Mar 11. doi: 10.1001/jama.2020.3786. [Epub ahead of print].
46. Wang X, Fang J, Zhu Y, et al. Clinical characteristics of non-critically ill patients with novel coronavirus infection (COVID-19) in a Fangcang Hospital [published online ahead of print, 2020 Apr 3]. Clin Microbiol Infect. 2020;S1198-743X(20)30177-4.
47. Wang X, Ferro EG, Zhou G, Hashimoto D, Bhatt DL. Association Between Universal Masking in a Health Care System and SARS-CoV-2 Positivity Among Health Care Workers. JAMA. 2020 Jul 14;324(7):703–4.
48. Yu IT, Li Y, Wong TW, et al. Evidence of airborne transmission of the severe acute respiratory syndrome virus. N Engl J Med. 2004;350(17):1731-1739.

## SEARCH WORDS

2019-NCOV  
BREATHING  
BREATHING DIFFICULTY  
CORONAVIRUS  
CORONAVIRUS EXPOSURE  
COUGH  
COVID19  
COVID-19  
COVID-19 EXPOSURE  
DIFFICULT BREATHING  
DIFFICULTY BREATHING  
EXPOSURE  
EXPOSURE QUESTION  
EXPOSURE QUESTIONS  
FOREIGN TRAVEL  
INFECTION EXPOSURE  
NCOV  
NOVEL CORONAVIRUS  
SOB  
TRAVEL  
TROUBLE BREATHING

## AUTHOR AND COPYRIGHT

**Author:** David A. Thompson, MD, FACEP  
**Copyright:** 2000-2021, LaGrange Medical Software, Inc. All rights reserved.  
**Company:** Schmitt-Thompson Clinical Content  
**Content Set:** After Hours Telehealth Triage Guidelines | Adult  
**Version Year:** 2021  
**Last Revised:** 8/25/2021  
**Last Reviewed:** 8/25/2021