

## DEFINITION

- Exposure (close contact) to a person who is suspected or known to have COVID-19 (Coronavirus Disease 2019)
- Travel to a geographic area with significant ongoing community transmission of COVID-19; see CDC list of geographic areas of high transmission at <https://www.cdc.gov/coronavirus/2019-ncov/about/transmission.html>
- Living in a CDC-identified high COVID-19 transmission geographic area
- Questions about COVID-19
- This guideline was **last updated** 3/15/2020.

**COVID-19 EXPOSURE (Close Contact)** 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 prolonged period of time (CDC). Examples of such close contact include kissing or hugging, sharing eating or drinking utensils, carpooling, close conversation, or performing a physical examination (relevant to health care providers). A prolonged close conversation is probably at least 10 minutes.
- 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/php/risk-assessment.html>.

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

- Living in a city or town where there are one or more confirmed cases of COVID-19. *Exception:* it is one of the high transmission geographic areas listed by the CDC at <https://www.cdc.gov/coronavirus/2019-ncov/about/transmission.html>.
- Walking by a person who has COVID-19.

A **Person Under Investigation (PUI)** is a person with symptoms who a healthcare provider suspects of having COVID-19.

- Restated, these are people who are sick and who will likely require testing.
- The latest CDC guidance on assessment of PUI's is available at <https://www.cdc.gov/coronavirus/2019-ncov/php/guidance-evaluating-pui.html>.

*Note:* The term coronavirus used throughout this guideline only refers to the novel or new coronavirus disease (COVID-19). It does not refer to the *common coronavirus* that causes the common cold.

## INITIAL ASSESSMENT QUESTIONS

1. **CONFIRMED CASE:** "Who is the person with the confirmed COVID-19 infection that you were exposed to?"
2. **PLACE of CONTACT:** "Where were you when you were exposed to COVID-19 (coronavirus disease 2019)?" (e.g., city, state, country)
3. **TYPE of CONTACT:** "How much contact was there?" (e.g., live in same house, work in same office, same school)
4. **DATE of CONTACT:** "When did you have contact with a coronavirus patient?" (e.g., days)
5. **DURATION of CONTACT:** "How long were you in contact with the COVID-19 (coronavirus disease)"

patient?" (e.g., a few seconds, passed by person, a few minutes, live with the patient)  
6. SYMPTOMS: "Do you have any symptoms?" (e.g., fever, cough, breathing difficulty)  
7. PREGNANCY OR POSTPARTUM: "Is there any chance you are pregnant?" "When was your last menstrual period?" "Did you deliver in the last 2 weeks?"  
8. HIGH RISK: "Do you have any heart or lung problems? Do you have a weakened immune system?" (e.g., CHF, COPD, asthma, HIV positive, chemotherapy, renal failure, diabetes mellitus, sickle cell anemia)

## TRIAGE ASSESSMENT QUESTIONS

### Call EMS 911 Now

Severe difficulty breathing (e.g., struggling for each breath, speak in single words, bluish lips)

*R/O: respiratory failure, hypoxia*

*CA: 40, 23, 24, 17, 19, 1*

Sounds like a life-threatening emergency to the triager

*CA: 40, 23, 24, 17, 19, 1*

### See More Appropriate Guideline

[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)*

### Go to ED Now

[1] Difficulty breathing occurs AND [2] within 14 days of COVID-19 EXPOSURE (Close Contact)

*R/O: Coronavirus pneumonia. Reason: Meets PUI criteria (persons under investigation). Note: triager should call ahead to the ED.*

*CA: 41, 15, 16, 17, 18, 19, 21, 80, 1*

Patient sounds very sick or weak to the triager

*Reason: severe acute illness or serious complication suspected. Note: triager should call ahead to the ED.*

*CA: 41, 15, 16, 17, 18, 19, 21, 80, 1*

### Call PCP within 24 Hours

[1] Fever or feeling feverish AND [2] within 14 Days of COVID-19 EXPOSURE (Close Contact)

*R/O: Coronavirus. Reason: Meets PUI criteria (persons under investigation). Note: Typically, the fever is greater than 100.4 F (38.0 C). However, people who are elderly or have a weak immune system may not have a significant fever.*

CA: 50, 37, 27, 30, 31, 25, 18, 19, 21, 72, 73, 22, 1

[1] Cough occurs AND [2] within 14 days of COVID-19 EXPOSURE

*R/O: Coronavirus. Reason: Meets PUI criteria (persons under investigation).*

CA: 50, 37, 27, 30, 31, 25, 18, 19, 21, 22, 1

[1] Fever (or feeling feverish) OR cough occurs AND [2] travel from or living in high risk area (identified by CDC) AND [3] within last 14 days

*R/O: Coronavirus. Reason: Meets PUI criteria (persons under investigation). Note: Typically, the fever is greater than 100.4 F (38.0 C). However, people who are elderly or have a weak immune system may not have a significant fever. Note: See CDC list of affected geographic areas of transmission at <https://www.cdc.gov/coronavirus/2019-ncov/about/transmission.html>.*

CA: 50, 37, 27, 30, 31, 25, 18, 19, 21, 72, 73, 22, 1

[1] COVID-19 EXPOSURE within last 14 days AND [2] mild body aches, chills, diarrhea, headache, runny nose, or sore throat occur

*R/O: viral syndrome. Note: patient has no cough, fever, or shortness of breath. It is less likely that this is COVID-19.*

CA: 50, 37, 27, 36, 3, 4, 5, 6, 7, 12, 39, 1

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

*Reason: Exposed person should consult with occupational health and determine if they can return to work.*

CA: 50, 27, 37, 33, 3, 4, 5, 11, 26, 1

### **Call PCP when Office is Open**

[1] COVID-19 EXPOSURE (Close Contact) within last 14 days AND [2] NO cough, fever, or breathing difficulty

*Reason: People exposed to coronavirus but without symptoms should monitor their own symptoms and keep their health care provider informed.*

CA: 51, 27, 37, 32, 28, 3, 4, 5, 11, 12, 26, 1

[1] Travel from or living in high risk area (identified by CDC) AND [2] within last 14 days AND [3] NO cough or fever or breathing difficulty

*Reason: Patient is asymptomatic and has no known definite exposure; however, patient could still develop symptoms and their workplace may prefer patient to stay/work at home. Note: See CDC list of affected geographic areas of transmission at <https://www.cdc.gov/coronavirus/2019-ncov/about/transmission.html>.*

CA: 51, 27, 37, 13, 32, 29, 3, 4, 5, 8, 6, 12, 26, 1

### **Home Care**

[1] COVID-19 EXPOSURE (Close Contact) AND [2] 15 or more days ago AND [3] NO cough or fever or breathing difficulty

*Reason: Asymptomatic for more than 14 days. Symptoms appear within 14 days after exposure to coronavirus.*

CA: 48, 2, 3, 4, 5, 6, 7, 90, 1

[1] No COVID-19 EXPOSURE BUT [2] living with someone who was exposed and who has no fever or cough

*Reason: no exposure, no symptoms.*

CA: 48, 3, 4, 5, 6, 7, 8, 9, 34, 10, 35, 90, 1

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

*Reason: unrealistic fear of exposure and needs reassurance*

CA: 48, 603, 601, 4, 5, 6, 604, 90, 1

COVID-19 testing, questions about who needs it

*Reason: no exposure, no symptoms.*

CA: 48, 601, 602, 90, 1

[1] No COVID-19 EXPOSURE BUT [2] questions about

*Reason: no exposure, no symptoms.*

CA: 48, 3, 4, 5, 6, 7, 8, 601, 604, 9, 34, 10, 35, 90, 1

[1] Diagnosed with Coronavirus Disease (COVID-19) AND [2] questions about home isolation

CA: 48, 605, 606, 607, 608, 609, 610, 611, 1

## CARE ADVICE (CA) -

1. **Care Advice** given per Coronavirus (COVID-19) Exposure (Adult) guideline.
2. **Reassurance and Education - No Symptoms and Day 15 or Later:**
  - The coronavirus infection starts within 14 days of an exposure.
  - Symptoms are those of a respiratory infection (such as fever, cough).
  - If you have not had symptoms by day 15, you should be safe from getting the coronavirus.
3. **COVID-19 (Coronavirus Disease 2019) - Outbreak:**
  - Our knowledge of COVID-19 is expanding as this outbreak spreads across the world.
  - An outbreak of this infection began in Wuhan, Hubei Province, 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.
  - 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>.
4. **COVID-19 - Symptoms:**
  - The coronavirus can cause a respiratory illness, such as bronchitis or pneumonia.
  - *The most common symptoms are:* cough, fever, and shortness of breath.
  - *Other less common symptoms are:* body aches, chills, diarrhea, fatigue, headache, runny nose, and sore throat

5. **COVID-19 - Exposure Risk Factors:**
  - You are at increased risk of COVID-19 if either of the following has occurred.
  - Exposure to a person who has been diagnosed (laboratory confirmed) with COVID-19.
  - Travel from or living in a geographic area with recent local transmission of COVID-19; see CDC list of geographic areas of high transmission at <https://www.cdc.gov/coronavirus/2019-ncov/about/transmission.html>.
6. **COVID-19 - How it Is Spread:**
  - The virus likely spreads through respiratory droplets produced when a person coughs or sneezes. This is how most respiratory viruses spread.
  - It is possible that a person can 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.
7. **COVID-19 - How to Protect Yourself from Getting Sick:**
  - *Avoid close contact with people known to have this new coronavirus infection.*
  - 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).
8. **COVID-19 - Travel:**
  - The Centers for Disease Control and Prevention (CDC) maintains a website with 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>
9. **FAQ - Should I wear a face mask to protect me from getting COVID-19?**
  - The CDC does not currently recommend the use of face masks among the general public.
  - If you have symptoms, you should wear a facemask when seeking medical care.
  - More information about prevention is available at: <https://www.cdc.gov/coronavirus/2019-ncov/about/prevention-treatment.html>.
10. **FAQ - What are examples of activities that do not cause or increase my risk of getting COVID-19?**
  - Eating at a Chinese restaurant.
  - Walking by a person who has coronavirus.
  - Living in a city or town where there are one or more confirmed cases of coronavirus.
  - Close contact with a person who was exposed to coronavirus more than 14 days ago and never developed any symptoms.

11. **Measure Temperature:**
  - Watch for symptoms of cough and fever.
  - Measure your temperature 2 times each day, until 14 days after exposure.
  - Report any cough or fever to your healthcare provider or to the local department of public health.
12. **Home Isolation Recommendations:**
  - *Isolation will be needed if you develop a cough or fever 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.
13. **Note to Triager - HCP Will Notify Public Health Department:**
  - The patient should stay at home and avoid contact with others until they have talked with their HCP, a telemedicine provider, or the public health department.
  - The patient should check their temperature two times a day. Early detection of symptoms is the only way to prevent spread of the disease.
  - *Possible Sources of Care:* People exposed to coronavirus but without symptoms need to be followed closely by the public health department and their healthcare provider. *The best source of care will depend on your local health system and community resources. Use your judgment and knowledge of current public health department recommendations.*
15. **Note to Triager - Triage Nurse Should Notify Emergency Department (ED):**
  - The triager should call ahead to the ED and inform them of patient's symptoms and suspected diagnosis of **COVID-19**.
  - Obtain and document the patient / caller's mobile phone number. Either keep the patient on hold or call the patient back with instructions.
  - *Reason:* So that ED can make plans to prevent coronavirus spread to others in the hospital.
16. **You should Go to the Emergency Department (ED):**
  - You will need to go to a nearby ED.
  - Do not leave until I've called and talked with the ED. The ED may have special instructions on how best to get you there. I will call you back (or place you on hold).
17. **Tell Emergency Department Personnel:**
  - Tell the first person you meet in the emergency department that you may have been exposed to COVID-19 (Coronavirus Disease).
18. **Isolation Is Needed:**
  - Isolate yourself at home.
  - Do **Not** allow any visitors
  - Do **Not** go to work or school
  - Do **Not** go to church, child care centers, shopping, or other public places.
  - Do **Not** shake hands.
  - **Avoid close contact** with others (hugging, kissing).

19. **Cover Your Mouth and Nose, Wear a Mask:**
  - Cover your mouth and nose with a disposable tissue (e.g., Kleenex, toilet paper, paper towel) or wash cloth.
  - Ask for a mask to wear over your mouth and nose.
20. **Cover Your Mouth and Nose:**
  - Cover your mouth and nose with a disposable tissue (e.g., Kleenex, toilet paper, paper towel) or wash cloth.
21. **Wash Your Hands with Soap and Water:**
  - Wash your hands and face frequently with soap and water.
22. **Call Back If:**
  - Shortness of breath or trouble breathing
  - You become worse.
23. **Tell the Ambulance Dispatcher about Your COVID-19 Exposure:**
  - When you call 911, tell the dispatcher that you may have been exposed to Coronavirus Disease (COVID-19).
24. **Tell Ambulance Medics about Your COVID-19 Exposure:**
  - Tell the paramedic right away that you may have been exposed to Coronavirus Disease (COVID-19).
25. **For In-Person Visits - Patient Must Tell Healthcare Personnel:**
  - Tell the first person you meet in any healthcare facility that you may have been exposed to Coronavirus Disease (COVID-19).
26. **Call Back (or Call Your Doctor) If:**
  - Fever or feeling feverish occurs within 14 days of Coronavirus Disease (COVID-19) exposure.
  - Cough or difficulty breathing occur within 14 days of Coronavirus Disease (COVID-19) exposure.
  - Body aches, chills, diarrhea, headache, runny nose, or sore throat occur within 14 days of Coronavirus Disease (COVID-19) exposure.
  - You have more questions.
27. **Alternate Disposition - Call Occupational Health at Your Workplace Within 24 Hours:**
  - You need to call and discuss this with the Occupational Health Department for your workplace within the next 24 hours.
28. **Reassurance and Education:**
  - Although you were exposed to coronavirus (COVID-19), it appears that you do not currently have any symptoms of coronavirus infection. Coronavirus infections starts within 14 days following the last exposure.
  - Since it's been less than 14 days, you still are at risk for getting sick with coronavirus.
  - You need to watch for symptoms until 14 days have passed. Check your temperature two times a day.
  - Stay at home until you talk with your doctor or the local public health department.

29. **Reassurance and Education:**
- Coronavirus (COVID-19) infections starts within 14 days following the last exposure.
  - Since it's been less than 14 days, since your travel to a high risk area, you still are at risk for getting sick with coronavirus.
  - You should stay at home and not go to work until 14 days after the exposure.
  - If you work, you should call the occupational health office for your workplace.
  - **You need to watch for symptoms until 14 days have passed.** Check your temperature two times a day.
30. **Note to Triager - COVID-19 Testing Probably Indicated:**
- COVID-19 testing is available from the CDC and local and state public health departments. Commercial labs have or will soon have these tests available. This is a throat or nose swab test.
  - The patient should stay at home and avoid contact with others.
  - The patient needs to be followed closely by the public health department and their healthcare provider.
  - **Possible sources of care are:** The best source of care will depend on your local health system and community resources. *Use your judgment and knowledge of current public health department recommendations.*
31. **For In-Person Visits - Patient or Triage Nurse Should Phone Ahead:**
- Wherever you go for care, it is important to phone ahead first.
  - Tell them that you may have been exposed to coronavirus and you are now having symptoms (e.g., fever, cough).
  - You **Must** do this so that the healthcare workers can make plans to prevent spread of coronavirus to others.
32. **Note to Triager - Should the Patient Go to Work?**
- It is reasonable for people who have **traveled** to a high risk area or had **close contact** exposure to coronavirus in the last 14 days, to make arrangements to work from home until 14 days have passed.
  - The patient should talk to the occupational health office for their workplace.
33. **Note to Triager - Should an Exposed Healthcare Worker Go Back to Work?**
- Healthcare workers who were exposed to coronavirus and who were not wearing recommended personal protective equipment are at risk of getting coronavirus.
  - This is a concern because if they get infected, they can spread it to patients.
  - The exposed healthcare worker should talk to the occupational health office for their workplace.
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 coronavirus before they start feeling sick. However, this is not the main way coronavirus spreads.

35. **FAQ - Can I get coronavirus from touching an infected surface?**
- It is possible that a person could get coronavirus by touching an object like a doorknob or a phone, or surfaces like a table or desk.
  - However, this is not the main way coronavirus 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.
36. **Reassurance and Education:**
- The coronavirus infection starts within 14 days of an exposure.
  - The most common symptoms are those of a respiratory infection (such as fever, cough, and shortness of breath).
  - You do not have a fever, cough, or trouble breathing and so it is less likely that this is Coronavirus Disease (COVID-19).
  - Still, to be safe and for peace of mind, it is probably best if you talk to your healthcare provider.
37. **Alternate Disposition - Telemedicine Within 24 Hours:**
- Telemedicine may be your best choice for care during this COVID-19 outbreak.
  - You should call a telemedicine provider within the next 24 hours, if your own healthcare provider is not available.
38. **Alternate Disposition - Call PCP Within 24 Hours:**
- You need to discuss this with your doctor (or NP/PA) within the next 24 hours.
39. **Call Back If:**
- Shortness of breath or trouble breathing
  - Fever or feeling feverish occurs within 14 days of Coronavirus Disease (COVID-19) exposure.
  - Cough occurs within 14 days of Coronavirus Disease (COVID-19) exposure.
  - You become worse.
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 Within 4 Hours (or PCP triage):**
- **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.
44. **See PCP Within 24 Hours:**
- **If Office Will Be Open:** You need to be seen within the next 24 hours. Call your doctor (or NP/PA) when the office opens and make an appointment.
  - **If Office Will Be Closed and No PCP (Primary Care Provider) Second-Level Triage:** 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 Office Will Be Closed and PCP Second-Level Triage Required:** You may need to be seen within the next 24 hours. Your doctor (or NP/PA) will want to talk with you to decide what's best. I'll page the on-call provider now. **NOTE:** Since this isn't serious, hold the page between 10 pm and 7 am. Page the on-call provider in the morning.
  - **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.
45. **See PCP Within 3 Days:**
- You need to be seen within 2 or 3 days. 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 (Primary Care Provider):** 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. Call your doctor (or NP/PA) during regular office hours and make an appointment.
  - **If Patient Has No PCP (Primary Care Provider):** A primary care clinic or an 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 (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.
72. **Fever Medicines:**
- For fever relief, take acetaminophen or ibuprofen.
  - Treat fevers above 101° F (38.3° C).
  - The goal of fever therapy is to bring the fever down to a comfortable level. Remember that fever medicine usually lowers fever 2-3° F (1-1.5° C).
- Acetaminophen (e.g., Tylenol):**
- Take 650 mg (*two 325 mg pills*) by mouth every 4-6 hours as needed. Each Regular Strength Tylenol pill has 325 mg of acetaminophen. The most you should take each day is 3,250 mg (10 Regular Strength pills a day).
  - Another choice is to take 1,000 mg (*two 500 mg pills*) every 8 hours as needed. Each Extra Strength Tylenol pill has 500 mg of acetaminophen. The most you should take each day is 3,000 mg (6 Extra Strength pills a day).
- Ibuprofen (e.g., Motrin, Advil):**
- Take 400 mg (*two 200 mg pills*) by mouth every 6 hours as needed.
  - The most you should take each day is 1,200 mg (six 200 mg pills a day), unless your doctor has told you to take more.
- Extra Notes:**
- Acetaminophen is thought to be safer than ibuprofen or naproxen for people over 65 years old. Acetaminophen is in many OTC and prescription medicines. It might be in more than one medicine that you are taking. You need to be careful and not take an overdose. An acetaminophen overdose can hurt the liver.
  - McNeil, the company that makes Tylenol, has different dosage instructions for Tylenol in Canada and the United States. In Canada, the maximum recommended dose per day is 4,000 mg or twelve (12) Regular-Strength (325 mg) pills. In the United States, McNeil recommends a maximum dose of ten (10) Regular-Strength (325 mg) pills.
  - Before taking any medicine, read all the instructions on the package.

73. **Caution - NSAIDs (e.g., ibuprofen, naproxen):**
- Do not take nonsteroidal anti-inflammatory drugs (NSAIDs) if you have stomach problems, kidney disease, heart failure, or other contraindications to using this type of medicine.
  - Do not take NSAID medicines for over 7 days without consulting your PCP.
  - Do not take NSAID medicines if you are pregnant.
  - Do not take NSAID medicines if you are also taking blood thinners.
  - You may take this medicine with or without food. Taking it with food or milk may lessen the chance the drug will upset your stomach.
  - **Gastrointestinal Risk:** There is an increased risk of stomach ulcers, GI bleeding, perforation.
  - **Cardiovascular Risk:** There may be an increased risk of heart attack and stroke.
80. **Driving:**
- Another adult should drive.
89. **Call Back If:**
- You become worse.
90. **Call Back If:**
- You have more questions.
144. **Cough Medicines:**
- **OTC Cough Syrups:** The most common cough suppressant in OTC cough medications is dextromethorphan. Often the letters "DM" appear in the name.
  - **OTC Cough Drops:** Cough drops can help a lot, especially for mild coughs. They reduce coughing by soothing your irritated throat and removing that tickle sensation in the back of the throat. Cough drops also have the advantage of portability - you can carry them with you.
  - **Home Remedy - Hard Candy:** Hard candy works just as well as medicine-flavored OTC cough drops. People who have diabetes should use sugar-free candy.
  - **Home Remedy - Honey:** This old home remedy has been shown to help decrease coughing at night. The adult dosage is 2 teaspoons (10 ml) at bedtime. Honey should not be given to infants under one year of age.
601. **COVID-19 - Information about Testing:**
- Tests for COVID-19 are only done on patients who are sick (have a fever or cough) AND also have a past history that puts them at definite risk for having COVID-19.
  - Testing requires a doctor's order (as with all medical tests).
  - Testing is performed on material collected with a nose or throat swab.
  - Swab specimens are then sent to the CDC and/or state public health department.
  - In the near future, commercial labs may also have these tests available.
  - The results usually come back in 1 to 4 days.
  - Any person who is being tested should be staying home (home isolation).

602. **COVID-19 - Where to Go for Testing:**

- Go to the testing site recommended by your healthcare provider (e.g., doctor, NP, or PA) or public health department.
- Swabs of the throat and/or nose will only be collected on patients who have a healthcare provider's order.
- People cannot walk in and request a COVID-19 test.
- Testing sites vary based on the city, hospital, and healthcare system.
- In general, they are not performed in private doctor's offices or clinics.

603. **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 within 24 hours.
- Discourage the caller from going to a healthcare facility, unless they are feeling very sick (e.g., difficulty breathing, very weak).

604. **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.
- *Expected Course:* Studies from other counties have shown that about 80% have a mild illness, much like normal flu or a bad cold. The symptoms usually last 2 weeks.
- *Asymptomatic Patients:* An unknown percentage of infected patients have no symptoms.
- *Complications:* Viral pneumonia occurs in 5 to 10% of patients. People with complications generally recover in 3 to 6 weeks.
- *Death Rate:* The adult death rate is currently estimated to be between 1% and 3%. The death rate is lower in children and highest in older adults.
- *Vaccine:* There currently is no vaccine to prevent COVID-19. Many labs are working on developing a vaccine, but that will take at least a year.
- *Treatment:* Currently, there is no effective anti-viral medication for coronavirus. Treatment is supportive (e.g., oxygen and IV fluids) for hospitalized patients.

605. **People Diagnosed with COVID-19 - Home Isolation:**

- **Stay at home.** People who are mildly ill with COVID-19 can recover at home. Do not leave to
- 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.
- Do **Not** use public transportation (e.g., bus, taxis, ride-sharing).

606. **Stay Away from Others in Your Home:**

- As much as possible, you should stay in a specific "sick room" and away from other people in your home.
- Use a separate bathroom, if available.

607. **Clean Your Hands Often:**

- **Wash Hands:** Wash your hands often with soap and water for at least 20 seconds. This is especially important after blowing your nose, coughing, or sneezing; going to the bathroom; and before eating or preparing food.
- **Use Hand Sanitizer:** If soap and water are not available, use an alcohol-based hand sanitizer with at least 60% alcohol, covering all surfaces of your hands and rubbing them together until they feel dry.
- Avoid touching your eyes, nose, and mouth with unwashed hands.

**608. Clean "High Touch" Surfaces Every Day:**

- Clean high-touch surfaces in your isolation area ("sick room" and bathroom) every day.
- High-touch surfaces include phones, remote controls, counters, tabletops, doorknobs, bathroom fixtures, toilets, keyboards, tablets, and bedside tables.

**609. Call Ahead Before Visiting Your Healthcare Provider (Doctor, NP, PA):**

- Call ahead: If you have a medical appointment, call your doctor's office or emergency department, and tell them you have or may have COVID-19.
- This will help the office protect themselves and other patients.
- Wear a facemask.

**610. How and When to Stop Home Isolation:**

- *Talk to your healthcare provider.*
- The decision to stop home isolation should be made by your healthcare provider in consultation with the local health departments. Local decisions depend on local circumstances.

**611. Call Back (or Call Your Healthcare Provider) If:**

- Shortness of breath occurs
- You become worse.

**FIRST AID**

N/A



**BACKGROUND INFORMATION**

**Key Points**

- Our knowledge of COVID-19 is expanding as this outbreak spreads across the world.
- An outbreak of this infection began in Wuhan, Hubei Province, 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.
- 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 causes a lower respiratory tract illness. Common symptoms are:

- Cough
- Fever
- Shortness of breath

Less common symptoms may include:

- Body aches
- Chills

- Diarrhea
- Fatigue
- Headache
- Runny nose
- Sore throat

### Complications

Possible complications include pneumonia, respiratory distress, hypoxia, and respiratory failure.

### Cause

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

### Exposure Risk Factors

The two main risk factors for getting sick with COVID-19 are:

- Exposure to a person who has been diagnosed (laboratory confirmed) with COVID-19.
- Travel from or living in a geographic area with high ongoing transmission of coronavirus; see CDC list of geographic areas of high transmission at <https://www.cdc.gov/coronavirus/2019-ncov/about/transmission.html>.

The following activities do not increase the risk for getting sick with COVID-19:

- Eating at a Chinese restaurant.
- Close contact with an asymptomatic person who was exposed to COVID-19 more than 14 days ago.

### Patient Risk Factors

Based on prior virus outbreaks, such as influenza, it is presumed that adults in the following two groups are at **High Risk** of developing COVID-19-related complications:

- Women who are pregnant or postpartum (up to 2 weeks)
- Persons < 2 years old and > 65 years and older

People with the following medical conditions may also be at **High Risk** of developing COVID-19-related complications:

- Aspirin long-term therapy (e.g., Kawasaki's disease and rheumatoid arthritis)
- Compromised ability to handle respiratory secretions (e.g., spinal cord or brain injury)
- Diabetes
- Heart disease (e.g., congestive heart failure, pacemaker, cardiac surgery)
- Kidney disease (e.g., nephrotic syndrome, renal dialysis)
- Liver disease (e.g., liver failure, chronic hepatitis)
- Lung disease (e.g., COPD, emphysema, asthma, cystic fibrosis, bronchopulmonary dysplasia)
- Neuromuscular or neurologic disease (e.g., stroke, Parkinson's disease, muscular dystrophy, cerebral palsy, epilepsy)
- Sickle cell disease
- Technology-dependent lung disease (e.g., oxygen required, tracheostomy, ventilator)
- Weak immune system (e.g., cancer, chemotherapy, HIV/AIDS, transplant, taking oral steroids)

This is being studied by the CDC. More data is needed.

## How it is Spread (Transmission)

The virus likely spreads through respiratory droplets produced when a person coughs or sneezes. This is how most respiratory viruses spread.

- Reports from China suggest that the initial COVID-19 cases were spread from animals to humans.
- The current large number of cases are believed to be spread from human to human.

Both SARS and MERS, which are also coronaviruses, were spread through respiratory droplet (cough, sneezing) person-to-person.

See CDC list of geographic areas of high transmission at <https://www.cdc.gov/coronavirus/2019-ncov/about/transmission.html>.

## Incubation Period

The incubation period is between 2 and 14 days after exposure.

## Diagnosis and Reporting

A **person Under investigation** (PUI) is a person with symptoms who a healthcare provider suspects of having COVID-19.

- Restated, these are people who are sick and who will likely require testing.
- The latest CDC guidance on assessment of PUI's is available at <https://www.cdc.gov/coronavirus/2019-ncov/php/guidance-evaluating-pui.html>.

Healthcare providers who identify a PUI should notify both the infection control personnel for their healthcare facility and the local or state health department.

## Treatment

There is no vaccine or anti-viral medication for Coronavirus Disease 2019 (COVID-19). Treatment is supportive (e.g., oxygen and IV fluids).

## 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 NL63). 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)

## Internet Resources

- *Centers for Disease Control and Prevention (CDC)*: Coronavirus. <https://www.cdc.gov/coronavirus/>.
- *Public Health Agency of Canada*: <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html>.
- *World Health Organization (WHO)*: Coronavirus. <https://www.who.int/health-topics/coronavirus>.

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## REFERENCES

1. 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.
2. Eccles R. Understanding the symptoms of the common cold and influenza. *Lancet Infect Dis*. 2005 Nov;5(11):718-25.
3. 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)
4. Hui DS. Epidemic and Emerging Coronaviruses (Severe Acute Respiratory Syndrome and Middle East Respiratory Syndrome). *Clin Chest Med*. 2017 Mar;38(1):71-86.
5. Paules CI, Marston HD, Fauci AS. Coronavirus Infections - More Than Just the Common Cold. *JAMA*, Published online January 23, 2020.
6. Rothberg MB, Haessler SD, Brown RB. Complications of viral influenza. *Am J Med*. 2008 Apr;121(4):258-64.
7. 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.
8. Song Z, Xu Y, et.al. From SARS to MERS, thrusting coronaviruses into the spotlight. *Viruses*. 2019 Jan 14;11(1).
9. 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  
CHINA TRAVEL  
CORONAVIRUS  
CORONAVIRUS EXPOSURE  
COUGH  
COVID-19  
DIFFICULT BREATHING  
DIFFICULTY BREATHING  
EXPOSURE  
EXPOSURE QUESTION  
EXPOSURE QUESTIONS  
FOREIGN TRAVEL  
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NOVEL CORONAVIRUS  
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