

COVID-19 - Diagnosed or Suspected

After Hours Telehealth Triage Guidelines | Adult | 2021



DEFINITION

- Diagnosis was confirmed by **positive lab test** OR
- **Clinical diagnosis** (suspected diagnosis) was made by healthcare provider (HCP) OR
- **Patient or caregiver suspects COVID-19** based on symptoms consistent with COVID-19 and recalls close contact with a person with COVID-19 in past two weeks, or is living in an area of high community spread.

Note to Triager:

- Triagers should use their clinical judgment, but generally will want to use the *COVID-19 - Diagnosed or Suspected* guideline when a patient calls with cough, fever, shortness of breath, or a combination of typical COVID symptoms and there is community spread.
- During the 2020-2021 influenza season, triagers can use the *COVID-19 - Diagnosed or Suspected* guideline when a patient calls with flu-like symptoms.
- In adult patients triager should use clinical judgment to decide whether a symptom guideline (e.g., Chest Pain, Fever, Headache) should be used in addition to the *COVID-19 - Diagnosed or Suspected* guideline. Adult patients have multiple factors that make assessment and triage more complex. Adults (and especially older adults) are more likely to have one or more chronic underlying medical conditions. Increased age is also a strong risk factor for severe COVID-19 illness and complications. Further, fever as a marker of important pathology increases significantly by age in adults.
- *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** 5/7/2021.

INITIAL ASSESSMENT QUESTIONS

1. COVID-19 DIAGNOSIS: "Who made your Coronavirus (COVID-19) diagnosis?" "Was it confirmed by a positive lab test?" If not diagnosed by a HCP, ask "Are there lots of cases (community spread) where you live?" (See public health department website, if unsure)
2. COVID-19 EXPOSURE: "Was there any known exposure to COVID before the symptoms began?" CDC Definition of close contact: within 6 feet (2 meters) for a total of 15 minutes or more over a 24-hour period.
3. ONSET: "When did the COVID-19 symptoms start?"
4. WORST SYMPTOM: "What is your worst symptom?" (e.g., cough, fever, shortness of breath, muscle aches)
5. COUGH: "Do you have a cough?" If Yes, ask: "How bad is the cough?"
6. FEVER: "Do you have a fever?" If Yes, ask: "What is your temperature, how was it measured, and when did it start?"
7. RESPIRATORY STATUS: "Describe your breathing?" (e.g., shortness of breath, wheezing, unable to speak)
8. BETTER-SAME-WORSE: "Are you getting better, staying the same or getting worse compared to yesterday?" If getting worse, ask, "In what way?"
9. HIGH RISK DISEASE: "Do you have any chronic medical problems?" (e.g., asthma, heart or lung disease, weak immune system, obesity, etc.)
10. PREGNANCY: "Is there any chance you are pregnant?" "When was your last menstrual period?"
11. OTHER SYMPTOMS: "Do you have any other symptoms?" (e.g., chills, fatigue, headache, loss of smell or taste, muscle pain, sore throat; new loss of smell or taste especially support the diagnosis)

of COVID-19)

TRIAGE ASSESSMENT QUESTIONS

Call EMS 911 Now

SEVERE difficulty breathing (e.g., struggling for each breath, speaks in single words)

R/O: respiratory failure, hypoxia

CA: 40, 7, 8, 1

Difficult to awaken or acting confused (e.g., disoriented, slurred speech)

R/O: hypoxia, sepsis

CA: 40, 7, 8, 1

Bluish (or gray) lips or face now

R/O: cyanosis and need for oxygen

CA: 40, 7, 8, 1

Shock suspected (e.g., cold/pale/clammy skin, too weak to stand, low BP, rapid pulse)

R/O: shock

CA: 40, 7, 8, 1

Sounds like a life-threatening emergency to the triager

CA: 40, 7, 8, 1

See More Appropriate Guideline

[1] COVID-19 exposure AND [2] has not completed COVID-19 vaccine series AND [3] no symptoms

Go to Guideline: COVID-19 - Exposure (Adult)

[1] COVID-19 exposure AND [2] completed COVID-19 vaccine series (fully vaccinated) AND [3] no symptoms

Go to Guideline: COVID-19 - Vaccine Questions and Reactions (Adult). Note: Quarantine not needed if exposure occurs after being fully vaccinated for COVID-19.

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)

[1] COVID-19 vaccine series completed (fully vaccinated) AND [2] new-onset of COVID-19 symptoms BUT [3] no known exposure

Go to specific symptom-based guideline. Reason: COVID-19 is unlikely in fully vaccinated person with no known new exposure to COVID-19.

[1] Had lab test confirmed COVID-19 infection within last 3 months AND [2] new-onset of COVID-19 symptoms BUT [3] no known exposure

Go to specific symptom-based guideline. Reason: COVID-19 is unlikely in recently infected person with no known new exposure to COVID-19.

[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] Adult with possible COVID-19 symptoms AND [2] triager concerned about severity of symptoms or other causes

Note to Triager: First use this guideline. In adult patients triager should then use clinical judgment to decide whether a symptom guideline (e.g., Chest Pain, Fever, Headache) should also be used.

COVID-19 and breastfeeding, questions about

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

Go to ED Now

SEVERE or constant chest pain or pressure (Exception: mild central chest pain, present only when coughing)

R/O: pneumonia, pleurisy. Note to Triager: Consider using both this guideline AND the Chest Pain guideline if any concern for cardiac or other more serious cause of chest pain.

CA: 41, 615, 11, 12, 80, 6, 1

MODERATE difficulty breathing (e.g., speaks in phrases, SOB even at rest, pulse 100-120)

R/O: pneumonia

CA: 41, 615, 11, 12, 80, 6, 1

[1] Headache AND [2] stiff neck (can't touch chin to chest)

R/O: meningitis

CA: 41, 615, 11, 12, 80, 1

Go to ED Now (or PCP triage)

MILD difficulty breathing (e.g., minimal/no SOB at rest, SOB with walking, pulse <100)

R/O: pneumonia. Note: not from stuffy nose (e.g., not relieved by cleaning out the nose)

CA: 42, 14, 13, 17, 1

Chest pain or pressure

R/O: pneumonia, pleurisy, chest discomfort from COVID-19

CA: 42, 14, 13, 17, 1

Patient sounds very sick or weak to the triager

Reason: severe acute illness or serious complication suspected

CA: 42, 13, 615, 17, 1

See HCP Within 4 Hours (or PCP Triage)

Fever > 103 F (39.4 C)

R/O: serious bacterial infection.

CA: 43, 14, 13, 16, 19, 17, 144, 146, 1002, 1005, 89, 1

[1] Fever > 101 F (38.3 C) AND [2] age > 60 years

R/O: pneumonia

CA: 43, 14, 13, 16, 19, 17, 144, 146, 1002, 1005, 89, 1

[1] Fever > 100.0 F (37.8 C) AND [2] bedridden (e.g., nursing home patient, CVA, chronic illness, recovering from surgery)

R/O: pneumonia

CA: 43, 14, 13, 16, 19, 17, 144, 146, 1002, 1005, 89, 1

Call PCP Now

[1] HIGH RISK patient (e.g., age > 64 years, diabetes, heart or lung disease, weak immune system) AND [2] new or worsening symptoms

Reason: See HIGH RISK criteria in Background. Testing for both COVID-19 and influenza may be needed. PCP may need to phone in a prescription to the pharmacy.

CA: 49, 14, 13, 16, 19, 17, 144, 146, 1002, 1005, 89, 1

[1] HIGH RISK patient AND [2] influenza is widespread in the community AND [3] ONE OR MORE respiratory symptoms: cough, sore throat, runny or stuffy nose

Reason: During an influenza outbreak, treatment with antiviral influenza medication should be considered for HIGH RISK patients, especially for symptoms present < 48 hours. PCP may wish to phone in a prescription to the pharmacy. Testing for both COVID-19 and influenza may be needed.

CA: 49, 14, 13, 16, 19, 17, 144, 146, 1002, 1005, 1007, 89, 1

[1] HIGH RISK patient AND [2] influenza exposure within the last 7 days AND [3] ONE OR MORE respiratory symptoms: cough, sore throat, runny or stuffy nose

Reason: During an influenza outbreak, treatment with antiviral influenza medication should be considered for HIGH RISK patients, especially for symptoms present < 48 hours. PCP may wish to phone in a prescription to the pharmacy. Testing for both COVID-19 and influenza may be needed.

CA: 49, 14, 13, 16, 19, 17, 144, 146, 1002, 1005, 1007, 89, 1

Call PCP Within 24 Hours

Fever present > 3 days (72 hours)

R/O: bacterial sinusitis, bronchitis, pneumonia

CA: 50, 15, 13, 16, 19, 17, 144, 146, 1002, 1005, 5, 1

[1] Fever returns after gone for over 24 hours AND [2] symptoms worse or not improved

R/O: bacterial sinusitis, bronchitis, pneumonia

CA: 50, 15, 13, 16, 19, 17, 144, 146, 1002, 1005, 5, 1

[1] Continuous (nonstop) coughing interferes with work or school AND [2] no improvement using cough treatment per protocol

CA: 50, 15, 13, 16, 19, 17, 144, 146, 1002, 1005, 5, 1

Call PCP When Office is Open

[1] COVID-19 infection suspected by caller or triager AND [2] mild symptoms (cough, fever, or others) AND [3] no complications or SOB

Reason: PCP will discuss suspected diagnosis and need for testing

CA: 51, 611, 17, 144, 146, 147, 150, 148, 1003, 1005, 16, 19, 3, 1100, 4, 1

Cough present > 3 weeks

CA: 51, 15, 13, 16, 19, 17, 144, 146, 1002, 1005, 5, 1

Home Care

[1] COVID-19 diagnosed by positive lab test AND [2] NO symptoms (e.g., cough, fever, others)

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CA: 48, 618, 20, 1100, 90, 1

[1] COVID-19 diagnosed by positive lab test AND [2] mild symptoms (e.g., cough, fever, others) AND [3] no complications or SOB

CA: 48, 610, 17, 144, 146, 147, 150, 148, 1003, 1006, 1007, 16, 19, 25, 3, 1100, 4, 1

[1] COVID-19 diagnosed by HCP (doctor, NP or PA) AND [2] mild symptoms (e.g., cough, fever, others) AND [3] no complications or SOB

CA: 48, 2, 17, 144, 146, 147, 150, 148, 1003, 1006, 1007, 16, 19, 1048, 25, 3, 1100, 4, 1

[1] COVID-19 diagnosed AND [2] has mild nausea, vomiting or diarrhea

Note: if symptoms are more than mild, consider using an additional guideline (e.g., Diarrhea or Vomiting guidelines). Mild diarrhea is defined as 1 to 3 episodes per day. Mild vomiting is defined as 1 to 2 episodes per day.

CA: 48, 1091, 19, 1092, 1

COVID-19 Home Isolation, questions about

Note: How to protect others when you are sick.

CA: 48, 19, 22, 23, 21, 24, 25, 3, 90, 1

COVID-19 Testing, questions about

CA: 48, 38, 1111, 34, 617, 1101, 1102, 1103, 1071, 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, 1048, 1047, 1049, 1050, 1051, 39, 19, 90, 1

COVID-19 Disease, questions about

Note: Broad information including symptoms, how it is spread, travel, et.al.

CA: 48, 26, 27, 28, 29, 1047, 31, 617, 1048, 615, 1100, 90, 1

CARE ADVICE (CA) -

1. **Care Advice** given per COVID-19 - Diagnosed or Suspected (Adult) guideline.

2. **Reassurance and Education - Diagnosed With COVID-19 by Health Care Provider (HCP) and Mild Symptoms:**
 - Your HCP has diagnosed you as having COVID-19 based on your symptoms and other information.
 - You may or may not have been tested for COVID-19. People with mild symptoms sometimes do not need testing. It does not change treatment.
 - The symptoms of COVID-19 can be mild, especially if you are healthy and under 65 years old.
 - *Here's some care advice to help you and to help prevent others from getting sick.*

3. **Stopping Home Isolation - Must Meet all 3 Requirements (CDC):**
 - 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.
 - *If unsure if it is safe for you to leave isolation, check the CDC website or call your healthcare provider.*

4. **Call Back If:**
 - Fever over 103 F (39.4 C)
 - Fever lasts over 3 days
 - Fever returns after being gone for 24 hours
 - Chest pain or difficulty breathing occurs
 - You become worse.

5. **Call Back If:**
 - Fever over 103 F (39.4 C)
 - Chest pain or difficulty breathing occurs
 - You become worse.

6. **Call EMS 911 If:**
 - Severe difficulty breathing occurs
 - Lips or face turns blue
 - Confusion occurs.

7. **Tell the Ambulance Dispatcher About COVID-19 Diagnosis:**
 - When you call 911, tell the dispatcher that you probably have COVID-19.

8. **Tell Ambulance Medics About Your COVID-19 Diagnosis:**
 - Tell the paramedic right away that you probably have COVID-19.
 - The paramedics should call ahead to the emergency department to let them know.

11. **You Should Tell Healthcare Personnel That You Might Have COVID-19:**
 - Tell the first healthcare worker you meet that you may have COVID-19.
 - Tell them you have symptoms and have been sent for COVID-19 testing.

12. **Wear a Mask - Cover Your Mouth and Nose:**
 - Wear a mask.
 - If you do not have a mask, then cover your mouth and nose with a disposable tissue (e.g., Kleenex, toilet paper, paper towel) or wash cloth.

13. **Note to Triager - If NO PCP, Have Other HCP Re-triage the Patient, if Available:**
 - During this COVID-19 pandemic, the medical community is trying to prevent unnecessary referrals to the emergency department (ED). Some patients are fearful of being exposed to COVID-19 in a medical setting. Second-level triage (re-triage) by a physician has been shown to reduce ED referrals. Here are resources that may be available in your community.
 - **PCP Second-Level Telephone Triage:** Some PCPs (primary care providers) want to provide re-triage before any of their non-emergent patients are referred to an ED. This requires their approval.
 - **Telemedicine:** Telemedicine is often a preferred source of second-level triage and care during this pandemic. Many practices and some hospitals now offer a telemedicine (virtual visit) service. There are also many national telemedicine companies that are delivering COVID-19 care.
 - **Emergency Department (ED):** Some EDs may provide a telephone follow-up service for patients who have COVID-19 with worsening symptoms.

14. **Alternate Disposition - Call Telemedicine Provider Now:**
 - Telemedicine may be your best choice for care during this COVID-19 outbreak.
 - You should call a telemedicine provider now, if your own healthcare provider is not available.

15. **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.

16. **Note to Triager - Ibuprofen Concerns:**
 - Discuss only if caller brings up concerns about ibuprofen.
 - **Response:** The CDC, WHO, and other experts continue to support the use of ibuprofen (if needed) for patients with COVID-19. They found no scientific evidence to support the claim that ibuprofen made COVID-19 worse.

17. **General Care Advice for COVID-19 Symptoms:**

- The treatment is the same whether you have COVID-19, influenza or some other respiratory virus.
- *Cough:* Use cough drops.
- *Feeling dehydrated:* Drink extra liquids. If the air in your home is dry, use a humidifier.
- *Fever:* For fever over 101 F (38.3 C), take acetaminophen every 4 to 6 hours (Adults 650 mg) OR ibuprofen every 6-8 hours (Adults 400 mg). Before taking any medicine, read all the instructions on the package. Do not take aspirin unless your doctor has prescribed it for you.
- *Muscle aches, headache, and other pains:* Often this comes and goes with the fever. Take acetaminophen every 4-6 hours (Adults 650 mg) OR ibuprofen every 6 to 8 hours (Adults 400 mg). Before taking any medicine, read all the instructions on the package.
- *Sore throat:* Try throat lozenges, hard candy or warm chicken broth.

19. **How to Protect Others - When You Are Sick With COVID-19:**

- **Stay Home a Minimum of 10 Days:** Home isolation is needed for at least 10 days after the symptoms started. Stay home from school or work if you are sick. 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). Do **Not** allow any visitors to your home. Leave the house only if you need to seek urgent medical care.
- **Cover the Cough:** Cough and sneeze into your shirt sleeve or inner elbow. Don't cough into your hand or the air. If available, cough into a tissue and throw it into a trash can.
- **Wash Hands Often:** Wash hands often with soap and water. After coughing or sneezing are important times. 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.
- **Wear a Mask:** Wear a facemask when around others. Always wear a facemask (if available) if you have to leave your home (such as going to a medical facility).
- **Call First if Medical Care Needed:** Call ahead to get approval and careful directions.

20. **How to Protect Others - When You Test Positive for COVID but Have No Symptoms:**

- **Stay Home a Minimum of 10 Days:** Home isolation is needed for at least 10 days after the date of the positive test. 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). Do **Not** allow any visitors to your home. Leave the house only if you need to seek urgent medical care.
- **Wash Hands Often:** Wash hands often with soap and water. After coughing or sneezing are important times. 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.
- **Wear a Mask:** Wear a facemask when around others. Always wear a facemask if you have to leave your home (such as going to a medical facility).
- **Call First if Medical Care Needed:** Call ahead to get approval and careful directions.

21. **Stay Away From Others in Your Home:**
 - If possible, stay in a specific "sick room" and away from other people in your home.
 - Use a separate bathroom, if available.

22. **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.

23. **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.

24. **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.

25. **Stopping Home Isolation - Talk to Your Healthcare Provider:**
 - *Talk to your healthcare provider.*
 - The decision to stop home isolation **if you are sick with COVID-19** should be made by your healthcare provider in consultation with the local health departments.
 - Local decisions depend on local circumstances.

26. **COVID-19 (Coronavirus Disease 2019) - Introduction:**
 - 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.
 - 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>.

27. **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).
28. **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 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 has occurred 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.
29. **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.
31. **COVID-19 - Travel Guidelines:**
- 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>

34. **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 nose or throat will only be collected on patients who have a healthcare provider's order.
 - Testing sites vary based on the city, hospital, and healthcare system.
 - In general, they are not performed in private doctor's offices or clinics.
 - *People cannot just walk in and request a COVID-19 test.*
38. **Note to Triager - COVID-19 Testing:**
- **For questions about testing, it is best to direct the patient to their HCP** (doctor, NP, PA) during office hours. The HCP is the best resource for up-to-date information on testing. This is a somewhat complicated decision process. National and state testing recommendations continue to change. *Testing requires a HCP's order (as with all medical tests).*
 - COVID-19 testing is becoming more available from local and state public health departments. Commercial labs now can perform COVID-19 testing. However, it may still be difficult to find a place to get tested.
 - **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.
39. **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.
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.
- 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.
80. **Another Adult Should Drive:**
- It is better and safer if another adult drives instead of you.
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.
146. **Caution - Dextromethorphan:**
- Do not try to completely suppress coughs that produce mucus and phlegm. Remember that coughing is helpful in bringing up mucus from the lungs and preventing pneumonia.
 - **Research Notes:** Dextromethorphan in some research studies has been shown to reduce the frequency and severity of cough in adults (18 years or older) without significant adverse effects. However, other studies suggest that dextromethorphan is no better than placebo at reducing a cough.
 - **Drug Abuse Potential:** It should be noted that dextromethorphan has become a drug of abuse. This problem is seen most often in adolescents. Overdose symptoms can range from giggling and euphoria to hallucinations and coma.
 - **Contraindicated:** Do not take dextromethorphan if you are taking a monoamine oxidase (MAO) inhibitor now or in the past 2 weeks. Examples of MAO inhibitors include isocarboxazid (Marplan), phenelzine (Nardil), selegiline (Eldepryl, Emsam, Zelapar), and tranylcypromine (Parnate). Do not take dextromethorphan if you are taking venlafaxine (Effexor).
147. **Humidifier:**
- If the air is dry, use a humidifier in the bedroom.
 - Dry air makes coughs worse.
148. **Avoid Tobacco Smoke:**
- Avoid tobacco smoke.
 - Smoking or being exposed to smoke makes coughs much worse.
150. **Coughing Spells:**
- Drink warm fluids. Inhale warm mist. (Reason: both relax the airway and loosen up the phlegm)
 - Suck on cough drops or hard candy to coat the irritated throat.
610. **Reassurance and Education - Positive COVID-19 Lab Test and Mild Symptoms:**
- You had a lab test for COVID-19 and it came back positive.
 - The diagnosis has been confirmed.
 - From what you have told me, your symptoms are mild. That is reassuring.
 - *Here's some care advice to help you and to help prevent others from getting sick.*

611. **Reassurance and Education - Suspected COVID-19:**
- You suspect you have COVID-19 because you have symptoms that match and you were either exposed to someone with it or because it is widespread in your community.
 - Most people who get COVID-19 will have mild illness, can recover at home without medical care, and may not need to be tested. From what you have told me, your symptoms are mild. That is reassuring.
 - Talk with your healthcare provider about your symptoms. Ask if testing is needed.
 - Call them during regular office hours.
 - *Here's some care advice to help you and to help prevent others from getting sick.*
615. **Reassurance and Education - Going to the ED or Urgent Care Center During the COVID-19 Pandemic:**
- 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.
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, if available. Asymptomatic people with a close contact COVID-19 exposure should get the viral test on day 5 to 7 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.
 - The results usually come back in 1 to 3 days, but may take longer depending on testing kit or testing site availability.
618. **Reassurance and Education - Positive COVID-19 Lab Test and No Symptoms:**
- You had a viral test (e.g., nasal swab) for COVID-19 and it came back positive. The diagnosis has been confirmed.
 - From what you have told me, you have no symptoms. That is reassuring.
 - You will still need to isolate from others for 10 days after the date of the positive test.
 - *Here's some care advice to help you and to help prevent others from getting sick.*

1002. **Fever Medicines:**

- For fevers above 101° F (38.3° C) take either acetaminophen or ibuprofen.
- They are over-the-counter (OTC) drugs that help treat both fever and pain. You can buy them at the drugstore.
- The goal of fever therapy is to bring the fever down to a comfortable level. Remember that fever medicine usually lowers fever 2 degrees F (1 - 1 1/2 degrees C).
- **Acetaminophen Regular Strength 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 pills a day).
- **Acetaminophen - Extra Strength Tylenol:** 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 pills a day).
- **Ibuprofen (e.g., Motrin, Advil):** Take 400 mg (two 200 mg pills) by mouth every 6 hours. The most you should take each day is 1,200 mg (six 200 mg pills), unless your doctor has told you to take more.

1003. **Pain and Fever Medicines:**

- For pain or fever relief, take either acetaminophen or ibuprofen.
- They are over-the-counter (OTC) drugs that help treat both fever and pain. You can buy them at the drugstore.
- 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 degrees F (1 - 1 1/2 degrees C).
- **Acetaminophen Regular Strength Tylenol:** Take 650 mg (two 325 mg pills) by mouth every 4 to 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 pills a day).
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- **Ibuprofen (e.g., Motrin, Advil):** Take 400 mg (two 200 mg pills) by mouth every 6 hours. The most you should take each day is 1,200 mg (six 200 mg pills), unless your doctor has told you to take more.

1005. **Fever Medicines - Extra Notes and Warnings:**

- Use the lowest amount of medicine that makes your fever better.
- Acetaminophen is thought to be safer than ibuprofen or naproxen in 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 Regular-Strength (325 mg) pills. In the United States, the maximum dose per day is ten Regular-Strength (325 mg) pills.
- **Caution:** Do not take acetaminophen if you have liver disease.
- **Caution:** Do not take ibuprofen if you have stomach problems, kidney disease, are pregnant, or have been told by your doctor to avoid this type of anti-inflammatory drug. Do not take ibuprofen for more than 7 days without consulting your doctor.
- *Before taking any medicine, read all the instructions on the package.*

1006. **Pain and Fever Medicines - Extra Notes and Warnings:**
- Use the lowest amount of medicine that makes your pain or fever better.
 - Acetaminophen is thought to be safer than ibuprofen or naproxen in 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.
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 - **Caution:** Do not take acetaminophen if you have liver disease.
 - **Caution:** Do not take ibuprofen if you have stomach problems, kidney disease, are pregnant, or have been told by your doctor to avoid this type of anti-inflammatory drug. Do not take ibuprofen for more than 7 days without consulting your doctor.
 - *Before taking any medicine, read all the instructions on the package.*
1007. **No Aspirin:**
- Do not use aspirin for treatment of fever or pain.
 - *Reason:* there is an association between influenza and Reyes' Syndrome.
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 this new coronavirus infection.
 - Avoid close contact with people outside your family unit.
 - Avoid closed spaces (indoors) when possible and all crowds (even outdoors).
 - When you must leave your home, wear a mask and observe social (safe) distancing.
 - 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 essential for reducing the spread of COVID-19. They will also reduce the spread of influenza. *Reason:* Many people with COVID-19 have no symptoms, but can spread the virus. **Masks Should Be Worn:**
- ... Any time you are in a public setting or a public building (such as a grocery store).
- ... Any time you are traveling on a plane, bus, train, or other form of public transportation or in transportation hubs such as airports and stations.
- ... When you are around people who do not live with you, including inside your home or inside someone else's home.
- ... Inside your home if someone you live with is sick with symptoms of COVID-19 or has tested positive for COVID-19.
- **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 (CDC).
- **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.

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.

1091. **Mild Stomach and Intestinal Symptoms During COVID-19 Illness:**

- **Mild Nausea or Vomiting:** Sip small amounts (1 tablespoon or 15 ml) of water or half-strength sports drink every 5 minutes for 8 hours. After 4 hours with no vomiting, slowly increase the amount. After no vomiting for 8 hours, slowly add in bland foods - saltine crackers, white bread, rice, mashed potatoes.
- **Mild Diarrhea:** Drink clear fluids like water, ½ strength sports drink or oral rehydration liquid (e.g., Pedialyte). Slowly start bland foods like saltine crackers, white bread, mashed potatoes, noodles, bananas, yogurt, or soup. Slowly return to a normal diet.
- **Check Your Urine:** it should be light yellow to clear if you are getting enough fluids.

1092. **Call Back If:**

- Vomiting lasts more than 2 days (48 hours)
- Vomit contains bile (green color)
- Diarrhea lasts more than 7 days
- Constant stomach pain lasting more than 2 hours
- Signs of dehydration (e.g., no urination over 12 hours, very dry mouth, very lightheaded)
- You become worse.

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.
- **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.
- **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.
- **Prevention - Medicine:** Currently, there is no medicine to prevent COVID-19. Warning: the malaria drug (chloroquine) was studied and found not to be helpful for this disease. It also had cardiac side effects. *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?**

- People who have **symptoms of COVID-19**.
- 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. People who **live with someone** confirmed to have COVID-19.
- People living or working in a congregate setting (such as a correctional facility, long-term care facility, or shelter) where an **outbreak has occurred**.

FIRST AID

N/A



BACKGROUND INFORMATION

Key Points

- 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. During March 2020 cases were identified in all states.
- 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 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).

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 take the following precautions whenever they go out:

- A cloth face-covering
- Hand sanitizer with at least 60% alcohol

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.

When should testing be performed?

- **People Who Have Symptoms of COVID-19:** A person who is symptomatic should get a COVID-19 viral test **within 3 days**.
- **People With Close Contact Exposure:** A person who had a close contact COVID-19 exposure and is asymptomatic should get a COVID-19 viral test **about 5 to 7 days** after exposure.

For questions about testing, it is often best to direct the patient to their HCP (doctor, NP, PA) during office hours. The HCP is the best resource for up-to-date information on testing. National and state testing recommendations continue to change. *Testing requires a HCP's order (as with all medical tests).*

Diagnosis and Reporting

Clinicians should report positive test results to infection control at their health system and to their local or state health department.

Complications

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

The following two groups of individuals are considered as **HIGH RISK** in this guideline.

1. People with the following medical problems or conditions are at **highest** 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
- Heart disease, such as heart failure, coronary artery disease
- Obesity with a body mass index (BMI) of 30 or higher
- Sickle cell disease
- Smoking
- Solid organ transplant
- Type 2 diabetes

2. According to the CDC, people with the following medical conditions might be at **higher** risk of severe illness from COVID-19 (or from influenza).

- Asthma (moderate-to-severe)
- Cerebrovascular disease (affects blood vessels and blood supply to the brain)
- Cystic fibrosis
- Hypertension or high blood pressure
- Immunocompromised state (weak immune system) from blood or bone marrow transplant, immune deficiencies, HIV, use of corticosteroids, or use of other immune weakening medicines
- Liver disease
- Neurologic conditions, such as dementia
- Pregnancy
- Pulmonary fibrosis (having damaged or scarred lung tissues)
- Thalassemia (a type of blood disorder)
- Type 1 diabetes

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 risk for severe disease:

- Bamlanivimab
- Bamlanivimab-etesevimab
- Casirivimab-imdevimab

Prevention

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

Vaccination

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 many 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.*

Ibuprofen and Other NSAID Use for COVID-19

Some callers have expressed concerns that ibuprofen (or other NSAID) use to treat COVID-19 symptoms may worsen the disease. These concerns originated from a few physicians' comments and have since spread over social media.

To date, there is no scientific evidence (clinical trials or studies) that show that using ibuprofen negatively impacts outcome in COVID-19 patients. We will continue to review any new literature as it is published. The CDC, WHO, AAP and our Infectious Disease expert reviewers continue to approve the use of ibuprofen for COVID-19.

For these reasons, Schmitt-Thompson Clinical Content (STCC) guidelines continue to recommend ibuprofen as an acceptable way to treat high fevers and pain.

- Remind callers that fevers may be beneficial, help fight the infection, and speed recovery.
- Low-grade fevers should not be treated.

If callers remain concerned, they can use acetaminophen for symptoms that warrant treatment.

Caution: For suspected COVID-19 patients on oral steroids, such as prednisone, the triager should involve the HCP for a decision about whether the drug can be continued.

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.

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SEARCH WORDS

2019-NCOV
ACHES
BREATHING
BREATHING DIFFICULTY
CHILLS
CORONAVIRUS
COUGH
COVID19
COVID-19
DIFFICULT BREATHING
DIFFICULTY BREATHING
FOREIGN TRAVEL
LOSS OF SMELL
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SOB

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Company: Schmitt-Thompson Clinical Content
Content Set: After Hours Telehealth Triage Guidelines | Adult
Version Year: 2021
Last Revised: 5/7/2021
Last Reviewed: 5/7/2021