Coronavirus (COVID-19) - Exposure
Pediatric After-Hours Version - Standard - 2020

**DEFINITION**

- Call about a person who has NO symptoms BUT was exposed to COVID-19
- Exposure means close contact with a diagnosed (confirmed) or suspected case of COVID-19
- Diagnosed (confirmed) patients have a positive COVID-19 lab test
- Suspected patients are those whom a HCP suspects of having COVID-19, based on symptoms and exposure (CDC definition). Also called Person Under Investigation (PUI).
- Note to Triager: During community spread of COVID-19, triage nurses are more qualified to make clinical diagnoses of this infection than parents. Patients with cough, SOB, fever, loss of smell or taste, or other compatible symptoms can be presumed to have COVID-19 until proven otherwise.
- For symptomatic suspected COVID-19 patients, use the COVID-19 Diagnosed or Suspected guideline.
- Updated: November 2, 2020

**CLOSE CONTACT (EXPOSURE) to COVID-19 Definition:**

**HOUSEHOLD CLOSE CONTACT:**

- Living in the same house (household contacts) or visiting with a person with confirmed or suspected COVID-19.

**OTHER CLOSE CONTACT:**

- Being within 6 feet (2 meters) of a confirmed or suspected COVID-19 case for a total of 15 minutes or more over a 24-hour period. (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).
- OR having direct contact with infectious secretions of a confirmed COVID-19 case (e.g., being coughed on) (CDC)

**COMMUNITY CONTACTS:**

- Living in or travel from a city, country or other geographic area where there is documented person-to-person transmission (community spread) of confirmed COVID-19 carries a small risk. This risk increases as community spread increases. This is due to the increased chance of unknowingly experiencing close contact with a COVID-19 sick patient.

**NOT CLOSE CONTACT (LOW RISK EXPOSURE):**

- Walking by a person who has COVID-19 carries no risk.
- Being outdoors and observing safe distancing (greater than 6 feet).
- Being in the same school, workplace, place of worship or building as ONE person with COVID-19 carries a small risk. This risk increases once multiple people in that setting develop COVID-19.

**INITIAL ASSESSMENT QUESTIONS**

1. COVID-19 PATIENT: "Who is the person with confirmed or suspected COVID-19 infection that your child was exposed to?"
2. PLACE of CONTACT: "Where was your child when they were exposed to the patient?" (e.g. home, school, child care)
3. TYPE of CONTACT: "What type of contact was there?" (e.g. talking to, sitting next to, same room, same building) Note: within 6 feet (2 meters) for 15 minutes is considered close contact.
4. DURATION of CONTACT: "How long were you or your child in contact with the COVID-19 patient?" (e.g., minutes, hours, live with the patient) Note: a total of 15 minutes or more over a 24-hour period is considered close contact.
5. MASK: "Was your child wearing a mask?" Note: wearing a mask reduces the risk of an otherwise close contact.
6. DATE of CONTACT: "When did your child have contact with a COVID-19 patient?" (e.g., how many days ago)
7. COMMUNITY SPREAD: "Are there lots of cases or COVID-19 (community spread) where you live?" (See public health department website, if unsure)
8. SYMPTOMS: "Does your child have any symptoms?" (e.g., fever, cough, breathing difficulty, loss of taste or smell, etc.) (Note to triager: If symptoms present, go to Coronavirus (COVID-19) Diagnosed or Suspected guideline)
9. TRAVEL: Note to triager - Rarely relevant with existing community spread and travel restrictions. "Have you and/or your child traveled internationally recently?" If so, "When and where?" Also ask about out-of-state travel, since the CDC has identified some high risk cities for community spread in the US. (Note: this becomes irrelevant if there is widespread community transmission where the patient lives)

- Author's note: IAQ's are intended for training purposes and not meant to be required on every call.

TRIAGE ASSESSMENT QUESTIONS

See More Appropriate Guideline

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

[1] Symptoms of COVID-19 (cough, SOB or others) AND [2] recent household exposure to known influenza (flu test positive)
   Go to Guideline: Influenza (Flu) - Seasonal (Pediatric)

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

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

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

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

   Go to Guideline: Breathing Difficulty (Respiratory Distress) (Pediatric)

   Go to Guideline: Cough (Pediatric)

   Go to Guideline: Colds (Pediatric)

Call PCP when Office is Open

   Reason: Home quarantine recommended. PCP will discuss if testing is needed.
   CA:  61, 25, 15, 9, 12, 16, 23, 1

   Reason: PCP will discuss testing.
   CA:  61, 11, 15, 25, 9, 12, 16, 23, 1

   Reason: Asymptomatic patients may need testing 6-8 days after true exposure. PCP will discuss testing.
   CA:  61, 15, 11, 25, 9, 12, 16, 23, 1

Home Care

   Reason: Asymptomatic for 14 days. Risk of developing COVID-19 infection has passed. Reassure and discontinue quarantine.
   CA:  58, 2, 36, 1

   Reason: follow local PHD directives regarding staying at home, etc.
    Reason: lower risk. May need home quarantine.
    CA:  58,  24,  4,  6,  7,  8,  28,  1

[1] Caller concerned that COVID-19 exposure occurred BUT [2] does not meet CDC criteria for close contact
    Reason: unrealistic fear of exposure and needs reassurance
    CA:  58,  38,  39,  26,  40,  41,  36,  1

COVID-19 Testing, questions about who needs it
    CA:  58,  27,  39,  40,  41,  36,  1

COVID-19 Prevention, questions about
    CA:  58,  7,  34,  37,  29,  30,  31,  36,  1

COVID-19 Disease, questions about
    Reason: No known exposure and not living in a high-risk area. Refer most callers to CDC website: https://www.cdc.gov/coronavirus
    CA:  58,  45,  3,  4,  5,  6,  7,  37,  8,  43,  36,  1

ALSO, COVID-19 Maternal Illness and Breastfeeding questions
    CA:  58,  13,  14,  1

CARE ADVICE (CA) -

1. **Care Advice** given per Coronavirus (COVID-19) - Exposure (Pediatric) guideline.

2. **Reassurance and Education - No Symptoms and Day 15 or Later:**
   - The COVID-19 infection starts within 14 days of an exposure.
   - Your child developed no symptoms of respiratory infection (such as fever or cough) during the 14 days after an exposure.
   - Your child should be safe from getting COVID-19.
   - If your child has been on home isolation, it can be discontinued.

3. **COVID-19 Outbreak:**
   - Cause: The name of the new virus is SARS-CoV-2.
   - An outbreak of this infection began in Wuhan, China in early December 2019.
   - The first COVID-19 patient in the United States was reported on January 21, 2020. During March, cases were identified in all states.
   - The first COVID-19 patient in Canada was reported on January 31, 2020.
   - The Centers for Disease Control and Prevention (CDC) is considered the source of truth. This continues to be a rapidly changing situation and recommendations from the CDC are being updated daily.
   - See: [https://www.cdc.gov/coronavirus](https://www.cdc.gov/coronavirus)
4. **COVID-19 Symptoms:**
   - COVID-19 coronavirus causes a respiratory illness. The most common symptoms are cough and fever. Some patients progress to shortness of breath.
   - Other common symptoms are chills, shivering (shaking), sore throat, muscle pain, headache, loss of smell and taste.
   - The CDC also includes the following less common symptoms: runny nose, fatigue (tiredness), nausea, vomiting and diarrhea.

5. **COVID-19 - CDC Definition of Exposure (Close Contact):**
   - You are at risk of getting COVID-19 if the following has occurred:
   - Close contact with a person who tested positive for COVID-19 AND contact occurred while they were ill. CDC Definition of close contact: within 6 feet (2 meters) for a total of 15 minutes or more over a 24-hour period. Prolonged close contact would extend the risk to the 48 hours prior to the person becoming ill with symptoms.
   - Living in or travel from a city, country or other geographic area where there is documented community spread of COVID-19. This carries a lower risk compared to close contact if one observes social distancing.
   - Community spread has occurred in most of the US, especially in cities.
   - The CDC ([https://www.cdc.gov/coronavirus](https://www.cdc.gov/coronavirus)) has the most up-to-date list of where COVID-19 outbreaks are occurring.

6. **COVID-19 - How it is Spread:**
   - COVID-19 is spread from person to person.
   - The virus spreads when respiratory droplets 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.
   - 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.
   - These methods are how most respiratory viruses spread.
   - Aerosols are tiny, invisible particles that can float in the air for 1 to 2 hours. They only occur in a closed room with poor ventilation. Aerosols are a rare cause of COVID-19 transmission. (CDC and WHO). Evidence: within household units, only 30% of contacts get infected.
7. **COVID-19 - How to Protect Yourself and Family from Catching It - The Basics:**
   - 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.
   - **Wash hands often with soap and water (very important).** Always do before you eat.
   - Use an alcohol-based hand sanitizer if water is not available. Remember: soap and water work better.
   - Don't touch your eyes, nose or mouth unless your hands are clean. Germs on the hands can get into your body this way.
   - Don't share glasses, plates or eating utensils.
   - No longer shake hands. Greet others with a smile and a nod.
   - If your child needs to be seen for an urgent medical problem, do not hesitate to go in. ERs and urgent care sites are safe places. They are well equipped to protect you against the virus. For non-urgent conditions, talk to your doctor's office first.

8. **COVID-19 - Travel:**
   - Avoid all non-essential travel.
   - If you must travel, go to CDC website for updates on travel advisories: [https://www.cdc.gov/coronavirus](https://www.cdc.gov/coronavirus).

9. **Measure Temperature:**
   - Measure your child's temperature 2 times each day.
   - Do this until 14 days after exposure to COVID-19.
   - If fever occurs, call back.

10. **Isolation at Home Recommendations:**
    - *Isolation will definitely be needed if your child develops a cough or fever within 14 days of COVID-19 exposure.*
    - For patients without symptoms, home quarantine also is usually required. Call your PCP for specific instructions.
    - Until you talk with your PCP, isolate your child at home. Do not go to stores, restaurants, places of worship or other public places. Do not allow any visitors (such as friends).
    - Home isolation of younger children can be very difficult. Many families also have limited options. Therefore, each triager should individualize the recommendations for isolation after discussing it with the caller.
    - **Isolation Questions for Your PCP:** Home isolation can be complicated. A parent may need to return to work. Someone in the household may be elderly or have a serious medical problem. If you have additional questions, call your doctor during office hours. Your doctor is the best resource for up-to-date information on COVID-19.

11. **Lab Test Needed to Return to Work or School:**
    - You had close contact with a COVID-19 patient in the last 14 days.
    - Your employer (or school) wants you to have a COVID-19 lab test before you can return.
    - The test has to be negative.
    - So far you have not developed any symptoms, but could still be carrying the virus.
    - Your doctor will help you with your testing questions.
    - Call them during office hours.
12. **Watch for Other COVID-19 Symptoms:**
   - The most common symptoms are cough, fever and shortness of breath (trouble breathing).
   - Other common symptoms are chills, shivering (shaking), sore throat, muscle pain, headache, loss of smell and taste.
   - The CDC also includes the following less common symptoms: runny nose, fatigue (tiredness), nausea, vomiting and diarrhea.
   - Some rare symptoms are a widespread red rash with red eyes, red lips and red palms/soles. This almost always occurs with several days of fever.
   - Other rare symptoms are red or purple toes (“COVID toes”).
   - If any of these symptoms occur, call back.
   - Early detection of symptoms and home isolation is the only way to reduce spread of the disease.

13. **Breastfeeding and COVID-19:**
   - Breastfeeding experts recommend you continue to breastfeed even if you are sick with COVID-19. (AAP)
   - Wash your hands before feeding your baby.
   - The CDC recommends wearing a face mask or covering. Be careful to avoid coughing on your baby.
   - Breastmilk gives beneficial antibodies your body is making against this illness to your baby. This should provide some protection against this illness for your baby, like it does for influenza and most other viral illnesses.
   - The virus is probably not passed through breastmilk. The studies are small, so this is not yet known for sure. (CDC)

14. **Call Back If:**
   - Breastfeeding isn’t going well
   - Your baby becomes sick

15. **COVID-19 Testing if NO Symptoms - Talk with Your Health Care Provider:**
   - For questions about testing, call your doctor during office hours.
   - The availability of testing and where to get it can be different for every community.
   - National, state and local (school) recommendations also continue to change.
   - Doctors may order a test about a week after known exposure if your child continues to be without symptoms. (CDC). Testing done during the first 5 days after exposure will usually be negative.
   - Testing should be done sooner if your child develops symptoms after known exposure.
16. **Home Isolation Is Needed:**
   - Isolation means separating sick or people exposed to a contagious disease from people who are not sick. (CDC). The quarantine period is usually 14 days. Call your PCP for specific instructions regarding timeframe for quarantine.
   - Living with a suspected COVID-19 patient implies close contact has occurred. In this case, both patient and family members should stay home on isolation and quarantine.
   - Until you talk with your PCP, isolate your child at home. Do not go to stores, restaurants, places of worship or other public places. Do not allow any visitors (such as friends).
   - The patient does not need to be confined to a single room. Reason: Preventing spread of respiratory infections within a home is nearly impossible.
   - The sick person should try to avoid very close contact with other family members. That includes hugging, kissing, sitting next to or sleeping in the same bed. None of this is realistic for young children.
   - Older children and adults with symptoms may consider wearing a mask in common household areas.
   - Note to Triager: Many families have limited options. Triageurs should individualize their recommendations for isolation after discussing it with the caller.

   ### Isolation Questions for Your PCP:
   - Home isolation can be complicated. A parent may need to return to work. Someone in the household may be elderly or have a serious medical problem. If you have additional questions, call your doctor during office hours. Your doctor is the best resource for up-to-date information on COVID-19.

17. N/A

18. N/A

19. **Wash Your Hands with Soap and Water:**
   - Wash your hands and face frequently with soap and water.

20. **Call Back If:**
   - Breathing difficulty occurs
   - Your child becomes worse

21. N/A

22. N/A

23. **Call Back If:**
   - Fever occurs within 14 days of COVID-19 exposure
   - Cough or difficulty breathing occur within 14 days of COVID-19 exposure
   - Other symptoms of COVID-19 infection occur
   - You have other questions
24. **Reassurance and Education - Areas with High Community Spread:**
   - Living in an area where there is widespread community spread of COVID-19 carries an increased risk of catching it.
   - The degree of risk depends on how many people have it.
   - At a minimum, wear a mask and practice social distancing (6 feet away from anyone who is sick or a stranger)
   - Avoid crowds.
   - Wash your hands frequently.
   - In addition, follow the directives of your local PHD or government officials.

25. **Reassurance and Education - Close Contact, No Symptoms, but Less than 14 Days:**
   - Although your child may have been or was exposed to COVID-19, your child does not currently have any symptoms. COVID-19 infections start within 14 days following the last exposure.
   - Since it's been less than 14 days, your child is still at risk for getting sick with it.
   - You need to watch for symptoms until 14 days have passed. Check your child’s temperature two times a day.
   - Keep your child on home quarantine for 14 days to protect others. Talk with your child's doctor or the local public health department if you have questions about when it is safe to return to school or work.

26. **Travel History from or Living in a High Risk Area (as identified by CDC) But No Symptoms:**
   - Living in or travel from a city, country or other geographic area where there is documented person-to-person transmission (community spread) of confirmed COVID-19 is a lower risk factor compared to close contact.
   - However, it does increase the risk of unknowingly experiencing close contact with a COVID-19 sick patient.
   - You may need COVID-19 testing if you develop a fever or cough.
   - Monitor for onset of fever or cough symptoms. After travel, you will need to measure your temperature 2 times each day for 14 days. Report the onset of fever or cough to your PCP.
27. **COVID-19 Testing - Talk with your Health Care Provider:**
   - For questions about testing, call your doctor during office hours.
   - The decision is a complicated one.
   - The availability of testing and where to get it can be different for every community.
   - National and state recommendations also continue to change.
   - **Diagnostic Tests:** These are performed on nasal or mouth secretions and tell us if your child has a COVID-19 infection now. The type of diagnostic tests that are available continues to improve.
   - **Diagnostic Tests for COVID-19: Recommended Timing:**
     - **Symptomatic patients** - get a test within 3 days of onset of symptoms.
   - **Asymptomatic patients with a COVID-19 close contact** - get a test on day 6-8 post exposure. Reason: Testing done during the first 5 days after exposure will usually be negative.
     - Your doctor is the best resource for up-to-date information on diagnostic testing.
   - **Antibody Tests:** These tests are different. These are performed on blood. They can sometimes tell us if there are antibodies from a previous infection. Discuss if this test would be helpful with your doctor.
   - **Timing guideline for Antibody Tests:** If indicated, antibody tests are not recommended until at least 2 or 3 weeks have passed since the start of the infection (CDC). Waiting for a few weeks will give the most accurate result (highest positive rate).
     - **Note to Triager:** Here are some facts that may answer some of the caller's questions:
       - Tests for COVID-19 are mainly done on people who are sick (have symptoms of COVID-19). Tests are usually not done on people who have no symptoms unless they are a close contact.
       - Testing is routinely performed on patients who have serious symptoms or are admitted to the hospital. Testing is not always done on patients with mild symptoms who don't need to be seen.
       - Testing is also helpful for adults who have essential jobs or students who attend in-person school. If they develop symptoms, they should consider testing. A negative test may allow them to return to the work force or school sooner, namely when they no longer have symptoms.
       - **Repeat diagnostic tests:** After a positive test, repeat tests are not recommended. Even after it is safe to stop isolation (usually 10 days), tests may stay positive for up to 90 days. A positive test does not mean the patient can spread the infection once the required isolation period is completed.
       - **In some locations, testing requires a HCP's order.**

28. **Call Back If:**
   - Fever occurs
   - Cough or difficulty breathing occurs
   - Other symptoms of COVID-19 infection occur
   - You have other questions
29. **Keep Your Body Strong:**
   - Get your body ready to fight the COVID-19 virus.
   - Get enough sleep (very important)
   - Keep your heart strong. Walk or exercise every day. Take the stairs. Caution: Avoid physical exhaustion.
   - Stay well hydrated.
   - Eat healthy meals. Avoid overeating to deal with your fears.
   - Avoid the over-use of anti-fever medicines. Fever fights infections and ramps up your immune system.

30. **Keep Your Mind Positive:**
   - **Live in the present, not the future.** The future is where your needless worries live.
   - **Stay positive.** Use a mantra to reduce your fears, such as "I am strong".
   - **Get outdoors.** Take daily walks. Go to a park if you have one. Being in nature is good for your immune system.
   - **Show love.** As long as they are well, hug your children and partner frequently. Speak to them in a kind and loving voice. Love strengthens your immune system.
   - **Stay in touch.** Use regular phone calls and video chats to stay in touch with those you love.
   - "**2-Household Bubble**". To reduce social isolation, especially for young children, some families have joined up with one other family for visits. Rules: Both families must agree that they will not have social contacts with any other families. No one in either family can work outside the home. Not approved by CDC but a reasonable family decision.

31. **How to Protect Others - When You or Your Child are Sick:**
   - **Stay Home:** Stay home from school or work if you are sick. Your doctor or local health department will tell you when it is safe to return. Do Not go to stores, restaurants, places of worship or other public places. Avoid public transportation or ride sharing. Do Not allow any visitors (such as friends). Leave the house only if you need to seek 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, sneeze into a tissue and throw it into trash can.
   - **Wash Hands often with Soap and Water:** After coughing or sneezing are important times.
   - **Don't Share Personal Household Items:** Don't share glasses, plates or eating utensils.
   - **Wear a Mask:** Wear a face mask when around others or if you need to go to a medical facility.
   - Carefully avoid any contact with the elderly and people with weak immune systems or other chronic health problems.

32. N/A

33. N/A
Social (Safe) Distancing and COVID-19 Prevention:
- Avoid any contact with people known to have COVID-19 infection. Avoid talking to or sitting close to them.
- **Social (Safe) Distancing:** Try to stay at least 6 feet (2 meters) away from anyone who is sick, especially if they are coughing. Also called physical distancing. Avoid crowds because you can't tell who might be sick.
- If COVID-19 is widespread in your community, try to stay 6 feet away from everyone outside your family unit.
- **Stay at Home Orders:** Follow any stay at home (stay in place) orders in your community. Leave your home only for essential needs such as buying food or seeking medical care.
- **After Stay at Home Orders are Lifted:** Continue social distancing. Also wear a mask when entering any public building or outdoor crowded area. These precautions will be needed for many months. Your state public health department will decide when they are no longer needed.

Call Back If:
- Your child becomes worse

Call Back If:
- You have other questions

Face Masks and COVID-19 Prevention:
- **Overview:** Face masks are essential for reducing the spread of COVID-19. Masks may be more protective than the future vaccine. They will also reduce the spread of influenza. Wearing a mask means you care about other people.
- **Recommended Masks:** Made of 2 or more layers of washable, breathable fabric. Completely cover the nose and mouth. Fits snugly under your chin and against the sides of your face. Neck gaiter masks may be less effective (CDC)
- **Sick patients:** Must always wear a face mask if need to leave the home. Example: for medical visits. Exception: patients with trouble breathing in a mask can consider a loose face covering such as a bandana.
- **Well people:** The CDC recommends everyone wears a face mask or covering when going outside the home. They are critical if entering a public building, such as a grocery store. Face masks are required by management for entering most businesses. Reason: Many people with COVID-19 have no symptoms but can spread the virus.
- **Well People Exceptions:** Face mask or covering is optional if outdoors in nature and you can avoid being within 6 feet of other people. Examples: on an outdoor walk or run.
- **Age Limits:** Face coverings also are not recommended for children under 2 years (CDC).

Reassurance and Education - Needless Concerns about COVID-19 Exposure:
- What you have described is not a true exposure to COVID-19.
- Your child is not at any risk for getting a COVID-19 infection from what you have told me. Exception: travel from or living in a high risk area carries a small risk.
- You can take this off your worry list. I'll try to explain in more detail.
39. **Criteria for True COVID-19 Exposure (CDC):**
   - The risk of getting COVID-19 requires one of the following to have occurred:
     - Close contact with a person who is a lab-test-confirmed COVID-19 AND contact occurred while they were ill.
     - Close contact with a person who is under investigation for COVID-19 AND contact occurred while they were ill.
   - **Secondary Exposure:** Close contact with household member (such as parent) who is under investigation for COVID-19 BUT household member doesn’t develop symptoms within 14 days, probably does not represent a true exposure for the child. Discuss with your PCP if you have questions.

40. **Activities that Do Not Cause COVID-19 Infections:**
   - Being in the same school, church, workplace or building as one person with COVID-19 carries a small risk. This risk increases once multiple people in that setting develop COVID-19.
   - Walking by a person who has COVID-19
   - Close contact with a person who was exposed to COVID-19 more than 14 days ago and never developed any symptoms

41. **Caller Remains Worried after Education and Reassurance:**
   - Encourage them to call their PCP or public health department within 24 hours.
   - Discourage them from going to a health care facility.
   - Tell them that no special testing or treatment will be offered.

42. N/A
43. **Other COVID-19 Facts:**
   - **Incubation Period:** average 5 days (range 2 to 14 days) after coming in contact with the secretions of a person who has COVID-19.
   - **No Symptoms but Infected:** Over 30% of infected adult patients have no symptoms (asymptomatic patients). Children and teens are even more likely to have no symptoms. Such patients do however spread the disease and develop protective antibodies (immunity).
   - **Mild Infections:** 80% of those with symptoms have a mild illness, much like normal flu or a bad cold. The symptoms usually last 2 weeks.
   - **Severe Infections:** 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.
   - **Deaths:** Children generally have a mild illness and recover quickly. Pediatric deaths are very rare. Older adults, especially those with chronic lung disease, heart disease, diabetes or weak immune systems, have the highest death rates. The overall death rate for COVID-19 infections is around 0.6%.
   - **Vaccine:** There currently is no vaccine to prevent COVID-19. Research is on the fast track in many labs. Safe and effective vaccines may be available by early 2021. Most vaccines will be a two dose regimen, separated by 3-4 weeks. Similar to flu shots, they will probably provide protection for 6-9 months. The first widely available vaccines will only be offered to adults. Reason: Vaccine safety needed to be proven in adults first and vaccine trials on adolescents are just starting. (November 2020)
   - **Treatment:** New treatments for severe COVID-19 are becoming available. They are only used on hospitalized patients and are given in a vein (IV).
   - **Prevention:** 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 and had side effects. Social (safe) distancing and face masks are proven to help prevent disease.

44. N/A

45. **Note to Triager - Only Answer Caller's Main Question:**
   - This is an information only call.
   - Address one specific question, two at the most.
   - If there are many questions about COVID-19, redirect the caller to online information. Here are the most reliable websites:
     - CDC website: [https://www.cdc.gov/coronavirus](https://www.cdc.gov/coronavirus)
     - American Academy of Pediatrics parent website: [www.healthychildren.org](http://www.healthychildren.org)
   - To meet the demand for COVID-19 information, the public must be encouraged to read.

50. **Call EMS 911 Now:** Your child needs immediate medical attention. 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.)

51. **Go To ED Now:** Your child needs to be seen in the Emergency Department immediately. Go to the ED at ____________ Hospital. Leave now. Drive carefully.
52. **Go To ED Now (or PCP Triage):**
   - **If No PCP (Primary Care Provider) Second-Level Triage:** Your child needs 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:** Your child 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, go directly to the ED/UCC at _____________ Hospital.

53. **See HCP Within 4 Hours (or PCP triage):**
   - **If Office Will Be Open:** Your child needs to be seen within the next 3 or 4 hours. Call your doctor's (or NP/PA) office as soon as it opens.
   - **If Office Will Be Closed and No PCP (Primary Care Provider) Second-Level Triage:** Your child needs 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 your child becomes worse.
   - **If Office Will Be Closed and PCP Second-Level Triage Required:** Your child 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.

54. **See PCP Within 24 Hours:**
   - **If Office Will Be Open:** Your child needs to be examined within the next 24 hours. Call your child's 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:** Your child needs to be examined within the next 24 hours. A clinic or 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:** Your child 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:** Between 10 pm and 7 am, hold the page since this isn't serious. 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 (medical home) for their child.

55. **See PCP Within 3 Days:**
   - Your child needs to be examined within 2 or 3 days. Call your doctor (or NP/PA) during regular office hours and make 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):** Refer patient to an urgent care center or clinic. Also try to help caller find a PCP (medical home) for their child.

56. **See PCP Within 2 Weeks:**
   - Your child needs an evaluation for this ongoing problem within the next 2 weeks. Call your child's doctor (or NP/PA) during regular office hours and make an appointment.
   - **If Patient Has No PCP (Primary Care Provider):** Refer patient to an urgent care center or primary care clinic. Also try to help caller find a PCP (medical home) for their child.
BACKGROUND INFORMATION

COVID-19 Symptoms

COVID-19 should be suspected in people who have 1 or more of the following:

- Cough
- Shortness of breath (difficulty breathing)
- Fever or chills
- Loss of smell or taste
- Muscle or body aches
- Headache
- Sore throat
- Runny nose (not from allergies)
- The CDC also includes the following less common symptoms: fatigue (tiredness), nausea, vomiting and diarrhea. In isolation, these symptoms (such as diarrhea) are not very helpful for recognizing COVID-19. Reason: Too common, multiple causes and sometimes subjective. For example, mild diarrhea is often caused by a change in the diet.
- "COVID Toes": Reddish or purple toes have been reported as a rare finding. They can occur alone and go away without treatment. Or they can occur 1-2 weeks after the more common symptoms.
- Multisystem Inflammatory Syndrome (MIS-C): A small number of children present with symptoms similar to Kawasaki's disease. See complete description below.

Multisystem Inflammatory Syndrome (MIS-C)

- MIS-C is a rare and sometimes severe complication associated with COVID-19. The most common symptoms are fever, a red rash, red eyes, abdominal pain and diarrhea or vomiting. Half of the patients develop trouble breathing and shortness of breath. Some children become confused or overly sleepy. Always has multiple symptoms. All patients suspected of having this syndrome should be seen by a doctor. Most need to be admitted to the hospital. Some cases are similar to Kawasaki's
Disease (KD), but MIS-C is a more serious condition.

- Onset of symptoms: Usually about 4 weeks after COVID-19 infection and apparent recovery.
- Peak age: 8 years. Age range: 6 months to 21 years.
- Treatment: MIS-C is treatable with medications, including IV immune serum globulin (ISG). At this time, it cannot be prevented nor predicted.
- Reassurance: If a child gets this rare complication, a parent will know that their child needs to see a doctor.

**Child Abuse During the COVID-19 Pandemic**

- Social isolation combined with the financial crisis has caused unremitting stress for many parents.
- Young children often become irritable and demanding when confined to the home.
- These factors have increased the rate of angry outbursts and child abuse.
- Triagers need to be alert for calls about bruises or other injuries that are suspicious, unexplained or occur in the first year of life.
- They also need to offer help to families in crisis before they reach the breaking point. Be prepared. Know where to refer at-risk families.
- National Alliance on Mental Health (NAMI) Helpline: 1-800-950-6264. This is an information and referral source for locating community mental health programs.
- Domestic Violence Hotline: 1-800-799-7233
- Child Abuse: Call the Child Abuse Reporting Hotline in the county where the child lives. The number can also be obtained by calling 911.
- See the Psychosocial Problems, Child Abuse or Domestic Violence guidelines for details.

**COVID-19 - Other Facts**

- **Incubation Period**: average 5 days (range 2 to 14 days) after coming in contact with the secretions of a person who has COVID-19.
- **No Symptoms but Infected**: Over 30% of infected adult patients have no symptoms (asymptomatic patients). Children and teens are even more likely to have no symptoms. Such patients do however spread the disease and develop protective antibodies (immunity).
- **Mild Infections**: 80% of those with symptoms have a mild illness, much like normal flu or a bad cold. The symptoms usually last 2 weeks.
- **Severe Infections**: 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.
- **Deaths**: Children generally have a mild illness and recover quickly. Pediatric deaths are very rare. (CDC) Older adults, especially those with chronic lung disease, heart disease, diabetes or weak immune systems, have the highest death rates. The overall death rate is around 0.6%.
- **Vaccine**: There currently is no vaccine to prevent COVID-19. Research is on the fast track in many labs. Safe and effective vaccines may be available by early 2021. Most vaccines will be a two dose regimen, separated by 3-4 weeks. Similar to flu shots, they will probably provide protection for 6-9 months. The first widely available vaccines will only be offered to adults. Reason: Vaccine safety needed to be proven in adults first and vaccine trials on adolescents are just starting. (November 2020)
- **Treatment**: New treatments for severe COVID-19 are becoming available. They are only used on hospitalized patients and are given in a vein (IV).
- **Prevention**: 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 and had side effects. Social (safe) distancing and face masks are proven to help prevent disease.
COVID-19 - CDC Definition of Exposure (Close Contact)

- You are at risk of getting COVID-19 if the following has occurred:
  - Close contact with a person who tested positive for COVID-19 AND contact occurred while they were ill.
  - Close contact with a person diagnosed by their HCP as a suspected COVID-19 patient.
  - CDC Definition of close contact: within 6 feet (2 meters) for a total of 15 minutes or more over a 24-hour period. Prolonged close contact would extend the risk to the 48 hours prior to the person becoming ill with symptoms.
  - Living in or travel from a city, country or other geographic area where there is documented community spread of COVID-19. This carries a lower risk compared to close contact if one observes social distancing.
  - Community spread has occurred in most of the US, especially in cities.
  - The CDC (https://www.cdc.gov/coronavirus) has the most up-to-date list of where COVID-19 outbreaks are occurring.

COVID-19 - How it is Spread

- COVID-19 is spread from person to person.
- The virus spreads when respiratory droplets produced when a person coughs or sneezes. 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 ground or floor.
- 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.
- These methods are how most respiratory viruses spread.
- Aerosols (tiny airborne particles) can float in the air for 1 to 2 hours. They only occur in a closed room and are a rare cause of COVID-19 transmission (CDC and WHO). Evidence: within household units, only 30% of contacts get infected.

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

COVID-19 - Travel

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

COVID-19 and Repeat Infections

- Most viral infections cause our immune system to create antibodies that protect us from getting that
infection again.
• Sometimes this provides lifelong protection, but sometimes that protection only lasts a few months or years.
• Experts have not seen people who have COVID-19 get sick with COVID-19 a second time. Research about how long protection against COVID-19 lasts is ongoing.
• For now, it remains important for people who have recovered from COVID-19 to be careful. Take normal precautions such as wearing a mask and social distancing.
• CDC website on re-infection: “Clinical recovery has been correlated with the detection of IgM and IgG antibodies which signal the development of immunity. However, the possibility of re-infection after full recovery requires more data”.

Ibuprofen and other NSAID Use for COVID-19

• Many 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 this reason, STCC guidelines continue to recommend ibuprofen as an acceptable way to treat high fevers and pain. (Note: Remind callers that fevers are beneficial, help fight the infection, and may 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 PCP for a decision about whether the drug can be continued.

Other Coronaviruses in Humans

• MERS-CoV: Middle East Respiratory Syndrome (MERS)
• SARS-CoV: Severe Acute Respiratory Syndrome (SARS)
• Of note, neither of these viruses had a major impact on the pediatric population.
• Common coronaviruses causing colds and upper respiratory symptoms that are identified in currently available commercial respiratory testing panels are different than COVID-19 addressed in this guideline.

Internet Resources

• American Academy of Pediatrics: http://www.healthychildren.org

Expert Reviewers of Original COVID-19 Guideline (March 2020) and all 4 Updates

• Jessica Cataldi, MD, Sections of Infectious Disease and Epidemiology, Children's Hospital Colorado, Aurora, CO
• Samuel Dominguez, MD, Sections of Infectious Disease and Epidemiology, Children's Hospital Colorado, Aurora, CO
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SEARCH WORDS

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