

DEFINITION

- Exposed (close contact) to a person who has been diagnosed (confirmed by testing) or suspected to have COVID-19
- The exposed person is well and has NO COVID-19 symptoms (cough, fever, shortness of breath or others).
- For symptomatic suspected COVID-19 patients, use the COVID-19 Diagnosed or Suspected guideline.
- For patients with a positive COVID-19 lab test, also use the COVID-19 Diagnosed or Suspected guideline.
- **Also included:** Questions about COVID-19 and vaccine questions
- **Updated:** April 1, 2022 (version 16)

Vaccine Status Definitions (CDC 1-16-2022)

Vaccines Up-to-date ("Fully Vaccinated" is term used in this guideline)

- Completed the Pfizer or Moderna primary vaccine series AND also received a booster shot OR
- Completed the Pfizer or Moderna primary vaccine series within the last 5 months AND is not yet eligible for a booster shot (mainly applies to children) OR
- Received J&J primary vaccine AND also received a booster shot

Vaccines Not Up-to-date ("Partially" or "Unvaccinated" is term used in this guideline)

- Unvaccinated: Has not received any COVID-19 vaccines.
- Completed the Pfizer or Moderna primary vaccine series AND 5 or more months ago BUT has not received a booster shot OR
- Received only one Pfizer or Moderna vaccine OR
- Received J&J primary vaccine AND 2 or more months ago BUT has not received a booster shot
- **Note:** Also, if less than 14 days since the shot, the person is only "partially vaccinated." *This waiting period does not apply to booster shots.*

CLOSE CONTACT (EXPOSURE) to COVID-19 Definition:

Household Close Contact:

- Living in the home with someone infected with COVID-19 (based on a positive lab test) carries the greatest risk for catching the infection.

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, or close conversation.
- OR having direct facial contact with infectious secretions of a confirmed COVID-19 case (e.g., being coughed on) (CDC)
- **Masks:** Even if both people are wearing face masks, the above criteria for Close Contact do not change. (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.
- The risk also increases if not wearing a mask

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). CDC 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. SYMPTOMS: "Does your child have any symptoms?" (Note: No symptoms required to use this guideline)
8. HIGHER RISK for COMPLICATIONS with COVID-19 : "Does your child have any chronic medical problems?" (e.g., heart or lung disease, diabetes, asthma, cancer, weak immune system, etc.
9. VACCINES: "Is your child vaccinated against COVID-19?" If so, "What vaccine (Pfizer, Moderna, Johnson and Johnson) did they receive?" "Have they received a booster shot?"
Fully Vaccinated definition (CDC):
Person has completed primary vaccine series and received a booster shot OR has completed primary vaccine series within the last 5 months and not yet eligible for booster shot.
Other people are either unvaccinated or partially vaccinated.

- 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

Positive COVID-19 test

Go to Guideline: 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)

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

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

[1] Symptoms of COVID-19 (cough, SOB or others) AND [2] lives in area or has recently traveled to an area with high community spread

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

[1] Symptoms of COVID-19 AND [2] within 10 days of possible close contact with diagnosed or suspected COVID-19 patient

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

[1] Difficulty breathing (or shortness of breath) AND [2] onset > 10 days after COVID-19 exposure (Close Contact) AND [3] no community spread where patient lives

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

[1] Cough AND [2] onset > 10 days after COVID-19 exposure AND [3] no community spread where patient lives

Go to Guideline: Cough (Pediatric)

[1] Common cold symptoms AND [2] onset > 10 days after COVID-19 exposure AND [3] no community spread where patient lives

Go to Guideline: Colds (Pediatric)

COVID-19 vaccine reactions

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

Call PCP When Office is Open

[1] Caller has question about quarantine or testing AND [2] triager not able to answer

Reason: PCP will discuss.

CA: 61, 11, 1

Home Care

[1] Close Contact COVID-19 Exposure within last 10 days AND [2] NO symptoms AND [3] Fully Vaccinated (see definition)

Reason: Home quarantine is NOT needed. Discuss COVID-19 testing.

CA: 58, 18, 47, 16, 27, 48, 9, 12, 22, 23, 1

[1] Close Contact COVID-19 Exposure within last 10 days AND [2] NO symptoms AND [3] NOT Fully Vaccinated (see definition)

Reason: Home quarantine is needed. Discuss COVID-19 testing.

CA: 58, 25, 16, 47, 27, 48, 9, 12, 22, 23, 1

[1] Caller concerned that COVID-19 exposure occurred BUT [2] does not meet CDC criteria for close contact

Reason: No true exposure or is a secondary exposure and needs reassurance

CA: 58, 38, 39, 26, 40, 41, 36, 1

[1] Close Contact COVID-19 Exposure AND [2] 10 or more days ago AND [3] NO symptoms

Reason: Asymptomatic for 10 or more days. Risk of developing COVID-19 infection has passed. Reassure and discontinue quarantine.

CA: 58, 2, 36, 1

[1] Living in high risk area for COVID-19 community spread identified by local Public Health Department (PHD) BUT [2] NO symptoms

Reason: Follow local PHD directives regarding staying at home, etc.

CA: 58, 24, 4, 6, 7, 8, 28, 1

[1] Travel from high risk area for COVID-19 community spread (identified by CDC) AND [2] within last 10 days BUT [3] NO symptoms

Reason: Follow local PHD directives regarding staying at home, etc.

CA: 58, 26, 8, 9, 10, 23, 1

COVID-19 Testing, questions about who needs it

CA: 58, 27, 21, 39, 40, 41, 36, 1

COVID-19 Prevention, questions about

CA: 58, 7, 15, 34, 80, 37, 29, 30, 31, 36, 1

COVID-19 Disease, questions about

Reason: Refer most callers to CDC website: <https://www.cdc.gov/coronavirus>

CA: 58, 45, 3, 4, 5, 6, 7, 8, 43, 49, 36, 1

ALSO, COVID-19 Maternal Illness and Breastfeeding, questions about

CA: 58, 13, 14, 1

ALSO, COVID-19 Vaccines, questions about

CA: 58, 32, 17, 33, 42, 44, 36, 1

CARE ADVICE (CA) -

1. **Care Advice** given per COVID-19 - Exposure (Pediatric) guideline.
2. **Reassurance and Education - No Symptoms and Day 10 or Later:**
 - The COVID-19 infection usually starts within 10 days of an exposure.
 - Your child developed no symptoms of respiratory infection (such as fever or cough) during the 10 days after an exposure.
 - Your child should be safe from getting COVID-19.
 - If your child has been on home quarantine, it can be stopped.
3. **COVID-19 Outbreak:**
 - COVID-19 stands for Coronavirus disease 2019.
 - Cause: The name of the new virus is SARS-CoV-2.
 - An outbreak of this infection began in Wuhan, China in early December 2019.
 - In US and Canada, the first COVID-19 patients were reported in January, 2020.
 - The World Health Organization (WHO) declared COVID-19 a global pandemic on March 11, 2020.
 - In the summer and fall of 2021, the Delta variant has become the most common COVID-19 variant. In December 2021, Omicron variant became the dominant strain.
 - The Centers for Disease Control and Prevention (CDC) is considered the source of truth. This continues to be a changing situation and recommendations from the CDC are being updated as they occur.
 - See: <https://www.cdc.gov/coronavirus>
4. **COVID-19 Symptoms:**
 - COVID-19 coronavirus most often 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, runny nose, muscle pain, headache, loss of smell and taste.
 - The CDC also includes the following less common symptoms: fatigue (tiredness), nausea, vomiting and diarrhea.
 - Some people may have minimal symptoms or even have no symptoms (asymptomatic).
5. **COVID-19 - Exposure Risk Factors:**
 - Here are the main risk factors for getting sick with COVID-19:
 - **Household close contact:** Living in the home with someone infected with COVID-19 carries the greatest risk for catching the infection.
 - **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) 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 to an area** where there is **high community spread** of COVID-19 also carries some risk.
 - **International travel:** The CDC (<https://www.cdc.gov/coronavirus>) has the most up-to-date list of where COVID-19 outbreaks are highest.
 - **Not being fully vaccinated** (or up-to-date with recommended boosters)
 - **Masks:** Even if both people are wearing face masks, the above criteria for Close Contact do not change. (CDC)

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 an uncommon cause of COVID-19 transmission. (CDC and WHO).

7. **COVID-19 - How to Protect Yourself and Family from Catching It - The Basics:**
 - Get the COVID-19 vaccine and booster shot. It is your family's best protection against this serious infection.
 - Avoid close contact with people outside your family unit. Avoid closed spaces (indoors) when possible and all crowds (even outdoors).
 - Always wear a face mask when you leave your home. Also, 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 air travel.
 - Travel is much safer for people who are fully vaccinated and boosted.
 - The Centers for Disease Control and Prevention (CDC) maintains a website with the latest recommendations regarding travel and your health.
 - Currently the CDC recommends against travel to many geographic areas with widespread and ongoing spread of COVID-19. See current list at <https://wwwnc.cdc.gov/travel/>.

9. **Measure Temperature:**
 - Measure your child's temperature 2 times each day.
 - Do this until 10 days after exposure to COVID-19.
 - If fever occurs, call back.

10. **High-Risk Travel - Quarantine Questions:**
 - **Symptomatic Patients:** Quarantine is needed if your child develops a cough, fever or other symptoms within 10 days of travel.
 - **Asymptomatic Patients:** For patients without symptoms, follow CDC, local, state or provincial Department of Health directives.
 - **Domestic Travel:** Following domestic travel, quarantine is usually not needed unless suspected COVID-19 exposure occurred or you develop symptoms.
 - **International Travel:** Following international travel, the CDC recommends all travelers get a COVID-19 lab test on day 5 after arriving home. Fully vaccinated people do not need to quarantine. Non- and partially-vaccinated people need to stay home for 5 full days even if the lab test is negative. You will need to wear a mask for 10 days when around others.
 - If you have questions about quarantine, call your doctor during office hours.

11. **If Lab Test Needed to Return to Work or School:**
 - You had close contact with a COVID-19 patient in the last 10 days.
 - Your employer (or school) wants you to have a COVID-19 lab test before you can return.
 - The test has to be negative.
 - Your employer or school may provide testing. If not, try to perform a home rapid test.
 - If not available, your doctor will help you with your testing questions.
 - Many offices do COVID-19 lab tests. 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, runny nose, muscle pain, headache, loss of smell and taste.
 - The CDC also includes the following less common symptoms: fatigue (tiredness), nausea, vomiting and diarrhea.
 - A rare symptom is 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 will provide some protection against this illness for your baby, like it does for influenza and most other viral illnesses.
 - Research has shown that the virus is not passed through breastmilk.
 - Breastfeeding mothers are also encouraged to get the COVID-19 vaccine. (CDC) After a few weeks, the breastmilk will contain protective antibodies against COVID-19.

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

15. **Flu Vaccine:**
- Protect your family from influenza by getting your annual flu vaccine.
 - Reason: Getting COVID-19 while you also have or are recovering from the flu may increase the chances of getting severe symptoms.
 - Both the flu and the COVID-19 vaccines can be given at the same time.
16. **Home Quarantine Is Needed - How to Implement in the Household:**
- 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 positive 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 should wear a mask in common household areas.
 - Note to Triager: Many families have limited options. Triagers 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.
17. **COVID-19 Vaccine Safety and Rare Side Effects Questions:**
- **Vaccine Safety:** Very safe. Most people get a sore arm for a few days. About half get some general symptoms for about 24 hours, such as feeling tired and achy. A smaller number have a fever. These are the normal side effects seen with most vaccines and they go away quickly. They show your immune system is working. Serious reactions are extremely rare.
 - **COVID Arm:** Large red blotchy rash may occur at the injection site. Feels somewhat itchy. Redness can last for a week. It's a harmless local reaction that may or may not occur with next shot. Less than 1 per 100 people have this reaction. Mainly with Moderna vaccine.
 - **Blood Clot Concerns:** Very rare. Occur in about 1 person per million vaccinated people. Blood clots occur much more commonly in people who get the natural COVID-19 infection. (Note: have NOT occurred with Moderna or Pfizer vaccines)
 - **Myocarditis Concerns:** Myocarditis is inflammation of the heart muscle. Main symptoms are chest pain and shortness of breath. Symptoms start within 1 week of getting the vaccine. Note to triager: If chest pain is the only symptom, refer to PCP or ED urgently. Very rare side effect of the COVID-19 vaccines. Occurs in about 6 per million vaccinated people. (20 per million in study from Israel) Mainly in teen or young adult males. The symptoms are usually mild and go away quickly. Myocarditis occurs much more commonly in people who get the natural COVID-19 infection. Plus it is more severe in them.

18. **Reassurance and Education - Close Contact but Child is Fully Vaccinated:**
 - You have told me that your child is fully vaccinated against COVID-19. That means they recently completed their primary series over 2 weeks ago (or have gotten a booster shot if eligible).
 - The risk of getting infected is low.
 - **Home quarantine is NOT needed.**
 - **Do Monitor For Symptoms Until 10 Days After Last Exposure:** Check your child's temperature two times a day. Watch for symptoms of COVID-19.
 - **Get Tested:** A fully vaccinated person who had a COVID-19 exposure and is asymptomatic should get a COVID-19 test about 5 days after exposure (CDC). Test sooner if symptoms develop.
 - **Wear a Mask:** Wear a mask for 10 days.
 - 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.
 - Follow local, state or provincial Department of Health directives if they are different.
 - Students should follow their school's COVID-19 policy.
 - **Test to Stay in Schools.** Some school systems have replaced a 10 day quarantine at home with daily rapid testing to keep exposed children in school classes. This program has not caused any added transmission.
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. **Antibody Tests - Rarely Needed:**
 - **Antibody Tests:** These tests are different. These are performed on blood. They can sometimes tell us if there are antibodies from a previous infection. They require a doctor's order and are rarely helpful. If you have questions, discuss with your doctor during office hours.
 - **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).
22. **Getting the COVID-19 Vaccine and Exposure:**
 - If you have been exposed to COVID-19 and are scheduled to receive the COVID-19 vaccine, the vaccination should be postponed until 10 full days after the date of exposure.
23. **Call Back If:**
 - Fever occurs within 10 days of COVID-19 exposure
 - Cough or difficulty breathing occur within 10 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 when going outside your home.
 - Practice social distancing (6 feet away from anyone who is sick or a stranger).
 - Avoid crowds.
 - Wash your hands frequently.
 - Follow local, state or provincial Department of Health directives.
 - The CDC has a website that can tell you the COVID-19 community risk level in any County in the US. Your County will be listed as Low, Medium or High. Go to www.covid.gov and search by your county.
25. **Reassurance and Education - Home Quarantine for Close Contact and Unvaccinated or Partially Vaccinated:**
- Although your child may have been or was exposed to COVID-19, your child does not currently have any symptoms. COVID-19 infections usually start within 10 days following the last exposure.
 - Since it's been less than 10 days, your child is still at risk for getting sick with it.
 - **Home Quarantine:** Keep your child on home quarantine for 5 full days to protect others (CDC). After quarantine, your child will need to wear a mask in public for an additional 5 days. For children under 2 years and those uncooperative with wearing a mask: Home quarantine will be needed for a full 10 days.
 - **Monitor For Symptoms Until 10 Days After Last Exposure:** Check your child's temperature two times a day. Watch for symptoms of COVID-19.
 - **Get Tested:** A person who had a COVID-19 exposure and is asymptomatic should get a COVID-19 test about 5 days after exposure. Test sooner if symptoms develop. (CDC recommendations)
 - Follow local, state or provincial Department of Health directives if they are different.
 - Students should follow their school's COVID-19 policy.
 - **Test to stay in Schools.** Some school systems have replaced a 10 day quarantine at home with daily rapid testing to keep exposed children in school classes. This program has not caused any added transmission.
 - 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 need COVID-19 testing if you develop symptoms or have traveled internationally.
 - Monitor for onset of fever or cough symptoms. After travel, you will need to measure your temperature 2 times each day for 10 days. Report the onset of fever or cough to your PCP.

27. **COVID-19 Diagnostic Testing:**

- Testing is the only way to know for sure that your child has COVID-19. You can't tell by symptoms. Reason: Most respiratory viruses cause similar symptoms.
- Testing is now widely available without a doctor's order. Exception: age less than 3. Where to get a test can be different for some communities. Check your state's public health website for community testing centers.
- Some doctors can do COVID-19 tests in their office. Many retail clinics and urgent care centers also perform COVID-19 testing. Even pharmacies (such as CVS and Walgreens) now perform drive-thru testing on children age 3 and older. Visit their website to schedule a test.
- Self-tests (such as Abbot BinaxNow) for use at home are now available in most drugstores (such as CVS, Walgreens) or on-line. (Note: Most rapid home tests are not FDA approved for use under 2 years of age).
- **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.
- **Tests for COVID-19: Recommended Timing (CDC):**
- **Symptomatic patients** - get a test immediately (or at least within 3 days of onset of symptoms.)
- **Asymptomatic Unvaccinated or Partially Vaccinated patients with a COVID-19 close contact** - Get a COVID-19 test 5 days after exposure. Test sooner if symptoms develop.
- **Asymptomatic Fully Vaccinated with a Booster and a COVID-19 close contact** - Get a test on day 5 after exposure. Test sooner if symptoms develop.
- **Negative Tests:** After a negative test, a repeat test is sometimes needed. Reason: negative home tests are not always reliable. If you live with a high risk person, talk with your doctor about getting a more accurate PCR test.
- **Repeating Positive Tests:** After a positive rapid or PCR test, repeat tests are not recommended. Positive rapid tests are reliable. Repeat testing with a PCR test is not indicated after a positive rapid test. After it is safe to stop isolation (usually 5 days), repeat rapid tests may be negative or stay positive for 5 - 10 days. Repeat PCR tests may stay positive for up to 90 days. A repeat positive PCR test does not mean the patient can spread the infection once the required isolation period is completed.
- Main reason not to repeat positive tests: A negative test result will not allow a patient with a positive test result to leave quarantine or isolation any sooner. It will not allow earlier return to child care or school.
- If you have more testing questions, call your doctor during office hours.

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.
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. **COVID-19 Vaccines - Efficacy Questions:**
- **Vaccine Efficacy:** All the vaccines approved by the FDA for use in the US are highly effective at preventing COVID-19. The protection against getting the new variants has gone down some, but most people have mild symptoms or none. The vaccines continue to prevent serious symptoms, complications and the need for hospital or ICU admission, even for the variants. They are much more effective than flu vaccines.
 - **Other Major Benefits:** Vaccines also prevent the rare serious delayed onset complications from COVID-19 infections that can occur in some unlucky people. One example is multisystem inflammatory syndrome in children (also called MIS-C). Another is "long hauler" symptoms (such as brain fog or chronic breathing problems). Key: Vaccines prevent death from COVID-19 infections.
 - **Vaccines and Normal Life:** Having almost everyone vaccinated is the only way we can get back to normal. Normal means no masks, open schools, safe to travel, safe to visit grandparents, less mental health crisis and no deaths from COVID-19.
 - **Best Vaccine:** Any vaccine approved by the FDA is highly effective and safe. Get the first one that becomes available to you. They will protect you and your family.

33. **COVID-19 Vaccines - Protection and Booster Shot Questions:**
- **Start of Vaccine Protection:** Full protection is reached about 2 weeks after you complete the vaccine series.
 - **Duration of Vaccine Protection:** Research data has confirmed that protection is still high at 6 months after completing the vaccine series. Experts predict the protection may last for 12 months or longer from boosters, but we need to wait for more data.
 - **COVID-19 Primary Vaccine Series:** CDC recommends the COVID-19 vaccine primary series for all children age 5 and older.
 - **Booster Shot Indications:** CDC recommends for every one age 12 and older. Experts predict we may need them yearly, just like flu vaccine booster shots.
 - **Timing of the Booster Shot:** For Pfizer or Moderna vaccines, a booster shot for those 12 and older is needed if 5 or more months have passed after the first ones. For Johnson and Johnson vaccine, a booster shot is needed 2 or more months after the first one. A second booster for those 12 and older for those patients with a weak immune system has been approved for 4 months after their previous booster (3/2022; Pfizer only).
 - **COVID-19 Variants and Vaccine Protection:** For now, the current vaccines protect against the current variants in the US. The vaccinated person usually does not get infected. If they do, they develop either a mild illness or an asymptomatic infection. They are protected against serious symptoms and any complications. By contrast, natural immunity does not protect against some of the variants.
 - **Breakthrough cases** are COVID-19 infections that bypass vaccine protection. They are more common with new variants. Many do not cause any symptoms. Some get mild symptoms. The vaccine prevents almost all hospital admissions and deaths.
 - **Quarantine after Exposure:** If you are up-to-date on your COVID-19 vaccines, you do not have to quarantine after close contact with a COVID-19 infected person. However, fully vaccinated people should get tested 5 days after an exposure to COVID-19. You should also wear a mask for 10 days when you are around other people.
34. **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.
35. **Call Back If:**
- Your child becomes worse
36. **Call Back If:**
- You have other questions

37. **Face Masks and COVID-19 Prevention:**

- Face masks are essential for reducing the spread of COVID-19. They will also reduce the spread of influenza. People with COVID-19 can have no symptoms, but still spread the virus.

- Because of the Omicron variant (and other possible future variants) recommendations for wearing masks are pretty much the same for people who are vaccinated or unvaccinated. Mask wearing is even more important if you are in an area of high COVID-19 spread or if you have a weak immune system.

People Who Are Well (Not Sick With COVID-19) Should Wear Masks If:

- Current Recommendation (CDC 3/2022): This advice only applies if family lives in a community with High COVID-19 Level.
- You are in indoor public spaces (such as a church or a grocery store).
- You are in a crowded outdoor setting (e.g., concert, music festival, rally).
- You are traveling on a plane, bus, train, or other form of public transportation or in transportation hubs such as airports and train stations.
- You must be around someone who has symptoms of COVID-19 or has tested positive for COVID-19.

People Who Are Sick With COVID-19 Must Wear Masks If:

- You need to leave the home. Example: for medical visits. Patients with trouble breathing in a mask can consider a loose face covering such as a bandana.
- You are around other people or animals (such as pets).

Exceptions to Masks:

- Face coverings are **NOT** recommended for **children under 2 years**.
- 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.

How to Select and Use a Face Mask:

- Make sure your mask fully covers your nose and mouth. It should fit snugly under your chin and against the sides of your face.
- 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>.

38. **Reassurance and Education - 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.

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 or within 48 hours before symptoms started.
- Close contact with a person who is under investigation for COVID-19 AND contact occurred while they were ill or within 48 hours before symptoms started.
- **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 10 days, probably does not represent a true exposure for the child. Discuss with your PCP if you have questions.
- **Masks:** Even if both people are wearing face masks, definitions of Close Contact do not change. (CDC)

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 10 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 during office hours.
 - Discourage them from going to a health care facility.
 - Tell them that no special testing or treatment will be offered.
42. **COVID-19 Vaccines - Eligibility and Special Patient Questions:**
- **Adults:** Approved for all age groups.
 - **Children and Teens:** Currently approved for 5 years and older. Results: strong protection and also safe (normal side effects). Importance: while most children have mild or asymptomatic infections, they can get rare complications such as MIS-C. Also, they can innocently transmit the disease to others.
 - **Pregnant Women:** Vaccines are approved and safe.
 - **Breastfeeding Mothers:** Vaccines are approved and safe. Studies show that breastmilk passes antibody protection against COVID-19 to the baby.
 - **Underlying High Risk Conditions:** Vaccines are approved and safe. These patients need the vaccine protection the most. If you have questions about a specific condition, discuss with your doctor.
 - **Person Already had the Disease:** Get the vaccine. It provides higher levels of antibodies and better protection than the natural disease. Restriction: not approved until you are over any acute symptoms and the 10 days of isolation have passed.
 - Go to CDC website for other questions: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines>.
43. **COVID-19 - Other Facts:**
- **Incubation Period:** average 5 days (range 2 to 10 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 most develop protective antibodies (immunity).
 - **Mild Infections:** 80% of adults with symptoms have a mild illness, much like normal flu or a bad cold. The symptoms usually last 2 weeks.
 - **Severe Infections:** 20% of unvaccinated adults with symptoms develop trouble breathing from viral pneumonia. Many of these need to be admitted to the hospital. About 2% of unvaccinated children with COVID-19 need to be admitted to the hospital. About 10% of unvaccinated teens need hospitalization. About 3% require ICU care. (CDC). People with complications generally recover in 3 to 6 weeks. Severe infections are rare in people who are vaccinated.
 - **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, obesity or weak immune systems, have the highest death rates. The overall death rate is around 2 per 1000 people. Over 90% of deaths occur in people who are not vaccinated.

44. **COVID-19 Vaccine - Reasons to Postpone Questions:**
- **Positive COVID-19 Test with Symptoms:** If your child has a positive COVID-19 test, the vaccine should be postponed for a full 10 days. Also, fever needs to be gone for over 24 hours without fever meds, and the symptoms need to be resolving (gone or almost gone).
 - **Positive COVID-19 Test without Symptoms:** If your child has a positive COVID-19 test without symptoms, the vaccine should be postponed for a full 10 days. The 10 day period starts on the day the test sample was collected.
 - **Exposed to COVID-19, But No Symptoms:** If your child has been exposed to COVID-19 and is scheduled for the vaccine, the vaccine should be postponed for a full 10 days. The 10 day period starts on the last day of exposure.
 - **Child is Sick and Scheduled for Vaccine:** If your child has symptoms compatible with COVID-19, should get a test before receiving the vaccine. If negative and mild illness (such as isolated runny nose or mild diarrhea), can receive the vaccine. For moderate or severe illness (including a fever), the vaccine should be postponed until fever is gone for over 24 hours and symptoms are resolving (gone or mild).
 - **Flu and COVID-19 Vaccines:** Can be given at the same time. No waiting period needed between the 2 shots.
 - **After Monoclonal Antibody Therapy:** Vaccine must be postponed at least 90 days.
 - **Multisystem Inflammatory Syndrome (MIS-C):** Vaccine must be postponed at least 90 days since MIS-C was diagnosed.
45. **Note to Triage - 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>.
 - American Academy of Pediatrics parent website: www.healthychildren.org
 - To meet the demand for COVID-19 information, the public must be encouraged to read.
46. **Stopping Home Quarantine for COVID-19 Exposed People (CDC):**
- Household members by definition are exposed to COVID-19. However, they do not have symptoms or a positive COVID-19 lab test. Here are the CDC recommendations for managing them.
 - **Not Vaccinated or Partially Vaccinated** family members should also stay at home on quarantine. Living with a COVID-19 positive patient implies close contact has occurred and continues to occur.
 - **Fully Vaccinated with a Booster** family members with no symptoms do not need to be on home quarantine unless they develop a positive lab test. They do need to wear a mask outside the home.
 - All people with close contact should be tested 5 days after close contact with an infected person. You should also wear a mask in public indoor settings for 10 days.

47. **Household Exposure and Quarantine:**

- Living with a person who has a COVID-19 positive test means ongoing exposure. Here is some general guidance:
- The infected person is contagious for up to 10 days. That means all household members will continue to be exposed for a minimum of 10 days.
- If a household member develops COVID symptoms, it should be assumed that they also have COVID. Getting tested is optional. Reason: a negative rapid test cannot be trusted.
- If a household member does NOT develop symptoms, a test is not needed until 5 days after the sick family member is released from isolation. If a second family member tests positive, the cycle starts over.
- If household members do not develop symptoms, quarantine as follows:
- **Fully vaccinated people with a booster**, do not need to quarantine at home. They need to wear a mask if they leave the home.
- **Unvaccinated or partially vaccinated exposed household members** need to quarantine at home for 10 days or longer.

48. **COVID-19 Testing - Low Availability:**

- If you cannot find any home testing materials or a timely testing site for your child, call your doctor's office during office hours. Your child's doctor may be able to provide testing.
- If your child does not develop any symptoms, not doing a test is probably fine.
- Do keep your child in quarantine for the required time.

49. **COVID-19 Vaccines and Treatment:**

- **Vaccines:** Safe and effective vaccines are available. At this time, vaccines have been tested and are FDA approved for 5 years and older. Trials on children younger than 5 years have started. The COVID-19 vaccine will reduce the chance of your child getting COVID-19. The vaccine prevents almost all hospital admissions, ICU care and deaths.
- **Booster Vaccines:** In December 2021, the CDC recommended a booster shot for those 12 and older. For Pfizer or Moderna vaccines, a booster shot for those 12 and older is needed if 5 or more months has passed after the first ones. For Johnson and Johnson vaccine, a booster shot is needed 2 or more months after the first one. Experts predict we may need a yearly booster, just like the flu vaccine.
- **"Breakthrough Cases":** These are COVID-19 infections that bypass vaccine protection. They are more common with new variants. Many do not cause any symptoms. The vaccine prevents almost all hospital admissions and deaths.
- **Treatment:** New treatments for severe COVID-19 are available. They are mainly prescribed for high risk patients or those who are hospitalized. **Caution** - Refer most antiviral questions to the PCP during office hours. Only discuss the following if caller asks about the new anti-viral pill (paxlovid): Paxlovid is given by mouth during the first 3 days of symptoms to prevent serious complications. It has emergency approval from the FDA (December 2021) and can be used for 12 and older at high-risk for complications. Supply may be limited.
- **Prevention:** The COVID-19 vaccine and booster are the best way to prevent infections. Face masks, social (safe) distancing and extra handwashing are also proven to help prevent disease. **Caution** - only discuss the following if caller asks about monoclonal antibody therapy: Is available for those at high risk for severe disease who are 1) asymptomatic and had a recent close contact exposure OR 2) have confirmed COVID-19 mild symptoms. It is usually given IV to prevent progression and complications. People hospitalized with COVID-19 are not eligible.

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.
- 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.

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:** Your child needs to be examined 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 (medical home) 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.
55. **See PCP Within 3 Days:**
- Your child needs to be examined 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 (Primary Care Provider):** 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.
56. **See PCP Within 2 Weeks:**
- Your child needs an evaluation for this ongoing problem within the next 2 weeks.
 - **PCP Visit:** Call your child's doctor (or NP/PA) during regular office hours and make an appointment.
 - **If Patient Has No PCP (Primary Care Provider):** 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.
58. **Home Care:**
- You should be able to treat this at home.
59. **Call PCP Now:**
- You need to discuss this with your child's 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.
60. **Call PCP Within 24 Hours:**
- You need to discuss this with your child's 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.
61. **Call PCP When Office Is Open:**
- You need to discuss this with your child's doctor (or NP/PA) within the next few days.
 - Call the office when it is open.

80. **Current CDC Mask Recommendations (March 2022):**

- Mask requirements have been reduced in most parts of our country.
- Mask requirements are now based on the number of COVID-19 cases in your community.
- The CDC has a website that can tell you the COVID-19 community level in any county in the US. Your county will be listed as Low, Medium or High. Go to www.covid.gov and search by county.
- High means everyone should wear a mask indoors in public.
- Medium means people at high risk for serious illness should wear a mask.
- Low means masks are not needed.

FIRST AID



N/A

BACKGROUND INFORMATION

COVID-19 Main 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.

Matching Pediatric Care Advice (PCA) Handouts for Callers

Detailed home care advice instructions have been written for this protocol. If your software contains them, they can be sent to the caller at the end of your call. Here are the names of the pediatric handouts that can be used with this protocol:

- COVID-19 - Exposure
- COVID-19 Prevention
- COVID-19 or Influenza - How to Tell
- COVID-19 Vaccines - Answers to Common Questions

Multisystem Inflammatory Syndrome (MIS-C)

- MIS-C is a very rare complication of COVID-19. In general, COVID-19 continues to be a mild disease in children. It cannot be predicted who will get this complication.
- Prevention: MIS-C can be prevented by getting your child vaccinated against COVID-19. Recent CDC report of 102 teens with MIS-C, over 95% were not vaccinated.

- The most common symptoms are fever, a red rash, abdominal pain with vomiting and diarrhea. Half of the patients develop trouble breathing. Some children become confused or overly sleepy. Always has multiple symptoms.
- Onset of symptoms: Usually about 4 weeks after a COVID-19 infection and apparent recovery.
- Peak age: 8 years. Age range: 6 months to 21 years.
- Treatment: Most patients with MIS-C need to be admitted to the hospital. MIS-C is treatable with medications, including IV immune serum globulin and steroids.
- Prognosis: Most children with MIS-C have a full recovery. The death rate is about 1 per 100.

Cause

- It is caused by a novel (new) coronavirus (COVID-19).
- Viruses change through mutation. Variants of the COVID-19 virus continue to emerge and spread.
- In the summer and fall of 2021, the Delta variant became the most common COVID-19 variant.
- In December 2021, the Omicron variant became the dominant strain. It is more highly contagious than Delta, leading to rapid spread. On the positive side, it caused more URI symptoms and less lung infections.
- The COVID-19 vaccines help protect against the serious complications and hospitalization risk with the disease and variants. The unvaccinated continue to have a 20 times higher rate of hospitalizations and deaths.

COVID-19 Origins

- An outbreak of this new viral infection began in Wuhan, China in early December 2019.
- The first COVID-19 cases in the United States and Canada were reported in January 2020.
- The World Health Organization (WHO) declared COVID-19 a global 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 recommendations from the CDC are updated daily. See: <https://www.cdc.gov/coronavirus>. If the CDC recommendations are different than what is in this guideline, follow the CDC guidelines.

COVID-19 - Other Facts

- **Incubation Period:** average 5 days (range 2 to 10 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 most develop protective antibodies (immunity).
- **Mild Infections:** 80% of adults with symptoms have a mild illness, much like normal flu or a bad cold. The symptoms usually last 2 weeks.
- **Severe Infections:** 20% of unvaccinated adults with symptoms develop trouble breathing from viral pneumonia. Many of these need to be admitted to the hospital. About 2% of unvaccinated children with COVID-19 need to be admitted to the hospital. About 10% of unvaccinated teens need hospitalization. About 3% require ICU care. (CDC). People with complications generally recover in 3 to 6 weeks. Severe infections are rare in people who are vaccinated.
- **Long-Haul Symptoms:** Have been reported in some children after hospitalization with severe infections. Main symptoms are fatigue, brain fog, muscle pains and joint pains. Up to 2% have symptoms beyond 8 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, obesity or weak immune systems, have the highest death rates. The overall death rate is around 2 per 1000 people. Over 90% of deaths occur in people who are not vaccinated.
- **Vaccines:** Safe and effective vaccines are available. At this time, vaccines have been tested and are FDA approved for 5 years and older. Trials on children younger than 5 years have started. The COVID-19 vaccine will reduce the chance of your child getting COVID-19. The vaccine prevents

almost all hospital admissions, ICU care and deaths.

- **Booster Vaccines:** In December 2021, the CDC recommended a booster shot for those 12 and older. For Pfizer or Moderna vaccines, a booster shot for those 12 and older is needed if 5 or more months has passed after the first ones. For Johnson and Johnson vaccine, a booster shot is needed 2 or more months after the first one. Experts predict we may need a yearly booster, just like the flu vaccine. A second booster for those 12 and older for those patients with a weak immune system has been approved for 4 months after their previous booster (3/2022; Pfizer only).
- **"Breakthrough Cases":** These are COVID-19 infections that bypass vaccine protection. They are more common with new variants. Many do not cause any symptoms. The vaccine prevents almost all hospital admissions and deaths.
- **Treatment:** New treatments for severe COVID-19 are available. They are mainly prescribed for high risk patients or those who are hospitalized. **Caution** - Refer most antiviral questions to the PCP during office hours. Only discuss the following if caller asks about the new anti-viral pill (paxlovid): Paxlovid is given by mouth during the first 3 days of symptoms to prevent serious complications. It has emergency approval from the FDA (December 2021) and can be used for 12 and older at high-risk for complications. Supply may be limited.
- **Prevention:** The COVID-19 vaccine and booster are the best way to prevent infections. Face masks, social (safe) distancing and extra handwashing are also proven to help prevent disease. **Caution** - only discuss the following if caller asks about monoclonal antibody therapy: Is available for those at high risk for severe disease who are 1) asymptomatic and had a recent close contact exposure OR 2) have confirmed COVID-19 mild symptoms. It is usually given IV to prevent progression and complications. People hospitalized with COVID-19 are not eligible.

COVID-19 - Exposure Risk Factors

- The following 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 is defined as being 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. This includes **living with someone infected** with COVID-19.
- **Living in or travel to an area** where there is high community spread of COVID-19 also carries some risk.
- **International travel:** The CDC (<https://www.cdc.gov/coronavirus>) has the most up-to-date list of where COVID-19 outbreaks are highest.
- **Not being fully vaccinated and boosted**
- **Masks:** Even if both people are wearing face masks, definitions of Close Contact do not change. (CDC)

Mask Wearing in Public Indoor Settings Protects Against the Odds of Getting COVID-19

- N95 or KN95 Mask: 83%
- Surgical Mask: 66%
- Cloth Mask: 56%
- No Mask: 0%
- Source: Andrejko K; MMWR Morb Mortal Wkly Rep; 2022

Child Abuse During the COVID-19 Pandemic

- The pandemic has increased the incidence of abuse and domestic violence due to social isolation and financial burdens.
- Also, young children often become irritable and demanding when confined to the home.
- Triagers need to be alert for calls about bruises or other injuries that are suspicious, unexplained or occur in the first year of life.
- Offer help to families in crisis before they reach the breaking point. Be alert to increased domestic violence. Know where to refer at-risk families.

- See the Psychosocial Problems, Child Abuse or Domestic Violence guidelines for details.

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.
- 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 Disease 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 months or years.
- **Protection Duration after an Infection.** Research about how long protection against COVID-19 lasts is ongoing. Protection has been proven to last for at least 90 days (3 months) after infection. The CDC recommends using 90 days post exposure as a protected period.
- For now, it remains important for people who have recovered from COVID-19 infections to be careful. Take normal precautions such as wearing a mask and social distancing.
- **Recovery and Re-infections.** Re-infections after full recovery do occur. The arrival of COVID-19 variant (mutant) viruses has increased the rate of re-infections for some of the variants.
- **Need for Vaccine.** People who have recovered from COVID-19 should still get a COVID-19 vaccine and booster shot. Reason: Vaccination provides greater protection than the natural immunity from a COVID-19 infection.
- **Break-through Infections.** Breakthrough cases are COVID-19 infections that bypass vaccine protection. They are more common with new variants. Many do not cause any symptoms. The vaccine prevents almost all hospital admissions and deaths.
- **Booster Vaccines:** Booster vaccines are recommended 5 or more months after the Pfizer or Moderna vaccines and 2 or more months after the Johnson and Johnson vaccine. These booster shots reduce the rate of COVID-19 break-through infections.

Internet Resources

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

Expert Reviewers

- Jessica Cataldi, MD, Pediatric Infectious Diseases and Epidemiology, Children's Hospital Colorado, Aurora, Colorado
- Samuel Dominguez, MD, Pediatric Infectious Diseases and Epidemiology, Children's Hospital Colorado, Aurora, Colorado
- Lisa M. Koonin DrPH, MN, MPH; Founder, Health Preparedness Partners; Pandemic preparedness specialist.
- The author is extremely grateful for these critical reviews.

REFERENCES

1. Andrejko KL, Pry JM, Myers JF, et al. Effectiveness of Face Mask or Respirator Use in Indoor Public Settings for Prevention of SARS-CoV-2 Infection - California, February-December 2021. *MMWR Morb Mortal Wkly Rep.* 2022 Feb 11;71(6):212-216.
2. Bautista-Rodriguez C, Sanchez-de-Toledo J, Clark BC, et al. Multisystem Inflammatory Syndrome in children: An international survey. *Pediatrics* 2021 Feb;147(2):e2020024554.
3. Castagnoli R, Votto M, Licari A, et al. Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection in Children and Adolescents: A Systematic Review. *JAMA Pediatr.* 2020 Sep 1;174(9):882-889.
4. CDC COVID-19 Response Team. Coronavirus Disease 2019 in Children - United States, February 12 - April 2, 2020. *MMWR Morbidity and Mortality Weekly Report.* ePub: 6 April 2020.
5. Chung E, Chow EJ, Wilcox NC, et al. Comparison of Symptoms and RNA Levels in Children and Adults With SARS-CoV-2 Infection in the Community Setting. *JAMA Pediatr.* 2021 Jun 11.
6. De Rose DU, Piersigilli F, Ronchetti MP, et al. Novel coronavirus (COVID-19) in newborns and infants. *Ital J Pediatr.* 2020 Apr 29;46(1):56.
7. DeLaroche AM, Rodean J, Aronson PL, et al. Pediatric Emergency Department visits at US Children's Hospitals during the COVID-19 pandemic. *Pediatrics.* 2021 Apr;147(4):e2020039628.
8. Dionne A, Sperotto F, Chamberlain S, et al. Association of Myocarditis With BNT162b2 Messenger RNA COVID-19 Vaccine in a Case Series of Children. *JAMA Cardiol.* 2021 Aug 10.
9. Dufort EM, Koumans EH, Chow EJ, et al. Multisystem Inflammatory Syndrome in children in New York state. *N Engl J Med.* [published online ahead of print, 2020 Jun 29]
10. Farooqi KM, Chan A, Weller RJ, et al. Longitudinal Outcomes for Multisystem Inflammatory Syndrome in Children. *Pediatrics.* 2021 Aug;148(2):e2021051155.
11. Feldstein LR, Rose EB, Horwitz SM, et al. Multisystem Inflammatory Syndrome in U.S. children and adolescents. *N Engl J Med.* [published online ahead of print, 2020 Jun 29].
12. Fernandes DM, Oliveira CR, Guerguis S, et al. Severe Acute Respiratory Syndrome Coronavirus 2 Clinical Syndromes and Predictors of Disease Severity in Hospitalized Children and Youth. *J Pediatr.* 2021 Mar;230:23-31.e10.
13. Fouda GGA, Kwiek JJ, Yotebieng M. Safety of breastfeeding by mothers with COVID-19: New evidence from Israel. *Pediatrics.* 2021 Apr 13;e2020049772.
14. Harrison E, Garbutt J, Sterkel R, et al. Collaborating to advocate in primary care for children during COVID-19. *Pediatrics.* 2021 Oct;148(4):e2021052106.
15. Hatoun J, Correa ET, Donahue SMA, et al. Social distancing for COVID-19 and diagnoses of other infectious diseases in children. *Pediatrics.* 2020 Oct;146(4):e2020006460.
16. Humphreys KL, Myint MT, Zeanah CH. Increased risk for family violence during the COVID-19 pandemic. *Pediatrics.* 2020 Jul;146(1):e20200982.
17. Jain SS, Steele JM, Fonseca B, et al. COVID-19 Vaccination - Associated Myocarditis in Adolescents. *Pediatrics,* Nov 2021, 148 (5) e2021053427.
18. Kainth MK, Goenka PK, Williamson KA, et al. Early experience of COVID-19 in a US children's hospital. *Pediatrics.* 2020 Oct;146(4):e2020003186.

19. King JA, Whitten TA, Bakal JA, et al. Symptoms associated with a positive result for a swab for SARS-CoV-2 infection among children in Alberta. *CMAJ*. 2021 Jan 4;193(1):E1-E9.
20. Laws RL, Chancey RJ, Rabold EM, et al. Symptoms and transmission of SARS-CoV-2 among children - Utah and Wisconsin, March-May 2020. *Pediatrics*. 2021 Jan;147(1):e2020027268.
21. Lu X, Zhang L, Hui, D, et al. SARS-CoV-2 Infection in children. *N Engl J Med*. 2020 Apr 23;382(17):1663-1665.
22. Ludvigsson JF. Systematic review of COVID-19 in children shows milder cases and a better prognosis than adults. *Acta paediatrica*. March 2020. doi:10.1111/apa.15270.
23. Marshall M, Ferguson ID, Lewis P, et al. Symptomatic acute myocarditis in seven adolescents following Pfizer-BioNTech COVID-19 vaccination. *Pediatrics*. Published online June 4, 2021; e2021052478.
24. McCormick DW, Richardson LC, Young PR, et al. Deaths in Children and Adolescents Associated With COVID-19 and MIS-C in the United States. *Pediatrics*, Nov 2021, 148 (5) e2021052273.
25. Mithal LB, Machut KZ, Muller WJ, et al. SARS-CoV-2 infection in infants less than 90 days old. *J Pediatr* 2020 Sep;224:150-152.
26. Muchmore B, Muchmore P, Lee CW, et al. Tracking potential COVID-19 outbreaks with influenzalike symptoms urgent care visits. *Pediatrics*. 2020 Oct;146(4):e20201798.
27. Ouldali N, Yang DD, Madhi F, et al. Factors associated with severe SARS-CoV-2 infection. *Pediatrics* March 2021,147 (3) e2020023432.
28. Paret M, Lalani K, Hedari C, et al. SARS-CoV-2 among infants <90 days of age admitted for serious bacterial infection evaluation. *Pediatrics*. 2021 Oct;148(4):e2020044685.
29. Romero Ramírez DS, Lara Pérez MM, Carretero Pérez M, et al. SARS-CoV-2 Antibodies in Breast Milk After Vaccination. *Pediatrics*, Nov 2021, 148 (5) e2021052286.
30. Ruiyun Li, Sen Pei, Bin Chen, et al. Substantial undocumented infection facilitates the rapid dissemination of novel coronavirus (SARS-CoV2). *Science* 10.1126/science.abb3221 (2020)
31. Shekerdemian LS, Mahmood NR, Wolfe KK, et al. Characteristics and outcomes of children With Coronavirus Disease 2019 (COVID-19) infection admitted to US and Canadian pediatric intensive care units. *JAMA Pediatr*.2020 Sep 1;174(9):868-873.
32. Shlomai NO, Kasirer Y, Strauss T, et al. Neonatal SARS-CoV-2 infections in breastfeeding mothers. *Pediatrics*. 2021 May;147(5):e2020010918.
33. Song W, Li J, Zou N, et al. Clinical features of pediatric patients with coronavirus disease (COVID-19). *J Clin Virol*. 2020 Apr 24;127:104377.
34. Su L, Ma X, Yu H, et al. The different clinical characteristics of corona virus disease cases between children and their families in China - the character of children with COVID-19. *Emerging Microbes and Infection* 2020; 9(1): 707-13.
35. Szilagyi PG, Shah MD, Delgado JR, et al. Parents' Intentions and Perceptions About COVID-19 Vaccination for Their Children: Results From a National Survey. *Pediatrics*. 2021 Oct;148(4):e2021052335.
36. Wong CA, Ming D, Maslow G, et al. Mitigating the impacts of the COVID-19 pandemic response on at-risk children. *Pediatrics*. 2020 Jul;146(1):e20200973.

37. Zambrano LD, Newhams MD, Olson SM, et al. Effectiveness of BNT162b2 (Pfizer-BioNTech) mRNA Vaccination Against Multisystem Inflammatory Syndrome in Children Among Persons Aged 12-18 Years - United States. N Engl J Med 2021;385:2132-2139.
38. Zimmerman KO, Brookhart MA, Kalu IC, et al. Community SARS-CoV-2 Surge and Within-School Transmission. Pediatrics. 2021 Oct;148(4):e2021052686.

SEARCH WORDS

BREATHING
BREATHING DIFFICULTY
CORONAVIRUS
CORONAVIRUS EXPOSURE
COUGH
COVID
COVID-19
DIFFICULT BREATHING
DIFFICULTY BREATHING
EXPOSURE
EXPOSURE QUESTION
EXPOSURE QUESTIONS
FOREIGN TRAVEL
INFECTION EXPOSURE
INTERNATIONAL TRAVEL
NCOV
NOVEL CORONAVIRUS
SARS-COV-2
SOB
TRAVEL
TROUBLE BREATHING

AUTHOR AND COPYRIGHT

Author: Barton D. Schmitt, MD, FAAP
Copyright: 1994-2022, Schmitt Pediatric Guidelines LLC All rights reserved.
Company: Schmitt-Thompson Clinical Content
Content Set: After Hours Telehealth Triage Guidelines | Pediatric
Version Year: 2022
Last Revised: 4/1/2022
Last Reviewed: 4/1/2022