

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 associated symptoms (cough, fever, shortness of breath or others).
- For symptomatic suspected COVID-19 patients, use the COVID-19 Diagnosed or Suspected protocol.
- For patients with a positive COVID-19 rapid or PCR lab test, use the COVID-19 Diagnosed or Suspected protocol.
- For COVID-19 vaccine reactions or questions, use the COVID-19 Vaccine Reactions or Questions protocol.
- **Updated: September 1, 2022** (version 18)

CONTACT (EXPOSURE) to COVID-19 Definition: Higher Risk

- **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.** Close contact includes kissing, hugging or sharing eating and drinking utensils. It also includes close conversations. Direct contact with secretions of a person with COVID-19 is also close contact. Includes being in the same childcare room, classroom or carpool. These exposures are usually lower risk than living with an infected person.
- **Masks:** Even if both people are wearing face masks, the above criteria for Close Contact do not change. (CDC)

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). Outdoor contacts are much safer than indoor contacts.
- 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.

TRIAGE ASSESSMENT QUESTIONS

See More Appropriate Protocol

Positive COVID-19 test

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

[1] Symptoms of COVID-19 (cough, SOB or others) AND [2] diagnosed by HCP has having COVID-19

Go to Protocol: 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 Protocol: Influenza (Flu) - Seasonal (Pediatric)

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

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

[1] Symptoms of COVID-19 (cough, SOB or others) AND [2] within 10 days of close contact with confirmed or suspected COVID-19 patient

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

[1] Symptoms of COVID-19 AND [2] lives in area or has recently traveled to an area with high community spread

Go to Protocol: 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 Protocol: 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 Protocol: 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 Protocol: Colds (Pediatric)

COVID-19 vaccine reactions OR questions about the vaccine

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

Discuss With PCP and Callback by Nurse Today

Caller has question about quarantine or testing and triager not able to answer

See in Office Within 3 Days

Triager thinks child needs to be seen for non-urgent problem

Caller wants child seen for non-urgent problem

Home Care

[1] COVID-19 Close Contact Exposure within the last 10 days AND [2] NO Symptoms

Reason: discuss home quarantine questions

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

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

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

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

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

Reason: No exposure and needs reassurance

COVID-19 testing, questions about

COVID-19 prevention, questions about

COVID-19 Disease, questions about

Note: Refer most callers to CDC website: www.cdc.gov/coronavirus

HOME CARE ADVICE

COVID-19 Close Contact Exposed Person with No Symptoms - Home Quarantine Questions

- 1. Home Quarantine is NOT needed for Exposed People within last 10 days:**
 - Although your child may have been or was exposed to COVID-19, your child does not currently have any symptoms of this infection. COVID-19 infections start within 10 days following the last day of exposure.
 - Since it's been less than 10 days, your child is still at risk for getting sick with it.
 - **Home Quarantine is NOT needed.** Your child will need to wear a mask in public for 10 days. For children under 2 years and those uncooperative with wearing a mask: Home quarantine will be needed for a full 10 days. If you have further questions about when it is safe to return to school or work, call us back.
 - **Monitor for Symptoms until 10 Days from 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 immediately (within 24 hours). If the test is negative, the test should be repeated about 5 days after the last day of exposure. Test sooner if symptoms develop. (CDC recommendations). If you can't find a rapid test or if your child is under 2, call us during office hours to schedule a test.
 - Follow local, state or provincial Department of Health directives if these are different. Students should follow their school's policy.
- 2. Household Exposure and Home 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, no quarantine is required.
 - They do need to wear a mask if they leave the home. Length: for 10 days after their LAST date of exposure to the contagious person.
- 3. Home Quarantine - 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 positive 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 us back during office hours.
4. **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.
 5. **Watch for Other COVID-19 Symptoms:**
 - COVID-19 coronavirus most often causes a respiratory illness. The most common symptoms are cough, fever and shortness of breath.
 - Other common symptoms are chills, shivering (shaking), runny nose, sore throat, muscle pain, headache, fatigue and loss of smell or taste.
 - The CDC also includes the following less common symptoms: nausea, vomiting and diarrhea.
 - 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.
 6. **Day 10 or Later After Close Contact and No Symptoms:**
 - 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 full days after an exposure.
 - Your child should be safe from getting COVID-19 from this exposure.
 - If your child has been on home quarantine (isolation), it can be stopped.
 7. **COVID-19 Vaccine - Reasons to Postpone Questions:**
 - Any recommended delay in vaccination is to avoid bringing contagious people into a vaccination site.
 - **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, they should get a test before receiving the vaccine. If negative and mild illness (such as isolated runny nose or mild diarrhea), they 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 for a full 10 days after the symptoms started or after positive test.
 - **Multisystem Inflammatory Syndrome (MIS-C):** Vaccine must be postponed at least 90 days since MIS-C was diagnosed.
 8. **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

COVID-19 Testing Questions

1. **COVID-19 Diagnostic Testing:**
 - Note to Triage: Follow the policy for testing recommended by your practice.
 - 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.
 - 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 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).
2. **COVID-19 Testing Facts:**
 - Here are some facts that may answer some of the caller's questions.
 - **Diagnostic Tests:** These are performed on nasal or mouth secretions and tell us if your child has a COVID-19 infection now.
 - **Tests for COVID-19: Recommended Timing (CDC):**
 - **Symptomatic patients** - get a test immediately (or at least within 3 days of onset of symptoms.)
 - **Asymptomatic patients with a COVID-19 close contact** - Get a test now and 5 days after their LAST date of exposure to the contagious person. Test sooner if symptoms develop.
3. **Negative COVID-19 Tests:**
 - Negative rapid test results are usually accurate but can sometimes be wrong.
 - An error is more likely with tests performed at home. Rapid tests performed at a test site are usually more accurate.
 - Repeat testing with a PCR test may be indicated after a negative rapid test. In some cases, particularly among vaccinated people, rapid tests may be negative very early after symptoms start. If symptoms continue, repeat testing may be needed. Repeat a negative home rapid test in 48 hours.
 - Note to Triage: For callers who are worried about a false negative test, especially if they had a known exposure, discuss with the PCP.
 - If a person is exposed again or develops symptoms suggestive of COVID-19, then repeat viral testing should be performed.
4. **Positive COVID-19 Tests:**
 - Positive rapid tests are reliable.
 - **Repeating Positive Tests:** After a positive rapid or PCR test, repeat tests are not recommended. 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 even longer. 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 prior positive test result to leave isolation any sooner. It will not allow earlier return to child care or school.
5. **Antibody Tests - Rarely Needed:**
 - **Antibody Tests:** These tests are different from diagnostic testing. These are performed on blood. They can sometimes tell us if there are antibodies from a previous infection. If you have questions, your doctor can discuss this with you 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).

6. **Call Back If:**

- You have other questions

COVID-19 Prevention Questions

1. **COVID-19 - How to Protect Yourself and Family from Catching It - The Basics:**

- Get the COVID-19 vaccine and booster(s) when eligible. It is your family's best protection against serious infection from COVID-19.
- **Vaccine Site.** Find a nearby vaccine site at [vaccines.gov](https://www.vaccines.gov). If your doctor's office doesn't supply the vaccine, also look on your state's public health department website.
- Avoid close contact with people outside your family unit. Avoid closed spaces (indoors) when possible and all crowds (even outdoors).
- Wear a mask if community spread is high where you live. Also, observe social (safe) distancing.
- Everyone 6 months and older should get an annual flu shot. Reason: Getting COVID-19 while you also have or are recovering from the flu may increase the chances of getting severe symptoms.
- **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, urgent care sites and your doctor's office are safe places. They are well equipped to protect you against the virus. For non-urgent conditions, talk to your doctor's office first.

2. **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. Also wear a mask when entering any public building or outdoor crowded area.

3. **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 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 your 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.

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

- Face masks are helpful 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.
- Wear a mask if you must be around someone who has symptoms of COVID-19 or has tested

positive for it.

People Who Are Well (Not Sick With COVID-19) Should Wear Masks in Areas of High Community Spread When:

- 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.

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. Some examples are an outdoor walk or run.

5. Keep Your Mind and 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. Go outdoors if you can. Caution: Avoid physical exhaustion.
- Think positive thoughts.
- Stay well hydrated.
- Eat healthy meals.
- Avoid the over-use of anti-fever medicines. Fever fights infections and ramps up your immune system.

6. Call Back If:

- You have other questions

COVID-19 Disease FAQs

1. Trusted Sources for Accurate Information - CDC and AAP:

- To meet the extreme demand for COVID-19 information, when possible, find your answers online. Here are the most reliable websites:
- CDC website: <https://www.cdc.gov/coronavirus>.
- American Academy of Pediatrics parent website: www.healthychildren.org

2. COVID-19 Cause:

- It is caused by a new coronavirus: SARS-CoV-2 (COVID-19).
- Viruses change through mutation. New variants of the COVID-19 virus are expected to appear and spread.
- In the 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.

3. 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), runny nose, sore throat, muscle pain, headache, fatigue, and loss of smell or taste.
- The CDC also includes the following less common symptoms: nausea, vomiting and diarrhea.
- Some people may have minimal symptoms or even have no symptoms (asymptomatic).

4. **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 (based on a positive lab test) 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. 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 with a booster shot
 - **Masks:** Even if both people are wearing face masks, definitions of Close Contact do not change. (CDC)
5. **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, sings or shouts. 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 mainly occur in a closed room with poor ventilation. Aerosols are an uncommon cause of COVID-19 transmission (CDC and WHO).
6. **COVID-19 - Travel:**
 - Travel is much safer for people who are vaccinated and boosted.
 - The Centers for Disease Control and Prevention (CDC) maintains a website with the latest recommendations regarding travel and your health.
 - **International travel:** The CDC recommends all travelers get a COVID-19 lab test on day 5 after arriving home. You should continue to wear a mask for 10 days and watch for COVID-19 symptoms.
 - Currently, the CDC recommends against travel to any geographic areas with widespread and ongoing spread of COVID-19. See current list at <https://wwwnc.cdc.gov/travel>
7. **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 up-to-date with vaccinations and get all recommended boosters when eligible.

- **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.

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

- **Vaccines:** Safe and effective vaccines are available. At this time, vaccines have been tested and are FDA approved for 6 months and older. The COVID-19 vaccine will reduce the chance of your child getting any COVID-19 complications. The vaccine prevents almost all hospital admissions, ICU care and deaths.

- **Booster Vaccines:** Booster vaccines are recommended for those 5 years and older after completing their primary vaccine series. Get your booster(s) when eligible. See the CDC website if you aren't sure when you need a booster.

- **"Breakthrough Cases":** These are COVID-19 infections that happen despite vaccine protection. They are more common with new variants. Many do not cause significant 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** - 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(s) are the best way to prevent infections. Face masks, social (safe) distancing and extra handwashing are also proven to help prevent disease.

9. **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.

10. **Call Back If:**

- You have other questions

FIRST AID

N/A

BACKGROUND INFORMATION

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 are intended for use with this protocol:

- COVID-19 - Exposure
- COVID-19 Prevention
- COVID-19 Vaccines - Answers to Common Questions
- Fever - How to Take the Temperature

COVID-19 Main Symptoms (CDC)

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

- 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)
- Fatigue
- The CDC also includes the following less common symptoms: 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.
- **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.

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.

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.

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 or Child Abuse protocols 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 during which re-infection is less likely. As new COVID-19 variants emerge, immunity gained from a prior infection may not protect as well against new variants.
- **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. 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 if community spread is high.
- **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 immunity from a COVID-19 infection.
- **Break-through Infections.** Breakthrough cases are COVID-19 infections that happen despite vaccine protection. They are more common with new variants. Many do not cause significant symptoms. The vaccine prevents almost all hospital admissions and deaths.
- **Booster Vaccines:** Booster vaccines are recommended for those 5 years and older after completing their primary vaccine series. Get your booster(s) when eligible. See the CDC website or ask your doctor if you aren't sure when you need a booster.

Office Call Surges: How to Better Manage

Getting behind in responding to calls is always a problem during infection outbreaks or panic created by the media. The COVID-19 pandemic caused major surges in call volumes. Here are some suggestions for off-loading calls:

- Refer callers to the American Academy of Pediatrics parent website: www.healthychildren.org while they are waiting for a callback. The answer to their questions will likely be found there.
- The website contains numerous articles written for parents on every COVID-19 issue. Examples are masks, getting outside, breastfeeding, dealing with anxiety, etc.
- Every topic is available in both English and Spanish.
- Your favorite COVID-19 handouts from the AAP or CDC can be emailed or texted to parents directly or using your EHR portal.
- The AAP website also features a Pediatric Symptom Checker. It helps a parent self-triage. It also provides self-care advice if they don't need to be seen. In addition to 160 other symptom topics, it contains 2 COVID-19 self-triage guides.
- Changing Parent Behavior: During a major pandemic, encourage parents to use a pediatric symptom checker before calling. Result: Parents would only call about patients who might need to be seen or need testing.

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>

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- The author is extremely grateful for these critical reviews.

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