
Coronavirus (COVID-19) - Diagnosed or Suspected

Office Hours Telephone Triage Protocols | Pediatric | 2020

DEFINITION

Child has symptoms of COVID-19 (cough, fever, SOB or others) AND:

- Diagnosis was confirmed by positive lab test OR
- Clinical diagnosis (suspected diagnosis) was made by HCP (doctor, NP or PA) OR
- Parent or patient suspects COVID-19 based on symptoms consistent with COVID-19 AND living in area of community spread.
- COVID-19 testing may or may not be available to confirm which suspected cases have the diagnosis.
- **Updated:** July 24, 2020

COVID-19 Main Symptoms (CDC)

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

- Cough
- Shortness of breath (difficulty breathing)
- Fever or chills
- Muscle pains or body aches
- Headache
- Sore throat
- Loss of smell or taste
- The CDC also includes the following less common symptoms: runny nose, fatigue (tiredness), nausea, vomiting and diarrhea. In isolation, these less common symptoms are not helpful for diagnosis.

TRIAGE ASSESSMENT QUESTIONS

Call EMS 911 Now

- Severe difficulty breathing (struggling for each breath, unable to speak or cry, making grunting noises with each breath, severe retractions) (Triage tip: Listen to the child's breathing.)
- Slow, shallow, weak breathing
R/O: respiratory depression with impending apnea
- Bluish (or gray) lips or face now
R/O: cyanosis and need for oxygen
- Difficult to awaken or not alert when awake
R/O: encephalitis
- Very weak (doesn't move or make eye contact)
R/O: sepsis or shock

- Sounds like a life-threatening emergency to the triager

See More Appropriate Protocol

- Stridor (harsh, raspy sound heard with breathing in) confirmed by triager
Go to Protocol : Croup (Pediatric)
- [1] COVID-19 exposure AND [2] NO symptoms
Go to Protocol: Coronavirus (COVID-19) - Exposure (Pediatric)

Go to ED Now

- Difficulty breathing confirmed by triager BUT not severe (includes tight breathing and hard breathing)
R/O: pneumonia
- Ribs are pulling in with each breath (retractions)
R/O: pneumonia
- Age < 12 weeks with fever 100.4 F (38.0 C) or higher rectally
R/O: sepsis
- SEVERE chest pain (excruciating)
R/O: pneumonia, pleurisy, pulmonary emboli
- Child sounds very sick or weak to the triager
Reason: severe acute illness or serious complication suspected

Discuss with PCP and Callback by Nurse within 1 Hour

- Wheezing confirmed by triager
- Rapid breathing (Breaths/min > 60 if < 2 mo; > 50 if 2-12 mo; > 40 if 1-5 years; > 30 if 6-11 years; > 20 if > 12 years)
R/O: respiratory distress. (Caution: Do not attribute abnormal RR to fever)
- MODERATE chest pain that keeps from taking a deep breath
R/O: pneumonia, pleurisy
- Lips or face have turned bluish BUT only during coughing fits
R/O: need for oxygen
- Fever > 105 F (40.6 C) by any route OR axillary > 104 F (40 C)
R/O: serious bacterial infection
- Sore throat AND complication suspected (refuses to drink, can't swallow fluids, new-onset drooling, can't move neck normally or other serious symptom)
- Muscle or body pains AND complication suspected (can't stand, can't walk, can barely walk, can't move arm or hand normally or other serious symptom)
- Headache AND complication suspected (stiff neck, incapacitated by pain, worst headache ever, confused, weakness or other serious symptom)

- Multisystem Inflammatory Syndrome (MIS-C) suspected (fever, widespread red rash, red eyes, red lips, red palms/soles, swollen hands/feet, abdominal pain, vomiting, diarrhea)
- Dehydration suspected for age < 1 year (signs: no urine > 8 hours AND very dry mouth, no tears, ill-appearing, etc.)
- Dehydration suspected for age > 1 year (signs: no urine > 12 hours AND very dry mouth, no tears, ill-appearing, etc.)
- Age < 3 months with lots of coughing
R/O: pneumonia
- Crying that cannot be comforted lasts > 2 hours
R/O: severe otitis
- Age less than 12 weeks and suspected COVID-19 with mild symptoms BUT no fever
Reason: PCP will decide on needed follow-up care
- HIGH-RISK patient (e.g., immuno-compromised, lung disease, on oxygen, heart disease, bedridden, etc)

Discuss with PCP and Callback by Nurse Today

- [1] COVID-19 infection suspected by caller or triager AND [2] mild symptoms (cough, fever and others) AND [3] no complications or SOB
Reason: PCP will decide if suspected diagnosis is correct and need for testing. Triager will provide advice for treating symptoms.
- Continuous coughing keeps from playing or sleeping AND no improvement using cough treatment per protocol
- Fever returns after gone for over 24 hours AND symptoms worse or not improved
R/O: otitis media or sinusitis
- Fever present > 3 days (72 hours)
R/O: bacterial superinfection - usually otitis media
- Earache or ear discharge also present
R/O: otitis media
- Age > 5 years with sinus pain around cheekbone or eye (not just congestion) and fever
R/O: sinusitis

Home Care

- [1] COVID-19 infection diagnosed or suspected by HCP AND [2] mild symptoms (cough, fever, chills, sore throat, muscle pains, headache, loss of smell) AND [3] needs symptom care advice
- COVID-19 Home Isolation, questions about
- COVID-19 Prevention, questions about
- COVID-19 Testing, questions about

HOME CARE ADVICE

COVID-19 Infection with Mild Symptoms - Treatment

1. **Reassurance and Education - COVID-19 with Mild Symptoms:**
 - Your child has been diagnosed as probably having COVID-19 OR
 - You suspect COVID-19 because it is widespread in your community and your child has developed symptoms that match (cough and/or fever).
 - Your child may or may not have received a lab test for COVID-19. It doesn't matter. Most infections are mild, especially in children.
 - The symptoms are mild. They stay that way for over 80% of people.
 - Here's some care advice to help your child and to help prevent others from getting sick.
2. **Treatment of Symptoms:**
 - The treatment is the same whether you have COVID-19, influenza or some other respiratory virus.
 - The only difference for COVID-19 is you need to stay on home isolation until you recover. Reason: You want to protect other people from getting it.
 - Treat the symptoms that are bothering you the most.
 - **Note to Triager:** Care Advice is available for Cough, Fever, Chills and Shivering, Sore throat, Muscle pains, Headache and Loss of smell. Only discuss treatment for the caller's main symptoms.
 - There is no anti-viral medication for treating COVID-19 at home. New antiviral treatments have been developed for patients who need to be hospitalized.
 - Antibiotics are not helpful for viral infections.
 - You don't need to see your doctor unless you develop trouble breathing or become worse in any other way.
3. **Fever Treatment:**
 - For fever above 102 F (39 C), you may use acetaminophen or ibuprofen if the patient is uncomfortable. (See Dosage table).
 - For fevers 100-102 F (37.8 to 39 C), fever medicines are not needed. Reason: Fever turns on your body's immune system. Fever helps fight the infection.
 - Exception: if the patient also has pain, treat it.
 - Fluids: Offer cool fluids in unlimited amounts. Reason: prevent dehydration. Staying well hydrated helps the body sweat and give off heat.
 - Note to triager about ibuprofen concerns: Discuss only if caller brings up concerns about ibuprofen. Response: The CDC, WHO, AAP and other experts continue to support the use of ibuprofen (if needed) for patients with COVID-19. They found no scientific evidence to support the claim that ibuprofen made this disease worse.
4. **Chills, Shivering and Rigors - Treatment:**
 - Shivering occurs when the body needs to raise its core temperature quickly. Shivering generates body heat until the level of fever that the brain needs to fight the infection is reached.
 - Whether or not you take a fever-reducing medicine, here are some ways to stop the shivering:
 - **Blanket.** Wrap the patient in a warm blanket.
 - **Warm bath.** For severe shivering (rigors), the quickest way to get the fever level up is to take a warm bath. Once the fever peaks, the shivering or rigors will stop.
 - **Fluids.** Drink extra fluids to improve hydration and circulation.
5. **Homemade Cough Medicine:**
 - **Age:** 3 Months to 1 year:

- Give warm clear fluids (e.g., apple juice or lemonade) to thin the mucus and relax the airway. Dosage: 1-3 teaspoons (5-15 ml) four times per day.
 - Note to Triager: Option to be discussed only if caller complains that nothing else helps: Give a small amount of corn syrup. Dosage: 1/4 teaspoon (1 ml). Can give up to 4 times a day when coughing. Caution: Avoid honey until 1 year old (Reason: risk for botulism).
 - **Age 1 year and older:** Use **Honey** 1/2 to 1 tsp (2 to 5 ml) as needed as a homemade cough medicine. It can thin the secretions and loosen the cough. (If not available, can use corn syrup.) OTC cough syrups containing honey are also available. They are not more effective than plain honey and cost much more per dose.
 - **Age 6 years and older:** Use **Cough Drops** (throat drops) to decrease the tickle in the throat. If not available, can use hard candy. Avoid cough drops before 6 years. Reason: risk of choking.
 - OTC cough medicines are not recommended. (Reason: no proven benefit for children.) Honey has been shown to work better.
 - Don't use OTC cough medicines under 6 years of age. Reason: Cough is a protective reflex.
6. **Coughing Fits or Spells - Warm Mist and Fluids:**
- Breathe warm mist (such as with shower running in a closed bathroom).
 - If the air is dry, use a humidifier in the bedroom (Reason: dry air makes coughs worse).
 - Give warm clear fluids to drink. Examples are apple juice and lemonade. Don't use warm fluids before 3 months of age.
 - Amount. If 3 - 12 months of age, give 1 ounce (30 ml) each time. Limit to 4 times per day. If over 1 year of age, give as much as needed.
 - Reason: Help relax the airway and loosen up any phlegm.
 - What to Expect: The coughing fit should stop. But, your child will still have a cough.
7. **Home Isolation Is Needed:**
- Isolation means separating sick people with a contagious disease from people who are not sick. (CDC) That means stay at home if you are sick.
 - See the Home Isolation section for details.
8. **Sore Throat Pain Relief:**
- COVID-19 often causes a sore throat. Here are some tips on treating it:
 - Age over 1 year: Can sip warm fluids such as chicken broth or apple juice. Some children prefer cold foods such as popsicles or ice cream.
 - Age over 6 years: Can also suck on hard candy or lollipops. Butterscotch seems to help.
 - Age over 8 years: Can also gargle. Use warm water with a little table salt added. A liquid antacid can be added instead of salt. Use Mylanta or the store brand. No prescription is needed.
 - Pain medicine: Use if pain interferes with swallowing. Not needed for mild pain.
9. **Sore Throat - Fluids and Soft Diet:**
- Try to get your child to drink adequate fluids.
 - Goal: Keep your child well hydrated.
 - Cold drinks, milk shakes, popsicles, slushes, and sherbet are good choices.
 - Solid Foods: Offer a soft diet. Also avoid foods that need much chewing. Avoid citrus, salty, or spicy foods.
 - Note: Fluid intake is much more important than eating any solid foods.
10. **Muscle Pains - Treatment:**
- COVID-19 can normally cause muscle pains and body aches.
 - **Massage:** Gently massage any sore muscles.
 - **Stretching:** Gently stretch any sore muscles.
 - **Apply Heat:** Use a heat pack, heating pad or warm wet washcloth. Do this for 10 minutes 3 times per day.
 - **Warm bath:** For widespread muscle pains, consider a warm bath for 20 minutes 2 times a day. Gently exercise the sore muscles under water.

- **Pain medicine:** For widespread body aches, give acetaminophen every 4 hours OR ibuprofen every 6 hours as needed. (See Dosage table.) Not needed for mild aches.

11. **Headache - Treatment:**

- COVID-19 can cause a headache.
- **Pain medicine:** Give acetaminophen every 4 hours OR ibuprofen every 6 hours as needed. (See Dosage table.) Not needed for mild headaches.
- **Cold pack:** Apply a cold wet washcloth or cold pack to the forehead for 20 minutes.
- **Massage:** Stretch and massage any tight neck muscles.

12. **Loss of Smell and Taste:**

- Losing the sense of smell and taste can be an early symptom of COVID-19.
- Most of these patients have a mild course.
- These senses usually return within 1 to 2 weeks.

13. **Call Back If:**

- Shortness of breath occurs
- Difficulty breathing occurs
- Your child becomes worse

COVID-19 Home Isolation Questions

1. **Home Isolation Is Needed for those that are Sick:**

- Isolation means separating sick people with a contagious disease from people who are not sick. (CDC) That means stay at home.
- The patient needs to stay at home but does not need to be confined to a single room. Preventing spread of respiratory infections within a home is nearly impossible. The sick person should try to avoid very close contact with other family members. That includes hugging, kissing, sitting next to or sleeping in the same bed. None of this is realistic for young children.
- Other family members should also stay at home on quarantine. Living with a suspected COVID-19 patient implies close contact has occurred. Exceptions: Essential workers who have COVID-19 exposure but do not have any symptoms. Talk to your employer.
- Do Not allow any visitors. (such as friends)
- Do Not go to school or work.
- Do Not go to stores, restaurants, places of worship or other public places.
- Avoid public transportation or ride sharing.
- In addition, many families have limited options. Therefore, triagers should individualize their recommendations for isolation after discussing it with the caller.
- **Isolation Questions for PCP - Note to Triager:** 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 a caller has additional questions, involve the PCP.

2. **How to Protect Others - When You or Your Child are Sick:**

- 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.
- 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 glasses, plates or eating utensils.
- Wear a face mask when around others.
- Always wear a face mask if you have to leave your home (such as going to a medical facility). Always call first to get approval and careful directions.
- Carefully avoid any contact with the elderly and people with weak immune systems or other chronic health problems.

3. **Stopping Home Isolation - Must Meet all 3 Requirements (CDC):**

- Fever gone for at least 24 hours off fever-reducing medicines AND
- Cough and other symptoms must be improved AND
- Symptoms started more than 10 days ago.
- Asymptomatic patients who don't develop symptoms: Stay at home until 10 days have passed since the date of their positive COVID-19 test.
- If unsure it is safe for you to leave isolation, check the CDC website or call your PCP.

4. **Call Back If:**

- Shortness of breath occurs
- Difficulty breathing occurs
- Your child becomes worse

COVID-19 Prevention Questions

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

- **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.

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.
- **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. These precautions will be needed for many months. Your state public health department will decide when they are no longer needed.

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

- **Sick patients:** Must always wear a face mask if need to leave the home. Example: for medical visits. Exception: patients with trouble breathing (CDC). Consider a loose face covering such as a bandana.
- **Well people:** As community spread became high, the CDC also recommends face masks or coverings for everyone going outside the home. They are critical if entering a public building, such as a grocery store. Reason: Many people with COVID-19 have no symptoms but can spread the virus.
- **Well People Exceptions:** Face mask or covering is optional if outdoors and can avoid being within 6 feet of other people. Examples: on an outdoor walk or run.
- **Age Limits:** Face coverings also are not recommended for children under 2 years (CDC).

4. **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.

5. **Keep Your Mind Positive:**

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

6. **How to Protect Others - When You or Your Child are Sick:**

- Stay home from school or work if you are sick.
- See the Home Isolation section for details.

7. **Call Back If:**

- Your child becomes worse
- You have other questions

COVID-19 Testing Questions

1. **COVID-19 Testing - Who Needs It:**

- Note to Triager: Follow the recommendations for testing that apply to your community and your practice. The patient's PCP may need to be involved in the decision.
- The decision is a complicated one.
- The availability of testing and where to get it can be different for every community.
- National and state recommendations also continue to change.
- **Diagnostic Tests:** These are performed on nasal secretions and tell us if your child has a COVID-19 infection now. The type of diagnostic tests that are available continues to improve. The FDA has approved a rapid antigen test for COVID-19 that gives results in minutes.
- **Antibody Tests:** These tests are different. These are performed on blood and tell us if there are antibodies from a previous infection. They are not done until at least 3 weeks have passed from the start of the infection.

2. **COVID-19 Testing Facts:**

- Here are some facts that may answer some of the caller's questions.
- Tests for COVID-19 are mainly done on people who are sick (have symptoms of COVID-19). Tests are usually not done on people who have no symptoms.
- Testing is routinely performed on patients who have serious symptoms or are admitted to the hospital. It is usually not done on patients with mild symptoms who don't need to be seen.
- Testing is also needed on adults who have essential jobs and need to know if they can return to the work force.
- In some locations, testing requires a HCP's order.

3. **Call Back If:**

- Shortness of breath occurs
- Difficulty breathing occurs
- Your child becomes worse

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
 - Nurse advice lines and medical call centers are needed for sick patient calls.

2. **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.
 - The first COVID-19 patient in the United States was reported on January 21, 2020. During March, cases were identified in all states.
 - The first COVID-19 patient in Canada was reported on January 31, 2020.
 - The 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. This continues to be a rapidly changing situation and recommendations from the CDC are being updated daily.
 - See: <https://www.cdc.gov/coronavirus/2019-ncov>

3. **COVID-19 Symptoms:**
 - COVID-19 coronavirus causes a respiratory illness. The most common symptoms are cough, fever and shortness of breath.
 - Other common symptoms are chills, shivering (shaking), sore throat, muscle pain, headache, loss of smell and taste.
 - The CDC also includes the following less common symptoms: runny nose, fatigue (tiredness), nausea, vomiting and diarrhea.

4. **Multisystem Inflammatory Syndrome (MIS-C):**
 - MIS-C is a very, very rare complication of COVID-19. In general, COVID-19 continues to be a mild disease in children.
 - The most common symptoms are fever, a red rash, abdominal pain and diarrhea or vomiting. Half of the patients develop trouble breathing. Some children become confused or overly sleepy.
 - 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: MIS-C is treatable with medications, including IV immune serum globulin.
 - If a child gets this rare complication, a parent will know that their child needs to see a doctor. Patients with MIS-C need to be admitted to the hospital.
 - At this time, it cannot be prevented nor predicted.

5. **COVID-19 - CDC Definition of Exposure (Close Contact):**
 - You are at risk of getting COVID-19 if the following has occurred:
 - Close contact with a person who tested positive for COVID-19 AND contact occurred while they were ill.
 - Living in or travel from a city, country or other geographic area where there is documented community spread of COVID-19. This carries a lower risk compared to close contact if one observes social distancing.
 - Community spread has occurred in most of the US, especially in cities.
 - The CDC (<https://www.cdc.gov/coronavirus/2019-ncov/travelers>) has the most up-to-date list of where COVID-19 outbreaks are occurring.

6. **COVID-19 - How it is Spread:**

- COVID-19 is spread from person to person.
 - The virus spreads when respiratory droplets produced when a person coughs or sneezes. The infected droplets can then be inhaled by a nearby person or land on the surface of their eyes.
 - Most infected people also have respiratory secretions on their hands. These secretions get transferred to healthy people on doorknobs, faucet handles etc. The virus then gets transferred to healthy people when they touch their face or rub their eyes.
 - These methods are how most respiratory viruses spread.
7. **COVID-19 - Travel:**
 - Avoid all non-essential travel.
 - If you must travel, go to CDC website for updates on travel advisories: <https://www.cdc.gov/coronavirus/2019-ncov/travelers>.
 8. **Breastfeeding and COVID-19:**
 - Breastfeeding experts recommend you continue to breastfeed even if you are sick with COVID-19.
 - Wash your hands before feeding your baby.
 - The CDC recommends wearing a face mask or covering. Be careful to avoid coughing on your baby.
 - Breastmilk gives beneficial antibodies your body is making against this illness to your baby. This should provide some protection against this illness for your baby, like it does for influenza and most other viral illnesses.
 - The virus is probably not passed through breastmilk. The studies are small, so this is not yet known for sure. (CDC)
 9. **Other COVID-19 Facts:**
 - **Incubation Period:** average 5 days (range 2 to 14 days) after coming in contact with the secretions of a person who has COVID-19.
 - **No Symptoms but Infected:** Over 20% of infected patients have no symptoms.
 - **Mild Infections:** 80% of those with symptoms have a mild illness, much like normal flu or a bad cold. The symptoms usually last 2 weeks.
 - **Severe Infections:** 20% of those with symptoms develop trouble breathing from viral pneumonia. Many of these need to be admitted to the hospital. People with complications generally recover in 3 to 6 weeks.
 - **Deaths:** Children generally have a mild illness and recover quickly. Pediatric deaths are very rare. Older adults, especially those with chronic lung disease, heart disease, diabetes or weak immune systems, have the highest death rates. The overall death rate is around 1%.
 - **Vaccine:** There currently is no vaccine to prevent COVID-19. Research is on the fast track in many labs. New vaccines usually take at least a year to develop.
 - **Treatment:** New treatments for severe COVID-19 are becoming available. They are only used on hospitalized patients and are given in a vein (IV).
 - **Prevention:** Currently, there is no medicine to prevent COVID-19. Social (safe) distancing and face masks are proven to work at helping to prevent disease.
 10. **Call Back If:**
 - You have other questions

FIRST AID

N/A

BACKGROUND INFORMATION

Referrals to the ED or other Medical Facility : How to Refer Safely

ED Referrals - Triager Should First Notify ED

- Tell the ED you are sending a patient with suspected diagnosis of COVID-19 who is getting worse and inform them of patient's symptoms.
- Obtain and document the patient / caller's mobile phone number. Either keep the patient on hold or call the patient back with instructions. Reason: So ED can make plans to prevent COVID-19 spread to others in the hospital.
- Also determine the best means of transportation.

ED Referrals - Triager Instructions for the Caller

- Tell the caller, "You will need to go to a nearby ED. Do not leave until I've called and talked with the ED. The ED may have special instructions on how best to get you there. I will call you back (or place you on hold)."
- Cover the patient's mouth and nose with a disposable tissue (e.g., Kleenex or paper towel) or a washcloth.
- Have patient wear a disposable face mask if you have one. If you don't, ask for a mask on arrival to the health care setting.
- Tell the first hospital worker you meet that your child probably has (or does have) COVID - 19.

EMS (911) Referrals - Triager Instructions for the Caller

- Tell the ambulance dispatcher and medics right away about COVID-19 Diagnosis. Reason: to prevent COVID-19 spread to first responders.
- They will also call ahead to the ED to let them know so ED can make plans to prevent COVID-19 spread to others in the hospital.

COVID-19 Main Symptoms (CDC)

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

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

Multisystem Inflammatory Syndrome (MIS-C)

- MIS-C is a rare and sometimes severe complication associated with COVID-19. The most common

symptoms are fever, a red rash, abdominal pain and diarrhea or vomiting. Half of the patients develop trouble breathing and shortness of breath. Some children become confused or overly sleepy. All patients with this syndrome should be seen by a doctor. Many need to be admitted to the hospital. Some cases are similar to Kawasaki's Disease (KD), but MIS-C is a more serious condition.

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

Child Abuse During the COVID-19 Pandemic

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

"Discuss with PCP and Callback by Nurse" Dispositions: Why these are used for Symptomatic COVID-19 Calls

- During this COVID-19 pandemic, these dispositions are used for most sick child calls. Reason: Most PCPs are attempting to keep contagious patients with COVID-19 out of their office.
- Patients who normally are triaged to be seen in the office are now provided the option of a telemedicine visit (video visit). A telemedicine visit is appropriate if it can provide a definitive diagnosis and care without being seen in-person. Note: Telemedicine visits can usually be billed at in-person visit rates.
- How to implement: The triage nurse continues to manage the Home Care disposition calls and the "for information only" calls. These are more than half of incoming calls.
- If available, the triager schedules all other nonemergent calls with the PCP for a video visit. If unsure, triager discusses the patient with the PCP.

Animals and COVID-19

- The main way COVID-19 spreads is from person to person. There is low risk of getting COVID-19 from a pet or other animal.
- It is possible for animals to catch COVID-19 from people. A few pets have tested positive for COVID-19 (including cats and dogs).
- The CDC recommends treating pets like other family members when trying to avoid spreading COVID-19. Do not let pets have close contact with other people or animals outside your household. A sick person should self-isolate and avoid contact with both people and pets.
- Call your vet if your pet gets sick or you have other questions.
- The CDC has more information on COVID-19 and animals at:
<https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/animals.html>

COVID-19 and Repeat Infections

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

Ibuprofen and other NSAID Use for COVID-19

- Many callers have expressed concerns that ibuprofen (or other NSAID) use to treat COVID-19 symptoms may worsen the disease.
- These concerns originated from a few physicians' comments and have since spread over social media.
- To date, there is no scientific evidence (clinical trials or studies) that show that using ibuprofen negatively impacts outcome in COVID-19 patients. We will continue to review any new literature as it is published.
- The CDC, WHO, AAP and our Infectious Disease expert reviewers continue to approve the use of ibuprofen for COVID-19.
- For this reason, STCC guidelines continue to recommend ibuprofen as an acceptable way to treat high fevers and pain. (Note: Remind callers that fevers are beneficial, help fight the infection, and may speed recovery. Low-grade fevers should not be treated.)
- If callers remain concerned, they can use acetaminophen for symptoms that warrant treatment.
- Caution: For suspected COVID-19 patients on oral steroids, such as prednisone, the triager should involve the PCP for a decision about whether the drug can be continued.

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: Encourage parents to call about exposed children only if they develop symptoms. During a major pandemic, encourage parents to use a symptom checker before calling. Result: Parents would only call about patients who might need to be seen.

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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