COVID-19 - Diagnosed or Suspected

Schmitt-Thompson Clinical Content

DEFINITION

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

- **Positive lab test confirms the diagnosis** OR
- **Doctor (or NP or PA) makes a clinical diagnosis** (suspected diagnosis) OR
- **Triage Nurse makes suspected diagnosis** using nurse judgment based on symptoms consistent with COVID-19 AND any possible close contact with COVID-19 patient within last 2 weeks.
- Confirmation of Diagnosis: COVID-19 testing is now widely available. It should be performed on all the above suspected cases. Testing can confirm which of the suspected cases have a COVID-19 diagnosis.
- **Triage Bypass:** *Asymptomatic patients with a positive COVID-19 lab test* are also covered in this guideline. Triage not needed in these cases. Go directly to Home Care.
- **Also Included:** Suspected Influenza calls during flu season when flu is also present in the community.
- **Updated:** April 1, 2022 (version 16)

COVID-19 Main Symptoms (CDC)

COVID-19 should be suspected in people who have 1 or more of the following symptoms (CDC) and have not been fully vaccinated against COVID-19:

- 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 are not very helpful for recognizing COVID-19. Unless there is associated close contact with a COVID-19 patient, these symptoms can usually be triaged and managed in those specific guidelines. So can an isolated headache. For reasons of safety, all respiratory symptoms (such as runny nose and sore throat) are considered COVID-19 until disproven by testing.

COVID-19 Fully Vaccinated Symptomatic Patients who later Develop COVID-19 Compatible Symptoms (Breakthrough Cases)

- COVID-19 vaccines approved by the FDA are highly effective. Research data has confirmed that protective antibody levels are still high at 6 months in most people after completing the vaccine series.
- However, some may develop a mild breakthrough infection and can transmit the infection to others.

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.*

INITIAL ASSESSMENT QUESTIONS

Note to Triager - Respiratory Distress: Always rule out respiratory distress (also known as working hard to breathe or shortness of breath). Listen for grunting, stridor, wheezing, tachypnea in these calls. How to assess: Listen to the child's breathing early in your assessment. Reason: What you hear is often more valid than the caller's answers to your triage questions.

1. COVID-19 DIAGNOSIS: "Who made your COVID-19 diagnosis? Was it confirmed by a positive lab test?"
2. COVID-19 EXPOSURE: "Was there any known exposure to COVID-19 before the symptoms began?" Household exposure or close contact with positive COVID-19 patient outside the home (child care, school, work, play or sports). CDC Definition of close contact: within 6 feet (2 meters) for a total of 15 minutes or more over a 24-hour period.
3. ONSET: "When did the COVID-19 symptoms start?"
4. WORST SYMPTOM: "What is your child's worst symptom?"
5. COUGH: "Does your child have a cough?" If so, ask, "How bad is the cough?"
6. RESPIRATORY DISTRESS: "Describe your child's breathing. What does it sound like?" (e.g., wheezing, stridor, grunting, weak cry, unable to speak, retractions, rapid rate, cyanosis)
7. BETTER-SAME-WORSE: "Is your child getting better, staying the same or getting worse compared to yesterday?" If getting worse, ask, "In what way?"
8. FEVER: "Does your child have a fever?" If so, ask: "What is it, how was it measured, and how long has it been present?"
9. OTHER SYMPTOMS: "Does your child have any other symptoms?" (e.g., chills or shaking, sore throat, muscle pains, headache, loss of smell)
10. CHILD'S APPEARANCE: "How sick is your child acting?" " What is he doing right now?" If asleep, ask: "How was he acting before he went to sleep?"
11. HIGHER RISK for COMPLICATIONS with FLU or COVID-19 : "Does your child have any chronic medical problems?" (e.g., heart or lung disease, diabetes, asthma, cancer, weak immune system, etc. See that List in Background Information. Reason: may need antiviral if has positive test for influenza.)
12. 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

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.)

CA: 50, 25, 1

Slow, shallow, weak breathing

R/O: respiratory depression with impending apnea

CA: 50, 25, 1

[1] Bluish (or gray) lips or face now AND [2] persists when not coughing

R/O: cyanosis and need for oxygen

CA: 50, 25, 1

Difficult to awaken or not alert when awake (confusion)

R/O: encephalitis

CA: 50, 25, 1

Very weak (doesn't move or make eye contact)

R/O: sepsis or shock

CA: 50, 25, 1

Sounds like a life-threatening emergency to the triager

CA: 50, 25, 1

See More Appropriate Guideline

[1] Had lab test confirmed COVID-19 infection within last 3 months AND [2] new-onset of COVID-19 possible symptoms AND [3] no NEW variant strains in community

Go to the specific symptom-based guideline. Reason: COVID-19 unlikely in previously infected person during following 3 months.

[1] Stridor (harsh, raspy sound heard with breathing in) AND [2] confirmed by triager

Go to Guideline: Croup (Pediatric)

Runny nose from nasal allergies

Go to Guideline: Nasal Allergies (Hay Fever) (Pediatric)

[1] Headache is isolated symptom (no fever) AND [2] no known COVID-19 close contact

Go to Guideline: Headache (Pediatric)

[1] Vomiting is isolated symptom (no fever) AND [2] no known COVID-19 close contact

Go to Guideline: Vomiting without Diarrhea (Pediatric)

[1] Diarrhea is isolated symptom (no fever) AND [2] no known COVID-19 close contact

Go to Guideline: Diarrhea (Pediatric)

[1] COVID-19 exposure AND [2] NO symptoms

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

[1] COVID-19 vaccine general reaction (fever, headache, muscle aches, fatigue) AND [2] starts within 48 hours of shot (Note: vaccine does not cause respiratory symptoms. Stay here for those symptoms.)

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

COVID-19 vaccine, questions about

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

[1] Diagnosed with influenza within the last 2 weeks by a HCP AND [2] follow-up call

Go to Guideline: Influenza (Flu) Follow-up Call (Pediatric)

[1] Household exposure to known influenza (flu test positive) AND [2] child with influenza-like symptoms

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

Go to ED Now

[1] Difficulty breathing confirmed by triager BUT [2] not severe (Triage tip: Listen to the child's breathing.)

R/O: pneumonia

CA: 51, 37, 25, 26, 1

Ribs are pulling in with each breath (retractions)

R/O: pneumonia

CA: 51, 37, 25, 26, 1

[1] Age < 12 weeks AND [2] fever 100.4 F (38.0 C) or higher rectally

R/O: sepsis

CA: 51, 37, 25, 26, 33, 1

SEVERE chest pain or pressure (excruciating)

R/O: pneumonia, pleurisy, pulmonary emboli

CA: 51, 37, 25, 26, 31, 1

Go to ED Now (or PCP triage)

[1] Oxygen level <92% (<90% if altitude > 5000 feet) AND [2] any trouble breathing

CA: 52, 37, 25, 26, 1

[1] Stridor (harsh sound with breathing in) AND [2] doesn't respond to 20 minutes of warm mist OR has occurred 2 or more times

CA: 52, 37, 25, 26, 83, 4, 84, 1

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)

CA: 52, 37, 25, 26, 4, 84, 1

[1] MODERATE chest pain or pressure (by caller's report) AND [2] can't take a deep breath

R/O: pneumonia, pleurisy

CA: 52, 37, 25, 26, 4, 31, 84, 1

[1] Fever AND [2] > 105 F (40.6 C) by any route OR axillary > 104 F (40 C)

R/O: serious bacterial infection

CA: 52, 37, 25, 26, 4, 84, 1

[1] Shaking chills (shivering) AND [2] present constantly > 30 minutes

R/O: sepsis

CA: 52, 37, 25, 26, 4, 84, 1

[1] Sore throat AND [2] complication suspected (refuses to drink, can't swallow fluids, new-onset drooling, can't move neck normally or other serious symptom)

CA: 52, 37, 25, 26, 4, 84, 1

[1] Muscle or body pains AND [2] complication suspected (can't stand, can't walk, can barely walk, can't move arm or hand normally or other serious symptom)

CA: 52, 37, 25, 26, 4, 84, 1

[1] Headache AND [2] complication suspected (stiff neck, incapacitated by pain, worst headache ever, confused, weakness or other serious symptom)

CA: 52, 37, 25, 26, 4, 84, 1

[1] Dehydration suspected AND [2] age < 1 year (signs: no urine > 8 hours AND very dry mouth, no tears, ill-appearing, etc.)

CA: 52, 37, 25, 26, 29, 4, 84, 1

[1] Dehydration suspected AND [2] age > 1 year (signs: no urine > 12 hours AND very dry mouth, no tears, ill-appearing, etc.)

CA: 52, 37, 25, 26, 29, 4, 84, 6, 1

Child sounds very sick or weak to the triager

Reason: severe acute illness or serious complication suspected

CA: 52, 37, 25, 26, 84, 1

See HCP (or PCP Triage) Within 4 Hours

[1] Wheezing confirmed by triager AND [2] no trouble breathing (Exception: known asthmatic)

Note to triager: Asthmatic children will also need triaging with the Asthma guideline.

CA: 53, 37, 29, 4, 84, 6, 1

[1] Lips or face have turned bluish BUT [2] only during coughing fits

R/O: need for oxygen

CA: 53, 37, 29, 4, 84, 6, 1

[1] Age < 3 months AND [2] lots of coughing

R/O: pneumonia

CA: 53, 37, 25, 26, 84, 6, 1

[1] Crying continuously AND [2] cannot be comforted AND [3] present > 2 hours

R/O: severe otitis or sinusitis

CA: 53, 37, 25, 26, 29, 4, 31, 84, 6, 1

Call PCP Now

[1] Oxygen level <92% (90% if altitude > 5000 feet) AND [2] no trouble breathing

Note to triager: abnormal reading needs to persist or occur more than once

CA: 59, 4, 7, 6, 1, 49

[1] SEVERE RISK patient (e.g., immuno-compromised, serious lung disease, on oxygen, heart disease, bedridden, etc) AND [2] suspected COVID-19 with mild symptoms (Exception: Already seen by PCP and no new or worsening symptoms.)

Reason: special chronic diseases at risk for severe pneumonia or sepsis

CA: 59, 4, 7, 6, 1, 49

[1] Age less than 12 weeks AND [2] suspected COVID-19 with mild symptoms

Reason: PCP will decide on needed follow-up care

CA: 59, 33, 7, 6, 1

Multisystem Inflammatory Syndrome (MIS-C) suspected (Fever AND 2 or more of the following: widespread red rash, red eyes, red lips, red palms/soles, swollen hands/feet, abdominal pain, vomiting, diarrhea)

Note: rare complication AND average onset of symptoms 4 weeks AFTER a COVID-19 infection

CA: 59, 4, 6, 1

See PCP Within 24 Hours

[1] Stridor (harsh sound with breathing in) occurred once BUT [2] not present now

Reason: may need Decadron

CA: 54, 37, 29, 5, 30, 4, 89, 24, 7, 84, 38, 1

[1] Continuous coughing keeps from playing or sleeping AND [2] no improvement using cough treatment per guideline

CA: 54, 37, 29, 5, 30, 4, 7, 84, 6, 1, 49

Earache or ear discharge also present

R/O: otitis media

CA: 54, 37, 4, 32, 29, 5, 30, 7, 84, 6, 1, 49

Strep throat infection suspected by triager

Reason: may need Strep test

CA: 54, 37, 4, 42, 43, 7, 84, 6, 1

[1] Age 3-6 months AND [2] fever present > 24 hours AND [3] without other symptoms (no cold, cough, diarrhea, etc.)

R/O: UTI, bacteremia

CA: 54, 37, 4, 7, 84, 6, 1

[1] Age 6 - 24 months AND [2] fever present > 24 hours AND [3] without other symptoms (no cold, diarrhea, etc.) AND [4] fever > 102 F (39 C) by any route OR axillary > 101 F (38.3 C)

R/O: UTI, bacteremia

CA: 54, 37, 4, 7, 84, 6, 1

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

R/O: otitis media or sinusitis

CA: 54, 37, 4, 29, 5, 30, 7, 84, 6, 1, 49

Fever present > 3 days (72 hours)

R/O: bacterial superinfection - usually otitis media

CA: 54, 37, 4, 29, 5, 30, 7, 84, 6, 1, 49

[1] Age > 5 years AND [2] sinus pain around cheekbone or eye (not just congestion) AND [3] fever

R/O: sinusitis

CA: 54, 37, 4, 29, 5, 30, 7, 84, 6, 1, 49

Call PCP Within 24 Hours

[1] Influenza also widespread in the community AND [2] mild flu-like symptoms WITH FEVER AND [3] HIGH-RISK patient for complications with Flu (See that CDC List)

Reason: may need testing for influenza and COVID-19. If positive for flu, PCP will decide if antiviral meds would be helpful for this patient.

CA: 60, 85, 86, 87, 4, 5, 29, 42, 43, 44, 11, 88, 82, 95, 6, 1, 49

[1] Age 12 and above AND [2] COVID-19 lab test positive AND [3] HIGH-RISK patient for complications with COVID-19 (See that CDC List)

Reason: may be eligible for antiviral meds, such as monoclonal antibodies

CA: 60, 85, 87, 4, 5, 29, 42, 43, 44, 11, 88, 82, 95, 6, 1, 49

Call PCP When Office is Open

[1] COVID-19 rapid test result was negative AND [2] mild symptoms (cough, fever, or others) continue

R/O: false negative; PCP will decide if PCR test is indicated

CA: 61, 93, 3, 7, 11, 39, 96, 4, 40, 5, 41, 29, 90, 30, 42, 43, 44, 45, 95, 6, 1

Home Care

[1] COVID-19 diagnosed by positive rapid or PCR lab test AND [2] NO symptoms

CA: 58, 92, 91, 28, 39, 97, 95, 6, 1

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

CA: 58, 80, 3, 7, 28, 39, 97, 4, 40, 5, 41, 29, 90, 30, 42, 43, 44, 45, 46, 82, 11, 95, 6, 49, 1

[1] COVID-19 suspected by a doctor (or NP/PA) AND [2] lab test pending or not done AND [3] mild symptoms (cough, fever or others) AND [4] no complications or SOB

Reason: Isolate at home until results are known.

CA: 58, 2, 3, 7, 28, 39, 96, 97, 4, 40, 5, 41, 29, 90, 30, 42, 43, 44, 45, 46, 82, 11, 95, 6, 1, 49

[1] COVID-19 infection suspected by triager AND [2] lab test not yet done or not available AND [3] mild symptoms (cough, fever, or others) AND [4] no complications or SOB

Reason: try to arrange COVID-19 testing. Isolate at home until results are known.

CA: 58, 13, 3, 12, 98, 7, 28, 11, 39, 97, 4, 40, 5, 41, 29, 90, 30, 42, 43, 44, 45, 46, 95, 19, 49,

COVID-19 Home Isolation and Quarantine, questions about

CA: 58, 7, 28, 39, 96, 97, 6, 1

COVID-19 Prevention, questions about

CA: 58, 8, 47, 27, 48, 9, 10, 11, 82, 95, 6, 1

COVID-19 Testing, questions about

CA: 58, 12, 98, 93, 94, 6, 1

COVID-19 Maternal Illness and Breastfeeding, questions about

CA: 58, 14, 7, 39, 15, 1

COVID-19 Disease, questions about

CA: 58, 16, 17, 18, 19, 20, 8, 21, 22, 99, 48, 82, 36, 1

Multisystem Inflammatory Syndrome (MIS-C), questions about

CA: 58, 81, 36, 1

CARE ADVICE (CA) -

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

2. **Reassurance and Education - Doctor (or NP/PA) Suspects COVID-19 and Symptoms are Mild:**
   - Your doctor told you that your child probably has COVID-19 based on the symptoms and close contact.
   - Your child may or may not have received a lab test for COVID-19. Reason: household contact or other caregiver had positive lab test.
   - From what you have told me, your child's symptoms are mild. They stay that way for most children.
   - What to Expect: Mild symptoms usually last less than 2 weeks. Complications are rare in children.
   - You don't need to see your doctor unless your child develops trouble breathing or becomes worse in any other way.
   - Here's some care advice that should help.

3. **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 (a minimum of 5 full days). Reason: You want to protect other people from getting it. For influenza-like illness, the CDC recommends that people remain at home (isolate) until at least 24 hours after they are free of fever.
   - Treat the symptoms that are bothering you the most.
   - **Note to Triager:** Care Advice is available for Cough, Fever, Chills and Shivering, Runny nose, Sore throat, Muscle pains, Headache and Loss of smell. Only discuss treatment for the caller's main symptoms.
   - There is no anti-viral medication readily available for treating COVID-19 at home. New antiviral treatments have been developed for patients who are high risk for complications.
   - Antibiotics are not helpful for viral infections.

4. **Fever Medicine and Treatment:**
   - For fever above 102 F (39 C), you may use acetaminophen OR ibuprofen (See Dosage table). Avoid aspirin.
   - 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 your child also has definite pain, treat it.
   - **Fluids.** Encourage cool fluids in unlimited amounts. Reason: prevent dehydration. Age younger than 6 months, only give formula or breastmilk.
   - **Clothing.** For all children, dress in 1 layer of clothing, unless shivering. For shivering, use a blanket until it stops.
   - **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.

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.
   - Don't use OTC cough medicines under 6 years of age. Reason: Cough is a protective reflex.

6. **Call Back If:**
   - Shortness of breath occurs
   - Difficulty breathing occurs
   - Your child becomes worse

7. **Home Isolation For Children with Positive COVID-19 Test - With or Without Symptoms:**
   - Isolation means separating sick people with a contagious disease from people who are not sick. (CDC)
   - Home isolation is needed for at least 5 full days after the day the symptoms started or the sample was collected for the positive COVID-19 lab test.
   - Children under 2 years: Home isolation will be needed for a full 10 days.
   - Presence or absence of symptoms does not change this requirement.
   - Vaccine status does also does not change the length of home isolation.
   - The patient does not need to be confined to a single room. Reason: Preventing spread of respiratory infections within a home is nearly impossible.
   - The sick person should try to avoid very close contact with other family members. That includes hugging, kissing, sitting next to or sleeping in the same bed. None of this is realistic for young children.
   - Older children and adults with symptoms 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. Your doctor is the best resource for up-to-date information on COVID-19.
   - **Exceptions:** Follow local, state or provincial Department of Health directives if they are different. Students should follow their school's COVID-19 policy.

8. **COVID-19 - How to Protect Yourself and Family from Catching It - The Basics:**
   - Get the COVID-19 vaccine and a booster shot. It is your 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 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.

9. **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.

10. **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.

11. **How to Protect Others - When You or Your Child are Sick with COVID-19:**
   - **Stay Home for Minimum of 5 Days.** Do not allow visitors.
   - **Wear a Mask for 10 Days:** Wear a face mask when around others or if you have to go to a medical facility.
   - **Wash Hands often with Soap and Water.**
   - Carefully avoid any contact with the elderly and people with weak immune systems or other chronic health problems.
   - **Don't Share Personal Household Items:** Don't share glasses, plates or eating utensils.

12. **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.

13. **Possible COVID-19 and Mild Symptoms:**
    - Your child may have COVID-19 because they have developed symptoms that match. Cough, sore throat and fever are the most common symptoms.
    - Getting a COVID-19 lab test is the only way to know for sure. Getting the test is not urgent.
    - From what you have told me, your child's symptoms are mild. They stay that way for most children.
    - Here's some care advice that should help.

14. **Breastfeeding and COVID-19:**
    - Breastfeeding experts recommend you continue to breastfeed even if you are sick with COVID-19. (AAP)
    - Wash your hands before feeding your baby.
    - The CDC recommends wearing a face mask or covering. Be careful to avoid coughing on your baby.
    - Breastmilk gives beneficial antibodies your body is making against this illness to your baby. This should provide some protection against this illness for your baby, like it does for influenza and most other viral illnesses.
    - Research has proven 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.

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

16. **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.

17. **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 patients in the United States and Canada were 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 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 unvaccinated continued to have a 20 times higher rate of hospitalizations and deaths.
    - 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 regularly. See:
    - https://www.cdc.gov/coronavirus

18. **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, 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).

19. **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)

20. **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 mainly occur in a closed room with poor ventilation. Aerosols are an uncommon cause of COVID-19 transmission. (CDC and WHO).

21. **COVID-19 - Travel:**
    - Travel is much safer for people who are fully vaccinated with a booster shot.
    - 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/.

22. **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.

23. N/A

24. **First Aid For Stridor:**
    - For stridor (harsh sound with breathing in) or constant coughing:
    - Breathe warm mist in a foggy bathroom with the hot shower running for 20 minutes. Other options: a wet washcloth held near the face or a humidifier containing warm water.
    - Caution: avoid very hot water or steam which could cause burns or high body temperatures.
    - If warm mist fails, breathe cool air by standing near an open refrigerator or taking outside for a few minutes if the weather is cold.
    - What to Expect. The stridor should go away with warm mist. The cough and hoarse voice won't.

25. **Cover Your Mouth and Nose - Wear a Mask:**
    - Exception: Less than 2 years or face covering increases difficulty breathing.
    - Cover the patient's mouth and nose loosely with a disposable tissue (e.g., Kleenex or paper towel), a washcloth or bandana.
    - Have patient wear a disposable face mask if you have one.
    - Ask for a face mask on arrival.

26. **Announce COVID-19 Diagnosis on Arrival in ED:**
    - Tell the first hospital worker you meet that your child probably has (or does have) COVID -19.

27. **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 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.
    -

28. **Duration of Isolation - How to Count the Days:**
    - People with Symptoms: The isolation 'clock' starts on the first day of symptoms for people who have symptoms.
    - Example: For a person who has symptoms on Sunday but doesn't take a test until Tuesday, start their isolation 'clock' from Sunday, the day their symptoms started.
    - People without Symptoms: The isolation 'clock' starts on the day the positive test was collected. Reason: This is the only start day we can really use.

29. **Coughing Fits or Spells - Warm Mist and Fluids:**
    - Breathe warm mist (such as with shower running in a closed bathroom).
    - 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: Both relax the airway and loosen up any phlegm.
    - What to Expect: The coughing fit should stop. But, your child will still have a cough.

30. **Humidifier**:
    - If the air is dry, use a humidifier in the bedroom (Reason: dry air makes coughs worse).
    - Avoid menthol vapors (Reason: makes coughs worse).

31. **Pain Medicine**:
    - For pain relief, give acetaminophen every 4 hours **Or** ibuprofen every 6 hours as needed. (See Dosage table.)
    - Note to triager about ibuprofen concerns: Discuss only if caller brings up concerns about ibuprofen. Response: The CDC, WHO and other experts continue to support the use of ibuprofen (if needed) for patients with COVID-19. They found no scientific evidence to support the claim that ibuprofen made this disease worse.

32. **Cold or Hot Pack for Ear Pain**:
    - Apply a cold pack or a cold wet washcloth to outer ear for 20 minutes to reduce pain while medicine takes effect.
    - Note: Some children prefer local heat for 20 minutes.
    - **Caution**: cold or hot pack applied too long could cause frostbite or burn.

33. **Fever Under 3 Months Old - Don't Give Fever Medicine:**
    - Don't give any acetaminophen before being seen.
    - Need accurate documentation of temperature in medical setting to decide if fever is really present. (Reason: may require septic work-up.)

34. **Call Back If:**
    - Your child becomes worse

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

36. **Call Back If:**
    - You have other questions

37. **Note to Triager: If Available, Refer for Re-Triage by a Doctor (or NP/PA):**
    - During this pandemic, the medical community is trying extra hard to prevent unnecessary ED referrals of suspected COVID-19 patients. Parents also prefer this. Re-triage by a physician has been shown to reduce ED referrals. Here are some resources that may be available in your community:
    - **PCP telephone re-triage:** Some PCPs (primary care providers) want to provide re-triage before any of their non-emergent patients are referred to an ED. This requires their approval.
    - **ED telephone re-triage:** Some EDs provide a telephone triage service for patients referred in.
    - **Telemedicine re-triage:** Many practices and some hospitals now offer a telemedicine (virtual visit) service. Telemedicine has the highest rate of providing a definitive diagnosis and care without an in-person visit.

38. **Call Back If:**
    - Stridor occurs again
    - Shortness of breath occurs
    - Difficulty breathing occurs
    - Your child becomes worse

39. **Stopping Home Isolation (CDC) for COVID-19 Positive Patients:**
    - Symptomatic patients must meet 3 criteria: [1] Fever gone for at least 24 hours off fever-reducing medicines AND [2] Cough and other symptoms must be resolving (gone or almost gone) AND [3] Symptoms started more than 5 days ago.
    - Asymptomatic patients with a positive COVID-19 lab test who don't develop symptoms: must stay at home until 5 full days have passed since the date the sample was collected for the positive test.
    - Summary: Must isolate at home for at least 5 full days. Then wear a mask around others for another 5 days. Children under 2 and children that aren't cooperative with wearing a mask should isolate for 10 full days.
    - Repeat diagnostic tests: After a positive test, repeat tests are not recommended. Even after it is safe to stop isolation. PCR tests may stay positive, even up to 90 days.
    - If unsure it is safe for you to leave isolation, call your PCP during office hours.

40. **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 or shower. Once the fever peaks, the shivering or rigors will stop.
    - **Fluids.** Drink extra fluids to improve hydration and circulation.

41. **OTC Cough Medicine - DM:**
- OTC cough medicines are not recommended. (Reason: no proven benefit for children.)
- Honey has been shown to work better. (Caution: Avoid honey until 1 year old.)
- If the caller insists on using one and the child is over 6 years old, use one with dextromethorphan (DM).
- Follow the instructions on the package.
- Indication: Give only for severe coughs that interfere with sleep, school or work.
- Don't use under 6 years of age. Reason: cough is a protective reflex.

42. **Sore Throat Pain Relief:**
- Here are some tips on treating a sore throat:
- 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.

43. **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.

44. **Muscle Pains - Treatment:**
- Here are some tips on treating 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.

45. **Headache - Treatment:**
- Here are some tips for treating 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.

46. **Loss of Smell and Taste:**
- Losing the sense of smell and taste can be an early symptom of COVID-19.
- It is strong evidence for having COVID.
- In 50% of patients, these senses return within 1 to 3 weeks.
- In 85%, they return within 6 months.
- Most of the others recover by 1 year.
- If symptoms persist, it should not delay the end of isolation.

47. **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.

48. **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.

49. **Asthma - See Additional Guideline:**
- Note to Triager: For patients with COVID-19 or possible influenza who also have a diagnosis of Asthma, ask: "Are you taking asthma meds to manage any wheezing or coughing?'
- If yes, they need additional triage and care advice. Use the appropriate Asthma guideline.

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. **Lab Test Confirmed COVID-19 AND Symptoms are MILD:**
- Your child had a lab test for COVID-19 and it came back positive.
- A positive result on a PCR test or rapid self-test kit is highly accurate for diagnosing COVID-19. It is highly likely that your child has COVID-19.
- From what you have told me, your child's symptoms are mild. They stay that way for most children.
- You don't need to see your doctor unless your child develops trouble breathing or becomes worse in any other way.
- Here's some care advice that should help.

81. **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 and boosted against COVID-19.
- 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.

82. **Flu and COVID-19 Vaccines:**
- 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.
- Get the COVID-19 for your child as soon as your child is eligible.
- Both the flu and the COVID-19 vaccines can be given to children at the same time.

83. **Warm Mist**:
- Before going in to be seen, breathe warm mist in a foggy bathroom for 10 minutes (Note: may also help severe croupy cough).
- Then inhale warm mist from a wet washcloth while driving in (if this is practical).

84. **How to Protect Others When You or Your Child are Sick:**
- **After You are Seen - Stay Home:** Stay home if you are sick. If you are sick, you are contagious to others. At your medical visit, your provider will discuss home isolation timeframes.
- **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.
- **Avoid Visitors:** Do Not allow any visitors (such as friends). Leave the house only if you need to seek additional medical care.
- **Wear a Mask:** Always wear a face mask if you have to leave your home. Also try to maintain safe distancing from others (6 feet).
- **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.

85. **Note to Triager - Contacting the PCP on Weekends and Holidays:**
- On these days, page the on-call PCP during the day up until 5 PM.
- After 5 PM, page them the next morning after 8 AM.
- Reason: if antivirals are needed, it is best to start them within 48 hours.

86. **Prescription Antiviral Drugs For Influenza:**
- Antiviral drugs (such as Tamiflu) can be helpful for treating the influenza virus.
- The benefits are limited: Tamiflu usually reduces the time your child is sick by 1 to 1.5 days. It reduces the symptoms, but does not make them go away.
- To be helpful, antiviral drugs (such as Tamiflu) should be started within 48 hours of the onset of flu symptoms. If the flu symptoms or fever started more than 48 hours ago, they are not useful. (Exception: children with severe disease).
- Tamiflu also can have side effects: Vomiting in 10% of children.
- Most normal children do not need an antiviral drug.
- The CDC recommends they be used for: [1] any patient with severe symptoms AND [2] for most **High-Risk** children with underlying medical problems (see that list).
- The CDC doesn't recommend antiviral drugs for **Low-Risk** children with normal influenza. These children recover with supportive care of their symptoms.
- Also, it is not used to prevent flu. Reason: You would need to take the medicine every day for months.

87. **High-Risk Children For Complications for Flu and COVID-19:**
- Significance: HIGH-RISK children also are the main patients who may need prescription anti-viral medications when they develop influenza. New anti-viral medications for COVID-19 may also be indicated for similar patients.
- Aspirin long-term therapy (e.g., Kawasaki's disease and rheumatoid arthritis)
- Down's syndrome
- Heart disease (e.g., congenital heart disease, rheumatic heart disease)
- Immune system compromised (e.g., cancer, chemotherapy, HIV/AIDS, transplant, taking oral steroids)
- Liver disease (e.g., liver failure, chronic hepatitis)
- Lung disease (e.g., asthma, cystic fibrosis, bronchopulmonary dysplasia, oxygen, trach, ventilator)
- Metabolic disease (e.g., diabetes mellitus)
- Neuromuscular disease or injury (e.g., muscular dystrophy, cerebral palsy, epilepsy, spinal cord or brain injury)
- Obesity (BMI > 30, the 95th percentile)
- Pregnancy
- Renal disease (e.g., nephrotic syndrome, renal dialysis)
- Sickle cell disease
- Healthy children under 2 years old are also considered HIGH-RISK. Reason: higher rate of pneumonia and hospitalization.
- Note: All other patients are referred to as LOW-RISK.

88. **Exposure of High-Risk Patient**:
- If the child with flu symptoms lives with a **High-Risk** person (such as a sibling or adult with a chronic disease, persons under 2 years or over 65 years, a pregnant woman, etc), the family needs to call the **High-Risk** patient's PCP within 24 hours. (Reason: may need anti-viral medication.)

89. **Observation During Sleep**:
- Sleep in the same room for a few nights. Reason: Stridor can progress to difficulty breathing and can get worse at night.

90. **Runny Nose - Blow or Suction the Nose:**
- The nasal mucus and discharge is washing viruses and bacteria out of the nose and sinuses.
- Having your child blow the nose is all that is needed. Teach your child how to blow the nose at age 2 or 3.
- For younger children, gently suction the nose with a suction bulb. Use saline (salt water) nose drops or spray to loosen up the dried mucus as needed.

91. **How to Protect Others:**
- **Stay Home a Minimum of 5 Days:** Home isolation is needed for at least 5 full days after symptoms started.
- Follow local, state or provincial Department of Health directives if they are different.
- Students should follow their school's COVID-19 policy.
- 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.
- **Avoid 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. Carefully avoid any contact with the elderly and people with weak immune systems or other chronic health problems.
- **Wash Hands Often with Soap and Water:** Use an alcohol-based hand sanitizer if water is not available. Don't touch your eyes, nose or mouth unless your hands are clean.
- **Don't Share Personal Household Items:** Don't share glasses, plates or eating utensils.
- **Older Children Wear a Mask** in common household areas.

92. **Lab Test Confirmed COVID-19 and NO Symptoms:**
- Your child had a lab test for COVID-19 and it came back positive.
- A positive result on a PCR or rapid self-test kit is highly accurate for diagnosing COVID-19. Your child has COVID-19.
- From what you have told me, your child has no symptoms. That is reassuring.
- Your child will still need home isolation for 5 full days after the date the sample for the positive test was collected. After that, they may leave your home but must wear a mask for another 5 days or longer (CDC).
- If your child is too young to wear a mask or not cooperative with wearing a mask, they should isolate at home for a full 10 days.
- Here's some care advice that should help.

93. **Questions about a Negative Rapid COVID-19 Test Result:**
- Positive rapid test results are accurate and can be trusted.
- Negative rapid test results are sometimes wrong.
- An error is more likely with tests performed at home. Rapid tests performed at a test site are usually more accurate.
- The COVID-19 vaccine does NOT affect the results of a COVID-19 test.
- Note to Triager: For concerns about false negative test results, especially if they had a known exposure, put the call back to the PCP during normal hours. Tell the caller:" Your doctor will help decide if a special PCR lab test would be useful for your child".

94. **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).

95. **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.

96. **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.

97. **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 people** need to quarantine at home for 10 days or longer.

98. **COVID-19 Testing - Low Availability:**
- If you are having difficulty finding a timely testing site for your child or home testing materials, call your doctor's office during office hours.
- If your child has a known positive household contact and develops symptoms, they don't need a test to confirm the diagnosis.
- In other cases relating to lack of testing options and patient develops symptoms, assume they have the infection and follow the CDC guidelines on home isolation.

99. **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.

FIRST AID

N/A

BACKGROUND INFORMATION

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
- 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.

Preventing the Need to Use 2 Symptom Guidelines to Manage COVID-19 Calls

- Concern: Call centers have reported that triage nurses often needed to use 2 guidelines to provide complete triage and care advice for suspected COVID-19 cases. Reason: Many patients have multiple symptoms.
- Solution: Triage and targeted care advice have been expanded.
- This guideline covers telephone care for Cough, Fever, Chills or shaking, Sore throat, Muscle pains, Headaches and Loss of smell or taste.
- Triagers should use clinical judgment and consider use of an additional guideline for any important symptoms not addressed in this guideline. Examples are Asthma or Vomiting.

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 - Diagnosed or Suspected
- COVID Exposure
- COVID-19 Prevention
- COVID-19 or Influenza - How to Tell
- COVID-19 Vaccines - Answers to Common Questions
- Fever - How to Take the Temperature
- Fever - Facts Versus Myths
- Acetaminophen (Tylenol) Dosage Table - Children
- Ibuprofen (Advil, Motrin) Dosage Table - Children

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.

High-Risk Children for Complications with Influenza (also with COVID-19)

- Significance: HIGH-RISK children also are the main patients who may need prescription anti-viral medications when they develop influenza. New anti-viral medications for COVID-19 may also be indicated for similar patients.
- Aspirin long-term therapy (e.g., Kawasaki's disease and rheumatoid arthritis)
- Down's syndrome
- Heart disease (e.g., congenital heart disease, rheumatic heart disease)
- Immune system compromised (e.g., cancer, chemotherapy, HIV/AIDS, transplant, taking oral steroids)
- Liver disease (e.g., liver failure, chronic hepatitis)
- Lung disease (e.g., asthma, cystic fibrosis, bronchopulmonary dysplasia)
- Lung disease technology-dependent (e.g., oxygen required, tracheostomy, ventilator)
- Lung risk for aspiration from compromised ability to handle respiratory secretions (e.g., spinal cord or brain injury)
- Metabolic disease (e.g., diabetes mellitus)
- Neuromuscular disease (e.g., muscular dystrophy, cerebral palsy, epilepsy)
- Obesity (BMI > 30, the 95th percentile)
- Pregnancy

- Renal disease (e.g., nephrotic syndrome, renal dialysis)
- Sickle cell disease
- Healthy children under 2 years old are also considered HIGH-RISK. Reason: higher rate of pneumonia and hospitalization.
- Note: All other patients are referred to as LOW-RISK.

High-Risk Children: Possible Exceptions

- The current HIGH-RISK list includes over 20% of children because 10% of children are under 2 years of age and 10% of children have asthma.
- To reduce unnecessary prescribing of Tamiflu, our call center and ED have decided to exclude children who only have exercise-induced asthma or cough-variant asthma. We have also excluded any child with asthma who has not needed to use any asthma medications within the last year. The latter would indicate that they have very mild intermittent asthma.
- Each call center and medical advisory group will need to decide if certain conditions will not be included in the HIGH-RISK group.

Influenza Calls: Preventing the Need to Use 2 Guidelines

Here are the reasons why this guideline can be used simultaneously for calls about patients with suspected COVID-19 and also for those with suspected Influenza:

- **Symptoms** are nearly identical. Cannot differentiate based on symptoms. Only exception: loss of taste or smell is highly specific for COVID.
- **Triage for serious symptoms** or complications is the same. The nurse can triage both at same time.
- **Viral Testing** is the only way to reach an accurate diagnosis. Tests for both are available.
- **Care Advice** is the same. Treat symptoms and stay well hydrated.
- **High-Risk patients for Complications**: The long-established list for influenza is similar to the evolving list for patients with COVID-19. It can be used for both.
- **Oral Antivirals** are readily available for patients with influenza who also are High Risk for complications. Antivirals have also been FDA approved for emergency use for COVID-19 for high-risk children 12 and older, but supply may be limited.
- **Isolation:** Home isolation is required for 5 days or longer for COVID-19. Isolation for flu is only recommended until the fever is gone for 24 hours or longer. Reason: COVID-19 is far more dangerous than flu.
- **Why COVID-19 Guideline was Chosen to Cover Both:** Influenza is seasonal. COVID-19 is not seasonal. It will not go away in 6 months like influenza.

Flu without Fever

- Influenza can sometimes occur without fever.
- However, fever remains a valuable aid in triage, and without it the telephone diagnosis of suspected flu could double or triple (because it would include many children with the common cold or very mild cases of influenza). That would overwhelm the health care delivery system.
- Premise: anyone who has flu without a fever has a very mild case of the infection and doesn't need anti-viral medications. (Exception: immune-suppressed individuals who may not be able to mount a febrile response).
- Our call center has decided to exclude children who may have flu respiratory symptoms but do not have a fever. Each call center will need to make their own decision.

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.

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.
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Determining the Viral Etiology of Respiratory Infections

Specific respiratory symptoms such as hoarseness, stridor, type of cough, wheezing are not helpful for telling us the cause of the infection. All the lower respiratory tract viruses can cause croup, bronchiolitis or pneumonia symptoms. Influenza virus, COVID virus, respiratory syncytial virus and other viruses can cause the same clinical picture. In addition, getting an infection with 2 of these viruses within the same week can cause a higher complication rate. Reason: the first viral infection damages the lung tissue and makes it easier for the second virus to cause greater damage. That is why gaining protection from the flu vaccine reduces the risk a serious coronavirus infection. Viral tests are the only way to know for sure which virus is causing the child's symptoms and if quarantine is needed. On the downside, the tests can be expensive.

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

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.

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.

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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- Lisa M. Koonin DrPH, MN, MPH; Founder, Health Preparedness Partners; Pandemic preparedness specialist
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SEARCH WORDS

BREATHING
BREATHING DIFFICULTY
CORONAVIRUS
CORONAVIRUS EXPOSURE
COUGH
COVID
COVID TOES
COVID-19
DIFFICULT BREATHING

DIFFICULTY BREATHING
EXPOSURE
EXPOSURE QUESTION
EXPOSURE QUESTIONS
FOREIGN TRAVEL
INFECTION EXPOSURE
INTERNATIONAL TRAVEL
MIS-C
MULTISYSTEM INFLAMMATORY SYNDROME
NCOV
NOVEL CORONAVIRUS
SARS-COV-2
SOB
TRAVEL
TROUBLE BREATHING

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