Coronavirus (COVID-19) - Exposure

Office Hours Telephone Triage Protocols | Pediatric | 2020

DEFINITION

- Call about a person who has NO symptoms BUT was exposed to COVID-19
- Exposure means close contact with a diagnosed (confirmed) or suspected case of COVID-19
- Diagnosed (confirmed) patients have a positive COVID-19 lab test
- Suspected patients are those whom a HCP suspects of having COVID-19, based on symptoms and exposure (CDC definition). Also called Person Under Investigation (PUI).
- Note to Triager: During community spread of COVID-19, patients with cough, SOB, fever or other compatible symptoms can be presumed to have COVID-19.
- For symptomatic suspected COVID-19 patients, use the COVID-19 Diagnosed or Suspected protocol.
- Updated: July 8, 2020

CLOSE CONTACT (EXPOSURE) to COVID-19 Definition:

Exposure to COVID-19: Levels of Risk

- Household Close Contact. Lives with a person who has positive test for COVID-19. This carries the highest risk of transmitting the infection.
- Other Close Contact. The CDC defines 6 feet as how far coughing can spread the virus. How long the close contact lasts can also be important. Prolonged close contact is defined as more than 10 minutes. Close contact includes kissing, hugging or sharing eating and drinking utensils. It also includes close conversations. Direct contact with secretions of a person with COVID-19 is also close contact. Includes being in the same childcare room, classroom or carpool. These exposures are usually lower risk than living with an infected person.
- In Same Building Low Risk Exposure. Being in the same school, place of worship, workplace or building carries a small risk for exposure. This risk increases once sustained community spread occurs.
- In Same City Low Risk Exposure. Living in or travel from a city or country where there is community spread of COVID-19, also carries a small risk. The CDC lists these "hot spots". Outdoor contacts are much safer than indoor contacts.

TRIAGE ASSESSMENT QUESTIONS

See More Appropriate Protocol

■ [1] Symptoms of COVID-19 (cough, SOB or others) AND [2] lab test positive OR diagnosed by HCP

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

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

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

■ [1] Symptoms of COVID-19 (cough, SOB or others) AND [2] within 14 days of close contact with confirmed or suspected COVID-19 patient

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

■ [1] Symptoms of COVID-19 AND [2] travel from high risk area (hot spot) for COVID-19 community spread (identified by CDC) within last 14 days

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

■ [1] Positive COVID-19 test BUT [2] NO symptoms (asymptomatic patient)

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

■ [1] Difficulty breathing (or shortness of breath) AND [2] > 14 days after COVID-19 exposure (Close Contact) AND [3] no community spread where patient lives

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

■ [1] Cough AND [2] > 14 days after COVID-19 exposure AND [3] no community spread where patient lives

Go to Protocol: Cough (Pediatric)

■ [1] Common cold symptoms AND [2] > 14 days after COVID-19 exposure AND [3] no community spread where patient lives

Go to Protocol: Colds (Pediatric)

Discuss with PCP and Callback by Nurse Today

■ [1] Close contact with diagnosed or suspected COVID-19 patient within last 14 days AND [2] needs COVID-19 lab test to return to essential work force AND [3] NO symptoms

Reason: PCP will discuss testing

Home Care

[1] Close contact with confirmed COVID-19 patient AND [2] within last 14 days BUT [3] NO symptoms

Reason: Needs home isolation.

■ [1] Close contact with confirmed COVID-19 patient AND [2] 15 or more days ago AND [3] NO symptoms

Reason: Asymptomatic for 14 days. Risk of developing COVID-19 infection has passed. Reassure and discontinue isolation.

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

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

■ [1] Travel from high risk area (hot spot) for major COVID-19 community spread AND [2] within last 14 days AND [3] NO symptoms

Reason: lower risk. May need home isolation.

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

Reason: unrealistic fear of exposure and needs reassurance

- COVID-19 testing, questions about
- COVID-19 prevention, questions about

■ COVID-19 Disease, questions about

Reason: no exposure, no travel to high-risk areas. Refer most callers to CDC website: www.cdc.gov/coronavirus

■ Multisystem Inflammatory Syndrome (MIS-C), questions about

HOME CARE ADVICE

COVID-19 Exposed Person with No Symptoms: Home Quarantine

1. Reassurance and Education - Close Contact, No Symptoms, but Less than 14 Days:

- Although your child may have been or was exposed to COVID-19, your child does not currently have any symptoms of this coronavirus infection. COVID-19 infections start within 14 days following the last exposure.
- Since it's been less than 14 days, your child is still at risk for getting sick with it.
- You need to watch for symptoms until 14 days have passed. Check your child's temperature two times a day.
- Keep your child on home quarantine until you talk with your child's doctor or the local public health department. Quarantine will probably need to be continued for 14 days to protect others. They will help you decide.
- They will tell you when it is safe to return to school or work.

2. Measure Temperature:

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

3. Watch for Other 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.
- Rare symptoms are red or purple toes ("COVID toes").
- If any of these symptoms occur, call back.
- Early detection of symptoms and home isolation is the only way to reduce spread of the disease.

4. Isolation at Home Recommendations:

- Isolation will definitely be needed if your child develops a cough or fever within 14 days of COVID-19 exposure.
- For patients without symptoms, home quarantine also is usually required. Follow the current directives of your local health department.
- Isolate your child at home.
- Home isolation of younger children can be very difficult. Many families also have limited options. Therefore, each triager should individualize the recommendations for isolation after discussing it with the caller.
- Do Not allow any visitors.
- Do **Not** go to school or work.
- Do **Not** go to church, child care centers, shopping, or other public places.
- 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.

5. Day 15 or Later After Close Contact and No Symptoms:

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

6. Call Back If:

- Fever occurs within 14 days of COVID-19 exposure
- Cough or difficulty breathing occur within 14 days of COVID-19 exposure
- Other symptoms of COVID-19 infection occur
- You have other questions

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.

Call Back If:

• You have other questions

COVID-19 Prevention Questions

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

- 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. 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.

7. Call Back If:

• You have other questions

COVID-19 Disease FAQs

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

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

- You are at risk of getting COVID-19 if the following has occurred:
- Close contact with a person who tested positive for COVID-19 AND contact occurred while they were ill.
- Close contact with a person diagnosed by their HCP as a suspected COVID-19 patient.
- 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 is occurring in most of the US, especially in cities.
- The CDC (<u>https://www.cdc.gov/coronavirus/2019-ncov/travelers</u>) has the most up-to-date list of where COVID-19 outbreaks are occurring.

5. COVID-19 - How it is Spread:

- COVID-19 is spread from person to person.
- The virus spreads when respiratory droplets produced when a person coughs 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.

6. 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.

7. 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.

8. Call Back If:

• You have other questions

Multisystem Inflammatory Syndrome (MIS-C) Questions

1. 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.

2. Call Back If:

You have other questions

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
- 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, the 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.

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 guestions.
- 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".

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

Expert Reviewers

- Ann-Christine Nyquist MD, MSPH, Sections of Infectious Disease and Epidemiology, Children's Hospital Colorado, Aurora, CO
- Samuel Dominguez, MD, Sections of Infectious Disease and Epidemiology, Children's Hospital Colorado, Aurora, CO
- Jessica Cataldi MD, Sections of Infectious Disease and Epidemiology, Children's Hospital Colorado, Aurora, CO
- Lisa M. Koonin DrPH, MN, MPH. Senior Advisor in support of the CDC 2019 Novel Coronavirus (COVID-19) Response. Centers for Disease Control and Prevention (CDC).

REFERENCES

- 1. Alramthan A, Aldaraji W. A case of COVID-19 presenting in clinical picture resembling chilblains disease. First report from the Middle East. Clin Exp Dermatol 2020 Apr 17.
- 2. Castagnoli R, Votto M, Licari A, et al. Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection in Children and Adolescents: A Systematic Review. JAMA Pediatr. 2020 Apr 22.
- 3. De Rose DU, Piersigilli F, Ronchetti MP, et al. Novel coronavirus (COVID-19) in newborns and infants. Ital J Pediatr. 2020 Apr 29;46(1):56.
- 4. Dong Y, et al. Epidemiology of COVID-19 Among Children in China. Pediatrics. March 16, 2020.
- 5. Dufort EM, Koumans EH, Chow EJ, et al. Multisystem Inflammatory Syndrome in children in New York state. N Engl J Med. [published online ahead of print, 2020 Jun 29].
- 6. Feldstein LR, Rose EB, Horwitz SM, et al. Multisystem Inflammatory Syndrome in U.S. children and adolescents. N Engl J Med. [published online ahead of print, 2020 Jun 29].
- 7. Huang C, Wang Y, et.al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. Lancet published online. January 24, 2020. https://doi.org/10.1016/S0140-6736(20)30183-5.
- 8. Hui DS. Epidemic and Emerging Coronaviruses (Severe Acute Respiratory Syndrome and Middle East Respiratory Syndrome). Clin Chest Med. 2017 Mar;38(1):71-86.
- 9. Lu X, Zhang L, Hui, D, et al. SARS-CoV-2 Infection in Children. N Engl J Med. 2020 Mar 18.
- 10. Mithal LB, Machut KZ, Muller WJ, et al. SARS-CoV-2 infection in infants less than 90 days old. J Pediatr 2020 Jun 18.
- 11. Parri N, Lenge M, Buonsenso D; et al. Children with Covid-19 in Pediatric Emergency Departments in Italy. N Engl J Med. 2020 May 1.
- 12. Paules CI, Marston HD, Fauci AS. Coronavirus Infections More Than Just the Common Cold. JAMA, Published online January 23, 2020.
- 13. Ruiyun Li, Sen Pei, Bin Chen, et al. Substantial undocumented infection facilitates the rapid dissemination of novel coronavirus (SARS-CoV2). Science 10.1126/science.abb3221

- 14. Shekerdemian LS, Mahmood NR, Wolfe KK, et al. Characteristics and outcomes of children With Coronavirus Disease 2019 (COVID-19) infection admitted to US and Canadian pediatric intensive care units. JAMA Pediatr.2020 May 11.
- 15. Song W, Li J, Zou N, et al. Clinical features of pediatric patients with coronavirus disease (COVID-19). J Clin Virol. 2020 Apr 24;127:104377.
- 16. Song Z, Xu Y, et.al. From SARS to MERS, thrusting coronaviruses into the spotlight. Viruses. 2019 Jan 14;11(1).
- 17. Tagarro A., Epalza C., Santos M., et al. Screening and severity of Coronavirus Disease 2019 (COVID-19) in children in Madrid, Spain. JAMA Pediatr. 2020 Apr 8:e201346.
- 18. Yu IT, Li Y, Wong TW, et al. Evidence of airborne transmission of the severe acute respiratory syndrome virus. N Engl J Med. 2004;350(17):1731-1739.

AUTHOR AND COPYRIGHT

Author: Barton D. Schmitt, MD, FAAP

Copyright: 1994-2020, Schmitt Pediatric Guidelines LLC. All rights reserved.

Company: Schmitt-Thompson Clinical Content

Content Set: Office Hours Telephone Triage Protocols | Pediatric

Version Year: 2020

Last Revised: 7/10/2020 **Last Reviewed:** 7/9/2020