
Coronavirus (COVID-19) - Diagnosed or Suspected

Office Hours Telephone Triage Protocols | Pediatric | 2020

DEFINITION

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

- Diagnosis was confirmed by positive lab test OR
- Clinical diagnosis (suspected diagnosis) was made by HCP OR
- Parent or patient suspects COVID-19 based on symptoms consistent with COVID-19 AND widespread prevalence in their community. In areas with major community spread, lab test confirmation will mainly be indicated on patients who need hospitalization.
- **Updated: 4/1/2020**
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Note to Triager - Protocol Choice for Suspected COVID-19:

- During **major community spread** of COVID-19, patients with fever and/or cough can be presumed to have COVID-19. Use the COVID-19 protocols for these patients, not Cough or Fever protocols.
- The best COVID-19 protocol choice also depends on the **public health department (PHD)** recommendations and **testing availability** in the patient's community.
- If PHD does not recommend testing on all suspected COVID-19 patients and/or if testing is not readily available, use the Coronavirus (COVID-19) Diagnosed or Suspected protocol.
- If PHD recommends testing on all suspected COVID-19 patients and testing is readily available, use the Coronavirus (COVID-19) Exposure protocol.

TRIAGE ASSESSMENT QUESTIONS

Call EMS 911 Now

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

See More Appropriate Protocol

- [1] COVID-19 suspected AND [2] mild symptoms AND [3] PHD recommends testing for all suspected patients (Reason: testing sites readily available and PHD trying to determine prevalence)

Go to Protocol: Coronavirus (COVID-19) - Exposure (Pediatric)

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

Go to Protocol: Coronavirus (COVID-19) - Exposure (Pediatric)

Go to ED Now

- Difficulty breathing confirmed by triager BUT not severe (includes tight breathing and hard breathing)

R/O: pneumonia

- Ribs are pulling in with each breath (retractions)

R/O: pneumonia

- Age < 12 weeks with fever 100.4 F (38.0 C) or higher rectally

R/O: sepsis

- SEVERE chest pain (excruciating)

R/O: pneumonia, pleurisy

- Child sounds very sick or weak to the triager

Reason: severe acute illness or serious complication suspected

Discuss with PCP and Callback by Nurse within 1 Hour

- Wheezing confirmed by triager

- Rapid breathing (Breaths/min > 60 if < 2 mo; > 50 if 2-12 mo; > 40 if 1-5 years; > 30 if 6-11 years; > 20 if > 12 years)

R/O: respiratory distress. (Caution: Do not attribute abnormal RR to fever)

- MODERATE chest pain that keeps from taking a deep breath

R/O: pneumonia, pleurisy

- Lips or face have turned bluish BUT only during coughing fits

R/O: need for oxygen

- Fever > 105 F (40.6 C) by any route OR axillary > 104 F (40 C)

R/O: serious bacterial infection

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

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

- Age < 3 months with lots of coughing

R/O: pneumonia

- Crying that cannot be comforted lasts > 2 hours

R/O: severe otitis

- HIGH-RISK patient (e.g., immuno-compromised, lung disease, on oxygen, heart disease, bedridden, etc)

Discuss with PCP and Callback by Nurse Today

- Continuous coughing keeps from playing or sleeping AND no improvement using cough treatment per protocol
- Fever returns after gone for over 24 hours AND symptoms worse or not improved
R/O: otitis media or sinusitis
- Fever present > 3 days (72 hours)
R/O: bacterial superinfection - usually otitis media
- Earache or ear discharge also present
R/O: otitis media
- Age > 5 years with sinus pain around cheekbone or eye (not just congestion) and fever
R/O: sinusitis

Home Care

- [1] COVID-19 infection diagnosed or suspected AND [2] mild symptoms (fever or cough) BUT [3] no trouble breathing or other serious symptoms
- COVID-19 Home Isolation, questions about
- COVID-19 Prevention, questions about
- COVID-19 Testing, questions about
- COVID-19, questions about

HOME CARE ADVICE

COVID-19 Infection with Mild Symptoms

1. **Reassurance and Education - COVID-19 with Mild Symptoms:**
 - Your child has been diagnosed as probably having COVID-19 OR
 - You suspect COVID-19 because it is widespread in your community and your child has developed symptoms that match (cough and/or fever).
 - Your child probably did not receive a lab test for COVID-19. It doesn't matter. Most infections are mild, especially in children.
 - The symptoms are mild. They stay that way for over 80% of people.
 - Here's some care advice to help your child and to help prevent others from getting sick.
2. **Treatment of Symptoms:**
 - The treatment is the same whether you have COVID-19, influenza or some other respiratory virus.
 - The only difference for COVID-19 is you need to stay on home isolation until you recover. Reason: You want to protect other people from getting it.
 - Treat the symptoms that are bothering you the most.
 - There is no anti-viral medication for treating COVID-19.

- Antibiotics are not helpful for viral infections.
 - You don't need to call or see your doctor unless you develop trouble breathing or become worse in any other way.
3. **Fever Treatment:**
 - For fever above 102 F (39 C), you may use acetaminophen or ibuprofen if the patient is uncomfortable. (See Dosage table).
 - For fevers 100-102 F (37.8 to 39 C), fever medicines are not needed. Reason: Fever turns on your body's immune system. Fever helps fight the infection.
 - Exception: if the patient also has pain, treat it.
 - Fluids: Offer cool fluids in unlimited amounts. Reason: prevent dehydration. Staying well hydrated helps the body sweat and give off heat.
 - Note to triager about ibuprofen concerns: Discuss only if caller brings up concerns about ibuprofen. Response: The CDC, WHO, AAP and other experts continue to support the use of ibuprofen (if needed) for patients with COVID-19. They found no scientific evidence to support the claim that ibuprofen made this disease worse.
 4. **Homemade Cough Medicine:**
 - **Age:** 3 Months to 1 year:
 - Give warm clear fluids (e.g., apple juice or lemonade) to thin the mucus and relax the airway. Dosage: 1-3 teaspoons (5-15 ml) four times per day.
 - Note to Triager: Option to be discussed only if caller complains that nothing else helps: Give a small amount of corn syrup. Dosage: 1/4 teaspoon (1 ml). Can give up to 4 times a day when coughing. Caution: Avoid honey until 1 year old (Reason: risk for botulism).
 - **Age 1 year and older:** Use **Honey** 1/2 to 1 tsp (2 to 5 ml) as needed as a homemade cough medicine. It can thin the secretions and loosen the cough. (If not available, can use corn syrup.) OTC cough syrups containing honey are also available. They are not more effective than plain honey and cost much more per dose.
 - **Age 6 years and older:** Use **Cough Drops** (throat drops) to decrease the tickle in the throat. If not available, can use hard candy. Avoid cough drops before 6 years. Reason: risk of choking.
 - OTC cough medicines are not recommended. (Reason: no proven benefit for children.) Honey has been shown to work better.
 - Don't use OTC cough medicines under 6 years of age. Reason: Cough is a protective reflex.
 5. **Home Isolation Is Needed:**
 - Isolation means separating sick people with a contagious disease from people who are not sick. (CDC) That means stay at home.
 - Isolate the sick patient. Reason: They are contagious and can spread their infection to others.
 - Other family members should also stay at home on quarantine. Living with a suspected COVID-19 patient implies close contact has occurred.
 - Do Not allow any visitors. (such as friends)
 - Do Not go to school or work.
 - Do Not go to stores, restaurants, places of worship or other public places.
 - Avoid public transportation or ride sharing.
 - The patient needs to stay at home but does not need to be confined to a single room. Preventing spread of respiratory infections within a home is nearly impossible. The sick person should try to avoid very close contact with other family members. That includes hugging, kissing, sitting next to or sleeping in the same bed.
 - None of this is realistic for young children.
 - In addition, many families have limited options. Therefore, triagers should individualize their recommendations for isolation after discussing it with the caller.
 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 available) if you have to leave your home (such as going to a medical facility). Always call first to get approval and careful directions.

7. Call Back If:

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

COVID-19 Home Isolation Questions

1. Home Isolation Is Needed for Those who are Sick:

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

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

- Stay home from school or work if you are sick. Your doctor or local health department will tell you when it is safe to return.
- Cough and sneeze into your shirt sleeve or inner elbow. Don't cough into your hand or the air.
- If available, sneeze into a tissue and throw it into trash can.
- Wash hands often with soap and water. After coughing or sneezing are important times.
- Don't share glasses, plates or eating utensils.
- Wear a face mask when around others.
- Always wear a face mask (if available) if you have to leave your home (such as going to a medical facility). Always call first to get approval and careful directions.

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

- Fever gone for at least 72 hours (3 full days) off fever-reducing medicines AND
- Cough and other symptoms must be improved AND
- Symptoms started more than 7 days ago.
- If unsure it is safe for you to leave isolation, check the CDC website or call your PCP.

4. Call Back If:

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

COVID-19 Prevention Questions

1. **COVID-19 - How to Protect Yourself and Family from Catching It:**
 - Avoid any contact with people known to have COVID-19 infection. Avoid talking to or sitting close to them.
 - Social Distancing: Try to stay at least 6 feet 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 becomes widespread in your community, try to stay 6 feet away from everyone outside your family unit.
 - 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.
 - Being outdoors for exercise is generally safe. Follow social 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.
 - Avoid ERs and urgent care clinics if you don't need to go there. These are places where you are likely to be exposed to infections.
 - Masks: The CDC does not recommend wearing a face mask, unless you are sick.
2. **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.
3. **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".
 - Go to a park if you have one. Being in nature is good for your immune system.
 - 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.
 - Use regular phone calls and video chats to stay in touch with those you love.
4. **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 available) if you have to leave your home (such as going to a medical facility). Always call first to get approval and careful directions.
5. **Breastfeeding and COVID-19:**
 - Breastfeeding experts recommend you continue to breastfeed even if you are sick with COVID-19.

- Wash your hands before feeding your baby.
- The CDC recommends to wear a mask if available. Be careful to avoid coughing on your baby.
- Breastmilk gives beneficial antibodies your body is making against this illness to your baby. This should provide some protection against this illness for your baby, like it does for influenza and most other viral illnesses.
- The virus is probably not passed through breastmilk, but this is not yet known for sure.

6. **Call Back If:**

- Your child becomes worse
- You have other questions

COVID-19 Testing Questions

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

- Tests for COVID-19 are only done on people who are sick (have a fever OR cough) AND also have a health history that puts them at definite risk for having COVID-19. That mainly means close contact with someone who has lab confirmed or suspected COVID-19 disease.
- As community spread increases, who needs testing change.
- When cases of COVID-19 are everywhere, testing becomes pointless on mildly ill patients. Testing will mainly be helpful for patients who need admission to the hospital.
- Testing requires a doctor's order (as with all medical tests).
- Testing is performed on fluid collected on a throat swab and/or nasal swab.
- Swab specimens are then sent to a lab.
- The results become available in 24-72 hours. Faster tests are being developed.
- Caution: Once there is widespread community transmission, testing is not done on exposed people who don't have serious symptoms.

2. **Testing Sites for Specimen Collection:**

- Swabs of the throat and/or nose will only be collected on people who have a doctor's order.
- People cannot walk in and request a COVID-19 test.
- Specimen collection sites vary from city to city. Your local health department may operate drive through sites.
- In general, they are not done in medical offices or clinics.
- If you are sent to have a COVID-19 test done, go to the site recommended by your local health department, nurse advice line, or PCP.
- Caution: Don't go to an ER, other health facility or testing site without a doctor's order. If you do, you will not receive a test. And you may be exposed to patients who have COVID-19.

3. **Call Back If:**

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

COVID-19 FAQs

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

- Nurse call centers and doctors' offices are overloaded with calls. They need to keep their lines open for sick patients.
- 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:**

- 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.
3. **COVID-19 Symptoms:**
 - COVID-19 coronavirus causes a respiratory illness. The most common symptoms are fever, cough and shortness of breath.
 - Less common symptoms are body aches, chills, diarrhea, headache, runny nose, and sore throat.
 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.
 - 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 (<https://www.cdc.gov/coronavirus/2019-ncov/travelers>) 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. **Breastfeeding and COVID-19:**
 - Breastfeeding experts recommend you continue to breastfeed even if you are sick with COVID-19.
 - Wash your hands before feeding your baby.
 - The CDC recommends to wear a mask if available. Be careful to avoid coughing on your baby.
 - Breastmilk gives beneficial antibodies your body is making against this illness to your baby. This should provide some protection against this illness for your baby, like it does for influenza and most other viral illnesses.
 - The virus is probably not passed through breastmilk, but this is not yet known for sure.
 8. **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.
 - Expected Course of the Infection: 80% have a mild illness, much like normal flu or a bad cold. The symptoms usually last 2 weeks.
 - No Symptom Patients: An unknown percentage of infected patients have no symptoms.
 - Complications: 20% have a more severe illness with 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.
 - Death rate: currently estimated at 0.5 to 2% (CDC) of all infected patients.

- Children generally have a mild illness and recover. Older adults, especially those with chronic lung disease or weak immune systems, have the highest death rates.
- Vaccine: There currently is no vaccine to prevent COVID-19. Many labs are working on developing a vaccine, but that will take at least a year.
- Treatment: Currently, there is no effective anti-viral medication for coronavirus. Treatment is supportive. Oxygen and IV fluids are used for hospitalized patients.

9. **Call Back If:**

- You have other questions

FIRST AID

N/A

BACKGROUND INFORMATION

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

ED Referrals - Triager Should First Notify ED

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

ED Referrals - Triager Instructions for the Caller

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

EMS (911) Referrals - Triager Instructions for the Caller

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

COVID-19 FAQs:

COVID-19 Outbreak

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COVID-19 Symptoms

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- Less common symptoms are body aches, chills, diarrhea, headache, runny nose, and sore throat.

COVID-19 - Other Facts

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- No Symptom Patients: An unknown percentage of infected patients have no symptoms.
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- Death rate: currently estimated at 0.5 to 2% (CDC) of all infected patients.
- Children generally have a mild illness and recover. Pediatric deaths are rare. Older adults, especially those with chronic lung disease or weak immune systems, have the highest death rates.
- Vaccine: There currently is no vaccine to prevent COVID-19. Many labs are working on developing a vaccine, but that will take at least a year.
- Treatment: Currently, there is no effective anti-viral medication for coronavirus. Treatment is supportive. Oxygen and IV fluids are used for hospitalized patients.

COVID-19 - CDC Definition of Exposure (Close Contact)

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

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.

Ibuprofen (or 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.

Concerns About Positive Lab Test for the Common Coronavirus that Causes Colds

- There are many strains of coronaviruses. Most of them cause the common cold.
- Older viral respiratory panels only tested for the "common" coronavirus.
- Common coronavirus strains usually don't cause serious illness in healthy children.

Other Coronaviruses in Humans

- MERS-CoV: Middle East Respiratory Syndrome (MERS)
- SARS-CoV: Severe Acute Respiratory Syndrome (SARS)
- Of note, neither of these viruses had a major impact on the pediatric population.
- Common coronaviruses causing colds and upper respiratory symptoms that are identified in currently available commercial respiratory testing panels are different than COVID-19 addressed in this guideline.

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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