

# Provincial Primary Care COVID-19 Pediatric Pathway

\*Pathway is being continually reviewed and updated as required

Quick links:

[Expanded details](#)

[Provider resources](#)

[Patient resources](#)

Rapid deterioration is most common during the second week after symptom onset

Confirmed or suspected COVID-19 pediatric patient. Establish/confirm date of symptom onset

## Risk stratify patient

**High risk:** Monitor Q daily x 14 days

**Average risk:** Monitor and reassess Q2 days x 14 days  
Caregivers should have information on self-managing symptoms, with action plan for deterioration

High risk: Defined as any of the following:

- Age < 1 year
- Underlying conditions including:
  - Immunocompromise
  - Comorbidities including heart disease, lung disease, neurological disease, diabetes mellitus

[Patient Resources](#)

[Self-manage \(RAG Tools\)](#)

## Clinical assessment

Determine health status today. Consider safety net flags during assessment. Reinforce isolation requirements.

[Clinical assessment](#)

[Safety net flags](#)

[Isolation & Quarantine Info](#)

High clinical concern

Screen for red flags

[Red flags](#)

Flags present

Patient requires in-person assessment  
**EMERGENT patient:**  
- Activate EMS by calling RAAPID/911  
**URGENT patient:**  
- Call RAAPID

[More info](#)

No flags present

Follow up in 24 hrs to reassess  
For specific concerns related to pediatric COVID-19 management, consider advice from on-call specialist (by zone):  
**Calgary** - Alberta Children's Hospital (403-955-7211, ask for Pediatric ID)  
**Central** - Red Deer Regional Hospital Centre (403-343-4422)  
**Edmonton** - Stollery Children's Hospital (780-407-8822)  
**North** - use ConnectMD  
**South (Chinook)** - 1. Chinook Regional Hospital (403-388-6111)  
2. Alberta Children's Hospital (403-955-7211, ask for Pediatrics ID)

[ConnectMD tele-advice](#)

[On-call options](#)

Moderate or low clinical concern

Does anyone else in household have COVID-19 symptoms?

Yes

If caregiver is ill and alternative caregiver not present, this is a high risk social situation: Requires evaluation, close follow-up and supports

[More info](#)

When patient is stable

## Expanded Details

This pathway is intended to be followed for pediatric patients who are confirmed or suspected COVID-19 positive.

### Core COVID-19 symptoms

- Cough
- Fever
- Shortness of breath
- Loss of sense of taste or smell

### Other COVID-19 symptoms

- Sore throat
- Runny or stuffy nose
- Painful swallowing
- Chills
- Headache
- Muscle or joint aches
- Feeling unwell or fatigue
- Nausea, vomiting, diarrhea or unexplained loss of appetite
- Conjunctivitis (commonly known as pink eye)

Source: [Symptoms and testing | Alberta.ca](https://www.alberta.ca/symptoms-and-testing.aspx)

### Clinical assessment (apply as appropriate based on patient's age)

#### • Central Nervous System

- Is the child their normal self in between the fever episodes?
- Does the child seem lethargic?

#### • Respiratory

- Is the child breathing faster than usual?
- Are the muscles over the child's ribs or neck pulling in when they breathe?
- Is the child's nose flaring when breathing?
- Is the child grunting?
- Is the child blue around or inside the mouth?

#### • Dehydration

- Does the child have any vomiting or diarrhea?
- When the child cries, do they make tears?
- Has there been a change in the number of wet diapers or the number of times the child urinates?
- Is the child able to tolerate fluid intake well?

#### • General

- Does the child have a new rash?
- Are the child's eyes red even between fever episodes?
- Are the child's lips or tongue more red than usual?

### Safety Net Flags

- Socially isolated
- Lack of caregiver support (e.g. caregiver also has suspected or confirmed COVID-19)
- Inability to maintain hydration (e.g. vomiting, diarrhea, poor fluid intake, cognitive impairment)
- Food/financial insecurity
- Challenges with health literacy
- Concerns with ability to manage pediatric patient



## Red flags

- Respiratory distress: tachypnea, cyanosis, indrawing, accessory muscle use, grunting
- New onset of acute GI symptoms: abdominal pain, vomiting, diarrhea
- Reduced urine output or signs of dehydration
- Rash, non-purulent conjunctivitis, or muco-cutaneous inflammation
- Fever with temperature > 38 C for three consecutive days or more
- Signs of shock: lethargy, non-responsiveness, altered mental status

## Emergent patient

- Respiratory: cyanosis, indrawing with accessory muscle use, grunting
- Signs of shock: lethargy, non-responsiveness, altered mental status

## Urgent patient

- Respiratory: tachypnea
- New onset of acute GI symptoms: abdominal pain, vomiting, diarrhea
- Reduced urine output or signs of dehydration
- Rash, non-purulent conjunctivitis, or muco-cutaneous inflammation
- Fever with temperature > 38 C for three consecutive days or more

## Multisystem Inflammatory Syndrome in Children (MIS-C):

Children and adolescents can develop a severe inflammatory syndrome thought to follow exposure to COVID-19 which has features similar to Kawasaki Disease and/or Toxic Shock Syndrome (TSS). Vigilance for this uncommon but serious disease is critically important.

### Resources:

[Multisystem Inflammatory Syndrome in Children \(MIS-C\) Associated with COVID \(acfp.ca\)](#)

[Public health disease management guidelines : Multisystem Inflammatory Syndrome in Children and Adolescents \(MIS-C\) - Open Government \(alberta.ca\)](#)

Level of Management	Clinical Presentation	Available Support and Resources
<b>EMERGENT management:</b>	<b>Clinical Presentation:</b> <ul style="list-style-type: none"><li>• Respiratory: cyanosis, indrawing with accessory muscle use, grunting</li><li>• Signs of shock: lethargy, non-responsiveness, altered mental status</li></ul>	<b>Call 9-1-1</b>
<b>URGENT &lt;1-hours assessment</b>	<b>Clinical Presentation:</b> <ul style="list-style-type: none"><li>• Respiratory: tachypnea</li><li>• New onset of acute GI symptoms: abdominal pain, vomiting, diarrhea</li><li>• Reduced urine output or signs of dehydration</li><li>• Rash, non-purulent conjunctivitis, or muco-cutaneous inflammation</li><li>• Fever with temperature &gt; 38 C for three consecutive days or more</li></ul>	<b>Call RAAPID</b>  <b>RAAPID North (for patients north of Red Deer):</b> 1-800-282-9911 or 780-735-0811  <b>RAAPID South (for patients south of Red Deer):</b> 1-800-661-1700 or 403-944-4486  <b>RAAPID website:</b> <a href="#">RAAPID   Alberta Health Services</a>

[Continued on next page]



Level of Management	Clinical Presentation	Available Support and Resources
<b>ON-CALL advice</b>	<ul style="list-style-type: none"> <li>For specific concerns related to COVID-19 management, consider advice from on-call specialist</li> </ul>	<p><b>On-Call Specialist</b></p> <p><b>Calgary Zone</b> Alberta Children's Hospital - ask for Pediatric ID 403-955-7211</p> <p><b>Central Zone</b> Red Deer Regional Hospital Centre 403-343-4422</p> <p><b>Edmonton Zone</b> Stollery Children's Hospital 780-407-8822</p> <p><b>South Zone (Chinook PCN)</b></p> <ol style="list-style-type: none"> <li>Chinook Regional Hospital 403-388-6111</li> <li>Alberta Children's Hospital - ask for Pediatric ID 403-955-7211</li> </ol>
<p><b>NON-URGENT daytime advice:</b></p> <p>Connects family physicians and specialists (including pediatricians) in real time via a tele-advice line</p>	<ul style="list-style-type: none"> <li>For concerns about COVID-19 management or questions about the status of a child</li> </ul>	<p><b>Contact Connect MD</b> (North, Edmonton &amp; Central Zones)</p> <p>Visit <a href="#">ConnectMD</a> or call/text: 1-844-633-2263</p> <ul style="list-style-type: none"> <li>Hours: Monday to Thursday, 9 a.m. to 6 p.m. and Fridays, 9 a.m. to 4 p.m. (except statutory holidays) *Summer hours: Monday 10 a.m - 4 p.m.; Friday 9 a.m - 2p.m; other days same as above</li> <li>Providers can expect to receive a call-back <b>within two to three hours</b></li> <li>Adult and pediatric tele-advice lines</li> </ul> <p><b>Specialist LINK Note:</b></p> <ul style="list-style-type: none"> <li>Specialist LINK does not offer COVID-19 pediatric advice. Please refer to on-call options above or other local resources.</li> <li>For general pediatric questions (not COVID-19 related), you can access community pediatrician through <a href="http://www.specialistlink.ca">www.specialistlink.ca</a> (Calgary Zone only)</li> </ul>
<p><b>NON-URGENT advice:</b></p>	<ul style="list-style-type: none"> <li>You have non-urgent pediatric COVID-related questions and require electronic advice</li> </ul>	<p><b>Alberta Netcare eReferral Advice</b></p> <ul style="list-style-type: none"> <li>Use the eReferral Advice Request option for non-urgent questions requiring <b>advice within 2-5 days</b>.</li> <li>Go to <a href="http://www.albertanetcare.ca/eReferral.htm">www.albertanetcare.ca/eReferral.htm</a> for instructions on how to submit an advice request.</li> </ul>



## High risk social situation

In a situation where the only available caregiver of a pediatric patient may be unable to provide enough support because they also have COVID-19 or other barriers or struggles, consider the following options:

- Seeking assistance from a PCN/other social worker to help address safety net flags
- Directing the household to 211 Alberta ([www.ab.211.ca](http://www.ab.211.ca)) for links and live online chat; call 2-1-1, text 2-1-1)
- Referring the household to Children's Services: <https://www.alberta.ca/childrens-services-office-locations.aspx>

## Isolation and Quarantine Information

Visit [Isolation and quarantine requirements | Alberta.ca](#) for the most up-to-date information on isolation and quarantine.

Respiratory hygiene practices (e.g. hand washing, covering your cough, social distancing, wearing a mask, etc.) continue to be strongly encouraged. Visit [COVID-19 Prevention & Protection | AHS](#) for more information.

### A. Isolation for children who attend school

Please refer to [COVID-19 Symptoms, About COVID-19, Spread | Alberta Health Services](#) for information about symptoms, isolation, and testing for children and adults.

### B. Talking to children about isolation at home for COVID-19

- Let children know that they are safe. The overwhelming majority of children will only have symptoms of the common cold, if they have any symptoms at all
- Remind children that it is important to prevent germs from spreading every day. They can do this by washing their hands often, covering their mouths when coughing or sneezing, and not sharing their food or drinks. When someone at home is sick, it is extra important to follow this plan.
- Remind children that the purpose of wearing a mask is to help stop the spread of germs. Let them know that the mask is only temporary and soon the household will return to "mask-free" with a usual home routine. Let children know they do NOT have to wear a mask while sleeping
- Listen to children's questions and concerns. They may have unique concerns, fears, or worries that caregivers do not think about
- Continue to provide physical comfort to children who are isolating if they need it, such as cuddles and hugs. It is best to avoid kisses since this is a higher risk for transmitting the virus between people



## Staying safe and healthy this school year

The Government of Alberta has updated their "Preparing for the new school year" webpage for parents, students and school staff about what to expect in schools. This page is now called "Staying safe and healthy this school year".

Webpage: <https://www.alberta.ca/k-12-learning-during-covid-19.aspx>

## For symptoms persisting longer than 14 days from onset

Patients should continue to be monitored until symptom resolution. If the patient remains symptomatic after 10 days, they should be monitored for an additional four days – a total of two weeks after symptoms started. It is recommended that they continue to isolate.

If patient remains symptomatic two weeks after date of onset of symptoms, contact [Specialist LINK](#) (Calgary & South Zones) or [ConnectMD](#) (Central, Edmonton & North Zones) for advice on further investigations and management.



## BACKGROUND

### About this pathway

The Provincial Primary Care COVID-19 Pediatric Pathway was originally developed in 2020 as part of the Calgary Zone's Specialist LINK initiative. Due to the reopening of schools across Alberta in fall 2020, a team that included specialists from Pediatrics, Infectious Disease, AHS Primary Health Care, family physicians, Primary Care Networks (PCNs) and members of the Calgary Zone Specialty Integration Task Group developed this pathway to help support family doctors to care for pediatric patients with COVID-19 in the community.

### Authors and conflict of interest declaration

Names of participating reviewers and their conflict of interest declarations are available on request.

### Pathway review process, timelines

This primary care pathway was created with up to date knowledge at the time it was created (August 2021). It will be reviewed on a consistent basis as the knowledge and process base evolves. If you have concerns or feedback please email [phc@ahs.ca](mailto:phc@ahs.ca) and enter 'COVID-19 pediatric pathway feedback' in the subject line.

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## PROVIDER RESOURCES

COVID-19 Resources	
Greenhalgh Trisha, Koh Gerald Choon Huat, Car Josip. Covid-19: a remote assessment in primary care <i>BMJ</i> 2020; 368:m1182	<a href="https://www.bmj.com/content/bmj/368/bmj.m1182.full.pdf">https://www.bmj.com/content/bmj/368/bmj.m1182.full.pdf</a>
Information for Primary Care Providers: novel coronavirus (COVID-19)	<a href="https://www.albertahealthservices.ca/topics/Page16956.aspx">https://www.albertahealthservices.ca/topics/Page16956.aspx</a>
Specialist LINK COVID-19 Resources	<a href="https://www.specialistlink.ca/covid-19-resources">https://www.specialistlink.ca/covid-19-resources</a>
Scientific Advisory Group	<a href="https://www.albertahealthservices.ca/topics/Page17074.aspx">https://www.albertahealthservices.ca/topics/Page17074.aspx</a>
Long COVID-19 FAQ for Providers	<a href="https://www.albertahealthservices.ca/assets/info/ppih/if-ppih-covid-19-long-covid-provider-faq.pdf">https://www.albertahealthservices.ca/assets/info/ppih/if-ppih-covid-19-long-covid-provider-faq.pdf</a>
Alberta Public Health Disease Management Guidelines	
Alberta Public Health Disease Management Guidelines: coronavirus- COVID-19	<a href="https://open.alberta.ca/publications/coronavirus-covid-19">https://open.alberta.ca/publications/coronavirus-covid-19</a>
Smoking, Vaping and COVID-19	
Smoking cessation: healthcare provider	<a href="https://www.albertaquits.ca/">COVID-19   Alberta Healthcare Providers (www.albertaquits.ca)</a>
Post-COVID-19 Resources	
Recovery & Rehabilitation After COVID-19: Resources for Health Professionals	<a href="https://www.albertahealthservices.ca/topics/Page17540.aspx">https://www.albertahealthservices.ca/topics/Page17540.aspx</a>
Rehabilitation and Allied Health Practice Considerations Post COVID-19	<a href="https://www.albertahealthservices.ca/assets/info/ppih/if-ppih-covid-19-rehab-allied-health-practice-considerations-post-covid.pdf">https://www.albertahealthservices.ca/assets/info/ppih/if-ppih-covid-19-rehab-allied-health-practice-considerations-post-covid.pdf</a>
COVID-19 Vaccine Awareness Program (CVAP)	
Physicians who have called patients via telephone or videoconference to address concerns related to COVID-19 Vaccine may claim HSC 03.01CC. Click on link for more information.	<a href="https://open.alberta.ca/publications/bulletin-alberta-health-care-insurance-plan-medical-services">Med 248 : COVID-19 Vaccine Awareness Program Update   https://open.alberta.ca/publications/bulletin-alberta-health-care-insurance-plan-medical-services</a>
Advanced Care Planning	
Advanced care planning	<a href="https://www.albertahealthservices.ca/info/Page9099.aspx">https://www.albertahealthservices.ca/info/Page9099.aspx</a>





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COVID-19 Websites & Self-Management Resources	
Navigating COVID: Symptom Tool	<a href="https://www.albertadoctors.org/COVID-19-info-resources/navigating-covid.pdf">https://www.albertadoctors.org/COVID-19-info-resources/navigating-covid.pdf</a>
COVID-19: Information for Albertans (AHS)	<a href="https://www.albertahealthservices.ca/topics/Page16944.aspx">https://www.albertahealthservices.ca/topics/Page16944.aspx</a>
COVID-19 info for Albertans (Government of Alberta)	<a href="https://www.alberta.ca/coronavirus-info-for-albertans.aspx">https://www.alberta.ca/coronavirus-info-for-albertans.aspx</a>
COVID-19: How to Manage Symptoms (MyHealth.Alberta.ca Network)	<a href="https://myhealth.alberta.ca/health/pages/conditions.aspx?Hwid=custom.ab_covid_19_symptom_mgmt_001">https://myhealth.alberta.ca/health/pages/conditions.aspx?Hwid=custom.ab_covid_19_symptom_mgmt_001</a>
COVID-19: Care Instructions (MyHealth.Alberta.ca Network)	<a href="https://myhealth.alberta.ca/health/pages/conditions.aspx?Hwid=custom.ack9673ahs">https://myhealth.alberta.ca/health/pages/conditions.aspx?Hwid=custom.ack9673ahs</a>
COVID-19: What you need to know (MyHealth.Alberta.ca Network)	<a href="https://myhealth.alberta.ca/Alberta/Pages/COVID-What-you-need-to-know.aspx">https://myhealth.alberta.ca/Alberta/Pages/COVID-What-you-need-to-know.aspx</a>
COVID-19 Self-Care Guide	<a href="https://www.ahs.ca/covidselfcare">https://www.ahs.ca/covidselfcare</a>
After COVID-19: Information and resources to help you recover	<a href="https://myhealth.alberta.ca/HealthTopics/After-COVID">https://myhealth.alberta.ca/HealthTopics/After-COVID</a>
Post-COVID-19 Resources	
Getting Healthy After COVID-19	<a href="https://www.albertahealthservices.ca/topics/Page17397.aspx">https://www.albertahealthservices.ca/topics/Page17397.aspx</a>
COVID-19 Translated Resources	
COVID-19: How to care for a COVID-19 Patient at Home (available in different languages)	<a href="https://www.albertahealthservices.ca/topics/Page17026.aspx">https://www.albertahealthservices.ca/topics/Page17026.aspx</a>
Translated resources: COVID-19 videos, webinars, podcasts available in multiple languages	Alberta International Medical Graduates Association: <a href="https://aimga.ca/healthhub/">https://aimga.ca/healthhub/</a>
Mental Health Resources	
Mental Health resource page	<a href="https://www.albertahealthservices.ca/topics/Page17311.aspx">https://www.albertahealthservices.ca/topics/Page17311.aspx</a>
Mental Health Helpline	<p><b>Adult Helpline:</b> Phone 1-877-303-2642 for 24/7 assistance</p> <p><b>Kids' Help Phone:</b> text CONNECT to 686868 or call 1-800-668-6868. This 24/7, free service offers professional counselling, information and referrals.</p>
Jack.org Alberta COVID-19 Youth Mental Health Resource Hub	Information for teens on mental health, self-care and supporting others. <a href="https://jack.org/Resources/ABHub">https://jack.org/Resources/ABHub</a>
Help in Tough Times – resource page	<a href="https://www.ahs.ca/helpintoughtimes">https://www.ahs.ca/helpintoughtimes</a>
Togetherall	Clinically moderated free online peer-to-peer mental health community. <a href="https://togetherall.com/en-ca/">https://togetherall.com/en-ca/</a>
Text For Hope Free daily text messaging services	<a href="https://www.albertahealthservices.ca/topics/Page17019.aspx">https://www.albertahealthservices.ca/topics/Page17019.aspx</a>



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Smoking Cessation Resources	
Smoking cessation	There is increasing evidence that smoking cessation may help to reduce the impact of COVID-19. <a href="https://www.albertaquits.ca/topics/smoking-vaping-covid-19">https://www.albertaquits.ca/topics/smoking-vaping-covid-19</a>
Advanced Care Planning	
Advanced care planning	Patients should also be counseled on advanced care planning, including: choosing an agent, communicating their values and documenting these in a Personal Directive. <a href="http://www.Conversationsmatter.ca">www.Conversationsmatter.ca</a>
School Resources (Government of Alberta)	
COVID-19: Education and child care	<a href="https://www.alberta.ca/covid-19-education-and-child-care.aspx">https://www.alberta.ca/covid-19-education-and-child-care.aspx</a>

