Caring for Children with COVID-19

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Key Points

• COVID-19 virus has a very low infection rate in children estimated at 1-5% worldwide.
• The majority of cases in children are the result of a household transmission by droplet spread from another family member with symptoms of COVID-19.
• Children who are infected with the virus and develop COVID-19 have milder symptoms if any, and very few become critically ill.
• Children with COVID-19 illness typically have a fever, dry cough and fatigue. Some may also experience nausea, vomiting, abdominal pain and diarrhea.
• Unlike adults the rates of transmission are unknown. There is no documented evidence of child-to-adult transmission. There are no documented cases of children bringing an infection into the home, from school or otherwise. This is likely the result of the limited number of cases and the mild symptoms in those who do have COVID illness.
• There is no conclusive evidence that children who are asymptomatic pose a risk to other children or to adults.
• There is no evidence indicating children of HCWs are at increased risk of COVID-19 infection than children of non-HCWs. This is likely due to the careful monitoring of HCWs for symptoms and follow-up of their household contacts.
• Like adults, children with any common cold, influenza or COVID-19 like symptoms should stay home and isolate for 10 days following onset of symptoms and until symptoms resolve.
• More research is needed to fully characterize infection, transmission and COVID-19 disease in children.

COVID-19 Illness in Children

1. Case counts of SARS-CoV2 infection and COVID-19 illness in children are low, representing only 1-5% of confirmed cases worldwide.
2. The severity of disease in children appears to be lower, with only a few documented cases of severe illness and/or death. Younger infants (those <1 year of age) have the highest rates of severe or critical illness.
3. Children are more likely to have few, if any symptoms. Up to 32% of children have been asymptomatic with presumed or confirmed COVID-19.
4. Typically, children with COVID-19 have a fever, dry cough and fatigue. In rare cases, dyspnea and respiratory compromise appear after a week of disease progression. These are associated with systemic symptoms including malaise, restlessness, and poor appetite.
5. Some children experience GI symptoms, including abdominal discomfort, nausea, vomiting, abdominal pain and diarrhea.

**Children and Infectivity**

1. The majority of children with COVID-19 have a positive household contact.
2. The incubation period in children is approximately two days, with a range of 2-10 days (similar to adults). The mean incubation period between household exposure and pediatric symptom onset is approximately 1 day longer than observed in adult cases.
3. Children typically have negative swabs within 6-22 days of symptom onset, but often not until 2 weeks' time. Children have been found to have high viral loads despite mild symptoms, with prolonged shedding in nasal secretions.
4. As a result of the lower symptom burden, the rates of asymptomatic transmission or transmission with mild symptoms are unknown.
5. There is no documented evidence of child-to-adult transmission of SARS-CoV2. This is different than outbreaks of other viruses such as Influenza where children have been found to have a high rate of infection outside of the household and significant inter-generational transmission.
6. It is unlikely the children of health care workers have more frequent COVID-19 than other children, however, no evidence is available.

**Recommendations for care for children with suspected or confirmed cases of COVID-19**

1. Children are at a lower risk of developing COVID-19, including developing severe disease. Most children who have COVID-19 can be cared for at home, with supportive care performed by their parents.
2. Children under 1 year of age and those who are immunocompromised or have pre-existing pulmonary conditions are at a higher risk of severe disease.
3. As for all members of the community at this time, children should physically distance themselves as much as possible outside of the family unit.
4. Children, and particularly young children, who develop fever, cough or shortness of breath should be evaluated, as influenza as well as other viral illnesses are still circulating in B.C. Symptomatic children should be cared for using droplet and contact precautions (with airborne precautions if aerosol generating medical procedures are needed).
5. While evidence is limited at this time, children with COVID-19 may shed the virus for longer than adults.
References


