

# Information Regarding COVID-19 in Children

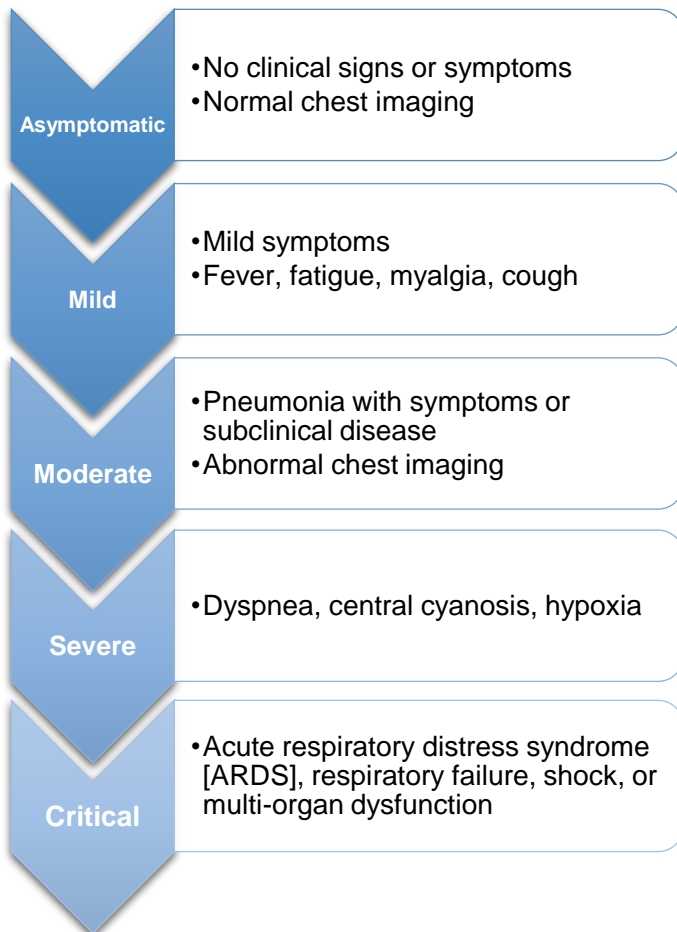
The following information is intended for use by physical therapists, physical therapist assistants, and medical professionals.

## Facts<sup>1</sup>

- Children of all ages can become sick with COVID-19
- Children may show no signs or symptoms of the virus
- CDC reports 2% of confirmed cases are among persons aged <18 years old

## Clinical Course:

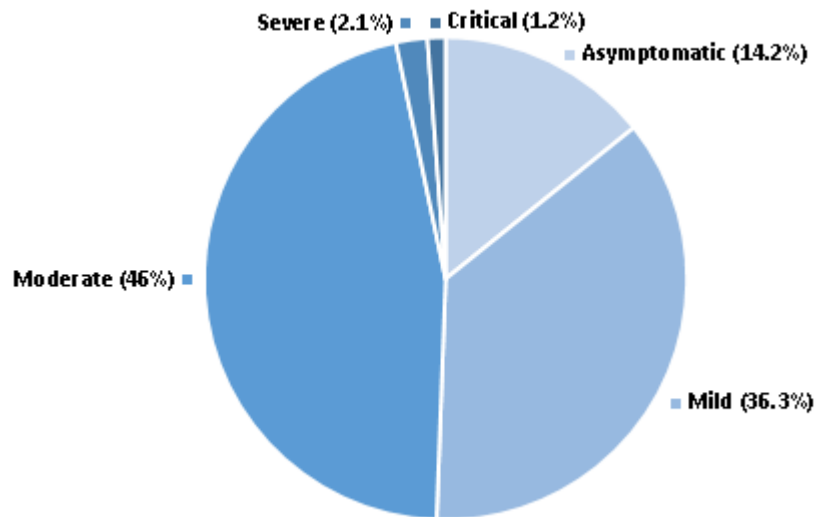
Presentation ranges from asymptomatic to severe/critical<sup>2,3</sup>



## Symptoms in Children<sup>1</sup>

- Fever
- Cough
- Nasal congestion or rhinorrhea
- Sore throat
- Shortness of breath
- Diarrhea (especially in newborns and infants)<sup>2</sup>
- Nausea or vomiting (especially in newborns and infants)<sup>2</sup>
- Fatigue
- Poor feeding or poor appetite
- Headache
- Myalgia

## Severity of Illness by Percentage<sup>2</sup>



### Information Regarding Newborns<sup>4</sup>

- Infants less than 12 months are at higher risk of severe illness from COVID-19 than other children
- Symptoms in Newborns
  - Fever
  - Lethargy
  - Rhinorrhea
  - Cough
  - Tachypnea
  - Increased work of breathing
  - Vomiting
  - Diarrhea
  - Feeding intolerance or decreased intake
- Severe disease requiring mechanical ventilation has been reported
- Full-term infants,  $\geq 37$  weeks may be asymptomatic or have milder symptoms and fewer complications than premature infants
- If a mother is confirmed to have COVID-19, the CDC has recommendations on how to proceed with visitation.

For More Information:

- <https://www.cdc.gov/coronavirus/2019-ncov/hcp/caring-for-newborns.html>

### What is Multisystem Inflammatory Syndrome in Children (MIS-C)?

MIS-C begins weeks after a child is infected with COVID19, potentially even if asymptomatic. The child may also fit criteria for Kawasaki disease.<sup>5</sup>

MIS-C is defined as a person <21 years old with:<sup>5</sup>

- Persistent fever  $>38.0^{\circ}\text{C}$  or higher  
AND
- Signs and symptoms from at least 2 systems (cardiac, GI, renal, hematologic, dermatologic, neurologic, etc.)  
Common Signs Include:
  - Abdominal pain
  - Poor feeding
  - Diarrhea
  - Vomiting
  - Rash
  - Enlarged glands
  - Redness of the eyes
  - Swollen and/or erythematous hands
  - Elevated inflammatory markers

For More Information:

- <https://www.cdc.gov/mis-c/hcp/>
- <https://www.who.int/news-room/commentaries/detail/multisystem-inflammatory-syndrome-in-children-and-adolescents-with-covid-19>
- <https://www.cdc.gov/kawasaki/index.html>

Sources:

1. Center for Disease Control and Prevention (CDC). Care for children. Updated May 29, 2020. Accessed June 1, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/caring-for-children.html>.
2. de Souza TH, Nadal JA, Nogueira RJN, Pereira RM, Brandão MB. Clinical manifestations of children with COVID-19: A systematic review. *Pediatr Pulmonol*. 2020;55(8):1892-1899. doi:10.1002/ppul.24885
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5. Xiong LJ, Zhou MY, He XQ, Wu Y, Xie XL. The Role of Human Coronavirus Infection in Pediatric Acute Gastroenteritis. *Pediatr Infect Dis J*. 2020;39(7):645-649. doi:10.1097/INF.0000000000002752.

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Supported by the APTA Academy of Pediatric Physical Therapy COVID-19 Work Group. Developed by expert contributor: Amanda DiGangi, PT, DPT, Board-Certified in Pediatric Physical Therapy.

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