

# StrongSchoolsNC What Are We Learning About Children and COVID-19?

**LAST UPDATED 9/14/2020** 

We are learning more every day regarding COVID-19 in children. We are using the latest research to help NC make decisions about how we should operate our schools during the COVID-19 pandemic. We will continue to follow new data and science as it is available to learn more. The current research summarized below still presents an early and limited picture of children and schools during the COVID-19 pandemic. Be sure to check back for regular updates by visiting https://www.nc.gov/covid19.

#### Children may be less likely to have and spread COVID-19 than adults, but we are learning more about children's ability to spread the virus

- Children, particularly younger children, may be less likely than adults to become infected with COVID-19, even after being exposed to someone with COVID-19.
- Newer findings suggest that because of mild to no symptoms, there may be an undercount of actual number children infected and more cases in children have been detected recently.
- Children under 10 years of age may be less likely to spread COVID-19 to others than older teens and adults.
- Newer findings suggest that younger children may be able to spread virus more than originally thought
- Children may be more likely to get COVID-19 from an adult than to spread an infection to an adult
- Spread of COVID-19 is more likely within a household than not within a household (such as school)

## Most children have very mild illness with COVID-19, but some have more severe symptoms and we are learning more about children who are at higher risk for infection or more severe illness

- Children infected with COVID-19 generally have mild or no symptoms.
- Although rare, some children can have severe disease, need hospitalization, and have developed multisystem inflammatory syndrome (MIS-C) after exposure to SARS-CoV-2.
- Children with underlying medical conditions are at increased risk of severe illness from COVID-19.
- Our African American and LatinX communities and children are disproportionally affected by COVID-19.

#### Data from other countries, for the most part, does not show a large spread of COVID-19 associated with schools being open for instruction

- International data that are available show limited transmission in schools when a child was infected.
- While there have been some specific examples of spread in school (e.g., Israel), schools have not seemed to play a major role in the spread of COVID-19, especially in areas with low viral transmission.
- Overall, countries that have reopened their schools after infection rates had gone down did not see large rises in infection at a population level.

#### Less than 6 feet of social distancing may still be protective for children

- The CDC still recommends 6 feet of social distancing as the most health-protective distancing.
- However, in low- and medium-risk settings, 3 feet of social distancing may lead to a similar risk for the spread of COVID-19, especially when people wear cloth face coverings. Because of decreased risk of spread among children, schools may be considered low or medium risk.
- Keeping students spread out with more space in between them provides additional protection.

#### **Learn More**

Children may be less likely to have and spread COVID-19 than adults, but we are learning more about children's ability to spread the virus

Centers for Disease Control and Prevention; Preparing K-12 School Administrators for a Safe Return to School in Fall 2020. Updated July 23. 2020

CDC, Reported laboratory-confirmed COVID-19 cases and estimated cumulative incidence, by sex and age group — United States; January 22–May 30, 2020

CDC, MMWR: Morbidity Mortality Weekly Report, Coronavirus Disease 2019 in Children — United States; February 12–April 2, 2020.

Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report (MMWR) Hospitalization Rates and Characteristics of Children Aged < 18 years Hospitalized with Laboratory-Confirmed COVID-19 COVID-NET, 14 States, March 1-July 25, 2020

Children and COVID-19: State Data Report. A joint report from the American Academy of Pediatrics and Children's Hospital Association. July 30, 2020

Children and Fecal SARS-CoV-2 shedding: Just the tip of the Iceberg of Italian COVID-19 outbreak? Digestive and Liver Disease July 18, 2020

Preprint. MedRxiv, Susceptibility to and transmission of COVID-19 amongst children and adolescents compared with adults: a systematic review and meta-analysis; May 24, 2020

Transmission Dynamics of COVID-19 Outbreaks Associated with Child Care Facilities — Salt Lake City, Utah, April–July 2020. Early Release / September 11, 2020 / 69

<u>Cluster of COVID-19 in northern France: A retrospective closed cohort study. April 23, 2020</u>

SARS-CoV-2 infections in primary schools in northern France: A retrospective cohort study in an area of high transmission.

Balancing the Risks of Pupils Returning to Schools; Royal Society DELVE Initiative; July 24 2020

Contact tracing during coronavirus disease outbreak, South Korea, 2020. Emerg Infect Dis. July 16, 2020 COVID-19 in Children and the Dynamics of Infection in Families Pediatrics July 2020

JAMA Pediatric Age-Related Differences in Nasopharyngeal Severe Acute Respiratory Syndrome Coronavirus 2 (SARS- CoV-2) Levels in Patients with Mild to Moderate Coronovirus Disease 2019 (COVID-19) July 30, 2020

BMJ Contact tracing during Phase 1 of the COVID-10 pandemic in the Province of Trento, Italy: key findings and recommendations. July 29, 2020
School Opening across globe suggest ways to keep coronavirus at bay, despite outbreaks. July 7, 2020

Prevent Epidemics, COVID-19 Weekly Science Review; June 20-26, 2020

Hospital Admission in Children and Adolescents With COVID-19. Early results from a national survey conducted by the German Society for Pediatric Infectious Diseases (DGPI). May 2020

Nature, Coronavirus disease 2019 (COVID-19) in children and/or adolescents: a meta-analysis; June 17, 2020

CDC, COVID 19 Information for Pediatric Health Care Providers; May 29, 2020

DA International, Hospital Admission in Children and Adolescents With COVID-19, Early results from a national survey conducted by the German Society for Pediatric Infectious Diseases; May 5, 2020

BMJ Global Health, Reduction of secondary transmission of SARS-CoV-2 in households by face mask use, disinfection and social distancing: a cohort study in Beijing, China; May 11, 2020

Science, Changes in contact patterns shape the dynamics of the COVID-19 outbreak in China; June 26, 2020

American Academy of Pediatrics, COVID-19 Planning Considerations: Guidance for School Re-entry; June 25, 2020

World Health Organization, Considerations for school-related public health measures in the context of COVID-19; May 10, 2020

Most children have very mild illness with COVID-19, but some have more severe symptoms and we are learning more about children who are at higher risk for infection or more severe illness Hospital Admission in Children and Adolescents With COVID-19. Early results from a national survey conducted by the German Society for Pediatric Infectious Diseases (DGPI). May 2020

Children and Fecal SARS-CoV-2 shedding: Just the tip of the Iceberg of Italian COVID-19 outbreak? Digestive and Liver Disease July 18, 2020

CDC, MMWR: Morbidity Mortality Weekly Report, Coronavirus Disease 2019 in Children — United States; February 12–April 2, 2020.

Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report (MMWR) Hospitalization Rates and Characteristics of Children Aged < 18 years Hospitalized with Laboratory-Confirmed COVID-19 COVID-NET, 14 States, March 1-July 25, 2020

Children and COVID-19: State Data Report. A joint report from the American Academy of Pediatrics and Children's Hospital Association. July 30, 2020

Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report (MMWR) COVID-19 – Associated Multisystem Inflammatory Syndrome in Children – United States, March-July 2020

CDC, MMWR: Morbidity Mortality Weekly Report,
Coronavirus Disease 2019 in Children — United States;
February 12–April 2, 2020.

Multisystem Inflammatory Syndrome in US Children and Adolescents. N Engl J Med, July 23, 2020
Centers for Disease Control and Prevention; Health
Department-Reported Cases of Multisystem Inflammatory
Syndrome in Children (MISC-C) in the United States July 15, 2020

Racial/Ethnic and Socioeconomic Disparities of SARS-CoV-2 Infection Among Children Goyal MK, et al. Pediatrics. Aug. 5, 2020

Data from other countries, for the most part, does not show a large spread of COVID-19 associated with schools being open for instruction

A large COVID-19 outbreak in a high school 10 days after schools' reopening, Israel, May 2020

Cluster of COVID-19 in northern France: A retrospective closed cohort study. April 23, 2020

SARS-CoV-2 infections in primary schools in northern France: A retrospective cohort study in an area of high transmission.

A large COVID-19 outbreak in a high school 10 days after schools' reopening, Israel, May 2020. Euro Surveill.

<u>Lancet Child Adolesc Health. Transmission of SARS-CoV-2 in Australian education settings: a prospective cohort study</u>
August 3, 2020

School Opening across globe suggest ways to keep coronavirus at bay, despite outbreaks. July 7, 2020

<u>Prevent Epidemics, COVID-19 Weekly Science Review;</u> June 20-26, 2020 American Academy of Pediatrics, COVID-19 Planning Considerations: Guidance for School Re-entry; June 25, 2020

<u>Learning Policy Institute, Reopening Schools in the Context of</u> COVID-19: Health and Safety Guidelines from other Countries

Center for Global Development, Back to School: An update on COVID cases as schools reopen; June 12, 2020

NCIRS, COVID-19 in schools- the experience in NSW; April 26, 2020

Lancet Child and Adolescent Health, School Closure and Management Practices During Coronavirus Outbreaks Including COVID-19: A Rapid Systematic Review;
April 6, 2020

Balancing the Risks of Pupils Returning to Schools; Royal Society DELVE Initiative; July 24 2020

## Less than 6 feet of social distancing may still be protective for children

The Lancet, Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis; June 1, 2020

World Health Organization, Considerations for school-related public health measures in the context of COVID-19; May 10, 2020