

COVID-19: Impact of Childhood Obesity on Health Outcomes



A Resource for Improving Measurable Impact
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Key Findings:

Childhood obesity is linked to worse outcomes from COVID-19

- Obesity is a risk factor for hospitalization and mechanical ventilation from COVID-19 among children.¹⁻³ One study demonstrated that obesity was the **strongest risk factor for mechanical ventilation** among children ages two years or older with COVID-19.³

Prevalence of childhood obesity is growing across the U.S.⁴

- Texas has **12th highest rate** of childhood and adolescent (ages 10-17) obesity according to the most recent (2018-2019) national data estimate from the National Survey of Children's Health.^{5,6}

Minority youth are at risk

- In Texas, Hispanic and Black children have nearly twice the rate of obesity compared to non-Hispanic white children.⁷

Stay-at-home orders impact healthy habits

- During stay-at-home orders, youth have reported more physical inactivity, sedentary behavior, and consumption of unhealthy foods and sugar-sweetened beverages – all of which increase risk for weight gain.⁸⁻¹⁰

Health behaviors persist into adulthood

- Poor health behaviors in childhood increase lifetime risk for serious conditions like obesity and diabetes.^{10,11}

Telemedicine can reduce barriers to care during the pandemic

- Chronic disease management requires frequent interactions with healthcare teams. Telemedicine ensures continuity of care for youth with obesity.¹²

Impact of Obesity on COVID-19 Outcomes:

- As of January 7, 2021, children and adolescents accounted for 12.5% (2,299,666/18,463,319) of U.S. COVID-19 cases.¹³
- As of September 30, 2020, the CDC reported that among 823 children hospitalized with COVID-19 and known condition status, 51.8% had an underlying health condition. The most common conditions included obesity (38.5%), neurologic conditions (12.8%), and asthma (10.9%).¹⁴
- Severe obesity is an even higher risk for COVID-19 complications among children.¹⁵



Impact of COVID-19 on Obesity:

Studies indicate the pandemic and stay-at-home orders are impacting child health behaviors related to obesity.⁹

- During stay-at-home orders, children and adolescents have:^{8,10}
 - Decreased time spent playing sports and participating in physical activity
 - Increased sedentary time and screen time
 - Increased consumption of sugar-sweetened beverages and unhealthy foods
- Socioeconomic inequities may be exacerbated by COVID-19, as many families have limited resources available to purchase healthy foods and exercise at home during lockdowns.^{10,16,17}

Mitigation & Prevention Recommendations:

Improve access to healthcare:

- Enhance telehealth infrastructure for screening, prevention and treatment of obesity.¹⁸ Telemedicine can be an effective approach for multidisciplinary teams to provide care to youth with obesity – especially during COVID-19 – by reducing travel barriers, building trust with healthcare providers, and ensuring continuity of care.^{9,12}

Promote healthy habits:

- Strengthen nutrition education, opportunities for physical activity, and availability of healthy foods in schools, early childhood, and afterschool programs.^{5,6,18,19}
- Expand availability of resources to support the use of evidence-based childhood obesity prevention programs.^{6,18,19}
- At the individual level, children and adolescents should participate in 60 minutes of physical activity each day, eat a variety of healthy foods, limit sedentary screen time, and get enough sleep each night to promote physical and emotional health.^{6,9,20-23}

Summary:

Though COVID-19 infections remain low in younger populations, children with obesity are at greater risk for hospitalization and mechanical ventilation from COVID-19. Moreover, stay-at-home orders are affecting health behaviors associated with weight gain and obesity among children, including poor dietary habits and physical inactivity. Recommendations include supporting telemedicine to coordinate care for youth with obesity, strengthening school- and community-based efforts to promote healthy eating and physical activity, and reinforcing COVID-19 prevention efforts in childcare centers and schools.

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