COVID-19 Guidance: Return to Sports

American Academy of Pediatrics Interim Guidance
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Approximately 35 to 45 million youth 6 to 18 years of age participate in some form of athletics. The coronavirus disease 2019 (COVID-19) pandemic has affected many aspects of the lives of children and families, including youth sport activity. As children present for health supervision visits and preparticipation physical evaluations, parents and athletes likely will ask questions about how best to ensure safety when considering a return to sports participation. This guidance is intended for pediatricians to inform families on how to mitigate risk and prevent the spread of severe acute respiratory syndrome-coronavirus 2 (SARS-CoV-2), the virus that causes COVID-19, to others both within sports and within families and the community. Pediatricians should also refer to their state regulations and guidance associated with return to sports as states are allowing practice and competition to resume at different stages.

What are the benefits of returning to sports for children and adolescents?
Re-engaging in sports activity with friends has both physical and psychological health benefits for children and adolescents. Participating in sports allows youth to improve their cardiovascular health, strength, body composition, and overall fitness. Mentally, youth may experience benefits from the increased socialization with friends and coaches as well as from the return to a more structured routine. These psychological and physical benefits can help support their developmental growth. Exercise also has immune system benefits.

What are the risks of returning to sports for youth?
Policy makers and school administrators must consider the mounting evidence regarding COVID-19 in children and adolescents, including the role they may play in transmission of the infection. SARS-CoV-2 appears to behave differently in children and adolescents than other common respiratory viruses, such as influenza, on which much of the current guidance regarding school closures is based. Although children and adolescents play a major role in amplifying influenza outbreaks, to date, this does not appear to be the case with SARS-CoV-2. Although many questions remain, the preponderance of evidence indicates that children and adolescents can become infected and are less likely to be symptomatic and less likely to have severe disease resulting from SARS-CoV-2 infection. We continue to learn more about the role children play in transmission of SARS-CoV-2. At present, it appears that children younger than 10 years may be less likely to become infected and less likely to spread infection to others, although further studies are needed. More recent data suggest children older than 10 years may spread SARS-CoV-2 as efficiently as adults, and this information should be part of the considerations taken in determining how to safely and effectively open schools. Additional in-depth studies are needed to truly understand the infectivity and transmissibility of this virus in anyone younger than 18 years, including children and adolescents with disabilities and medical complexities.

Because prolonged, close contact with a person infected with SARS-CoV-2 is the main driver of transmission, the sport (number of players, spacing, and frequency and duration of contact) and setting (indoor versus outdoor, size and ventilation of facility) will likely influence risk of infection. Although it is not likely the main
form of transmission, it is possible for SARS-CoV-2 to be transmitted on surfaces; therefore, sports with shared equipment, facilities, or common surfaces may pose additional risk.

**How do families balance the risk versus benefit of returning to sports for children and adolescents?**
Weighing the risk versus benefit of return to sport is driven by the sport and setting, local disease activity, and individual circumstances, including underlying health conditions that place the athlete or household contacts at high risk of severe disease should they contract SARS-CoV-2 infection. See the CDC for a list of high-risk conditions. Parents should review the school/league COVID-19 policies and discuss them with their children so they are aware of the expectations. Risk can be decreased but not eliminated by athletes, parents, coaches, and officials following safety protocols. Ultimately, the decision falls on a parents/guardians to decide whether they will allow their children to participate in sports.

**Should children have a COVID-19 test before attending sports?**
Testing for COVID-19 before participating in sports is discouraged unless an athlete is symptomatic or has been exposed to someone known to be recently infected with SARS-CoV-2. Antibody testing is not currently recommended. Current testing recommendations can be found in the AAP COVID-19 Testing Guidance.

**What modifications/strategies should be considered to reduce risk of youth sports participation?**
To reduce risk, state and local governments as well as sports governing bodies will be recommending modifications to practices, competitions, and events. The Centers for Disease Control and Prevention (CDC) recommendations for youth sports should be consulted when developing this guidance. Compliance by athletes, parents, spectators, coaches, and officials will affect the success of the reduction strategies. Key modifications that are recommended include prioritizing noncontact activity, such as conditioning and drills where physical distance can be maintained. When physical distancing cannot be maintained, cloth face coverings can reduce risk. In addition, it is important to reinforce appropriate hygiene and respiratory etiquette through the use of signage, parent/athlete education, and use of handwashing stations or hand sanitizer.

Maintaining practice groups in consistent pods of small sizes that do not mix youth athletes may help limit team-wide outbreaks of SARS-CoV-2 infection. Minimizing travel to other communities and regions is another reduction strategy. Frequently touched surfaces on the field, court, or play surface (eg, drinking fountains) should be cleaned and disinfected at least daily or between uses as much as possible. Sharing of equipment and use of communal spaces, such as locker rooms, should be reduced. When possible, athletic areas with poor ventilation (ie, weight rooms) or small spaces where distancing cannot be maintained should be avoided, because they bear greater risk for transmission of SARS-CoV-2. Considerations should be made for increased ventilation via opening doors or windows or use of fans when safe. Athletes should not share food or drink. Participants should be encouraged to bring their own water bottles.

The AAP anticipates sports organizations/school districts may choose to not operate sports programs given the new and frequently changing safety recommendations. Sports organizations/school systems may find the
safety requirements difficult to enact, fear liability issues, or have concern for operating sports teams and increase risk of COVID-19 spread. Individuals may choose to seek out other options for participating in sports within different settings or through another organization. As outlined in the Organized Sports for Children, Preadolescents, and Adolescents clinical report, fees for registration and equipment can be barriers for sports participation. Pediatricians are encouraged to become familiar with the local programs that have mechanisms for children to play for a reduced cost or for parents to volunteer in exchange for lower fees.

**When should cloth face coverings be worn?**

*Cloth face coverings* should be worn by coaches, officials, spectators, and volunteers. All individuals should wear a cloth face covering when arriving to or departing from an athletic facility, because physical distancing is often difficult. All athletes should wear a cloth face mask when on the sidelines, and physical distancing should be followed even in this setting. In some cases, cloth face coverings may cause safety concerns, and adaptations or alternatives should be considered. The World Health Organization does not recommend use of a cloth face covering during vigorous exercise, and the CDC cautions that some people who are engaged in high-intensity activity may not be able to wear a cloth face covering. When nonvigorous exercise is being performed and physical distancing is not possible, a cloth face mask should be worn. Cloth face coverings should not be worn in water activities (eg, swimming, diving) or in activities where they could pose an injury risk as a result of catching on equipment or accidently impairing vision during performance of sport (eg, gymnastics, cheer). Special considerations may be appropriate when there is an increased risk of heat-related illness. Individuals younger than 2 years old should not wear a cloth face covering.

Younger athletes may find wearing a *cloth face mask* challenging and may need to be reminded and/or assisted by parents/coaches. People should be reminded not to touch the front of the face mask and remove it from the straps whenever possible. Cloth face coverings should be routinely washed daily in hot water and not reused until cleaned.

**What if the youth or a family member exhibits signs or symptoms of COVID-19 or tests positive?**

All parents/guardians need to report if the athlete or any household contact is exhibiting any signs or symptoms of COVID-19 or tests positive for SARS-CoV-2, even if asymptomatic. These individuals should be held out of ALL practices and games until the CDC-recommended isolation or quarantine period has expired. If the test result for SARS-CoV-2 is positive, team officials and the health department should be notified so contact tracing and appropriate quarantining can be performed. The local health department can assist in determining when it is safe for athletes and exposed contacts to return to practice, and guidelines from the CDC should be followed to determine clearance.

**What to do if a participant had COVID-19 or has it during the season?**

To date, limited data are available on COVID-19 and its effects on children and adolescents. We know that those with severe presentations (hypotension, arrhythmias, requiring intubation or extracorporeal membrane oxygenation [ECMO] support, kidney or cardiac failure) or with multisystem inflammatory syndrome in children (MIS-C) must be treated as though they have myocarditis and restricted from exercise.
and participation for a duration of 3 to 6 months. These athletes must be cleared to resume participation by their primary care physician and appropriate pediatric medical subspecialist, preferably in consultation with a pediatric cardiologist. Cardiac testing (EKG, echocardiogram, 24-hour Holter monitor, exercise stress test, and if warranted, cardiac resonance imaging) must have returned to normal, before return to activity.

Those with moderate symptoms must be asymptomatic for at least 14 days and obtain clearance from their primary care physician before return to exercise and competition. Any individual who has current or a history of positive cardiac symptoms, who has concerning findings on their examination, or who had moderate symptoms of COVID-19, including prolonged fever, should have an EKG performed and potentially be referred to a pediatric cardiologist for further assessment and clearance.

The main question still remains about what to do with others infected with SARS-CoV-2 or who had close contact with an individual with COVID-19. Because of the growing literature about the relationship between COVID-19 and myocarditis, all children and adolescents with exposure to SARS-CoV-2, regardless of symptoms, require a minimum 14-day resting period and must be asymptomatic for >14 days before returning to exercise and/or competition. Because of the limited information on COVID-19 and exercise, the AAP strongly encourages that all patients with COVID-19 be cleared for participation by their primary care physician. The focus of their return to participation screening should be for cardiac symptoms, including but not limited to chest pain, shortness of breath, fatigue, palpitations, or syncope.

All individuals with a history of a positive test result for SARS-CoV-2 should have a gradual return to physical activity. If primary care physicians have any questions regarding their patients' readiness to return to competition, they should not hesitate to consult with and refer individuals to the appropriate pediatric medical subspecialist.

**Should parents and other spectators attend their children's sports practices and games?**
Parents/guardians should follow current local regulations for social distancing and use of cloth face coverings when considering game attendance. Attending outdoor events may bear less risk than indoor events with less space and ventilation. No one should attend any sports function as a spectator if they are exhibiting signs or symptoms of COVID-19. Parents and other spectators with high-risk health conditions should strongly consider not attending indoor events or events held outdoors where appropriate social distancing cannot be maintained. Live streaming or recording of athletic events, when available, may allow individuals who are unable to attend to participate in viewing events.

**What if children's sports are disrupted or canceled? How can parents support their athletes?**
Disruptions in normal routines can be challenging for everyone, especially children and adolescents. Time away from teammates and coaches can be hard on athletes both physically and mentally. If prolonged breaks occur in sports, athletes should be encouraged to maintain their fitness with regular physical activity. Consistent activity will help athletes stay in shape for when sports return, and this can help prevent injuries. Exercise can also help serve as a coping mechanism during this stressful time. Routine is important, so consideration should be given to establishing a consistent workout schedule.
Individuals who are unable to participate in milestone events, such as their final high school sports season or a state championship tournament, may be emotionally affected more than other individuals. This loss can also have a significant emotional impact on parents of athletes who may be heavily invested in their children's sports. All athletes should be monitored for signs and symptoms of depression and anxiety if their sports participation is disrupted. Individuals with a prior history of depression or anxiety may be at greater risk.

**What about the sports preparticipation examination and preparing for the season?**

All children should have an annual health supervision visit, which ideally incorporates the preparticipation physical evaluation (sports examination). Individuals who have not been physically active prior to the restart of sports may be at higher risk of an overuse injury. A gradual increase in frequency, duration, and intensity of exercise should be encouraged to help avoid injury. With a return to sports in summer months, athletes should also take time to acclimate to exercising in warm weather.

**AAP Resources**

- Preparticipation Physical Evaluation, 5th Edition Monograph
- Organized Sports for Children, Preadolescents, and Adolescents
- Overuse Injuries, Overtraining, and Burnout in Child and Adolescent Athletes
- Physical Activity Assessment and Counseling in Pediatric Clinical Settings
- COVID-19 Planning Considerations: Guidance for School Re-entry
- COVID-19 and Safe Transportation in Motor Vehicles
- COVID-19 Testing Guidance
- Cloth Face Coverings

**Information for Families from HealthyChildren.org**

- Cloth Face Coverings During Sports
- Mask Mythbusters: 5 Common Misconceptions about Kids & Cloth Face Coverings
- Youth Sports & COVID-19: Understanding the Risks
- Youth Sports Participation During COVID-19: A Safety Checklist

**Additional Information**

- Interim Guidance on the Pre-participation Physical Exam for Athletes during the SARS-CoV-2 Pandemic
- Centers for Disease Control and Prevention: Consideration for Youth Sports
- World Health Organization: Physical Activity
- American College of Cardiology: Returning To Play After Coronavirus Infection

**Interim Guidance Disclaimer:** The COVID-19 clinical interim guidance provided on AAP.org has been updated based on current evidence and information available at the time of publishing. Guidance will be regularly reviewed with regards to the evolving nature of the pandemic and emerging evidence. All interim guidance will be presumed to expire in December 2020 unless otherwise specified.