

COVID-19 in Youth Soccer Study: Executive Summary

[Addendum 9/25/2020]

PURPOSE

COVID-19 has had an unprecedented impact on virtually every aspect of our lives. As groups across the country now seek to reinitiate youth sports, we recognize that there is very little data to guide these decisions. In an attempt to provide some initial information regarding COVID-19 among youth sports, ***we partnered with the Elite Clubs National League (ECNL), a leading nationwide youth soccer competition and development platform, to collect data regarding the incidence of COVID-19 among youth soccer participants and the risk mitigation procedures being utilized among youth soccer organizations.***

BACKGROUND

In May of 2020, we conducted a nationwide survey of over 13,000 adolescent athletes regarding the impacts of school and sport cancelation due to COVID-19 on physical activity and mental health. Comparing the data from 3,200 Wisconsin athletes within this sample to data we had collected from over 5,000 Wisconsin adolescent athletes prior to COVID-19, we found that physical activity levels had dropped by 50% during the pandemic and symptoms of depression had increased dramatically. Prior to 2020, less than 10% of Wisconsin athletes reported moderate to severe symptoms of depression. Following the widespread cancelation of school and spring sports due to COVID-19, this number had risen to 33%. In the full nationwide sample, 38% reported moderate to severe depression and 35% reported moderate to severe anxiety. These results suggest that isolation and physical inactivity during COVID-19 restrictions may represent a significant threat to overall health in children. (The full study results are available [here](#).)

Nonetheless, we must acknowledge that COVID-19 is dangerous and continues to spread throughout the country. Research suggests that children generally experience milder cases than adults, but there is understandable concern that children could contribute to viral transmission and expose individuals who may be more likely to experience severe consequences of the disease. Specifically, all children interact with a network of individuals, including household members, community members, schoolmates, friends, etc., and sport participation could potentially connect these networks through contact between youth sport participants or attendees. It remains unclear, however, whether sport participation with risk mitigation procedures in place increases the risk of children acquiring COVID-19 and passing the virus on to individuals at greater risk who otherwise would not have been exposed.

Within youth sports, there are competing risks that must be acknowledged within any specific setting. Physical activity and sport participation have tremendous physical and mental health benefits for children, but this must be balanced against the potential contribution of youth sports to viral transmission and community spread. ***The information presented here is intended to contribute to ongoing discussions and highlight the need to for expanded research regarding the risk of COVID-19 within youth sports.***

*This data contains an addendum to the original summary. An outlying response regarding COVID-19 cases from a single club was found to be entered in error on follow up. This has been corrected and the analysis updated.

MAJOR FINDINGS

Surveys were completed by 129 clubs, of which 124 have restarted playing soccer since local restrictions were put in place at the beginning of the COVID-19 pandemic.

- **These 124 clubs represented over 90,000 players from 34 states who have participated in over 45,000 trainings and over 6,000 games** since restarting.
- The time since restarting varied across clubs, with a median duration of 73 days.
- 71 clubs (57%) had progressed to soccer participation that involved contact / unrestricted play in training or competition, while the remainder had not.

Clubs were asked to provide the number of players and staff members who had been diagnosed with COVID-19 since restarting soccer participation.

- 78 clubs (63%) reported at least one case of COVID-19 among players or staff members
- 282 positive cases of COVID-19 were reported, including 239 players and 43 staff members*
- This represents **263 cases of COVID-19 per 100,000 children**.* In comparison, according to the American Academy of Pediatrics, during the 10 weeks prior to the survey (6/18/2020 through 8/27/2020) the **nationwide case rate among children in the United States was 477 cases per 100,000 children**.

Clubs who reported a positive case were asked to provide additional information regarding the number of cases that were traced back to transmission during soccer activities, and the severity of the cases reported.

- Of the cases reported, **1 case in a player was reportedly traced to transmission during soccer**.
- No cases were reported to have resulted in hospitalization or death.

Finally, clubs were asked about the presence of a formal plan regarding COVID-19 and the risk mitigation procedures utilized.

- 100% of the clubs responded that they had a formal plan in place regarding COVID-19 risk reduction procedures.
- The proportion of clubs that reported utilizing different procedures was:

| Risk mitigation procedure | % of clubs |
|--|-------------------|
| Player/staff symptom monitoring | 93% |
| Player/staff temperature checks at home | 85% |
| Player/staff temperature checks on site | 32% |
| Face mask use for players off the field | 80% |
| Face mask use for staff | 85% |
| Social distancing for players while playing | 54% |
| Social distancing for players off the field | 92% |
| Social distancing for staff | 85% |
| Increased facility disinfection | 74% |
| Staggered arrival and departure times for events | 84% |

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CONCLUSIONS

These findings suggest that the incidence of COVID-19 among youth soccer athletes after reinitiating participation during the summer of 2020 is relatively low. The number of cases per 100,000 players reported by the participant clubs are lower than those reported by the American Academy of Pediatrics for children during the same time period. While there are limitations in comparing the overall case rate in this study to the nationwide pediatric case rate, this data does not appear to suggest that participation in youth soccer activities results in an increased risk of COVID-19 among participants. In addition, these findings agree with the existing literature regarding COVID-19 severity in children, as none of the cases were reported to result in hospitalization or death. Although this study did not account for the possibility that the virus could be transmitted through asymptomatic children to others who go on to develop a symptomatic infection, of the positive cases reported among players, only 1 was attributed to transmission during soccer activities. Finally, all of the respondent clubs reported having a formal COVID-19 plan in place, and the majority reported utilizing a broad range of risk mitigation procedures.

While we hope that this information will help contribute to the ongoing discussions about the relative risks and benefits of youth sport participation, we should recognize that COVID-19 risk will surely vary between sports and different areas of the country. Therefore, this data should represent an initial step toward developing a more complete picture of the relative risk of COVID-19 transmission during sport participation for children, and there continues to be an urgent need to expand these efforts in order to make informed decisions within specific contexts.

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