Beginning in early 2020, the COVID-19 pandemic fundamentally transformed every aspect of daily life. In the US, these changes extended to collegiate sports, with football being especially affected. It is impossible to maintain physical distance while playing football, but not playing has large economic and social ramifications. Adapting to COVID-19 meant figuring out how to minimize the risk of COVID-19 when it cannot be eliminated. Last fall, the college football season ultimately did proceed, with each Power 5 conference developing complex protocols to minimize the risk of COVID-19 transmission.

Fischer et al\(^1\) present observational data collected through remote-sensing technology to assess the risk of contact and COVID-19 transmission during the 2020 Southeastern Conference (SEC) college football regular season gameplay. This study used proximity sensing devices to evaluate the frequency and duration of close contact among players from opposing teams. SEC players were monitored using SafeTags (KINEXON), commercially available, ultrawideband sensors that measure distance and duration of contact between sensors to determine how often and for what duration players on opposing teams were within 6 feet of each other.

The study tracked 109,672 interactions among 1190 football student athletes during the regular 64-game season; despite being a contact sport, only 13 player-to-player interactions met the Centers for Disease Control and Prevention definition of close contact (ie, >15 minutes at <6 feet). Although athletes did not wear masks or other personal protective equipment during play, none of these contacts led to transmission of COVID-19. Despite documented close contact among players, the risk of transmission between opposing teams was negligible—likely because of the short duration of individual points-of-contact and the outdoor venue. Fischer and colleagues\(^1\) report that 138 players within the SEC tested positive during the season, but no secondary infections related to gameplay were identified. The authors concluded that playing college football did not contribute to COVID-19 transmission.

Key to interpreting this study is understanding the resource intensive off-field mitigation efforts by the SEC Medical Taskforce. Football players underwent polymerase chain reaction–based surveillance testing 3 times a week along with strict quarantine and isolation protocols for athletes and staff who were infected or exposed off the field. As the authors illustrate in Figure 2 of their article, there was spread of COVID-19 among team members, which reflected transmission risk in the community. If the extensive mitigation policies were not used, the study results may have been different. The testing protocol helped to reduce the number of student athletes with COVID-19 infection who reached the playing field, hence the opportunity of transmission between opposing teams was substantially decreased.

When taken in larger context, the current study has implications that go beyond college football. Other close-contact activities, such as amateur and recreational sports, especially if played outdoors, can continue safely during the COVID-19 pandemic. However, this does not mean that all aspects of football are without risk, but rather that as an outdoor activity with limited duration of close contact, transmission risk may be effectively mitigated. As previous studies have shown, the risk of transmission outdoors may be as much as 18 times lower than indoors.\(^2\,^3\) Football-related transmission has occurred during indoor activities like strength training and reviewing films.

It is notable that this study was performed before vaccination was available and prior to widespread dissemination of the Delta variant. This limits generalizability of the findings in the current situation where the Delta variant constitutes 99% of the circulating strains of SARS-CoV-2, and about 65%...
of the US population over age 12 years are fully vaccinated. However, the principles of transmission are relatively constant, so the data on duration and frequency of contact remain applicable.

Comprehensive interventions that reduce the number of potentially infectious individuals in a population interrupt the mode of transmission and decrease the number of susceptible persons—primarily using vaccination but also masking (especially indoors or in crowded spaces), distancing, ventilation, and appropriate isolation and quarantine—create the conditions which make engagement in activities like football safer. Tailoring those interventions to the factors that are most likely to influence transmission (for example roommates and social gatherings as opposed to athletic competition) balances population-level public health with social and economic priorities.

As the US weathers another surge of COVID-19 cases, as more highly transmissible variants emerge and vaccination recommendations continue to evolve, student athletes and others involved with collegiate sports are adapting to living with COVID-19. This study demonstrates that outdoor sports can occur safely. The data also invites thinking critically about the societal end game, as the goal in COVID-19 prevention cannot be zero cases of COVID-19. Studies like this show that many activities that appear risky actually are on a continuum between safe and not safe. Much has been learned about transmission dynamics that influence clusters or outbreaks. As Cevik et al. write, “Without clear public health communication about risk, individuals may fixate on unlikely sources of transmission—say outdoor activities—while undervaluing higher-risk settings.”

Striking a balance between resuming important activities (including athletics) without causing high rates of COVID-19 defines the new normal of endemic COVID-19. Fischer et al. illustrate that outdoor activities are safer than indoor activities and brief contact is unlikely to transmit disease, especially when occurring alongside established public health interventions that mitigate higher-risk indoor activities.