Background Understanding the incidence and characteristics of injuries in each sport helps to implement more effective preventive measures. Studying this information after the occurrence of the COVID-19 pandemic was particularly important. Accordingly, the medical commission of the United World Wrestling (UWW) has implemented a systematic surveillance of injuries during the Tokyo 2020 Olympic Games.

Objective To assess the injury profile of elite senior wrestlers during the Tokyo 2020 Olympic Games.

Wrestling (UWW) has implemented a systematic surveillance of injuries during the Tokyo 2020 Olympic Games. The severity of injuries, however, was lower than the 2012 London Olympic Games, with no serious or catastrophic injury being recorded. The proportion of concussions was higher than the 2016 Rio Games but lower than the 2012 London Olympic Games.

Results Of the 105 total injuries [6.15 injuries/1000 AEs (95% CI: 5.01 to 7.47)], concussion was the most common (n=28; 26.2%), followed by knee (n=16; 15.0%) and ankle injuries (n=15; 14.0%). Most concussions occurred due to ball-to-head contact (61.5%) and were unanticipated (84.6%). There was no difference in injury risk by sex (IRRF/M: 1.40; 95% CI: 0.73 to 2.66). Players in U18 had significantly lower rates of injury, compared to U16 and U14 (IRRU16: 2.44; 95% CI: 1.22 to 4.87; IRRU14: 3.58; 95% CI: 1.60 to 8.02).

Conclusion Players in U18 had the lowest injury rates. More research is needed to elucidate whether younger age groups report more injuries and develop volleyball-specific injury and concussion prevention strategies.

Background Sport-related injuries present a substantial burden in youth sport. Injury surveillance data in youth volleyball is scarce. Understanding injury and concussion burden can inform prevention strategies.

Objective To evaluate injury incidence rates, types, mechanism, and potential risk factors in youth volleyball.

Design Prospective cohort study.

Setting 2018 Canadian Youth National Volleyball Tournament.

Participants All tournament players were invited to participate (9616 players). 1876 players [466 males, 1391 females, mean age 16.2 years (1.26)] consented to participate (19.5%).

Main Outcome Measures Players completed a questionnaire (demographic information, injury, and concussion history). All medical attention injuries were recorded by tournament medical personnel via injury report form (e.g., mechanism, type). Injury was defined as any physical complaint seeking onsite medical attention. Concussion was defined using the 5th International Consensus Conference on Concussion in Sport. Exploratory multivariable Poisson regression was used to analyze potential risk factors (sex, age group, level of play) for injury, adjusted for cluster by team and offset by athlete-exposures (AEs).

Results Of the 105 total injuries [6.15 injuries/1000 AEs (95% CI: 5.01 to 7.47)], concussion was the most common (n=28; 26.2%), followed by knee (n=16; 15.0%) and ankle injuries (n=15; 14.0%). Most concussions occurred due to ball-to-head contact (61.5%) and were unanticipated (84.6%). There was no difference in injury risk by sex (IRRF/M: 1.40; 95% CI: 0.73 to 2.66). Players in U18 had significantly lower rates of injury, compared to U16 and U14 (IRRU16: 2.44; 95% CI: 1.22 to 4.87; IRRU14: 3.58; 95% CI: 1.60 to 8.02).

Conclusion Players in U18 had the lowest injury rates. More research is needed to elucidate whether younger age groups report more injuries and develop volleyball-specific injury and concussion prevention strategies.