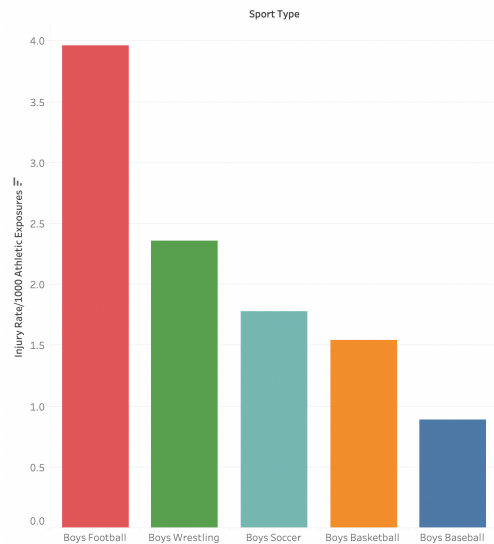


Sports Injuries BUS 290 - Fall 2023

Sports are a vital part of many children's lives. However, when deciding which sport a child should play, numerous factors must be considered. Perhaps one of the most important

Injury Rate/1,000 Athlete Exposures (Boys)



would be the risk of injury. There are many ways to guess which sport might be the most dangerous.

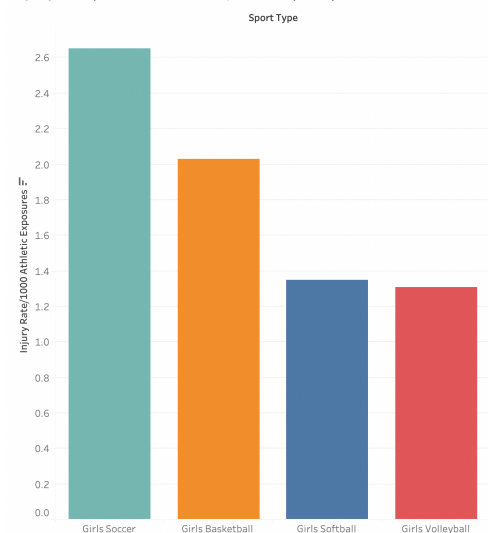
Thankfully, George Washington University conducted a study that encapsulates the problem well. The university used "Data from the National Health School Sports-Related Injury Surveillance Study, High School RIO (Reporting Information Online), which collects injury data from 100 nationally representative high schools" from the academic years 2015-2019. The data in these bar charts belongs to a table in the George Washington University study. Each bar chart measures the number of injuries per 1,000 athlete exposures

sorted by sport. The first is for boys and the second for girls. The study defines athletic exposure as "one athlete participating in one practice or competition."

Using athletic exposure in this calculation accounts for the varying usage in sports. For example, some sports go all year round, whereas others are seasonal. If those sports were compared by the number of injuries over total participants, the data would be skewed against sports with longer seasons.

As we can see from the study, for boys' sports, the highest injury rate belongs to football, at nearly four injuries per 1000 AEs. Baseball had the lowest rate of injury at 0.89 injuries per 1000 AEs. For the girls, the most dangerous sport is soccer at 2.65 injuries per 1000 AEs, and the lowest is volleyball at 1.31 injuries per 1000 AEs. While these numbers are helpful, there still are some limitations to the data set. These visuals don't consider the type of injuries that occur. There's a

Injury Rate/1,000 Athlete Exposures (Girls)



vast difference between an ankle sprain and an ACL tear or head injury. For example, say there's a sport with a relatively low injury rate, but every one of those injuries is a concussion. Most would agree that this particular sport is extremely dangerous, but that would not come out in these visualizations. Another limitation of these graphics is that the data is only from high school-aged children from 2015 to 2019. There could be trends in younger athletes at other times that aren't represented in these graphics.

Works Cited

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