

# Epidemiology of Pickleball Foot and Ankle Injuries: 2015 - 2023

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INTRODUCTION: Pickleball, a paddle sport combining elements of tennis, badminton, and ping-pong, is the fastest-growing sport in the United States. The surge in popularity is driving an increase in injuries presenting to emergency departments and orthopaedic clinics. This study seeks to describe the epidemiology of pickleball foot and ankle injuries including patient demographics, diagnoses, and mechanism of injury.

## METHODS:

A cross-sectional, retrospective review of data from our institutional database identified patients treated in a foot and ankle clinic between January 2015 and December 2023, whose medical records included the search terms “pickleball” or “pickle ball.” The medical record was reviewed and only patients who sustained a foot and ankle injury while playing pickleball were included. Patient demographics, diagnosis, mechanism of injury, and treatment were collected. Injury incidence and descriptive analyses of patient demographics, diagnoses, and treatment approaches were calculated.

## RESULTS:

One hundred ninety-eight patients with pickleball foot and ankle injuries were identified. The incidence of pickleball injuries increased 6.5-fold from 2019 to 2023. The mean age at time of injury was 58.3 years (SD=12.2). Most patients were male (58.6%) and reported a traumatic injury (77.8%). The most common diagnoses were Achilles tendon rupture (39.4%), gastrocnemius injury (15.7%), and Achilles tendinopathy (12.1%). The most common mechanisms of injury were running or lunging forward (30.9%), planting the foot (16.5%), and inverting the foot/ankle (15.5%). Most injuries were treated nonoperatively (71.2%); however, 62.8% of Achilles tendon ruptures were treated surgically.

## DISCUSSION AND CONCLUSION:

The incidence of pickleball foot and ankle injuries increased dramatically from 2015 to 2023. Injuries occurred more frequently in older male patients and were commonly traumatic in nature, with Achilles tendon rupture being the most common diagnosis. As the popularity of pickleball increases, expanded education and strategies to help pickleball players prevent foot and ankle injuries, particularly Achilles tendon injuries, are needed.

