

Wrestling Injuries Basics

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Introduction

- Objective: To familiarize medical practitioners with terminology commonly used within the 3 different styles of the sport, common techniques, competition setup, equipment used, mechanisms of injury, and unique aspects of the sport including weight cutting and skin infections.
- Scope: The focus will be on common wrestling specific injuries and conditions. While the sport is not immune to traumatic injuries requiring urgent/emergent management, these will be outside the scope of this guide. This is not meant to be a comprehensive review of all material but rather a practical resource linking to studies, articles, images and videos that can be further explored or recommended to patients.

Terminology

- “On the feet” or “Neutral” wrestling
 - o Both wrestlers are on their feet competing to take their opponent to the mat



- “Mat” or “Top-Bottom” wrestling
 - o Once a wrestler has been awarded a takedown, he/she is said to be in the “top” position while the other wrestler is in the “bottom” position. This wrestling will look different depending on the style of wrestling
 - o Referee’s position
 - Starting top-bottom position in folkstyle wrestling. The onus is on the wrestler on bottom to get out from this position.



- Par-Terre
 - Starting top-bottom position in freestyle and Greco-Roman wrestling. The top man must score otherwise the action will be brought back up to the feet.



- [Weight Certification](#)
 - A yearly process developed to determine what weight a wrestler can safely compete at in folkstyle wrestling. This typically involves passing a urine hydration test (urine specific gravity) and body composition testing (via 3 point caliper).
- Wrestling Styles
 - [Folkstyle](#)
 - Style of wrestling that takes place with high school and collegiate programs with seasons that generally run from late fall to early spring. The United States is the only country that wrestles this style. Differs from the other two styles primarily with “mat wrestling” in the sense that the onus is on the bottom wrestler to escape. In contrast, in the international styles of wrestling (freestyle and Greco-Roman), the onus is on the top wrestler to score points.
 - [Freestyle](#)
 - International style of wrestling. Will see this style, along with Greco-Roman, at the world and Olympic championships as well as international tournaments. Has similar attacks with “on the feet wrestling” as folkstyle. In the United States, kids may train in this style in the spring and summer time. Women’s wrestling in college practices this style.
 - [Greco-Roman](#)
 - The other international style of wrestling. Differs from the other two styles in that a wrestler is not able to grab his (currently there is no Women’s Greco-Roman wrestling) opponent’s legs in an attempt to score. This leads to a much more upright stance when wrestling on the feet.

Video examples of classic moves

[Double leg](#)

[Single leg](#)

[High Crotch](#)

[Sprawl](#)

[Headlock](#)

[Lat Drop](#)

[Suplex](#)

[Half-nelson](#)

[Arm bar](#)

Competition

- Greco-Roman/Freestyle
 - o 2 – 3 min periods
 - o Match may end early for a pin or technical fall
 - In Freestyle - technical fall is when a wrestler leads by 10 points or greater
 - In Greco-Roman - technical fall is when a wrestler leads by 8 points or greater
 - o Takedowns= 2 points
 - o Throws of high amplitude can be worth up to 5 points
 - o Back exposure (when a wrestler forces their opponents back to break 90 degrees in relation to the mat) is worth 2 points
 - o There is no overtime, criteria in order:
 - Highest point move executed in match (ex. In a 4-4 match, a wrestler who scored a 4 point throw would win over the wrestler who scored 2 - 2 point takedowns)
 - Least number of cautions
 - Last technical point scored
- Folkstyle
 - o 3 – 2 min periods in high school, collegiate periods are 3-2-2 min
 - o One wrestler gets choice of starting position (neutral, top, or bottom) to begin the 2nd period, and the other wrestler gets choice to begin the 3rd
 - o Match may end early for a pin or technical fall (when wrestler is up by 15 points)
 - o Takedown= 2 points
 - o Escape from bottom position= 1 point
 - o Near fall (when a wrestler holds their on their back for 2-4 seconds)= 2-4 points
 - o Reversal (when wrestler goes from bottom to top position)= 2 points
- Competition can take place as a dual (two teams wrestlers compete against each other at their respective weight classes) or individual (wrestlers compete against opponents in their weight class in a typical bracket)
- Weigh ins are generally 1-2 hours before competition

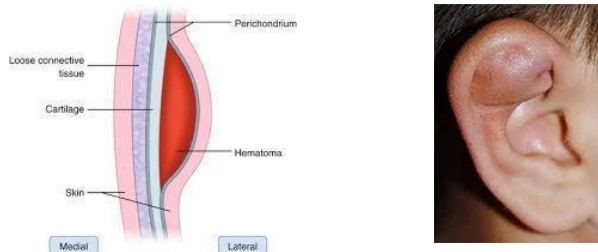
Equipment

- Wrestling shoes
- Singlet
- Headgear – required in folkstyle wrestling
 - o Do not help with prevention of concussion, used to help protect against auricular hematomas
- Mouthguard – not required but may be used

Injury Epidemiology

- [Epidemiology of Injuries in National Collegiate Athletic Association Men's Wrestling: 2014–2015 Through 2018–2019 - PMC \(nih.gov\)](#)
- [An Epidemiologic Comparison of High School and College Wrestling Injuries - Ellen E. Yard, Christy L. Collins, Randall W. Dick, R. Dawn Comstock, 2008 \(sagepub.com\)](#)
- [Caring for Wrestlers : Current Sports Medicine Reports \(lww.com\)](#)
- Overall injury rate 7.25-8.82 per 1000 athlete exposures in collegiate wrestlers, 2.33 per 1000 exposures in high school wrestlers
 - Rates among one of the highest injury rate among school sports
- Knee, shoulder, and head/face most commonly injured
- Sprains and strains >40% of injuries
- Concussion rate of 7.3% among collegiate wrestlers
- Common injuries
 - Knee
 - MCL/LCL sprains
 - Operative repair reserved for severe acute or chronic valgus instability in athletes with poor response to non-operative rehabilitation
 - Hinged knee brace may be used in wrestling competition if properly padded, must be approved by referee
 - [Management of MCL](#)
 - [Management of LCL](#)
 - Prepatellar bursitis
 - Due to repeated striking on mat
 - Aspirate if concern for infectious bursitis
 - Consider short term immobilization and/or activity modification
 - Knee pad for padding
 - [Management of prepatellar bursitis](#)
 - Shoulder
 - Subluxation/dislocation
 - Forced anterior flexion, abduction, and external rotation (see Half-Nelson technique)
 - Perform neurovascular checks before and after reduction
 - Concern for axillary nerve and/or brachial plexus injury
 - [Management of first time anterior shoulder dislocations](#)
 - Elbow
 - Dislocation
 - Wrestler trying to catch him/herself when being brought down to mat
 - Tend to be posterior
 - [Management of elbow dislocations](#)
 - Finger
 - Dislocation
 - Reduce and immobilize
 - Wrestler may continue wrestling if no neurovascular injury or fracture
 - Face/Head

- Brow laceration
 - Lateral brow ridge most common
 - Evaluate for concussion and facial fracture
 - Note depth and length of wound, presence of arterial bleeding, and neurologic function around laceration
 - Wrestler may continue to wrestle depending on extent of laceration, ability to control bleeding
- Unique Conditions
 - Auricular Hematomas
 - Accumulation of blood in space between perichondrium and auricular cartilage
 - Overtime abnormal cartilage will form with fibrosis “cauliflower ear”
 - [Management of auricular hematoma](#)



- Weight Cutting
 - System wide policies have been shown to help reduce the extent over the years, but remains prevalent in all combat sports, including wrestling
 - May alter performance and lead to poor health outcomes, in rare cases, death
 - [Associated with increased injury risk](#)
 - [ACSM Position Statement](#)
- Skin infections
 - [Cutaneous infections in wrestlers - PubMed \(nih.gov\)](#)
 - May be able to compete with certain skin infections after proper treatment and/or proper coverage
 - [NCAA Skin Form](#)