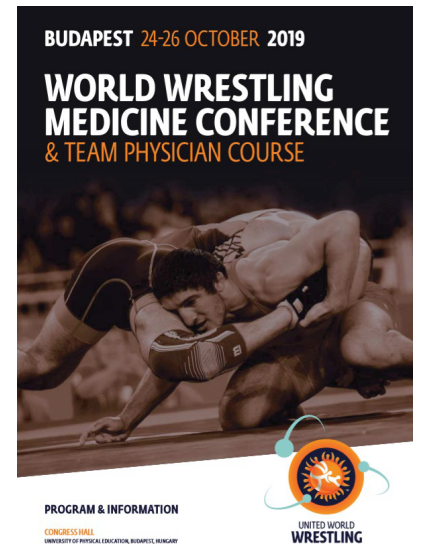




Special Section: Summaries of Presentations from the Wrestling Medicine Conference & Wrestling Team Physician Course, United World Wrestling, Budapest, October 24-26, 2019

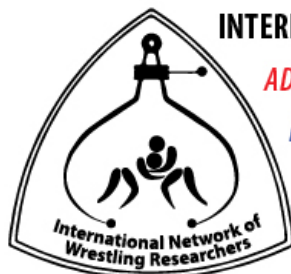
## WRESTLING INJURIES; FACTS AND FIGURES, PAST, PRESENT & FUTURE

**Babak Shadgan**



Published online: December 2019.

**To cite this article:** Babak Shadgan (2019) WRESTLING INJURIES; FACTS AND FIGURES, PAST, PRESENT & FUTURE. International Journal of Wrestling Science, 9:2, 86-90.



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# WRESTLING INJURIES; FACTS AND FIGURES, PAST, PRESENT & FUTURE

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INJURY; is a barrier for sport participation and development. Therefore, sport organizations need to have a good understanding of nature, specifications, patterns, risk factors, and mechanisms of injuries in order to prevent sport injuries, and promote the sport.

## UWW Wrestling Injuries Surveillance Program

- Started at 2004 Athens Olympic Games
- By direct observation and recording all injuries during competitions
- UWW-MC cloud-based injury surveillance system started from 2016 Rio

### Information

- severity, type, site, mechanism of Injury
- injury vs. style, sex, age, weight class, timing

### Definitions:

#### Injury

Any musculoskeletal or soft tissue complaint incurred during the competitions, that required medical attention regardless of the consequences with respect to absence from sport.

#### Injury Incidence

Number of new occurrences during competitions:

- number of injuries / 100 athletes
- number of injuries / 100 match

#### Injury Severity

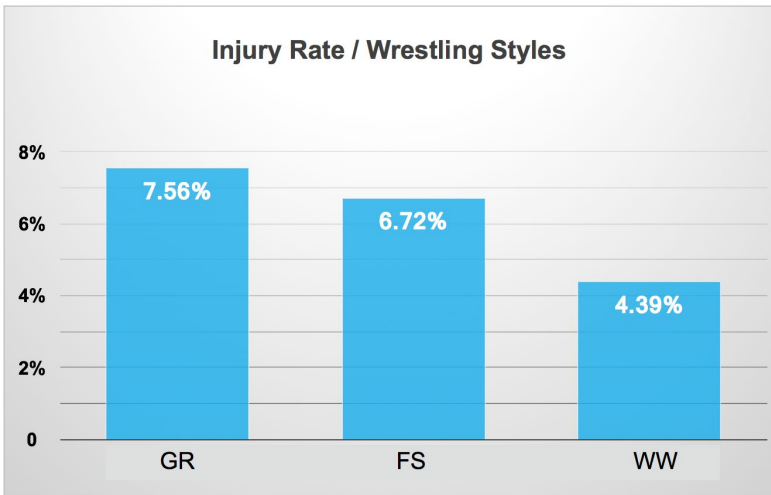
- Mild Injuries fully treated on the mat.
- Moderate injuries treated primarily on the mat but needing more attention after the competition, by which injured athletes were referred to the venue clinic.
- Severe injuries resulted in termination of the match; injured athletes were referred to the hospital.

## 2016 Rio Wrestling Competitions UWW-MC Injury Surveillance Study

### Results

#### Overall incidence:

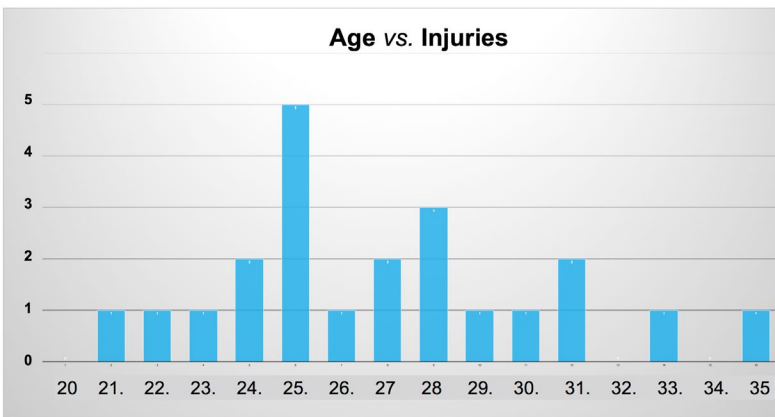
- 22 Injuries in 352 Athletes – 410 Matches
  - 6.2 injuries per 100 athletes (6.2%)
  - 5.4 injuries per 100 matches (5.4%)



#### Injuries vs. Styles

Women's freestyle had the lowest injury rate

Injury rate: 7.1% in men; 4.4% in women



#### Age vs. Injuries

Wrestlers between 24-28 years old showed more injury.

Injuries vs. Weight-Class  
More injuries were observed in the middle-weight categories.

Weight (kg)	Injury#
48	2
58	1
59	1
65	1
66	2
69	1
74	4
75	4
85	1
86	1
97	2
98	2

Injury Type	%
Skin Laceration	41
Nose Bleeding	18.2
Joint Dislocation	13.6
Ligament Sprain	13.6
Skin Contusion	9
Strangulation	4.5

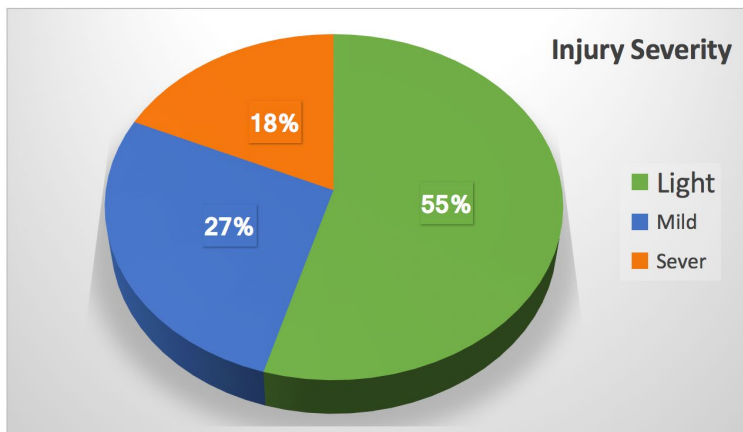
#### Injury Types

The most common injury type was skin laceration and contusion (54.5%) due to direct contact.

Injury Site	%
Forehead	22.9
Eyebrow	13.6
Nose	18.2
Chin	9.1
Head	4.5
Shoulder	13.6
Knee	9.1
Neck	4.5
Elbow	4.5

#### Injury Sites

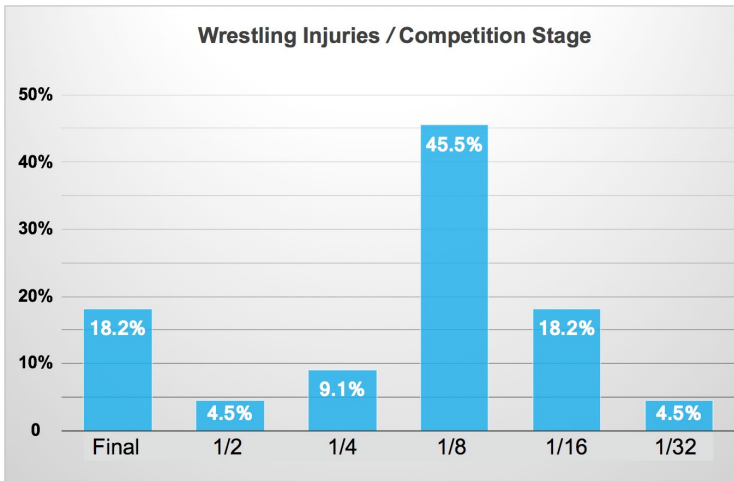
The most common sites of injuries were the face and head (72.8%) followed by shoulder and knee joints.



#### Injury Severity

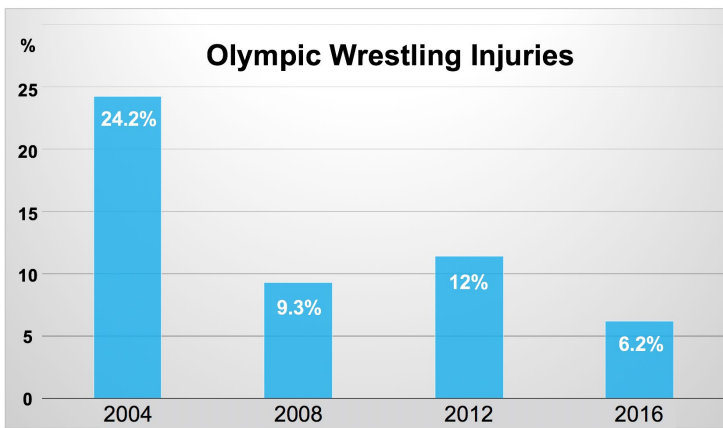
54.5% of all injuries were classified as mild, 27.3% as moderate and 18.2% as severe.

- 4 matches were terminated



**Injury Timing**  
 45.5% of all injuries occurred at 1/8 final;  
 18.2% of injuries were recorded at the Final matches.

**WRESTLING INJURY RATES OVER LAST 4 OLYMPIC GAMES & IN COMPARISON WITH OTHER SUMMER OLYMPIC SPORTS**



Wrestling Injury Rates, 2004 – 2016 Olympic Games

**Injury Rates at 2008, 2012 and 2016 – IOCMC Studies**



	Overall Inj. Rate	Wrestling Inj. Rate	UWW Inj. Rate
2004 Athens	-	-	24.2%
2008 Beijing	9.6%	9.4%	9.3%
2012 London	12.9%	12%	11.4%
2016 Rio	9.8%	5.5%	(22) 6.2%

## 2016 Rio - Injury Rate Wrestling Comparing Other Summer Olympic Sports



### Sports with Higher Injury Rates:

- BMX Cycling
- Boxing
- MTB Cycling
- Taekwondo
- Water polo
- Rugby
- Football
- Handball
- Gymnastics
- Weightlifting
- Hockey
- Judo
- Athletics
- Diving
- Badminton

### Conclusions

- No catastrophic injury was recorded during 2016 Rio Olympic wrestling competitions.
- Olympic wrestling injury rate shows a reducing trend.
- The rate of joint dislocations is still high.
- Wrestling compares favorably with other sports on the Olympic program.