

July 9 2014

# *Jockey Injuries: A Preliminary Analysis of the US Jockey Injury Database*



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see blue.

# Objective

- Provide update on data currently in the Jockey Injury Database
- Provide Considerations for Future Directions



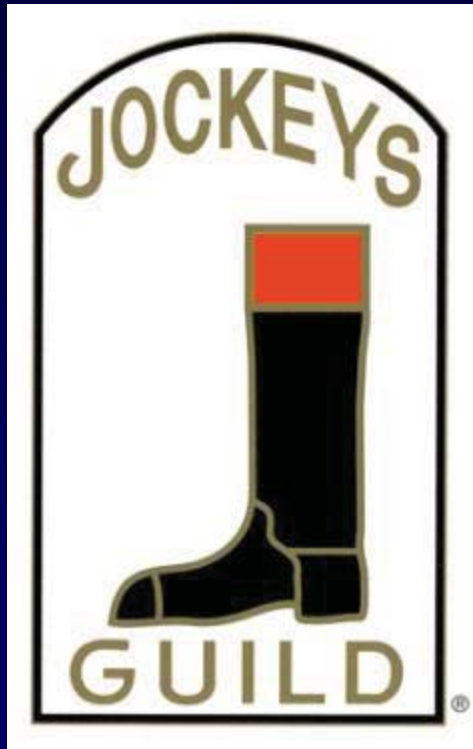
- <http://youtu.be/RzyJYH0kMVE>



KEENELAND



KEENELAND ASSOCIATION, INC.



- **The new data collection system has been created with the assistance of Keeneland, The Jockey Club and the National Thoroughbred Racing Association (NTRA) Safety and Integrity Alliance.**



# **Jockeys' Guild announces launch of Jockey Injury Database; aim is to track trends, protect riders**

**NICHOLASVILLE, Ky. (April 4, 2012) –**The Jockeys' Guild today announced the creation of the Jockey Injury Database, a new program aimed at preventing rider injuries in the future.

**The Jockey Injury Database will collect information on jockey injuries at racetracks, including where, when and how injuries occurred, what type of equipment riders were wearing at the time, and the nature and severity of the injuries.**

**When a jockey injury occurs, the information will be gathered confidentially by medical personnel at racetracks, as well as by Guild representatives, and then entered into a database to be analyzed at a later date. In the database, jockeys will not be identified by name nor will the tracks where incidents occur.**



# Professional Jockeys

- On average weigh approximately 110 pounds
- Reported to be in better physical condition than professional football, baseball, basketball, and hockey players.



# Professional Jockeys

- Ride an animal which weighs approximately 2,000 pounds, running at speeds of 45 mph.
- Injuries at these speeds can have catastrophic consequences





- Jockey Injury Database

Currently 369 entries



1.  Male

Female

2.  Apprentice

Professional jockey: (number of years) 15

CODE: 009-  
Internal use only

3. Location of Incident:

- Paddock
- Post parade
- Loading into the gate
- In the gate
- At start
- First half of race
- In final turn
- In stretch
- Galloping out
- Returning to unsaddle

Race Specifics:

4. Size of field: 9 (6) 5. Distance: 6 Furlongs 6. Purse: \$ 11,520

7. Surface:  Dirt  
 Synthetic  
 Turf

7A. Surface Condition of Dirt:  Fast  
 Good  
 Muddy  
 Sloppy

7B. Surface Condition of Turf:  Firm  
 Good  
 Soft  
 Yielding

8. Age:

- 2 YO
- 3 YO
- 3 YO & UP
- 4 YO & UP

9. Race Horse Gender

- M
- F

10. Race Gender

- C&G
- F&M
- Open

11. Race Type

- MSW
- MDN Claiming \$ 5,000
- Claiming \$ \_\_\_\_\_
- Starter ALW

Allowance optional claiming \$ \_\_\_\_\_

- ALW
- Handicap
- Stake Race
- Other \_\_\_\_\_

12. Cause of Incident:

(check all that apply):

- Thrown by horse (non-breakdown)
- Thrown by horse (breakdown)
- Clipped heels
- Collision
- Fell over fallen horse on track
- Thrown or pinned by horse in gate
- Equipment failure
- Other (specify): \_\_\_\_\_

13. Result of Incident:

- Non-Injury
- Injury (Returned to ride same day)
- Injury (Did NOT return same day)



12. Cause of Incident:  
(check all that apply):

- Thrown by horse (non-breakdown)
- Thrown by horse (breakdown)
- Clipped heels
- Collision
- Fell over fallen horse on track
- Thrown or pinned by horse in gate
- Equipment failure
- Other (specify): \_\_\_\_\_

13. Result of Incident:

- Non-Injury
- Injury (Returned to ride same day)
- Injury (Did NOT return same day)

14. Cause of Injury:  
(check all that apply):

- Injured on horse
- Injured in fall
- Trampled by horse
- Kicked by horse
- Pinned by horse
- Other \_\_\_\_\_

15. Site of Impact:

- Ground
- Rail
- Gate
- Other (specify): N/A

16. On-track Medical Staff:  
(check all that apply):

- Doctor
- Nurse
- Paramedic
- EMT
- Other \_\_\_\_\_

17. On-track Medical Care:

- No treatment necessary
- Treated and released
- Treated, then transported to hospital
- Transported immediately to hospital

18. Was hospitalization required for the injury?  Yes

No

19. Type of Helmet:

- Champion
- Charles Owen
- GPA Sport
- LAS Helmets
- Other

(specify model type of helmet):  
Caliente

20. Helmet Certification:

- ASTM F1163
- EN 1384 / BS EN 1384
- AS/NZS 3838
- Snell
- Other (specify): \_\_\_\_\_
- No Certification
- No Record

21. Type of Body Protection

- Air Vest
- Hovs Racesafe
- Phoenix Vest (Tipperary)
- Vipa Vest
- Other (specify model type): Excalibur
- None
- Not Recorded

22. Body Protection Certification:

- ASTM F1937
- ASTM F2681
- EN 13158
- SATRA
- Other (specify): \_\_\_\_\_
- No Certification
- Not Recorded



**23. Nature of Injury (check all that apply):**

[Fx=Fracture, Str/Spr=Strain/Sprain, Dis=Dislocation, Sx=Surgery]

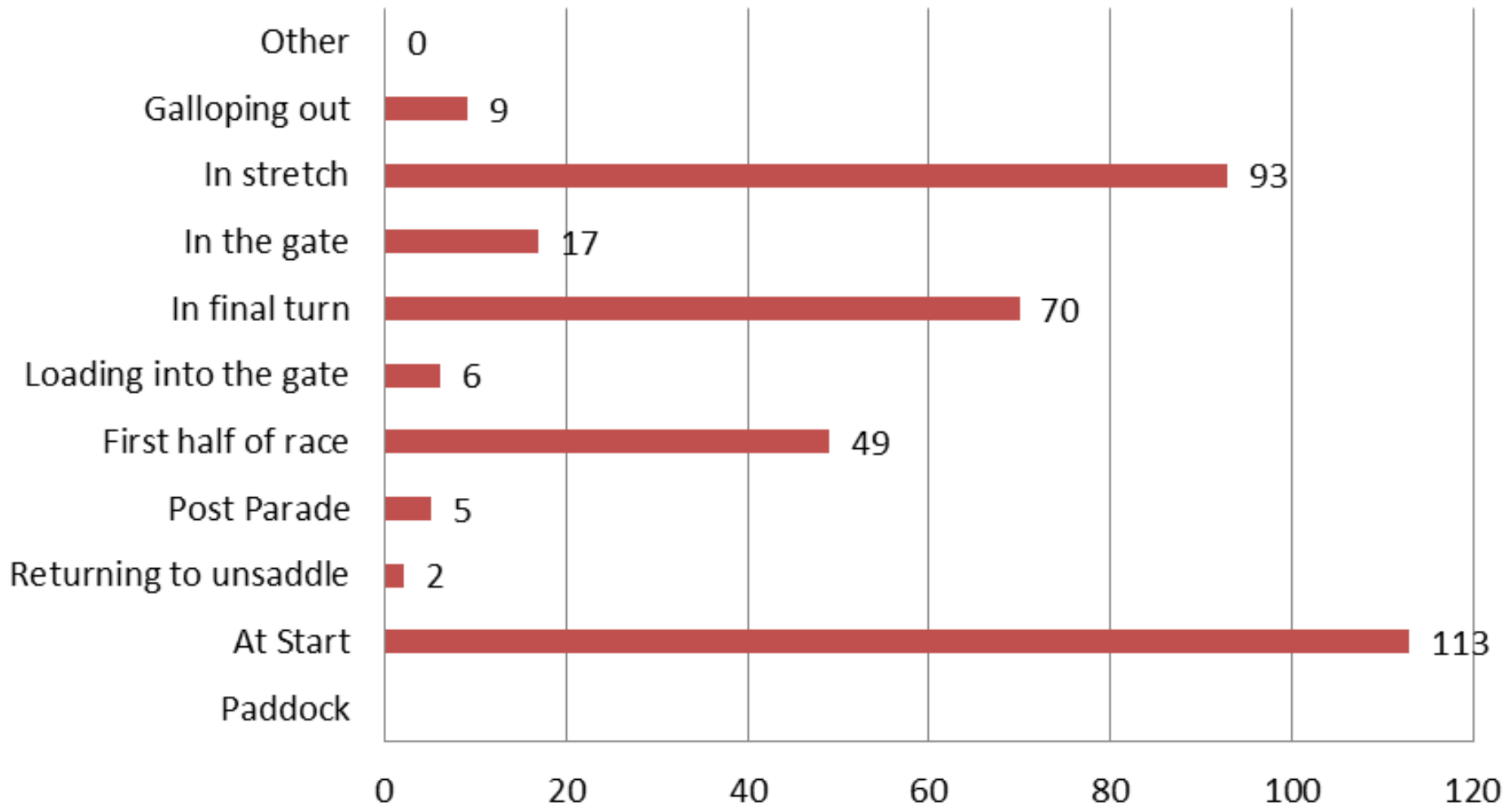
- |   |                             |                                  |  |                             |   |                              |   |                             |                                  |                              |                             |
|---|-----------------------------|----------------------------------|--|-----------------------------|---|------------------------------|---|-----------------------------|----------------------------------|------------------------------|-----------------------------|
| <input type="checkbox"/> Head/Skull             | <input type="checkbox"/> Fx | <input type="checkbox"/> Sx      | <input type="checkbox"/> Upper arm (humerus)         | <input type="checkbox"/> Fx | <input type="checkbox"/> Str/Spr            | <input type="checkbox"/> Sx  | <input type="checkbox"/> Thigh (femur)            | <input type="checkbox"/> Fx | <input type="checkbox"/> Str/Spr | <input type="checkbox"/> Sx  |                             |
| <input type="checkbox"/> Concussion             |                             |                                  | <input type="checkbox"/> Lower arm (radius/ulna)     | <input type="checkbox"/> Fx | <input type="checkbox"/> Str/Spr            | <input type="checkbox"/> Sx  | <input type="checkbox"/> Knee                     | <input type="checkbox"/> Fx | <input type="checkbox"/> Str/Spr | <input type="checkbox"/> Dis | <input type="checkbox"/> Sx |
| <input type="checkbox"/> Facial bones           | <input type="checkbox"/> Fx | <input type="checkbox"/> Sx      | <input type="checkbox"/> Wrist                       | <input type="checkbox"/> Fx | <input type="checkbox"/> Str/Spr            | <input type="checkbox"/> Dis | <input type="checkbox"/> Lower leg (tibia/fibula) | <input type="checkbox"/> Fx | <input type="checkbox"/> Str/Spr | <input type="checkbox"/> Dis | <input type="checkbox"/> Sx |
| <input type="checkbox"/> Eyes                   |                             | <input type="checkbox"/> Sx      | <input type="checkbox"/> Hand                        | <input type="checkbox"/> Fx | <input type="checkbox"/> Str/Spr            | <input type="checkbox"/> Sx  | <input type="checkbox"/> Ankle                    | <input type="checkbox"/> Fx | <input type="checkbox"/> Str/Spr | <input type="checkbox"/> Dis | <input type="checkbox"/> Sx |
| <input type="checkbox"/> Ears                   |                             | <input type="checkbox"/> Sx      | <input type="checkbox"/> Fingers                     | <input type="checkbox"/> Fx | <input type="checkbox"/> Str/Spr            | <input type="checkbox"/> Dis | <input type="checkbox"/> Foot                     | <input type="checkbox"/> Fx | <input type="checkbox"/> Str/Spr | <input type="checkbox"/> Dis | <input type="checkbox"/> Sx |
| <input type="checkbox"/> Nose                   | <input type="checkbox"/> Fx | <input type="checkbox"/> Sx      | <input type="checkbox"/> Chest/Ribs                  | <input type="checkbox"/> Fx | <input type="checkbox"/> Str/Spr            | <input type="checkbox"/> Sx  | <input type="checkbox"/> Spinal cord injury       |                             |                                  |                              | <input type="checkbox"/> Sx |
| <input type="checkbox"/> Jaw                    | <input type="checkbox"/> Fx | <input type="checkbox"/> Dis     | <input type="checkbox"/> Abdominal injury            |                             |   | <input type="checkbox"/> Sx  | <input type="checkbox"/> Paralysis                |                             |                                  |                              |                             |
| <input type="checkbox"/> Neck (cervical spine)  | <input type="checkbox"/> Fx | <input type="checkbox"/> Str/Spr | <input type="checkbox"/> Upper back (thoracic spine) | <input type="checkbox"/> Fx | <input type="checkbox"/> Str/Spr            | <input type="checkbox"/> Sx  | <input type="checkbox"/> Soft tissue injury       |                             |                                  |                              | <input type="checkbox"/> Sx |
| <input type="checkbox"/> Shoulder               | <input type="checkbox"/> Fx | <input type="checkbox"/> Str/Spr | <input type="checkbox"/> Lower back (lumbar spine)   | <input type="checkbox"/> Fx | <input checked="" type="checkbox"/> Str/Spr | <input type="checkbox"/> Sx  | <input type="checkbox"/> Death                    |                             |                                  |                              |                             |
| <input type="checkbox"/> Collar bone (clavicle) | <input type="checkbox"/> Fx | <input type="checkbox"/> Sx      | <input type="checkbox"/> Pelvis                      | <input type="checkbox"/> Fx | <input type="checkbox"/> Str/Spr            | <input type="checkbox"/> Sx  | <input type="checkbox"/> Other (specify): _____   |                             |                                  |                              |                             |
| <input type="checkbox"/> Elbow                  | <input type="checkbox"/> Fx | <input type="checkbox"/> Dis     | <input type="checkbox"/> Hip                         | <input type="checkbox"/> Fx | <input type="checkbox"/> Str/Spr            | <input type="checkbox"/> Dis | _____   |                             |                                  |                              |                             |

24. Length of Time to Return to Ride: (0 to 365 days or over) 3

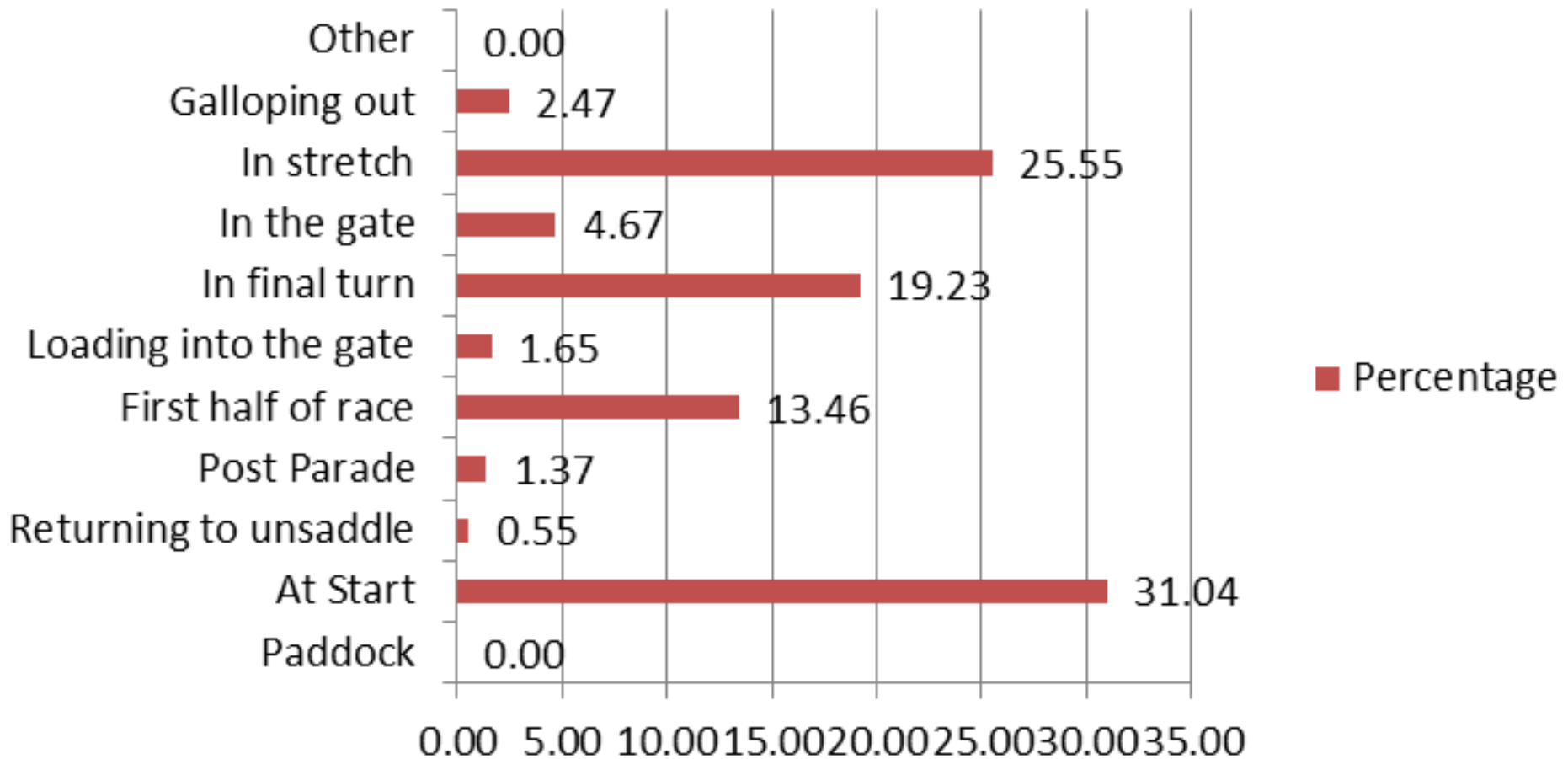
Fax or e-mail completed form to: 859-219-9892 • Info@jockeysguild.com



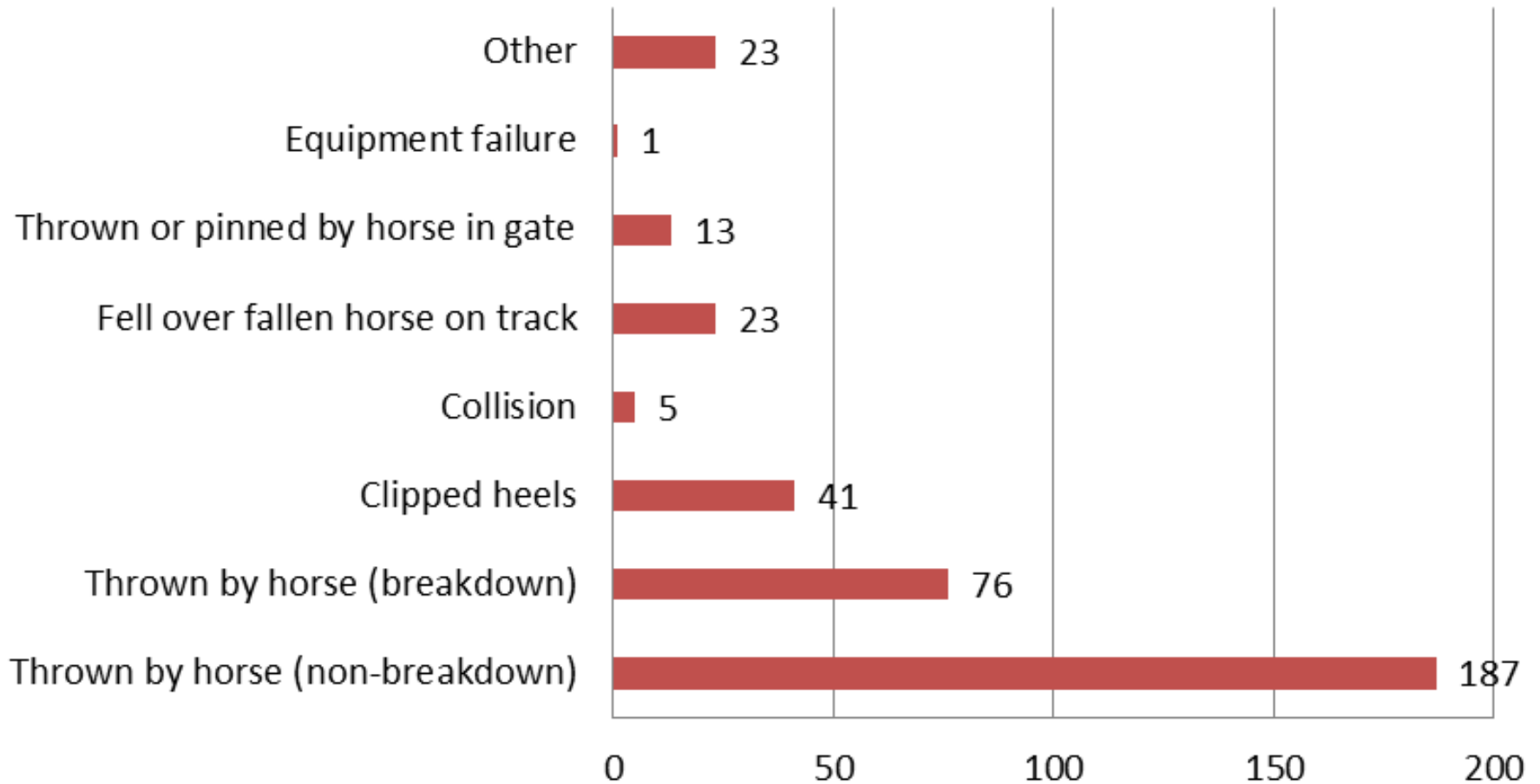
# Location of Incident



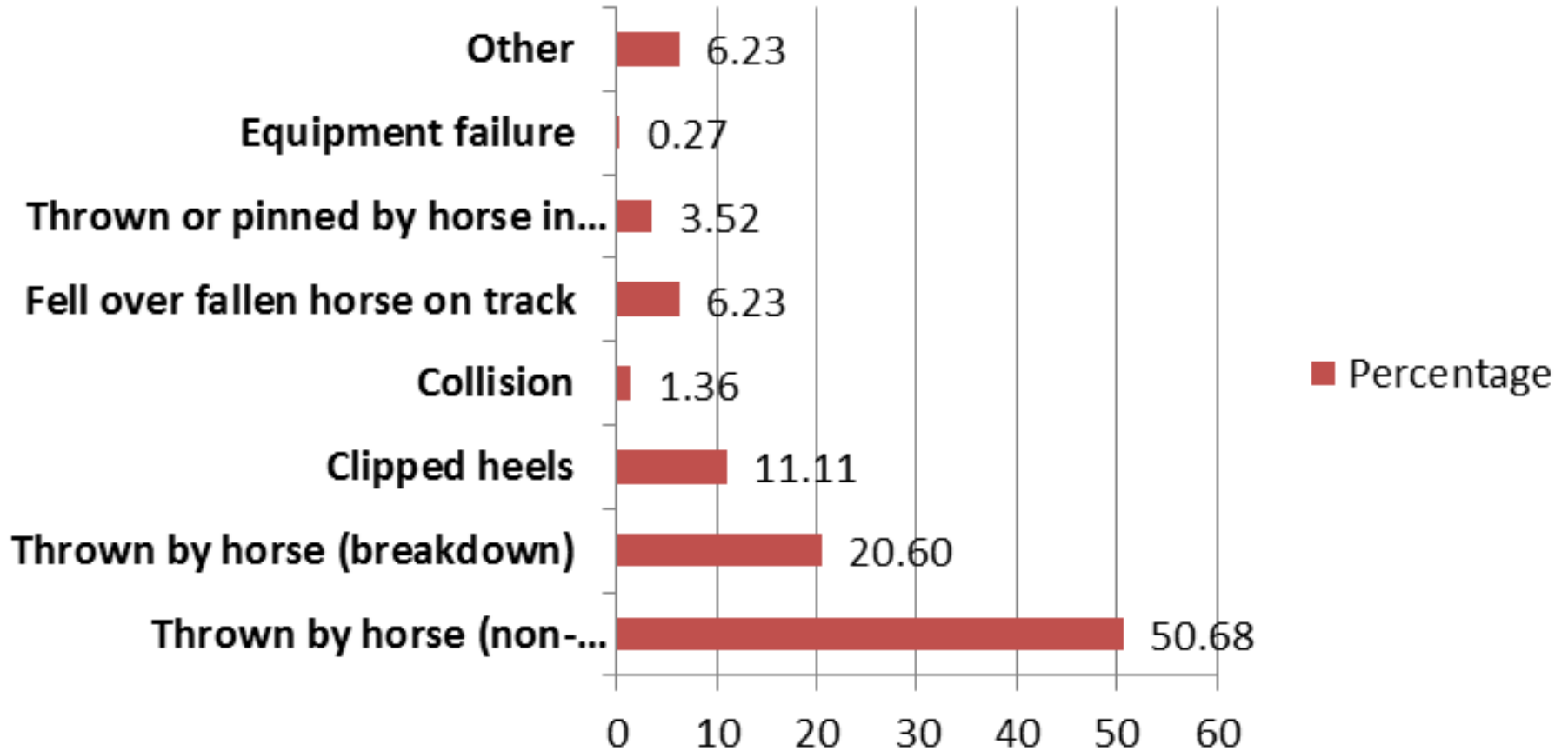
# Location of Incident %



# Cause of Incident

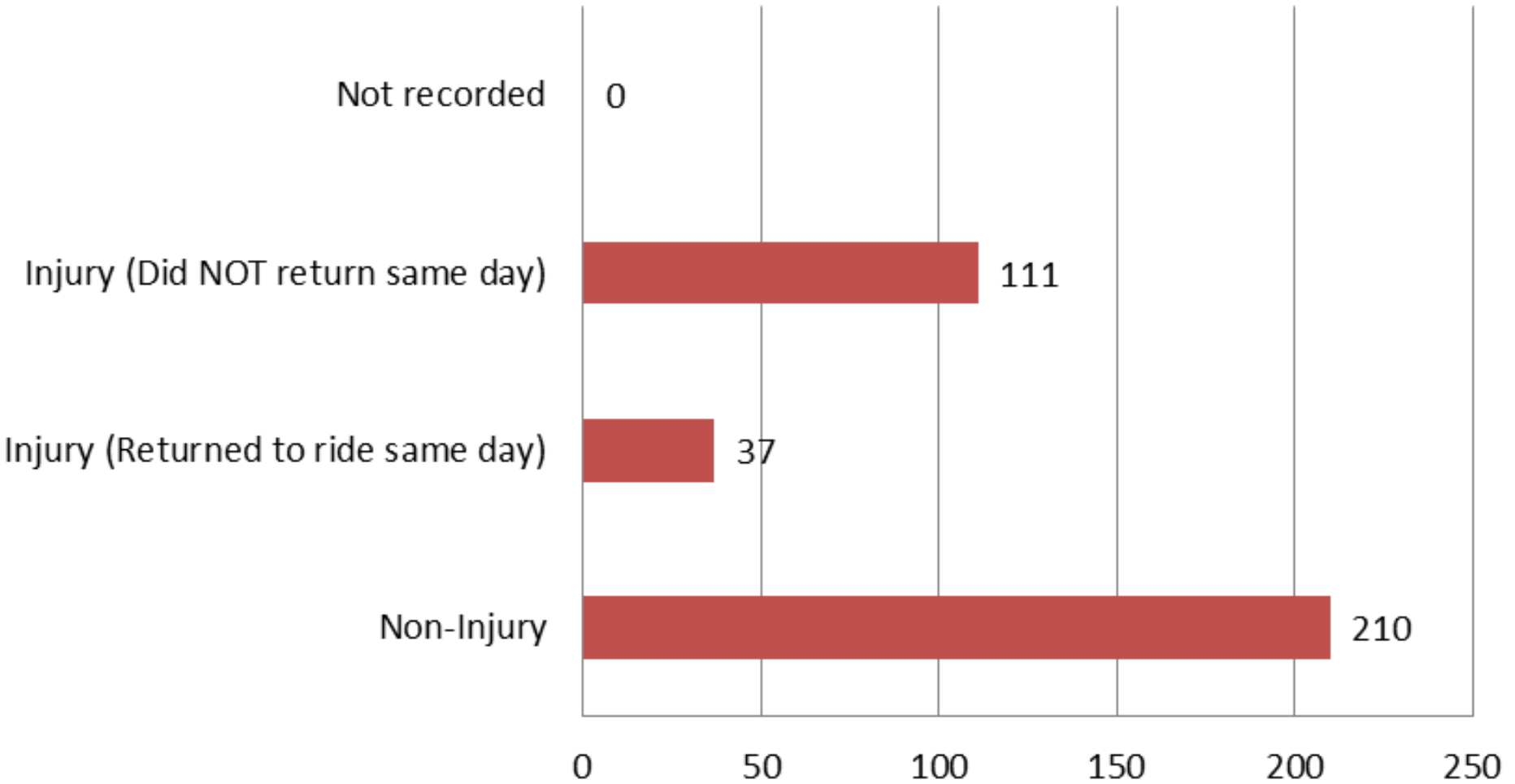


# Cause of Incident's %

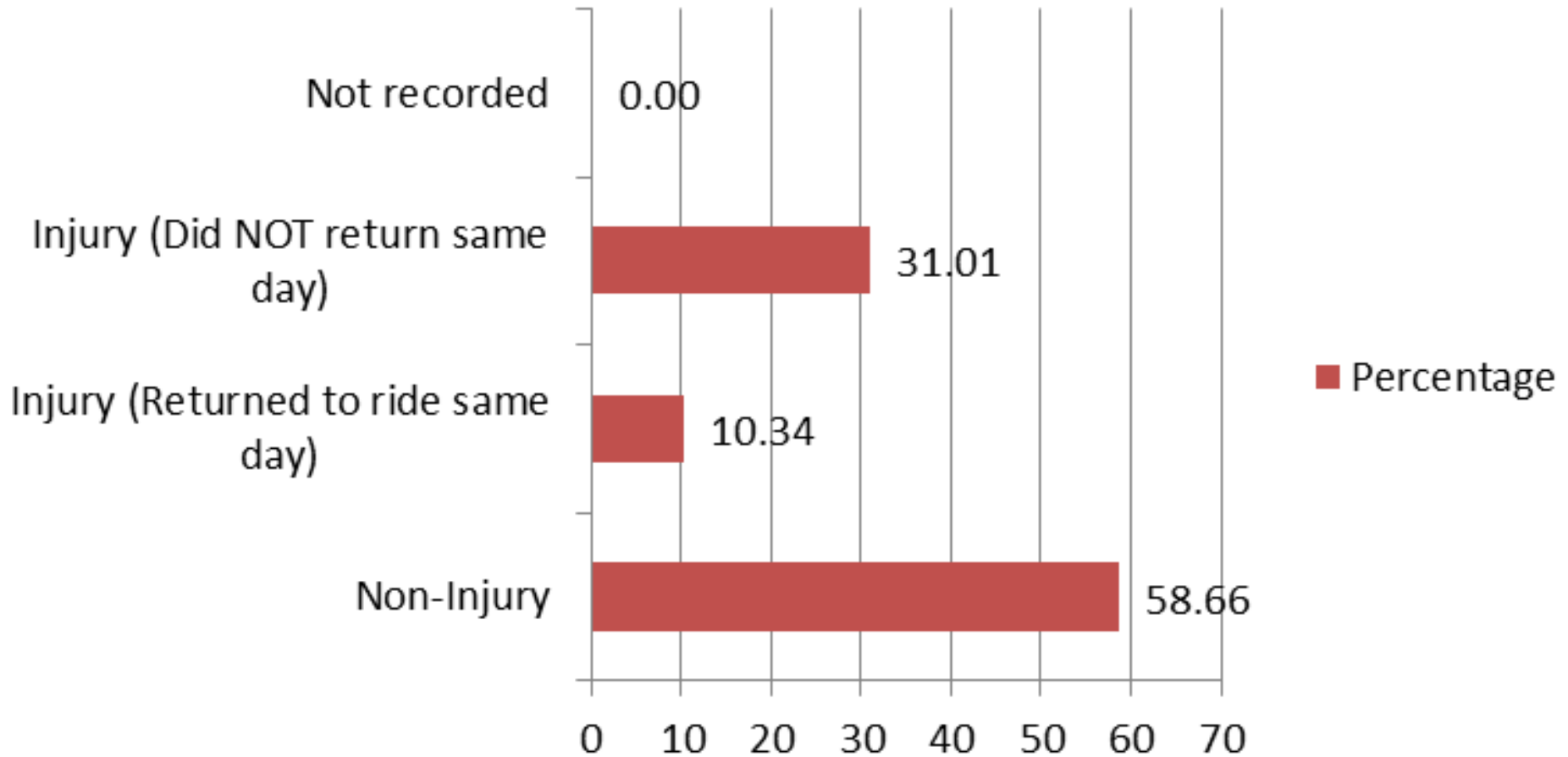




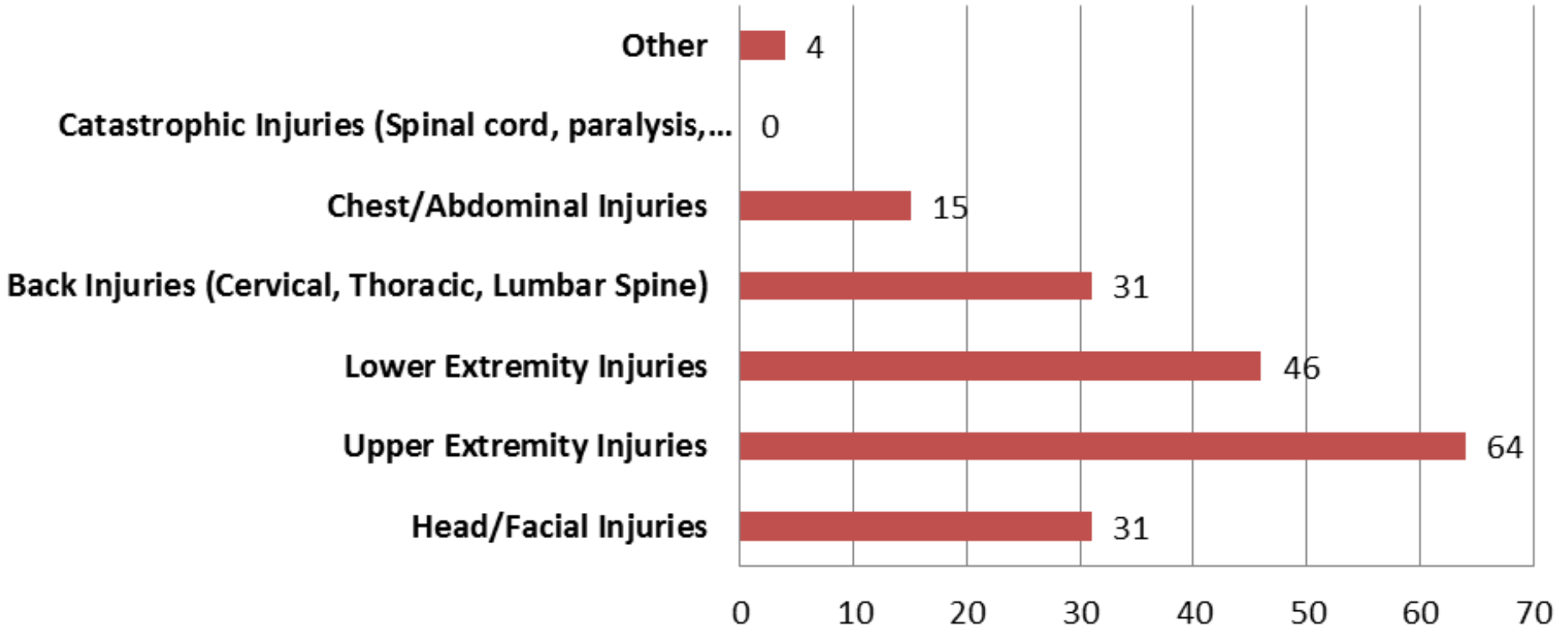
# Result of Incident



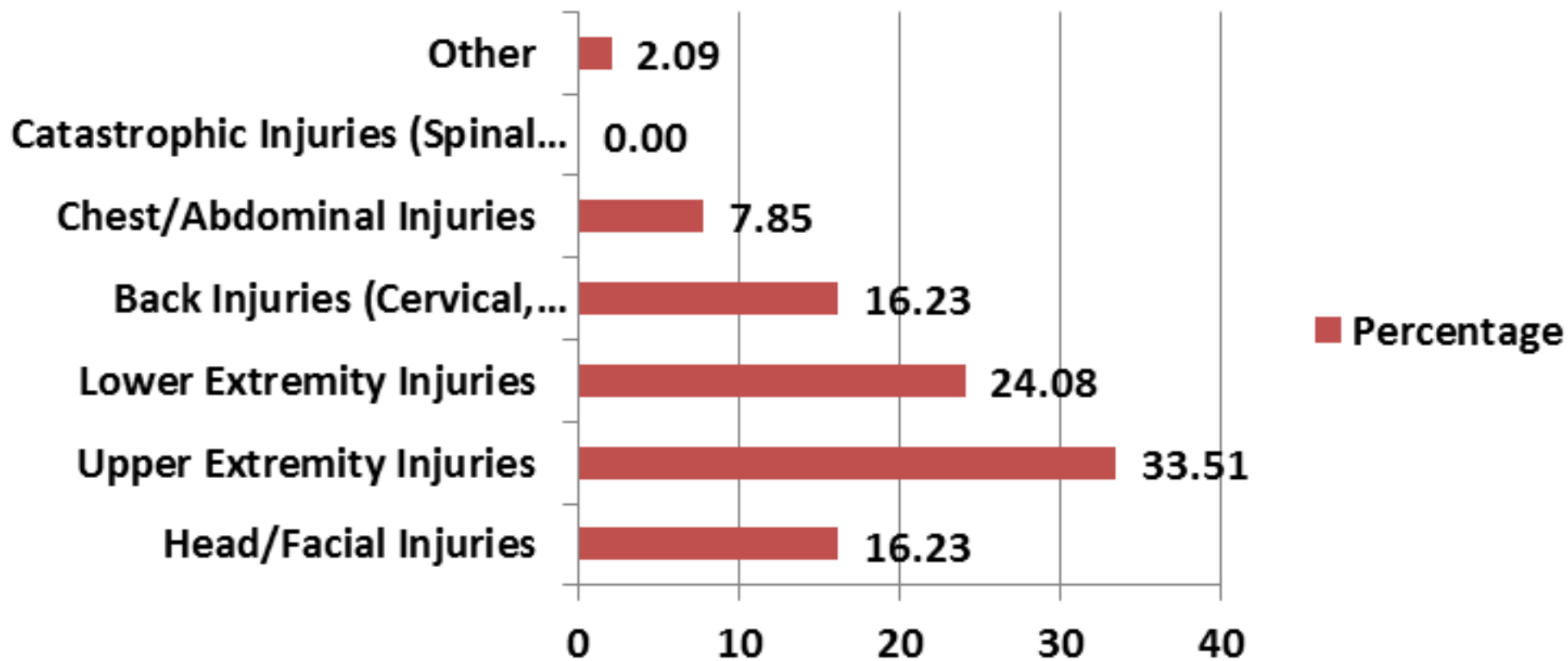
# Result of Incident %



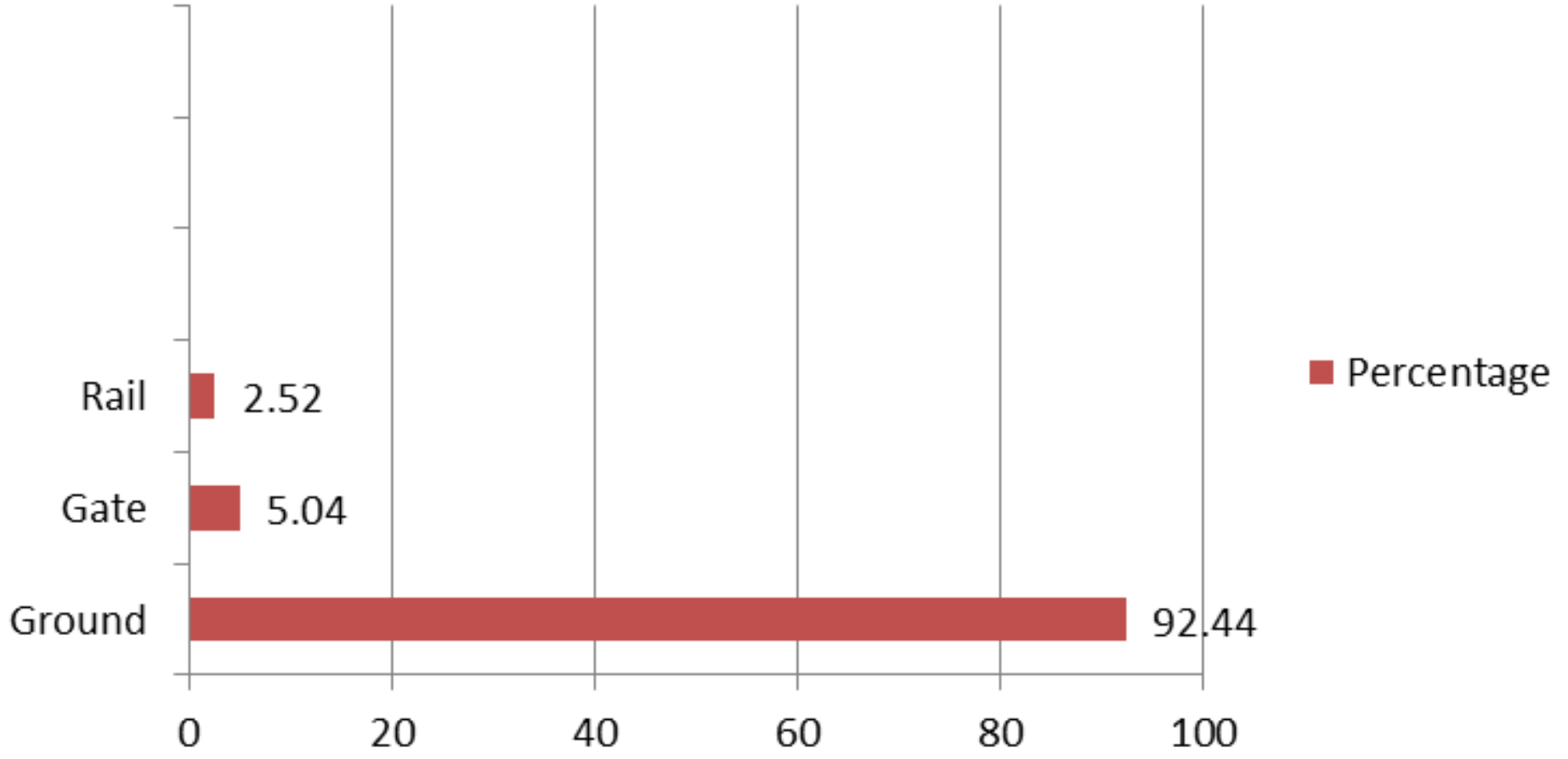
# Injuries by Region



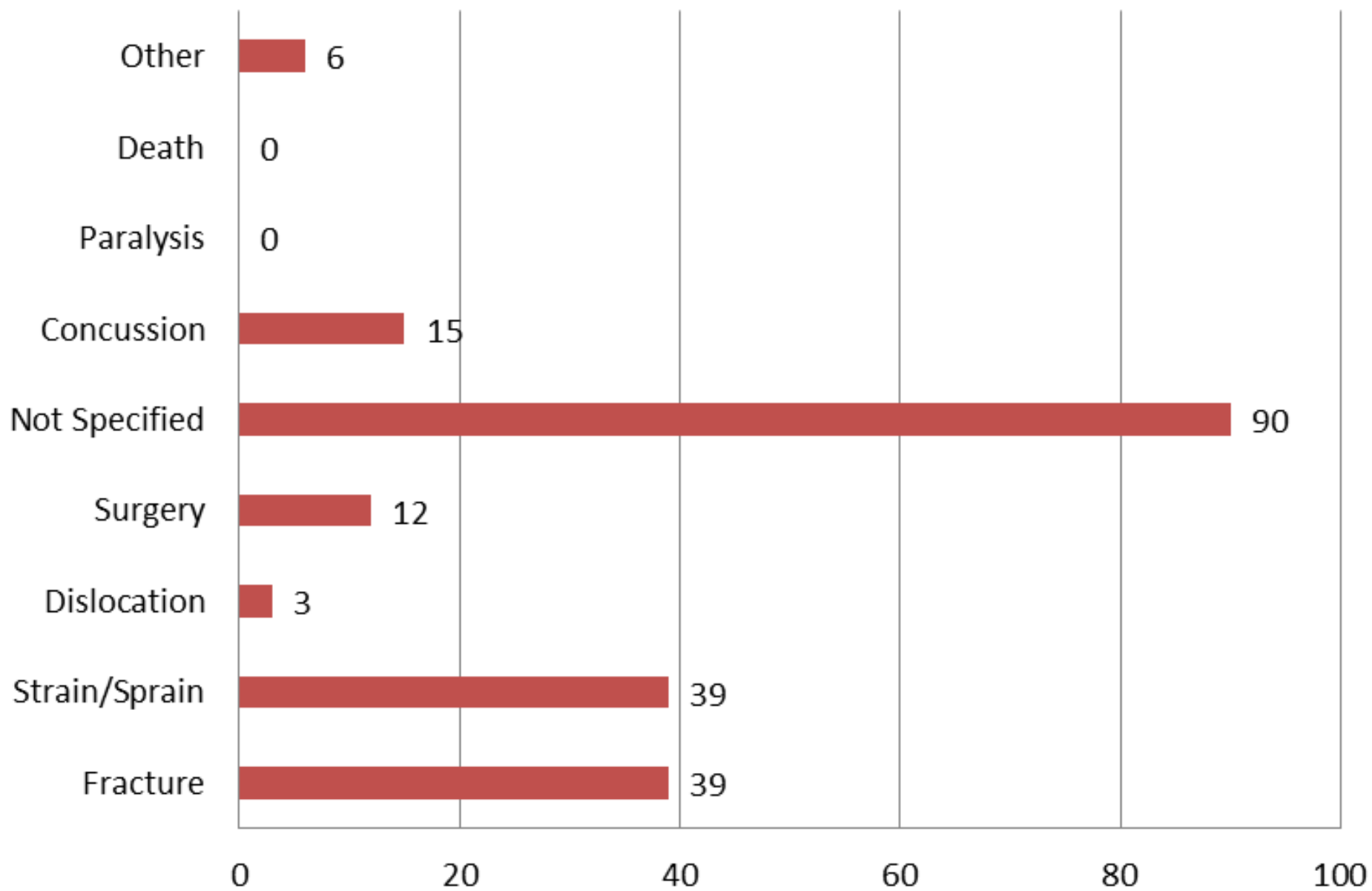
# Injury by Region %



# Site of Incident %

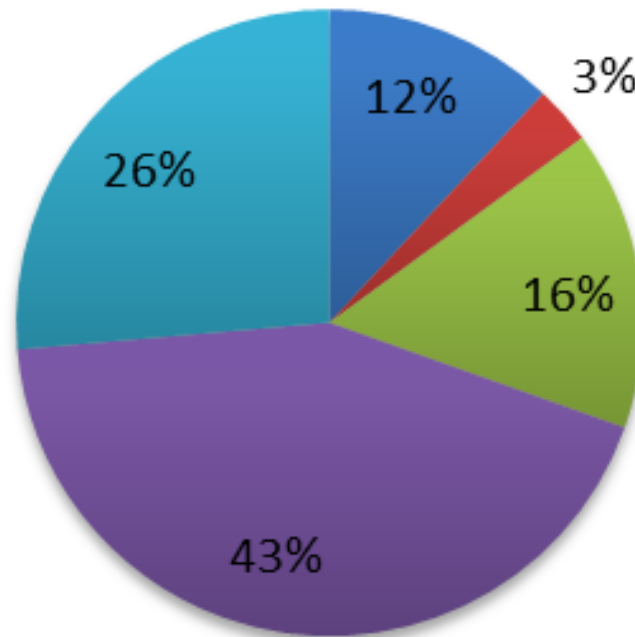


# Nature of Injury

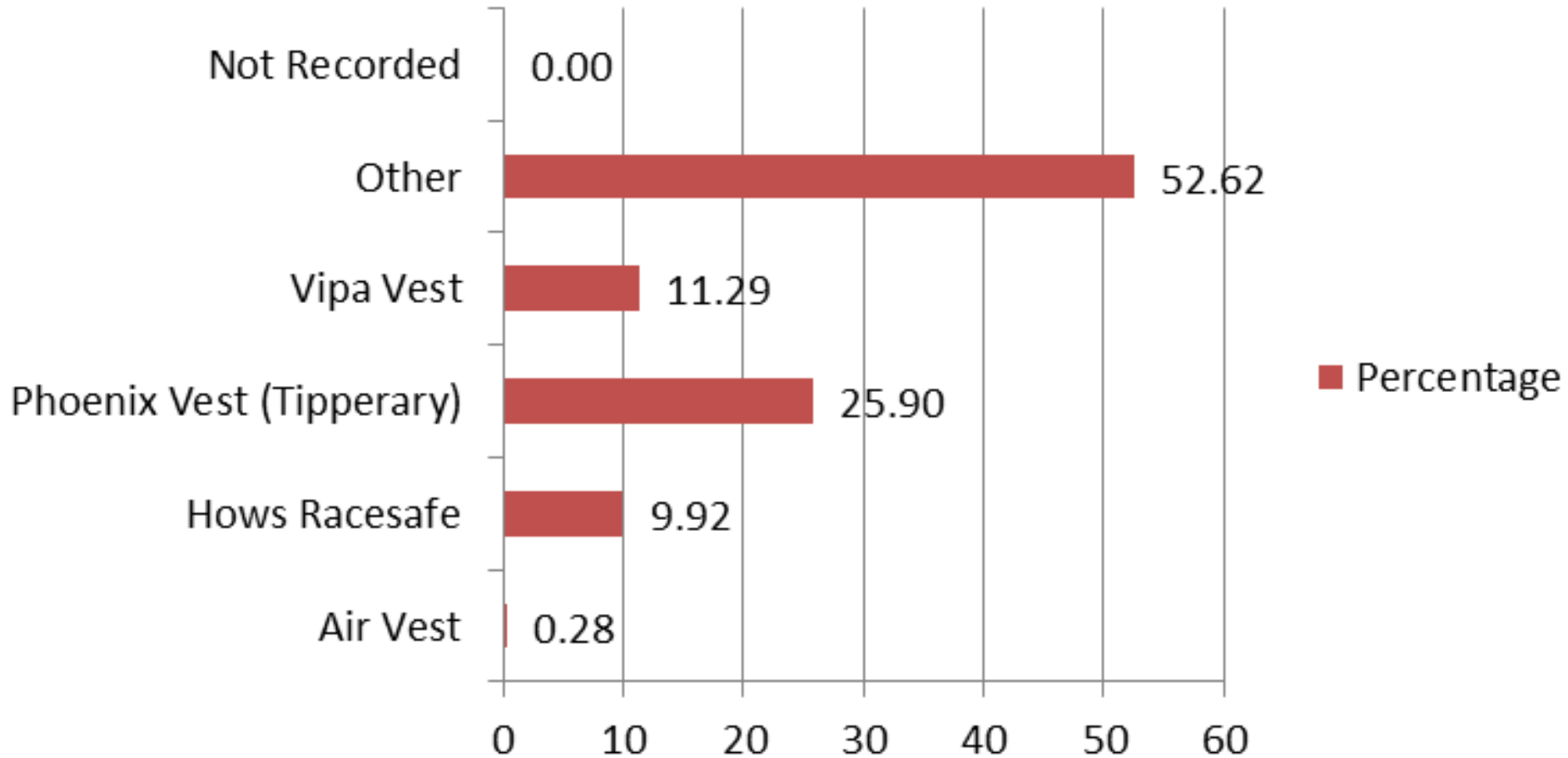


# Helmet

■ Champion   ■ Charles Owen   ■ GPA Support   ■ LAS Helmet   ■ Other



# Type of Protection %





- Of the 148 incidents where there was an injury, 111 did not return the same day and 37 were able to return the same day
- 263 total incidents in database where a jockey came off a horse.
- Of those, 163 resulted in an injury



# Challenges

- In order to capture the incidence of an injury

**Incidence:**

Number of new cases of the disease/injury over a period of time  
-----  
Number of people at risk during that period

Absolute incidence rate :  $\frac{\text{Number of injuries}}{\text{Number of exposure-events (games)}}$

Relative incidence rate :  $\frac{\text{Number of new cases}}{\text{Population time}}$



# Incidence

- Need Number of
  - Race Rides
  - Races
  - Race Meets
- Usually Number of new injuries or Fall per 1000 exposures or per 1000 race rides



# Future Considerations

- Under representative data
  - Based on 1993-1996 study by waller 6500 injuries
  - Therefore ~ 1000- 2000 per year



# Future Considerations

- COOPERATION OF
  - JOCKEYS
  - Tracks
  - Regional Managers
- Initiative
- Importance of factors we can't control
- Common denominator
- Accreditation



# Future Considerations

- Identification of Injuries will provide the ability to better protect and seek preventative mechanisms to put the welfare of the Jockey at the forefront
- Better understanding equipment needs and Medical Response



# Thanks





**Thank You!**

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see blue.

