

Research - R194

Poster

Abstract Title:

Horses, Cows, Mules; Oh My!

Authors:

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Background & Purpose:

As a Regional Level 1 Trauma Hospital; in an area with a large equine population and agricultural commerce as one of the leading industries, the investigators felt that a review of injury patterns from livestock would be a good origination point to guide outreach and education. Livestock, including large, domesticated animals found on farms, racetracks and households, exist abundantly in the region, allowing frequent and sometimes dangerous interactions with their human caregivers. Little thought is given to the potential risk of interacting with large animals, therefore meager resources are allocated for education and prevention.

Study/Project Design:

Retrospective, descriptive review.

Setting:

academic trauma center in a largely rural state

Sample:

Registry data obtained from 1/2010-6/2013 was used to identify patients hospitalized after animal injury. Excluded were small, wild animals and injuries involving vehicles.

Procedures:

The incidence, severity, type of animal, patient sex and age, body region injured and toxicology at time of injury was examined and compared amongst each type of livestock. Activity at time of injury was also reviewed. As divided into categories of occupation, transportation and recreation.

Findings/Results:

A total of 239 patients were pulled from the trauma registry. 117 patients were included after all exclusion criteria were applied. There were 2.5% transportation injuries, 19.5% occupational injuries and 78 % were recreational injuries. The most common animal was horses at 90%, those causing the most severe injuries were cattle with average ISS of 14. Over 23% of large animal ISS scores fell into the severe category. It was found that most frequent AIS was chest 36.4% and extremity 59.3%, the highest scoring AIS was head 3.79 and abdomen 3.29. Over 51% of patients had multiple injury categories. Across all categories 14% of patients were found to have positive toxicology screens, all of these occurred in the recreational group.

Discussion/Conclusions/Implications:

It is hard to quantify the incidence of livestock trauma, no national databases track injuries. Many of those injured are never treated or seen in the hospital system. Most people working with livestock as an occupation and recreation fail to educate and/or follow guidelines for safety. On that note, few standardized safety guidelines exist for the care and recreational use of livestock. Of existing safety guidelines many of them are out dated or not easily accessible to the general public. In a state that is still largely rural, with a preponderance of both urban and rural citizens participating in animal husbandry it behooves the states Level 1 trauma center to incorporate this into its outreach program.