

Risk factors for fatalities and musculoskeletal injuries in Thoroughbred flat racing under OSAFⁱ jurisdiction

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Even though many risks factors for fatalities and musculoskeletal injuries have been identified in Thoroughbred flat racing throughout the years, no study has ever been conducted to measure risk factors in Latin America's horseracing.

There are clear differences between racing industries amongst countries and regions; risk factors may also differ between them.

This study was focused on describing prevalence of fatalities and musculoskeletal injuries in four different recourses under OSAF jurisdiction and identifying risk factors amongst them. Our analysis involved approximately 500,000 race starts provided by OSAF racecourses. Each racetrack was analysed independently seeking identification of multiple risk factors for both outcomes.

Every available variable was analysed at the univariable level and a final multivariable analysis was conducted in order to identify the risk factors. Some of the identified risk factors were related to the horse, or its history in racing, some others were related to the race, the track or the jockey.

The result of this study could help develop strategies for reducing and preventing equine musculoskeletal injuries and fatalities, improving horse welfare in flat Thoroughbred racing in OSAF.

ⁱ **Latin American Organization for the Promotion of the Thoroughbred**