

## **Abstract**

This diploma thesis deals with the issue of injury prevention in modern pentathletes. It sets itself the goal of analyzing the current epidemiological situation of injuries in modern pentathlon as well as the current preventive strategies of athletes, including the evaluation of their impact on the incidence of injuries. The nature of the work is a prospective cohort study. A modified version of the validated „Oslo Sports Trauma Research Center questionnaire on health problems“ was used. This questionnaire was sent to athletes every week for 10 weeks using the Qualtrics questionnaire software. The study involved 43 probands from 15 countries, ie 4.3% of athletes registered with the UIPM (Union Internationale de Pentathlon Moderne).

A total of 34 new injuries and overloads were recorded in 27 probands. The incidence rate of injuries of 3.1 / 1000 h of active sports was found. The most frequently reported segments of injury were the shoulder (14.7%), ankle (14.7%), knee and shin (both 11.8%). The ratio of the lower limb to upper limb injuries was found to be 3: 1. Most injuries were associated with running discipline (46%). The most commonly used injury prevention strategy was stretching, followed by strength training, massages, and consistent warm-up before training. The mean warm-up duration showed a statistically significant negative correlation with the incidence of injury at subsequent 10-week monitoring ( $p < .013$ ).

Part of the work is a theoretical analysis of individual disciplines from the perspective of kinesiology, the incidence of injuries, mechanisms of injury, risk factors, and existing prevention programs.