

# COMPARISON OF NON-CONTACT AND CONTACT TIME-LOSS LOWER QUADRANT INJURY RATES IN MALE COLLEGIATE BASKETBALL PLAYERS: A PRELIMINARY REPORT

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## ABSTRACT

**Background:** Male collegiate basketball (BB) players are at risk for musculoskeletal injury. The rate of time-loss injury in men's collegiate BB, for *all* levels of National Collegiate Athletic Association (NCAA) competition, ranges from 2.8 to 4.3 per 1000 athletic exposures (AE) during practices and 4.56 to 9.9 per 1000 AE during games. The aforementioned injury rates provide valuable information for sports medicine professionals and coaching staffs. However, many of the aforementioned studies do not provide injury rates based on injury mechanism, region of the body, or player demographics.

**Hypothesis/ Purpose:** The purpose of this study is two-fold. The first purpose of this study was to report lower quadrant (LQ = lower extremities and low back region) injury rates, per contact and non-contact mechanism of injury, for a cohort of male collegiate basketball (BB) players. The second purpose was to report injury risk based on prior history of injury, player position, and starter status.

**Study Design:** Prospective, descriptive, observational cohort

**Methods:** A total of 95 male collegiate BB players (mean age  $20.02 \pm 1.68$  years) from 7 teams (NCAA Division II = 14, NCAA Division III = 43, NAIA = 21, community college = 17) from the Portland, Oregon region were recruited during the 2016-2017 season to participate in this study. Each athlete was asked to complete an injury history questionnaire. The primary investigator collected the following information each week from each team's athletic trainer: athletic exposures (AE; 1 AE = game or practice) and injury updates.

**Results:** Thirty-three time-loss LQ injuries occurred during the study period. The overall time-loss injury rate was 3.4 per 1000 AE. Division III BB players had the highest rates of injury. There was no difference in injury rates between those with or without prior injury history. Guards had a significantly greater rate of non-contact time-loss injuries ( $p = 0.04$ ).

**Conclusions:** Guards experienced a greater rate of LQ injury than their forward/center counterparts. Starters and athletes with a prior history of injury were no more likely to experience a non-contact time-loss injury than nonstarters or those without a prior history of injury. These preliminary results are a novel presentation of injury rates and risk for this population and warrant continued investigation.

**Level of Evidence:** 2

**Keywords:** basketball, college, epidemiology, prior history of injury

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The authors report that there are no conflicts of interest related to this work.

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