

FOOTBALL RESEARCH - UEFA CHAMPIONS LEAGUE STUDIES

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Injury study is the first step in injury prevention.

The UEFA Champions League injury study is ongoing since 14 years and includes information from 55 elite level clubs in Europe. The database, consisting of 20,000 injuries is the world's largest concerning male elite level football. A large database from a homogenous material provides robust information of the risk of specific injuries, their consequences in form of lay off days and the risk of recurrence etc. Further, injury studies provides an instrument to follow injury rates over time and to evaluate the effect of preventive programs or change of factors such as rules, match frequency or training load.

Important findings from the study

- The match unavailability due to injury is 14% and has been constant over the last decade.
- The injury incidence has been lowered for ligament injuries but injury rates for muscle injuries and severe injuries remain high and are still unaffected by preventive measures.
- On average, a team of 25-28 players can expect around 50 injuries per season.
- The injury incidence during matches is significantly higher than during training
- Injuries and team success are correlated. Teams with fewer injuries have better results both in UEFA tournaments and in national leagues.
- A period of match congestion can lead to player fatigue, which may result in injury and/or underperformance during the following period.
- Injury rates and especially muscle injury rates increase in matches with short recovery period between matches.
- Players that suffer a hamstring injury, groin injury or knee joint injury are 2-3 times more likely to suffer an identical injury in the subsequent season.
- The injury risk is similar when playing on artificial turf as when playing on natural grass, but the injury pattern is slightly different.
- Teams from the northern parts of Europe have higher incidences of injury compared to teams from southern parts. In contrast, the anterior cruciate ligament injury incidence is lower in the northern European teams, especially for noncontact Anterior Cruciate Ligament (ACL) injury.
- Newcomers to professional football have a lower general injury rate than established players but a higher rate of stress-related bone injuries.
- An excess of 90% of ACL operated players return to football at the same high level as before the injury. The lay-off is between 6-7 months even after optimal caretaking.
- Magnetic Resonance Imaging (MRI) can be helpful in verifying the diagnosis of a hamstring injury and to prognosticate layoff time. Radiological grading is associated with lay-off times after injury. 70% of hamstring injuries in professional football are of radiological grade 0 or 1, meaning no signs of fibre disruption on MRI, but still cause the majority of absence days.
- Fifth Metatarsal fractures are rare in football. It mainly affects young player at the beginning of a season. Surgery is better than conservative treatment.
- Medial Collateral Ligament (MCL) injuries are decreasing over time
- Achilles tendon injuries account for 4% of the total lay-off time in a club and are more common in older players. Players with Achilles injuries might need longer recovery periods since the re-injury risk is significantly higher after recovery periods less than 10 days.