






ECB SAFETY IN CRICKET

Claire Bolton

INTRODUCTIONS

Claire Bolton ECB Safety in Cricket Officer

Physical safety of all those involved or impacted by the **playing** of cricket

- What are the physical risks associated in cricket, and why do we want to minimise them?
- What do we know about injuries in recreational cricket?
- What do we do to prevent injuries in cricket?
- Deep Dive – Fast Bowling
- Future plans / Help us help you!
- Q&A

PHYSICAL RISK IN CRICKET

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1. Ball Strikes

All players, spectators and umpires are at risk of being struck by the ball

Risk of

- Bruising,
- Fractures,
- Concussions

2. Collisions

collisions between players, between players and the ground, and occasionally, and more frequently in the recreational game, between players and equipment.

Risk of

- Bruising,
- Fractures,
- Dislocations,
- Concussions.

3. Musculoskeletal Injuries

Rapid and intermittent accelerations, decelerations and changes of direction when bowling, taking runs, and fielding.

Risk of

- Muscular strains,
- Ligament sprains,
- Muscle or ligament ruptures.

4. Extreme Heat / Sun Exposure

Less severe currently in the UK but likely to become more of an issue over time with current state of global warming.

Risk of:

- Heat stroke
- Hyperthermia
- Skin conditions / skin cancers.

Why prevent injuries in cricket?

- **More players available** → fewer injuries mean stronger team selection and better chances of winning.
- **Duty of care** → as an NGB, we must make cricket as safe as possible and protect participants.
- **Reputation** → high injury rates can damage cricket's image and reduce participation compared to safer sports.
- **Long-term participation** → healthy players stay active longer, gaining social and health benefits; serious injuries can cause lasting mobility issues.
- **Impact on NHS** → cricket injuries add pressure on emergency and long-term healthcare services.
- **Financial cost** → injuries can lead to lost income for players and higher insurance premiums for governing bodies

INJURIES IN RECREATIONAL CRICKET

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Injuries in cricket

We asked recreational cricketers if they had suffered an injury when playing cricket in the last 12 months that prevented them from being able to play cricket, or perform your normal daily activities for more than 1 day (day of injury is day 0)

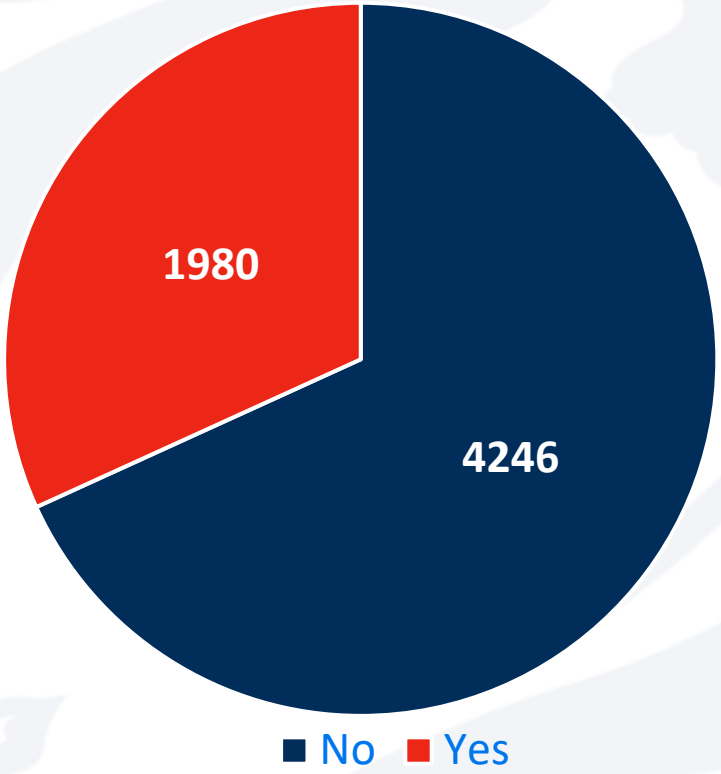
Just over 30% of players reported an injury.

1170 – one injury

550 – two injuries

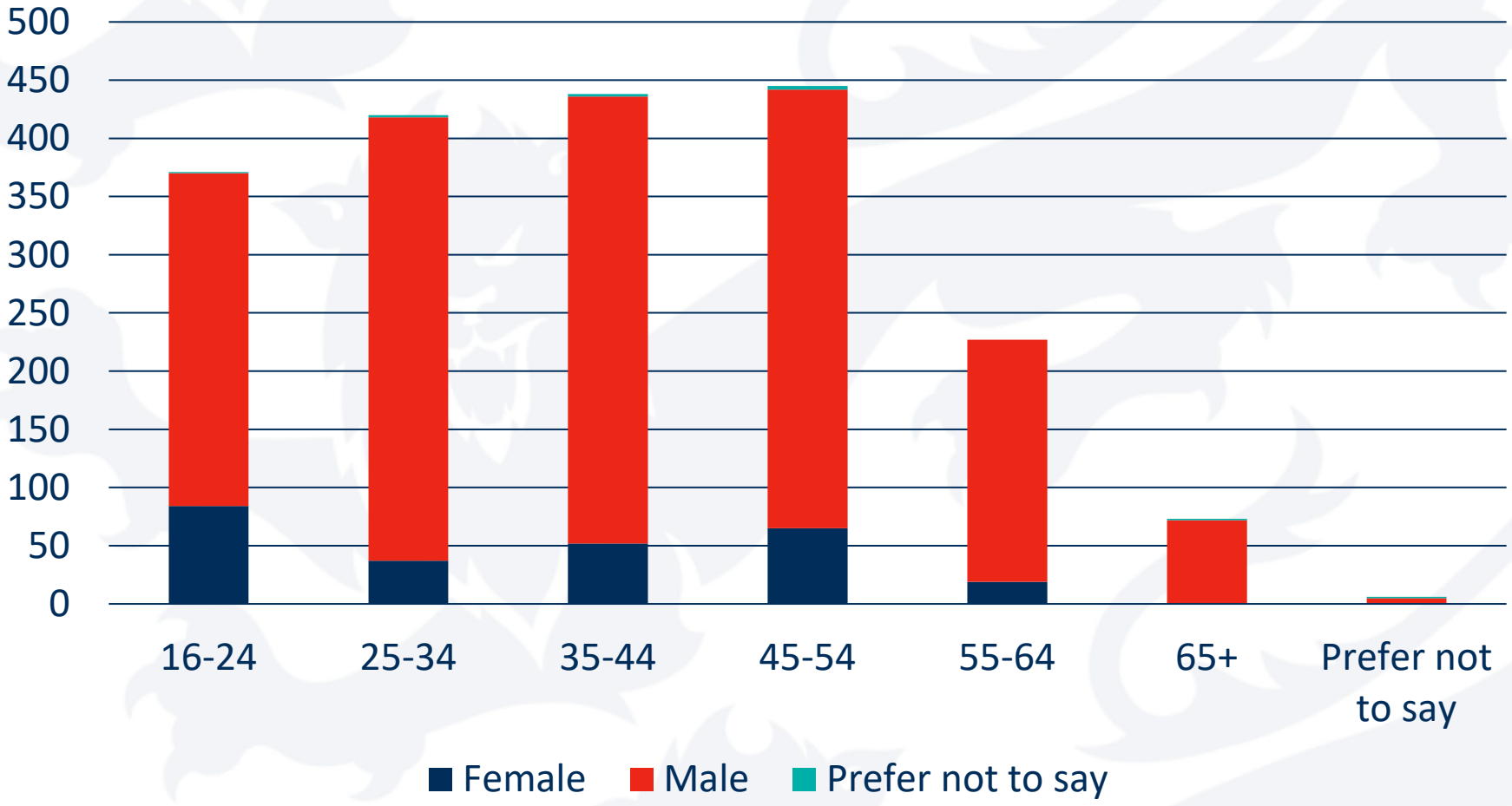
152 – three injuries

108 – four injuries

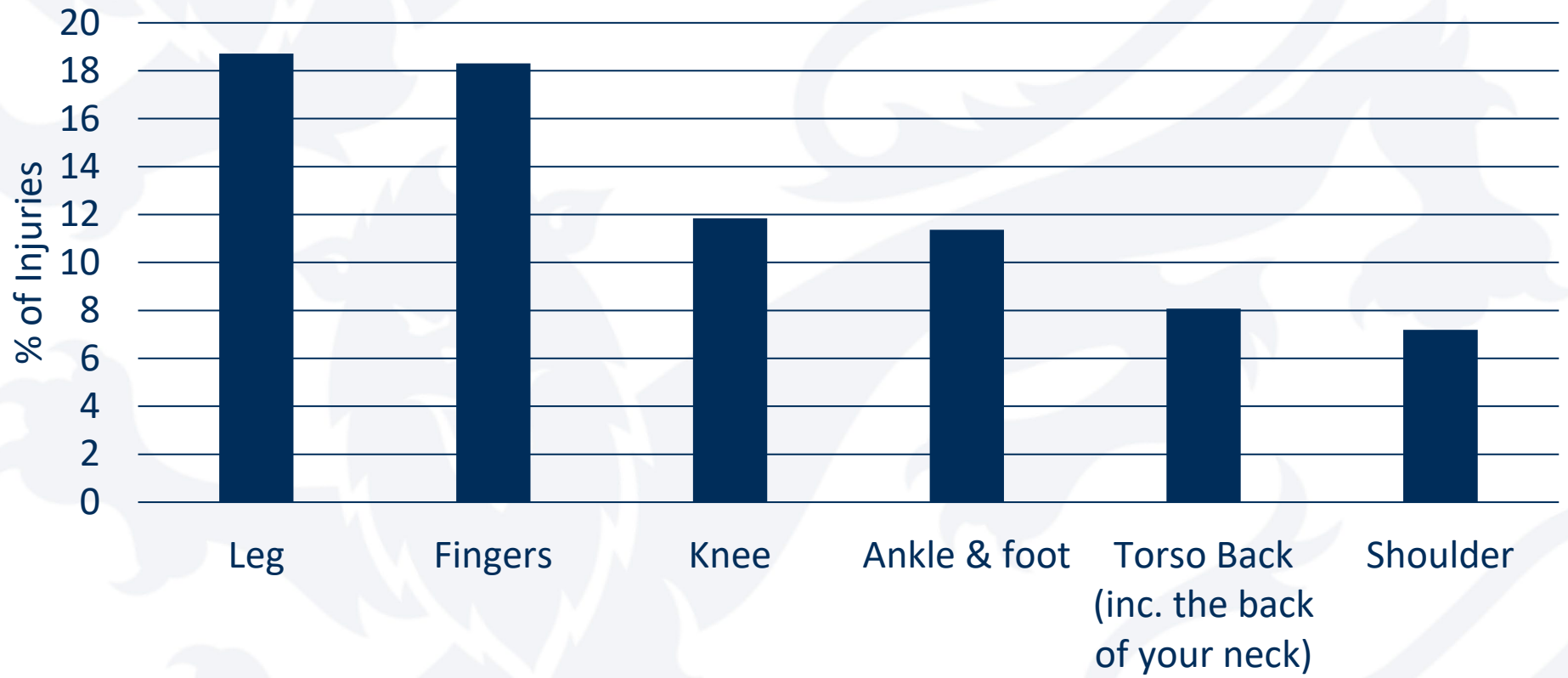


Injuries and age

Relatively even split of ages, disappointing split of genders

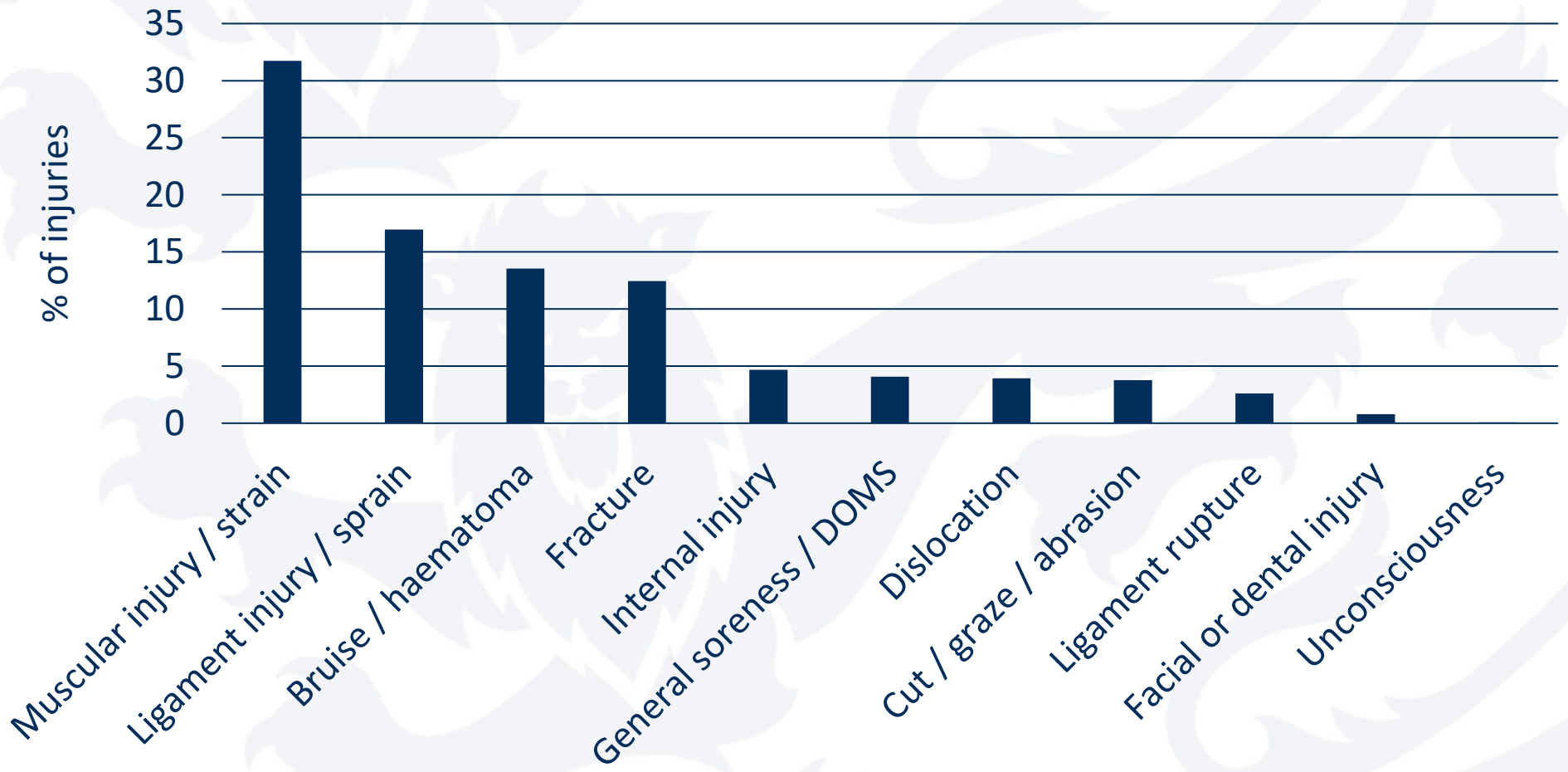


Body Parts Injured



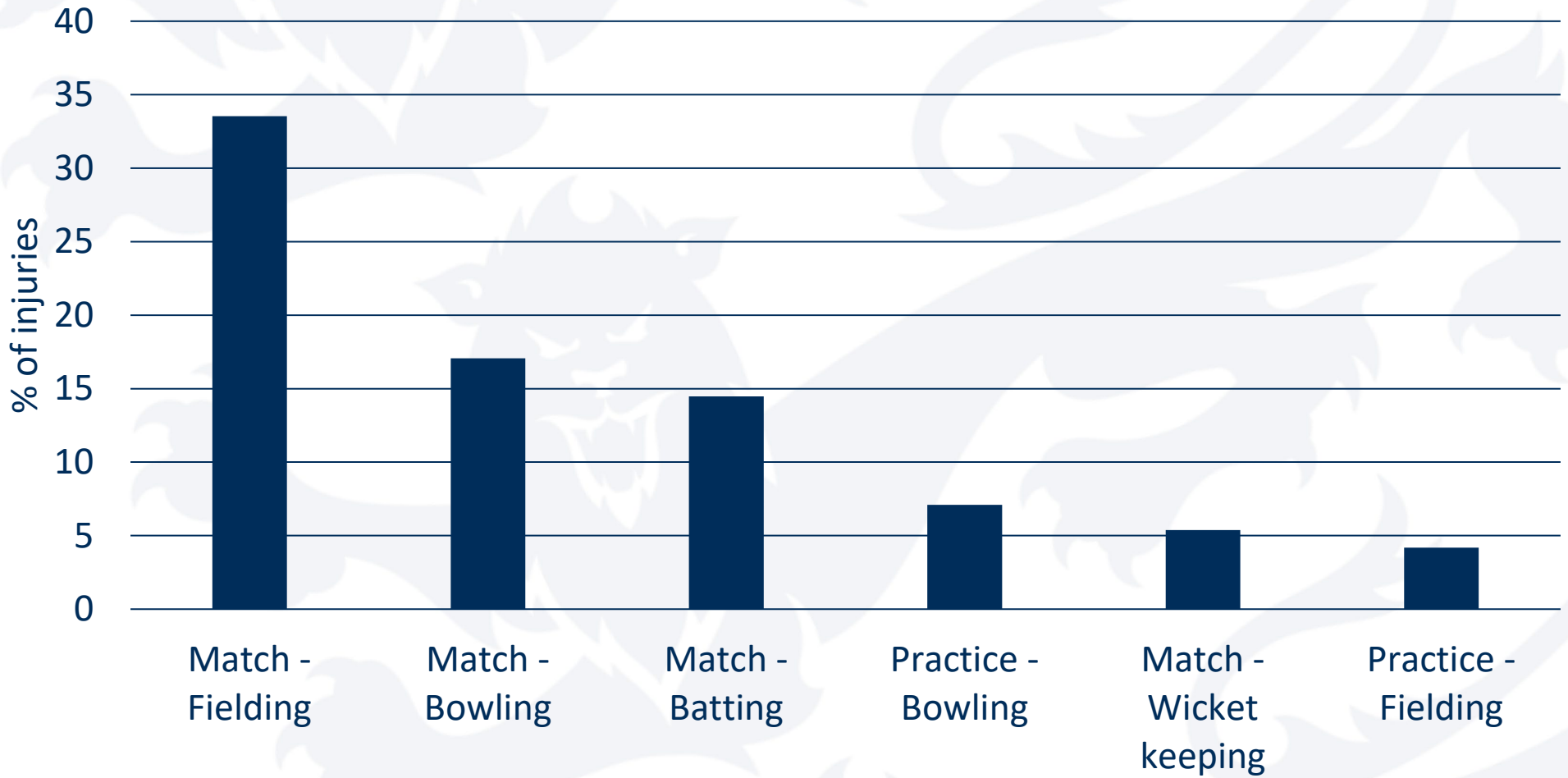
The number 1 injury site was the leg, with the fingers close behind, followed by the knee and ankle. This is fairly expected as a sport which relies on running and batting where legs are exposed and batting, throwing/bowling and catching where the fingers are heavily exposed.

Injury Type



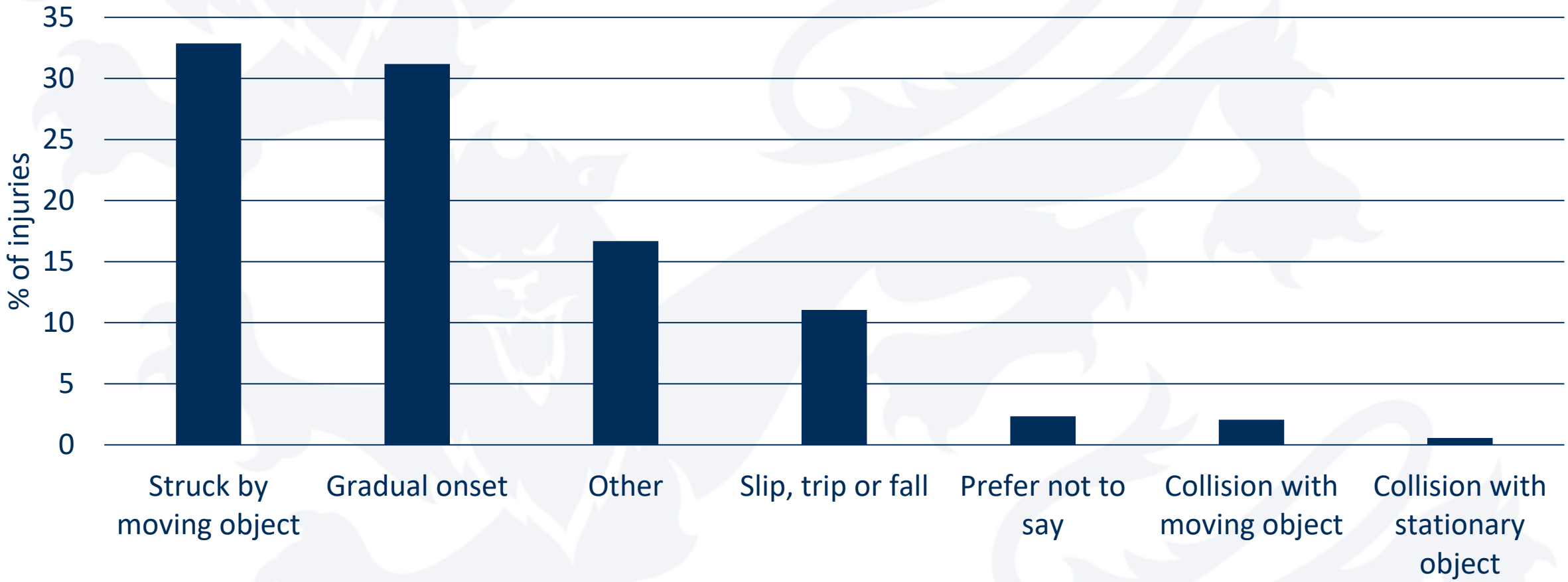
The most reported injuries are low severity—sprains, strains, and bruises make up over 60% of cases. Severe injuries like facial fractures, ligament ruptures, or unconsciousness are rare.

Injury Activity



Most injuries occur during fielding, followed by bowling and batting. This is expected as players spend more time in matches than training, and everyone fields for long periods (9 fielders vs. 2 batters and 1 bowler at a time).

Injury Cause

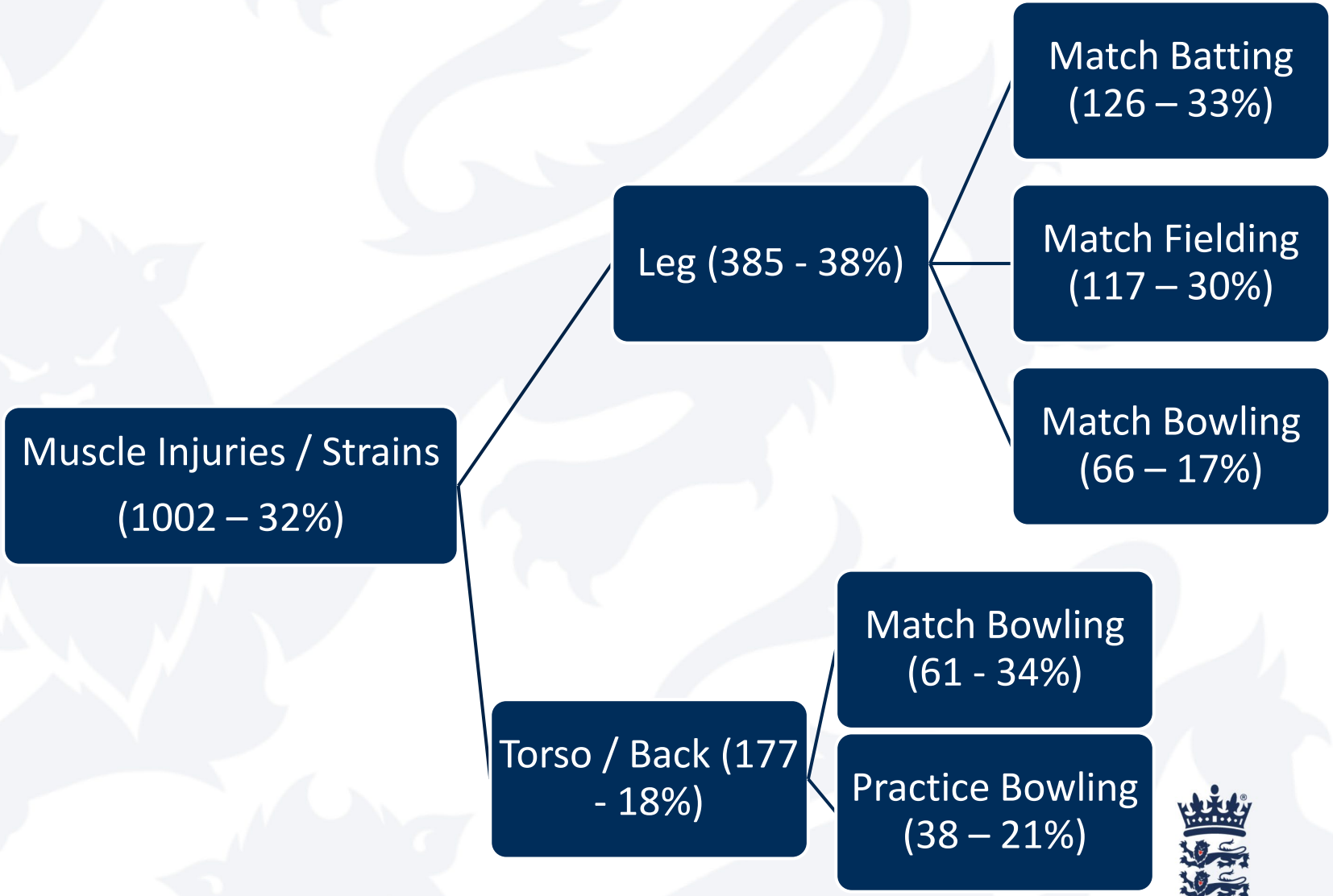


Being struck by a moving object (generally the ball) is the number one cause of injury in cricket, followed by gradual onset or muscle injuries. These are expected when we consider the main injury types (bruises and muscle injuries), and body parts (legs and fingers).

Injuries in focus – most ‘common’

From this data we can infer that the causes of these injuries are rapid accelerations, decelerations or running / changes of direction.

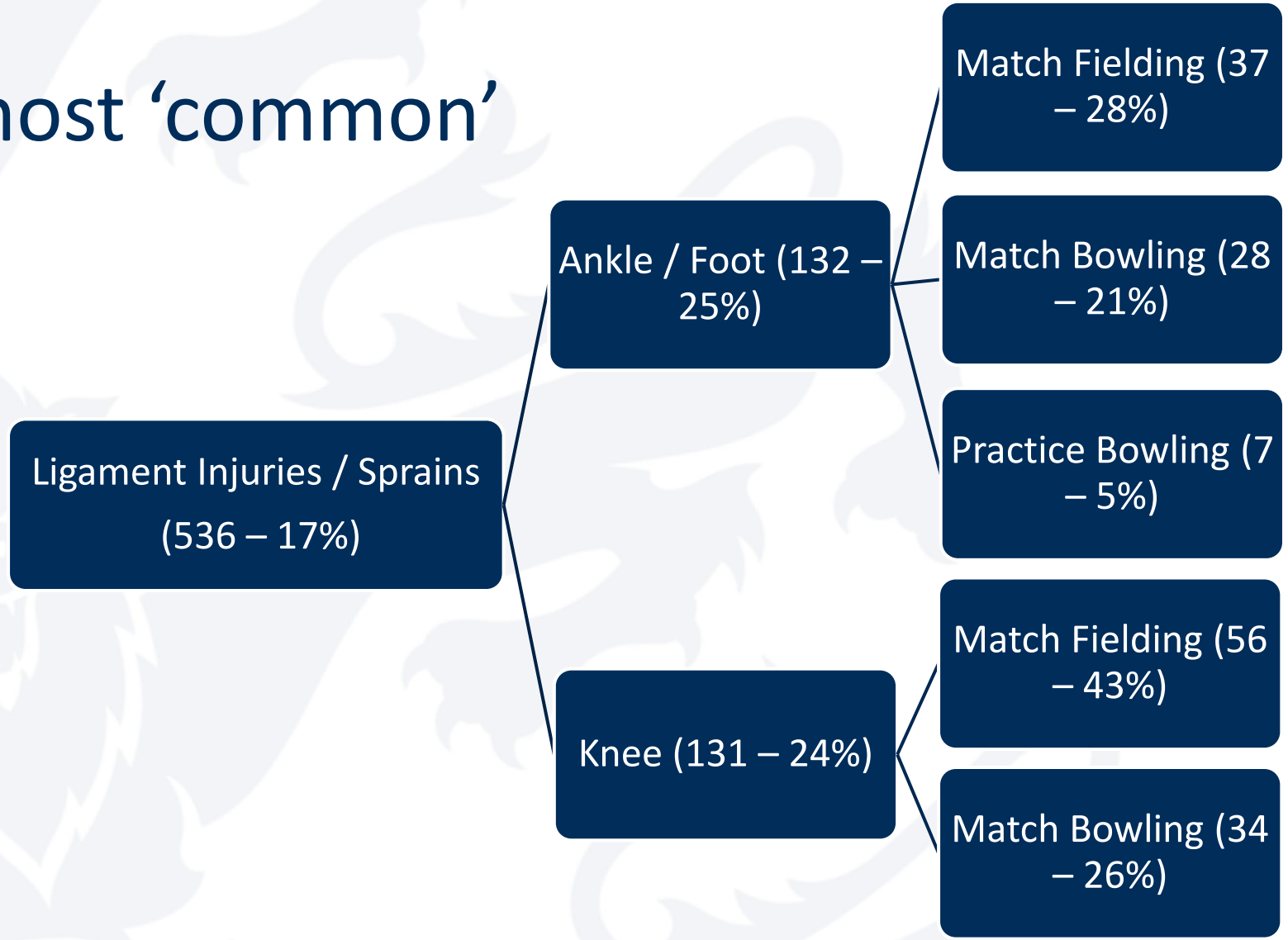
Back injuries are a cause of concern because they may be indicative or more insidious injuries such as bone stress.



Injuries in focus – most ‘common’

Causes of these injuries are generally where the joint is forced beyond its normal range of motion.

Could be common in bowling due to the forces that are applied to the joints, any awkward landing or sudden twist here can cause injury.

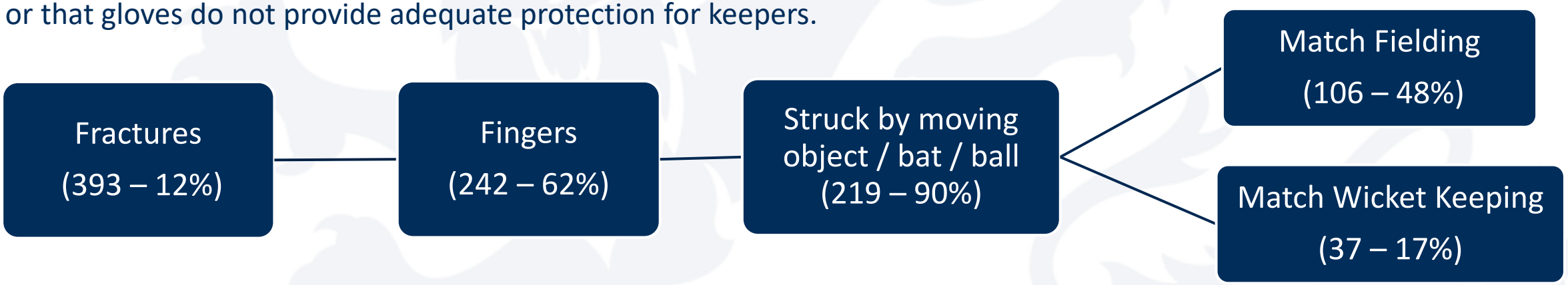


Injuries in focus – most ‘severe’

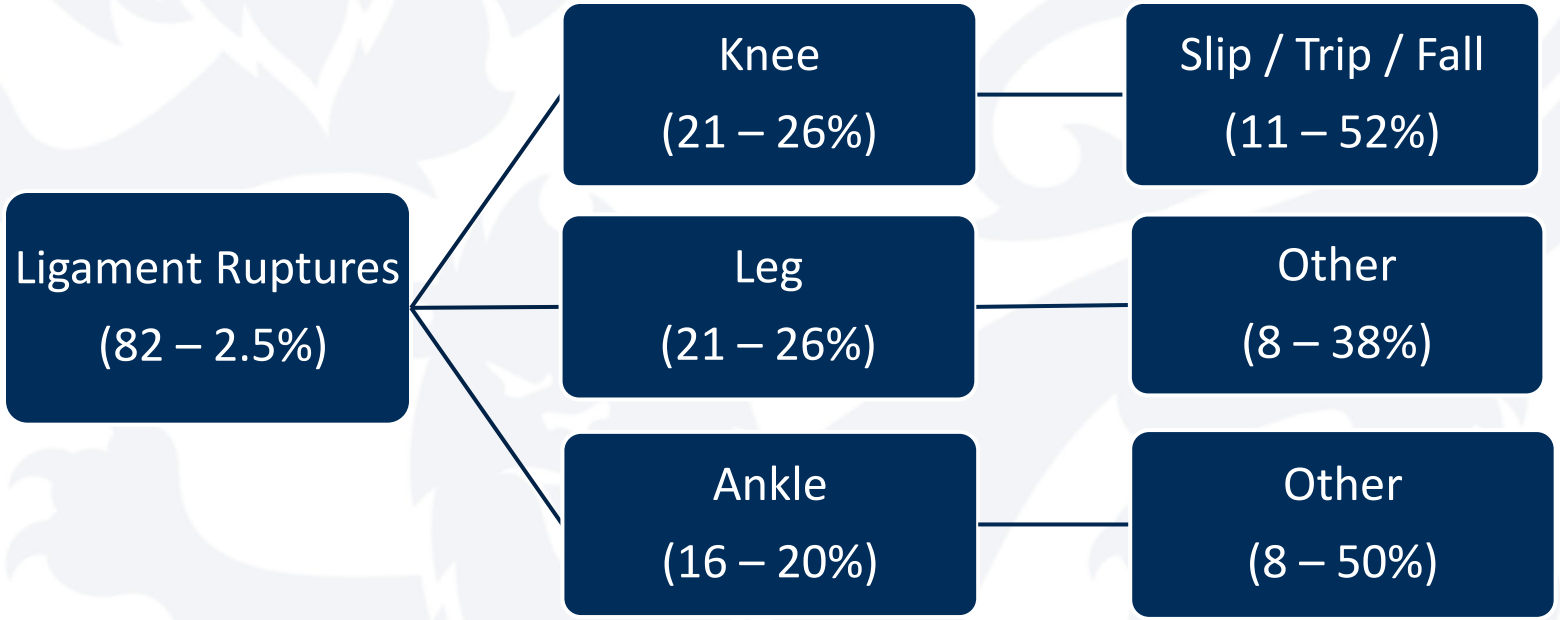
Hard to quantify injury severity without knowing how many days were lost due to injury or if medical treatment / hospitalisation was required.

As such, we have pulled out some injuries that are typically severe and generally require medical attention or complex recoveries.

Fractures: main cause is being struck by the ball during fielding and wicket keeping, could be linked to catching techniques, or that gloves do not provide adequate protection for keepers.

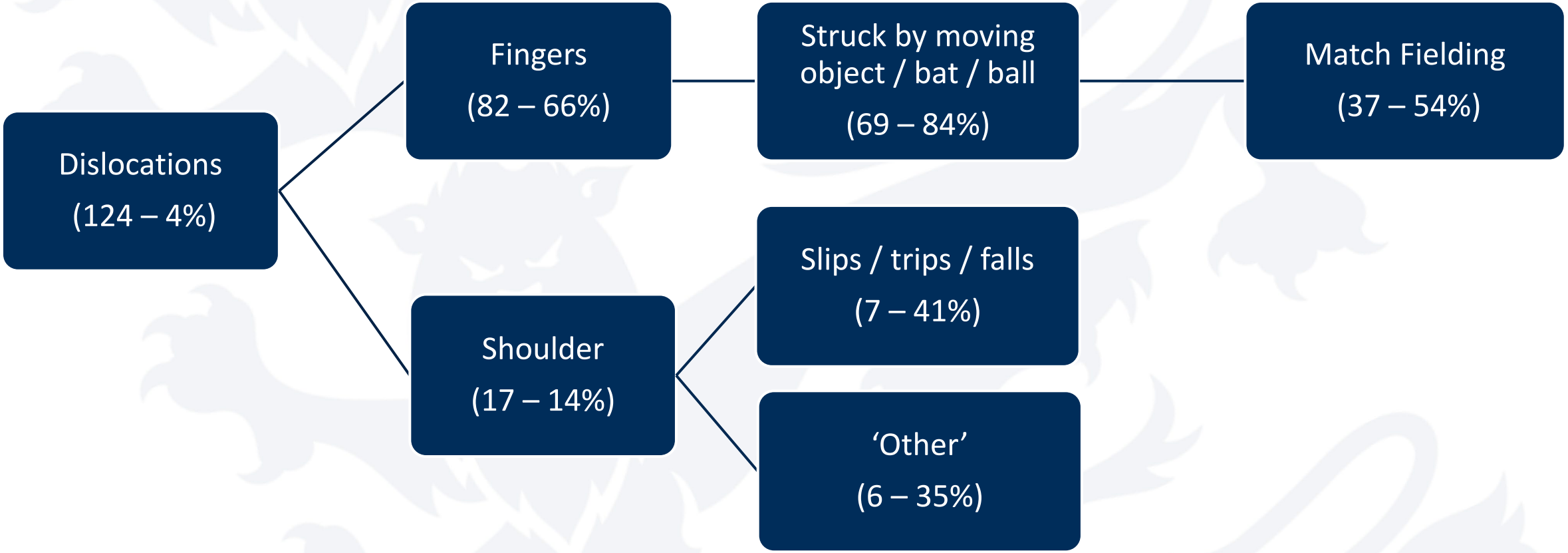


Injuries in focus – most ‘severe’



Ligament injuries are generally rare but can be severe, occasionally requiring surgery and long recovery periods. They occur most frequently in the knee, leg, and ankle. The main causes are slips, trips, awkward landings, or other unpredictable incidents, which makes them harder to prevent.

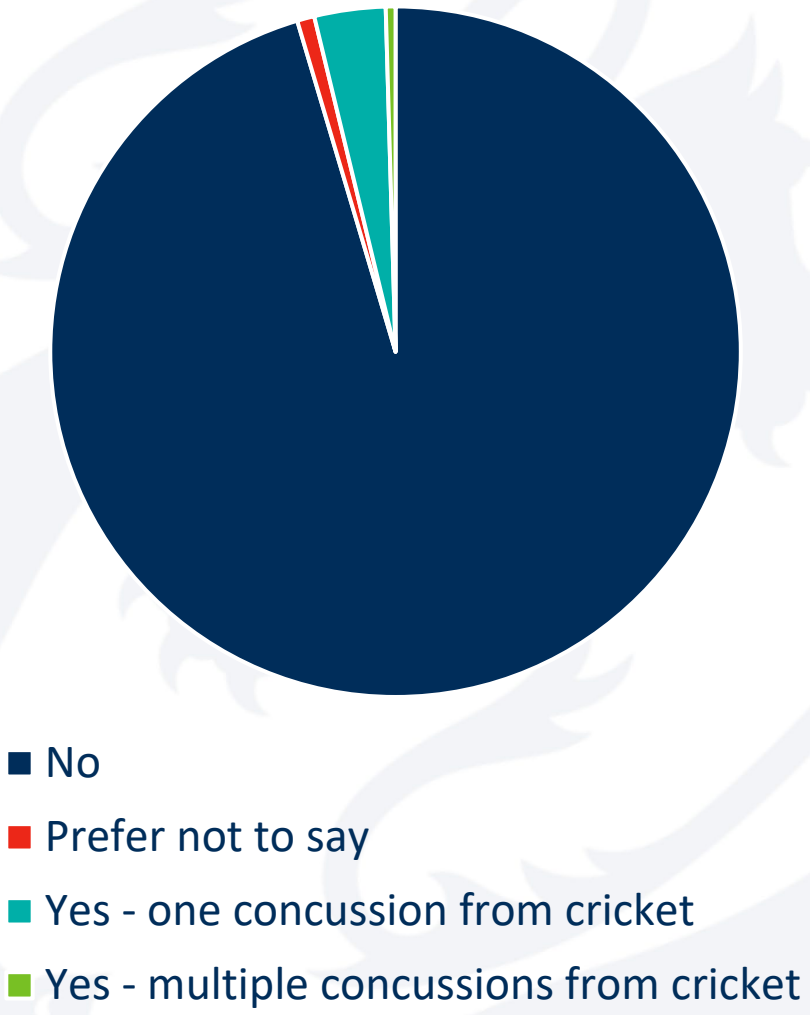
Injuries in focus – most ‘severe’



Dislocations make up about 4% of injuries, with the majority affecting fingers. Most finger dislocations happen when players are struck by the ball during fielding. Shoulder dislocations also occur, usually because of slips, trips, or awkward falls. These injuries are painful and typically require hospital treatment to relocate the joint.

Concussion

Concussions are relatively rare in cricket. In the past 12 months, 95% of players reported no concussions, 3.3% reported one, and only 0.5% reported multiple concussions. This suggests that cricket has a low concussion risk compared to many other sports, which is a positive finding.



WHAT DO WE CURRENTLY DO?

Current Prevention Strategies

Research

- PhD projects
- PPE testing and British Standards

Injury Surveillance

Regulations

- Personal Protective Equipment (PPE) for Junior Cricketers
- Minimum Fielding Distances
- Fast Bowling Regulations
- Age Group Eligibility & considerations
- Disparity Regulations

Guidelines

- PPE for adult cricketers
- First Aid and Medical Emergency Action Plans
- Fast Bowling Guidelines
- Extreme Heat

Education

- Concussion Education Resources and E-Learning

DEEP DIVE – FAST BOWLING

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Lumbar Spine Bone Stress Prevention in Fast Bowlers

- Injury prevention starts with understanding the problem and its causes.
- The Van Mechelen model guides this process: identify, analyze, prevent, and evaluate.
- Research shows lumbar spine bone stress injuries (LBSI) are a major issue in fast bowling.

STEP 1: Establish the issue

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STEP 2: Establish the cause

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STEP 3: Introduce Preventative Measures

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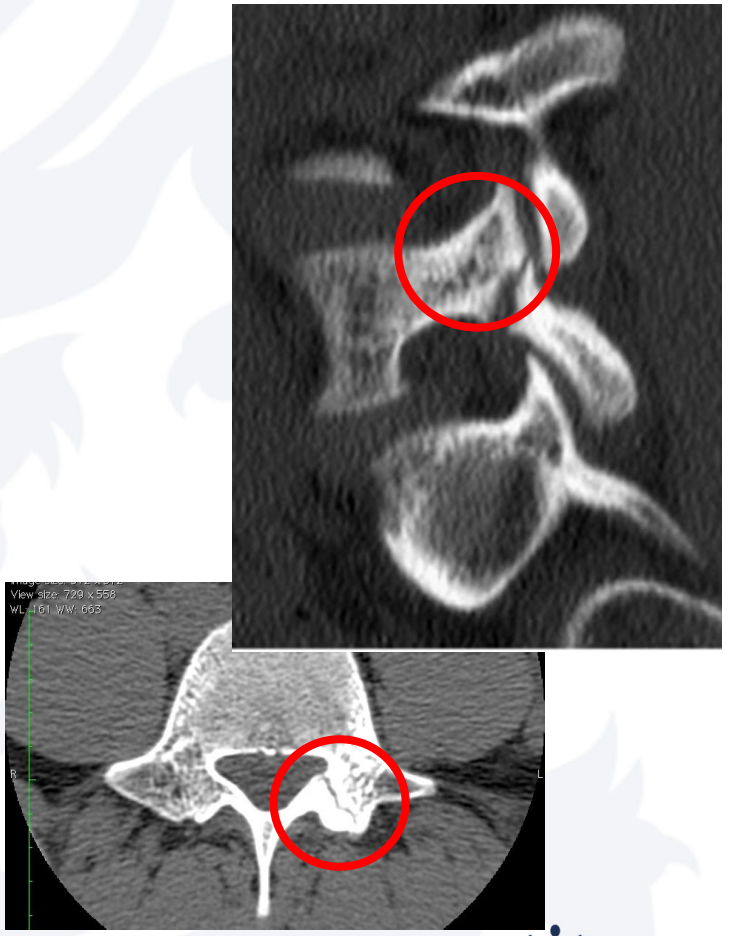
STEP 4: Assess the Effectiveness

Lumbar Spine Bone Stress Prevention in Fast Bowlers

- Lumbar spine bone stress injuries (LBSI) are the leading cause of unavailability among elite fast bowlers.
- Bones adapt to stress like muscles, becoming stronger with recovery, but without rest, microdamage accumulates and leads to stress fractures.
- For young bowlers, an LBSI can mean over six months out of the game, causing them to fall behind in development.
- This time loss impacts confidence, technique, and long-term performance during a critical growth period.
- Elite bowlers' lumbar spines are up to 50% stronger than average, but this adaptation takes years of well-managed workload and rest.
- Teenage years are a crucial window for building bone strength, making smart workload management essential.



STEP 3: Introduce Preventative Measures

Fast Bowling Directives

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Fast Bowling Regulations

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Fast Bowling Guidelines & Ready to Bowl

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Fast Bowling Education Resources & E-Learning

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Potentially Preventative Warm Ups

FUTURE PROJECTS

Future Projects

Injury Surveillance

- Junior cricketers in junior cricket
- Junior cricketers in open age cricket
- EPP / Age Group Cricketers

Growth & Maturation in Junior Cricketers

Preventative Warm-Ups

E-Learning:

- Concussion E-Learning to be re-launched
- Fast Bowling E-Learning
- General Safety in Cricket E-Learning

Extreme Weather Guidance

Help us help you!

Support our Injury Surveillance

Engage with our e-Learning, and share with your networks

Report your concerns

- safetyincricket@ecb.co.uk


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