



Australian Government
Australian Sports Commission

AUSPLAY™

Injury from sport and
physical activity in Australia
April 2023



AIHW

Stronger evidence,
better decisions,
improved health and welfare

Introduction

This report presents a very high-level overview of the incidence of sport injury in Australia among adults aged 18+. All results are based on 12 months of data collected between 1 January and 31 December 2022.

Participation in any kind of sport or physical activity carries some level of injury risk, whether from overuse of a body part or some kind of contact trauma (for example, with another person, the ground or other solid object).

Injuries to elite athletes and professional sport players are often reported in the media but a robust measure of the nationwide incidence of injury among participants at the community sport level has, to date, been unavailable.

As part of the development of the [National Sports Injury Data Strategy](#), the Australian Sports Commission (ASC) has been working with the Australian Institute of Health and Welfare (AIHW) to begin to fill this information gap. Two questions were added to the AusPlay survey in January 2022 to identify the incidence of injury and the activities being undertaken when injury occurred.¹ This will complement the data the [AIHW](#) already collates on emergency department presentations and hospital stays as a result of sport injuries.

The sport sector has also identified the need for wider research into community sport injury through the [National Sport Research Agenda](#).

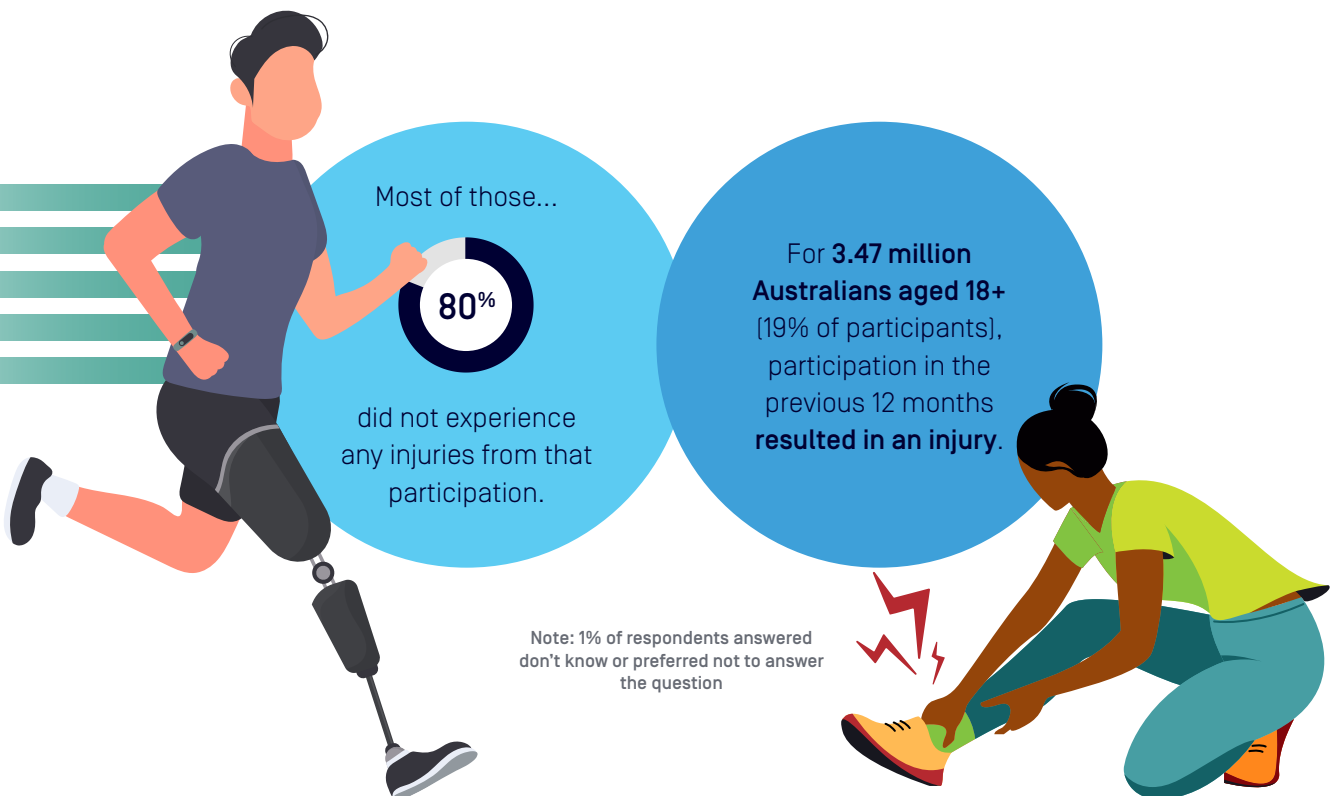
It is acknowledged that there is more work to be done in providing a full picture of sport injuries in Australia (such as information on the type of injury and the body parts involved) and AusPlay may be able to collect this data in the future.

1. In the last 12 months, have you experienced an injury from playing sport or undertaking physical activity, excluding any injuries caused by work or household duties? Which of your activities caused such an injury in the last 12 months?



How common are sports injuries?

In 2022, an estimated **18.27 million Australians aged 18+** said they participated at least once in some type of sport or physical activity in the previous 12 months.²



While these injuries may be painful or restrict activity for a period of time, very few are serious enough to result in hospitalisation. The most recent report from the AIHW shows there were around 52,300 hospital stays as a result of sports injuries in the 2019-20 financial year.³

AusPlay also tells us that, of the 2.54 million Australians 18+ who were not active at all in the 12 months prior to interview, a small proportion (13%) identified injury as a barrier to their participation. However, the nature of their injury (sport-related or otherwise) is not asked in the survey. Even fewer (2%) report fear of injury as a reason for not participating in any sport or physical activity.

2. AusPlay collects and typically reports data for Australians 15+ but due to the sensitive nature of the sport injury questions they are only asked of adults 18+. AusPlay participation data in this report refers to Australians 18+ for consistency with the sport injury questions.

3. AIHW, Sport injury hospitalisations in Australia, 2019-20

Who experienced injuries?

More men (1.96 million) injured themselves playing sport or undertaking physical activity than women (1.51 million), despite relatively equal rates of overall participation.⁴ This is a reflection of men being more likely to participate in the types of activities (for example, outdoor team sports) where injuries are more common.

PROFILE OF PARTICIPANTS AND THOSE EXPERIENCING INJURY, BY GENDER

PARTICIPANTS



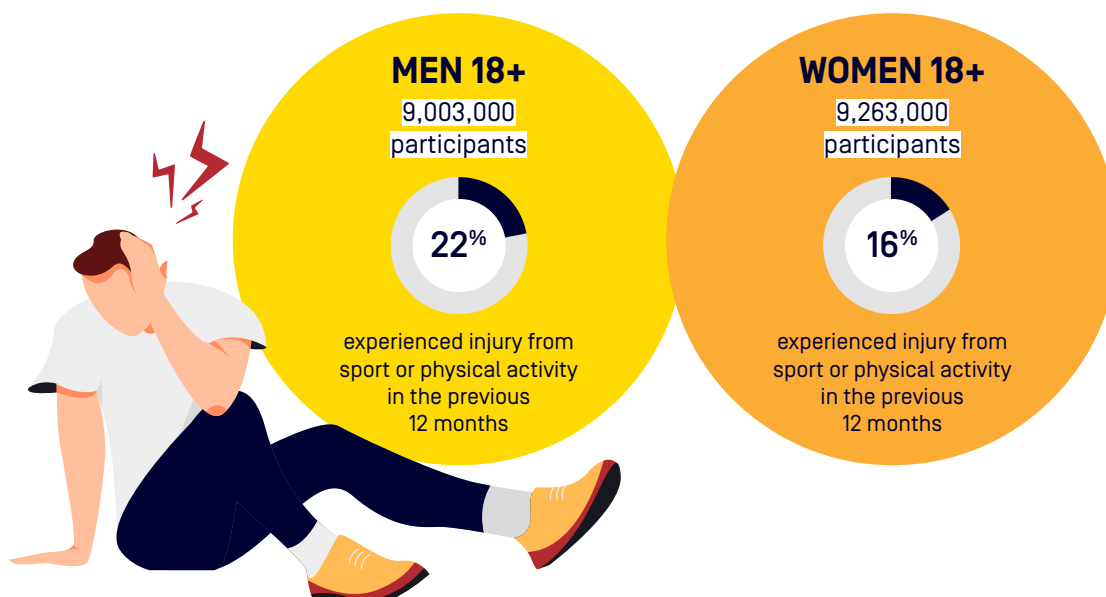
EXPERIENCED INJURY



■ Male ■ Female

Among men and women, injury rates (% of participants who experienced an injury) were 22% and 16% respectively.

PARTICIPATION ESTIMATES AND INJURY RATES, BY GENDER



4. AusPlay data is currently analysed by Male and Female only. From 1 July 2022, additional questions were added to ascertain sex at birth and gender identification based on the Australian Bureau of Statistics [data collection standards](#). These variables will be used in future analysis as sample size allows.

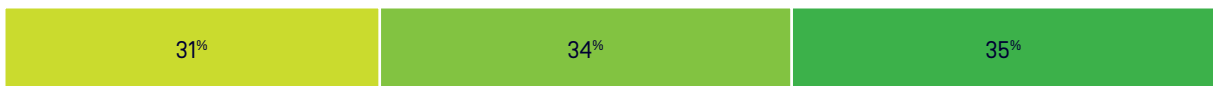
Who experienced injuries?



Those who get injured from sport or physical activity are more likely to be younger – 1.35 million 18-34 year olds, 1.31 million 35-54 year olds and 810,000 55+ year olds experienced an injury in the previous 12 months.

PROFILE OF PARTICIPANTS AND THOSE EXPERIENCING INJURY, BY AGE

PARTICIPANTS



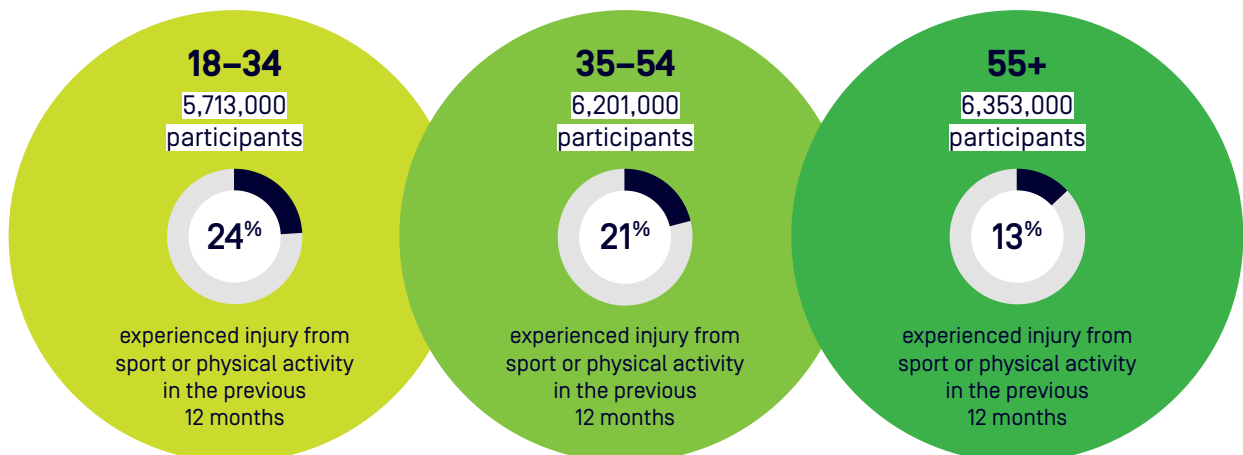
EXPERIENCED INJURY



■ 18-34 ■ 35-54 ■ 55+

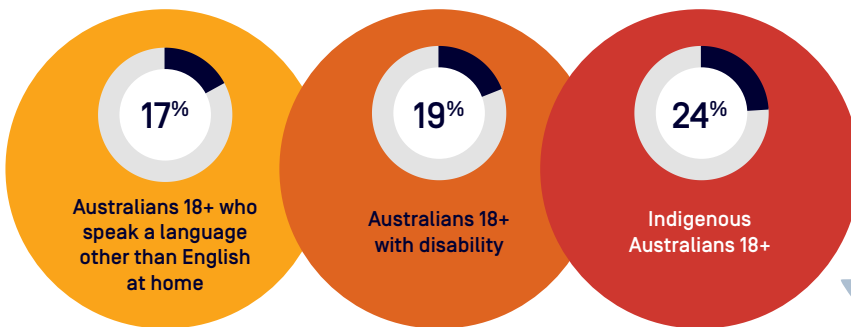
The injury rate among participants ranges from 24% for Australians aged 18-34 to 13% for those aged 55 and over.

PARTICIPATION ESTIMATES AND INJURY RATES, BY AGE

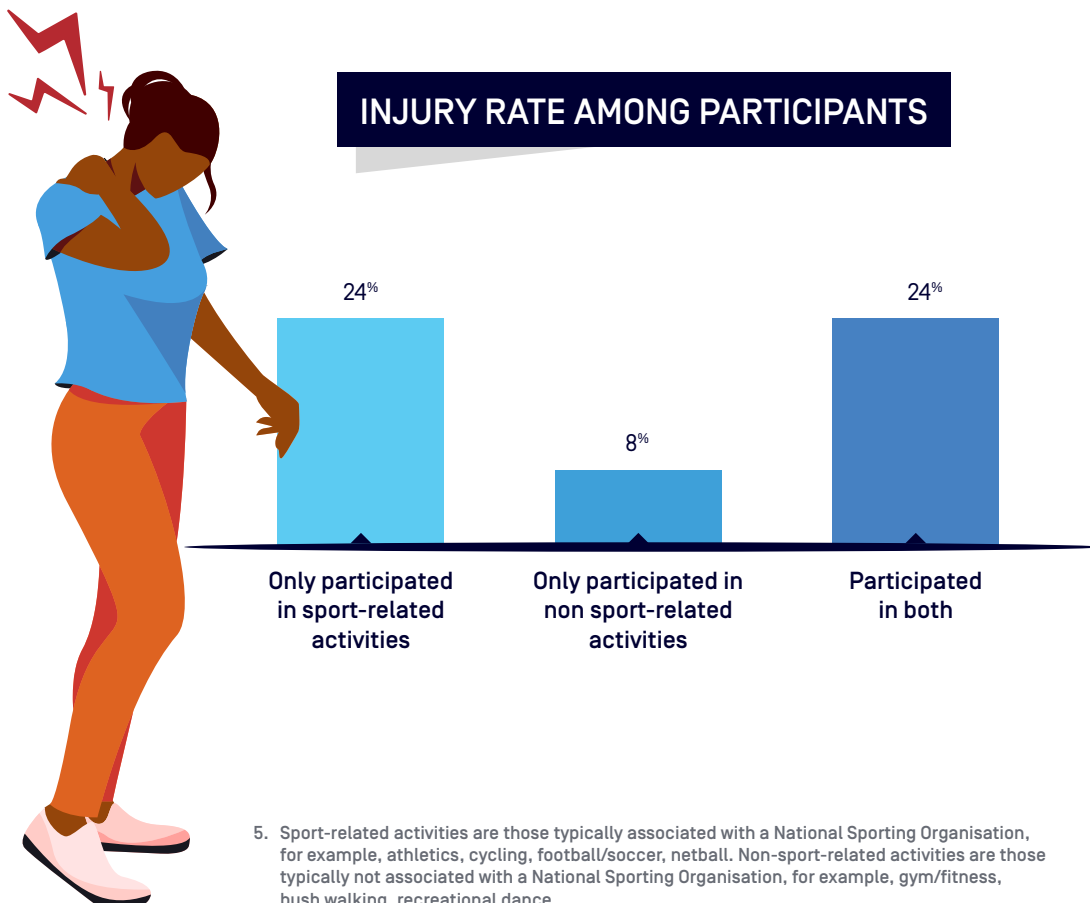


Who experienced injuries?

Injury rates among participants for most other demographic groups were in line with the 19% found in the general population, with rates for Indigenous Australians slightly higher.



Australians who **only** participate in non-sport-related activities are much less likely to experience injury than those who only play sport or who are involved in both.⁵

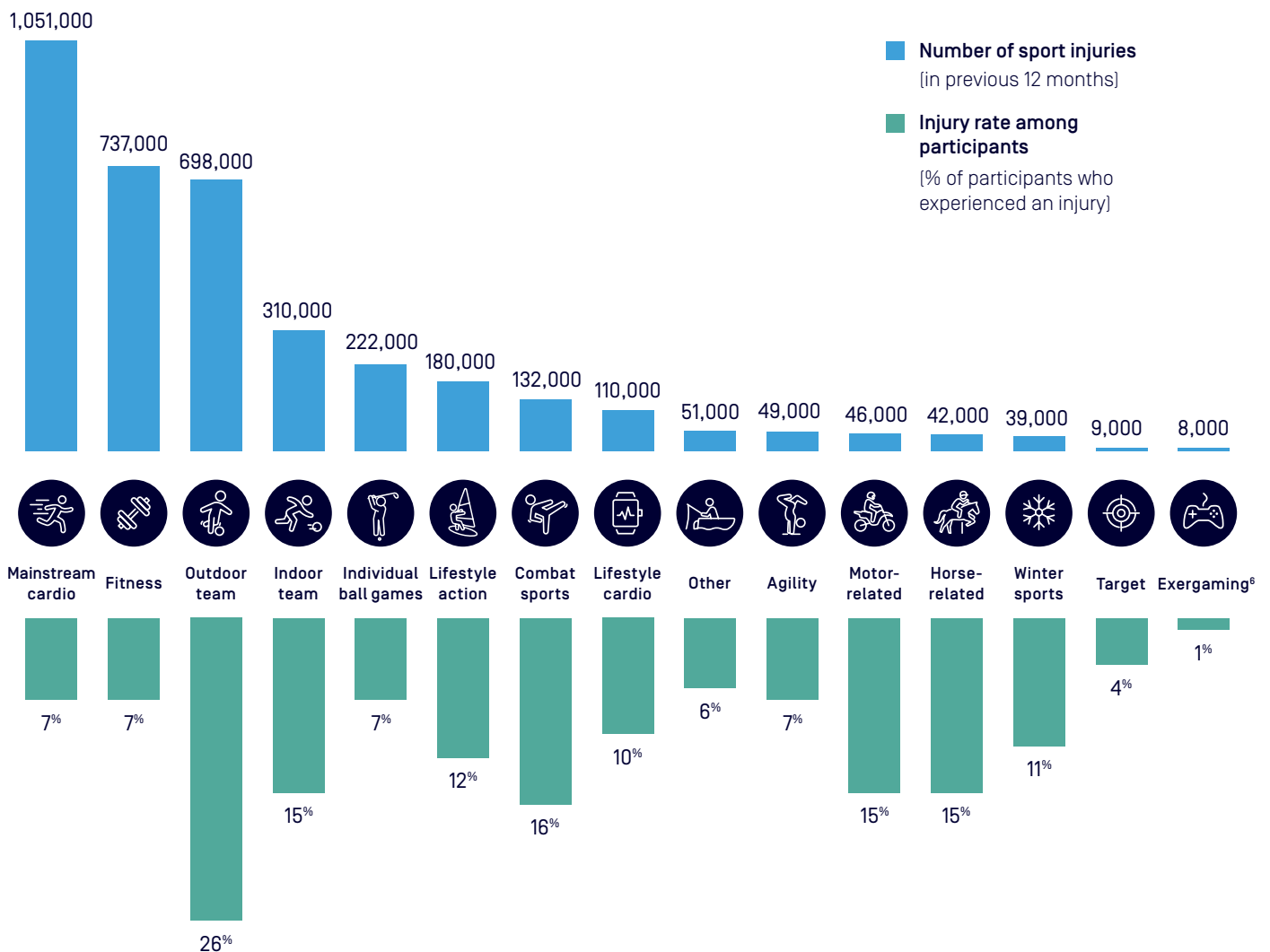


What were Australians participating in when they got injured?

As information on injuries has so far only been collected for 12 months, analysis by individual sports is not yet practical. Therefore activities in this report have been grouped into a number of categories for analysis purposes (full details of activities included in each category can be found at the end of the report).

The highest number of injuries (1,056,000) occurred in Mainstream cardio activities, a reflection of the much higher number of participants (14,398,000). When considered as an injury rate, Mainstream cardio activities are among the safest. The highest injury rate was among participants of outdoor team sports (26%).

NUMBER OF SPORT INJURIES AND INJURY RATE

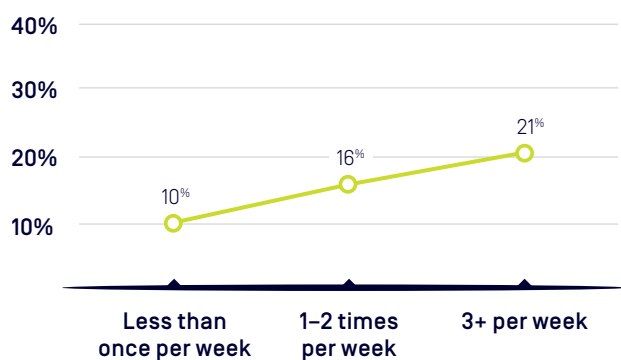


6. Virtual/technology-based exercise, for example, motion sensing console games, smart treadmills, online platforms such as Zwift.

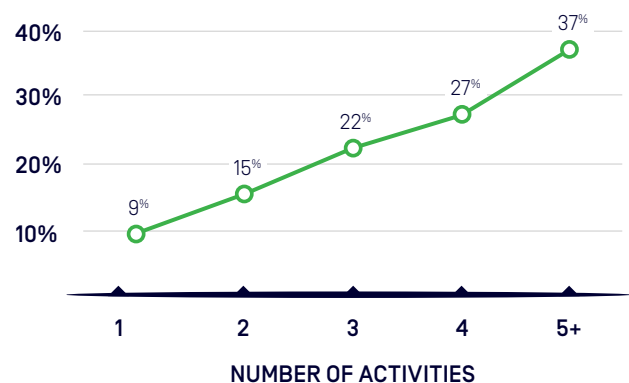
Impact of participation frequency and number of activities on injury

It stands to reason that the more exposure someone has to the risk of being injured, the more likely they are to be injured. The AusPlay results support this – injury rates increase with the frequency of participation and the number of different activities undertaken.

% OF PARTICIPANTS INJURED - BY PARTICIPATION FREQUENCY



% OF PARTICIPANTS INJURED - BY NUMBER OF ACTIVITIES

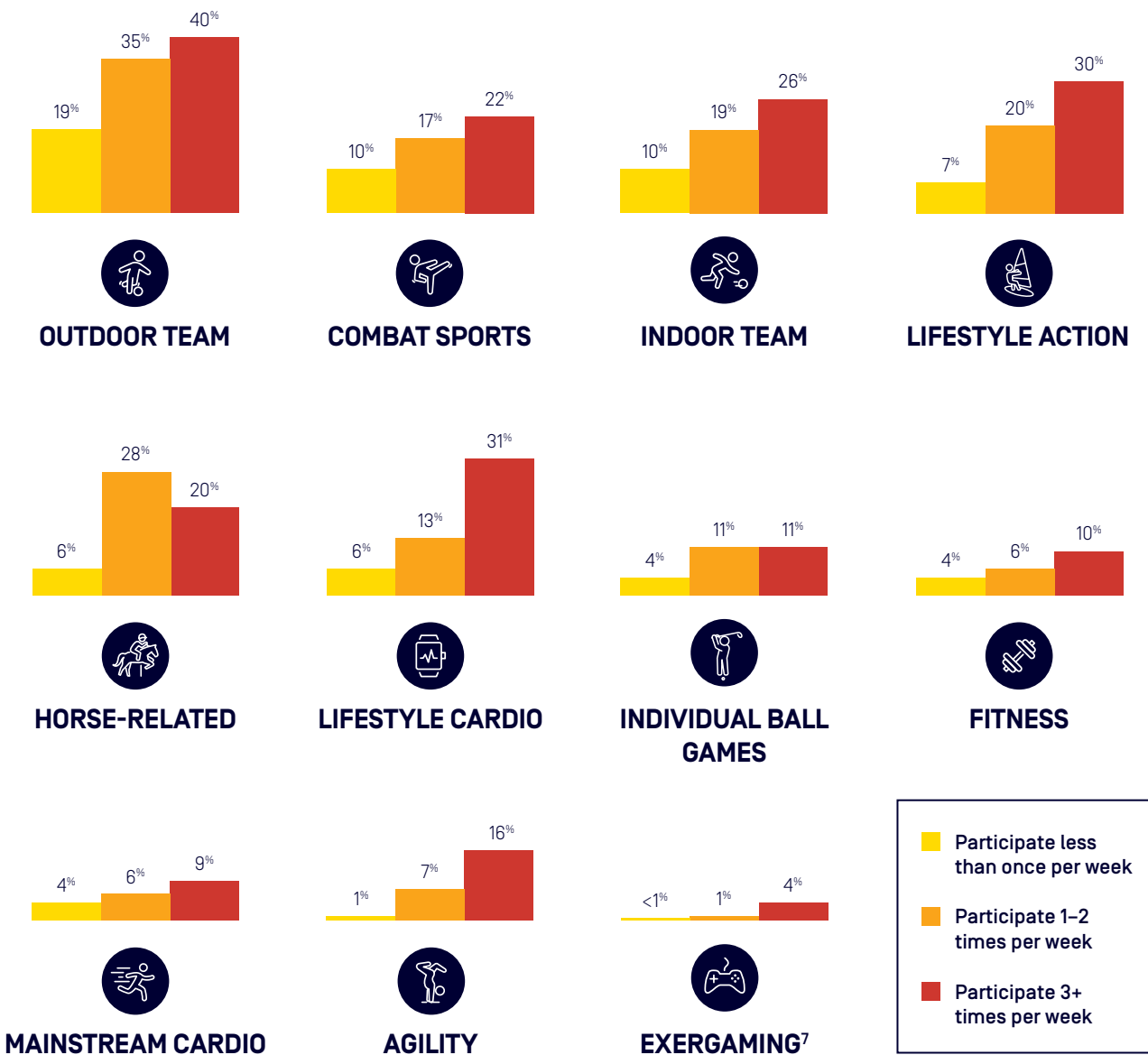


Impact of participation frequency and number of activities on injury

While frequency of participation is the main predictor of injury in all activity categories, the extent to which injury increases with frequency does differ. For example, those participating in Agility activities 3+ times a week are 16 times more likely to experience an injury than those participating less than once a week. In contrast, high-frequency participants in Outdoor team sports are about twice as likely to become injured than those who play less than once a week.

INJURY RATES BY PARTICIPATION FREQUENCY - ACTIVITY CATEGORIES

Note: Some categories are omitted due to small sample sizes



7. Virtual/technology-based exercise, for example, motion sensing console games, smart treadmills, online platforms such as Zwift.

Where to next for sport injury data and reporting?

The ultimate aim of the National Sports Injury Data Strategy (NSIDS) is to improve the understanding of sports injuries in Australia through the development of a national sports injury data asset.

Three pillars underpin the NSIDS:



Sports injury data development

Providing a framework for standardising data collection and best practice for governance, consent, privacy, security and data sharing. This will ultimately assist organisations to collect and use injury data more effectively.



Methodology development

Improving data analysis and reporting methods and ultimately providing a more complete picture of all aspects of sport injury, including economic impact.



Sports injury surveillance and reporting

Identifying the numbers and types of injuries experienced in each sport, including trends over time and prevention priorities.

More information on each of the pillars can found on the [AIHW website](#).

The ASC is pleased to have made an early contribution to the third of these pillars through the addition of AusPlay questions about injury. AusPlay is currently funded until at least June 2026 and may be further utilised to collect additional data on injury type in future years.



Appendix – Activity categories (in order of estimated participation)

| | |
|---|---|
|  | Mainstream cardio (14,378,000 estimated participants) Bush walking, Cycling, Running/jogging (incl. athletics), Swimming, Walking (recreational) |
|  | Fitness (9,949,000 estimated participants) Bodybuilding, Crossfit, Fitness/gym, Pilates, Powerlifting, Rope skipping, Weightlifting, Wood chopping, Yoga |
|  | Individual ball games (3,170,000 estimated participants) Badminton, Billiards/Snooker/Pool, Bocce/Boules, Boccia, Bowls, Croquet, Eight-ball, Golf, Petanque, Squash, Table tennis, Tennis, Tenpin bowling |
|  | Outdoor team (2,656,000 estimated participants) Australian rules, Baseball, Cricket, Flying disc (Ultimate), Football (soccer), Gaelic football, Gridiron, Hockey, Lacrosse, Oztag, Rugby League, Rugby Union, Softball, Tee ball, Touch football |
|  | Indoor team (2,090,000 estimated participants) Basketball, Dodgeball, Floorball, Goalball, Handball, Korfbal, Netball, Roller derby, Sepak takraw, Volleyball, Water polo |
|  | Lifestyle action (1,555,000 estimated participants) Air sports, BMX, Kitesurfing/ kiteboarding, Rock climbing/Abseiling/Caving, Sailing, Scootering, Skate sports, Sport climbing, Surfing, Waterskiing/Wakeboarding |
|  | Virtual-based physical activity (“exergaming”) (1,183,000 estimated participants) Virtual-based physical activity (“exergaming”), for example, motion sensing console games, smart treadmills, online platforms such as Zwift |
|  | Lifestyle cardio (1,115,000 estimated participants) Adventure racing, Canoeing/Kayaking, Dragon boat racing, Geocaching, Modern pentathlon, Mountain biking, Orienteering, Outrigger canoe, Paddle sports, Parkour, Rogaining, Rowing, Surf lifesaving, Triathlon |
|  | Other (894,000 estimated participants) Fishing (recreational), Underwater sports, Others |
|  | Combat sports (825,000 estimated participants) Boxing, Fencing, Judo, Jujitsu, Karate, Kendo, Kung fu wushu, Martial arts, Mixed martial arts, Muay Thai, Taekwondo, Wrestling |
|  | Agility (732,000 estimated participants) Baton twirling, Calisthenics, Dance sport, Dancing (recreational), Diving, Gymnastics, Marching, Physical culture, Synchronised swimming |
|  | Winter sports (344,000 estimated participants) Biathlon, Bobsledding, Broomball, Curling, Ice hockey, Ice racing/speed skating, Ice skating, Luge, Skeleton, Skiing/snowboarding, Tobogganing |
|  | Motor-related (298,000 estimated participants) Jet skiing, Motor cycling, Motor sport |
|  | Horse-related (283,000 estimated participants) Campdrafting, Equestrian, Harness racing, Horse racing, Polo, Polocrosse, Ready Set Trot, Rodeo |
|  | Target (208,000 estimated participants) Archery, Boomerang throwing, Darts, Paintball, Shooting, Shooting sports, Skirmish |

Note: Some activities can cross categories, for example, netball can be played indoors and outdoors. For this report's purpose, activities have been categorised according to where they are primarily played.



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Any further questions about AusPlay (or queries for additional customised reporting/further analysis of the dataset) can be directed to the ASC Insights team at ausplay@ausport.gov.au