

Safety Management at Outward Bound

The physical, emotional, and psychological safety of students and staff is a foundational priority for Outward Bound (OB). We aspire to conduct our programs safely at all times, whatever the activity, environment or student population - and our attention on safety is central to who we are.

Outward Bound Approach to Risk

At Outward Bound, we teach students leadership, responsibility, and compassion by exposing them to challenge and adventure. Our course activities and environments, from city parks to the most remote wild spaces, present opportunities for students to develop their judgment, push boundaries to uncover new potential, and build self-confidence by successfully navigating challenges. But these activities and environments also present inherent risks—risks that we accept as fundamental to the learning process. While we work hard to manage and reduce the risk, the possibility of harm and even death can never be eliminated. Safety remains a top priority at Outward Bound, and we incorporate risk management as an essential element in our programs.

Outward Bound Safety Objectives

Outward Bound believes in a culture of safety that emphasizes transparency, information sharing, collaborative problem solving, and candid discussions at all times; and we are motivated by the following safety objectives.

- Prevent fatalities, disabling injuries, and serious illnesses.
- 2. Minimize risk of harm (physical, emotional, psychological) to staff and students.
- 3. Continuously and critically review operations with a focus on learning and improvement.

Safety Management Principles

Outward Bound maintains a safety management system that incorporates every level of the organization, from School Boards and leaders to Instructors, students and partners. Our safety management system is built on five principles.



Governance and Oversight

Multiple governance and oversight committees are involved in setting and assessing OB approach to risk.

Exceptional, Qualified Staff

Our staff are carefully selected and trained. They are qualified educators and risk managers.

Student Preparation and Participation

All students are prepared for and trained to become active participants in our risk management system.

Emergency Planning and Preparation

OB maintains an extensive emergency response system, whether students travel locally or overseas.

Program Review and Continuous Improvement OR is committed to always learning and improving

OB is committed to always learning and improving and audit all aspects of operations regularly.



Risk Management Statistics

Outward Bound collects and tracks data on program related incidents to provide longitudinal perspective on our safety systems and to guide safety processes. As important as incident data is to our understanding of our Schools' safety performance, it is not the final word on safety effectiveness. Safety in programming and support operations is an emergent property of a complex system in which industry and government regulations, business decisions, School culture and mission, the actions of staff and students, and the environment all play a role. We present this data to make two primary points:

- 1. Accidents can and do happen, sometimes they are serious, and a small but important number are fatal; and
- 2. In almost all instances, the conditions that can produce fatal outcomes are identified and mitigated successfully.

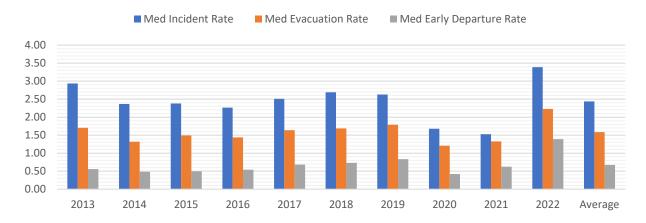
Neither of these points is to be taken lightly. The work of Outward Bound staff is to learn from past accidents, diligently apply and teach the principles, policies and procedures that have evolved from our experience, and to remain alert, flexible and resilient to respond to and mitigate the risks inherent in our programs.

Outward Bound Injuries and Illnesses 2013-2022

In the last decade, reportable incidents have averaged 159 student injuries and 150 student illnesses each year. Looking at the last decade as a whole:

Injuries	Illnesses
0.47% of all students were injured	0.45% of all students became ill
53% of injured students were evacuated	75% of ill students were evacuated
22% of injured students did not finish the course	32% of ill students did not finish the course
32% of injured students had sprains/strains	16% of ill students had gastrointestinal problems
8% of injured students had lacerations	16% of ill students had infections
6% of injured students had	12% of ill students had a communicable respiratory
dislocations/fractures	disease

Two-thirds of our reportable medical incidents required evacution from the field; of those, about half resulted in a student having to leave the course and not finish (early departure). The chart below shows the incident rates measured in incidents per 1000 student program days.



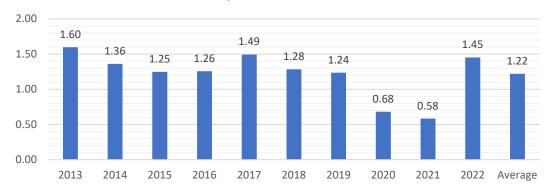
Injury Rates in Outward Bound Compared with Athletics

Using rates rather than numbers of injuries helps to understand risk by accounting for variations in exposure from year to year. In the last decade, acknowleding that 2020 and 2021 were unusual



operating seasons because of the COVID-19 pandemic, Outward Bound has averaged 1.22 injuries per 1000 student program days (SPDs), with a range from 0.58 in 2021 (44 total injuries over 75,294 SPDs) to 1.60 in 2013 (209 over 130,893 SPDs).

Injury Rate 2013-2022 per 1000 SPDs



Calculating injury rates to study risks is also done for other sports and recreational pursuits. There's some variation in definitions, but generally they include injuries that require treatment by a medical professional and/or some loss in participation time. Participant days and athlete-exposures refer to a single practice session or competition and are roughly analogous to Outward Bound's student program days.

College Sport	Injury Rate		
NCAA sports (all) ⁱⁱⁱ	3.96 injuries per 1000 athlete-exposures		
College outdoor club mountain bikingiv	7.5 injuries per 1000 athlete-exposures		
Women's college gymnastics practice ^v	6.1 injuries per 1000 athlete-exposures		
Sailing dinghies ^{vi}	4.6 injuries per 1000 participant days		

Data from Common Team Sports

Data is injuries that require medical attention and/or a loss of playing time, per 1000 athlete-exposures. Where available, data from games and practices are separated, as the risk is much higher in competition.

Age of Athlete	High School ^{vii}	Collegeviii	All Ages 5+ix
Years Included	2005-6	1988-2004	2011-2014
Boys'/Men's Football (American)	2.54 (practice) 12.09 (games)	9.6 (practice) 35.9 (games)	5.5
Girls'/Women's Soccer	1.1 (practice) 5.21 (games)	5.2 (practice) 16.4 (games)	1.7
Boys'/Men's Basketball	1.46 (practice) 2.98 (games)	4.3 (practice) 9.9 (games)	4.7
Girls'/Women's Basketball	1.37 (practice) 3.60 (games)	4.0 (practice) 7.7 (games)	1.8

From this we see that the risk of injury on Outward Bound courses is comparable to many (non-collision) high school team sports practice sessions.



¹ Medina McKeon, J. M., McKeon, P. O., & Nedimyer, A. K. (2021). <u>Sports Injury Epidemiology: Foundation of Evidence of, by, and for Athletic Trainers</u>. *Journal of athletic training*. 56(7), 606–615.

- iii Hootman, J. M., Dick, R., & Agel, J. (2007). **Epidemiology of collegiate injuries for 15 sports:** summary and recommendations for injury prevention initiatives. *Journal of athletic training*, *42*(2), 311–319. <u>Epidemiology of Collegiate Injuries for 15 Sports: Summary and Recommendations for Injury Prevention Initiatives (nih.gov)</u>
 iv Injury and Illness in College Outdoor Education. Gaudio, Flavio G. et al. Wilderness & Environmental Medicine,
- Volume 21, Issue 4, 363 370. <u>Injury and Illness in College Outdoor Education</u>.
- ^v Hootman, J. M., Dick, R., & Agel, J. (2007). **Epidemiology of collegiate injuries for 15 sports**: summary and recommendations for injury prevention initiatives. *Journal of athletic training*, *42*(2), 311–319. <u>Epidemiology of Collegiate Injuries for 15 Sports</u>: Summary and Recommendations for Injury Prevention Initiatives (nih.gov)

 vi Nathanson A. **Sailing Injuries: A Review of the Literature**. R I Med J (2013). 2019 Feb 1;102(1):23-27. PMID:
- 30709070. <u>2019-02-23-wilderness-nathanson.pdf (rimed.org)</u>
 vii Rechel JA, Yard EE, Comstock RD. **An epidemiologic comparison of high school sports injuries** sustained in
- ***Rechel JA, Yard EE, Comstock RD. **An epidemiologic comparison of high school sports injuries** sustained in practice and competition. J Athl Train. 2008;43(2):197-204. doi:10.4085/1062-6050-43.2.197 <u>An Epidemiologic Comparison of High School Sports Injuries Sustained in Practice and Competition (nih.gov)</u>
- viii Hootman, J. M., Dick, R., & Agel, J. (2007). **Epidemiology of collegiate injuries for 15 sports:** summary and recommendations for injury prevention initiatives. *Journal of athletic training*, *42*(2), 311–319. <u>Epidemiology of Collegiate Injuries for 15 Sports: Summary and Recommendations for Injury Prevention Initiatives (nih.gov)</u>
- ^{ix} Sheu Y, Chen LH, Hedegaard H. **Sports- and recreation-related injury episodes in the United States, 2011–2014**. National health statistics reports; no 99. Hyattsville, MD: National Center for Health Statistics. 2016. <u>National Health Statistics Reports, Number 99, November 18, 2016 (cdc.gov)</u>

ii Many readily available statistics on sports injuries focus on prevalence rather than incidence. In sports injury, the prevalence is the proportion of athletes with an injury at a given time. Incidence is the number of new injuries over a given time, relative to the number of athletes. These and other studies use emergency department visits to define injury, which is a different metric to ours. Some of the most rigorous studies use athlete-hours, and while these will be the most precise, we cannot use them for comparison because OB doesn't divide SPDs by activity or by hour.