Accidents in North American Climbing

Accident reporting and narratives to prevent future climbing accidents

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Managing Editor
Accidents in North American Climbing
Objectives

• What is Accidents?
  • Mission
  • History

• Climbing Injuries in the US

• Narratives and Data
  • Realistic training scenarios
  • Risk Identification
  • Data for risk management

• ANAC Features and Use

• Accessing data and search functions
Mission of Accidents

- The original mission of *Accidents* was to educate the growing numbers of climbers in postwar America and thus reduce the number of injuries and fatalities.

- This mission has remained mostly unchanged for the 71 years that the book has been published.
Mission of Accidents

• The purpose of the book is to gather reports and data regarding climbing accidents within North America, identify contributing factors, and pass on lessons learned from each incident to educate climbers, guide services, and outdoor recreation leaders.

• We are not out to judge people who have gotten into trouble but to communicate well-written and unbiased reports.
History of Accidents

- Accidents was created by the AAC’s Safety Committee in 1947.
- Dr. Ben Ferris Jr. an early climbing injury researcher designed the format that is still followed today.
- Dr. Ferris was a specialist in public health and a very keen mountaineer, and he edited Accidents for more than two decades, from 1952 to 1973.
History of Accidents

- Jed Williamson took over for the next four decades as a volunteer.

- In 2015, Dougald MacDonald became the executive editor of all AAC publications and took over as the managing editor of Accidents.
How do we collect accident information?

- Self-reporting (online form)
- Team of 16 volunteer editors across the US and Canada
- Regular correspondents in Arizona, Yosemite, Mt. Shasta, Grand Teton NP, and Oregon
- Mountain Rescue Teams
How do we collect accident information?

- National parks
- State Parks
- National and State Forest Services
- Primarily from rangers and FOIA requests
What information do we collect?

- Specific location and route
- Age/Gender of climbers involved
- Experience level
- Injury description - type, side, and severity
- Primary and Secondary cause of the accident.
- All lessons learned
- If there was a problem with gear (i.e. gear pulled) we try to be as specific as possible.
- We also like to include a photo of the route and/or rescue (while protecting patient privacy)

- ANONYMITY!
Why do climbers not submit reports?

Fall on Rock – Lowering Errors, Rope Too Short
Washington, Index, Lower Town Wall

I had run up the route Godzilla (5.9) to put up a top-rope for my girlfriend and her family. At the last second her parents asked us to hang their rope instead of ours. I didn’t think about it, but their rope was a 60m and mine was a 70m. I was climbing in approach shoes and everyone was chatting at the base — super casual, very relaxed. As I was lowering, we ran out of rope a few meters above the ground and my belayer accidentally let the end of the rope run through her brake hand and belay device. I dropped a few meters onto pretty gnarly rocks, landing on my butt and side and injuring my back a bit (compression fracture of two vertebrae).

Analysis

Lots of things should have been done better—we should have thought about how long the rope was, we should have been paying more attention, we should have had a knot in the end of the rope. I wasn’t wearing a helmet and was lucky to not injure my head—had I landed on my head, it probably would have been disastrous. My belayer had been climbing less than a year. Basically, things were all just a bit too lax. (Source: )
Climbing Injuries in the United States

Reported Climbing Accidents in the United States (1951-2019)
Climbing Injuries in the United States

Average Estimated Climbing Injuries Reported Emergency Departments

- 1990-2007
- 2010-2014
- 2008-2016


Climbing-Related Injury Among Adults in the United States: 5-Year Analysis of the National Emergency Department Sample. (2018)
Climbing Injuries in the United States

Demographics

- Median age of injured climbers = 26 yo
- Ages 20-39 = 60%/45%/59.5%
- Males = 66%/76%/85%

Most Common Causes

- Falls = 60%/50%/41%
Climbing Injuries in the United States

Injuries

• Most Common Injuries
  • Fractures – 27%/30%/36%
  • Sprains/Strains – 26%/8%/3%

• Most Common Injury location
  • Lower Extremity – 47%
  • Upper Extremity – 25%
  • Ankle Fracture – 27%
What does ANAC miss?

Minor injuries

Overuse injuries
Climbing Injuries at your Crag?

So how do you find out about common injuries in your region/crag?

- Check out the narratives
  - Organized by state

- Contact your regional MRA teams
  - [www.mra.org](http://www.mra.org)

- Contact local climber non-profits
Trends

- Leader falls vs. Equipment failure
- Increase in climbers, increase in accidents
- Gym to crag
- Falls from above
- and...
<table>
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<th>Year</th>
<th>Ascent (%)</th>
<th>Descent (%)</th>
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- **Ascent vs. Descent**

- **Communication at Transitions**
How can ANAC assist in Risk Management?

• Because of the detail provided within reports, these narratives can be adapted for:
  
  • Realistic scenarios for team training
  
  • Identification of planning considerations and environmental risks specific to your operational areas
How can ANAC assist organizations?

- Organizations can use ANAC to identify injury patterns in your respective operational area.
- ID accident trends and the most common accident locations in your area.
Data use for Risk Management

- Common Danger Zones
- Mitigation of risk from environmental and location specific danger
- Application in conjunction with first aid and evacuation planning
Features within *Accidents*

- Danger Zones
- Know the Ropes
- Essentials
- Data Summary
Features within Accidents – Danger Zones

- 2015 – The Nose, El Cap, CA
- 2016 – Grand Tetons, WY
- 2017 – Eldorado SP, CO
- 2018 – Mt. Hood, OR
- 2019 – Mt Washington, NH
- 2020 – New River Gorge, WV

*Mt. Washington from the east, with Tuckerman Ravine on the far left and Huntington Ravine at far right. The rime-covered observatory buildings can be seen on top. Brian Post*

Danger Zones
MT. WASHINGTON
Features within Accidents – Know the Ropes

• Previous topics include:
  • Rappelling
  • Belaying
  • 4th Class Travel
  • Placing Protection

MANAGING RISK
Planning and Reflection for Rock Climbers
BY RON FUNDERBURKE & DEREK DEBRUIN

Last year millions of viewers were awed by Free Solo, the feature film that documented Alex Honnold’s historic solo ascent of El Capitan. We were stupefied by the level of free climbing ability and mental strength required to even conceive of this feat, much less achieve it. We also were captivated by the debate that ensued. Many commentators viewed Alex’s climb as a moral failing, and many harangued the system that would allow such an ascent and the society that would laud it.

The debate begs some questions: How do we perceive risk as rock climbers? How do we manage it? Do we consistently manage risk? What are the most common inconsistencies? Even if we all have different relationships to risk, isn’t the desire to challenge ourselves in a complex and dangerous environment at least part of our essential motivation to climb? Is it possible that we all have more in common with Alex Honnold than we think?
## Features within Accidents - Essentials

### ESSENTIALS

**TRAUMATIC STRESS INJURIES**  
Immediate and Long-Term Aid  
By Laura McClearey

**DEEP WATER SOLOING**  
Safety Steps for a Fun New Sport  
By R. Bryan Simon and Seth C. Hawkins

**SPEAK UP**  
Intervening Effectively for Safer Climbing  
By Ron Funderburke

**WOUND MANAGEMENT**  
From Gobies to Serious Lacerations  
By R. Bryan Simon

**CLEAR WEIGHT TRANSITIONS**  
A Critical Yet Often Ignored Step  
By Molly Loemis

**LOWER LEG INJURIES**  
Assessment and Treatment  
By R. Bryan Simon

**MICRO-CAMS**  
What to Expect, How to Optimize  
By the Editors

**SHOCK**  
Assessment and Treatment  
By Dave Weber & Dr. Peter Hackett

**AVALANCHE RESPONSE**  
Physiology, Rescue, and Resuscitation  
By Dave Weber and Dr. Colin Grizzard
# Features within Accidents – Data Summary

## Tables

### Table 1: Reported Climbing Accidents

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Accidents Reported</th>
<th>Total Persons Involved</th>
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**TOTAL:** 8,005 1,078 459 63 174 15 26 6

**DATA TABLES / 123**
Conclusion

Our mission is to prevent accidents through education and thus reduce the number of injuries and fatalities in the climbing community.
Interested in Assisting?

- We are always looking for volunteers with a climbing and writing background to assist in collecting and editing reports.

- We are also always interested in ideas for Essentials pieces!

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Questions?

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