



**RedCliff Ascent**

WILDERNESS THERAPY PROGRAM

# SAFETY REPORT



# Wilderness Therapy Safety Report

## Executive Summary

This report summarizes historical rates of safety-related incidents among the general population of Americans aged 15 - 24 and those of clients at the Redcliff Ascent program. The purpose of the report was to understand the relative safety of Redcliff Ascent and make recommendations for future best practices.

Incident report metrics at Redcliff Ascent were summarized from 2006 to 2022. These data represented 2,578 clients and 198,558 client program days.

**2,578**

Redcliff Ascent clients

**198,558**

Redcliff Ascent client program days



## Findings

The Redcliff Ascent program is safe. Wilderness Therapy clients typically enter their program in clinically acute mental, behavioral, and relationship distress. Youths in this profile are more vulnerable to fatality and injury, whether intentional or unintentional. As such, Redcliff Ascent safety incident rates were expected to be substantially higher than in the general population.

The data showed that it is as safe, or more safe, for young people to be at Redcliff Ascent, than for young people to be living their lives in the general population.

There were no fatalities at Redcliff Ascent between 2006 - 2022. During the same time frame, the risk of fatality for young people (15 - 24) in the U.S. was about .01% over the span of two months (the typical duration of Wilderness Therapy).

At Redcliff Ascent, the likelihood of any injury, including minor injuries, was 2.4% over the span of two months. The likelihood of injury requiring removal from the field was 0.24%. The risk of injury-related Emergency Room visits among the general population of youth was 2% in any two month span — more than 8x that of Redcliff Ascent removal-associated injury.

The risk of injury-related Emergency Room visits among the general population of American youths was more than 8x the risk of injury at Redcliff Ascent associated with removal for medical care.

Just under 1% of minors in the U.S. run away from home. At Redcliff, the abscondment rate was 0.4%.

# Introduction





## What is wilderness therapy?

Wilderness therapy is a therapeutic intervention that combines outdoor activities with clinical mental health treatment to address emotional, behavioral, and psychological issues, primarily in adolescents and young adults.

Wilderness Therapy involves immersive experiences in nature to foster personal growth, self-efficacy, and interpersonal skills.

Wilderness therapy integrates clinician-led individual and group therapy that leverages the challenges and simplicity of wilderness to promote resilience, self-reflection, and behavioral change<sup>1,2</sup>.

Wilderness therapy clients typically enter a program in high clinical distress across mental, behavioral, and relationship health. Client self-reported overall health distress scores on an assessment tool called the Youth Outcomes Questionnaire<sup>3</sup> can range from -4 to 240. Clinical distress is indicated for scores 47 and higher. A recent report found that 3,893 wilderness therapy clients' average intake score was 74; their parents rated their health at an average of 99<sup>4</sup>. These scores were in the clinical range and higher than normative scores for community (average = 34), outpatient (average = 67), residential (average = 61), or partial hospital (average = 65) clients<sup>5</sup>.

## Redcliff Ascent & the Outdoor Behavioral Healthcare Council

Redcliff Ascent was a member of the Outdoor Behavioral Healthcare Council (OBHC), a consortium of wilderness therapy programs who collaborated on best practices for programming, administration, and knowledge sharing. All OBHC Wilderness Therapy programs were required to maintain accreditation through the Association for Experiential Education Outdoor Behavioral Healthcare and:

- Have clinical oversight by a licensed mental health professional
- Maintain 24-hour access to medical consultation and emergency medical services
- Have at least one Wilderness First Responder certified staff per expedition

<sup>1</sup> Russell, K. C. (2001). What is wilderness therapy? *Journal of Experiential Education*, 24(2), 70-79.

<sup>2</sup> Gass, M. A., Gillis, H. L., & Russell, K. C. (2012). *Adventure therapy: Theory, research, and practice*. Routledge.

<sup>3</sup> Burlingame, G. M., Cox, J. C., Wells, M. G., Latkowski, M., Justice, D., Carter, C., & Lambert, M. (2005). *The administration and scoring manual of the Youth Outcome Questionnaire*. Salt Lake City, Utah: OQ Measures.

<sup>4</sup> <https://natsap.org/natsap-outcomes-evaluation-report/>

<sup>5</sup> A meta analysis (Gillis et al., 2016) states different normative scores (e.g., community settings average = 21) but do not provide a citation for this information.

- Retain client-to-staff ratios typically between 3–4 clients per staff member
- Provide 80-hour field-guide training and ongoing supervision and refresher training

## Data Sources

Redcliff Ascent submitted incident report data each year to the University of New Hampshire. The data were aggregated at the program level — no individual client data were included.

At Redcliff Ascent, there were 2,578 admitted clients. The number of clients varied by year, with an average of 152 clients per year.

Wilderness Therapy programs typically had a length of stay of about 61 days between 2006 and 2022. At Redcliff Ascent, the average length of stay was 78 days, ranging from 71 (in 2011) to 84 (in 2022). For the sake of comparison to other metrics on Wilderness Therapy safety, the duration of 61.4 days was retained for analyses<sup>6</sup> in this report.



## Third Party Report

This report was commissioned by OBHC programs to be completed by a third party evaluation specialist at BestNotes, an Electronic Health Record Software company that offers Evaluation Services.

## Limitations

1. Redcliff Ascent was required to submit the total number of each incident, but not how many times any one client was involved in the incident — this means Redcliff Ascent incident rates were *overestimated*.
2. The reported incidents do not encompass all possible safety-related issues (e.g., medication error was not required until 2019).
3. There were no data regarding incident specifics, such as type of injury, environmental factors, cause, etc.

<sup>6</sup> See Wilderness Therapy Safety Report: <https://anyflip.com/qitig/rntk/>

# Results







# NON-FATAL INJURIES

2%

General population 15 - 24  
year olds risk of ER-visit  
related injury over 61 days

0.2%

Risk of injury requiring  
out-of-field support over  
61 days at Redcliff Ascent

2%

Risk of any injury (including  
minor) over 61 days  
at Redcliff Ascent

A non-fatal injury is 'bodily harm that requires medical attention but does not result in death. The cause of injury may be intentional or unintentional.' Examples include fractures, cuts, and burns<sup>7</sup>.

<sup>7</sup> Centers for Disease Control and Prevention. (2023). Injury Prevention & Control: Data and Statistics (WISQARS). <https://www.cdc.gov/injury/wisqars/index.html>

## General U.S. adolescent & young adult injuries

CDC's WISQARS data were queried<sup>8</sup> for non-fatal injuries among people aged 15 - 24 presenting to U.S. Emergency Room (ER) over the years 2006 to 2022. The average annual non-fatal injury rate was 118 per 1,000 population, or about 12%<sup>9</sup>. Injury rates were higher in earlier years (14% in 2006, 2007, and 2008) than later years (8% - 9% from 2019 - 2022) and higher among young adults than adolescents. For example, in 2023, 9% of adolescents and 10% of young adults presented to an ER for an injury.

The 12% annual ER-visit injury rate for this age group translates to .00032 per person per calendar day (derived from dividing the injury rate by days per year 0.118/365).

To compare general population injury rates to those of Wilderness Therapy, which had an average stay of 61.4 days, we multiplied the general population per person daily rate by 61.4, for an injury estimate of 0.0202 or a 2% risk of injury for young Americans aged 15 - 24.

## Redcliff Ascent injuries

Over 61 days at Redcliff Ascent, there is a 2.4% likelihood of any injury (including minor injury).

The rates for the general population are for ER-documented injuries, which are likely more severe than all injuries reported by Redcliff Ascent.

**ER-Visit Injuries  $\neq$  All Redcliff Ascent Injuries**

To better understand how Redcliff Ascent client risk compared to risk in the general population, injury-related removal from the field were examined. Injury-related removal from the field is the safe and purposeful removal of an individual or group from a remote or wilderness environment to a



<sup>8</sup> Centers for Disease Control and Prevention. Injury Prevention & Control: WISQARS Tables. <https://wisqars.cdc.gov/>

<sup>9</sup> The average number of ER-reporting injuries was 5.1 million for this age group, which had an average population of 43.4 million.

location where they can receive appropriate medical care, safety, or support due to an emergency or critical situation<sup>10</sup>.

At Redcliff Ascent, over 17 years and for 2578 clients, there were 71 reported injuries, 90% of which were Level I, which included minor injuries that required a half-day break then return to programming.

The total injury per client rate was .0004 per client day, or a 61.4-day injury likelihood of 2.4%. Level I per client injury rate was .00036, or a likelihood of injury of 2.2%, over the span of 61.4 days. The Level II injury rate was .00004, which translates to a 61.4 day risk of 0.2%.

Over 61 days at Redcliff Ascent, there is a 0.24% likelihood of injury requiring removal from the field.

Removal from the field was recorded since 2019. During the years 2019 - 2022, there were 7 reported client removals, suggesting that 10% of injuries were associated with field removal. In other words, there was a 0.24% likelihood of a removal-related injury over the span of a 61-day stay at Redcliff Ascent.

<sup>10</sup> Association for Experiential Education. (2023). Accreditation Standards. <https://www.aee.org/>





# FATALITIES

0.013%

General population risk of fatality over 61 days

0

Fatalities at Redcliff Ascent 2006 - 2022

## Fatalities among adolescents and young adults in the U.S.

The National Center for Health Statistics found that Americans aged 15 – 24 have an annual mortality rate of approximately .08%<sup>11</sup>. This rate, in risk per day per person is .00000217, and for the equivalent of the duration of a Wilderness Therapy program is .000133 or .013%.

## Redcliff Ascent fatalities

There were no fatalities at Redcliff Ascent over the 17 years from 2006 to 2022.

<sup>11</sup> National Center for Health Statistics. (2024). Mortality in the United States, 2023. NCHS Data Brief No. 521. <https://www.cdc.gov/nchs/products/databriefs/db521.htm>

# RUNNING AWAY OR ABSCONDMENT

0.9%

General population likelihood of  
running away over 61 days

0.4%

Likelihood of running away from a  
Redcliff Ascent program over 61 days

Running away is when a minor voluntarily leaves their home or legal place of residence without permission and stays away for at least one overnight<sup>12</sup>. In the clinical context, running away is often termed absconding.

## General population running away

The National Runaway Safeline<sup>13</sup>, and the National Center for State Legislatures<sup>14</sup> estimate approximately 6%-7% of the population of minors are reported as having run away annually in the U.S. The National Child ID Program estimates about 1 in 20 minors run away annually (5%). Using this more conservative estimate, the likelihood of a minor running away per day is .00015. Over a 61-day period, this translates to .0089 or about 0.9%.

OBHC (2002) defined running as: **Level I** when a client is away from program oversight for at least 60 minutes without permission, and **Level II** when a client is away from program oversight without permission for more than 24 hours. OBHC's Level II aligns with the NISMART definition and will be used for comparisons.

<sup>12</sup> Sedlak, A. J., Finkelhor, D., Hammer, H., & Schultz, D. J. (2002). National Estimates of Missing Children: An Overview. NISMART-2 National Incidence Studies of Missing, Abducted, Runaway, and Thrownaway Children. Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice. <https://www.ojjdp.gov/publications/PubAbstract.asp?pubi=196465>.

<sup>13</sup> National Runaway Safeline. (2019). Third Party Statistics. <https://www.1800runaway.org/runaway-statistics/third-party-statistics/>

<sup>14</sup> National Conference of State Legislatures. (2023). Youth Homelessness Overview. <https://www.ncsl.org>



## Redcliff Ascent abscondment

Over the 17 years of data contribution and 2578 clients, Redcliff Ascent reported 80 Level I abscondments and 10 Level II abscondments. Since Level II abscondment rates align with the national definition of running away, this is the only report of interest. The 10 Level II abscondments translate to a .0001 per client day rate, or extrapolate to a 61-day likelihood of .0034 or 0.35%.

# SUICIDE ATTEMPTS

0.4%

General population risk  
of suicide attempt over 61 days

0.6%

Likelihood of a suicide attempt incident  
at Redcliff Ascent over 61 days

A suicide attempt is a self-directed behavior with intent to die because of the behavior. A suicide attempt might not result in death or injury.



## General population suicide attempts

Suicide is one of the leading causes of death among young Americans<sup>15</sup>. Tragically, approximately 0.14% of Americans aged 15 – 24 lost their life to suicide in 2023<sup>16</sup>. People with mental health conditions are at a higher risk; 46% of people who die by suicide had a known mental health condition<sup>17</sup>. In 2023, 3.3% of American adolescents and 2% of those aged 18 – 25 attempted to take their own life<sup>18</sup>.

This extrapolates to a likelihood of 0.4 per person over the course of 61 days.

## Redcliff Ascent suicide attempts

Across the years 2019 - 2024 suicide attempt incidents were submitted by Redcliff Ascent. During those years, there were two suicide attempts reported. This is a .0001 per client day suicide attempt rate, or a likelihood of suicide attempt over 61 days of 0.4%.

<sup>15</sup> <https://www.nimh.nih.gov/health/statistics/suicide>

<sup>16</sup> <https://www.cdc.gov/suicide/facts/data.html>

<sup>17</sup> <https://www.nami.org/about-mental-illness/common-with-mental-illness/risk-of-suicide>

<sup>18</sup> Substance Abuse and Mental Health Services Administration. (2024). Key substance use and mental health indicators in the United States: Results from the 2023 National Survey on Drug Use and Health (HHS Publication No. PEP24-07-021, NSDUH Series H-59). <https://www.samhsa.gov/data/report/2023-nsduh-annual-national-report>

# NON-SUICIDAL SELF-INJURY (NSSI)

Non-suicidal self-injury (NSSI) is the deliberate, self-inflicted harm to one's body (by, for example, cutting, burning, or hitting) resulting in immediate damage, without suicidal intent. NSSI is often associated with mental health conditions<sup>19</sup>.

## General population NSSI

Approximately 17% - 18% of U.S. teens reported NSSI at least once in their lifetime<sup>20</sup>. Among clinical samples, the lifetime prevalence is concerningly as high as 50%<sup>21</sup>. Lifetime rates of NSSI cannot be compared to data collected while in treatment because time frames cannot be calculated.

## Redcliff Ascent NSSI rates

NSSI data were added to the submission protocol from 2019 - 2022. At Redcliff Ascent, there were 63 reported NSSI incidents between 2019 and 2022. This is a .002 per client day rate, which translates to a 61-day likelihood of 12%.

# MEDICATION ERRORS

Medication errors are defined as preventable events in prescribing, dispensing, administering, or monitoring medications that may cause or lead to inappropriate use or patient harm<sup>22</sup>. Medication errors do not include medication refusal.

## Redcliff Ascent medication error rates

At Redcliff Ascent, there were 105 medication errors reported between 2019 and 2022, for an error rate of .0034 per client day. This translates to a medication error likelihood of 21% over 61 days at Redcliff.

<sup>19</sup> Klonsky, E. D., Victor, S. E., & Saffer, B. Y. (2015). Nonsuicidal self-injury: What we know, and what we need to know. *Psychiatric Clinics of North America*, 38(3), 431-449. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4406976/>

<sup>20</sup> Lurigio, A. J., Nesi, D., & Meyers, S. M. (2023). Nonsuicidal self injury among young adults and adolescents: Historical, cultural, and clinical understandings. *Social Work in Mental Health*, 22. <https://doi.org/10.1080/15332985.2023.2264434>

<sup>21</sup> Zetterqvist, M., Jonsson, L. S., Landberg, Å., & Svedin, C. G. (2021). A potential increase in adolescent nonsuicidal self-injury during COVID-19: A comparison of data from three different time points during 2011- 2021. *Psychiatry Research*, 305, 114-208. doi:10.1016/j.psychres.2021.114208

<sup>22</sup> World Health Organization (WHO). (2017). Medication without harm: WHO global patient safety challenge. World Health Organization. <https://www.who.int/publications/i/item/WHO-HIS-SDS-2017.6>

A group of six cyclists is lined up on a dirt trail, looking towards the right. They are wearing helmets and casual riding gear. The lead cyclist is a woman with long hair, wearing a grey t-shirt and dark pants. The others are wearing blue and orange shirts. They are standing next to their mountain bikes, which have 'WTE' and 'RANGER' written on the tires. The background consists of tall pine trees under a clear blue sky with a few clouds. The ground is dry and dusty.

# Conclusion

## The Redcliff Ascent program is safe.

Wilderness Therapy clients typically enter their program in clinically acute mental, behavioral, and relationship distress. Youths in this profile are more vulnerable to fatality and injury, whether intentional or unintentional. As such, Redcliff Ascent safety incident rates were expected to be substantially higher than in the general population.

The data, however, showed that it is as safe, or more safe, for young people to be at Redcliff Ascent, than for young people to be living their lives in the general population.

There were no fatalities at Redcliff Ascent between 2006 - 2022. During the same time frame, the risk of fatality for young people (15 - 24) in the U.S. was about .01% over the span of two months (the typical duration of Wilderness Therapy).

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Just under 1% of minors in the U.S. run away from home. At Redcliff, the abscondment rate was just under half that of the general population of minors in the U.S.

Rate of ER-visit  
injuries for young  
Americans

8x

rate of Redcliff  
Ascent injuries  
requiring removal  
from the field

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