Program Ideas: HOW TO…

…REPORT INCIDENTS

INCIDENT DATA

Incident data collection is an essential component of risk management in experiential programs. Incidents fall into two categories: a **negative outcome** (injury, illness, property damage, etc.) or **close calls/near misses** (where significant chance for negative outcomes exist, but do not occur). Collecting and analyzing incident data allows a program to identify areas of increased risks and take specific actions to reduce those risks. **Failure to collect or analyze incident data** leaves a program exposed to significant liability and repetitive mistakes.

Safety science research shows that for every single negative outcome significantly more near misses occur. From a data analysis perspective, this means that **near miss data is an accurate predictor of actual risk levels**. Therefore, incident data should be collected and analyzed for **both negative outcomes and near misses**.

COLLECT

Collecting incident data can sometimes be challenging. Staff may worry that reporting an incident will have a detrimental impact on their employment, even though factors contributing to incidents do not just occur at the field level. Modern risk management theory has shown that when something goes wrong, it is likely **the result of interconnected failures throughout different levels of the organizational system**.

Organizations need to **proactively build a culture** where prompt and systematic reporting is seen as the best way to ensure that risk areas are quickly identified and addressed. This is possible when incident data are kept in spreadsheets or databases that permit trend analysis. For data to be legitimate, collection must use standardized procedures and forms.

Paper forms can be used in the field to record incident data. The information on these must be transferred to spreadsheets or databases. Staff should be educated on what incidents are collectable and what data should be submitted.

IDENTIFY

The "Systems Thinking" approach identifies **contributing factors** across all levels of the system that combine to create a negative outcome or near miss. Identifying these factors is typically done by assigning them to a particular **cause**. For example, causality can be identified as based on equipment, environment, or human contributing factors. Several peer-reviewed causal taxonomies can help in the analysis of collected incident data. Identifying contributing factors provides a roadmap for where to focus efforts. Should new protocols be put in place? Is additional staff training and/or better client screening needed?

ANALYZE

Data in spreadsheets or databases permit a more accurate analysis than those on paper. Program-wide risks can be assessed by using graphs or charts of frequency and severity, while descriptive statistics broken down by type (injury, illness, etc.), population (clients, staff, etc.), activity (hiking, canoeing, etc.) and across program years can indicate trends and issues. These tendencies can be countered with specific action steps taken to mitigate risks.

This analysis should occur at least annually with specific plans established to address any major issues. This intentional analysis and action will improve a program's overall risk management. AEE is working with leaders in the industry to develop standards for incident data collection to help experiential organizations understand and implement best practices.

Rick Curtis & Simon Priest

aee.org

Rick Curtis
staff@outdoored.com
www.OutdoorEd.com
www.IncidentAnalytix.com

FURTHER RESOURCES

Curtis, R. IncidentAnalytix Blog - https://www.incidentanalytix.com/blog/

Hollnagel, E., Wears, R. L., & Braithwaite, J. (2015). From Safety-I to Safety-II: a white paper. *The resilient health care net: published simultaneously by the University of Southern Denmark, University of Florida, USA, and Macquarie University, Australia*. https://psnet.ahrq.gov/issue/safety-i-safety-ii-white-paper https://www.england.nhs.uk/signuptosafety/wp-content/uploads/sites/16/2015/10/safety-1-safety-2-whte-papr.pdf

Qureshi, Z. H. (2008). A review of accident modelling approaches for complex critical sociotechnical systems. https://www.semanticscholar.org/paper/A-Review-of-Accident-Modelling-Approaches-for-Qureshi/c3a597212068c27be45d84dec76e86baabd4cf90

Rasmussen, J. (1997). Risk management in a dynamic society: a modelling problem. *Safety Science, 27*(2-3), 183-213. https://backend.orbit.dtu.dk/ws/files/158016663/SAFESCI.pdf https://www.sciencedirect.com/science/article/abs/pii/S0925753597000520

A story of Safety II – Jeffrey Braithwaite: https://www.youtube.com/watch?v=gauR843rRNk

Doing Safety Differently – Sydney Dekker: https://www.youtube.com/watch?v=6gREMV6j2A4

Perceiving what cannot be seen" - the practical side of Safety - II – Erik Hollnagel: https://vimeo.com/159498494

Safety Differently | The Movie: https://www.youtube.com/watch?v=moh4QN4IAPg

Safety I & Safety II – Erik Hoffnagel: https://vimeo.com/channels/1366431/89492241

Sidney Dekker — Just Culture short course 1: https://www.youtube.com/watch?v=PVWjgqDANWA

Sidney Dekker — Safety Differently Lecture: https://www.youtube.com/watch?v=oMtLS0FNDZs

The New View of Safety with Todd Conklin: https://www.youtube.com/watch?v=IoYUQlWiRgc

Todd Conklin speech "Risk Analysis is Fixed in Time – But Hazards Ebb and Flow: https://www.youtube.com/watch?v=X211fU39808