

Introduction

- Near misses are defined “as close calls...in which [an individual] might have been hurt if the circumstances had been slightly different.” [1]
- Identification of these events is critical to accident prevention since these bring high-risk circumstances to the attention of stakeholders, who can improve the conditions of a workplace
- The objective is to diagnose a root cause for the lack of near miss reports and propose a solution to increase it
- Challenges included the current system’s long reporting process, lack of website, and poor user accessibility
- To fit the timeline of the Capstone course, the team narrowed the scope to focus solely on COE UG student clubs

Methodology

A root cause analysis was performed to determine the deficit of near miss reporting. It was broken up as followed:

1. Initial Qualtrics UG COE club survey to determine club sizes and potential hazards
2. 30 minute interviews with COE UG club members to gauge safety and near miss knowledge
3. Analysis on the findings to help understand and diagnose root cause of lack of near miss reporting



Near Miss Reporting

Summary: Environmental Health and Safety (EH&S) sponsored an Industrial Engineering project to increase the near miss reporting rate, focusing on College of Engineering (COE) undergraduate (UG) student clubs.

Informational Signage

Training Videos Description

Informational training videos on near misses and their importance are accessible in the QR code. Videos are 45-90 seconds long and cover various topics relating to near misses.

Capstone Implementation

The team conducted 42 interviews with 16 different clubs to understand the challenges behind UG students’ lack of near miss reports in COE.

Based on interview findings, several informational materials were created which include:

- Near Miss Training Videos
-Videos are hosted on EH&S OSU Student Club Safety website
- Near Miss Informational Signage
-Signage is accessible on EH&S website for individual clubs to print
-Printed posters are available in Kathryn Walter’s office in Johnson Hall 219

[1] “Incident Investigation,” Incident Investigation - Overview | Occupational Safety and Health Administration. [Online]. Available: <https://www.osha.gov/incident-investigation>. [Accessed: 08-Oct-2021].

Findings

Near Miss Knowledge Gap

- 35% cited more knowledge in near miss would increase their likelihood of submitting a report
- 14% had a perception that other club members would have a fear of punitive action in reporting a near miss
- 24% would report a near miss depending on the severity of the event
- 10% believed their club members would have general unwillingness to report

Near Miss Reporting Accessibility

- 38% mentioned an easier process would increase the likelihood of submitting a near miss report
- 26% mentioned more knowledge of how to access the form would increase the likelihood of submitting a near miss report

Future Work

- COE continues support by providing signage for students and annually mentions importance of near miss reporting
- Further analysis from EH&S/COE is needed to assess efficacy of Capstone created material to improve rate of near miss submission

Acknowledgements

- Thomas Doyle | Director of Environmental Health and Safety
- Jenette Paul | Laboratory Safety Officer
- Kathryn Walters | Student Engagement Coordinator for the College of Engineering
- Dr. Thuy T. Tran | College of Engineering Senior Director of Marketing and Communications
- Dr. Sarah Oman | Senior Instructor I
- Dr. Ean H. Ng | Assistant Professor, Industrial Engineering
- Chukwudiebube Chukwunonso Atagbuzia | Ph.D Student Industrial Engineering



<https://beav.es/wTt>