

SafeMTS

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SafeMTS

Maritime Industry Near Miss
Reporting Program - Pilot

AWO Annual Safety Meeting 2023

Safe Maritime Transportation System



Agenda

1. SafeMTS Refresher
2. CIPSEA
3. Pilot Timeline
4. Data Process & Results Overview
 - Data Key
 - Company Example
5. Next Steps



SafeMTS

- A partnership between MARAD and BTS; a collaboration with industry
- A voluntary and confidential program aimed at collecting, analyzing, and benchmarking near miss data from the maritime industry to advance safety and environmental stewardship.
- Objectives:
 - Collect near miss data from industry partners that can be analyzed to identify safety-related trends to prevent incidents or identify otherwise non-correlated events.
 - Share results with industry stakeholders to support continuous safety improvement efforts
 - Align ASTM standard to data collection and reporting requirements for SafeMTS

BTS Legal Authority: CIPSEA

Confidential Information Protection and Statistical Efficiency Act

Title III of Foundations for Evidence-Based Policymaking Act of 2018, Pub. L. 115-435 (reauthorizing 2002 E-Gov Act)

- Law requires BTS to protect respondents against identification by indirect means
- Prohibition on release of data
 - No government agency may require, for any reason, a copy of any respondent's report
 - Courts cannot require a copy of any respondent's report
 - Reports are exempt from Freedom of Information Act (FOIA) requests
- Data systems may only be accessed by staff/agents on need-to-know basis
- Anyone working on data processing and analysis subject to confidentiality training and signs non-disclosure agreement
- Applies to all federal employees, contractors, and agents
- Willful disclosure of confidential information may incur sanctions and penalties
 - Disclosure is the unauthorized release of confidential information
 - Penalties may include removal from office, fines (up to \$250,000), and/or imprisonment (possible felony conviction, up to 5 years)

SafeMTS Pilot Timeline

- Target to complete pilot: October 2023
- Selected milestones (CY)
 - 2022 Q3-2023 Q1: Onboard participating companies; collect data (Completed)
 - **2023 Q2: Stakeholder meetings to review interim results and gather feedback (ongoing)**
 - Review how individual data compares to key
 - General stats
 - Feedback on key, narratives guidance, and general input
 - 2023 Q4: Publish aggregated results and lessons learned from pilot process
- Following pilot, adjust program characteristics based on lessons learned and expand program to additional companies

• Data Process & Results Overview

- Process:
 - Ingest data – keeping the participant burden low by accepting any format
 - Initial review
 - Identify critical fields
 - Automated mining (script)
 - Manual mining (SME Review)
 - Iterative: Key Development (critical fields & values)
- Coverage: 7 companies; 15,696 records; Jan 1st 2016 to Jan 29th 2023
- Varying number of data fields provided (between 6 and 36).
- Varying titles/definitions among fields.
- Varying number of records per participant (between 10 and 12,614).
- Varying quality among values in each record.

Data Key

- 18 core data fields identified, apart from basic information such as date and description (not all fields are applicable in each case):
 - Incident Type/Category
 - Near Miss Classification
 - Vessel Type
 - Geographic Location
 - Location on Vessel
 - System/Equipment Involved
 - Operations/Activity Ongoing
 - Environmental Conditions
 - Personnel Type
 - Factor Preventing further/worse incident (Pre-event factors)
 - Action Taken
 - Action Taken – Narrative
 - Immediate Corrective Action
 - Systemic Corrective Action
 - Potential Consequence
 - Actual Consequence
 - Potential Severity/Criticality Level (from company's evaluation)
 - Causal Factors
- Fields may be grouped differently or subcategorized further; subject to SME changes and company input

Data Process: Company Example

- Received files in PDF format, requiring transformation to compile into an Excel file
- Not all fields were required/helpful for SafeMTS, but are still important for the company, so they are stored separately from the core SafeMTS data fields
- Analysts interpret fields and ensure fields are mutually exclusive (possibly requiring separating a single-type field into multiple)
- SafeMTS core data fields were added to the Excel file for a SME to populate. When the field or equivalent field was not supplied by the company, the SME reviews free text fields (such as the description) to find the information.
- After SME review, some overview statistics are compiled such as:

Geographic Location	# of Cases
Underway	195
Dock/In Port/Shore	92
Shipyards	28
Anchorage	1

Location on Vessel	# of Cases
Deck	96
Galley	35
Engine Space	33
Bridge	14
Lifeboat	13
Laundry	11

Action Taken	# of Cases
Repaired	68
Secured Equipment	53
Operation Stopped	45
Obstacle/ Hazard Removed	30
Different solution found	26

Working with AWO

- How do AWO and SafeMTS work together?
 - Large sector
 - Dashboard for AWO members, to compare themselves to other members and non-members as a group (additional filter)
 - AWO 'promoting' the SafeMTS program

Next Steps

Short-term:

- Compile feedback & input from companies to update key and narrative guidance
- Writing Pilot Report
- Continuing Key Updates
- Onboarding additional SMEs

Longer-term:

- Completion of Pilot (Phase I)
 - BTS/MARAD continue to develop data fields and values (share with WTG and SOCP work group members)
 - Codebook that provides definitions for each data field and categorical value
 - Publishing of pilot report (publicly available)
- Adapt pilot to full program (Phase II)
 - Onboard additional participants and collect more data
 - Continuing Aims:
 - BTS to develop data collection tools
 - Form (structure and data elements) and potentially implement through an app or website
 - BTS to develop data analysis tools
 - Dashboard - safety metrics as compared to the aggregate

Contacts

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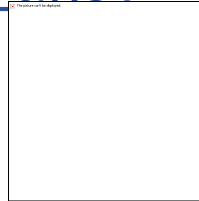
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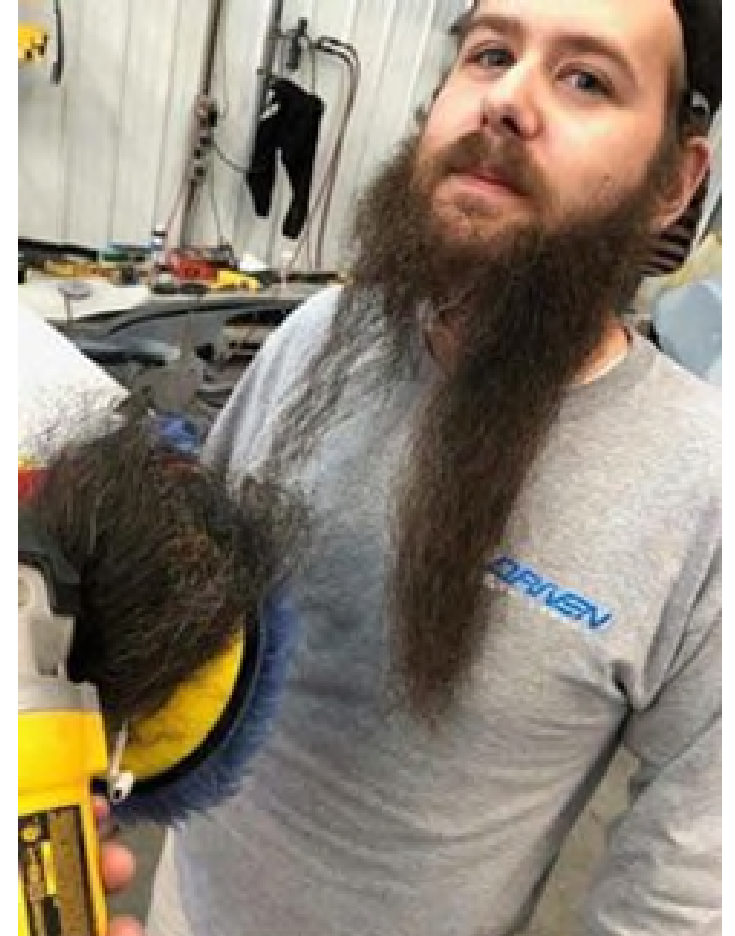


Near Miss Reporting

BARRY RAMESAR, DIRECTOR HSQE & Operations Integrity

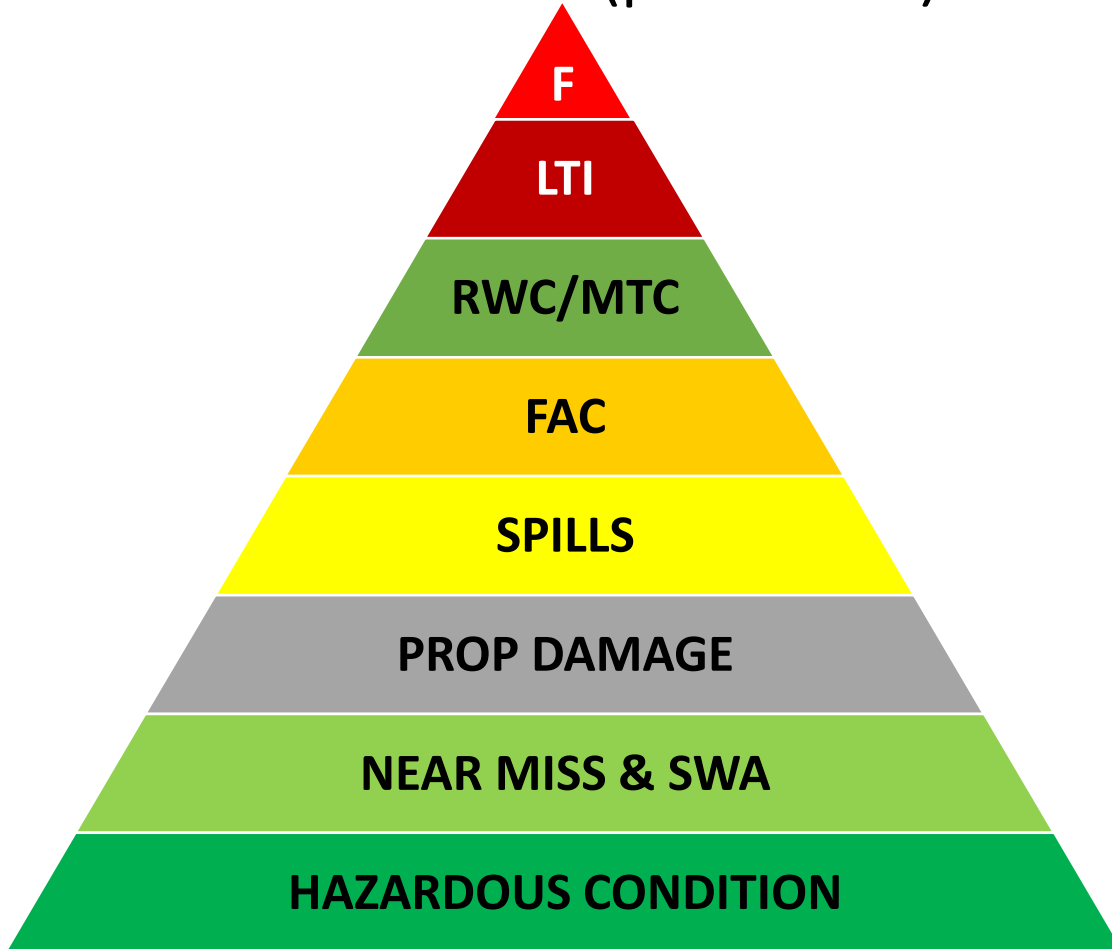
August 17th, 2023

- Definition: Near Miss – is an event that has / had the potential to:
 - result in injury,
 - damage to property, the environment,
 - or service loss,
- but, through some recovery mechanism, did not result in an injury, damage, or loss of service

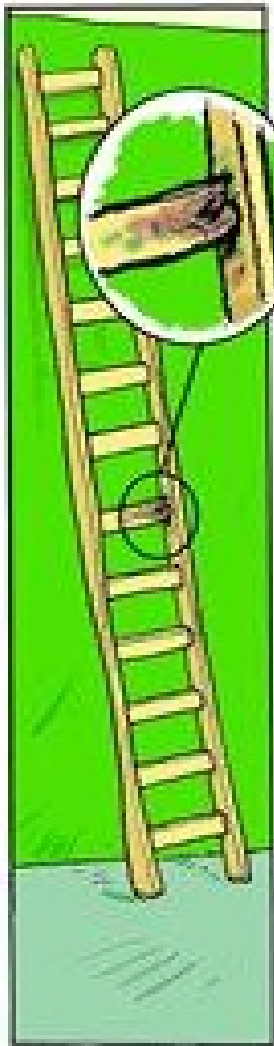


- *Unplanned* event with the *potential* to cause injury to personnel, damage to property, the environment, the community and the company's reputation.
- *Note: Some Organizations may refer to Near Misses as “Near Hits”.*

LEADING (pro-active) VERSUS LAGG



Event Type
Fatality / Lost Time Injuries
Other Recordable Injuries
First Aid Cases
LOCs & Spills (to Water)
Major Property Damage Events
Near Misses
Stop Work Authorities
Reports of Unsafe Conditions



Unsafe condition



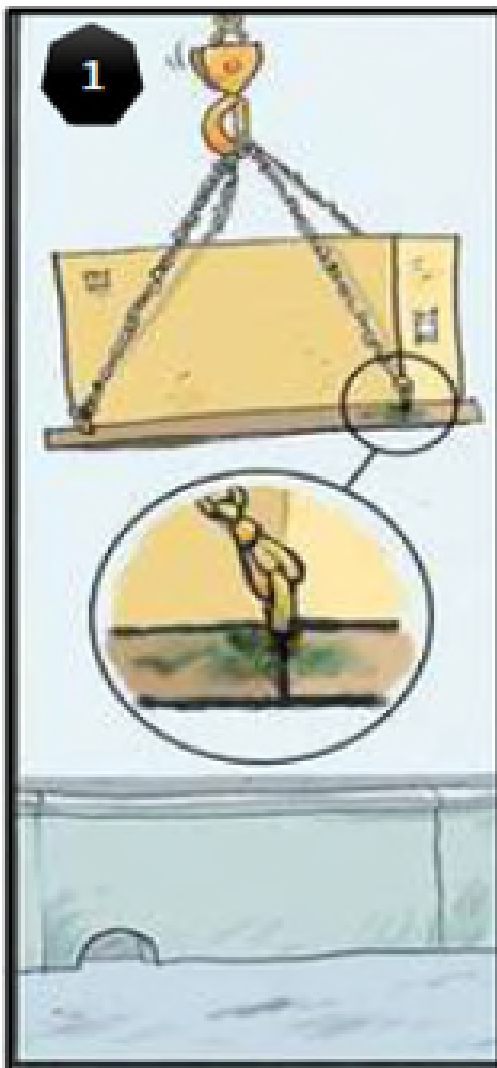
Unsafe act



Near miss



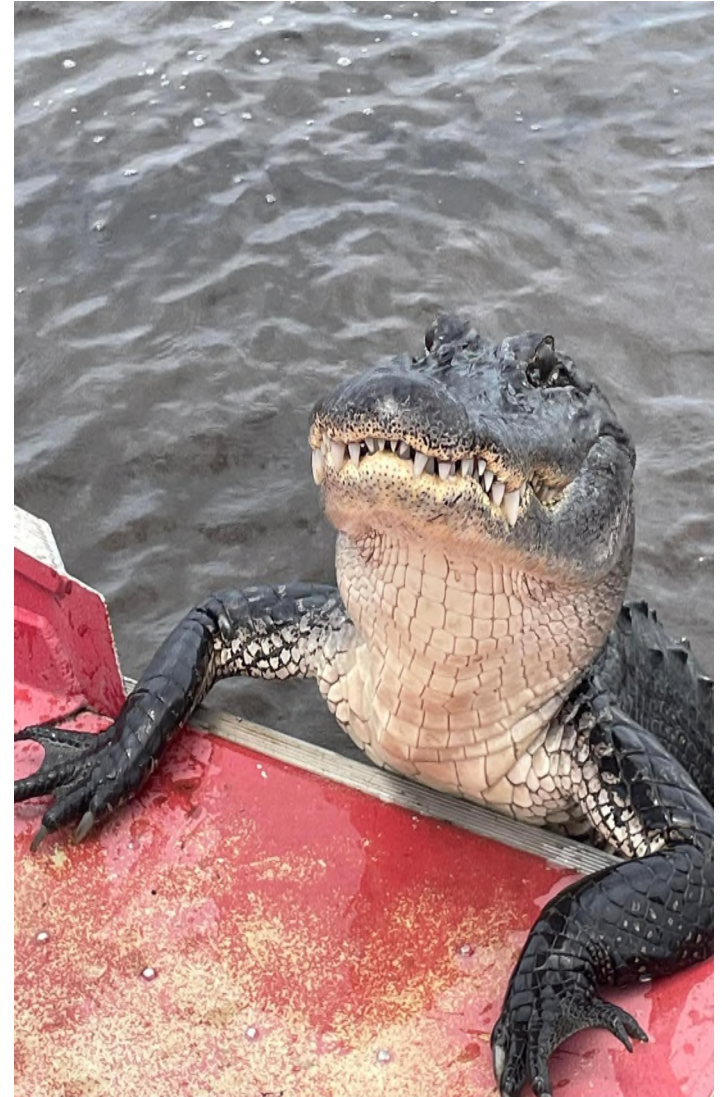
Accident



Do you think these workers performed any level of risk evaluation?



Sometimes the journey teaches us about the destination.

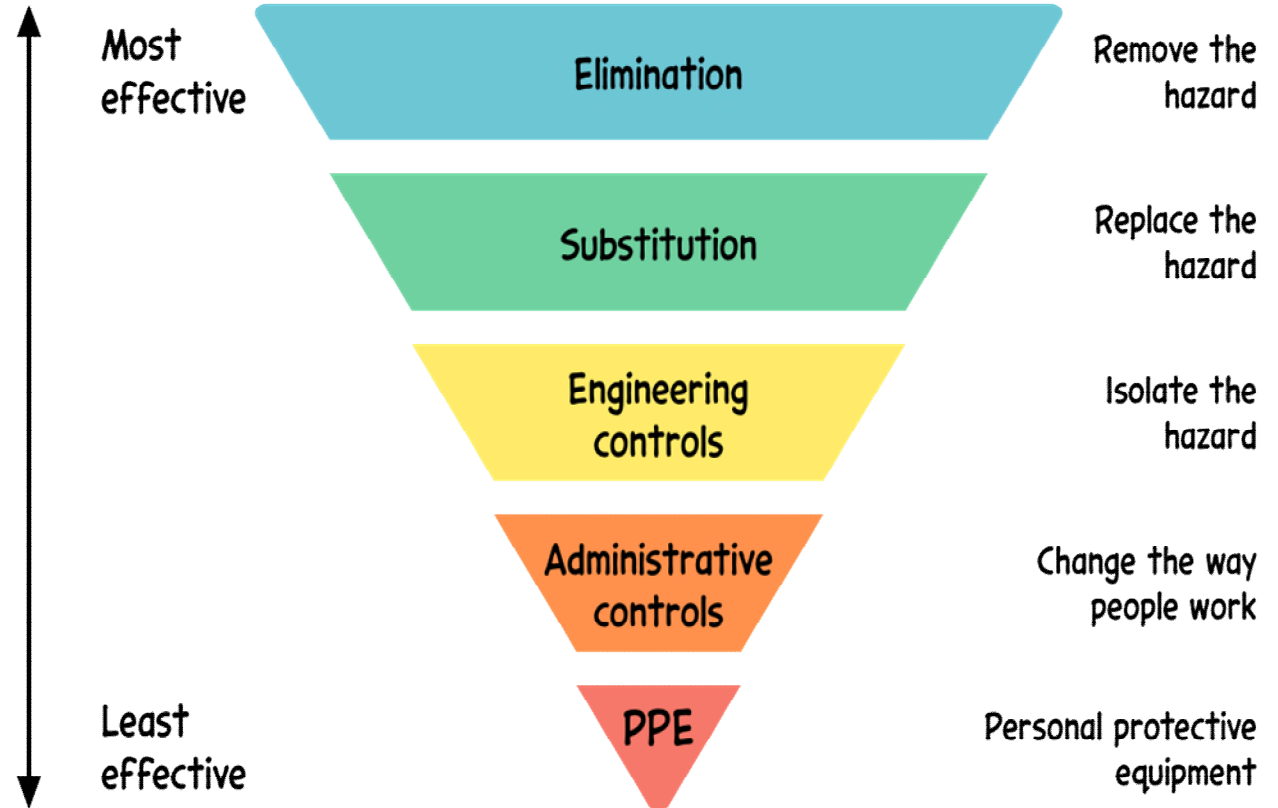


How can this effort assist you in raising the bar regarding Near Miss reporting?

Managing Risk

- The hierarchy of risk control is a step-by-step approach to eliminating or reducing risks

HIERARCHY OF CONTROLS



Link: NIOSH Control Hierarchy

<https://www.cdc.gov/niosh/topics/hierarchy/default.html>