

Safety Presentation for VCAT

Agenda:

- Management Review and 2024 Goals
- Incident and Near Miss Data
- Leading Indicator Safety Metrics
- Status of Action Plans
- Status of Safety Management System

Management Review Agenda Topics



October ESC Part 1: Review of Action Plans: Incident Investigation; External Assessment; Safety Culture Survey

November ESC Part 2: Safety Management System Status, Directives Updates; Training Data; Incidents and Corrective Action Data

December ESC Part 3: Inspections and Deficiencies; Communications; Draft Goals and Actions



Final 2024 Goals

Goals Posted on ESC Website to be featured with link in the Safety Standard Newsletter

1 Complete and Fully Functional SMS

- Issue and Implement Audit Program; conduct first external ISO 45001 Pre-certification assessment
- Develop and issue remaining SMS Directives
- OUs finish re-reviews of existing hazard reviews

3 Strengthen OSHE Roles & Responsibilities

- Strengthen Role and Responsibility of the CSO
- Define stronger roles for OSHE staff to ensure consistent hazard mitigation across NIST
- Implement a phased approach to increasing safety staffing and services provided, including OU embeds

2 Improve NIST Safety Culture

- Communicate Status of Implementation of the NIST Safety Culture Action Plan developed by multi-level, multi-OU teams (nine actions)

4 Performance Metric Goals and Access

- Establish goals for improving leading metrics, e.g., near miss reporting, timeliness of corrective actions, training completion
- Complete Build of Safety Dashboard

Reported Events: Lagging and **Leading** Indicators Q1



Type	Cases	Affected Staff	OSHA Recordable Cases
Injury	9	9	3
Illness	9	12	10
Near Miss	9	0	
Property Damage	5		
Contamination by Radioactivity	0	0	0
Spill / Release	4		
Exposure	1	1	0
Other	0	0	0
Total Cases FYTD	37		

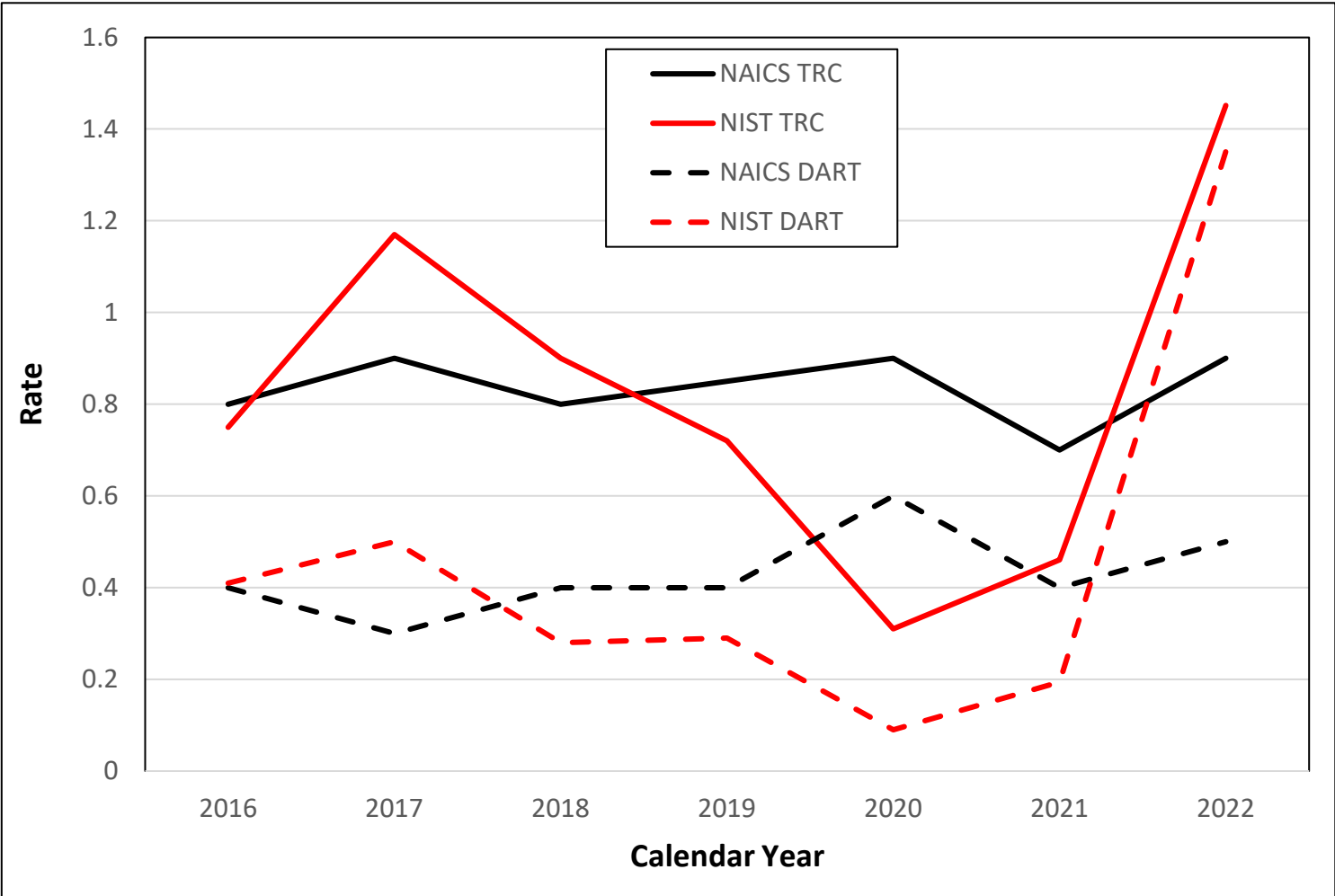
On track for pre-COVID number of events per year (150-175)

Near miss reporting, 9 of 37, well below the target of >50%

Key Actions: Weekly Summary
Communication to NIST Leadership; focus on analysis of potentially serious incidents for common root causes

Note: Of 13 OSHA Recordable Cases, 8 were DART (Days Away, Restricted or Transferred)
Of 8 DART cases, 2 were injury cases (both STF) and 6 were COVID cases
Of 12 Illness Cases Covid-19; 8 were COVID, 4 OSHA Recordable hearing loss cases

Lagging Indicator: Total Recordable Case, Days Away Restricted or Transferred CY22 Industry 0.9 and 0.5; NIST 1.45/1.35



- NIST CY22 Rate was heavily influenced by COVID cases (values w/o COVID, 0.18/0.13, much lower than NAICS)
- NIST TRC and DART numbers during COVID years were lower than Industry Sector.
- In previous years, NIST numbers were lower than or comparable to the applicable industry sector

NAICS: North American Industry Classification System, NAICS Sector: Research and Development in the Physical, Engineering, and Life Sciences.

1 Training Completion

NIST General Safety: 95.5% (267/6036)

NIST Leadership: 98.9% complete (6/533)

FY24 NIST Rules of Behavior: 91.0% (581/6433)

(Red = incomplete. All values improved since Dec ESC mtg)

3 Inspections Performed

Inspections Conducted in FY24: 922

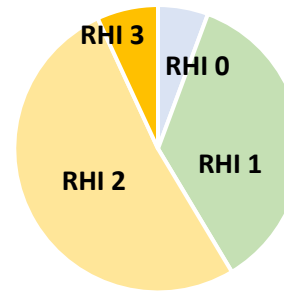
Deficiencies Abated in FY24: 1006

Deficiencies Outstanding from FY24: 231

Deficiencies Outstanding (FY18-23): 799

(Down from 1700 reported to ESC in Dec, ongoing)

2 Hazard Reviews



2901 Activities Approved (MML data)

Risk Distribution: 52% RHI=2; 36% RHI=1, 7% RHI=3 (200), 6% RHI=0

FY23 re-review initiative continuing in FY24

4 Incident-related Corrective Action Status

Total Corrective Actions in FY24: 22

Closed in FY24: 13 + Implemented: 2

Open in FY24: 7 (of which 5 are overdue)

Stale Open FY18-FY23: 65 (of total of >3,100)

Key Action Items Developed in Response to FACA

Key Action Item Status (✓ Complete; ☐ in progress)

LEADERSHIP COMMITMENT:

- Resource Allocation
- Establish Vision
- Communication

- ✓ SMS Contract funded; work started Dec 1
- ✓ Vision Statement developed, presented to Safety Commission
- ✓ Ongoing, next up: Actions Completed Communication

STRENGTHEN OSHE ROLES AND AUTHORITIES

- Increase staffing
- Increase roles and authorities
- Make organizational changes as needed

- ✓ OSHE has hired 1 embed, 3 new inspectors; Next Up: JILA embed (offer made), MR (posted) and EL embed, Fall Protection Specialist (reposted)
- ☐ Underway: Contract Tasks to assess OSHE location and structure

SMS IMPROVEMENTS

- Revise hazard review, workplace inspection programs
- Improve training
- Improve incident investigations
- Fill Safety Management System Gaps
- Improve IT Apps

- ☐ Both HR and WPI revisions under review within OSHE
- ☐ Hire a new training specialist, PD developed, position to be posted
- ☐ Contractor Task to develop case studies for incident investigation training
- ☐ Contractor Task to develop three programs
- ☐ Dashboard nearing completion; 3 FTEs to work on HR app

CULTURE

- Accountability
- Inculcate Elements of a strong safety culture
- Safety Culture Program
- Safety Culture Survey and Improvement Plan

- ✓ Supervisor performance element and new ROB Issued
- ✓ Krause Bell sessions for all supervisors underway
- ✓ Deployed Safety Culture program; Town Hall roll out
- ✓ Survey, Action Plan, Tracking Table on Safety website

ACHIEVING AND SUSTAINING EXCELLENCE

- Benchmarking
- External Evaluations
- Audit Program (Current Gap)

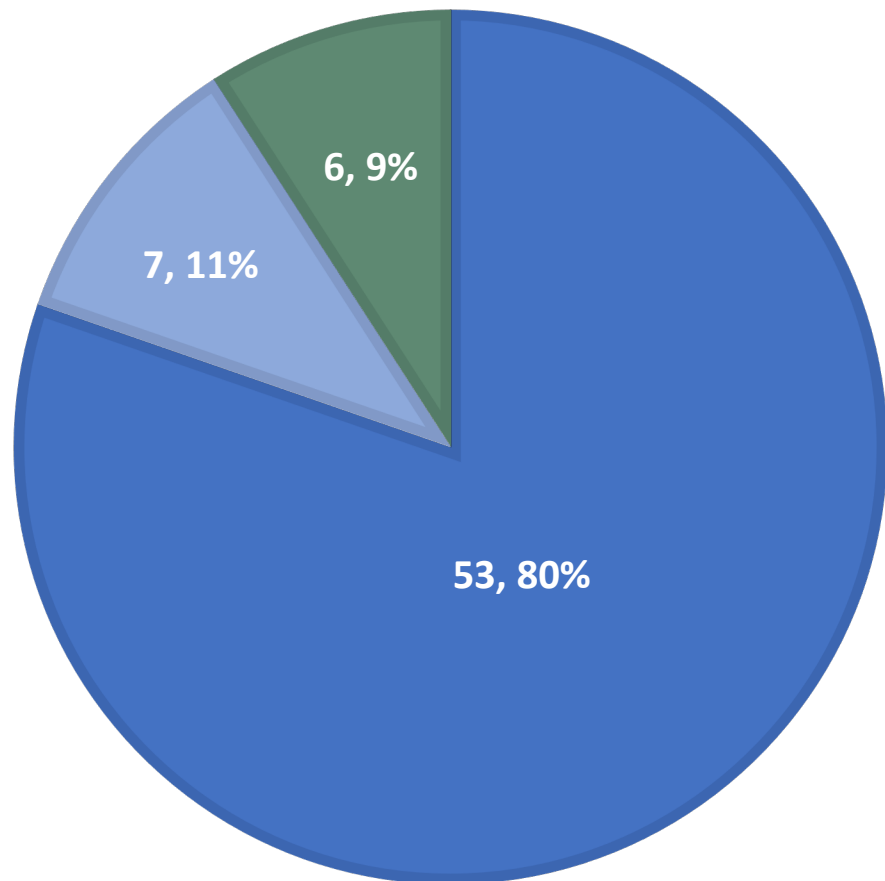
- ✓ FY23 benchmarking with NREL, ORNL, ANL completed;
- ☐ FY24 plans for visits to NIH and PNNL
- ☐ Contract Task 3, ISO 45001 underway, Task 4 Audit program next up

Safety Culture Improvement Plan: Items to address NSC Safety Barometer Survey Low Scoring Items

Action	Executive Sponsor	Safety Barometer Question	Status
Establish a Boulder Health Unit.	Del Brockett	Medical resources are sufficient for treating the injuries that occur. (Boulder percentile score; 12.8)	√ Complete. Boulder site added to the Gaithersburg Health Unit Contract. Medical staff on-site, supplies and equipment refresh, EMRS access underway.
Provide adequate safety staff.	Laurie Locascio, Chuck Romine, Del Brockett	Management has provided adequate staff to manage and support its safety program. (35.7)	28% Complete. Hired: 1 NCNR Safety embed, 3 new safety Workplace Inspectors. Planned 10 more safety staff.
Establish annual safety training.	Laurie Locascio	The same basic precautions are used by employees who deal with hazardous materials. (Boulder Percentile Score: 5.9)	Approximately 25% Complete. Revised General Safety Training for all new staff and as refresher to current staff planned for April 2024.
Management statement on value of safety.	Laurie Locascio, North Star Team	Management published a policy that expresses their attitude about employee safety. (35.9)	√ Complete. The north star team developed vision statement that ties safety to the core value of excellence.
Develop performance plan objectives.	Essex Brown	Job performance standards for production / work output are higher than safety performance standards. (36.2)	√ Complete. Supervisor safety performance plan element issued for use this FY; all staff required to review Safety Rules of Behavior every year.
Optimize the Hazard Review process.	Chuck Romine	The hazard review process reduces risk associated with my work. (53% Agreed, 40% Neutral, 7 % Disagreed)	Approximately 20% Complete. The suborder has been revised to simplify requirements. Next steps stakeholder review; revision of the IT app will follow

Safety Management System: Program Status 91% Complete

OCCUPATIONAL SAFETY AND HEALTH PROGRAMS AND RESOURCES



Key Action: **3rd Party ISO 45001 Pre-certification Assessment Underway**

Known SMS Program Gaps: Directives to be filled, with assistance of **Safety Consultants**:

- **Audits and Assessments**
- **Contractor Safety**
- **Construction Safety**
- Corrective and Preventive Action (Draft)
- Electrical Safety (Under SAC review)
- Management of Change (Draft)

All Environmental Management (14) and Fire and Life Safety (4) Directives are complete and implemented

Questions, Suggestions