

NIST Safety Update

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NIST Visiting Committee on Advanced Technology

Gaithersburg, MD

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2014 CEOs Who Get It

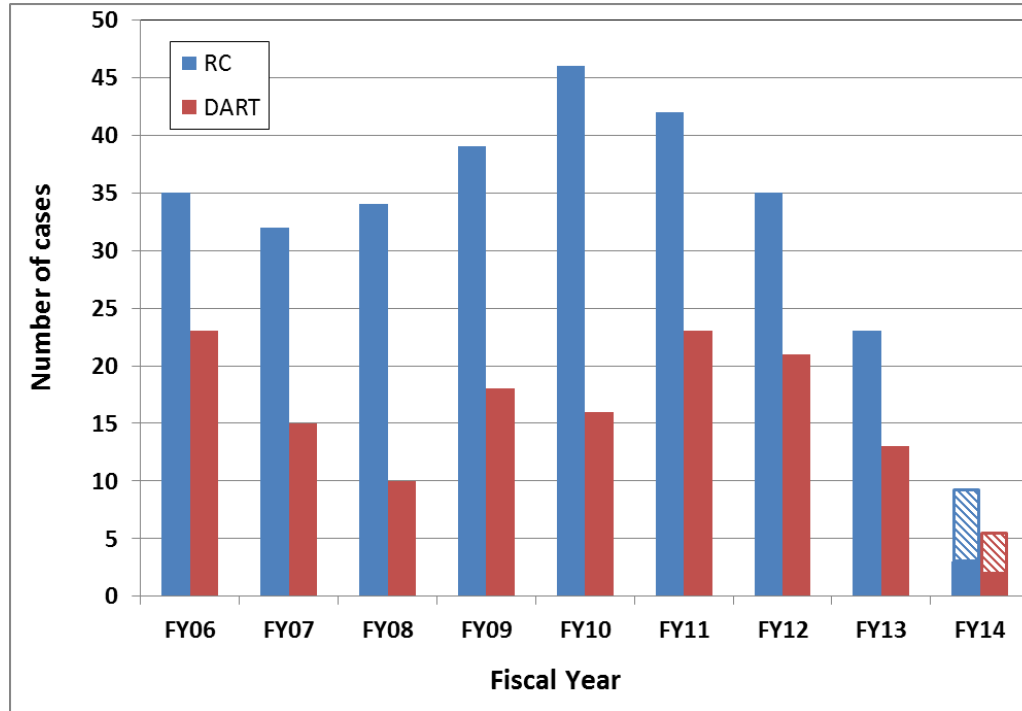


- Awarded by the National Safety Council (NSC) to leaders who demonstrate a personal commitment to safety
- The National Safety Council in its press release:
 - “Each of these leaders understands the value of a safe workplace, and ensures employees at all levels keep safety in the forefront.”
- Pat Gallagher on *Why is safety a core value at your organization?*:
 - “Safety is a core value because our mission is enabled by the talent and hard work of our employees and associates. There is no better way to repay their service than to do everything we can to ensure that they don’t get hurt doing their jobs.”

Agenda

- NIST Safety Incident Metrics
- Shared Standard of Safety Performance
- Incident Reduction
 - Slips, Trips, and Falls
- Incident Investigation Backlog
- Discussion

NIST Safety Incident Metrics



Data through January 2014

Goal = Zero

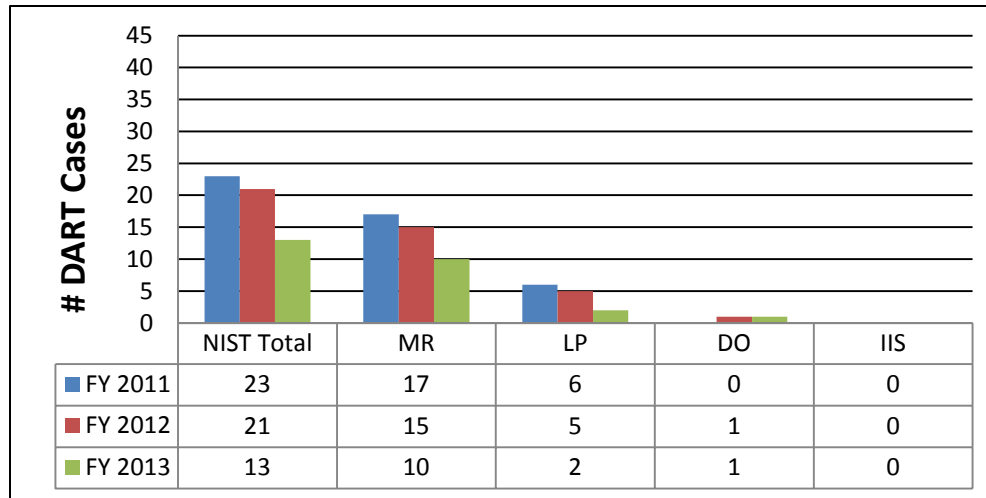
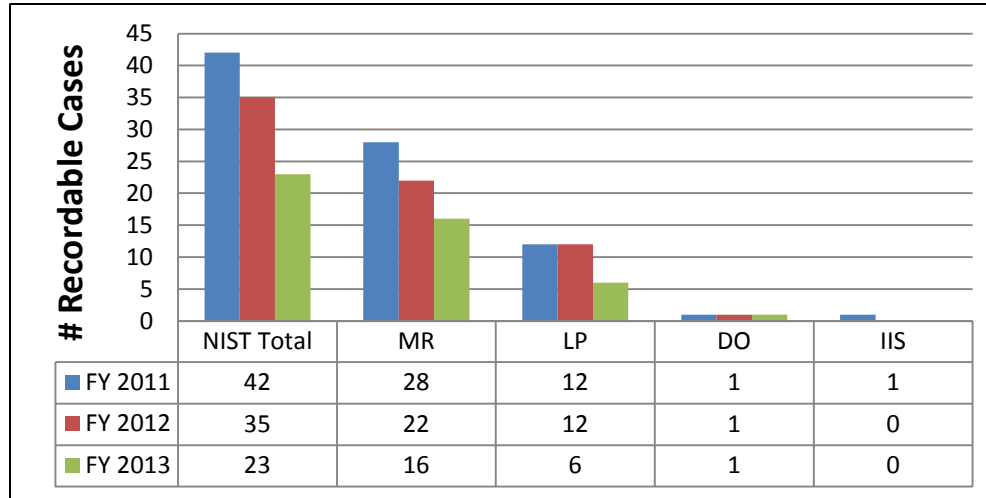
Recordable case (RC)

- To a first approximation, an injury that required medical treatment beyond first aid

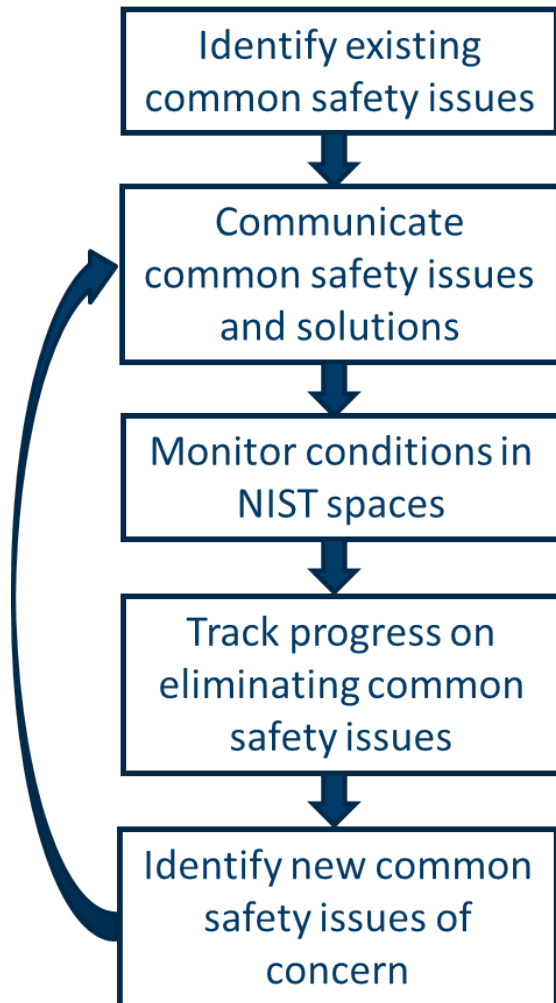
DART case

- An OSHA recordable that resulted in employee Days Away, Restricted duty, or job Transfer

NIST Safety Incident Metrics



Shared Standard of Safety Performance



Key Principles

- The content of the “Shared Standard” is owned by NIST leadership
- Meeting the “Shared Standard” is owned by all

Communication

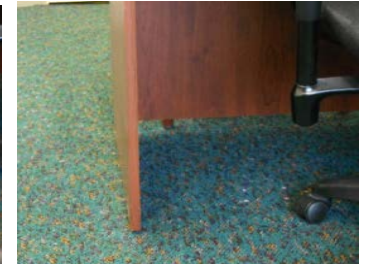
- Training of senior executives
- Resources for management and staff

Monitoring Conditions in NIST Work Areas

- Active senior leadership presence
 - Periodic, focused walkthroughs
 - Integration into routine management activities, e.g., management observations, laboratory visits
 - One or more of the above, or alternatives
- Integration into Workplace Inspection Program

Shared Standard of Safety Performance

- Trained all NIST executives on common safety issues at NIST
 - NIST Director, Associate Directors, OU Directors, OU Deputy Directors
- Developed agreed-upon focus for FY14
 - Eliminate tripping hazards
 - Boxes, drawers, etc.
 - Wires, cables, hoses, etc.
 - Use electrical cords safely
 - Extension cords
 - Power strips
 - Surge protectors
 - Uninterruptible power supplies
 - Label all chemicals properly





Shared Standard of Safety Performance

Focusing our collective attention on eliminating common safety issues at NIST



Slips, Trips, & Falls Resources



Electrical Cord Resources



Chemical Labeling Resources



Share Solutions

Everyone

- Learn about the common safety issues
- Identify any common issues in your work areas
- Correct the issues you can and notify your supervisor if you can't
- Avoid introducing new common issues
- Alert your colleagues to common issues you see in their work areas
- Share your creative solutions to common safety issues with OSHE

OU Management

- Discuss your Shared Standard expectations with staff
- Consult with staff members on issues they can't correct themselves
- Contact OSHE if you need assistance
- Consolidate and prioritize common issues requiring OFPM support
- Communicate the status of OFPM work orders to the staff
- Monitor conditions and address any issues identified

OSHE

- Provide information and guidance on the common safety issues
- Assist OU management in identifying possible solutions to common safety issues
- Share creative solutions to common safety issues across NIST

OFPM

- Support the OUs in correcting common safety issues they can't correct themselves
- Communicate the status of OFPM work orders to the OUs



Slips, Trips, and Falls

Read the Safety Briefs

To assist you in identifying and eliminating slip, trip and fall hazards in your work areas, read the following safety briefs:

- [Spot and Eliminate Tripping Hazards \(PDF\)](#)
- [Spot and Eliminate Slipping Hazards \(PDF\)](#)
- [Safe Practices to Avoid Slipping and Tripping \(PDF\)](#)

Assess Your Work Area

To assist you in recognizing common slip, trip and fall hazards in your work areas, use this assessment checklist.

[Slip, Trip, and Fall Assessment Checklist \(PDF\)](#)

Get Support

If you still have questions about slip, trip and fall hazards in your work area or how to address them, get them answered by contacting:

Gaithersburg Campus	Boulder Campus
	
<p>Kevin Bald Gaithersburg Safety, Health, and Environment Division x8164</p>	<p>Brian Brass Boulder Safety, Health, and Environment Division x6822</p>



[WATCH THE TRAINING VIDEO](#)



Shared SOLUTIONS



Addressing Tripping Hazard Posed By Tangled Electronic Equipment Cords
CNST's Allan Band purchased supplemental power devices with USB ports to address tangled electronic-equipment wires around desks, which can be tripping hazards.

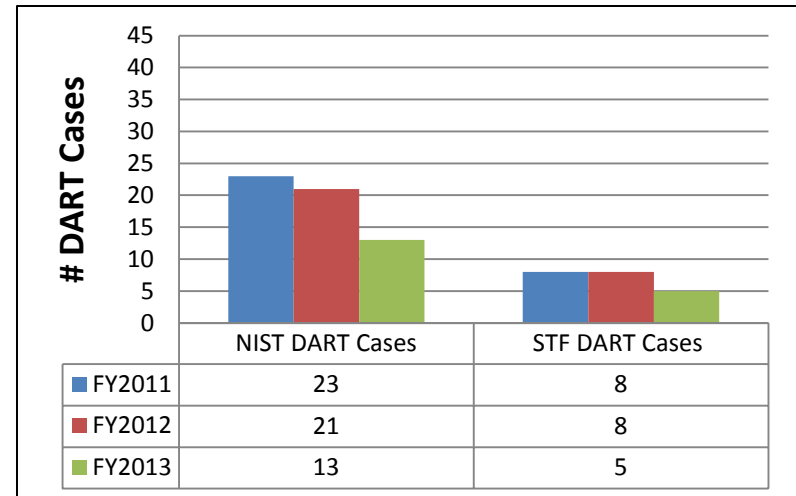
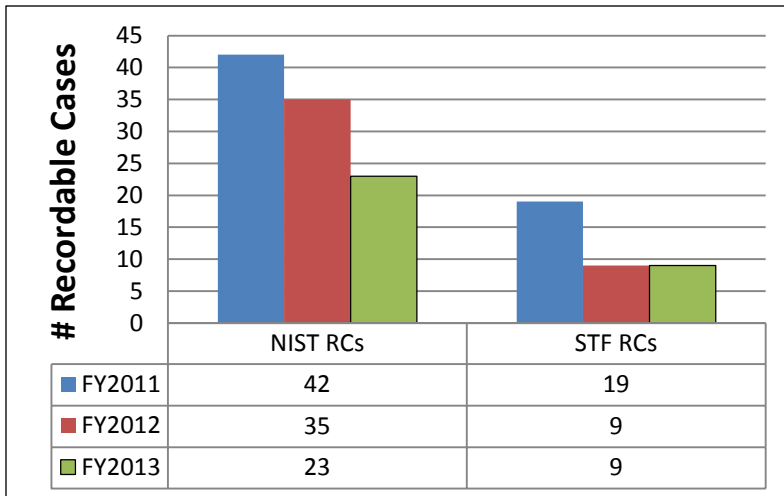
ADDITIONAL RESOURCES

[Prevent Slips, Trips, and Falls - SAIF Corporation](#)

[Slips, Trips and Falls Training - Department of Commerce](#)

Incident Reduction

- **Objective: Reduce the occurrence of the most common types of incidents resulting in OSHA recordable cases (RCs)**
- **Initial focus on slips, trips, and falls (STFs)**
 - 37% of NIST's OSHA RCs and 37% of NIST's DART cases in FY 2011 – FY 2013 were STFs



Slips, Trips, and Falls by Hazard

Hazard	# STFs	% STFs
Uneven surfaces	19	24
Obstacles in walkways/work areas	14	18
Snow/ice	13	16
Wet/slippery indoors	11	14
Work practices	10	13
Undetermined	9	11
Elevated surfaces	3	4
Total	79*	100

* All incidents FY 2011 through 2013

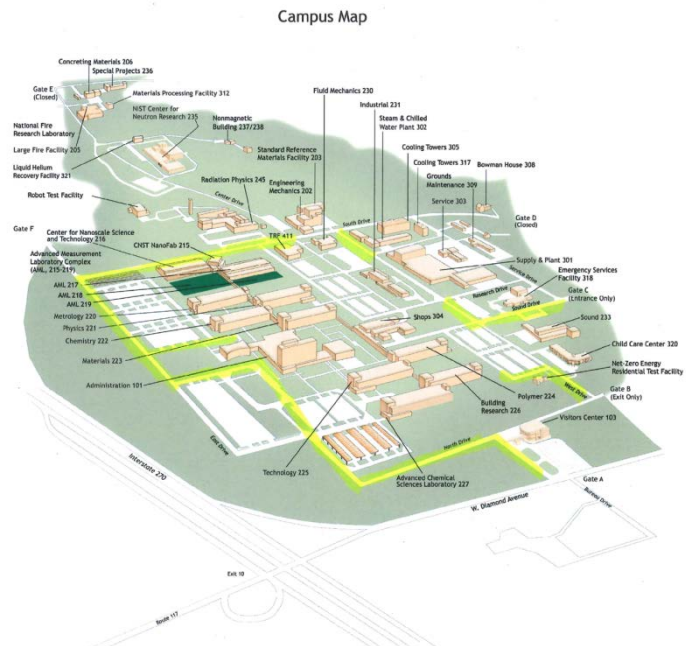
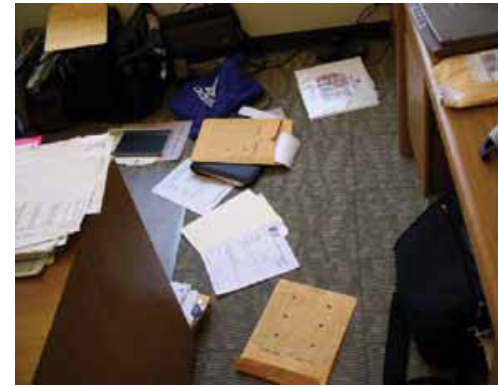
Where

- Hallways (19%) • Sidewalks (19%)
- Parking lots (16%) • Offices (15%)

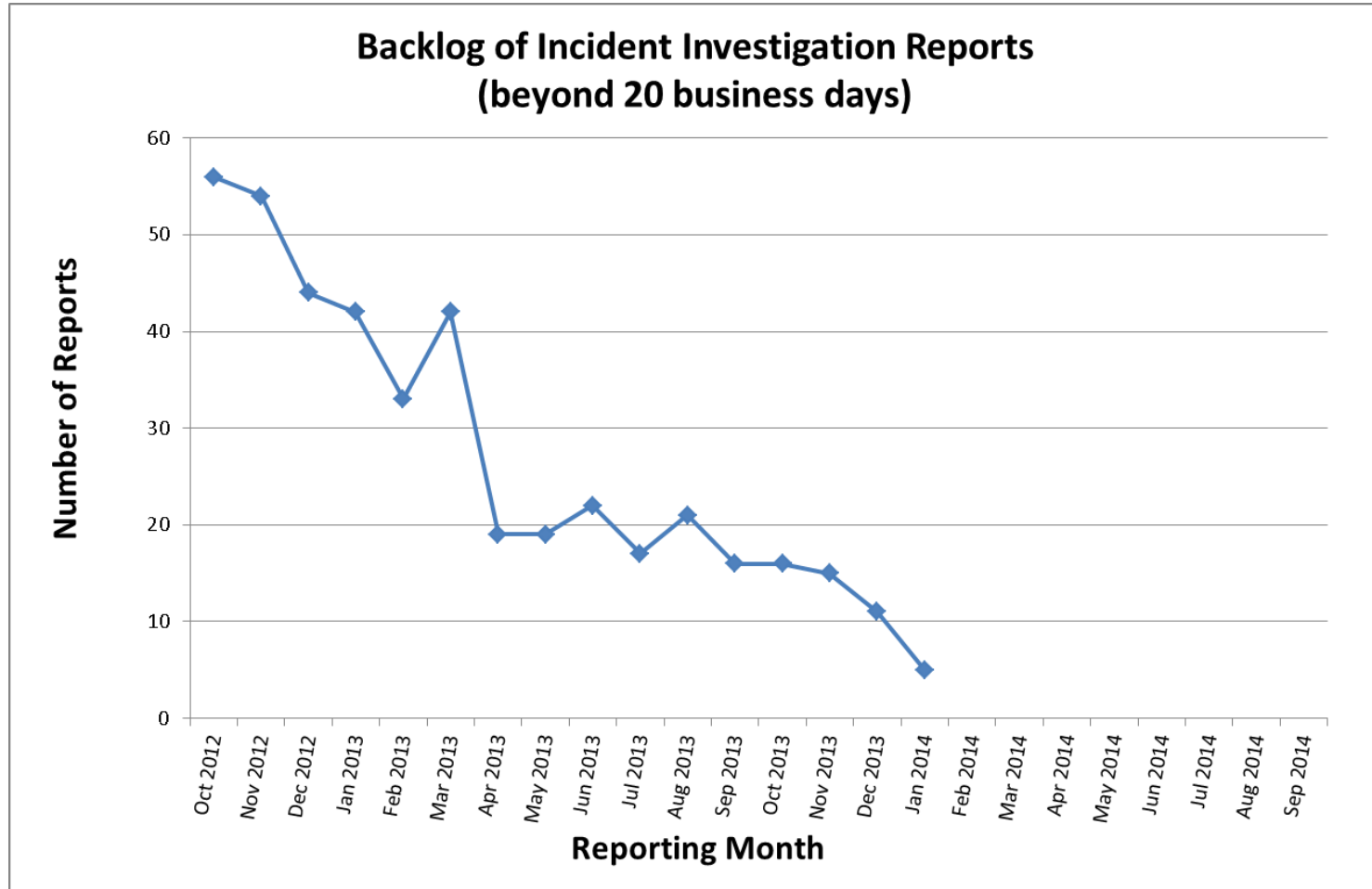
- **Engage management and staff**
 - Reduce or eliminate the number and severity of existing hazards
 - Prevent the introduction of new hazards
 - Reduce employee exposure or interaction with hazards
- **Integrate operational controls into the safety management system**

Slips, Trips, and Falls Planned Actions

- Eliminate tripping hazards
- Raise awareness of STF hazards in general
- Eliminate other major causes of STFs at NIST (Office of Facilities and Property Management)
 - Uneven surfaces
 - Replace walkways, install ADA-compliant curbs
 - Snow/ice/rain
 - Implement improved snow and ice management plans in Gaithersburg and Boulder, apply treatment in front of Building 101 to improve slip resistance
 - Wet/slippery surfaces indoors
 - Review and improve procedures for mopping and waxing floors, review training of both in-house and contract custodians



Incident Investigation Backlog



Discussion

Backup Slides

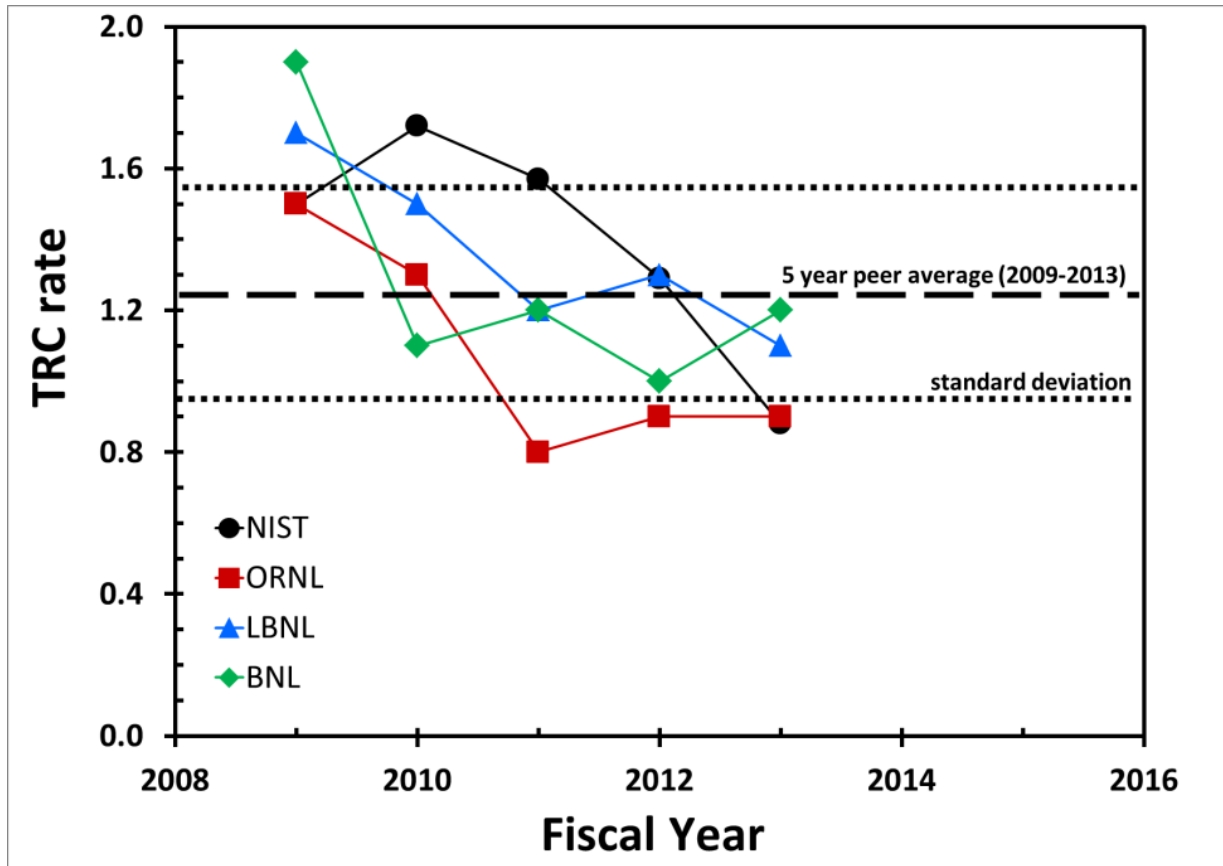
VCAT Observations – February 2013

- A culture change toward safety is well underway at NIST. It is moving from the “design-build” phase to one of continual improvement.
- While NIST has made substantial progress in developing a positive safety culture, the NIST recordable incident data do not yet demonstrate a clear downward trend.
- The underlying driver of the incidents appears to be high frequency, lower consequence events (rather than low frequency, higher consequence events).
 - This observation may point to a need for an approach to prevention and education activities within the safety system that emphasizes the prevention of more routine incidents such as slips, trips, and falls; body parts struck by or against objects; and ergonomics, including various types of overexertion.

VCAT Recommendations – February 2013

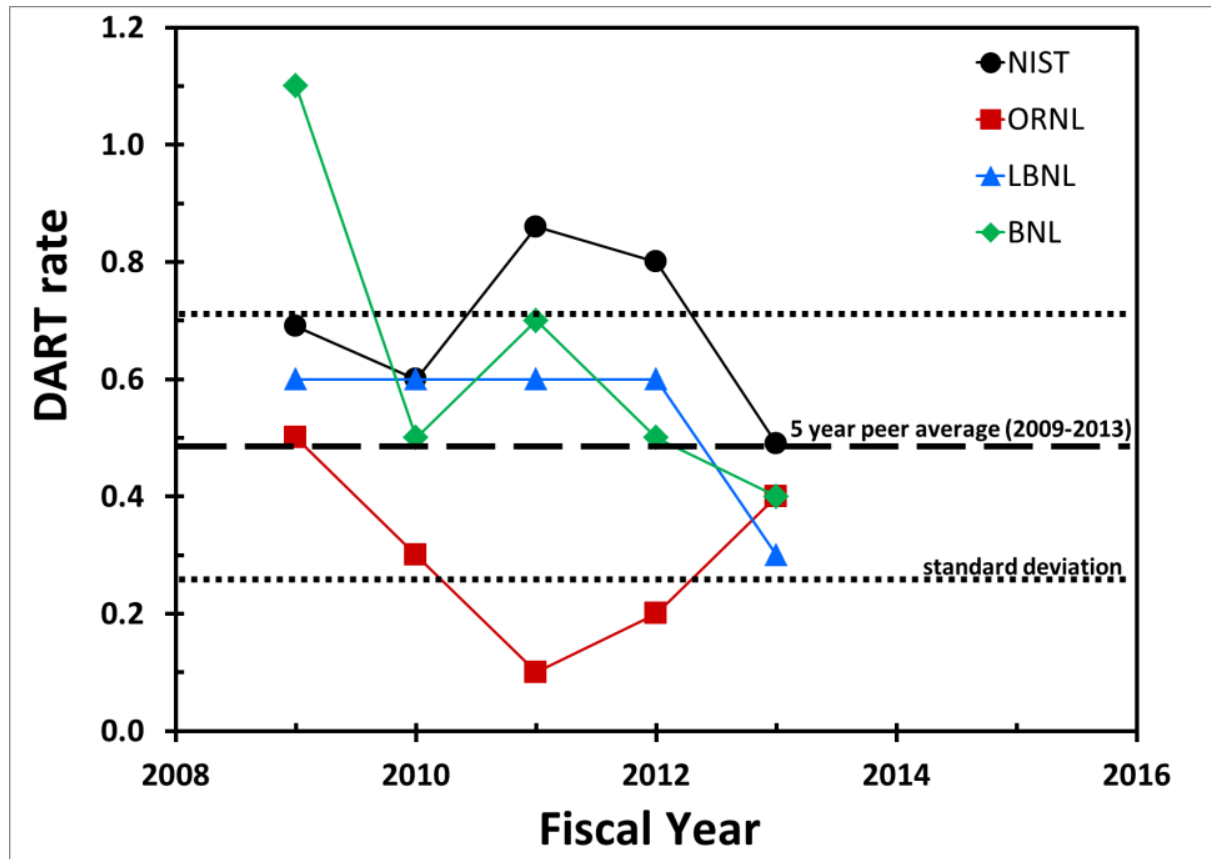
- NIST’s safety goal should be zero accidents. The VCAT encourages continued recognition of and reward for safety improvement.
- The VCAT recommends continued “grand rounds” audits of individual laboratory rooms led by senior, trained NIST executives.
- The VCAT recommends that NIST set a firm target for improvement in each OSHA recordable statistic.
- The VCAT urges the NIST Director to distribute and discuss IRIS statistics each reporting period. Based upon these reports, NIST leadership should identify top priority IRIS issues and action plans to reduce occurrence. Progress will be reviewed as a standing agenda item at the beginning of each VCAT meeting.
- The VCAT recommends that NIST concentrate its investigation time and reports on OSHA recordable incidents.
- The VCAT strongly urges increased “transparency” on all safety metrics, including easily accessible identification of the exact stage at which any non-closed IRIS cases are at any time.

TRC Rate Comparisons: NIST v. DOE Labs



DOE: Department of Energy
ORNL: Oak Ridge National Laboratory
LBNL: Lawrence Berkeley National Laboratory
BNL: Brookhaven National Laboratory

DART Rate Comparisons: NIST v. DOE Labs



Total Injury and Recordable Cases for FY 2013

OU	FY13 injury cases	FY13 injury cases involving employees	FY13 known OSHA recordables
00 - DO	4	4	1
13 - MR	4	4	1
15 - OSHE	1	1	0
16 - OFRM	5	5	3
17 - OWM	2	2	0
18 - OISM	4	3	0
19 - OFPM	21	20	12
40 - IIS	0	0	0
45 - BPEP	1	0	0
47 - TIP	0	0	0
48 - HMEPP	0	0	0
60 - LP	0	0	0
61 - NCNR	4	3	1
62 - CNST	3	2	0
63 - MML	15	7	2
68 - PML	6	5	2
73 - EL	3	2	0
77 - ITL	3	2	1
Totals	76	60	23