



Bureau of Transportation Statistics

Near Miss Reporting

Office of the Assistant Secretary for Research and Technology
US Department of Transportation

Marine Board Spring Meeting 2014
TRANSPORTATION RESEARCH BOARD



Federal Statistical System

A federal statistical agency is a unit of the federal government whose principal function is the compilation and analysis of data, and the dissemination of information for statistical purposes.

BTS is one of thirteen agencies designated as a federal/principal statistical agency.

ALL federal statistical agencies are subject to the oversight of, and policies and standards issued by OMB.

ALL federal statistical agencies have unique authorities for data protection and can invoke the Confidential Information Protection and Statistical Efficiency Act (CIPSEA).



CIPSEA

- Under CIPSEA:
 - Only the statistical agency has access to the submitted near-miss reports (micro-data).
 - It is a Class E Felony, punishable by up to \$250,000 in fines and up to 5 years in jail, for agency or its agents to release identifiable data confidentially submitted under CIPSEA.
 - Submitted near-miss reports **are exempt** from FOIA and subpoena.
 - Submitted near miss reports **CANNOT** be used for any **regulatory or enforcement** actions.

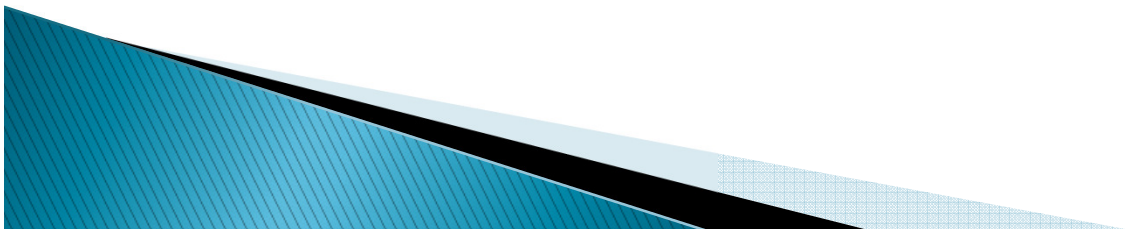




What is a Near Miss

A sequence of events and/or conditions that could have resulted in loss. This loss was prevented only by a fortuitous break in the chain of events and/or conditions. The potential loss could be human injury, environmental damage, or negative business impact (IMO)

“An opportunity to improve safety practices based on a condition, or an incident with a potential for more serious consequences.”





Near Miss Reporting Program

Key Elements

1. **Voluntary:** Usually not part of mandatory reporting
2. **Non-punitive:** Depending on the environment, it provides the reporter with protection from discipline or dismissal.
3. **Confidential:** *Trust in the system is essential* . Usually data collected by third party with authority to protect near-miss data from disclosure:
 - a) BTS statute 49 U.S.C.111(k)
 - b) Confidential Information Protection and Statistical Efficiency Act (CIPSEA).
4. **Proactive:** Identifies early warnings of safety problems. Uncovers hidden at-risk conditions not previously exposed from analysis of reportable accidents and incidents. Can identify trends or patterns before safety is compromised.
5. **A Tool for Continuous Improvement:** Focus on fixing impediments to safety.



Near Miss Reporting A New Approach

How It Is Now . . .

You are highly trained

and

**If you did as trained, you would
not make mistakes**

so

You weren't careful enough

so

You should be PUNISHED!

How It Should Be . . .

You are human

and

Humans make mistakes

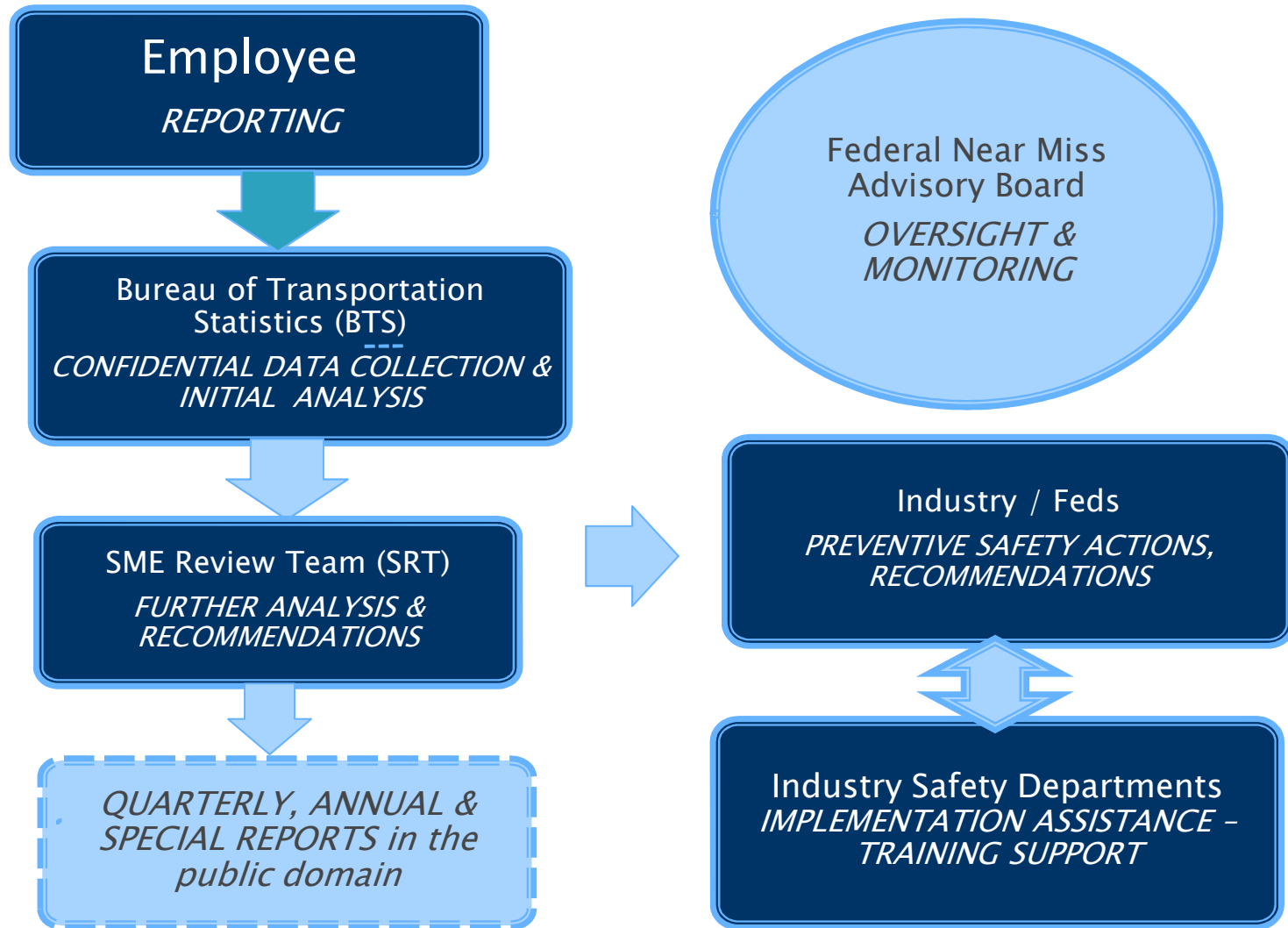
so

**Let's *also* explore why the system
allowed, or failed to accommodate, your
mistake**

and

Let's IMPROVE THE SYSTEM!

Outline of a Near Miss Program





Benefits for Labor

- “Instead of “enduring” blame and punishment, labor becomes a valuable source of information about potential problems and proposed solutions to accomplish what everyone wants – improved safety and reduced costs.”
- Independence from management and regulators ensures reporter’s anonymity
- More teamwork
- Work less stressful
- The reporter can be advised of the outcome



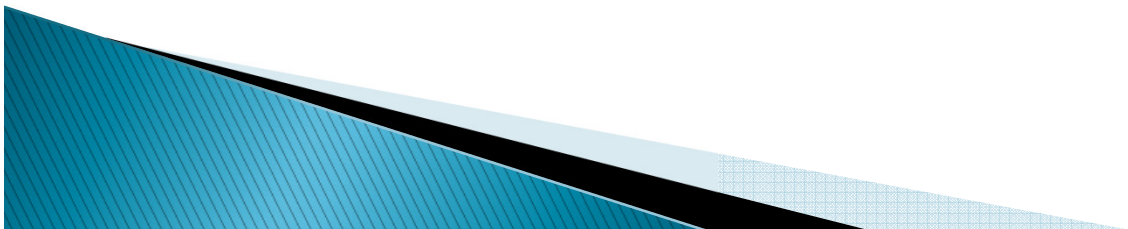
Benefits for Industry

- Improved safety: Supports a safety/just culture
- Cost savings (insurance, accident, injury claims, litigation, loss of time, property, damage)
- Improved effectiveness of remedies and greater cost effectiveness implementing the remedies
- Better employee morale and productivity
- Stay competitive with other modes and industries (nuclear power, security, health care, chemical)



Benefits for Regulators

- Less need for regulations
- Fewer enforcement activities
- Easier to understand what is not working and why
- Therefore remedies are more effective and credible
- Better management–labor relations

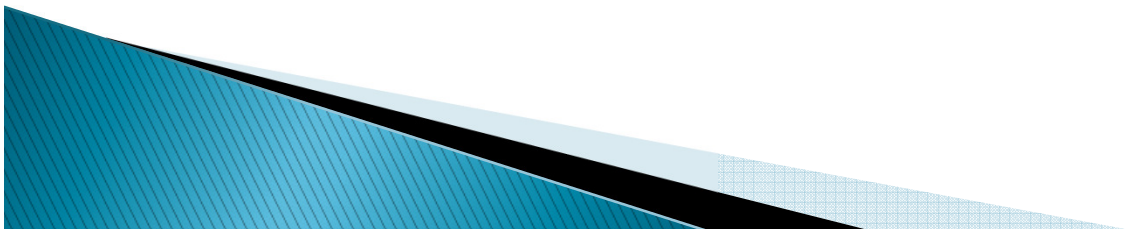




Everyone Wins

Near-miss reporting programs:

- ▶ enhance partnerships, trust and communications within and across organizations;
- ▶ promote “Just” culture.



Which condition should precede the other: confidential near miss reporting or a “just” culture?



AND YET THE QUESTION REMAINED:
"WHO CAME FIRST?"



Challenges to Creating Conditions for Change

- **Existing blame based culture:**
 - Investigation process tends to start and stop with the front-line employee
 - Corrective actions tend to focus on front-line employee actions
- **Beliefs for achieving goals within stakeholder organizations vary:**
 - e.g. national vs. local view of waivers
 - e.g. discipline vs. coaching
- **Uncertainty in response to change**
 - Labor: “Flavor of the month”
 - Management: locus of control
 - Regulator: tension between enforcement and partnership
- **Sustaining the changes across the organization and over time**



Creating the Conditions for Change

- **Build Trust**

- Non-regulatory approach.
- Focus on learning, not punishment
- Encourage full disclosure
- Establish core operating principles
 - Voluntary, confidential, non-punitive, recommend corrective actions, provide feedback.
- Assure anonymity/confidentiality and protection from liability and enforcement:
 - 3rd party data collection and analysis



Creating the Conditions for Change (continued)

- **Identify and involve all key stakeholders**
 - National level: Planning/Steering Committee
 - Local level: Peer Review Team
- **Empower stakeholders to make important decisions**
 - Planning/Steering Committee: Structure system, give guidance and oversight
 - PRT: Multi-causal incident analysis, make recommendations, communicate with employees, coordinate with BTS
- **Provide flexibility to adapt to local conditions**
 - Develop agreements that differ among companies and sites
- **Develop continuous support for the program**
 - Identify and educate champions within each stakeholder organization to communicate with their fellow stakeholders the value of an informed culture



Creating the Conditions for Change (continued)

- **Identify outcomes important to each stakeholder**
- **Provide continuous feedback to all key stakeholders, including reporters of near misses:**
 - Publications
 - Communications between program staff, reporting employees, and management
- **Measure impact and demonstrate value to management and employees/labor**
 - Show trends in number of reports received
 - Make feedback available on individual reports
 - Communicate corrective actions taken
 - Measure safety and productivity impact
 - Provide formative feedback to improve system effectiveness



Creating the Conditions for Change (continued)

A Role for Government

- Provide funding – proof of concept
- Support effective non-regulatory programs
 - FRA's Risk Reduction Program
- Establish infrastructure to address legal concerns of data disclosure and lead effort in data dissemination
 - Federal statistical agencies
 - Agency specific authority
- Coordinate efforts across countries / industries
 - FAA's programs



Creating the Conditions for Change (continued)

Promote Knowledge / Data Sharing

- Provide funding – proof of concept
 - Government
 - Academia
 - Private sector
- Provide incentives for data sharing
- Share knowledge through:
 - Invited meetings
 - Workshops
 - Fellowships
 - Joint programs