Waste Management 2010

Session 20

Safety – A Business Imperative:
A Holistic Approach to Safety and a Strong Safety Culture

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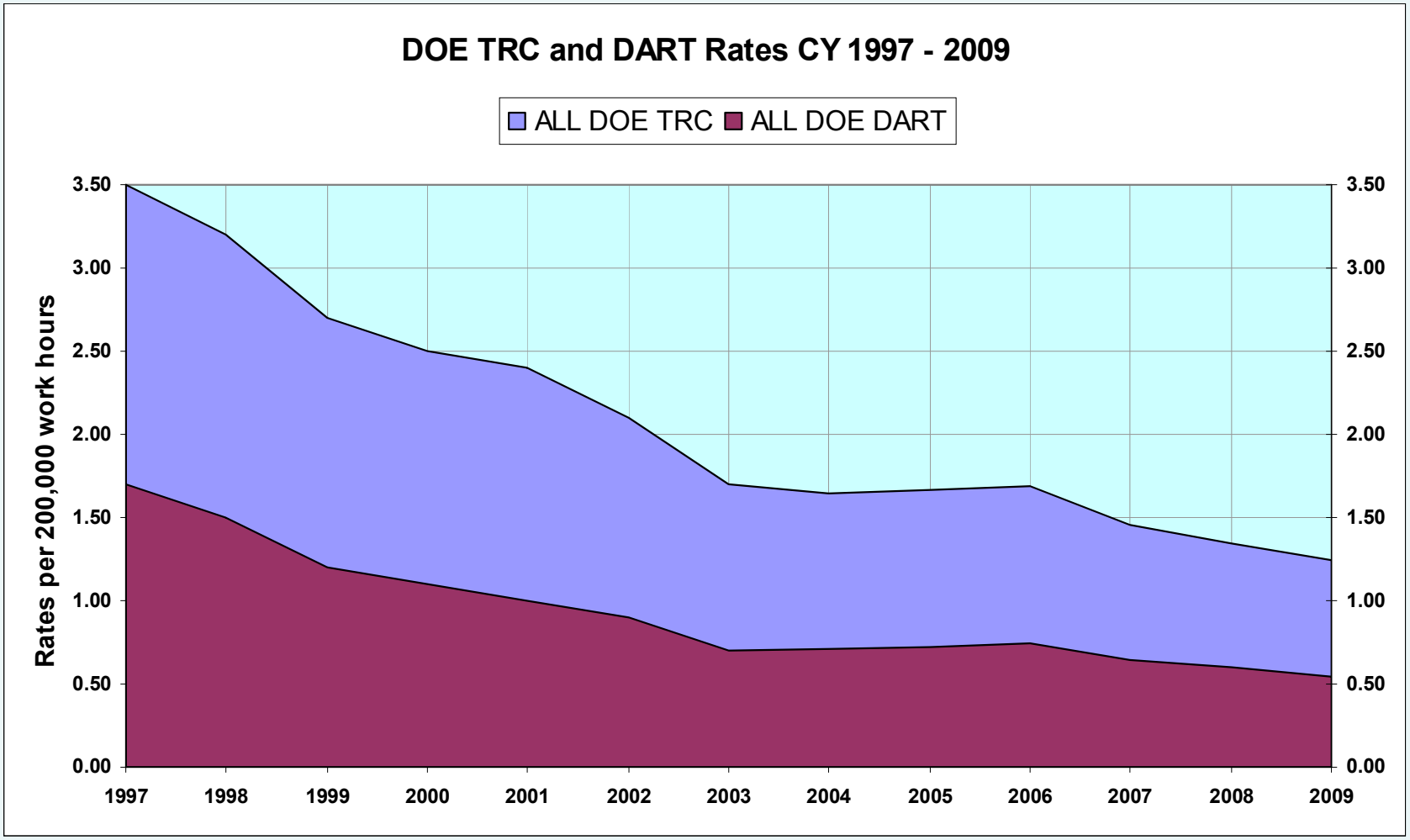
Overview

- Department of Energy Safety Trends
- Types of Activities Leading to Injuries and Resulting Injury Types
- ES&H Trends: DOE-wide and NNSA
- Recent ES&H Events and Related Causal Factors
- What Does it Take to Maintain a Strong Safety Culture?
- Closing Thoughts

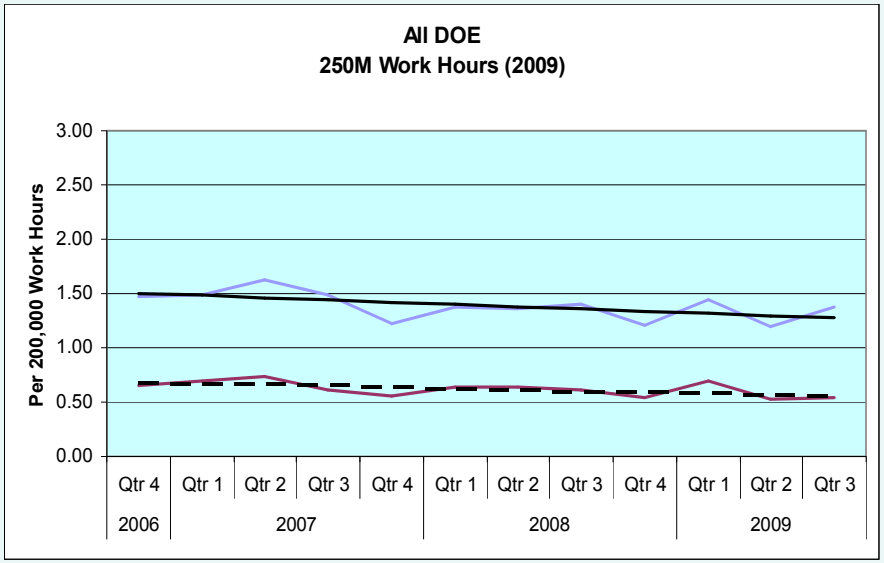
DOE Overall Safety Trends

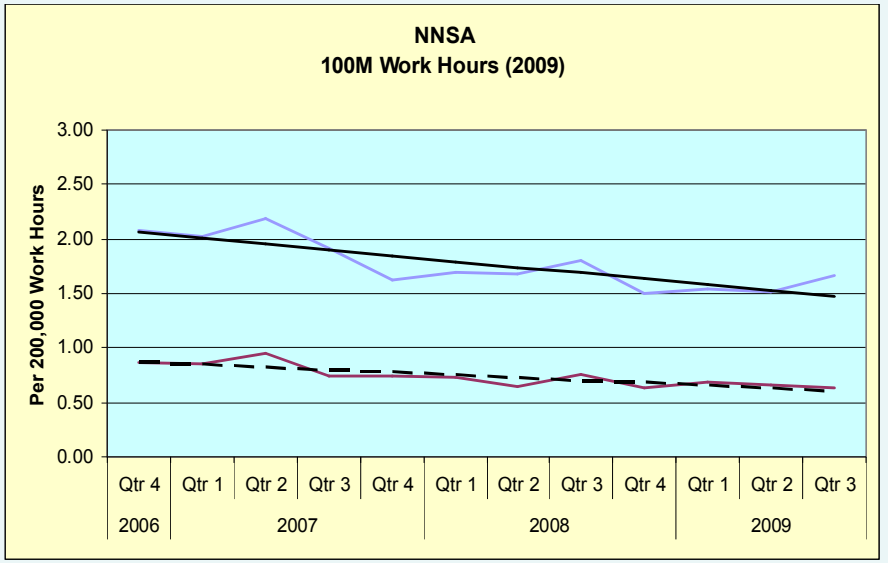


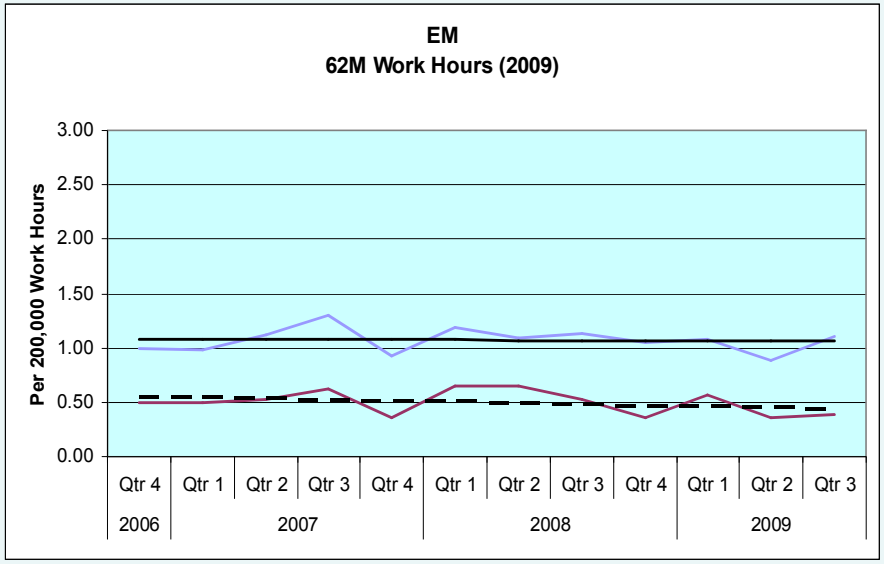
DOE's Total Recordable Case (TRC) and Days Away, Restricted or Transferred (DART) Case rates have declined over the past 12 years.

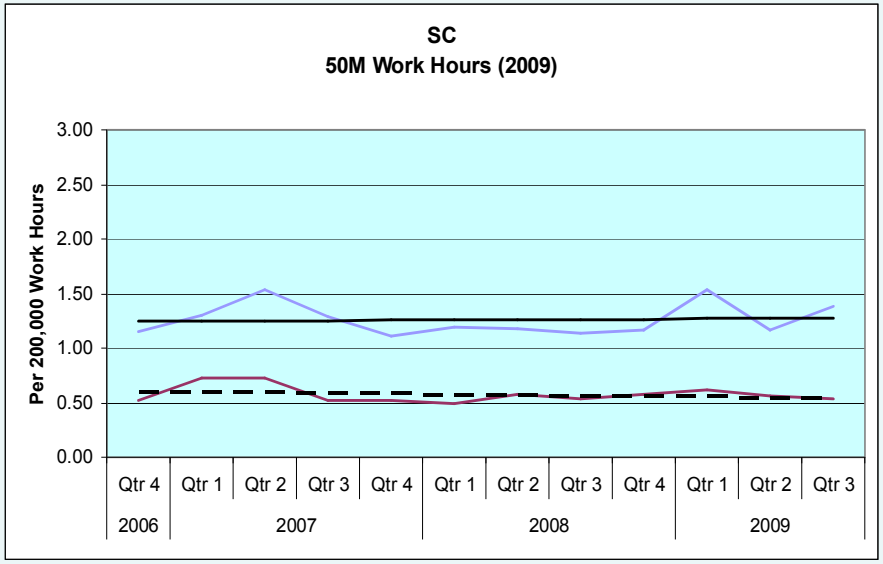
CAIRS data as of 2/12/2010

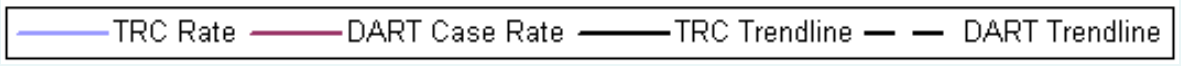
TRC and DART 12-Quarter Trends
DOE and Major PSOs





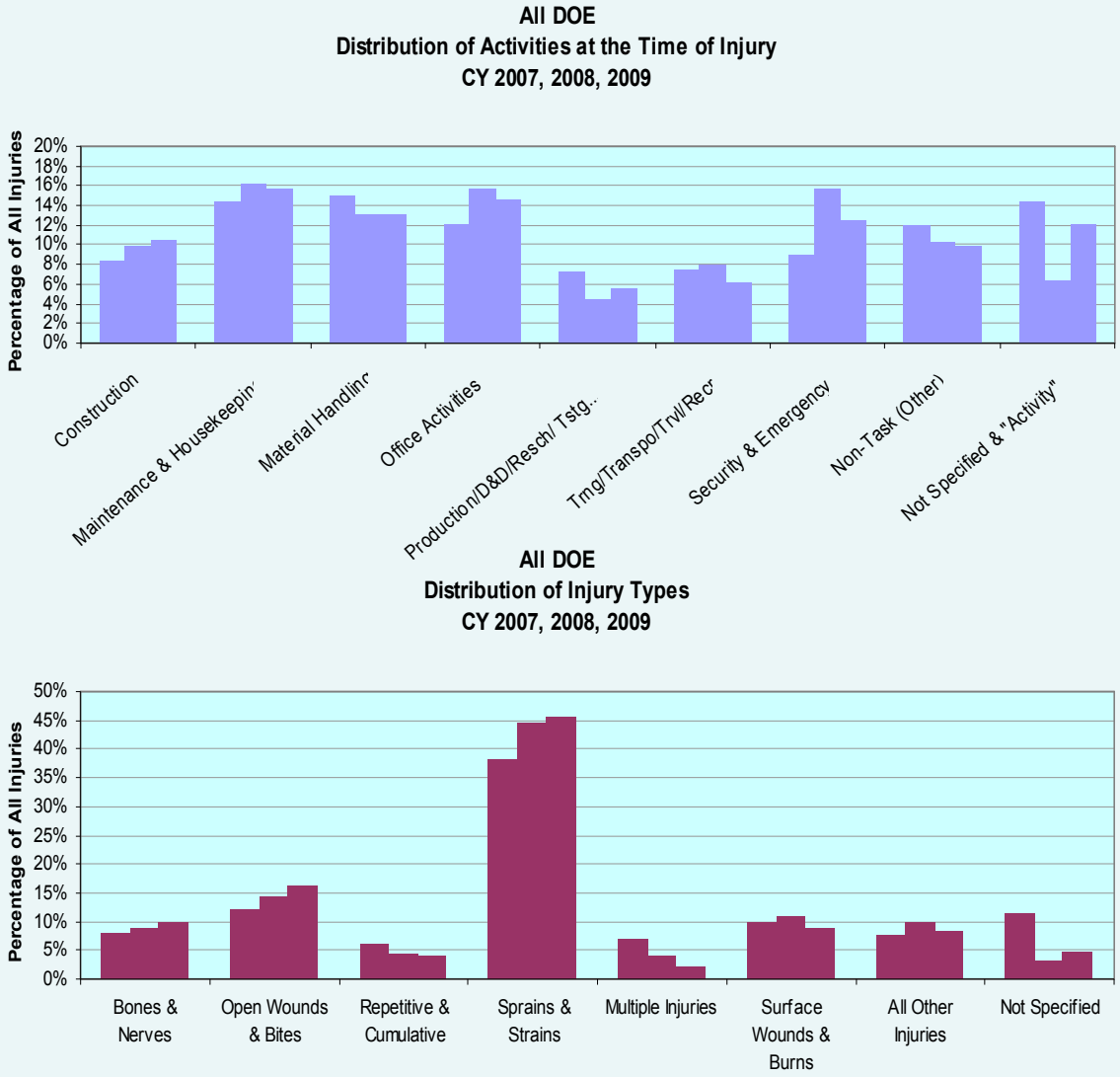






CAIRS data as of 2/12/2010

Activities Leading to Injuries and Resulting Injury Types (CY 2007, 2008 and 2009)



In order to gather actionable data, an effective Health and Safety analysis program should encourage complete and accurate reporting.

- Activities resulting in injuries/illnesses are fairly widely distributed.
- *Strains and Sprains* is by far the largest category of injuries.
- We must pay attention to the data and how it is reported.
- Unspecified data must not become the "norm" when reporting injuries and illnesses.
- Accurate reporting and sound analysis are crucial to DOE's ability to manage complex-wide ES&H.

CAIRS data as of 2/12/2010

ES&H Trends: DOE-wide and NNSA
(CY 2007, 2008 and 2009)

As a percentage of total ORPS events over the past three years:

- Injuries requiring offsite treatment have risen from 10% to 13% of ORPS events at NNSA and DOE-wide.
- DOE-wide Authorization Basis events have decreased from 14% to 11%, while NNSA's events have risen from 11% to 13%.
- NNSA Electrical Safety events have decreased from 13% to 9%, while DOE-wide they have remained steady.
- DOE-wide Lockout/Tagout events have risen from 4% to 7%, while at NNSA they have remained steady.
- Equipment Failure/Degradation events have decreased from 19% to 13% DOE-wide, especially at NNSA where they decreased from 23% to 13%.

DOE Motor Vehicle Accidents in CAIRS:

- Motor Vehicle Accidents account for only 2% of all DOE injuries, but result in 50% of DOE deaths.

ORPS data as of 2/15/2010

Recent Significant Events at DOE and Related Causal Factors

Date	Significant Event	Related Causal Factors
06/26/09	Livermore Vehicle Fatality	1, 2, 5
07/01/08	WAPA Vehicle Fatality	1
10/06/09	Savannah River Cable Reel Hand Injury	1, 2, 5
09/23/09	Savannah River Electric Arc Burns	2, 3, 5
07/01/09	Hanford Fall Scaffolding Injury	2, 3, 4
02/25/09	WIPP Electric Cart Injury	1, 2, 3
10/09/08	Sandia Rocket Sled Injury	2, 4, 5
12/16/09	LANL Large Bore Powder Gun Explosion	TBD

Related Causal Factors

1. Workers unfamiliar with equipment or safety procedures
2. Hazards analysis not performed or inadequate
3. Corrective actions from prior events not implemented
4. Normalization of deviation from standard practices
5. Unsafe practices

An organization cannot become complacent, especially when the "data" looks good!

What Does it Take to Maintain a Strong Safety Culture?

Safety Culture: An organization's "values and behaviors" - modeled by its leaders and internalized by its members.

- Management is responsible and accountable for preventing injuries.
- Employee involvement is essential.
- Preventing injuries is good business.
- Working safely is an expectation for all employees.
- Training and qualification are critical.
- Oversight should be viewed as a tool for improvement.
- Performance metrics and Operating Experience are driving improvement.
- Corrective Actions are timely and effective.

Closing Thoughts

- Does your organization possess the right “Core Values” to be a best-in-class business?
- Is leadership’s commitment to safety displayed not only by words but also by actions?
- Are you setting an example at your sites and facilities?
- Do you walk your spaces and listen to what your workers are saying and feeling?
- Are your workers truly involved?
- Do you have the right performance measures and are they telling you what you need to know?
- Do you believe your organization is doing good enough on safety?
- Are we being as safe off the jobsite as we are on the jobsite?