

U.S.NRC

UNITED STATES NUCLEAR REGULATORY COMMISSION

Protecting People and the Environment



Allegations and Incidents

Incidents and Allegations

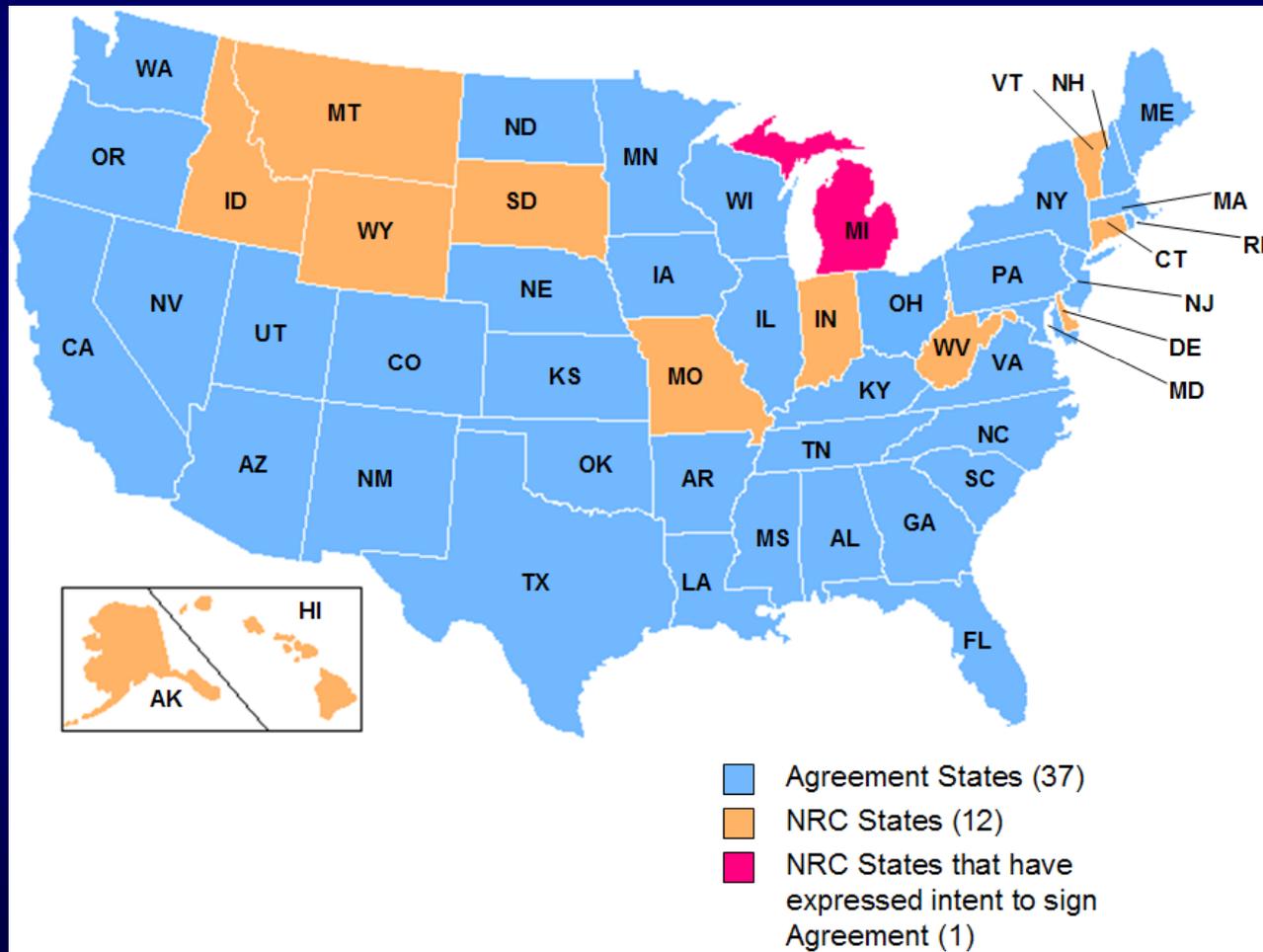
➤ SCOPE

- More than 20,000 Specific Licensees in U. S.
- About 75% in 37 Agreement States
- About 25% in NRC Jurisdiction

➤ CHALLENGE

- Collection of Data through NMED
- Evaluation of Data for Generic Issues
- Sharing of Information and Results
- Regulatory Actions

Materials Licensing Agencies



Contacts

- **NRC Headquarters Operations Center** **301-816-5100**
- **NRC Region I** **800-432-1156**
- **NRC Region II** **800-577-8510**
- **NRC Region III** **800-522-3025**
- **NRC Region IV** **800-952-9677**
- **NRC Office of Federal & State Materials
& Environmental Management Programs (FSME),
Division of Materials Safety & State Agreements (MSSA)**
301-415-3340

Contacts

- **FSME: <http://nrc-stp.ornl.gov/stpdirectr.html>**
- **Directory of Agreement State and Non-Agreement State Directors and State Liaison Officers:

<http://nrc-stp.ornl.gov/asdirectory.html>**

Allegations

Definition

An allegation means a declaration, statement, or assertion of impropriety or inadequacy associated with regulated activities, the validity of which has not been established

Allegations

References

- **NRC Management Directive 8.8, “Management of Allegations”**
- **FSME Procedure SA-400, “Management of Allegations”**

Allegations

State and NRC Roles

- **Have and follow agency's procedures to investigate allegations**
- **Gather information from allegeders in a competent and professional manner**
- **Refer concerns to other agencies as appropriate**
- **Perform appropriate inspection or other activities to determine the validity of allegations**
- **Confirm actions and findings to allegeder in writing**

Allegations

Receiving

- **telephone**
- **letter or other written note**
- **in person**

Allegations

Receiving

- **Gather as much information as possible**
 - **use standard form to be sure you include all required information**
 - **follow agency policy for granting confidentiality**
- **Listen; take allegor's concerns seriously**
- **Document conversations ASAP**
- **Protect the allegor's identity**

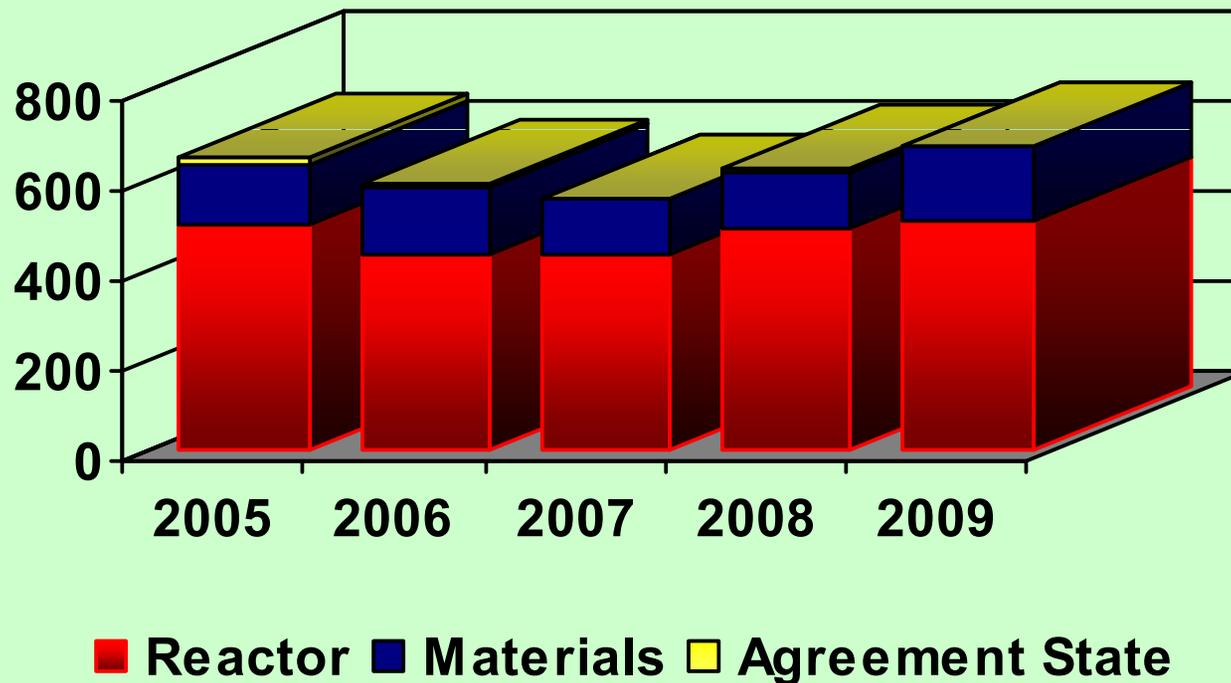
Allegations

Receiving

- **Determine if Department of Labor (DOL) issues are included; may need to refer alleger to DOL**
- **Determine if “wrongdoing” is alleged; NRC may need assistance from Office of Investigations**
- **Determine if issues are outside of NRC jurisdiction**
 - **alleger can contact other appropriate agencies directly**
 - **NRC will refer allegation to other agency**

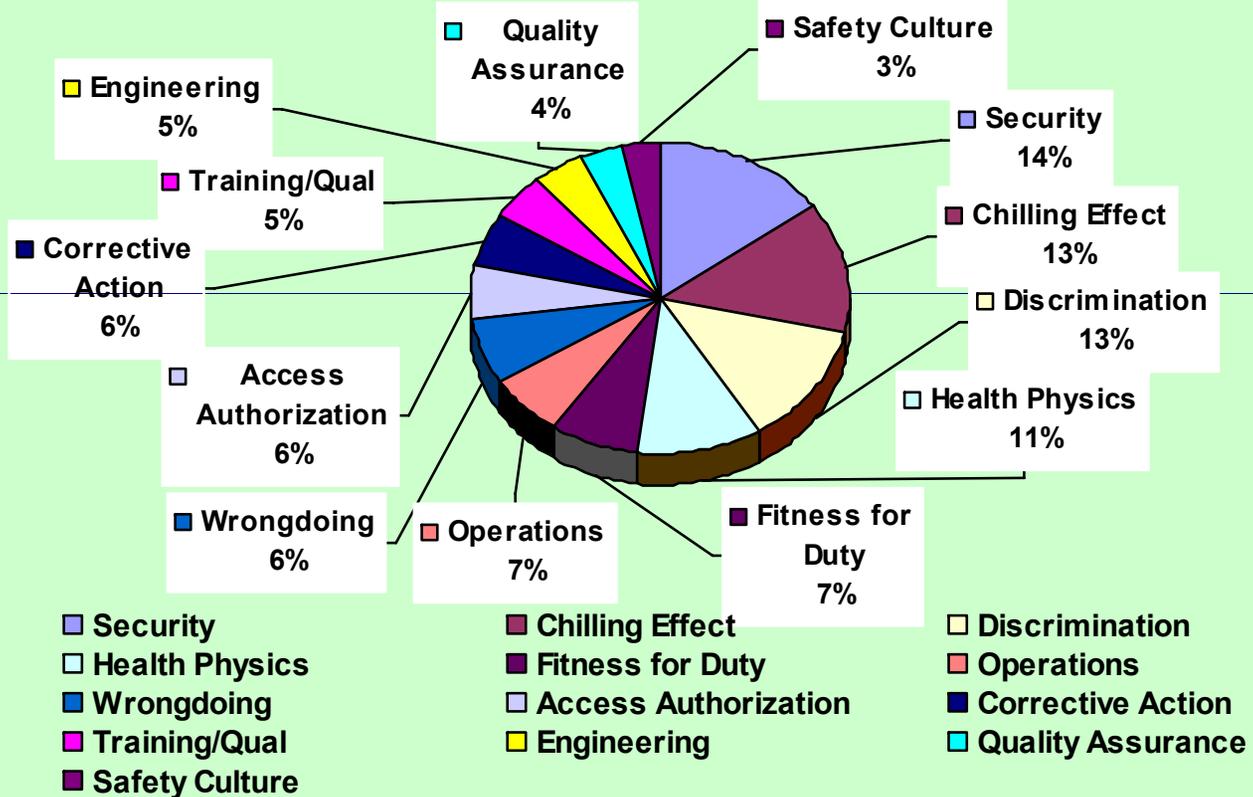
Allegations: total number received

FIGURE 1 - ALLEGATIONS RECEIVED BY CALENDAR YEAR



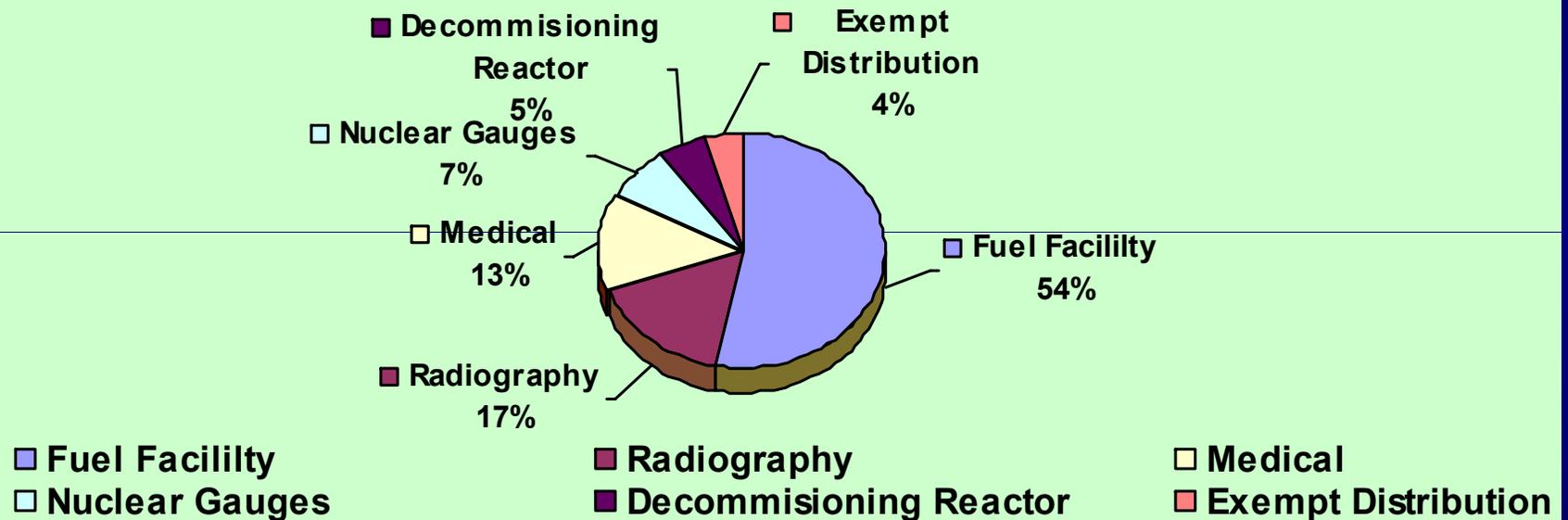
Allegations – Reactor Issues

FIGURE 2 - REACTOR ISSUES NATIONWIDE 2009



Allegations at Materials Facilities

FIGURE 3 - MATERIALS LICENSEE TYPES NATIONWIDE 2009

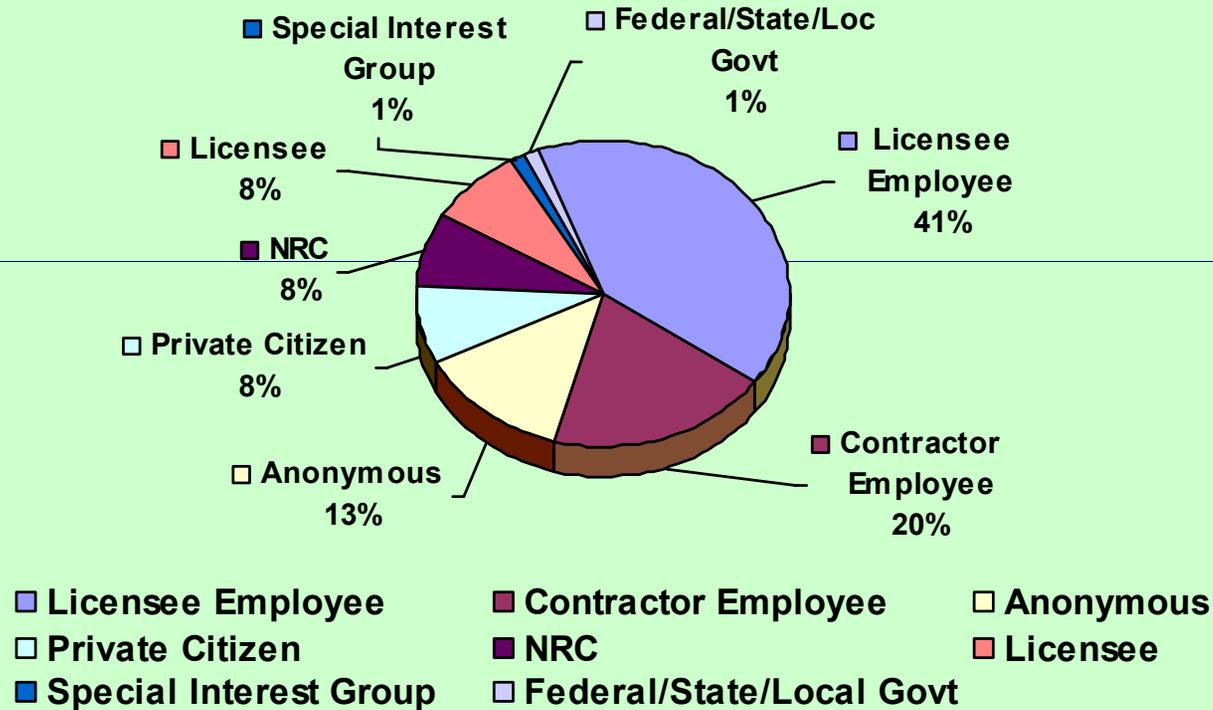


Allegations at Materials Facilities

- **2004-2008:**
 - ~50% at fuel cycle facilities
 - ~20% at medical facilities
 - ~30% other
- **2009:**
 - 54% at fuel cycle facilities
 - 13% at medical facilities
 - 33% other

Allegations at Reactors (data not tracked for Materials)

FIGURE 4 - ALLEGATIONS BY SOURCE CATEGORY 2009



Allegations

Investigation Guidelines

- **Prior to performing a site inspection...**
 - **review applicable licensing documentation**
 - **interview the allegor [again?], in person if possible**
 - **plan your areas for review**

Allegations

Investigation Guidelines

- **NRC licensees should NOT be aware that you are looking into allegation(s).**
 - **include allegation issues within context of full inspection**
 - **investigate non-allegation areas in a comparable level of detail**
- **Protect the allegor's identity.**
 - **treat allegor like all other workers you meet with during the inspection**
 - **be careful in conversations**

Allegations

On-Site

- **Follow your applicable inspection procedures**
- **Use good interview and inspection techniques**
- **Make good notes**
- **Check accuracy and completeness of information**
 - **theirs**
 - **yours**

Allegations

Closing the Allegation

- **Inspection documentation**
- **Letter to allegor**
- **Closure with other agencies, where applicable**

Allegations – IMPEP Results

In CY 2009, IMPEP review of 9 AS programs

- **reviewed casework/documentation for 48 allegations**
- **14 referred by NRC to the AS**
- **34 received directly from concerned individuals**

Allegations – IMPEP Results

In all cases, the review teams concluded that the AS

- **consistently took prompt and appropriate action in response to concerns raised**
- **documented the results of their investigations and closeout actions, including notifications to the allegers of the outcomes of the investigations when the allegers' identities were known.**
- **adequately protected the identity of any allegers that requested anonymity.**

Allegations – IMPEP Results

- **“In general, the results of the CY 2009 IMPEP Reviews demonstrate that the Agreement States continue to rank response to allegations as a high priority in protecting public health and safety.”**

Allegations

ANY QUESTIONS???

Incidents

Definition

An incident is an occurrence which, by itself or its consequences, poses an actual, potential or perceived hazard to public health and safety, property or to the environment.

Incidents

NRC References:

- **Management Directive (MD) 8.3 “NRC Incident Investigation Program”**
- **NRC Inspection Manual (IP) Series 1300, Incident Response**
- **IP 87103 “Inspection of Material Licensees Involved in an Incident of Bankruptcy filing”**
- **IP 93812 “Special Inspection”**
- **NRC Management Directive 8.1, “Abnormal Occurrence Reporting Procedures”**
- **MD 8.10 “NRC Medical Event Assessment Program”**

Incidents

Agreement State References:

- **FSME Procedure SA-300 “Reporting Material Events”**
- **and its Appendix, “Handbook on Nuclear Material Event Reporting in Agreement States”**

Incidents

State and NRC Role

- **Report Significant Events to NRC Operations Center**
- **Perform On-Site Evaluations**
- **Send Reports to NMED**
- **Take Enforcement Actions as Appropriate**

Incidents

NRC will also

- **Evaluate for Generic Issues**
- **Report Abnormal Occurrences**
- **Share Information**
- **Issue Bulletins, Information Notices**
- **Take Other Regulatory Actions**

Incidents

What States Report to NRC

➤ **WITHIN 24 HOURS**

- **All significant events (those required to be reported to your agency immediately or within 24 hours) to the NRC Headquarters Operations Center by the end of the next day**
- **May also report the event to the Regional Duty Officers or the State Agreements Officer (SAO).**

Incidents

What States Report to NRC

- **WITHIN 30 DAYS or MONTHLY**
- **All other reportable events (30 day) are reported to the Contractor for the Nuclear Material Events Database (NMED) at 30 days or monthly.**

Incidents

Closing the Incident

- **Document your findings, take necessary actions.**
- **Close NMED documentation.**
- **Re-inspect sooner, rather than later.**

Incidents

NRC: Nuclear Material Events Database - Microsoft Internet Explorer provided by USNRC

http://nmed.inl.gov/

File Edit View Favorites Tools Help

NRC: Nuclear Material Events Database

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U.S. NRC
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Protecting People and the Environment

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Nuclear Materials

Home > Nuclear Materials > Nuclear Material Events Database

Nuclear Material Events Database

The Nuclear Regulatory Commission's (NRC) Nuclear Material Events Database (NMED) contains records of events involving nuclear material reported to the NRC by NRC licensees, Agreement States, and non-licensees. The database is maintained by the Idaho National Laboratory. The NMED data may be accessed by NRC staff, Agreement State staff, and other users authorized by the NRC.

Beginning in fiscal year 2007, NMED data were summarized in publically available annual reports. Click the selection box below to select an annual NMED report.

FY2009

If you have any questions regarding access to this database, contact the NRC NMED Project Manager, Duane White, at nmednrc@nrc.gov

Login to NMED

Incidents



February 2010

Nuclear Material Events Database

Annual Report

Fiscal Year 2009

Prepared for the U.S. Nuclear Regulatory Commission
by the Idaho National Laboratory (INL/EXT-10-17653)

Enclosure 2

Incidents

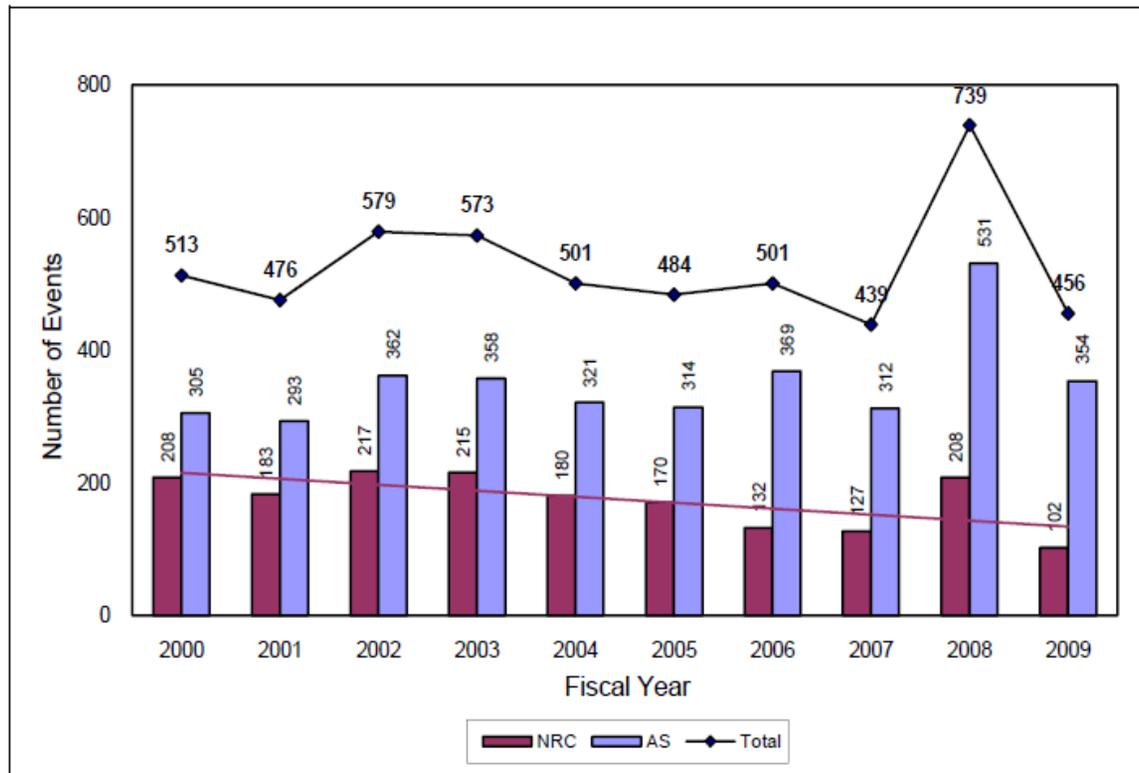


Figure 1. All NMED Events (5,261 total)

The following observations are made regarding the data in Figure 1.

1. In FY09, 419 occurrences accounted for 456 events; a single occurrence can be classified in different event categories.

Incidents

NMED information: Lost/abandoned/stolen sources

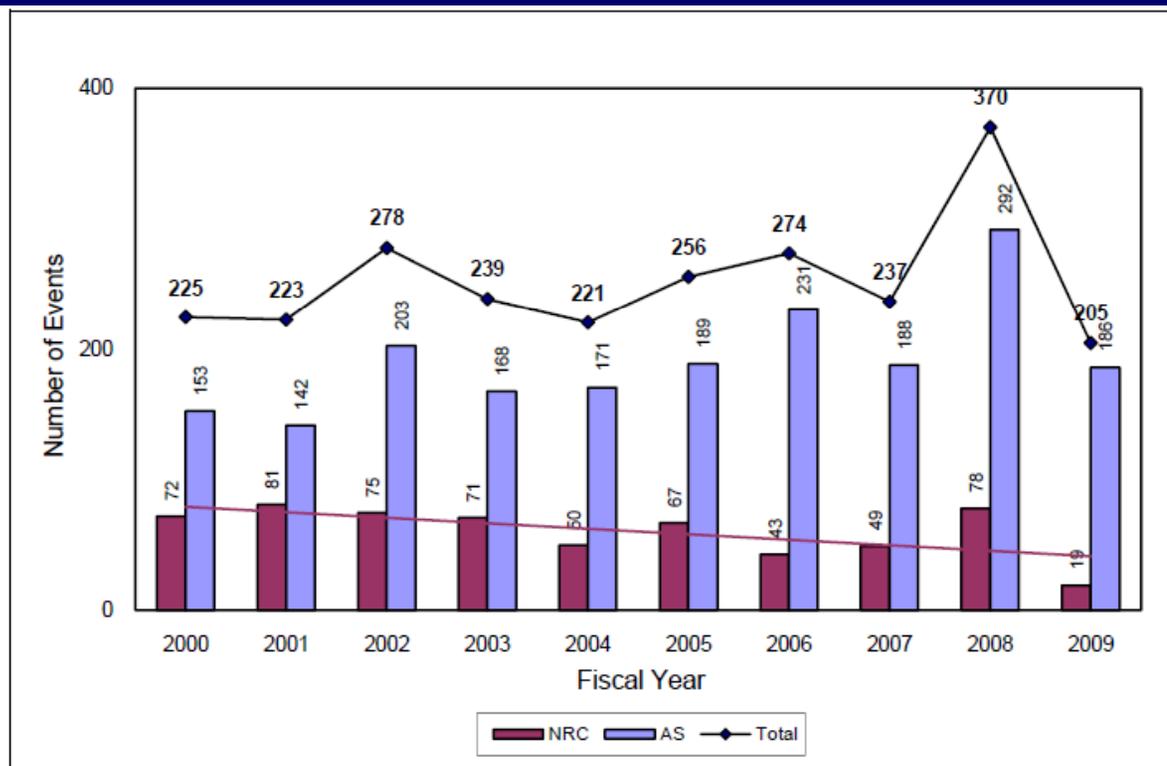


Figure 2. Lost/Abandoned/Stolen Material Events (2,528 total)

The FY08 and 09 data include 142 and 45 LAS events respectively that resulted from Wal-Mart's one-time review of their tritium exit sign inventory.

Abandoned gauge sources



Orphan Source Found at Landfill



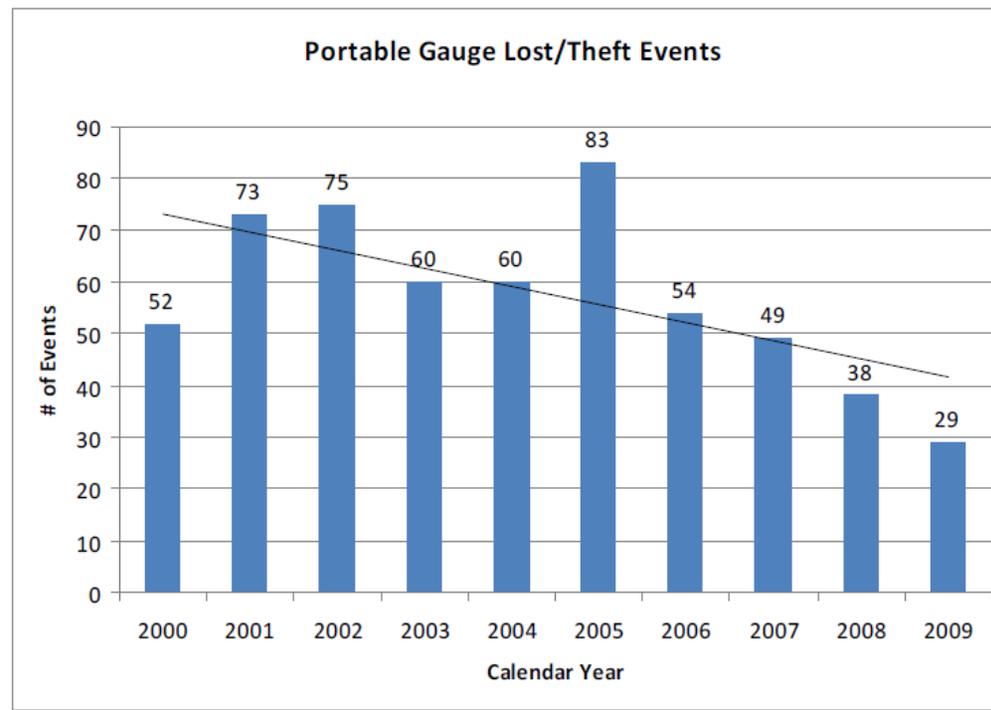
Orphan Sources Found at Scrapyard



Incidents

NMED information : What is the most frequently lost/stolen item? (maybe not anymore!)

The graph below displays the annual number of events due to losses and thefts of portable gauges for a 10 year period. The trend analysis indicates that the data does represent a statistically significant trend (indicated by the trend line).



Incidents

NMED information: Medical Events

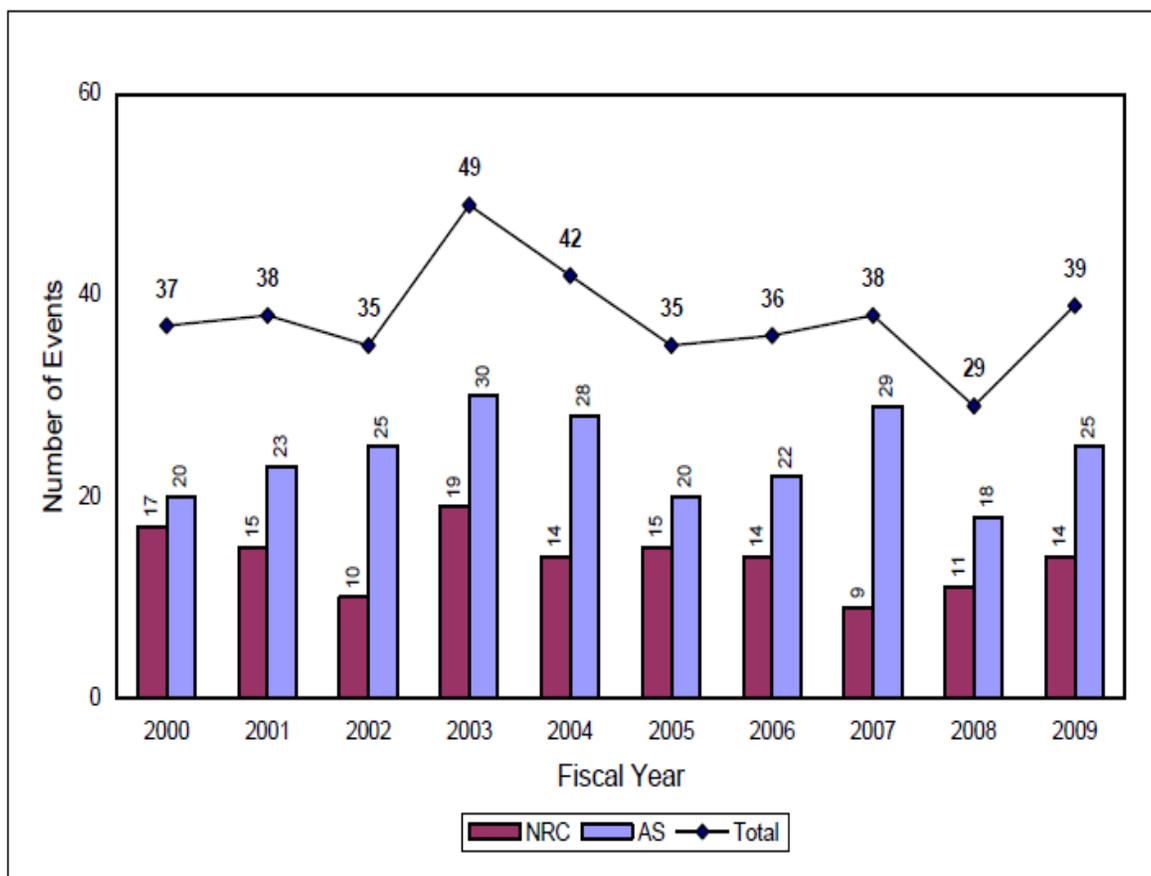


Figure 3. Medical Events (378 total)

Incidents

NMED Information: Overexposures

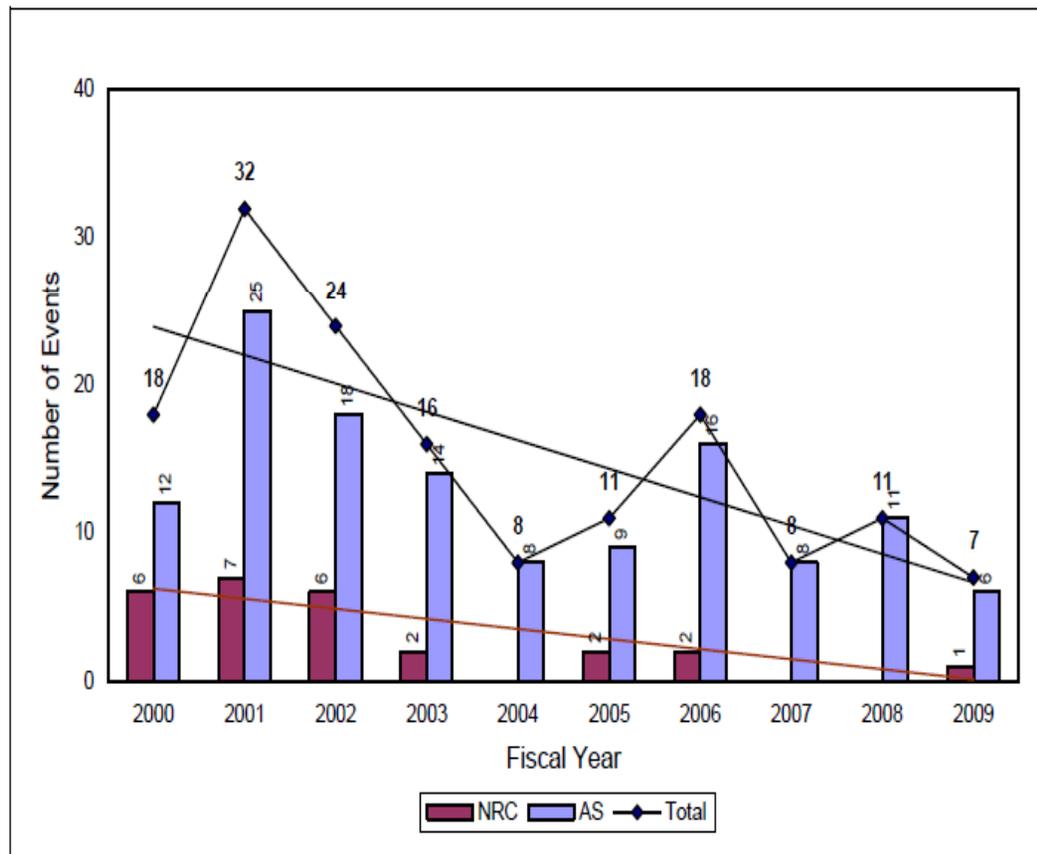


Figure 4. Radiation Overexposure Events (153 total)

Radiographer's hand



Incidents

NMED Information: Release/contamination

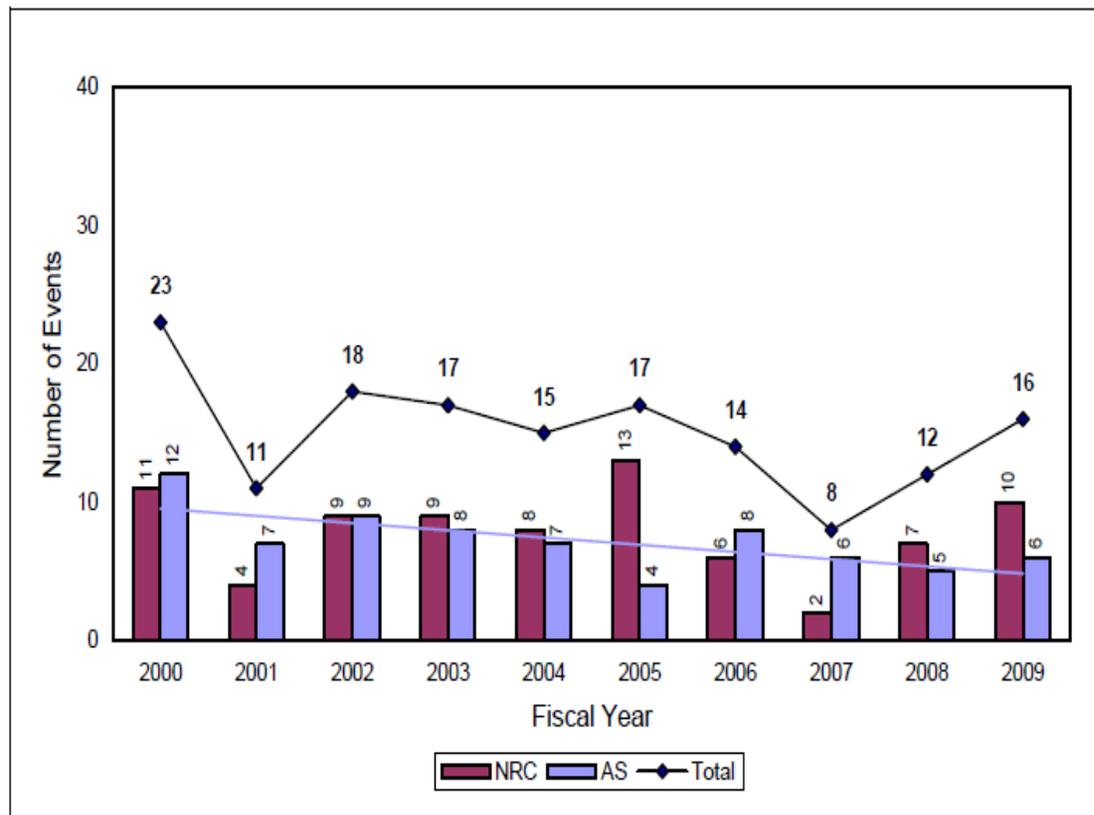


Figure 5. Release of Licensed Material or Contamination Events (151 total)

Contaminated wall, floors – broken H3 Exit Sign



Incidents

**Rental firm
storage area**



**Contaminated
scaffolding**

Incidents

NMED Information: Leaking sources

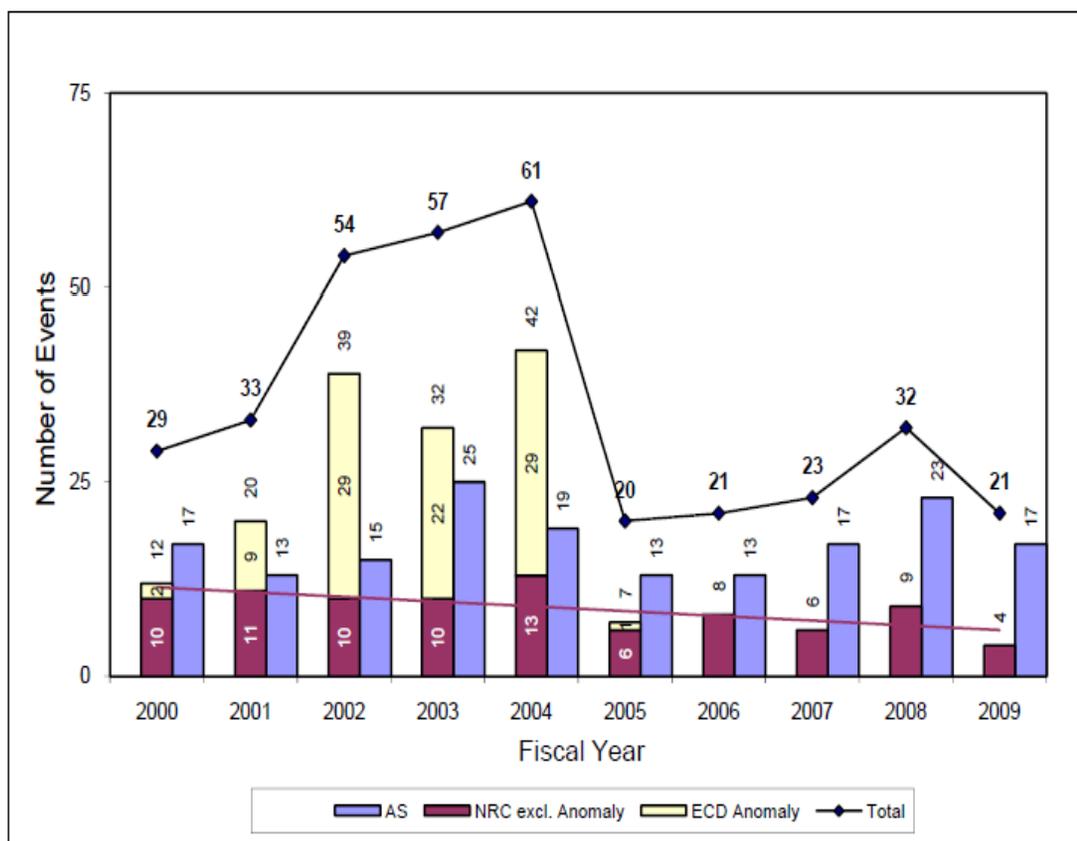


Figure 6. Leaking Sealed Source Events (351 total)

Original 1957 Lovelock ECD



Incidents

NMED Information: Equipment Events

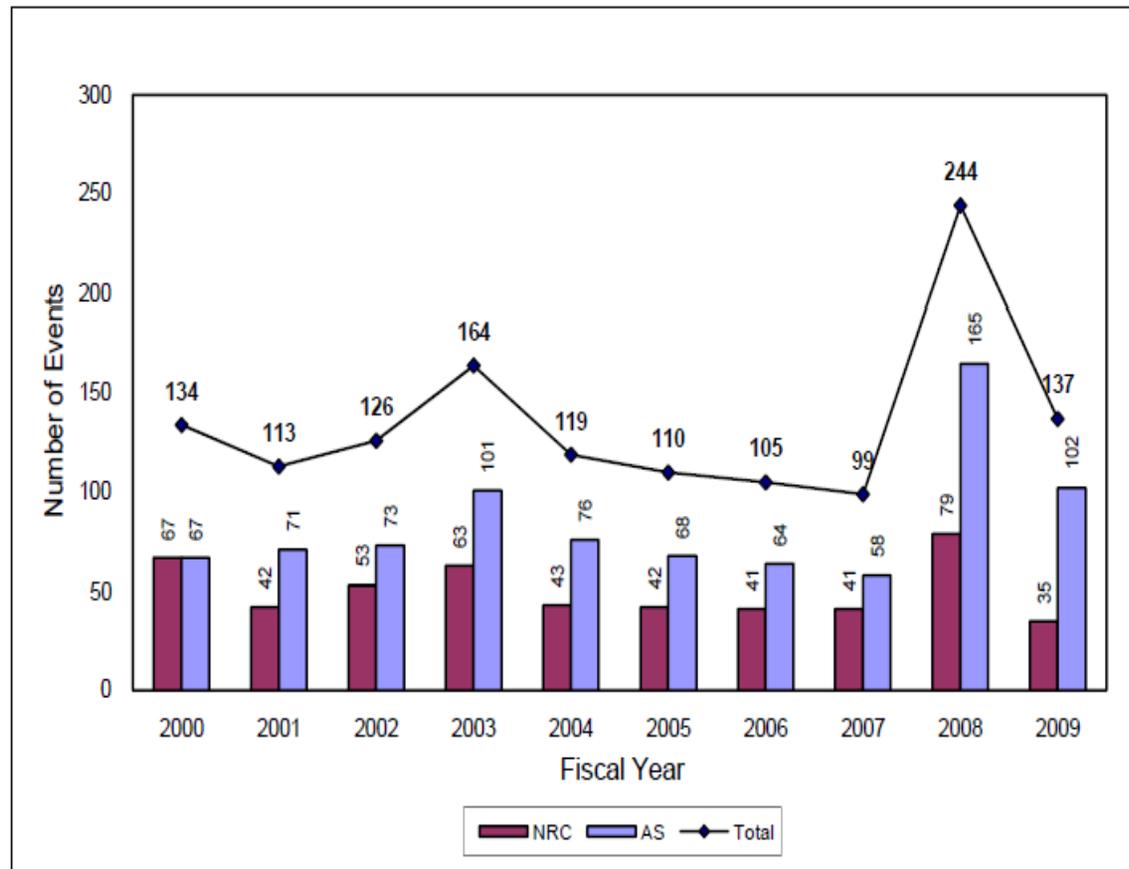


Figure 7. Equipment Events (1,351 total)

Remains of a Portable Gauge (run over)



Damaged/Malfunctioning Radiography Camera



Damaged Portable Gauge



Incidents

NMED Information: Transportation

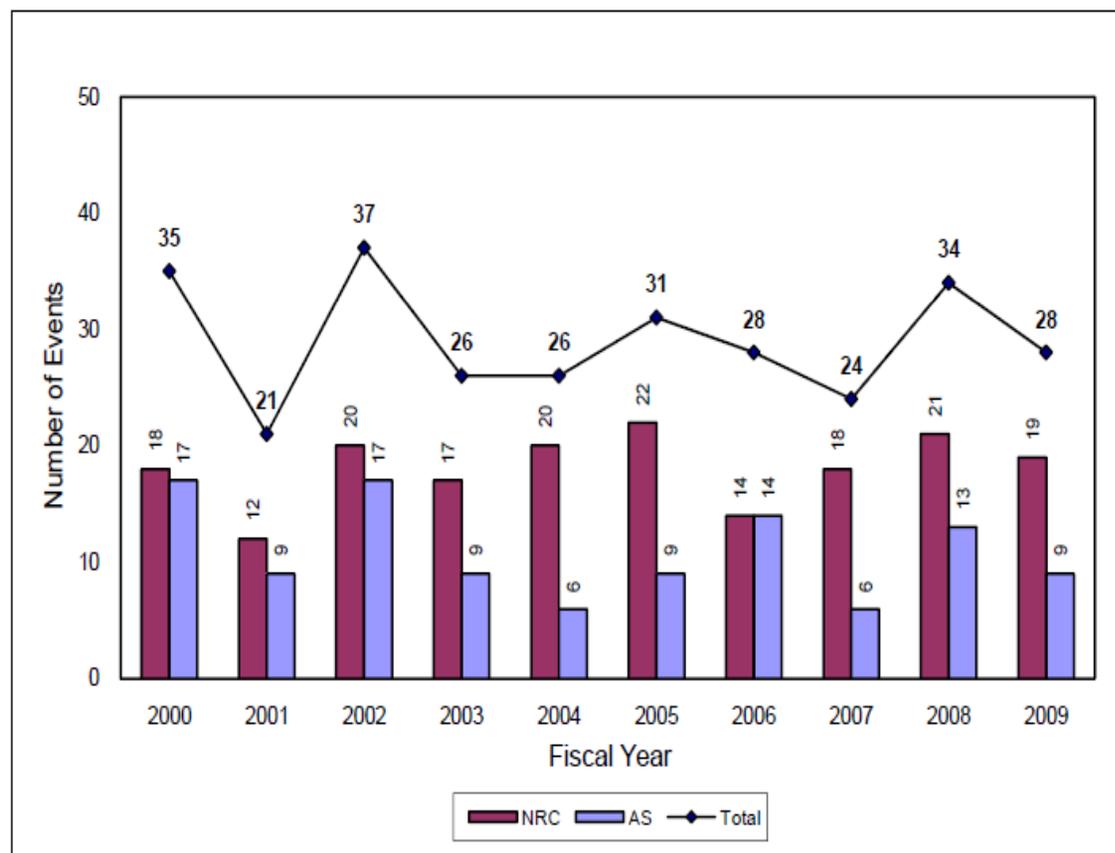


Figure 8. Transportation Events (290 total)

Low Overpass Transportation Accident (truck carrying contaminated equipment)



Incidents

NMED Information: Other

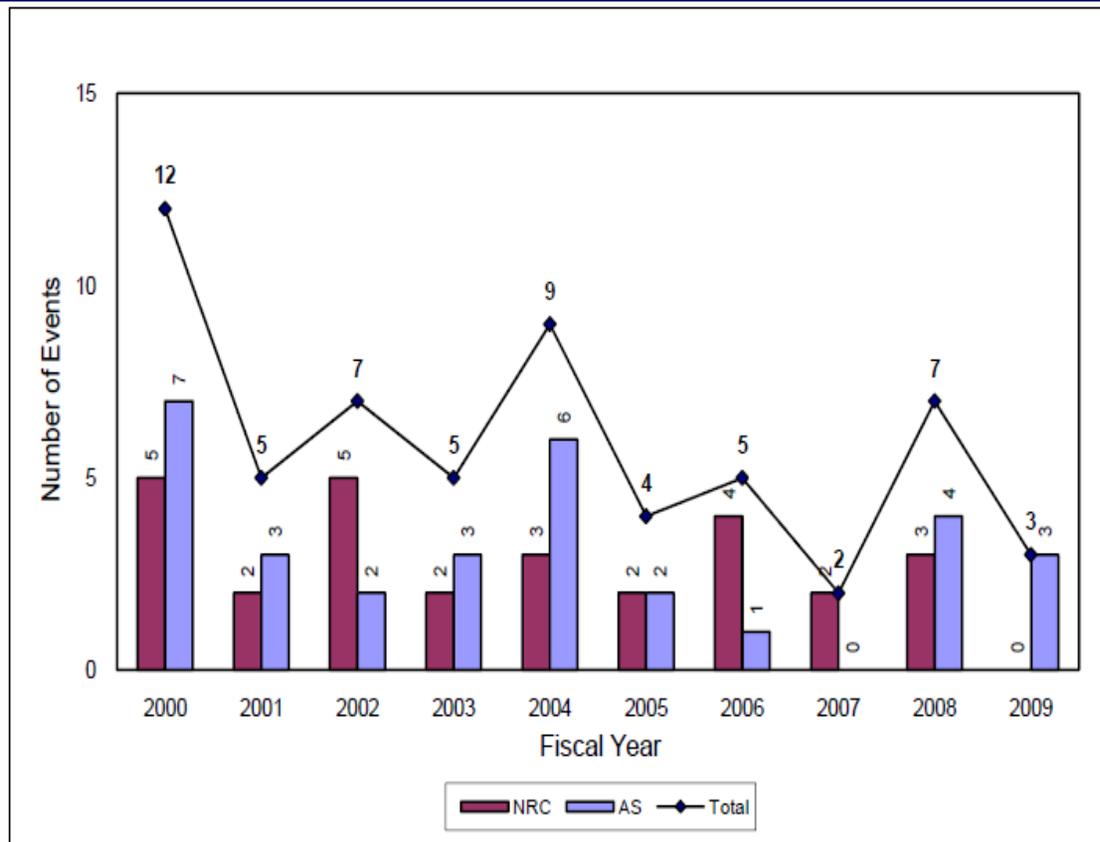
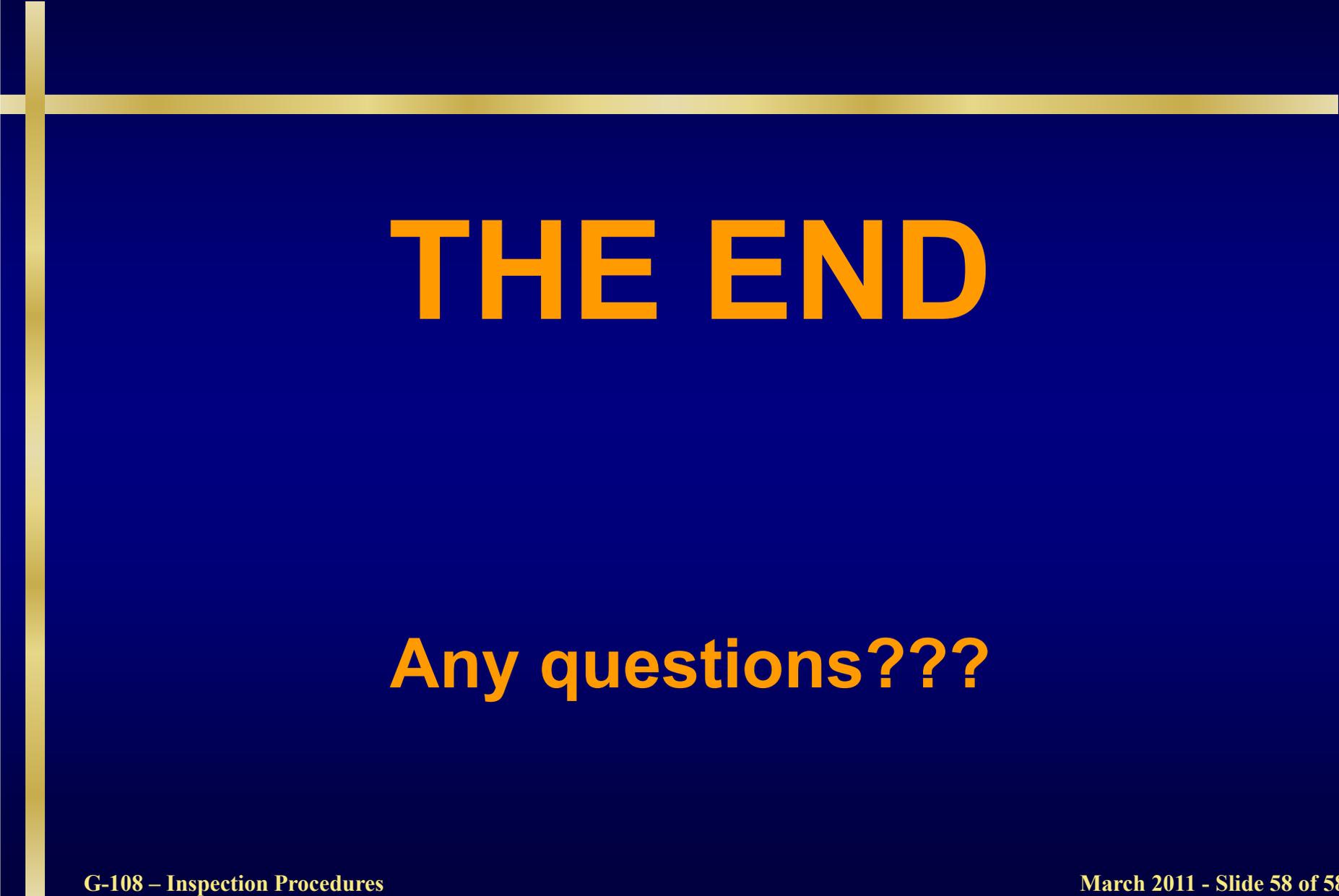


Figure 9. Other Events (59 total)

...one last thought...

Looking for a lost source can be a Big Deal





THE END

Any questions???