



2011 DOE ISM Champions Workshop

Enforcement History as Opportunity for Feedback and Improvement

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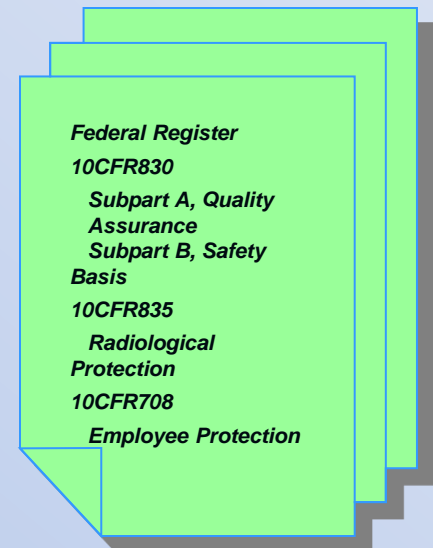
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Enforcement History as Opportunity for Feedback and Improvement

Worker Safety and Health Rule Background

- Since 1988, the DOE Office of Enforcement has enforced violations of the Nuclear Safety Rules through the Price-Anderson Amendments Act:
 - 10CFR820, Procedure Rules for DOE Nuclear Activities
 - 10CFR830, Nuclear Safety Management
 - Quality Assurance
 - Safety Basis
 - 10CFR835, Occupational Radiation Protection
 - 10CFR708, DOE Contractor Employee Protection Program
- No Federal Regulations existed over Industrial Safety and Health





Enforcement History as Opportunity for Feedback and Improvement

Worker Safety and Health Rule Background

- **10CFR851 issued in *Federal Register* (February 9, 2006)**
 - **Required establishment of Worker Safety and Health Program by May 25, 2007**
 - **Submission and approval requirements**
 - **Worker Rights**
 - **Codes and Standards**
 - **Program Requirements**
 - **Enforcement Protocols**
 - **Reporting of Noncompliances to Rule using DOE Noncompliance Tracking System (NTS) already established for PAAA reporting**
 - **Contained provisions for enforcement with civil penalties or CPOF**

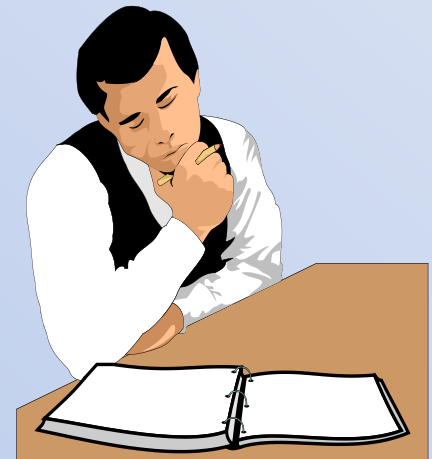




Enforcement History as Opportunity for Feedback and Improvement

What can we learn from the history of WSH enforcement?

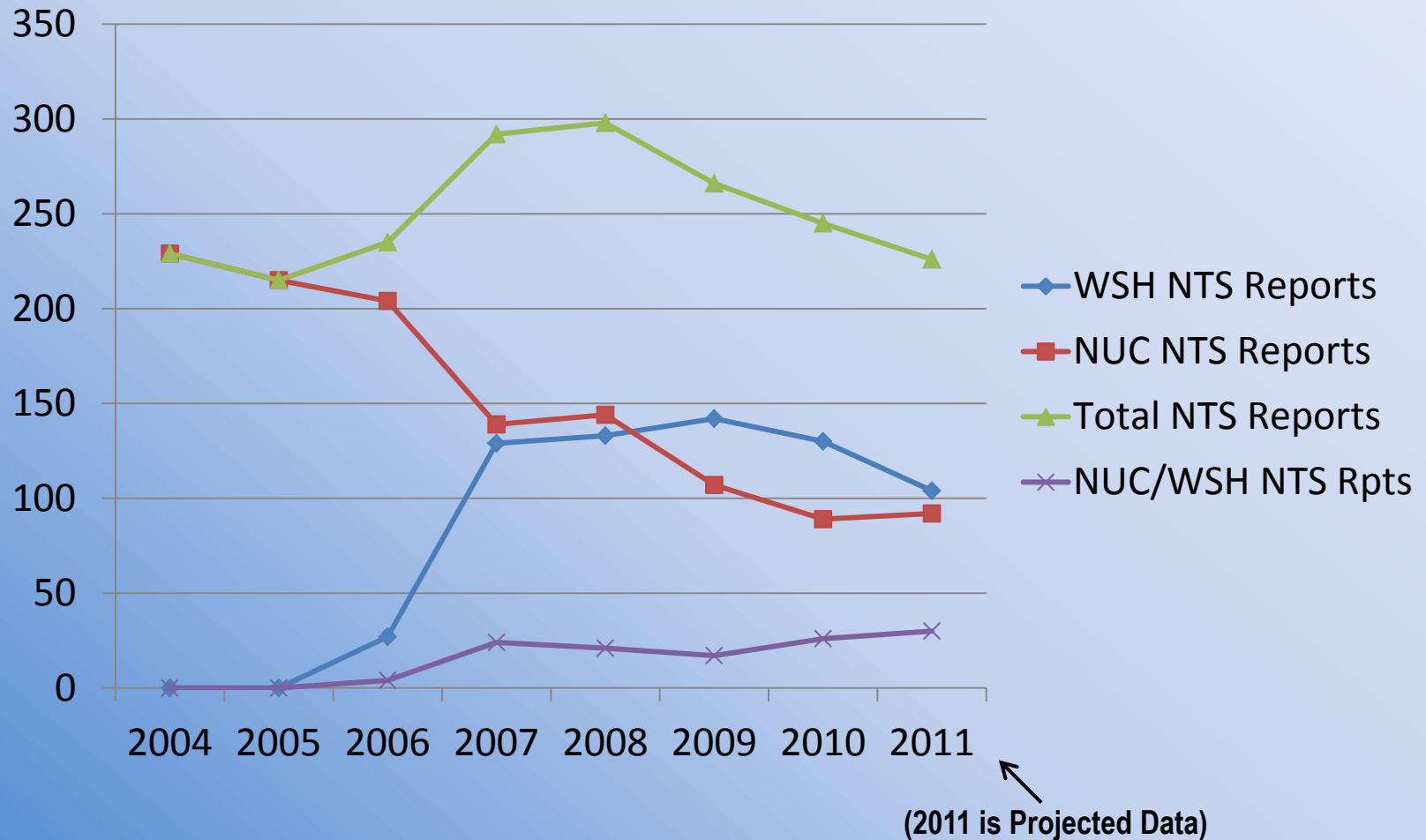
- Purposes of this presentation are to provide:
 - Information on the types of issues that are being reported in NTS
 - Feedback on issues that have caused enforcement
 - Information to predict where you might be enforced
 - Data on the trends of penalties/fee reductions
- Hopefully, learn from others' issues and improve your Safety and Health program





Enforcement History as Opportunity for Feedback and Improvement

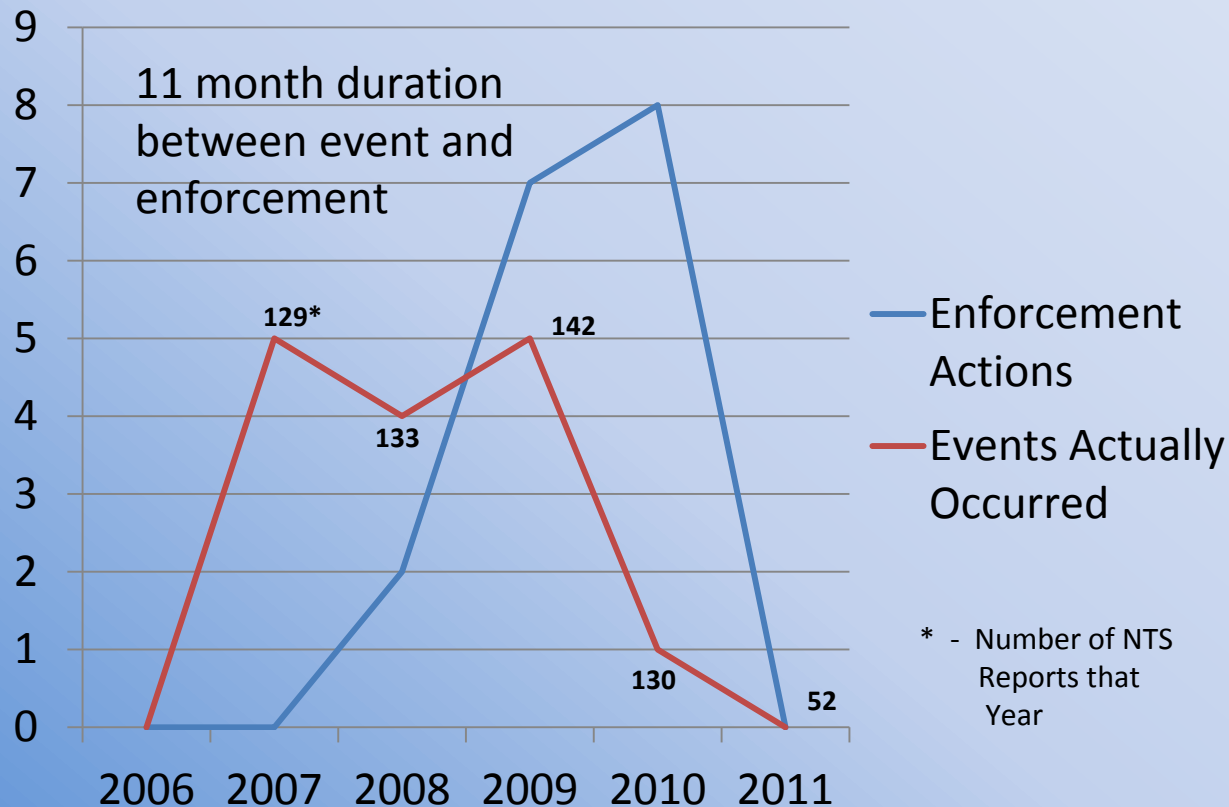
Nuclear NTS Reporting declined while WSH compensated





Enforcement History as Opportunity for Feedback and Improvement

Probability of Enforcement Low and Duration between Event and Enforcement not timely

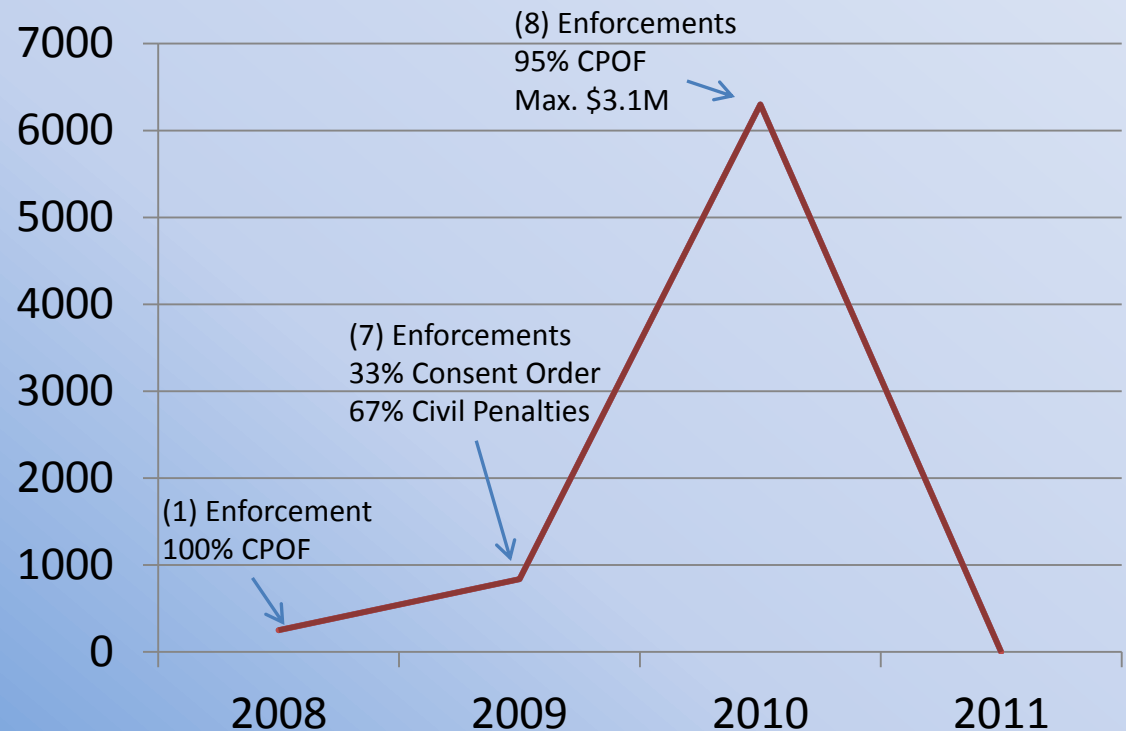




Enforcement History as Opportunity for Feedback and Improvement

Why is it important to consider the impact of WSH enforcement?

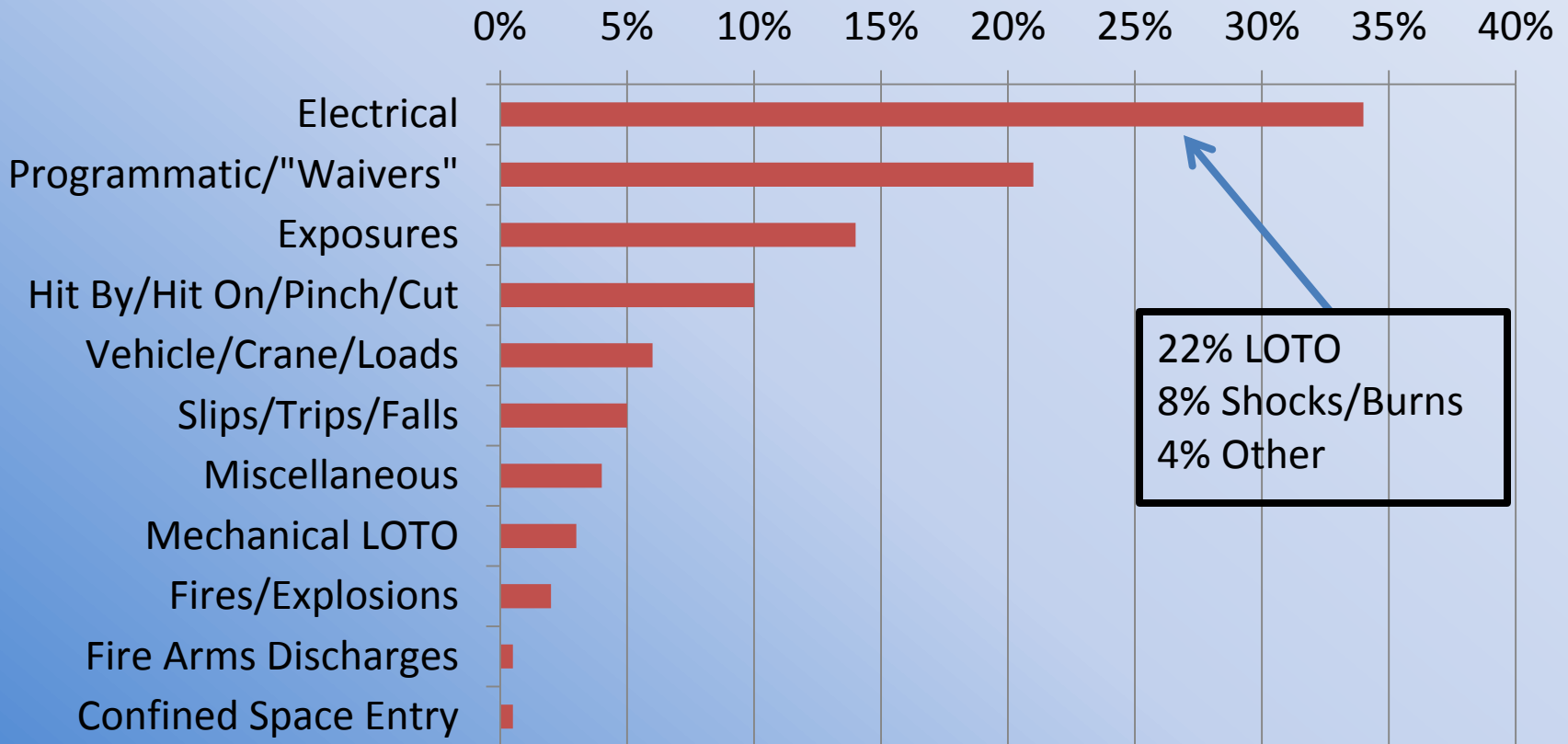
Enforcement Fines and Fee Reductions in Thousands of Dollars (\$K), All Non-reimbursable





Enforcement History as Opportunity for Feedback and Improvement

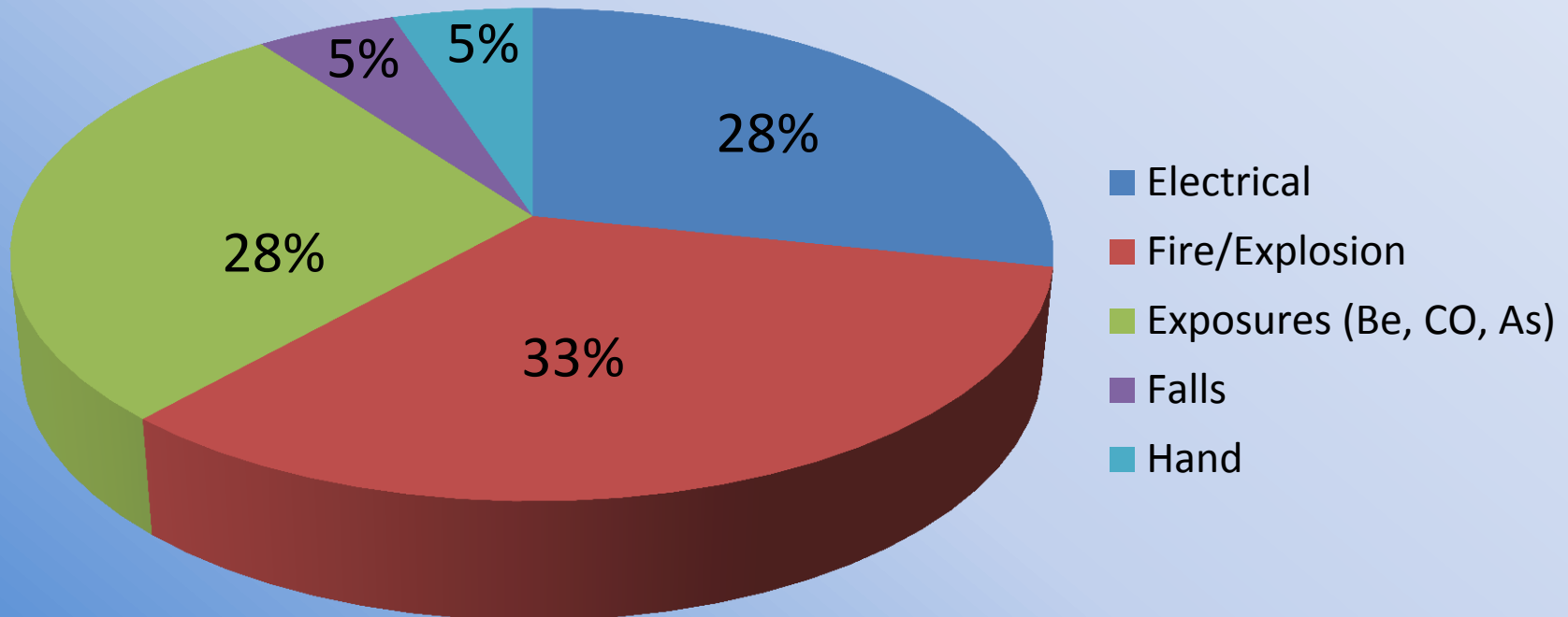
Fraction of NTSs Filed (2006 – 2011)





Enforcement History as Opportunity for Feedback and Improvement

Where is Enforcement* Occurring?

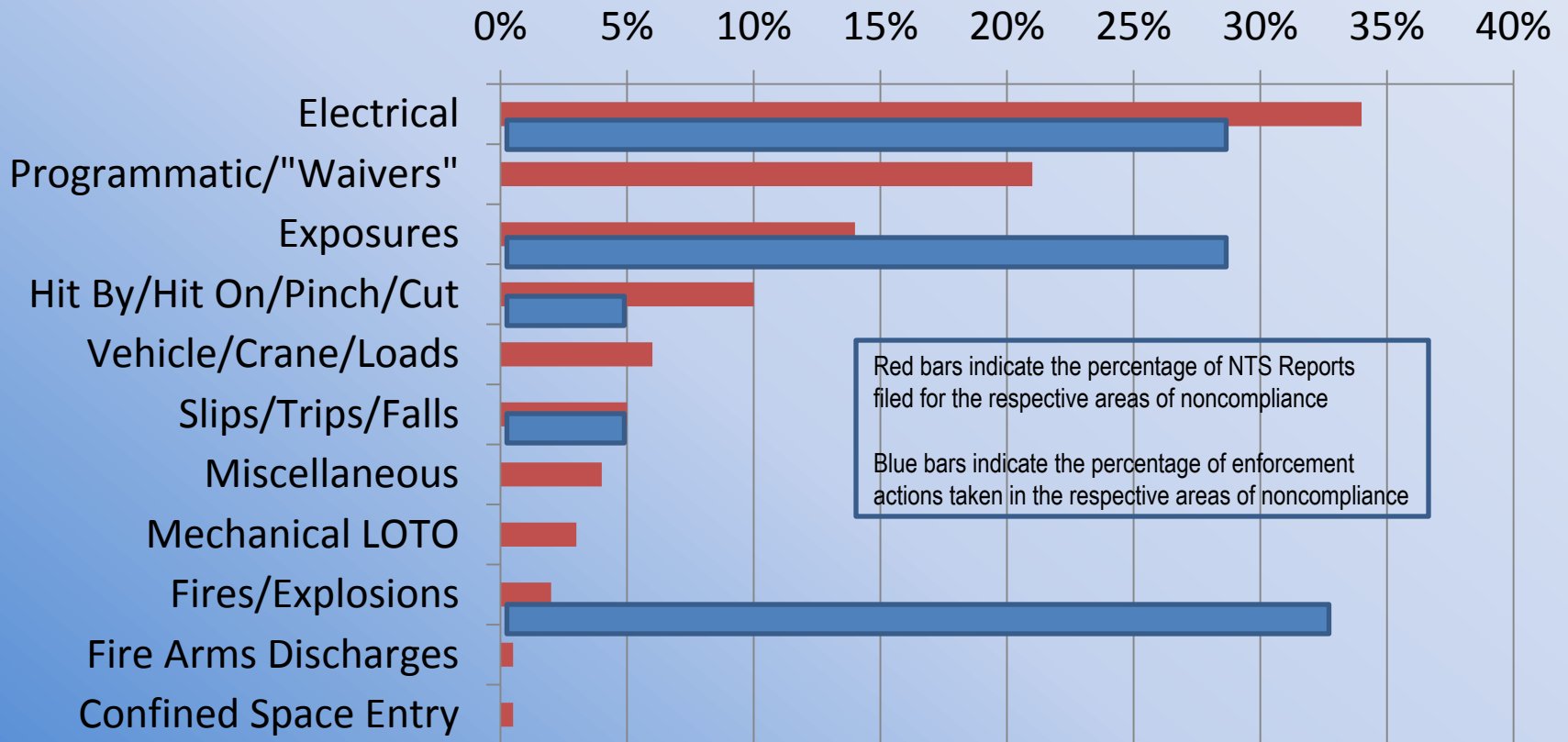


* Does not include (2) Enforcement Letters with no associated fines or fee reductions.



Enforcement History as Opportunity for Feedback and Improvement

Where Enforcement* has Occurred



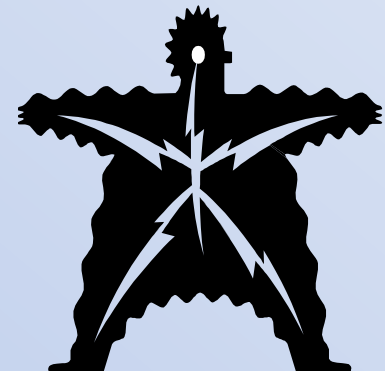
* Does not include two Enforcement Letters with no associated fines or fee reductions.



Enforcement History as Opportunity for Feedback and Improvement

Electrical Events and Enforcement

- Events were preventable shocks, burns and arc flashes
- Underscored by failure to implement LOTO
- One case of workers fighting range fire under distribution lines and shocked when smoke became conductor
- Serious consequences or potentially serious consequences
- Points out need to reduce LOTO noncompliances because they lead to events





Enforcement History as Opportunity for Feedback and Improvement

Overexposure Events and Enforcement

- Events were preventable overexposures to carbon monoxide, arsenic, and beryllium
- Failure to establish or follow prescribed hazard controls or have controls in place
- Serious exposure with potential for serious injuries
- Pointed out need for sound hazard analysis and procedure compliance





Enforcement History as Opportunity for Feedback and Improvement

Fires and Explosions

- Events were preventable propane fires or PVC solvent/primer combustion by welding
- One case of a rocket sled inadvertently starting while workers working on it
- Failure to recognize hazard, or establish or follow prescribed hazard controls
- Pointed out need for sound hazard analysis and procedure compliance





Enforcement History as Opportunity for Feedback and Improvement

Summary

- **Programmatic issues should be reported in NTS as DOE is crediting reporting without CP/CPOF implications**
- **Extra effort should be placed on electrical LOTO reduction to prevent arc flashes, burns and electrocutions**
- **Higher probability of enforcement with fires and explosions**
- **Overexposures are correctly treated as very serious**
- **Events are preventable with increased importance placed on hazard identification, analysis and control**



Enforcement History as Opportunity for Feedback and Improvement

QUESTIONS?