

Effective Leadership, Role of Workers & Labor Organizations

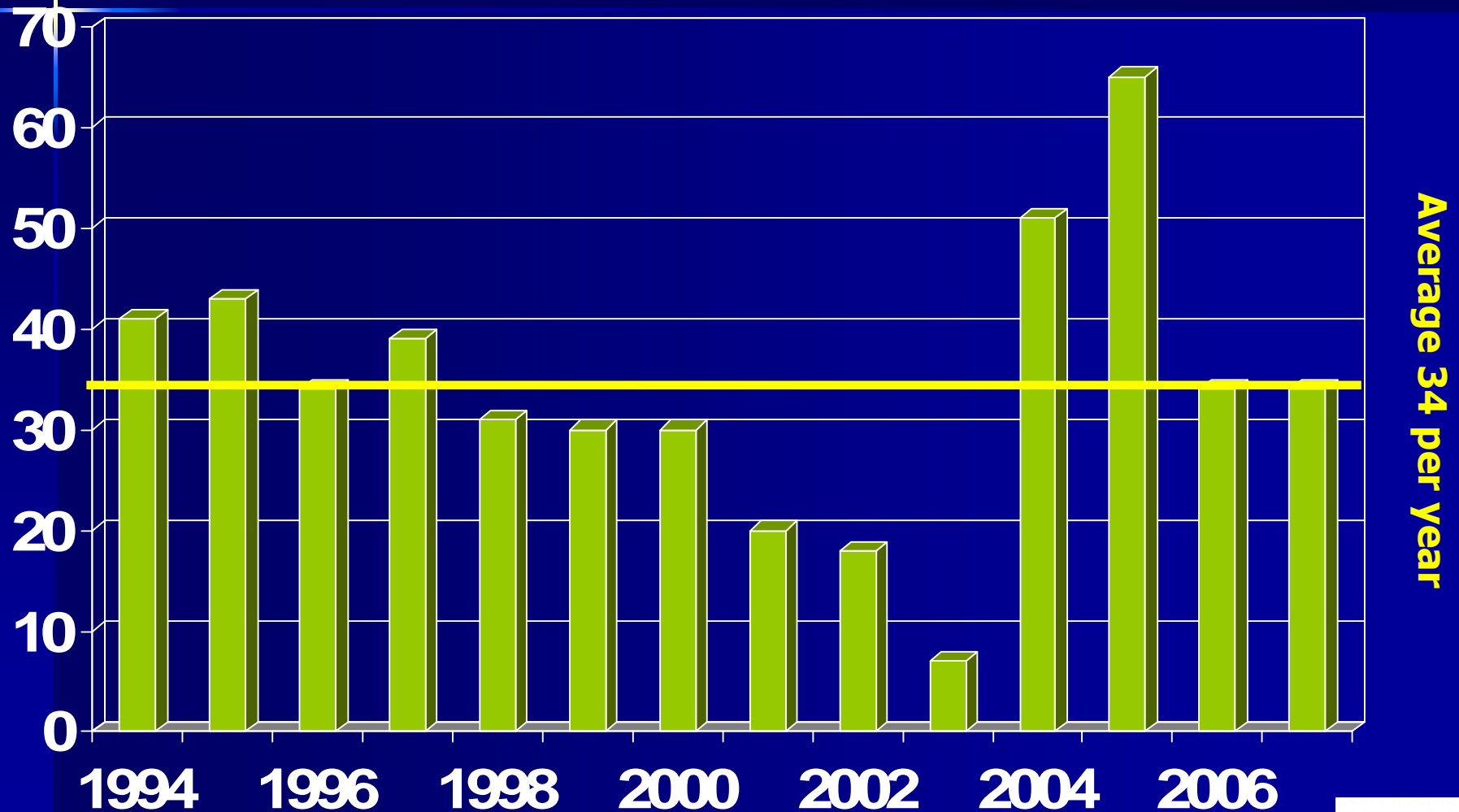
**International Regulators Offshore Safety
Conference December 6, 2007**



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Why is the USW involved in health & safety?

USW Member Fatality History 1994 to October 2007



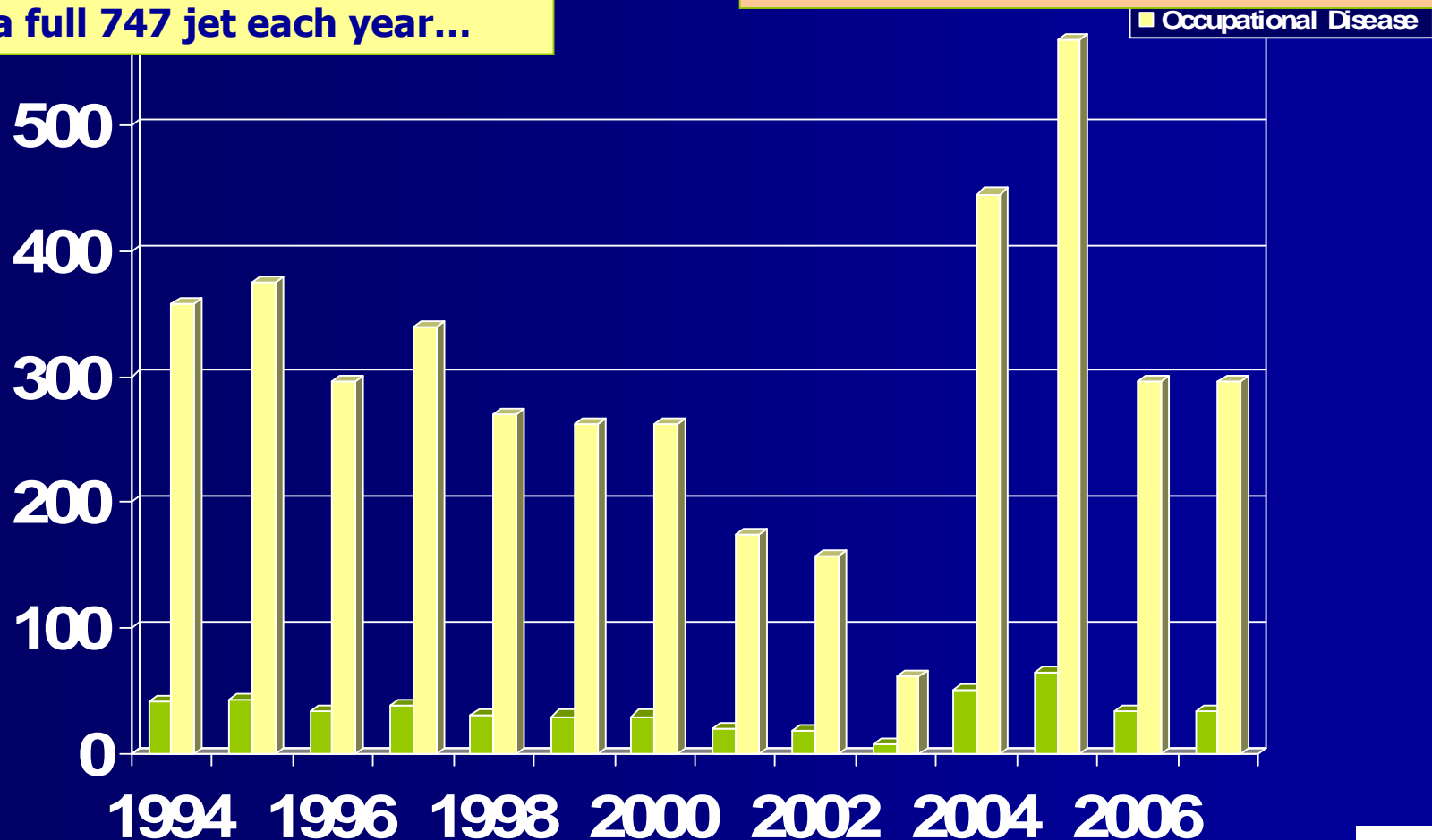
CHARACTERISTICS OF A DISASTER

1. A low OSHA Rate \neq Safe Plant
2. Similar or Identical Incidents are reoccurring at different facilities
3. Safety "Experts" are divided and take extreme positions
4. Every serious incident had given warnings
5. Workers do not have a sense of ownership or control over their safety program

Estimated USW Member Occupational Disease Deaths

Since 1994, the USW has experienced more than 450 fatalities and more than 4100 occupational disease deaths to our members and former members – **nearly ONE PER DAY!**
Or a full 747 jet each year...

The National Institute for Occupational Safety and Health (NIOSH) estimates that almost 9 workers die of occupational disease for every worker killed by traumatic injury in the United States.



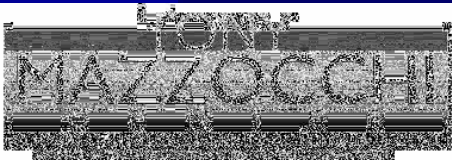
What the USW is Doing

- Training
- Triangle of Prevention
- Worker Health Protection Program
- Nation-wide Studies
- Recommendations for Corrective Actions
- Action Plan

USW's Tony Mazzocchi Center

Provided training to almost 25,000 members in past year

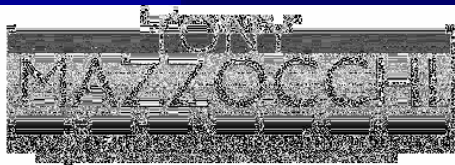
- Almost 500 USW members receive training from a qualified, trained trainer with USW-TMC developed curricula each week
- Training method is Small Group Activity Method



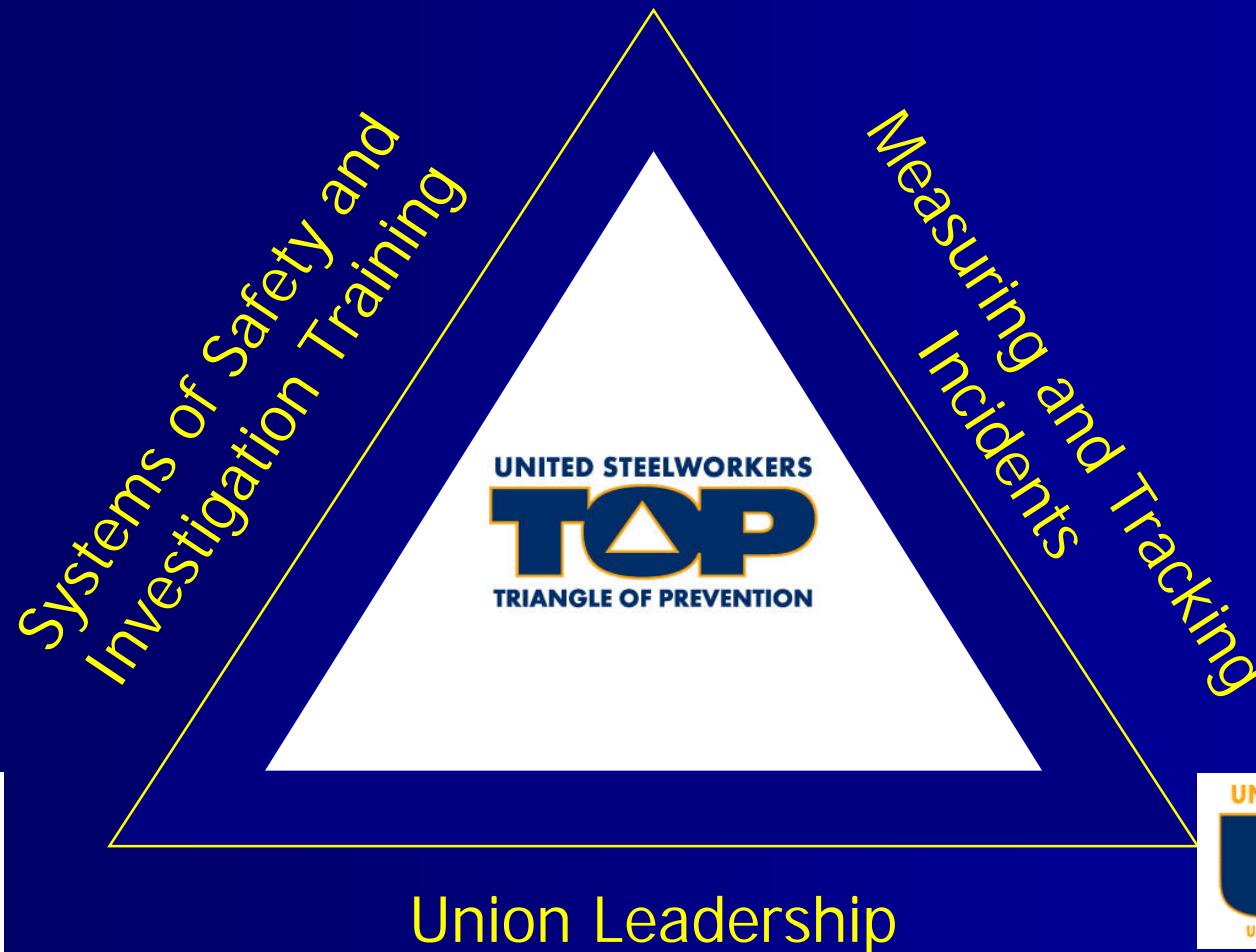
Tony Mazzocchi Center

Sample Training Programs

1. Systems of Safety
2. Incident Investigation
3. Hazard Identification/Mapping
4. Emergency Response & HAZWOPER
5. OSHA Outreach Training Courses
6. Catastrophic Accident Prevention
7. Effective Health & Safety Committees – The USW Approach
8. Chemical Plant Security
9. Health & Safety Planning for Natural Disasters
10. OSHA Process Safety Management



USW TRIANGLE OF PREVENTION PROGRAM – USW TOP



ELEMENTS OF USW TOP

1. Union Leadership—including a full time Union TOP Rep
2. Training—systems of safety and incident investigation
3. A Broader Measure of Safety—a new way of measuring and tracking incidents and near-misses
4. Joint Investigations
5. Recommendation Tracking
6. Information Sharing—using a Lessons Learned Program

Baker Panel's Over All Theme

Personal Safety vs. Process Safety

Personal Safety:

Slips, Trips, Falls

Fix the Worker

Behavior Based Safety

Process Safety:


Fires, Explosions

Fix the Workplace

Systems Based Safety



SYSTEMS OF SAFETY ANALYSIS

Safety Systems		Design & Engineering	Maintenance & Inspection	Mitigation & Warning Devices	Training and Procedures	Personal Protective Factors
Level of Prevention	Highest- 1 st line of defense	Middle – 2 nd line of defense				Lowest – last line of defense
Effectiveness	Most Effective					Least Effective

Examples of Safety Sub-Systems

- Technical
 - Chemical
 - Substitution
 - Safe Siting
 - Management of Change
 - Work Environment
- Organizational
 - Codes, Policy, Standards
 - MOC – Personnel
 - Work Organization & Scheduling

- Mechanical Integrity
- Parts Quality Control
- Preventive Maintenance
- Turnaround Frequency
- Vibration Monitoring
- Inspection & Testing

- Relief Valves
- Diking and Drainage
- Monitors
- Process Alarms
- Fire Suppression Devices
- Check Valves
- Shut-down Devices
- Facility Alarms

- Operating Manuals
- Permit Programs
- ER Planning and Training
- Refresher Training
- Process Safety Info.
- Operating Procedures
- Communications

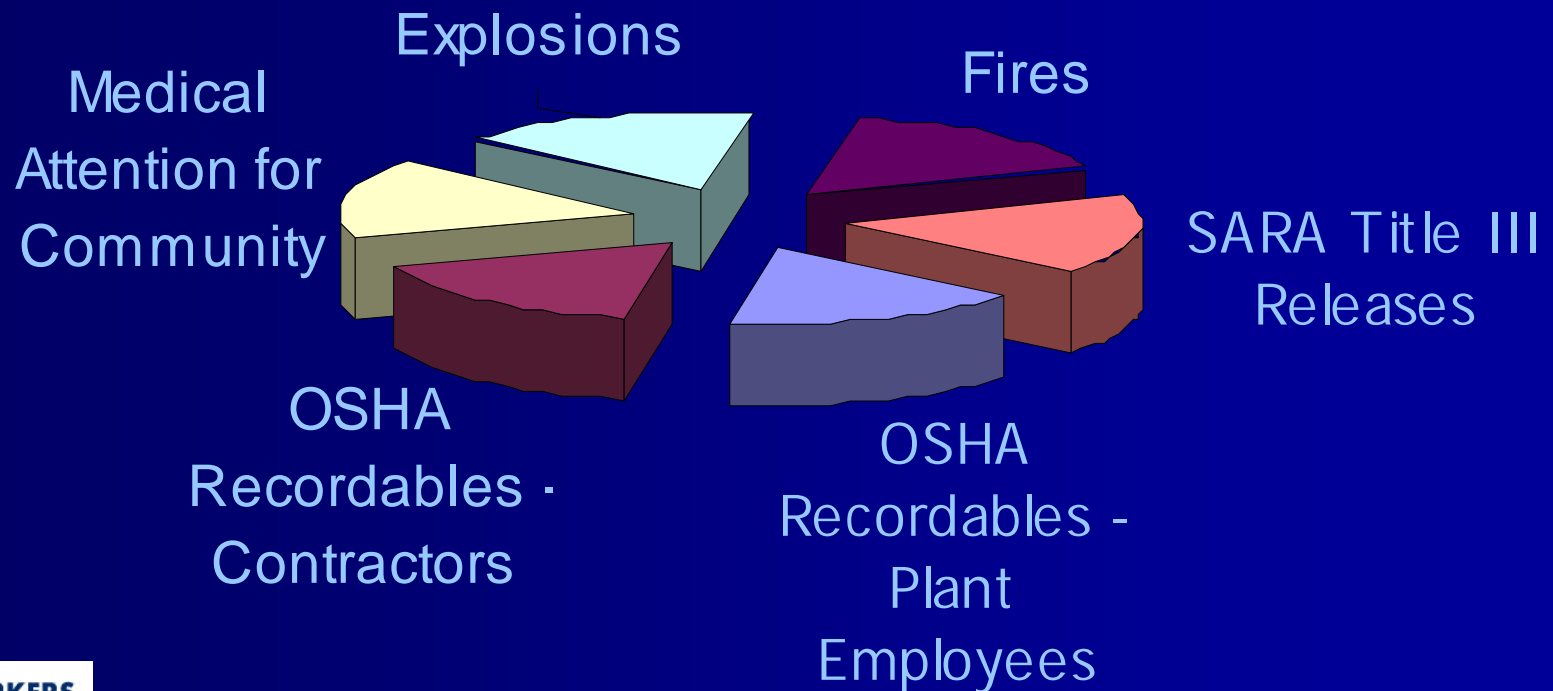
Personal Decision-making and Actions

Personal Protective Equipment (PPE)

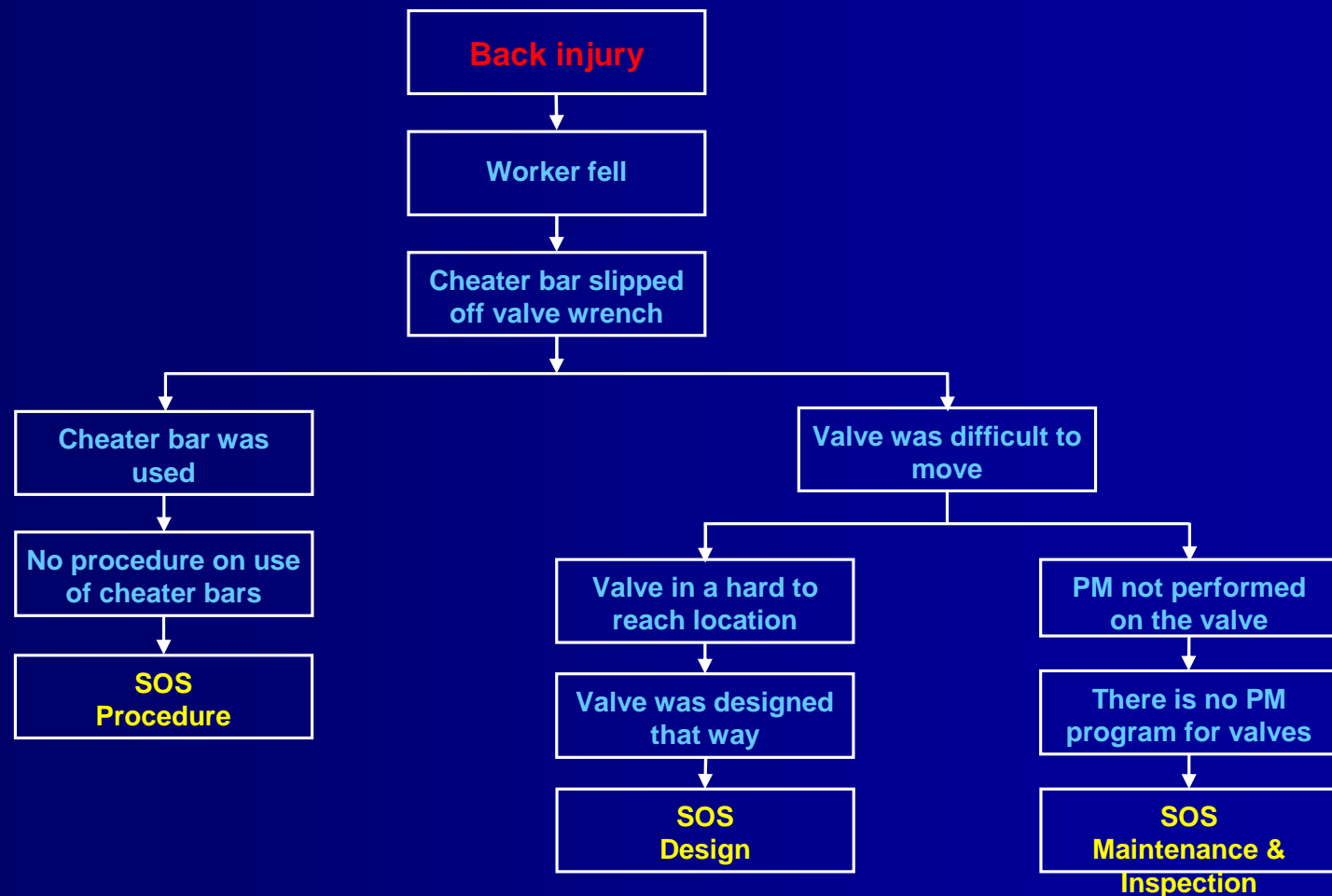
Stop Work Authority



USW TOP - A BROADER MEASURE OF SAFETY



LOGIC TREE DIAGRAMMING



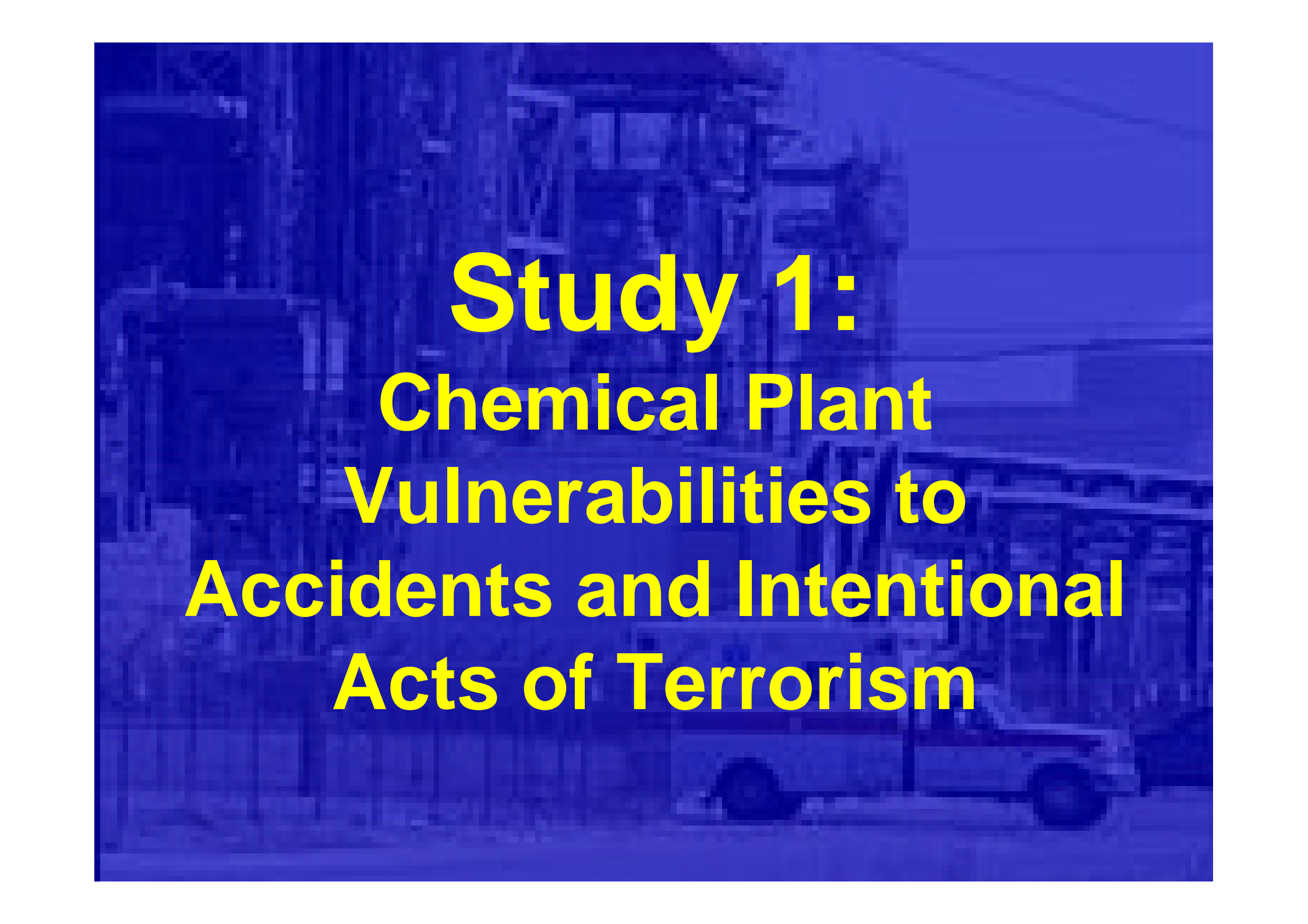
HSE Department Projects –

Worker Health Protection Program

Partnership of USW and Queens College, City University of New York

- Landmark medical screening program that has screened 15,000 people in Ohio, Tennessee, Kentucky, and Idaho.
- Largest occupational health screening program in the United States.
- Uses CT scanning, to detect early lung cancer.
- Screened 6,200 workers with more than 16,000 scans between 2000 and 2006.
- Detected 45 lung cancers, 80% early stage lung cancer.





Study 1: Chemical Plant Vulnerabilities to Accidents and Intentional Acts of Terrorism

Prevention Lacking

- Company actions most frequently focused on security (Guards-Gates-Guns)
 - Improved systems to guard and secure the plant (73%)
- And least frequently on inherently safer approaches
 - Reduced volumes of hazardous substances (17%)
 - Improved siting of hazardous substances or processes (14%)
- Less than half indicated that their companies' preventative actions were effective (44%)

Preparedness and Involvement Lacking

- 38% indicated that their company's actions *in preparing to respond* to an event caused by a terrorist attack were effective
- Low level of involvement of key stakeholders -- including workers, local unions, and the surrounding communities

USW Recommendations

1. Specify detailed requirements for chemical site **assessment and security**.
2. Mandate **audit inspections** supported by **significant penalties**.

USW Recommendations (Cont'd)

3. Require progress toward achieving **inherently safer processes** including minimizing storage of highly hazardous chemicals.
4. Examine and require additional **effective actions in prevention, emergency preparedness, response and remediation.**

USW Recommendations (Cont'd)

5. Mandate and fund the upgrading of emergency communication systems.
6. Involve workers and community members in plan creation and equip and prepare them to prevent and respond effectively to an incident.

Study 2: Beyond Texas City

**The State of Process Safety
in the Unionized U.S.
Oil Refining Industry**

www.beyondtexascity.com

Highly Hazardous Conditions, Near Misses, Incidents Abound

- 90% reported the presence of at least one of the targeted *conditions*
- 61% reported at least one incident or near-miss involving targeted *conditions*
- Numerous descriptions of types of process failures

CSB Report on BP Texas City

Unfortunately, the weaknesses in design, equipment, programs, and safety investment that were identified in Texas City are not unique either to that refinery or to BP."

CSB Chairwoman Carolyn Merritt



Conclusions

- Critical process safety deficiencies are widespread - mirror those found at Texas City
- Widely ignored lessons from incidents prior to and including Texas City
- Following Texas City, a majority of refineries with *highly hazardous conditions* took no action or took actions judged less than very effective

USW Calls for Action

1. Establish process safety teams
2. Improve process hazard analyses
3. Eliminate targeted highly hazardous conditions
4. Require full safety reviews for all process start-ups and shutdowns
5. Ensure adequate staffing

Planned Use of Study Results to Leverage Change

- Develop manuscript for publication in peer-reviewed journal
- Disseminate study report to:
 - All USW refinery locals and refinery coordinated bargaining councils
 - The press, government agencies, key leaders on Capitol Hill

Planned Use (**cont'd**)

- Promote implementation of recommendations in contract bargaining
- Advocate for improvements in OSHA regulations and enforcement



UNITED STEELWORKERS



UNITY AND STRENGTH FOR WORKERS

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