



# Creating a Process to Learn from Disasters

Jack HARRALD, Virginia Tech

Liesel RITCHIE, University of Colorado

Greg SHAW, George Washington  
University

# Steps in Organizational Learning From Rare Events

- EVENT OCCURS
- Problem or Failure observed during response
- Problem identified, verified, and documented
- Causes of problems determined
- Key organizations and individuals informed of problems and issues
- Solutions proposed (Policy, process, standards, methods, etc)
- Solutions implemented
- NEW EVENT OCCURS:

WERE LESSONS LEARNED?



# POSSIBLE OUTCOMES

- Problems not correctly identified and verified---learning does not occur
- Causes not correctly determined—wrong lessons learned
- Organizations and individuals with ability to solve problems not informed---learning does not occur
- Solutions implemented but fail—unsuccessful learning
- Solutions implemented succeed---successful organizational learning

# Processes Needed to Accomplish Organizational Learning from Disasters

- Process for identifying and verifying problems and issues
- Process for analyzing problems, determining causes
- Process for retaining, transmitting, accessing information describing problems and causes
- Process for identifying solutions
- Process for testing and evaluating solutions

# U.S. Has does not have a standard process for documenting lessons learned

1989 Exxon Valdez Spill: USCG Federal On Scene Coordinator's report, State of Alaska Oil Spill Commission Report *Spill: the Wreck of the Exxon Valdez*

1992 Hurricane Andrew: FEMA funded National Academy of Public Administration Report *Coping with Catastrophe*, GAO Report

1996 TWA 800: National Transportation Safety Board Aircraft Accident Report

# Examples (Continued)

2001 9/11 Attacks: Reviews by Arlington County and New York City (McKinsey Report), *Report of National Commission on Terrorist Attacks on the United States*

2005 Hurricane Katrina: Senate Report *Hurricane Katrina, a Nation Still Unprepared*, House Report *A Failure of Initiative*, DHS Performance Review, White House Report *The Federal Response to Hurricane Katrina*

2010 BP/Deepwater Horizon: *Report of National Commission on BP Deepwater Oil Spill and Offshore drilling*, Federal On Scene Coordinators Report, Coast Guard Incident Specific Performance Review (ISPR)

# 2011 National Research Council Managing Extreme Events Workshop Recommendations

“ Create a National Disaster Review board (NDRB) that should include private-public-academic sector representation; post-event forensic analysis with mission of prevention, reduction in losses, costs, and impacts; data collection; full costing of events; open source information sharing and provision; and development of recommendations to reduce losses, costs and impacts over time.”

“Build a central entity that can warehouse and make accessible data and research information; enable cross disciplinary, multi-sector research for extreme events”