



Conference of Radiation Control Program Directors

Fukushima Disaster Response: The States' Perspective in the United State and Future Activities from Lessons Learned

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A Partnership Dedicated to Radiation Protection



What Happened?

- U.S. Public Response to the Fukushima Daiichi accident was nearly immediate
 - Public Demanded Answers
 - Use of Potassium Iodide
 - Radiological Data
 - Effects on Water
 - Health Implications
 - Contamination
 - Travel



What Didn't Happen?

- Activation of the National Response Framework
- Identification of a Lead Coordinating Agency
- Prompt Communication
- Interagency Coordination
- Data Sharing
- Collaboration for Prompt, Effective Public Messaging



Command and Coordination

- International Events not addressed under National Response Framework
- Well established communications network and protocols were not used
- No coordinated structured federal response or interagency coordination



Communication Workarounds

- U.S. Centers for Disease Control and Prevention
 - First Federal agency to be proactive in sharing information
- U.S. Nuclear Regulatory Commission
 - Established regular conference calls through the State Liaison Officers program
- U.S. Department of Health & Human Services, Assistant Secretary of Preparedness & Response (HHS/ASPR)
 - All communication folded into these calls and was the primary source of information for state programs



Data Sharing

- U.S. Department of Energy
 - Shutdown access to plume modeling
 - Prevented from sharing radiological data
- U.S. Environmental Protection Agency
 - Released Environmental Sample Results without prior notification to affected States.
- Laboratory methods and protocols modified
 - National Labs modify analysis protocols to seek real numbers
 - State labs use different collection methods and analysis protocols
- Difficult to compare all the data collected



Intervention Levels

- Milk
 - FDA Derived Intervention Level (DIL) of 4,770 pCi/L
- Drinking Water
 - EPA's Maximum Contaminant Level (MCL) of 3 pCi/L
- Proved to be challenging to develop public information clearly explaining apparent disconnect between these two values



Data Management

- No single repository for all environmental data
 - “Big Picture” data products could not be developed
- No method in place to share radiological data efficiently and effectively among agencies that were collecting and reporting environmental sample results
- No clear policy in place on what data may be shared and how it may be used by outside organizations
 - Resulted in a reluctance to share data
 - Resulted in varying public information messages constructed to the data collected
 - Created confusion and conflict in public messaging and reporting



Public Information

- Lack of Coordination among government agencies resulted in delayed responses to media inquiries
- Media found alternate sources of “subject matter experts”
 - Referred to EPA Drinking Water Standards as a “safe limit”
- Confusion among American Citizens living in Japan when U.S. NRC recommended evacuation to 50 miles
 - Contrary to U.S. guidance for nuclear power plant responses



Public Information

- U.S. Surgeon General Press Interview
 - Prudent to purchase KI as a preparedness precaution
 - Caused widespread fear and panic
 - Unintentionally caused a significant demand for KI in the U.S. and abroad
- U.S. lacked a clear and consistent message to its citizens because public information and messaging was not coordinated in a collaborative manner



Contamination Passenger Screening

- U.S. Customs and Border Protection
 - Inquiries from States regarding screening methods and threshold values
 - Not provided based on “national security”
 - Contaminated Passengers and Cargo were allowed entry initially
- U.S. CDC intervened
 - Collaborative effort between CBP, CDC and state radiation control program
 - Developed an ad hoc passenger screening protocol
 - Follow-up became a state by state issue to be addressed



Opportunities for Improvement

- CRCPD Data Sharing Initiative
- Development of public-private partnerships
 - National Alliance for Radiation Readiness
- Passenger Screening
- Laboratory Sample Prioritization



Data Sharing

Why is this so important?

- Decision making depends on assessment of radiation data
- Scientists love data, the more the better (almost)
- Lack of data leads to inaction

What is the Goal?

- Rapid assessment of environmental impact (more data)
- Rapid verification of predictive models (better data)
- Rapid Development of data products (faster data)



CRCPD

Data Sharing Task Force

- Pilot Project to share real time fixed point data from NJ to DOE RadResponder database using the EPA's Exchange Network is successful
- CRCPD creates the E-43 Task Force to address Policy Issues and data requirements
- E-43 Task force develops pilot project to test data sharing through RadResponder in 5 other states
- Moving toward a national repository of data shared among users with pre-defined policies on distribution and use



Public-Private Partnerships

- National Alliance for Radiation Readiness (NARR)
 - The NARR serves as the collective “voice of health” in radiological preparedness by:
 - Participating in national dialogues on radiological emergency issues
 - Providing thoughtful feedback on documents, policies, and guidelines
 - Convening partners to raise awareness of and resolve radiological emergency issues



Public-Private Partnerships

- November 2011
 - NARR hosts a national level meeting with over 65 participants representing more than 25 different agencies and organizations
 - The focus of the meeting was to review the U.S. public health and medical response to domestic concerns arising from the 2011 incident at the Japanese Fukushima Daiichi nuclear power plant
 - “Fukushima Nuclear Reactor Radiation Crisis: A National Review of the U.S. Domestic Public Health and Medical Response”, (May 2012)
 - Key observations
 - Discussions
 - Recommendations



Passenger Screening Exercise

- April 17, 2013
 - “Tabletop Exercise: Passenger Screening During a Radiological Event” in Seattle, Washington
 - Federal, State and Local Participants
 - Goal 1
 - Identify key activities associated with passenger screening at an airport
 - Goal 2
 - Validate and identify opportunities for improving the passenger screening protocols



Passenger Screening Exercise

- Strengths
 - Knowledge regarding roles responsibilities and capabilities
 - Clear understanding of the issues
 - Willingness to collaborate and adapt to situational changes
 - Flexibility and excellent problem solving skills



Passenger Screening Exercise

- Areas for Improvement
 - Bioassay—when needed and process for collection
 - Passenger Screening Protocols
 - Specific to Fukushima Event
 - Need to develop generic radiological incident criteria
 - Clear Consistent Public Messaging is Critical
 - Pre-scripted messages
- NARR Working Group in process of developing protocol to address these issues



Laboratory Sample Prioritization

- Key Concerns
 - Federal and State Laboratories would be quickly overwhelmed for a large scale event within the U.S.
 - Prompt and effective decision making requires data
 - A unified approach to sample prioritization across laboratories is necessary to provide the right data for making decisions
 - Develop generic guidance for sample prioritization
 - Leverage the Integrated Consortium of Laboratory Networks



Moving Forward

- CRCPD committed to remain engaged as a partner to:
 - Systematically address key areas for improvement based on Lessons Learned from the Fukushima accident;
 - Explore new avenues and partnerships to address outstanding gaps in national level response to a large scale radiological incident; and
 - Promote collaborative efforts between state and federal government to strengthen national level response and coordination of resources