ASTHO’s Radiation Partnership Portfolio Update

HEATHER MISNER, MPP
DIRECTOR, PREPAREDNESS AND CLINICAL OUTREACH
ASSOCIATION OF STATE AND TERRITORIAL HEALTH OFFICIALS
NARR Overview
National Alliance for Radiation Readiness (NARR)

A coalition of organizations committed to improving the nation’s ability to prepare, respond, and recover from radiological emergencies at the local, state, and national levels.

- 18 Member Agencies
- 10 Federal Partners
- Administered by the ASTHO through a cooperative agreement with the CDC, National Center for Environmental Health, Radiation Studies Branch
NARR Membership

American Association of Poison Control Centers (AAPCC)
American Hospital Association (AHA)
American Medical Association (AMA)
American Public Health Association (APHA)
Association of Public Health Laboratories (APHL)
Association of Schools of Public Health (ASPH)
Association of State and Territorial Health Officials (ASTHO)
Conference of Radiation Control Program Directors (CRCPD)
Council of State and Territorial Epidemiologists (CSTE)
Health Physics Society (HPS)

International Association of Emergency Managers (IAEM)
National Association of County and City Health Officials (NACCHO)
National Association of State EMS Officials (NASEMSO)
National Disaster Life Support Foundation (NDSLF)
National Emergency Management Association (NEMA)
National Public Health Information Coalition (NPHIC)
Radiation Injury Treatment Network (RITN)
Society for Disaster Medicine and Public Health (SDMPH)
Federal Partner Agencies

- Centers for Disease Control and Prevention (CDC)
- Office of the Assistant Secretary for Preparedness and Response/US Department of Health and Human Services (ASPR/HHS)
- US Department of Homeland Security (DHS)
- Environmental Protection Agency (EPA)
- US Department of Energy (DOE)
- US Department of Agriculture (USDA)
- Food and Drug Administration (FDA)
- US Nuclear Regulatory Commission (NRC)
- Federal Emergency Management Agency (FEMA)
Purpose

To serve as the collective “voice of health” in radiological preparedness through the:

- Participation in national dialogue
- Provision of thoughtful feedback on policies and guidelines
- Convening of partners to raise awareness and resolve emergency issues

To build radiological emergency preparedness, response and recovery capacity and capabilities
NARR Clearinghouse

www.radiationready.org

Forum for sharing resources, tools, and best practices related to radiation planning, response, recovery
Featured

Guidance on Making Changes to Emergency Plans for Nuclear Power Reactors
The U.S. Nuclear Regulatory Commission (NRC) is issuing Revision 1 to Regulatory Guide (RG) 1.219, "Guidance on Making Changes to Emergency Plans for Nuclear Power Reactors." This guidance has been updated to clarify how the guidance applies to emergency plan changes at facilities that have certified permanent cessation of operations.

Prioritization of Laboratory Samples following a Radiological Event: Considerations
After a radiological event, many questions may need to be answered to help health officials mitigate a public health crisis, such as: Where did the fallout spread? Did it impact crops, livestock, or water supplies? Who was exposed, to what, and how much? ...

Fukushima Nuclear Reactor Radiation Crisis: A National Review of the U.S. Domestic Public Health and Medical Response
In mid-November 2011, the National Alliance for Radiation Readiness (NARR) led a review of the U.S. public health and medical response to domestic concerns arising from the 2011 incident at the Japanese Fukushima Daiichi nuclear power plant. Highlights of the group's discussions included the following key observations ...
Interactive Webinars

• Poison Control Center Collaborations with Public Health
• Communicating with the Public in a Radiation Disaster
• NYS Clinical Data Management System: Use for Medical Countermeasure Response and Population Management
• Radiological Emergency Preparedness and Hostile Action Based Exercises: Federal, State, and Local Perspectives
Fukushima After Action Report
Fukushima After Action Report

Review of the US public health and medical response to domestic concerns arising from the 2010 incident at the Japanese Fukushima Daiichi nuclear power plant

AAR identifies:

- **Key strengths**
  - Background environmental data included nuclear power plants
  - HHS Regions IX and X immediately convened calls that included federal, state, local, and tribal representatives
  - Collaborative development of passenger screening guidelines

- **Shortcomings**

- **Lessons learned**

- **Opportunities for improvement**
Traveler Screening Guidance
Passenger Screening Tabletop Exercise

Purpose

◦ Identify key activities associated with passenger screening at an airport following an radiological exposure in another country
◦ Validate and identify opportunities for improvement in the passenger screening protocols developed following the Fukushima Daiichi incident of 2011.

Goal

◦ Enhance preparedness of federal, state, and local responders responsible for coordinating and conducting passenger screening at US airports following a radiological release
Tabletop Exercise Objectives

• Understand and/or identify state and local response requirements
• Clarify response roles and communication channels
• How the Epidemiological Assessment form can inform next steps
• Identify key topics for public information releases
• Identify information to distribute to passengers and those potentially exposed at the airport
Exercise Strengths

• Partnership - numerous response agencies that worked well together

• Knowledge - clear understanding of the issues surrounding radiation emergencies

• Open Dialogue - existed between federal, state, and local responding agencies
Traveler Screening Guidance Workgroups

Formation of 4 work groups
- Communications
- Screening and Epidemiological Assessment
- Bioassay Guidance
- Emergency Management Role

Participants included NARR members, DPHP, State epidemiologists, Laboratory personnel, and Public information officers
Traveler Screening Guidance

- Present an introduction to screening travelers arriving at U.S. ports of entry (POE) who may be contaminated with or exposed to radioactive material following an international radiological incident

- Be used by state, local, and tribal public health professionals as part of their existing jurisdictional emergency operations plans and procedures during traveler screening activities

- Provide information that is intended to bolster, not replace existing plans
Traveler Screening Guidance

Divided into sections that “walk” the planner/responder through the traveler screening process beginning with consent and registration and ending with the (optional) development of a long-term registry.
Purpose of TS Guidance

Provide state, local and tribal planners with guidance on how to:

• Screen, decontaminate, or provide medical follow-up and long-term health follow-up for travelers, staff at U.S. international POE, and others with contamination or exposure.

• Communicate information and risk effectively with travelers, who may need:
  • Urgent medical referral
  • Decontamination, or
  • Reassurance that they are not contaminated or exposed

• Collect and use contamination, exposure, and epidemiologic data to provide situational awareness and to determine post-incident public health impacts of the radiologic incident.
Planning Assumptions

• International radiological incident results in potentially exposed and/or contaminated travelers arriving at U.S. international POE.

• Radiological incident - known situation, not a covert attack.

• Arriving travelers may or may not have been screened for radiological exposure and/or contamination prior to departing where the incident occurred.

• Response is scalable to the size of the incident. May be a need to screen a large number of people, even though only a small percentage may be found to be exposed and/or contaminated.
Planning Assumptions

• Traveler screening occurs once travelers have been cleared by customs and immigration.

• If decontamination is deemed necessary, external decontamination will be performed at the POE.

• Local and state government will be responsible for conducting traveler screening and management.

• CDC Quarantine Stations located at some international airports will assist in the traveler screening and management process.

• Federal aid and resources may not be available immediately.
Appendices Included

- Planning and Response Stakeholder Organizations
- Consent/Adolescent Assent/Parent Permission Form
- Traveler Screening Tracking and Epidemiologic Assessment Data Collection Form
Appendices Included

- Radiation Injury Treatment Network Centers
- Communication Templates
- Guidance Development
- Workgroup Members
- Resources
Next Steps

• Editorial review at ASTHO

• Layout and design

• Guidance will be posted online at www.radiationready.org
RITN Radiation Awareness Project

• Joint project completed October 2016
• Surveyed over 200 preparedness, radiation control, and emergency management professionals
• Research questions:
  ◦ To what extent are preparedness coordinators across the country are involved in preparedness planning activities for potential radiation emergencies?
  ◦ What capabilities do public health preparedness coordinators possess nationally with respect to radiation preparedness?
  ◦ What level of awareness and interaction do state and local public health preparedness coordinators have with RITN and NDMS?
The Radiation Injury Treatment Network (RITN) is a group of voluntary hospitals focused on preparing to respond to a large scale radiological incident that results in casualties with acute radiation syndrome, that occurs distant to their location.

RITN comprises of medical centers with expertise in the management of bone marrow failure, stem cell donor centers and umbilical cord blood banks across the US.

**RITN is preparing to...**

- Accept casualties from a distant incident
- Provide supportive care for casualties with marrow toxic injuries
- Provide treatment expertise to practitioners caring for casualties at other locations
- Collect data on casualties treated at their treatment facility
- Facilitate marrow transplantation for the small percentage of casualties who require hematopoietic stem cell transplantation
Project Objectives

To address areas for improvement in radiation emergency preparedness at state and local health departments across the United States by:

- Increasing the understanding of the preparedness coordinators’ awareness of radiation emergency concerns nationally;
- Enhancing the understanding of the radiation emergency response capabilities of preparedness coordinators and available planning activities;
- Expanding the level of awareness and interaction of preparedness coordinators with the RITN and NDMS.
Survey Responses

NACCHO Survey Participation by State

ASTHO Survey Participation by State
Awareness of Medical Evacuation

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<tr>
<th>KNOWLEDGE LEVEL</th>
<th>PERCENTAGE OF PARTICIPANTS</th>
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<tbody>
<tr>
<td>Not at all knowledgeable</td>
<td>7%</td>
</tr>
<tr>
<td>Not very knowledgeable</td>
<td>20.7%</td>
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<tr>
<td>Somewhat knowledgeable</td>
<td>65.5%</td>
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<tr>
<td>Very knowledgeable</td>
<td>12.1%</td>
</tr>
</tbody>
</table>
Types of Radiation Plans

- Sheltering of evacuees: 72.2%
- Community reception centers: 66.7%
- Medical countermeasure distribution: 64.8%
- Ingestion pathway: 63.0%
- Messaging templates: 57.4%
- Separate screening/decon from reception center: 42.6%
- Medical evacuation outside jurisdiction: 35.2%
- Animal/pet decontamination: 33.3%
- RITN coordination: 24.1%
- Other: 9.3%
- None: 3.3%
- Don't know: 20.0%

Percentage of jurisdictions

Map showing RITN Coordination Plan in Place.
Training Completed in Last 24 Months

- Community Reception Centers: 60.0%
- Sheltering of Evacuees: 53.3%
- Ingestion Pathway: 36.7%
- Medical Countermeasure Distribution: 33.3%
- Other: 23.3%
- Animal/Pet Decontamination: 20.0%
- Radiation Injury Treatment Network (RITN): 6.7%
- None: 3.3%
- Don't know: 13.3%
Familiarity with RITN
For the current list of RITN centers, please see the RITN website at www.ritn.net/about
Participation in RITN Exercise
Overall Radiation Preparedness Awareness
Findings and Recommendations

• Survey findings highlight gaps in radiation planning and spotty awareness even within the same health department

• Major challenges include funding, resources, information flow, and time

• Proximity to nuclear facility affects priority ranking
Thank you!

HMISNER@ASTHO.ORG