The National Alliance for Radiation Readiness: Leveraging Partnerships to Increase Preparedness

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Objectives

- To present the purpose and resources available through the NARR
- Overview of the major projects completed by the NARR
- Awareness of the development of an Anti-neutropenic distribution framework
Agenda

- NARR Overview
- Fukushima After Action Report
- Laboratory Prioritization
- Traveler Screening Guidance
- Anti-Neutropenics Distribution Framework
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 Member Agencies

- 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)
NARR Member Agencies (cont.)

- 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
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)
NARR Purpose

- To serve as the collective “voice of health” in radiological preparedness through the:
  - Participation in national dialogues
  - 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

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 ...

Partnership Strategies for State Radiation Control and Public Health Preparedness Programs
Partnerships between radiation control programs and public health preparedness programs can increase the overall preparedness of a state ...

News

International Atomic Energy Agency Fukushima Nuclear Accident Updates
June 2015

Japan to raise worker emergency radiation exposure limits
May 2015

New research leads to FDA approval of first drug to treat radiation sickness
May 2015

Exercise Documentation »
Federal Guidance »
Planning Templates »
State and Local Response Plans »
Webinars and Training »
View all tools »

Upcoming Events
Radiation Injury Treatment Network (RITN) 2015 Conference
Jul 14 - 15, 2015
View all events »

Most Viewed
Improvised Nuclear Device Response and Recovery: Communicating in the Aftermath
Medical Interventions after Radiation Exposure
Federal Radiological Monitoring and Assessment Center (FRMAC)

Item type: Federal Guidance
Source: National Nuclear Security Administration
Date posted: 16 June 2015
For coordinating federal radiological monitoring and assessment efforts in support of state, tribal, and local governments. The Federal Radiological Monitoring and Assessment Center (FRMAC) is a federal asset available on request by the Department of Homeland Security and state and local... Read More »

NNSA’s Aerial Measuring System

Item type: Federal Guidance
Source: National Nuclear Security Administration
Date posted: 16 June 2015
Environmental monitoring using aerial radiological monitoring platforms NNSA’s Aerial Measuring System (AMS) provides specialized airborne radiation detection systems to provide real-time measurements of low levels of air and ground contamination. Read More »

CDC Collection & Shipping Protocols for Specimens after a Radiological/Nuclear Incident

Item type: Federal Guidance
Source: Centers for Disease Control and Prevention
Date posted: 21 May 2014
The Centers for Disease Control and Prevention developed protocols for the collection and shipping of specimens after a radiological/nuclear incident. State radiation control directors are instructed to send these specimens to the state public health lab for packaging and shipping. Read More »

Radiation Issues in Children: Knowledge Check & Primer

Item type: Webinars and Training
Source: National Center for Disaster Medicine and Public Health
Date posted: 20 May 2014
The National Center for Disaster Medicine and Public Health (NCDMPH) offers a knowledge check and two complementary accredited online lessons for health care providers on Radiation Issues in Children Read More »
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
  - Shortcomings
  - Lessons learned
  - Opportunities for improvement
Key Recommendations

- Need for stronger, more visible federal leadership
  - NRF and NIMS
  - Lead agency designation
  - Improved data sharing
- More proactive, timely public information and education
- Leverage public and private resources for a more robust “whole of community” response
  - Situational awareness
- Invest in the public health enterprise
  - Bolster capacity of the nation’s LRN for rapid and accurate detection of radiological contaminants
Laboratory Prioritization
Development of the Laboratory Taskforce

- Volunteers from NARR members and federal partner agencies:
  - CDC, Radiation Studies Branch
  - CDC, Health Studies Branch
  - CDC, Inorganic and Radiation Analytical Toxicology Branch
  - EPA
  - APHL
  - ASTHO
Overview of some considerations that decision makers may include in the prioritization of laboratory samples following a radiological event including:

- Sample load projections (clinical, food & agricultural, environmental)
- Sample management and handling
- Triage and Screening
- Quality assurance
- Data sharing
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
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
**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
Areas for Improvement

- Bioassays—need to develop clear guidance for how bioassays would be triggered, who would collect them, where would they be sent, and how would the results be communicated
- Screening Guidance—Fukushima protocols are not generalizable to any radiation response incident. Need to develop more detailed guidance
- Communication/Public Information Materials—Need to develop templates and fact sheets
NARR Work Groups

- 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
Guidance for Traveler Screening at Ports of Entry Following an International Radiological Incident

- An introduction to screening travelers arriving at U.S. ports of entry who may be contaminated with radioactive material.
- It is intended to be used by public health professionals who are responsible for the traveler screening.
- Divided into sections that “walk” the planner/responder through the traveler screening process beginning with consent and ending with development of a long term registry.
- Specific key communication messages for travelers are presented throughout the document.
The purpose is to provide state and local planners with guidance on how to:

- Screen, decontaminate, and provide medical follow-up and long-term health follow-up for travelers, staff at POEs, and others with contamination
- Communicate information and risk effectively with travelers, who need:
  - Urgent medical referral or;
  - Decontamination or;
  - Reassurance that they are not contaminated
- Collect and use exposure and epidemiologic data to provide situational awareness and to determine post-incident public health impacts of the radiologic incident.
Anti-Neutropenics Distribution Framework
The jurisdiction will communicate and deliver anti-neutropenics (AN) effectively and efficiently, consistent with current recommendations to mitigate the effects of an Improvised Nuclear Device detonation and save lives.
The framework pertains to public health emergency response activities during the first days after an IND detonation, including the provision of an initial dose of AN to ambulatory self-presenting patients as warranted and continue until ensuring and arranging follow up with the appropriate referral. Specifically, the Scope bounds the PH role, uses a stepped or phased approach, and references Clinical Guidance once developed and released.
Framework Planning Assumptions

- Adequate medication including the initial dose to transfer and daily dose
- A compliant & affected population including an optimal patient population & tracking system in place
- Ability to distribute anti-neutropenic countermeasures within the timeframe where it will be clinically effective
- Individuals will have complete decontamination and epidemiological assessment of exposure
- Traumatic injuries will not present to the AN distribution site
- Healthcare facilities may request medication from the local or state health departments
- Jurisdiction operational plans have been activated
- Coordination between Emergency Operations Center and AN/Community Response Center on current radiological conditions
Framework Rationale

- **Provides 80% Solution**—e.g., 80% of the steps of the AN distribution process identified; jurisdiction and resource dependent

- **Clarifies Public Health & Medical Care Roles**—e.g., Public Health determines screening and eligibility; initial dose of AN; & transfer to appropriate medical home for follow up

- **Scopes Process from Reception to Transfer**—e.g., Complex medical problem; unique role of AN distribution begins; & public health role at AN distribution ends at follow up to appropriate medical referral
Key Elements in Developing the Framework

- **Criteria-Based**
  - Non-medical, defensible, principles are clear, and understandable

- **Context-Informed**
  - Operating environment can have both a positive or negative impact on response
    - Resources
    - Communication
    - Size/Effect of the detonation
    - Planning/Training that has occurred
    - Public Response

- **Scenario-Driven**
  - Developed assuming a Best Case Scenario
  - Can be scaled to a probable or worst case scenario
Public Health Responsibilities—Identify and Resource

- Description—Identify and resource AN dose administration sites.

- Considerations—Ability to use facility, facility amenities & logistics, ability to accommodate special areas, media/communications, and staffing & training
Public Health Responsibilities—Receive & Track

- **Description**—Receive and track affected population, including triage algorithm and clinical information (**epi** assessment and medical assessment)

- **Considerations**: Guidance and information (pre-event)
Description—Triage & administer AN with immediate discharge or transfer to Radiation Injury Treatment Network (RITN) or non-RITN facility for follow-up.

Considerations:
- Triage & Administer Documentation/Tracking, Contraindications/Warnings/Observations (Patient Eligibility), Education/Just In Time Training, & Who Administers Medication
- Transfer Planning, Disposition, Capacity, Transportation, Documentation, & Reunification
Thank you!