

“Managing” Radiological Emergencies



The Hendee Brothers

Eric - Waukesha Memorial Hospital

Bill - Medical College of Wisconsin



ASTRO

“A radiation disaster is a possibility for which we must be prepared.

Radiologists, radiation oncologists and medical physicists will play a vital role as responders and as sources of accurate information for patients, the public and the medical community.”



Sources of Radiological Emergencies

- Nuclear reactor
- Stored spent fuel
- Radioactive waste facility
- Accidental dispersal of radioactivity
- Terrorist activity
 - i. Intentional contamination
 - ii. Radiological dispersal device
 - iii. Nuclear explosion



Preparing for a Radiological Emergency

Planning Resources

- REAC/TS (DOE)
- FEMA (DHS)
- CDC (DHHS)
- JCAHO
- ACR
- AAP
- Poison Control Centers
- Wisconsin DHFS



Preparing for a Radiological Emergency

Planning Approaches

- Alert
- Notification
- Verification
- Communication
- Traffic Control/Signage
- Triage Control/Prioritization
- Contamination Control
- Radiation Protection
- Public Relations
- Preventing Chaos

Responding to a Radiological Emergency

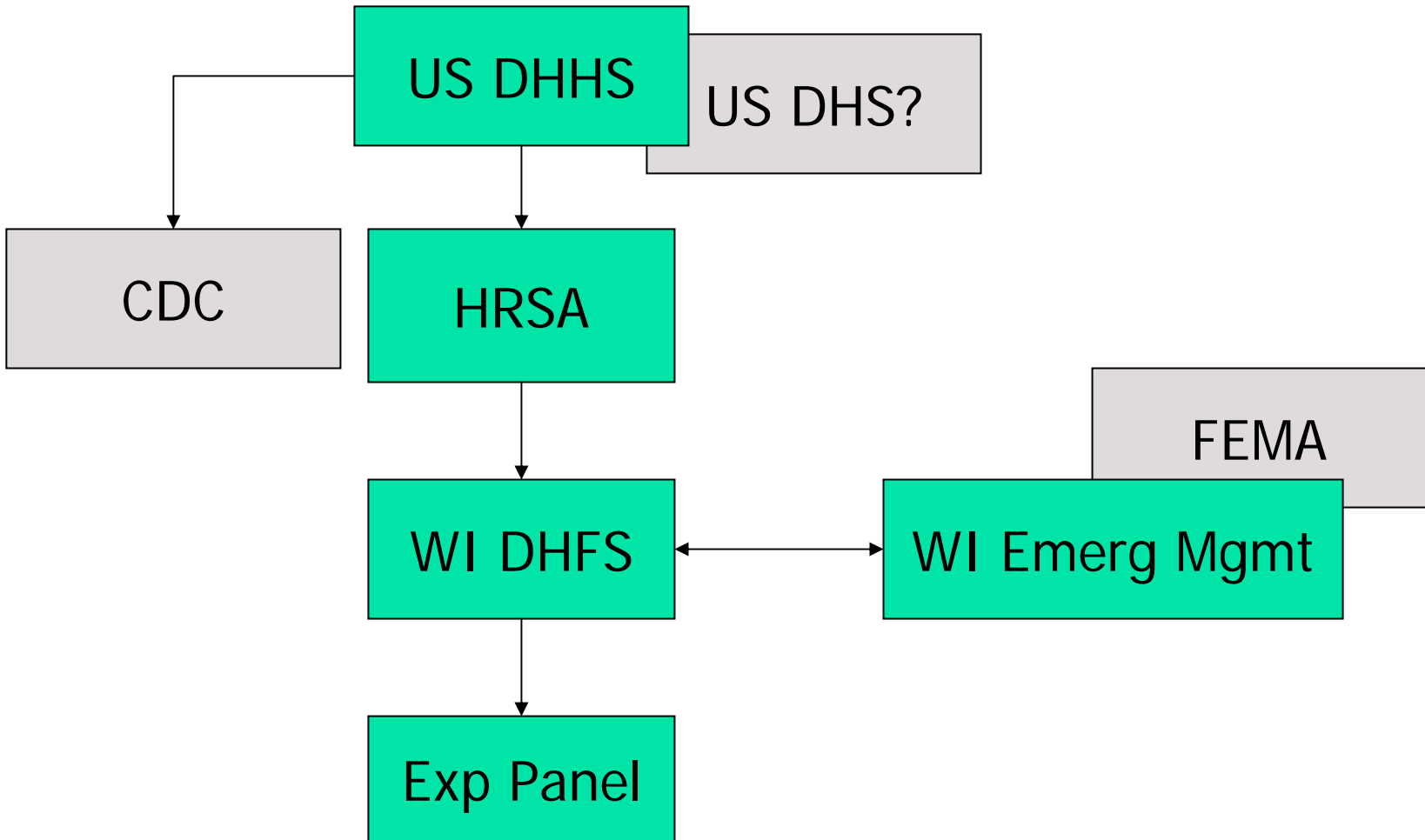


Rules

1. Prepare and Protect Staff
2. Time, Distance, Shielding, Containment
3. Triage/Prioritize Victims
4. Decontamination
5. Drill and Practice

"W"

Chain of Command



me

HRSA = Health Resources and Services Admin



Emergencies & Disasters

[▶ First Responders](#)[▶ Planning & Prevention](#)[▼ Response & Recovery](#)[▶ Maritime Search & Rescue](#)[▶ Declared Disasters & Assistance](#)[▶ Weapons of Mass Destruction](#)[▶ Grants](#)

Emergencies & Disasters

Response & Recovery

Nuclear Incident Response

We provide expert personnel and specialized equipment to a number of federal emergency response entities that deal with nuclear emergencies, nuclear accidents, and nuclear terrorism. Our emergency response personnel are experts in such fields as device assessment, device disablement, intelligence analysis, credibility assessment, and health physics. They participate in exercises and drills to hone deployment readiness and technical capabilities and to perfect coordination with other response groups.

For more information, please visit the [Nuclear Incident Response](#) section of the Lawrence Livermore National Laboratory website.

[Home](#) :: **Item Not Found**

The requested Web page does not exist on this server. The link you followed is either outdated or inaccurate.

The [Search](#) feature may help you find what you are looking for.



● Grants

- Funding Opportunities
- Be a Grant Reviewer
- Grantee Requirements & Reporting
- Performance Review

● Service Delivery

- Clinical Practice
- 340B Drug Pricing
- Provider Reimbursement
- Federal Tort Claims Act

● Health System Concerns

- Donation & Transplantation
- Rural Health
- Health Information Technology
- Bioterrorism

● Find Help

- Health Care Regardless of Your Ability to Pay
- Health Professions Scholarships, Loans & Stipends
- Vaccine Injury Compensation

● Data

- Geospatial Data Warehouse
- Health Professional Shortage Areas
- State Health Workforce Profiles
- Program Performance

● About HRSA

- Organization & Strategic Plan
- Job Opportunities
- Budget
- Legislation



HRSA

National Bioterrorism Hospital Preparedness Program (NBHPP)

Authorizing Legislation: P.L. 107-188: Section 319 of the Public Health Service Act...

Mission: to prepare hospitals ... to deliver coordinated and effective care to victims of terrorism and other public health emergencies.

Vision: to provide immediate and effective healthcare through a well-trained and equipped workforce....

Budget

FY 2005 \$491,410,000

FY 2004 \$514,944,000

FY 2003 \$514,633,000

FY 2002 \$135,000,000



WI: WEM and DHFS

DPH?

Wisconsin Emergency Management Geared toward Power Plants



Wisconsin Emergency Management

[Home](#)

[E-Sponder](#)

[EMAC Registration](#)

[Tornado/Severe Weather](#)

[What We Do](#)

[Protect Your Family](#)

[Protect Your Home](#)

[Past Emergencies](#)

[Homeland Security](#)

[Situation Reports](#)

[NIMS Information](#)

[Press Releases](#)

[Resources](#)

[What's New](#)

[Contact Us](#)

[Radiological Emergency Preparedness](#)

The Radiological Emergency Preparedness Program is responsible for developing and maintaining Wisconsin's emergency plans to a nuclear incident and exercising those response plans with affected local communities and the utilities.

The nuclear power plants located in Wisconsin are Kewaunee and Point Beach, and the Prairie Island plant is located across the Mississippi River near Red Wing, Minnesota. In addition, spent nuclear fuel rods are kept in a cooling pool at the Dairyland Power Cooperative in Genoa and at the Zion Nuclear Generating Plant located on Lake Michigan near the Wisconsin/Illinois border.

The Nuclear Regulatory Commission (NRC) requires each utility operating a nuclear power plant to demonstrate its ability, once every two years, to respond to a radiological emergency.

- [Kewaunee Power Station](#)
- [Nuclear Power Plant Emergency \(PDF\)](#)
- [Point Beach Nuclear Power Plant](#)
- [Prairie Island Nuclear Generating Plant](#)
- [Radiological Accidents \(PDF\)](#)
- [Wisconsin Nuclear Power Plant Map](#)

Enter Keyword:

Wisconsin Public Health Preparedness and Response for Bioterrorism Program

Since September 11, 2001, and the anthrax incidents that followed, public health and hospitals have been thrust to the forefront of terrorism preparedness. Great strides have been made in Wisconsin's public health preparedness efforts, and Wisconsin's public health system is more prepared now than it has ever been before. Public health is better equipped, has improved its response plans, is planning regionally as well as locally, is training staff, and has exercised the public health response plans across the state.

The 4th Annual Statewide Partners' Conference on Public Health and Hospital Emergency Preparedness, in La Crosse, WI.

September 11-12, 2006

[Conference Information](#)



•State and Local Roles in Radiological Emergency Response

Dick Matushek, La Crosse Health Dept

•Cheryl Rogers, Radiation Protection Section, DPH

•Teri Engelhart, Radiological Emergency Response Planner, WEM

•Ronald Berg, Environmental Manager, La Crosse Health Dept

•This session will discuss the various types of radiological incidents, and state resources available to assist local agencies



State Expert Panels



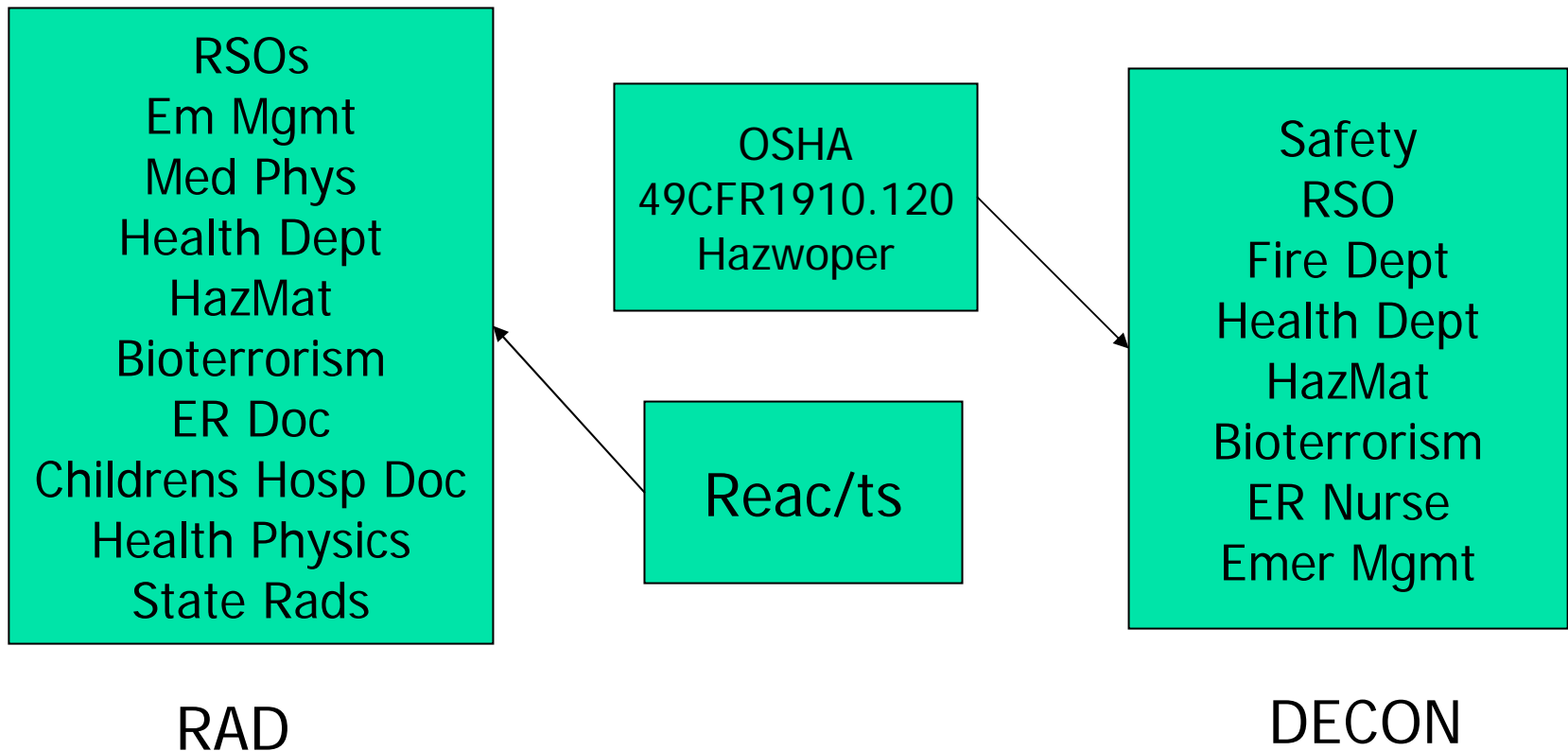
State Expert Panels

- 24 panels
- Consensus of opinions from local experts
- Consistent policies
- Voluntary participation
- HRSA funding to WI hospitals for implementation about 9M/yr

WI Hosp. Disaster Preparedness - Last Update to HRSA

- I. Regional Hazards Vulnerability Analysis (HVA)
- II. Round 3 Medical/Surgical Cots
- III. HICS IV (*Hospital Incident Command System*)
- IV. State Expert Panel on Pediatric Preparedness
- V. State Expert Panel on Evacuation of Healthcare Facilities
- VI. State Expert Panel on Radiation Emergencies
- VII. State Expert Panel on Mechanical Ventilation
- VIII. State Expert Panel on Disaster Ethics
- IX. State Expert Panel on Human Resources
- X. State Expert Panel on Materials Management
- XI. State Expert Panel on Disaster Reimbursement
- XIII. Project with Association of Professionals in Infection Control (APIC)
- XIV. Telecommunications Requests
- XV. Hospital MOU
- XVI. Community Physicians Advisory Council (CPAC)
- XVII. Evacuation Equipment
- XVIII. Security Workshop
- XIX. Real-Time Resource Reporting

Rad Emerg & Decon Panels





Decon Panel



Decon Panel Mission

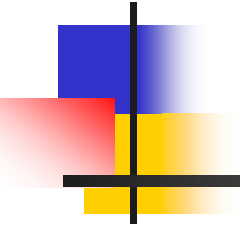
“To protect the health and safety of the people we serve in an incident involving a nuclear, biological or chemical (NBC) agents.”



HRSA Funds for Decon

- Phase One: “Decontamination Package”
- Phase Two: Decontamination Tents
- Phase Three: Subsidy for Fixed Decontamination Rooms
- Phase Four: Interim Decon Stockpile
- Phase Five: Subsidy for Training

Panel on Radiation Emergencies





Rad Emer Panel Tasks

- **Review of Template Policy for Hospitals**
- **Review of Template Policy for EMS**
- **Guidance for Physician Offices re Pt Mgmt**
- **Education and Training**
 - ***Hospitals, EMS and Physician Offices***
- **Radiation Monitoring Equipment**

[Introduction](#)

[Basics of Radiation](#)

[Detection](#)

[Measurement](#)

[Safety Around Radiation Sources](#)

[Types of Radiation Exposure](#)

Managing Radiation Emergencies

- [Guidance for Prehospital Emergency Services](#)
- Guidance for Hospital Medical Management

Managing Radiation Emergencies

Guidance for Hospital Medical Management

- [Managing Emergency Care](#)
- [Radiation Injury](#)
- [Acute Radiation Syndrome](#)
- [Internal Contamination](#)

Managing Emergency Care of Patients Contaminated with Radioactive Materials

- [Notification and Accident Verification](#)
- [The Radiological Emergency Response Team](#)
- [Goals of Contamination Control](#)
- [Techniques of Contamination Control](#)
- [If Radioactive Contamination Is Discovered After Patient Has Been Admitted](#)
- [Response Team Preparation](#)
- [Treatment Area Preparation](#)
- [Hospital Emergency Care of the Radiation Accident Patient](#)

Who you gonna call?



WISCONSIN

Department of Health and Family Services
24 Hour Emergency Hotline

RADIATION EMERGENCIES

[608] 258-0099

**When you reach the emergency hotline,
tell them you have a radiation related
emergency.**

For assistance with non-emergency radiation/radiological problems
call (608) 267-4797. If this is an emergency call (608) 258-0099.



REAC/TS HOTLINE

- MISSION:

- ⑩ 24/7 availability to deploy and provide emergency medical services anywhere in the world (within 12hrs)
- ⑩ Advice and consultation on radiation emergency medicine from its headquarters or at the scene

24/7 Emergency HotLine:

865.576.1005

Gets physician on call



Small vs Large Hospitals

SMALL

- No Nuc Med
- No Familiarity with rad spills or contamination
- No Survey Meters
- No RSO
- No Rad Onc
- Do Have Decon/Hazmat
- Radiologist On Call

LARGE

- Has Nuc Med On Call
- Radiologist Present
- Has Survey/spill equip
- Decon/HazMat
- Has RSO
- Rad Decon experience?
- May have Rad Onc (RTT on call)



Small vs Large Events

SMALL

- One or two people, enter through ER
- Allows for personal attention
- Time to think and react
- Forewarning is possible
- Patient(s) looking for doctor

LARGE

- Multiple points of entry to hospital
- Triage is difficult
- Spread of contamination likely
- Harder to focus on the job at hand
- Must get extra help immediately
- Patients looking for uniform (security)



Discussion
