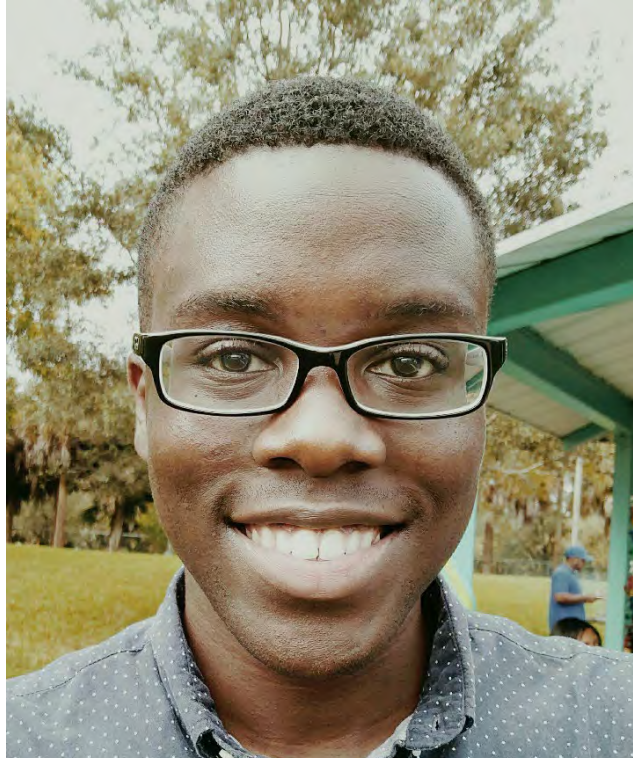

Enhancing Public Health Preparedness for Chemical and Radiation Emergencies:

A Resource Showcase from NACCHO and ASTHO

August 27, 2025

INTRODUCTIONS



Jerry Joseph
Director of Preparedness
NACCHO



Annie Evans
Director of Preparedness
ASTHO

Introductions | Centers for Disease Control and Prevention (CDC)

Jill Shugart

CAPT, U.S. Public Health
Service

Associate Director,
Coordinating Office for
Readiness, Response, and
Recovery

CDC/NCEH/OD

Alison Stargel

Environmental Health
Scientist

ATSDR/OAD/OCHHA

James Gooch

Commander, U.S. Public
Health Service

Environmental Health
Officer

CDC/NCEH/DEHSP

Lauren Finklea

Lead Health Physicist
Radiation Studies Program

CDC/NCEH

Rules of Engagement



Q&A Timing: Please hold question until the designated Q&A Session.



Chat Participation: Add comments and question in chat anytime; our team is monitoring.



Recording Notice: This session is being recorded and will be shared afterward.



Use of Reactions: Engage with reaction emojis to keep the session interactive.

Agenda

- Opening Remarks – Capt. Jill Shugart
- NACCHO | Chemical Preparedness & Radiation Program – Jerry Joseph
- Connecting Chemical and Radiation Preparedness – Alison Stargel and Cdr. James Gooch
- ASTHO | National Alliance for Radiation Readiness (NARR) – Annie Evans
- Bringing It All Together – Lauren Finklea
- Q&A
- Opportunities to Engage
- Closing Remarks – Jerry Joseph



Opening Remarks

Capt. Jill Shugart | Assoc. Director Coordinating Office for Readiness, Response, and Recovery





Chemical Preparedness

Jerry Joseph | Director of Preparedness - NACCHO



Chemical Preparedness

A Suite of Resources to Support the Entire Preparedness Cycle

- Chemical Preparedness Handbook
- ChemPrep Connect
- Discussion-based TTX (Rural | Urban)
 - Situation Manuals
 - Facilitation Slide Decks
 - Facilitation Guides
 - Exercise Evaluation Guides (EEGs)
 - After-Action Report | Improvement Plan
- Template Press Releases
 - Situational Awareness
 - Evacuation
 - Shelter-in-Place
 - Repatriation
 - Recovery/Post Incident
- Social Media Bites
- FAQs for PHEP Coordinators

Chemical Preparedness Handbook

From Planning to Recovery



Chemical Preparedness
for Local Health Department
Preparedness and Response Plans

Handbook to Support the Development of Public Health
Chemical Incident Preparedness Plans

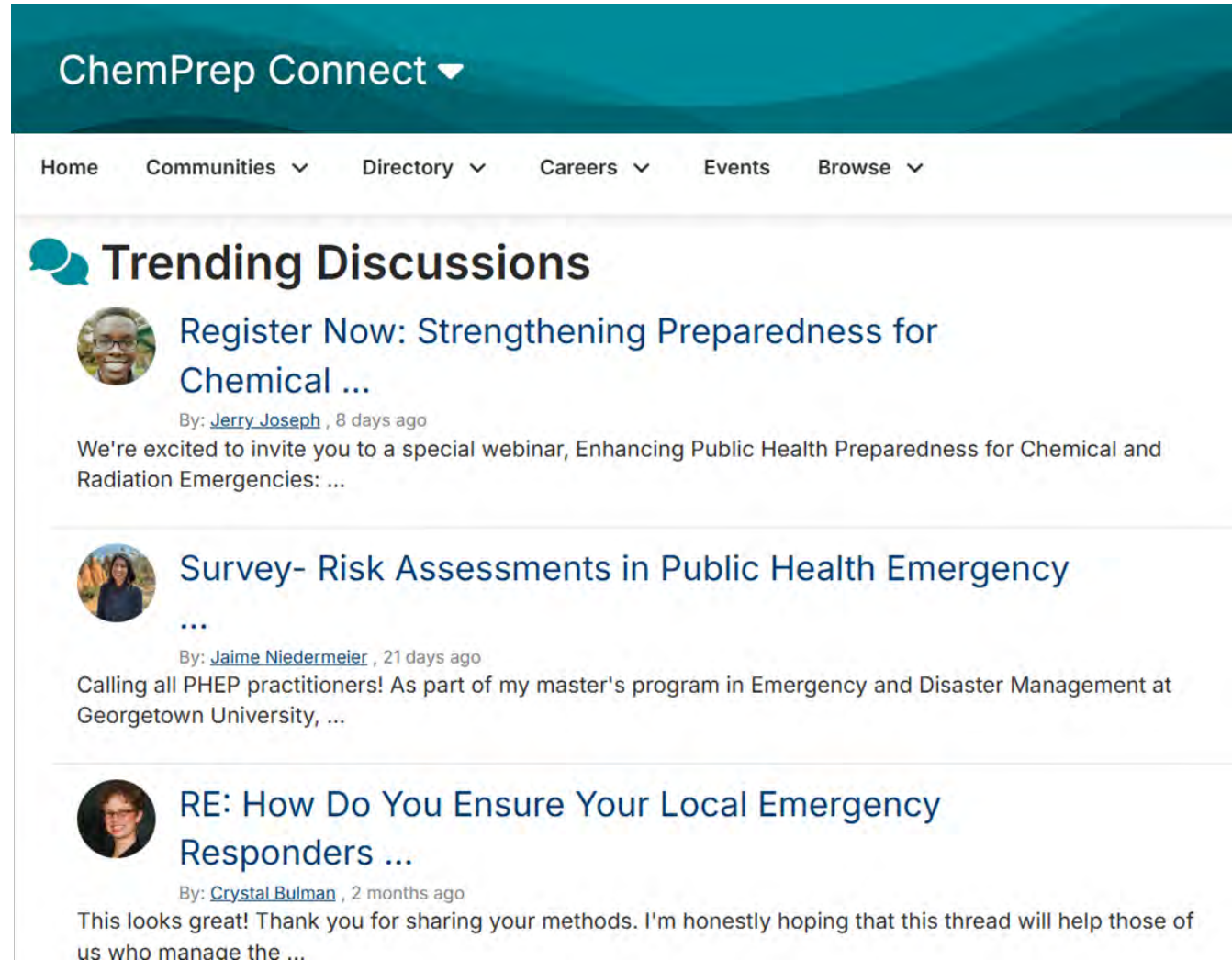


- Created with practical checklists, guidance, and strategies
- Covers the full emergency management cycle: prevention, preparedness, response, recovery
- Includes real-world examples and case studies from local health departments
- Designed to be a roadmap for developing or updating emergency operations plans

Virtual Community

Connect. Share. Learn.

- Online space for health department staff and partners focused on chemical preparedness
- Discuss challenges, exchange resources, and share promising practices
- Participate in monthly topic discussions and peer-to-peer learning
- Build connections that extend beyond a single exercise or event




The screenshot shows the ChemPrep Connect website interface. At the top is a teal header with the text "ChemPrep Connect" and a dropdown arrow. Below the header is a navigation bar with links for "Home", "Communities" (with a dropdown arrow), "Directory" (with a dropdown arrow), "Careers" (with a dropdown arrow), "Events", and "Browse" (with a dropdown arrow). The main content area is titled "Trending Discussions" with a speech bubble icon. It lists three discussion items, each with a profile picture, a title, the author's name and date, and a brief description.

ChemPrep Connect ▾

Home Communities ▾ Directory ▾ Careers ▾ Events Browse ▾


Trending Discussions



Register Now: Strengthening Preparedness for Chemical ...

By: [Jerry Joseph](#), 8 days ago


We're excited to invite you to a special webinar, Enhancing Public Health Preparedness for Chemical and Radiation Emergencies: ...



Survey- Risk Assessments in Public Health Emergency ...

By: [Jaime Niedermeier](#), 21 days ago

Calling all PHEP practitioners! As part of my master's program in Emergency and Disaster Management at Georgetown University, ...



RE: How Do You Ensure Your Local Emergency Responders ...

By: [Crystal Bulman](#), 2 months ago

This looks great! Thank you for sharing your methods. I'm honestly hoping that this thread will help those of us who manage the ...

Discussion-Based Tabletop Exercise

Practice Before it Happens



Pre-developed scenario for a chemical incident affecting a community



Helps LHDs and partners test decision-making, coordination, and communication



Includes objectives, roles, scenario injects, and evaluation questions



Adaptable for both rural and urban settings



Discussion-based Tabletop Exercise (Cont'd)

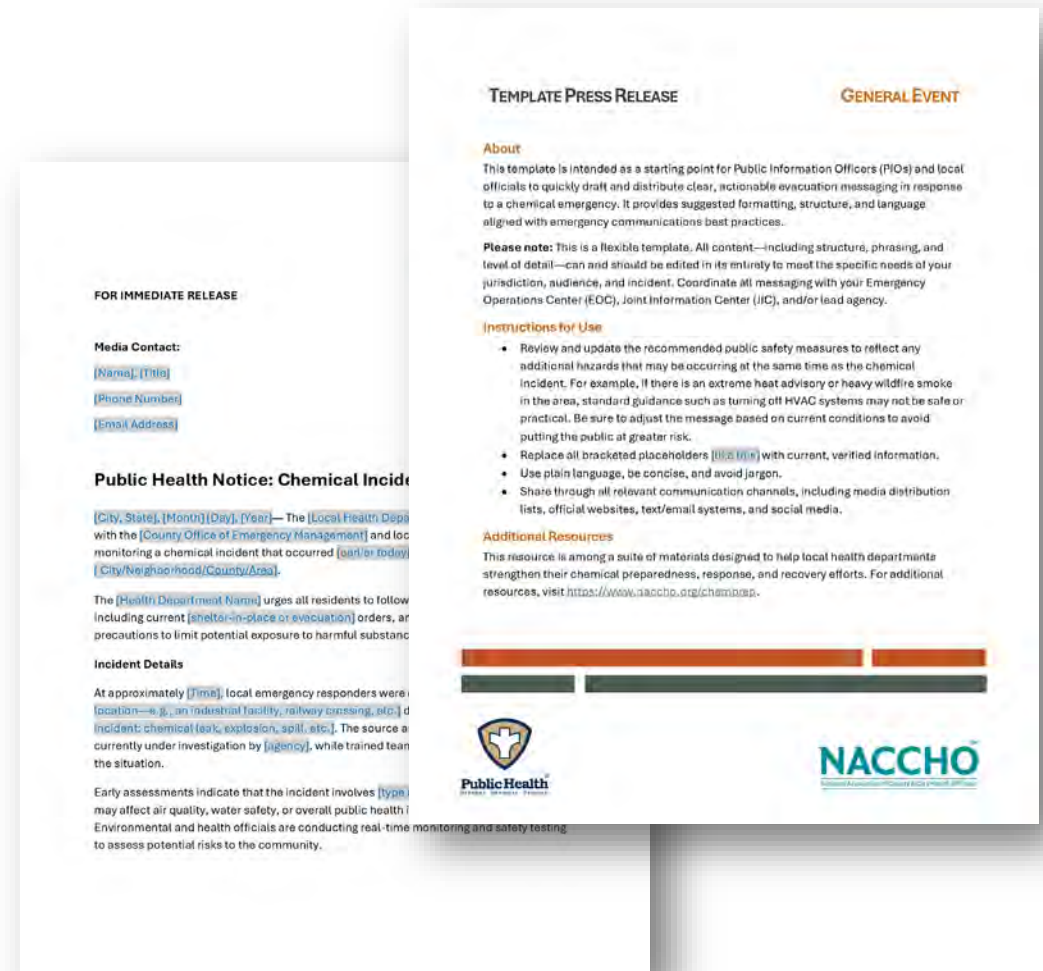
What's Inside the TTX Package

- Two Situation Manuals
 - Rural-focused version for smaller, resource-limited LHDs
 - Urban-focused version addressing complex, large-scale response
- Facilitation Slide Decks to guide exercise play and discussions
- Facilitation Guides with prompts, timelines, and best practices
- Template After-Action Report/Improvement Plan (AAR/IP) for capturing lessons learned
- Exercise Evaluation Guides (EEGs) to support objective assessment

Communication Templates

Ready-to-Use Public Communication Materials

- Pre-drafted templates for press releases, social media posts, and community updates
- Aligned with Crisis & Emergency Risk Communication (CERC) principles
- Editable for local context and specific scenarios
- Saves time during critical response periods



**Chemical Hazard:
ALL CLEAR** 

Officials say it's safe to return.

- ✔ Once home, **open** doors and windows.
- ✔ **Turn on** your heating or cooling systems to ventilate the house.
- ✔ **Follow instructions** from emergency officials concerning food and water cleanup methods.

[Insert Name of Local Health Department] 

 [Insert Phone Number] and/or web address

**Chemical Hazard:
EVACUATE** 

Evacuation issued, what now?

- ✔ **Stay calm**, move quickly, take pets and medications.
- ✔ **Follow instructions**, use official routes, avoid shortcuts — they may be blocked or hazardous.

[Insert Name of Local Health Department] 

 [Insert Phone Number] and/or web address

**Chemical Hazard:
Shelter-In-Place** 

What Now?

- ✔ **Seal home.**
- ✔ **Close and lock** windows and doors.
- ✔ **Turn off** heating or cooling systems.
- ✔ **Seal gaps** under doorways and windows with wet towels and duct tape.

[Insert Name of Local Health Department] 

 [Insert Phone Number] and/or web address

**Chemical Hazard:
EVACUATE** 

Evacuation issued, what now?

- ✔ **Stay calm**, move quickly, take pets and medications.
- ✔ **Follow instructions**, use official routes, avoid shortcuts — they may be blocked or hazardous.

[Insert Name of Local Health Department] 

 [Insert Phone Number] and/or web address

Social Media Bites

Ready-to-Share Messaging

- Pre-made graphics and captions to quickly share updates during chemical incidents
- Designed to amplify press releases across platforms (Twitter/X, Facebook, Instagram, LinkedIn)
- Editable text for local context, and audiences
- Saves time and helps deliver unified messages during fast-moving events

Southern Nevada Health District

Spaghetti Spill TTX | April 22, 2025

Southern Nevada Health District



Participants: ~40+ (Southern Nevada Health District, fire/EMS, hospitals, emergency management, federal partners, tribal reps)

Discussion Highlights:

- Urban response challenges: large homeless population, “worried well,” complex hospital coordination.
- Public-private partnerships: casinos, transit, resort partners critical for communication and sheltering.
- Messaging & equity: multiple languages, reverse 911, community ambassadors, outreach to vulnerable populations.

Strengths:

- Strong cross-sector engagement (health, fire, EMS, casinos, transit).
- Clear use of ICS and JIC structures.
- Effective brainstorming on vulnerable population outreach.

Opportunities for Improvement:

- Limited chemical expertise at LHD; reliance on partners.
- Resource strain (PPE, hospital surge, EMS decon).
- Need for sustained planning around long-term health monitoring.

2025 Preparedness Summit

May 1, 2025

2025 Preparedness Summit



Participants: 46 (LHDs from across U.S., NACCHO staff, CDC & DHS partners)

Discussion Highlights:

- Role clarity: LHDs as support agencies vs lead agencies.
- Cross-state comparisons enriched learning.
- Syndromic surveillance and epi registry concepts well-received.
- Transparency and trust emphasized in public messaging.

Strengths:

- National-level peer exchange across diverse jurisdictions.
- Valuable epi input on surveillance integration.
- Scenario considered realistic and engaging (83% rated scenario “agree/strongly agree”).

Opportunities for Improvement:

- Consider time of year/season in future exercises.
- Clarify LHD vs lead agency responsibilities in initial response.
- Enhance hospital–public health communication on chemical exposures (fit testing, syndromic detail).

Maryland Department of Health

Eastern Edge Exposure | May 22, 2025

Maryland Eastern Shore



Maryland
DEPARTMENT OF HEALTH

Participants: ~35–40 (Queen Anne’s, Cecil, Dorchester HDs, state agencies, NGOs, first responders)

Discussion Highlights:

- Rural challenges: limited HazMat teams, volunteer fire reliance, delays in mutual aid.
- Strong informal networks (phone calls often faster than WebEOC).
- Translation/communication to vulnerable populations remains a critical gap.

Strengths:

- Strong cross-county relationships and mutual support.
- Practical discussion on evac/shelter planning for schools, nursing homes, and homebound residents.
- Creative local resourcefulness (“make friends with your farmers,” using churches and nonprofits).

Opportunities for Improvement:

- Translation and outreach to immigrant/vulnerable groups.
- Limited local epidemiology and data capacity.
- Need for HazMat integration and larger-scale scenario planning.

Explore NACCHO's Chemical Preparedness Webpage

Your One-Stop Shop

- Central hub for all chemical preparedness tools, resources, and updates:
- **Chemical Preparedness Handbook:** Guidance for planning, preparedness, response, and recovery
- **Chemical Preparedness Resource Library:** Includes guidance documents, training modules, communication templates, and case studies
- **ChemPrep Connect Virtual Community:** Secure platform for LHD staff to connect, share best practices, and ask questions
- Easy sign-up for the **Preparedness Brief Digest** to stay updated on new tools and announcements
Organized into sections: Guidance, Training & Exercises, Communication, Mental Health & More

www.naccho.org/chemprep

Special Thank You!

NYC Health CBRN Unit



2025 Preparedness Summit



Maryland Eastern Shore



Hamilton County
Public Health



Southern Nevada Health
District



Public Health
Seattle & King County



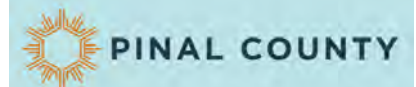
Harris County Public Health



DuPage County
Health Department



Pinal County
Public Health





Radiation Preparedness

Jerry Joseph | Director of Preparedness - NACCHO



CRC RESOURCES AND ACTIVITIES

- CRC Toolkit with planning guidance and templates
- Training modules and exercise support for LHD staff
- Webinars and peer-to-peer learning opportunities
- Case studies highlighting CRC planning in action

[Radiation Preparedness Resource Library](#)

[NACCHO Resource Hub](#)

<p>RadResponder Population Monitoring Form</p> <p>This form should be used to collect summarized aggregate data from...</p>	<p>Radiation Control Officer Training Tools</p> <p>This is the training curriculum from the Radiation Control Officer (RCO) training...</p>	<p>Community Reception Center Drill Toolkit</p> <p>Description: Provides guidance and templates to exercise independent or th...</p>
<p>Communicating Radiation Risks: Crisis Communications for Emergency Responders</p> <p>[^]Provides communications strategies as well as radiological scenarios and</p>	<p>National Alliance of Radiation Readiness Website</p> <p>A forum for sharing and evaluating practices, resources, and tools relate...</p>	<p>Radiation Emergencies Infographics</p> <p>Description: Attain PDF images to assist in training and incident communicatio...</p>
<p>CDC Radiation Emergency Infographics</p> <p>Description: Resource library for radiation emergencies. Intended Audience:...</p>	<p>A Mixed-Methods Approach to Understanding Radiation Preparedness within Local Health Departments</p>	<p>Radiation Communications Information for Professionals/Clinicians</p> <p>A site for clinicians to receive guidance on patient management...</p>



Building Readiness Through Exercise and Game

Practice. Play. Prepare.

- Tennessee's Full-Scale Radiation Exercise – PY 2019.
- Dayton, OH Full Scale Exercise - PY 2019.
- El Paso, TX Full Scale Exercise - PY 2019.
- Austin's CRC Exercise – PY 2022.
- Tennessee's Full-Scale Radiation Exercise – PY 2022.
- West Virginia' CRC Exercise along with a RITN Hospital – PY 2023.
- Peoria & Decatur Illinois This is a T.E.S.T CRC exercises- June 2023.
- CRC-Radiation Exercise- Montgomery County PA-August 2023.
- Howard County, MD CRC/POD-September 2023.
- Radiological Emergency Preparedness and TEST Game- Milwaukee, Waukesha County- November 2023.
- CRC-Radiation Exercise-Virginia Department of Emergency Management- December 2023.

Radiation Workshop

Strengthening CRC Preparedness

- Successful national workshop convened LHD Preparedness Coordinators & partners
- Shared resources, strategies, and lessons learned in radiation response
- Hands-on opportunity to exercise together and build partnerships
- Featured CDC's [This is a TEST – CRC Edition](#) training and simulation tool
- Enhanced local capacity to plan and operate Community Reception Centers



Radiation Workgroup

Your Voice in Radiation Preparedness

-
- **Objective:** Raise local health department (LHD) awareness of radiological preparedness tools, resources, and information
 - **Members:** Local, state, and federal public health and preparedness professionals with radiation subject matter expertise
 - **Roles and Activities:** Review and advise on NACCHO radiation resources; incorporate practitioner insights into new materials and strategies
 - **Engagement:** Regular conference calls and occasional national-level meetings; document review and input on preparedness materials
 - **Your Opportunity:** Join the workgroup to shape resources and tools that support LHD radiation readiness

[Join an Advisory Group](#)



Connecting Chemical and Radiation Preparedness

Cdr. James Gooch | Environmental Health Officer

Alison Stargel | Environmental Health Scientist



Updates from the National Alliance for Radiation Readiness (NARR)



August 27, 2025



What is the NARR?

Member Organizations

American Academy of Pediatrics (AAP)

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 (ASPPH)

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 Alliance of State Animal and Agricultural Emergency Programs (NASAAEP)

National Association of County and City Health Officials (NACCHO)

National Association of State EMS Officials (NASEMSO)

National Disaster Life Support Foundation (NDLSF)

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 Partners



FEMA



Executive Committee



Adrianna (Annie) Evans
Director, Preparedness and Disability
Integration
ASTHO, NARR Executive Secretary



Lauren Finklea
Physical Scientist
CDC, NARR Co-Lead



Paul Petersen
Director, Emergency Preparedness Program
Tennessee Department of Health
ASTHO Tri-Chair



Robert Goff
Emergency Response Coordinator, SE
Regional Officer
NACCHO, Member-At-Large Tri-Chair



Chris Williams
Deputy Director, Office of Radiation Protection
Washington State Department of Health
CRCPD Tri-Chair



Jon Bakkedahl
Deputy Emergency Manager
Carson City Fire Department
IAEM, Emergency Management Officer



Donna Early
Health Physicist
AHA, Healthcare Officer



Open
Public Health Officer



Sponsoring
Organization

Funding
Agency

Executive
Committee

Member Organizations

Federal Agencies

Staff
Representative

Member
Representative

Agency Liaison



What does the NARR
do?

Vision

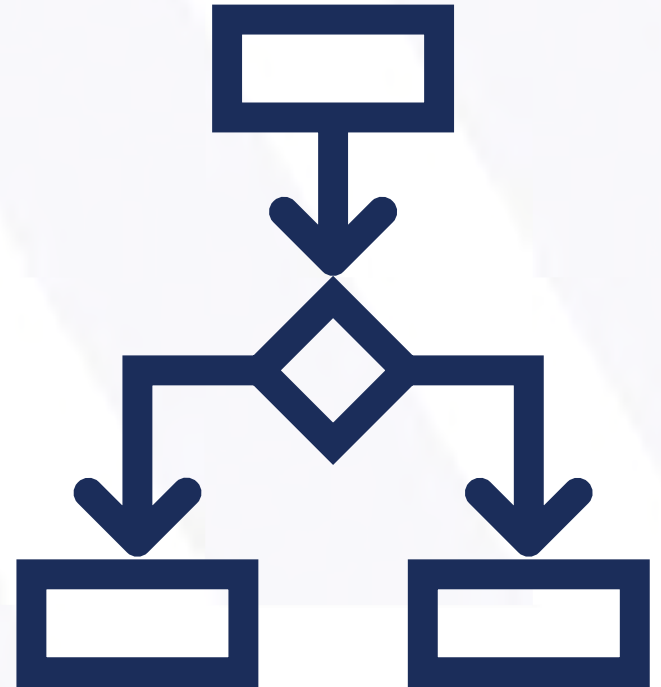
To become a more protected, resilient nation through a comprehensive and integrated approach to radiological emergencies

Mission

Enhancing radiological preparedness capability and capacity in public health and health care systems through 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

Activation

- NARR can activate during a radiation emergency
- Standard Operating Procedures
- NARR supports communication and coordination between member organizations and federal partners



How can you benefit from the NARR?



Networking



Sharing Information



Trainings/Webinars



**Cross-Collaborative
Perspectives**

How can you get involved?

1. Get in touch with NACCHO's member representative or staff representative
2. Follow ASTHO's newsletters and social media to get announcements about upcoming NARR events
3. Use the NARR website



Robert Goff
*Emergency Preparedness Director
Southeast Region
Tennessee Department of Health
NACCHO Representative*



Recent Activities

NARR 5-Year Strategic Planning Goal

By 2029, within NARR members and federal partners, increase radiation readiness across the three fields of public health, healthcare, and emergency management through training and collaboration

- **Objective:** Before the end of 2025, identify at least one radiation readiness gap within NARR member and federal partners for each of the three fields (public health, healthcare, and emergency management).
- **Objective:** Before the end of 2025, identify a baseline level of knowledge of radiation readiness within NARR members and federal partners including differences between each of the three fields (public health, healthcare, and emergency management).
- **Objective:** By 2029, increase knowledge of radiation readiness from the identified baseline within NARR members and federal partners.
- **Objective:** By 2029, increase NARR member and federal partner engagement in radiation readiness activities through participation in trainings, webinars, conferences, online communities, and other methods.
- **Objective:** By 2029, increase awareness of radiation readiness training opportunities within NARR members and federal partners.

Exercises

Cobalt Magnet 25

- Participated alongside CDC
- Testing SOP and engagement

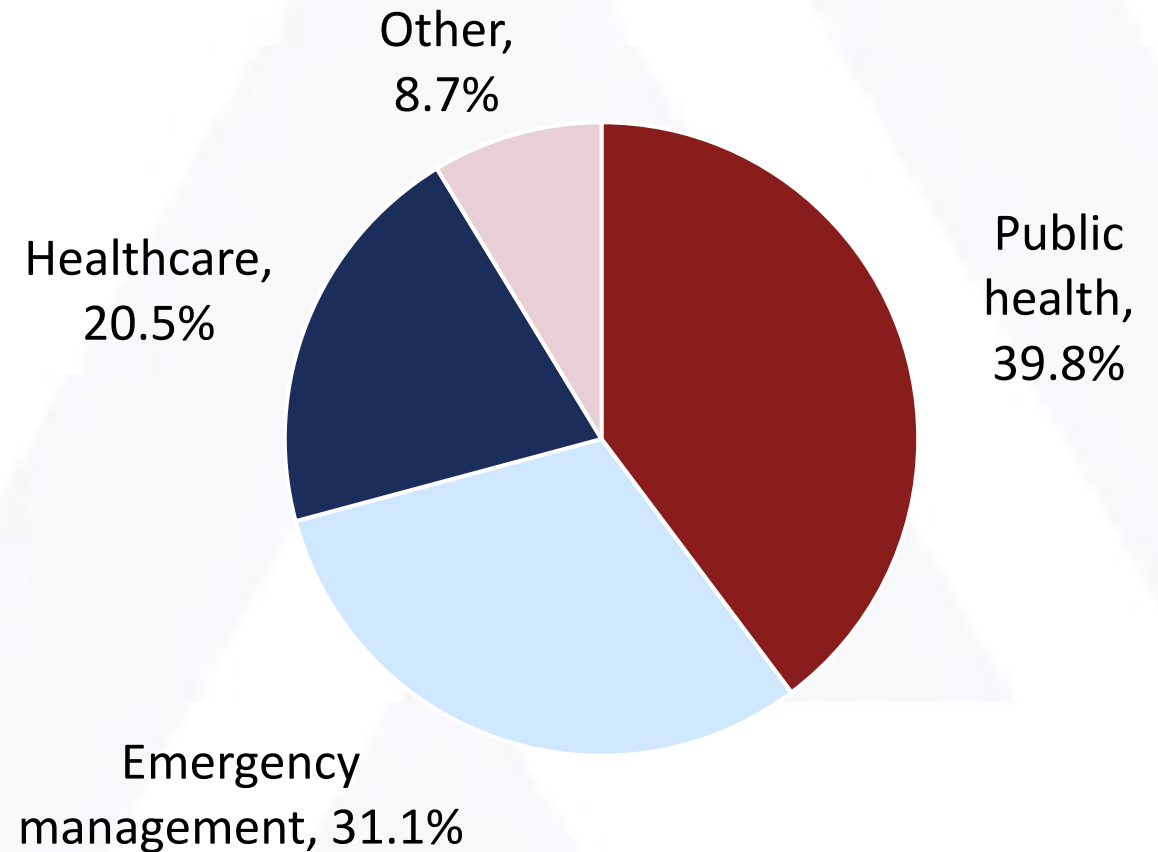
INEX-6

- Participated at request of EPA
- Led Health Module
- Members invited as players

Radiation Readiness Needs Assessment

This assessment aimed to establish a baseline level of knowledge of radiation readiness among professionals working in public health, healthcare, and emergency management while also identifying gaps in these areas. The information in this report will contribute to future NARR activities such as training, webinars, resources, and other programs.

This assessment was conducted as part of the NARR's 5-Year Strategic Planning Goal.



Respondents by Sector [N=425]



Selected Resources



NATIONAL ALLIANCE FOR
RADIATION READINESS

[CONTACT US](#) [SUBMIT A RESOURCE](#)

[MY.ASTHO](#)

[About the Alliance](#) ▾

[Resources](#) ▾

[Readiness 101](#) ▾

[Our Story](#) ▾

[Events](#)

A Comprehensive & Integrated Approach

The National Alliance for Radiation Readiness (NARR) is a coalition of public health, healthcare, and emergency management organizations. The NARR integrates these three fields to promote coordination for radiation readiness.

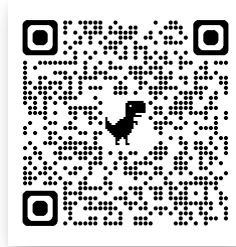
[LEARN MORE](#)



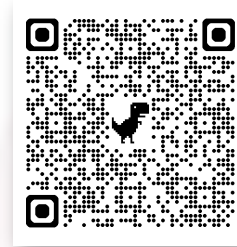
Selected Resources



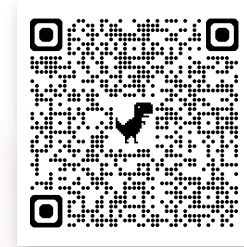
This is a TEST
CDC



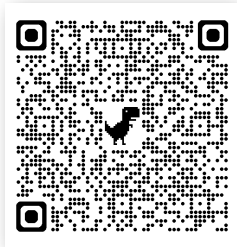
Animal Decon
NASA AEP and ASTHO



Rad Lab Hub
ICLN



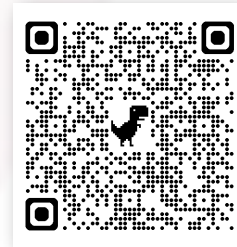
Leveraging Mental Models
NARR



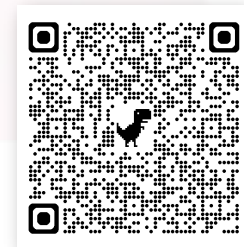
Public Health Training
Modules
NARR



Communicating In the
Immediate Aftermath of a
Nuclear Detonation
EPA and FEMA

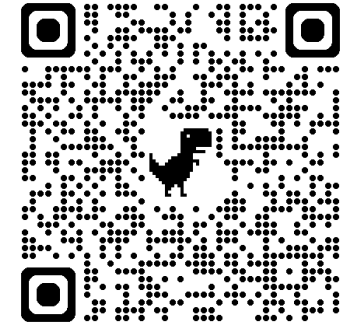


Nuclear Detonation
Guidance for the First 72
Hours
FEMA




Public Health Perspectives
on Fukushima
CDC

Assessment Summary Materials



ASTHOBrief

 July 2025

Assessing Capacity Gaps in the Radiation Readiness Workforce

Radiation readiness is a critical piece of emergency preparedness. In the case of a radiological incident, public health plays an important role in keeping communities safe and ready. Public health, health care, and other sectors can build stronger emergency response capabilities when working together. One such coalition is the [National Alliance for Radiation Readiness \(NARR\)](#), which unites emergency management, health care, and public health to improve radiation readiness. The NARR works to increase capacity by connecting across sectors and levels of government.

ASTHO provides support to the NARR in several ways, such as providing resources to enhance emergency preparedness in the radiation readiness workforce. In early 2025, ASTHO performed a knowledge and capacity assessment of the radiation readiness workforce through funding support from CDC. This assessment aimed to understand the current status of knowledge and capacity of radiation readiness among professionals working in public health, health care, and emergency management.

Assessment Methods

ASTHO created this assessment with input from the NARR and several other knowledgeable experts. NARR and were asked to distribute this assessment to relevant groups and individual contacts on a volunteer basis according to their internal policies. ASTHO shared this assessment through various channels including relevant peer networks and newsletters. The assessment was open from February 3, 2025, through February 28, 2025.

Key Findings

ASTHO received 425 unique responses to the needs assessment. The majority of respondents identified as either public health (39.8%) or emergency management (31.1%) professionals, as shown in Figure 1. The majority of respondents were well-experienced in radiation readiness. Most respondents indicated that they have either more than 10 years (38.4%, N=163) or six to 10 years (16.3%, N=69) of experience in radiation readiness. A majority (n=277, 65.2%) of respondents reported working at a governmental organization while others worked at non-governmental or non-profit organizations or associations (n=22, 5.2%), health care organizations (n=112, 26.4%), laboratories (n=7, 1.6%) or, identified with other entities (n=7, 1.6%). The majority of governmental respondents indicated they worked at either local (n=132, 49%) or state (n=119, 44%) government agencies [Figure 2]. The rest indicated they worked at the regional (n=10, 3.7%) or federal (n=8, 3%) level [Figure 2].

Summary Slides

Radiation Readiness Assessment Results

National Alliance for Radiation Readiness





[Resources](#) » [Submit a Resource](#)

Submit a Resource

We welcome you to send us any content and pertinent information that you feel would be of value for posting on this website. Upon submission review and approval, resources will be published to the site within 10 days.

Name *

First

Last

Email *

Agency / Organization / NARR Affiliation *

[RESOURCES](#)



[CONTACT US](#)



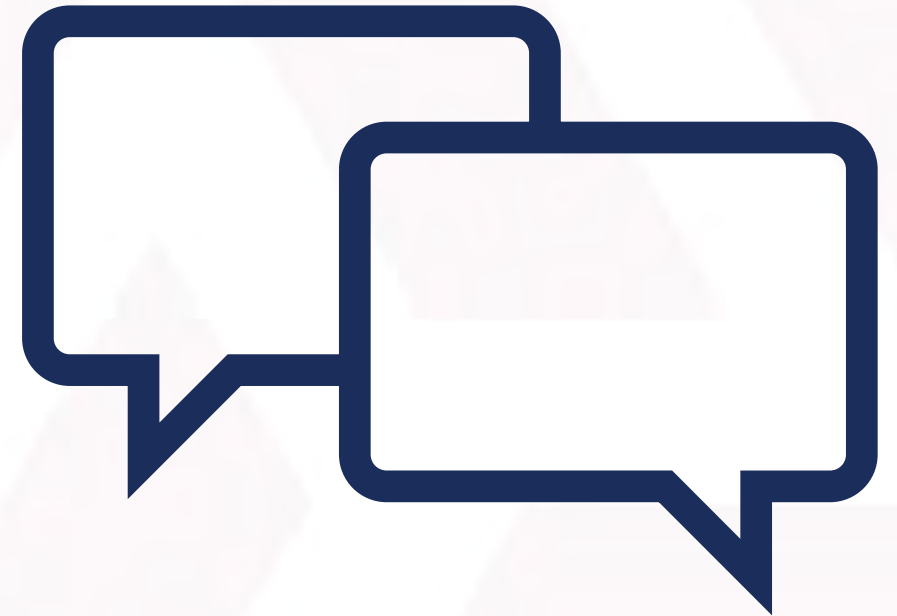
[MY.ASTHO](#)





NATIONAL ALLIANCE FOR
RADIATION READINESS

Let's Talk:
How can the NARR support your
jurisdiction?



STAY IN TOUCH

Adrianna (Annie) Evans

Director, Preparedness

aevans@astho.org

narr@astho.org





Bringing It All Together

Lauren Finklea | Lead Health Physicist, Radiation Studies Program





Questions & Answers

Your opportunity to share, clarify, and connect



Opportunities to Engage

- **Save the Date:** 2026 Preparedness Summit in Baltimore, MD, April 13-16, 2026
 - [Subscribe to the Preparedness Summit e-newsletter](#) to get the latest news on the 2026 Preparedness Summit.
- **NACCHO Email:** joseph@naccho.org or preparedness@naccho.org
- **ASTHO Email:** aevans@astho.org or narr@astho.org
- **Join a Preparedness Workgroup:** <https://www.naccho.org/membership/advisory-groups>
- **Join ChemPrep Connect | Virtual Community:** <https://www.naccho.org/blog/articles/chemprep-connect>

Closing Remarks

- Thank you for joining today's webinar
- We value your feedback because it helps us improve and tailor resources to your needs
- Please use the QR code or link to complete the short survey
- Explore NACCHO's Chemical & Radiation Preparedness resources anytime at <https://www.naccho.org/programs/public-health-preparedness>

Enhancing Public Health Preparedness for Chemical and Radiation Emergencies



<https://forms.office.com/r/V57IXChyti>