Radiation Readiness Assessment Results

National Alliance for Radiation Readiness

What is the NARR?

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

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 Association of County and City Health Officials (NACCHO)

National Alliance of State Animal and Agricultural Emergency Programs (NASAAEP)

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

Sponsoring Organization

Funding Agency

Executive Committee

Member Organizations

Federal Agencies

Staff Representative

Member Representative

Agency Liaison

Assessment

Purpose

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

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 results will contribute to future NARR activities such as training, webinars, resources, and other programs.

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.

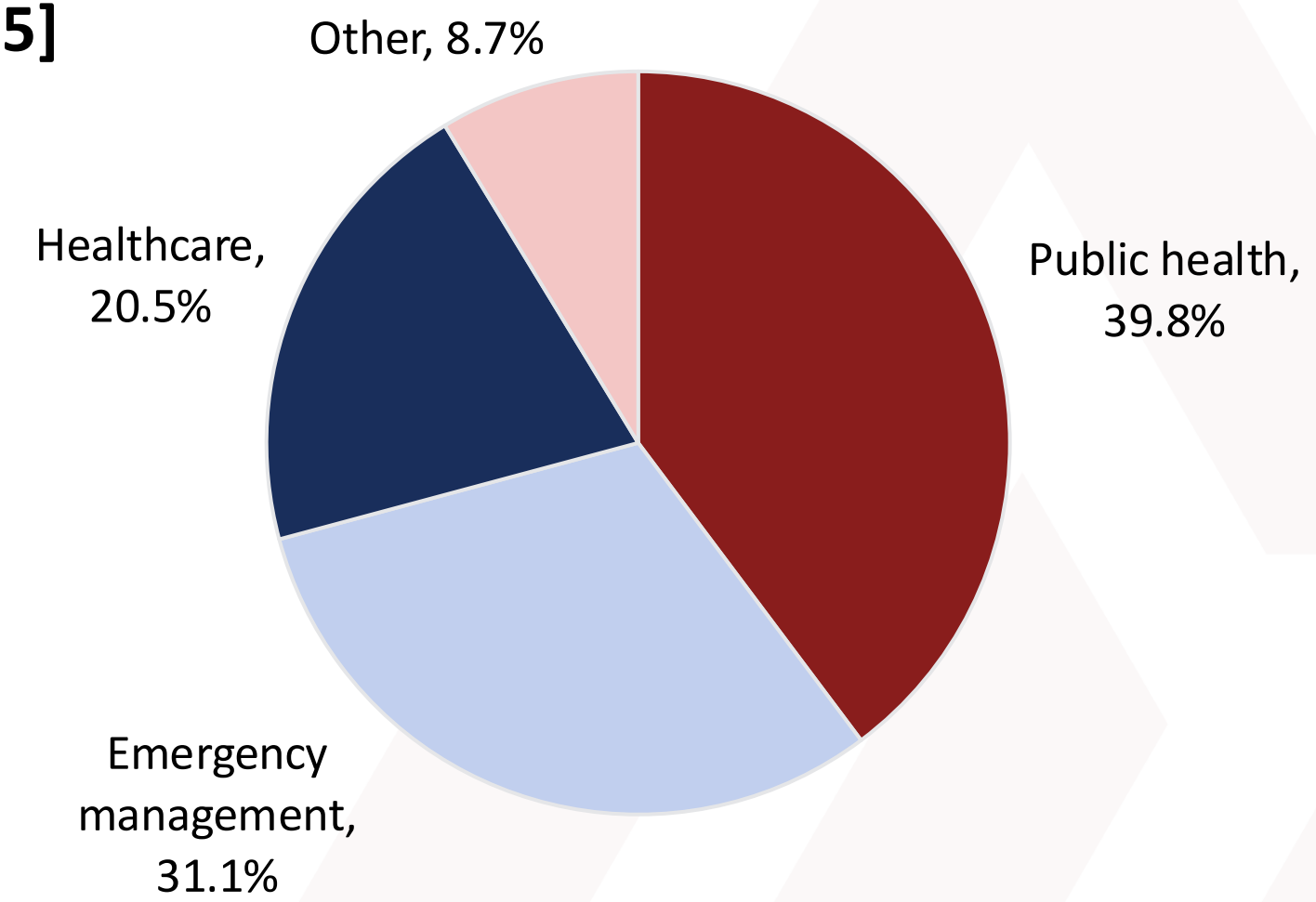
Methods

- **Total Participants**: 425
- **Timeline**: Monday, February 3, 2025, to Friday, February 28, 2025
- **Distribution**: Convenience sampling method shared through the NARR network
  - Social media
  - Newsletters
  - Peer networks

Results

Who Responded?

Sectors [N=425]



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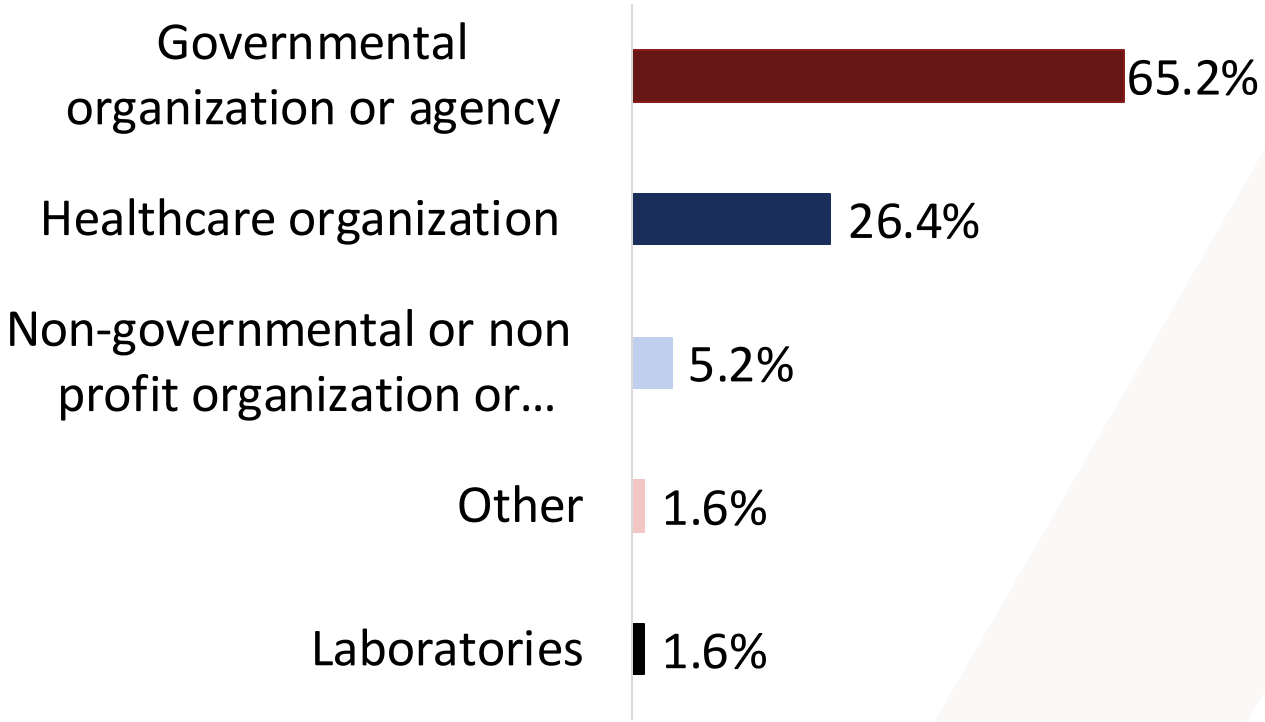
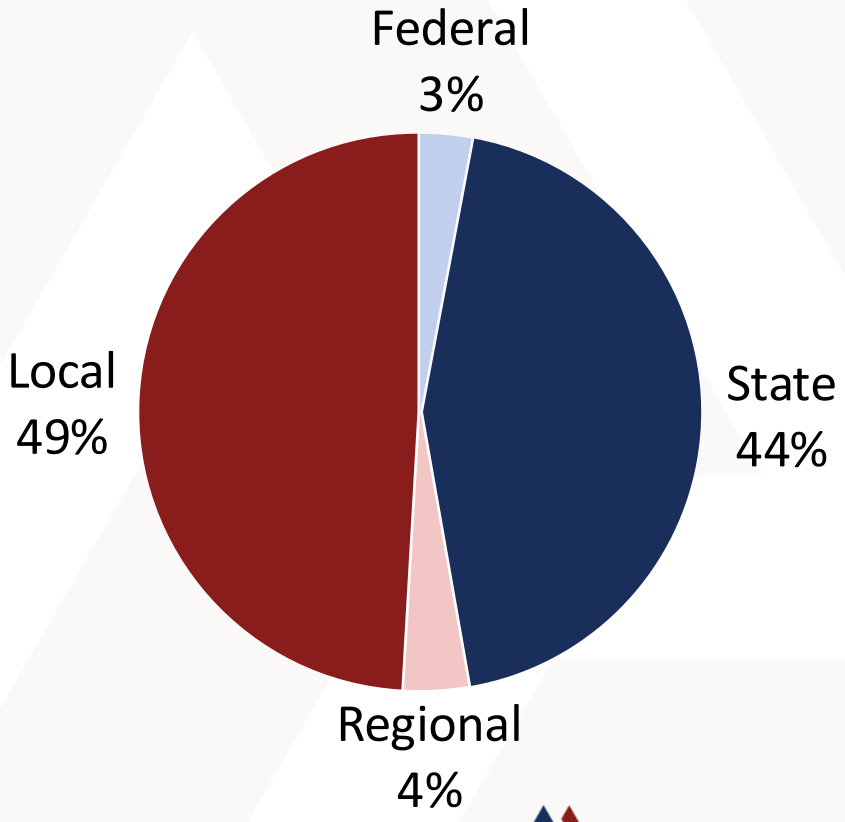
Who Responded?

Type of Organization [N=425]



Level of Government [N=271]



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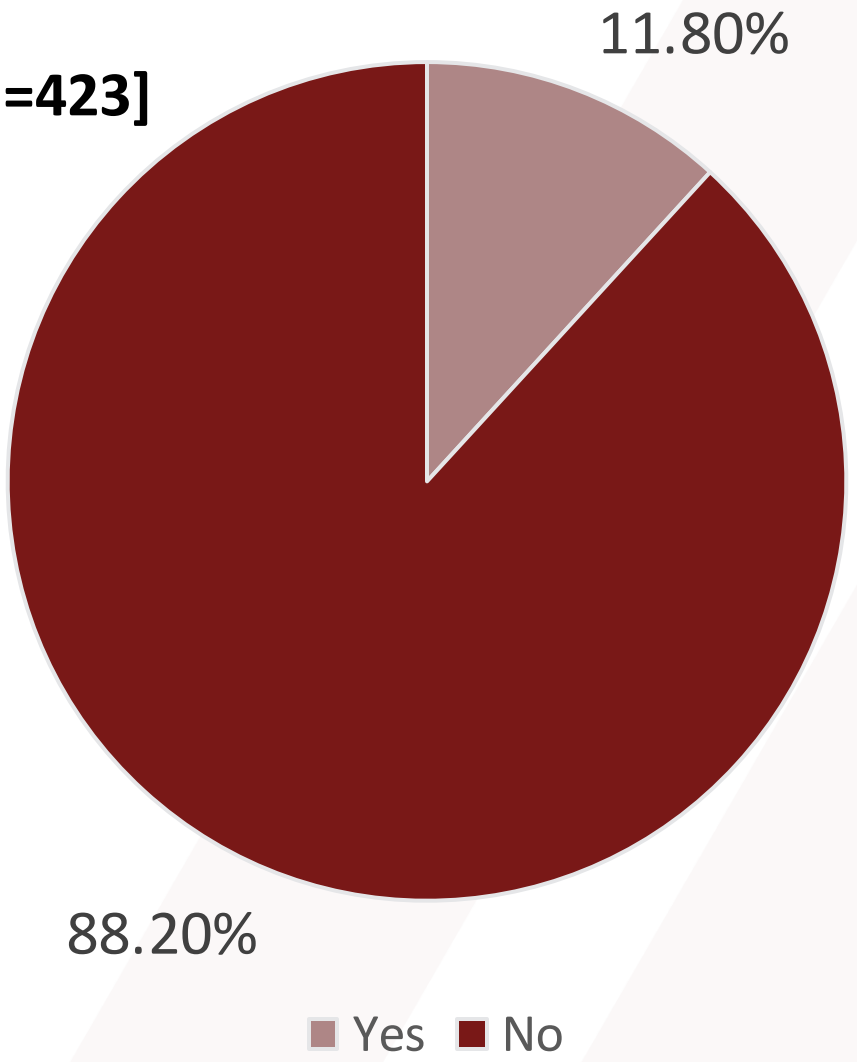
Who Already Knew About NARR?

Familiarity with NARR [N=423]



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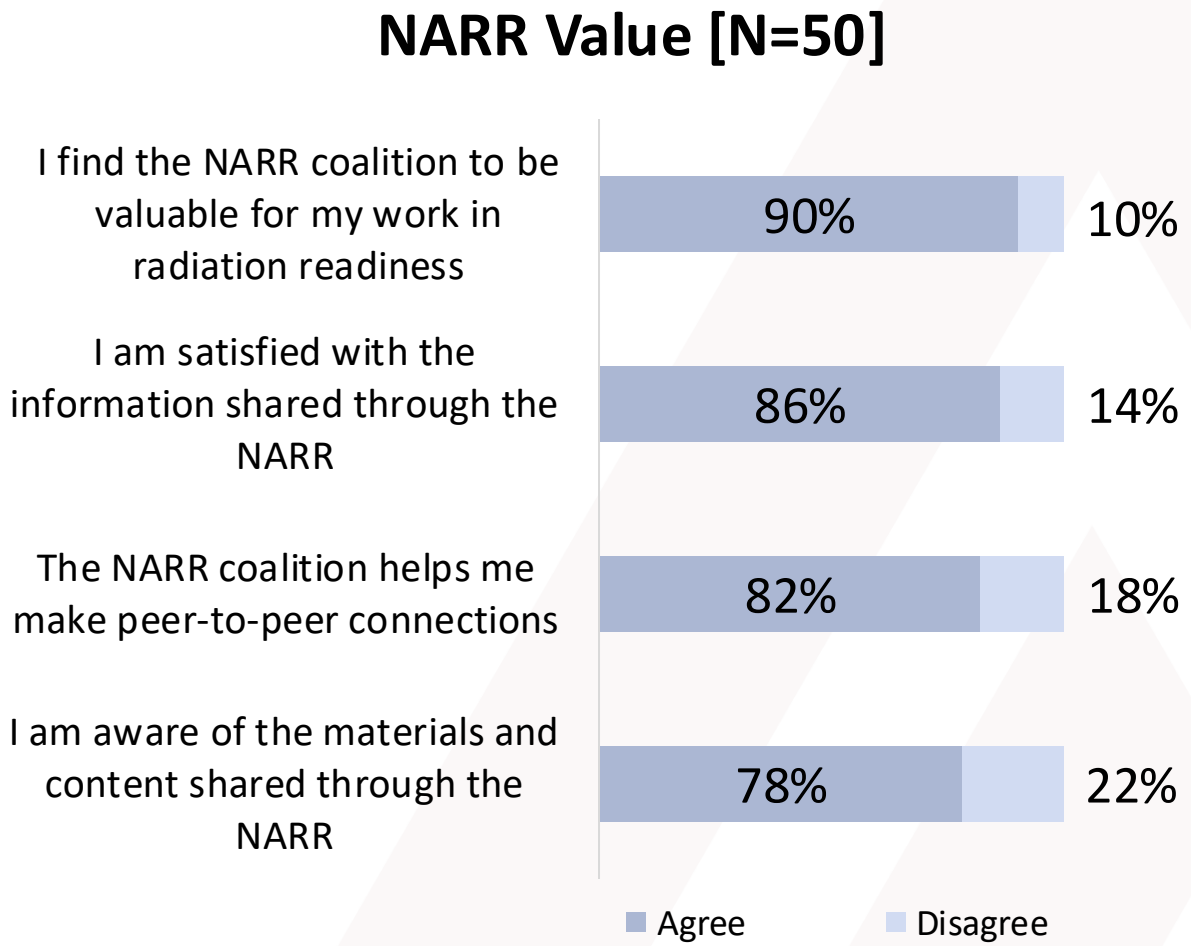
NARR Familiarity and Value



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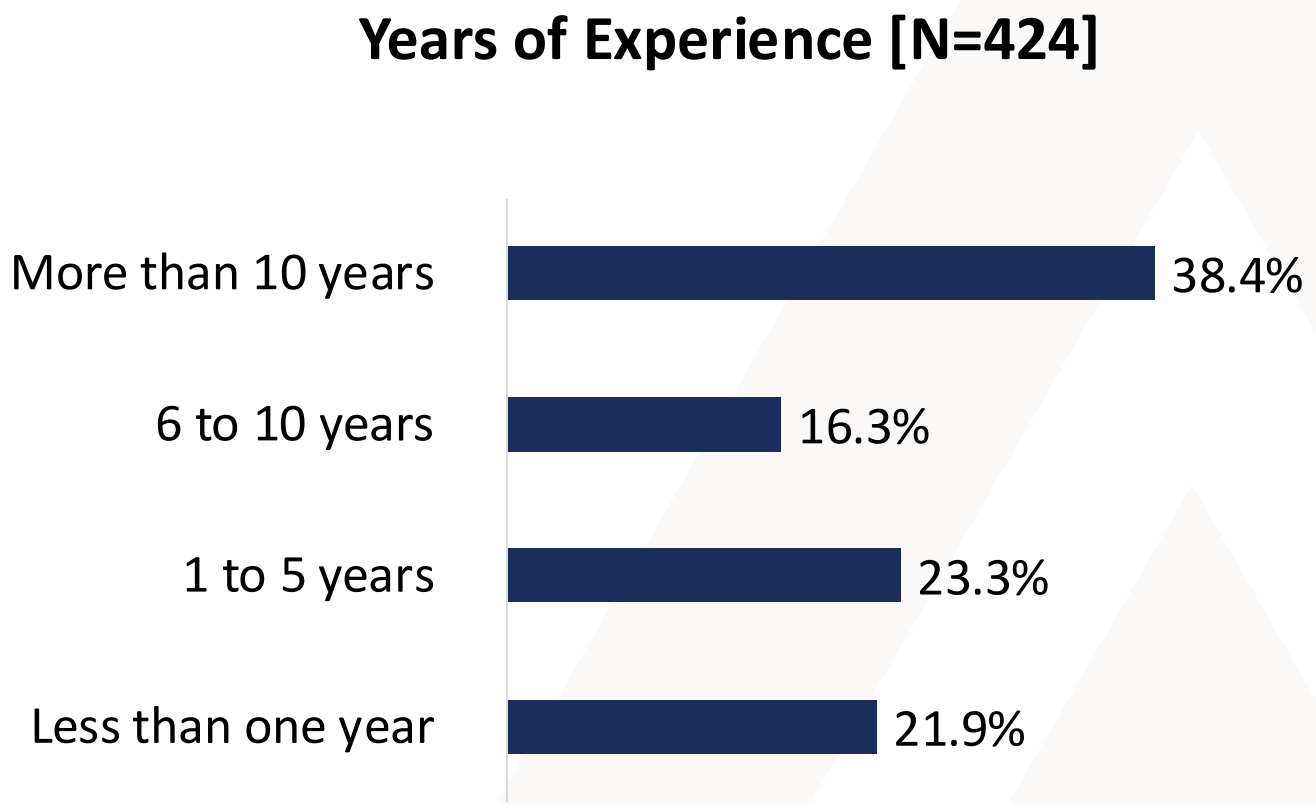
Radiation Readiness Experience



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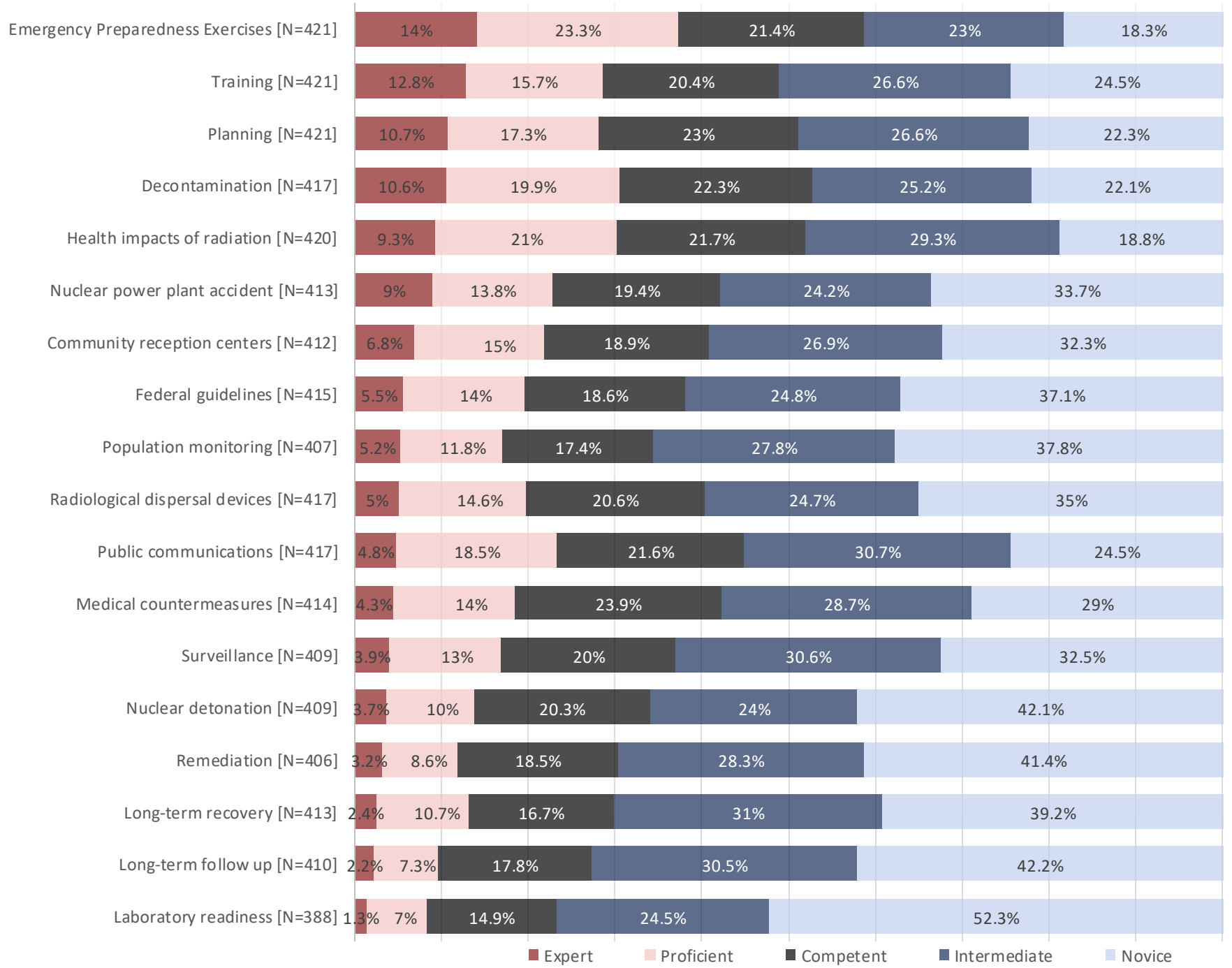
Individual Knowledge



Perception of Knowledge Gaps

- Key Themes:
  - Lack of training and practical experience
  - Widespread lack of basic knowledge and misunderstanding of radiation
  - Lack of prioritization and leadership support
  - Public health and emergency management coordination issues
  - Workforce shortages and the loss of experienced personnel
  - Resource limitations

Perception of Knowledge Gaps

- “Basic understanding of what risks are from nuclear power plant vs a radiological transportation accident vs. nuclear detonation”
- “Biggest gap is lack of understanding of radiation injury”
- “Having an entire response team on the same level of knowledge. With a high staff turnover - some staff are familiar; some staff are brand new.”
- “I think there is a huge gap in training and education for areas that may not have nuclear power plants.”
- “The biggest gap I have identified is the integration of state and federal resources during a response/recovery event.”

Suggested Topics for Additional Training

Sector	Training Topics
Public Health	• Role of public health in radiological emergency response • Integration into broader emergency systems • Awareness of radiological/weapons of mass destruction threats • Interagency coordination and communication
Healthcare	• Radiation preparedness in emergency management plans • Patient care post-decontamination • Low-level radiation exposure training • Use of field operations guides and job aids • Decontamination workflow • Hands-on and just-in-time training for hospital staff • Scheduling and access to continuing education credits
Emergency Management	• Planning for radiological dispersal device/improvised nuclear device and non-nuclear power plant scenarios • Full-scale and tabletop exercises (e.g., Liberty RADEX) • Cross-sector collaboration with public health and healthcare • Real-time operational decision-making • Field operations with fundamental tools • Networking and sharing lessons learned

Organizational Capacity

		Sector			
		Public Health (n, %)	Emergency management (n, %)	Healthcare (n, %)	Other (n, %)
Radiation Readiness Efforts	Planning for radiological incidents [N=361]	97, 26.9%	77, 21.3%	50, 13.9%	14, 3.9%
	Training for radiological incidents [N=361]	84, 23.3%	77, 21.3%	52, 14.4%	13, 3.6%
	Emergency preparedness exercises for radiological incidents [N=363]	99, 27.3%	79, 21.8%	51, 14%	16, 4.4%
	Public communications following a radiological incident [N=356]	91, 25.6%	77, 21.6%	47, 13.2%	12, 3.4%
	Reporting requirements for radiation detection and exposure [N=356]	67, 18.8%	66, 18.5%	44, 12.4%	16, 4.5%

Perception of Organizational Capacity Needs

- Key Themes:
  - Additional staffing and funding
  - Need for specialized training and education
  - Leadership buy-in and prioritizing radiation readiness
  - Planning guidance and ready-made toolkits
  - Coordination and communication with relevant agencies

Workforce Capacity by Sector

		Sector			
		Public Health (n, %)	Emergency management (n, %)	Healthcare (n, %)	Other sectors (n, %)
Specific Areas of Focus	Response to a nuclear detonation [N=90]	29, 8.1%	38, 10.7%	18, 5.1%	5, 1.4%
	Response to a nuclear power plant incident [N=144]	58, 16.4%	54, 15.3%	24, 6.8%	8, 2.3%
	Response to a RDD/RED incident [N=149]	55, 15.7%	54, 15.4%	33, 9.4%	7, 2%
	Population monitoring [N=136]	62, 17.5%	45, 12.7%	20, 5.6%	9, 2.5%
	Decontamination [N=164]	45, 12.7%	67, 18.9%	41, 11.6%	11, 3.1%
	Mitigating health impacts of radiation [N=148]	58, 16.5%	46, 13.1%	35, 10%	9, 2.6%
	Remediation [N=95]	35, 9.9%	30, 8.5%	23, 6.5%	7, 2%
	Public communications [N=230]	96, 27.2%	77, 21.8%	43, 12.2%	14, 4%
	Distribution of medical countermeasures [N=203]	94, 26.6%	56, 15.9%	38, 10.8%	15, 4.2%
	Long term follow up from a radiological incident [N=121]	47, 13.4%	42, 11.9%	25, 7.1%	7, 2%
	Implementation of community reception centers [N=162]	76, 21.6%	52, 14.8%	24, 6.8%	10, 2.8%
	Long term recovery from a radiological incident [N=105]	39, 11%	40, 11.3%	20, 5.7%	6, 1.7%
	Protection for responders [N=190]	70, 19.9%	72, 20.5%	36, 10.2%	12, 3.4%
	Surveillance [N=157]	73, 20.8%	48, 13.7%	27, 7.7%	9, 2.6%
	Internal coordination [N=234]	96, 27.2%	79, 22.4%	42, 11.9%	17, 4.8%
	External coordination [N=197]	77, 21.8%	72, 20.4%	33, 9.4%	15, 4.2%

Workforce Capacity

Public Health

- **Most Capacity**
  - Internal coordination
  - Public communication
  - Distribution of medical countermeasures
- **Least Capacity**
  - Response to a nuclear detonation
  - Response to a radiological dispersal device/radiological exposure device incident
  - Long term recovery from a radiological incident

Emergency Management

- **Most Capacity**
  - Public communication
  - Protection for responders
  - External coordination
- **Least Capacity**
  - Response to a nuclear detonation
  - Remediation
  - Long term recovery from a radiological incident

Healthcare

- **Most Capacity**
  - Public communications
  - Internal coordination
  - Decontamination
- **Least Capacity**
  - Response to a nuclear detonation
  - Response to a nuclear power plant incident
  - Population monitoring

Perception of Workforce Capacity Gaps

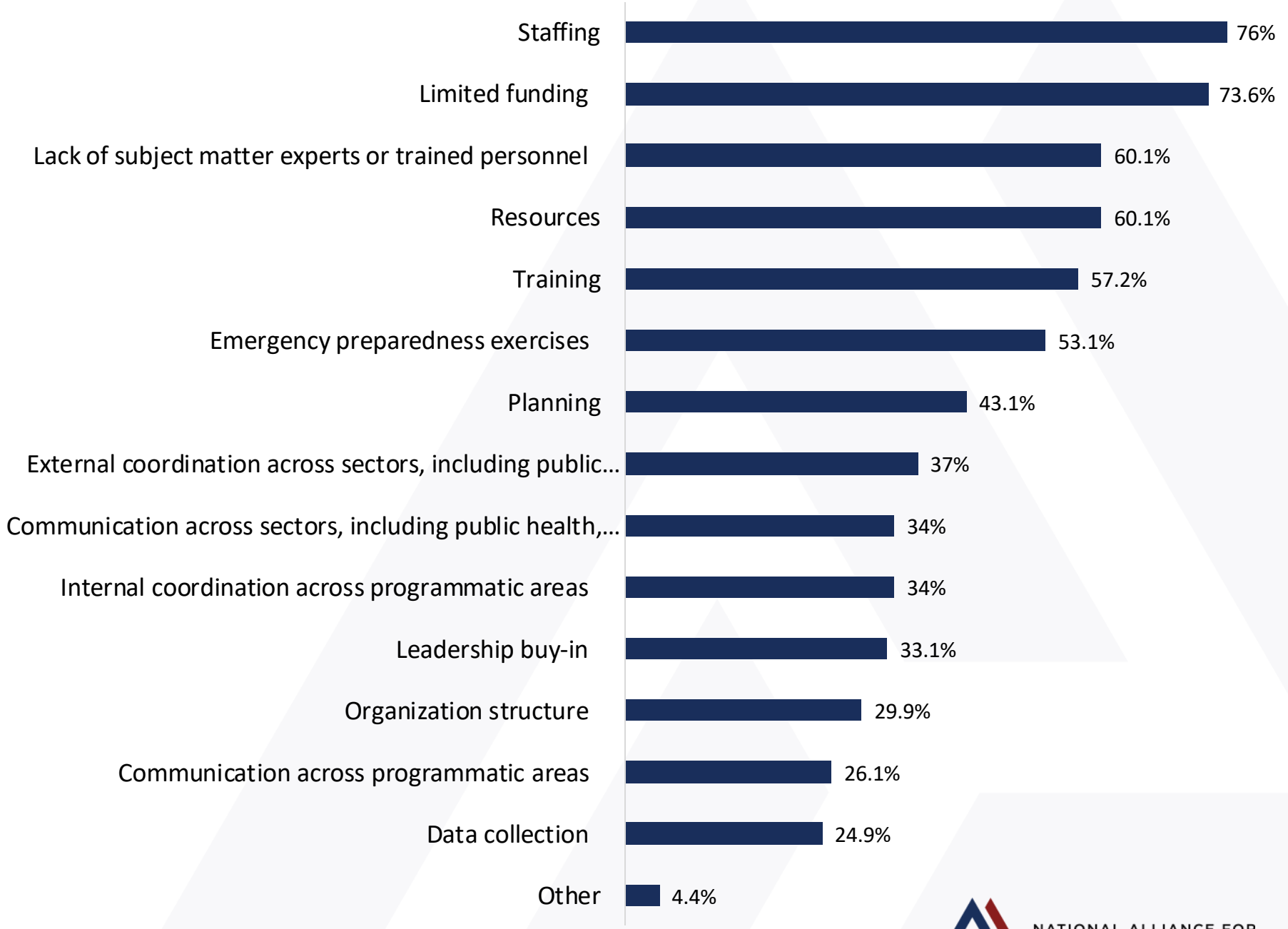
- Key Themes:
  - Inadequate or poorly structured funding
  - Access to both functional and advanced training
  - Absence of clearly defined responsibilities
  - Better collaboration and coordination
  - Burnout and staffing instability
  - Retention and institutional knowledge loss are growing concerns
  - Specialized technical expertise
  - Equipment

Perception of Workforce Capacity Gaps

- “Due to our small size, we need ready-to-use tools and templates. Knowledge and availability of resources are more important to us than an employed workforce.”
- “I honestly do not feel prepared to respond to a radiological or nuclear incident. My agency has had several internal discussions about this topic and understands the basic needs for such a response but does not have any resources or equipment to respond. I understand that K would be needed, we do not have that. Decon would be needed, we do not have that. Equipment to detect radiation, we do not have that or even know how to use it.”
- “More people, but also a dedication to setting aside adequate time to learn, train, and exercise on a consistent basis. With such a limited workforce, the organization understandably prioritizes the overwhelming day-to-day needs/work and significantly neglects preparedness needs.”

Challenges

Individual Challenges Within Radiation Readiness [N=341]



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STAY IN TOUCH

Email us at:

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