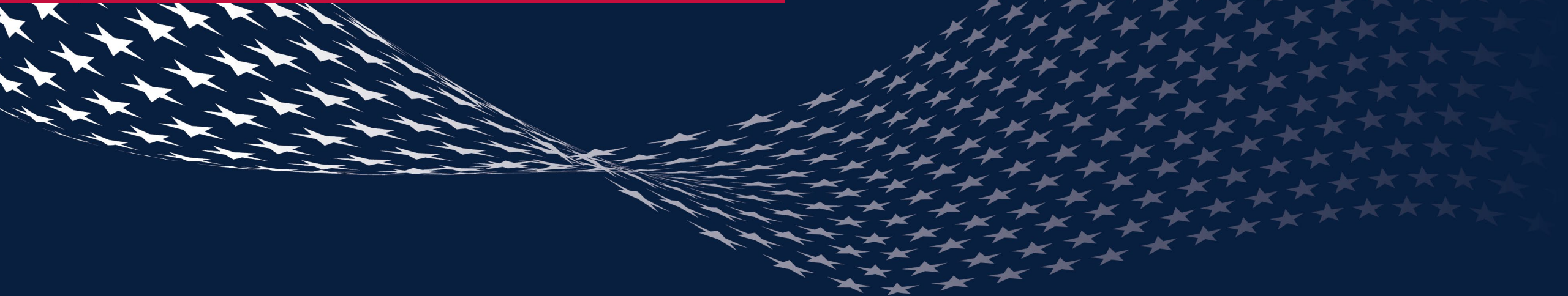


State/FRMAC Semi-Annual Webinar

July 29, 2026



Peace Through Atomic Strength



U.S. DEPARTMENT
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AGENDA



- Introduction
- FRMAC Working Group Updates
- Exercise Updates
- DOE Regional Update
- National Radiological Emergency Preparedness Conference
- Emergency Preparedness Update
- State/Federal Agency Updates
- Open Discussion & Questions
- Closing



FRMAC Working Group Updates for Semi-Annual State/FRMAC Call



July 2026



SAND2026-24461PE

Sandia National Laboratories is a multitechnology laboratory managed and operated by National Technology and Engineering Solutions of Sandia LLC, a wholly owned subsidiary of Honeywell International Inc. for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA0003525.



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Assessment Working Group Update



Assessment Manuals available

Vol 1, Assessment Operations – CM/FRMAC Assessment Operations

Vol 2, Assessment Methods – Technical Methods

Vol 3, Assessment Pre-Assessed Scenarios – 7 different types of release scenarios, replaces 2010 version

https://www.nnss.gov/pages/programs/frmac/frmac_documentsmanuals.html

Or just google “FRMAC Manuals”!



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Training

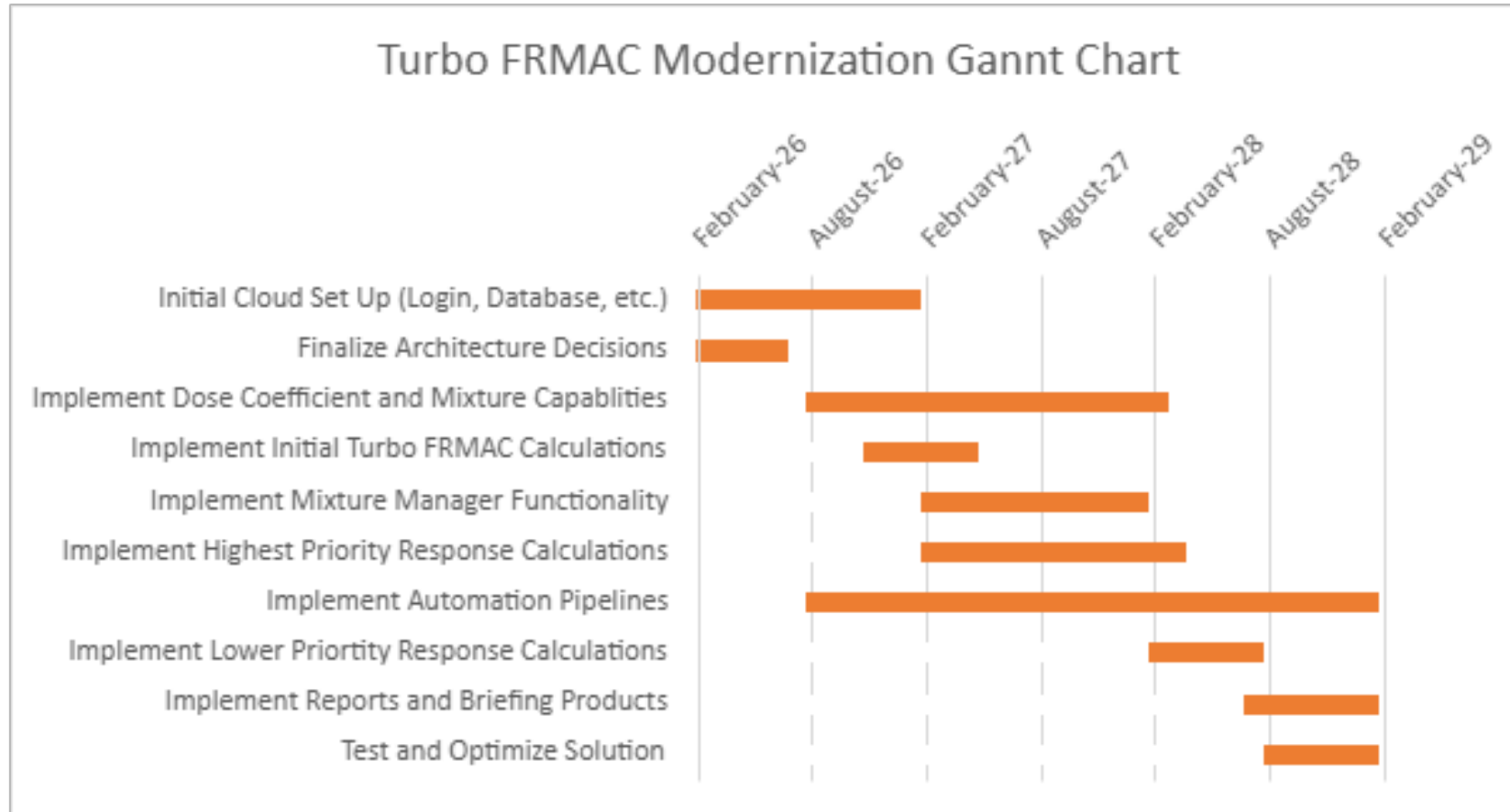
- AS-50 is available in recorded form
- AS-100 available in an online self-study (LMS) version
 - <https://snl.matrixlms.com/>
 - Instructions at <https://nirp.sandia.gov> under AS100 Training “FRMAC Training Portal MATRIX Login Instructions”
- Quarterly Continuing Training continues
 - Recordings available at nirp.sandia.gov
 - Will be added to LMS as time allows

Turbo FRMAC Modernization

- Transforming Turbo FRMAC from a stand-alone desktop application to a cloud-based tool.
- Funded by the Technology Modernization Fund, subsidiary of the General Services Administration (GSA)
- 3 year effort
- Two general high-level goals:
 - Phase 1 – develop a tool that meets the minimum performance requirements associated with the current baseline
 - Phase 2 – improve automated interoperability with other response tools

Assessment Working Group Update

Turbo FRMAC Modernization



Assessment Working Group Update



Turbo FRMAC Modernization requirements socialization meeting.

TODAY (7/29/26) at 3 EDT/12 PDT

Microsoft Teams meeting

<https://teams.microsoft.com/meet/299155535113403?p=mpYUOZDSkjlqQJvamK>

Meeting ID: 299 155 535 113 403

Passcode: EB9Ac3P3



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Assessment Working Group Update



NIRP Website Update

<https://nirp.sandia.gov>

The screenshot shows the home page of the Nuclear Incident Response Program (NIRP) website. The header includes the Sandia National Laboratories logo and a search bar. The main navigation bar lists Home, Software, Training, Help, and Contact Us. The "Our Mission" section states that the NIRP program provides research and technical solutions, expert analysis, and highly trained emergency response professionals to support the federal government's response to an accident or act of terrorism involving radiological, chemical, or biological material. The "Recent Software Updates" section features four software programs:

- Turbo FRMAC**: Version: 11.3.1, Last Release: Sep 4, 2023. Description: The Turbo FRMAC (TF) software program is the software implementation of the science and methodologies utilized by the Federal Radiological Monitoring and Assessment Center (FRMAC). These methods are documented in the FRMAC Assessment Manual and are utilized in the event of the intentional or accidental...
- SHARC**: Version: 10.5.0, Last Release: Sep 4, 2023. Description: SHARC (Specialized Hazard Assessment Response Capability) is used to simulate the release of radioactivity from a nuclear weapon via either conventional detonation or by non-explosive techniques. Each scenario is associated with an event that describes when and where the material was released and each event...
- Mixture Manager**: Version: 4.0.0, Last Release: Jun 5, 2023. Description: Mixture Manager (MM) allows users to create and manage radionuclides mixtures for future use across applications.
- Radionuclide Viewer**: Version: 4.4.0, Last Release: Jun 5, 2023. Description: Radionuclide Viewer (RV) is an application for viewing the DCFPAK radiological data from Oakridge National Laboratories.

The screenshot shows the Training page of the NIRP website. The header and navigation bar are consistent with the home page. The "Training" section lists five training modules:

- Assessment Scientist Continuing Training**: Needs description, Last Updated: Mar 31, 2023. View Training -->
- AS300 Training**: Needs description, Last Updated: Mar 31, 2015. View Training -->
- AS100 Training**: Needs description, Last Updated: Mar 22, 2021. View Training -->
- AS50 Training**: Needs description, Last Updated: Jul 31, 2022. View Training -->
- Assessment Work Group**: Needs description, Last Updated: Jul 17, 2019. View Training -->

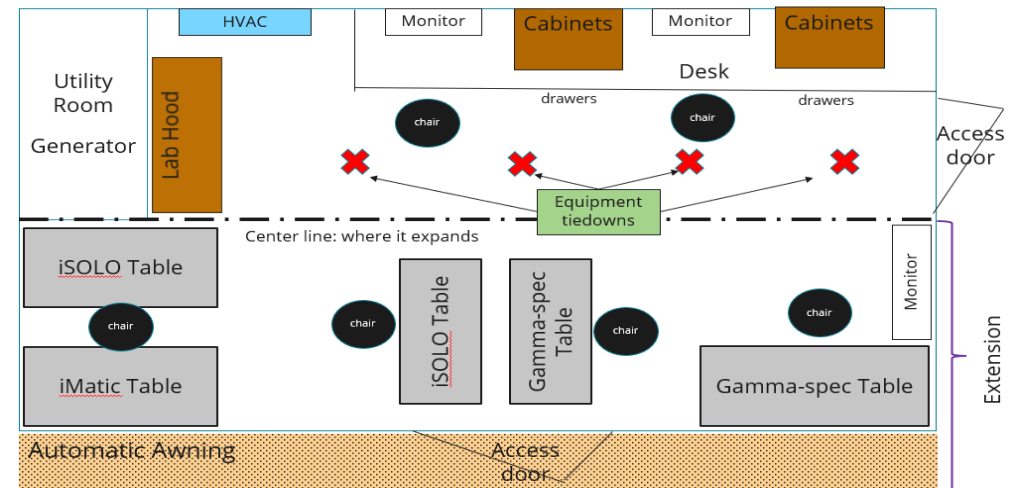


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Lab Analysis Working Group Update

- Fly Away Lab Container is currently being set up for operations
- Full field laboratory set-up
 - 3 gamma-spec detectors
 - 2-3 gross alpha/beta counters
 - HVAC
 - Lab hood for sample prep
 - Equipment storage/shipment
 - Power generator
 - Desks/tables/chairs
 - Secure access



Workspace/utility layout

Lab Analysis Working Group Update

- Bison lifts: lifts/lowers lab in the field
- Contract hot shot truck for rapid, on-call deployment
- Permanently set up at SNL RAPROC
 - On-site quick turn around time lab
 - Ease of maintenance
 - Training opportunities
- Operationally ready to respond: ~December 2026



Bison lifts

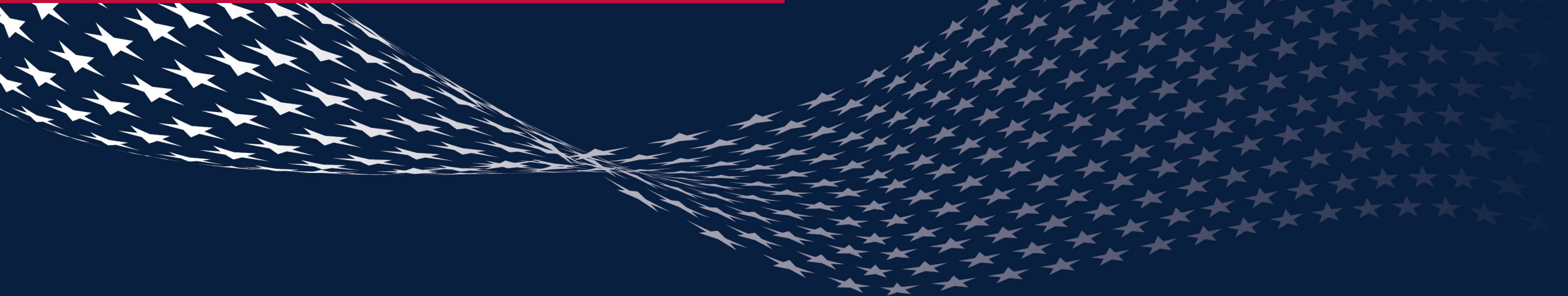


Semi-truck or aircraft delivery

- CBRN Responder Laboratory Participation Effort
 - Many States have radioanalytical laboratories to support their programs that have a “State” account type in CBRN Responder.
 - To interact with FRMAC Laboratory Analysis Group in an event, a laboratory must have a “Laboratory” account type to enable it to access to the CBRN Responder laboratory portal. The portal facilitates electronic transfer of information, completed forms and data packages to reduce/eliminate manual entry of data.
 - Currently there are only ~20 state laboratories that have the “Laboratory” type account that will allow electronic interface with FRMAC.

Exercise Update

July 29, 2026



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Cobalt Magnet 2025 AAR Summary/Update



Cobalt Magnet 2025 (CM25)

A multinational, full-scale consequence management exercise simulating a release at the fictional Erie Nuclear Power Plant in southeast Michigan, played over a seven-day operational timeline.

DOE/NNSA-led, with Michigan as lead U.S. state partner; Indiana, Ohio, and Canadian federal & provincial partners.

3,000+
participants

100+
response organizations

3 + Canada
U.S. states impacted

7 days
Mar 14–21, 2025

SCENARIO TIMELINE

1

Fri 3/14

Alert & Site Area Emergency declared

2

Mon 3/17

First radiological release; readings beyond site boundary

3

Tue 3/18

Second release drives plume NE across Lake Erie into Ontario

How the Findings Were Derived

1,800+

electronic observation submissions collected

40+

follow-up coordination calls with agencies &
SMEs

Excel + Power BI

consolidated adjudication database & trend
coding

Findings coded by TYPE (not by agency) so the analysis remained relevant as federal structures evolve:

STRATEGIC

National / senior-level decision-making: policy, governance, and resource alignment across agencies or nations.

OPERATIONAL

Mid-level coordination that translates strategy into action, multi-agency planning and situational management.

TACTICAL

Frontline, field-level execution by deployed personnel and technical specialists.

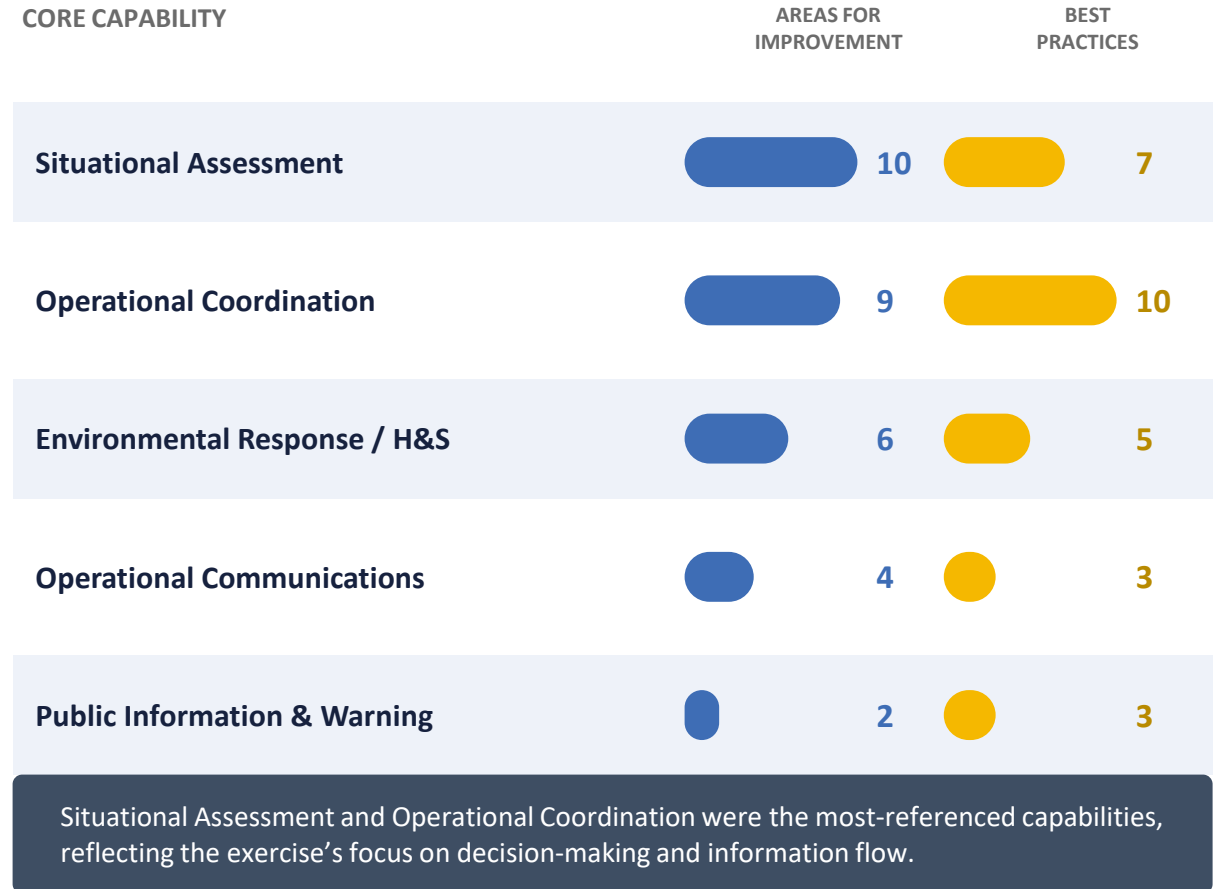
Only interagency-relevant findings appeared in this report; single-agency items were routed to internal AARs, and control/situational notes archived for reference.

Findings Framework

Nine Primary Topic Areas

- 1 Field Team Activities
- 2 Incident Management
- 3 Information Sharing
- 4 Logistics Support
- 5 Public Communications
- 6 Scientific Support
- 7 Technology
- 8 Training and SOPs
- 9 Exercise Design

Findings by Core Capability



Four Cross-Cutting Themes

1

Multi-Jurisdictional Coordination & Shared Decision-Making

Large-scale radiological incidents demand agile structures uniting federal, state, local, and international partners under a shared operating picture enabled by liaison networks and defined information-exchange channels.

2

Integration of Scientific, Technical & Operational Capabilities

Teams that merged technical data with operational decisions advanced the response faster. Tools but only with clear SOPs and data-validation discipline.

3

Realism, Readiness & Exercise Design Innovation

The week-long, player-driven, ungraded design with integrated simulation and spiked samples produced the most authentic readiness assessment when matched with trained controllers and balanced pacing.

4

Sustaining Institutional Knowledge Through Collaboration & Training

Preparedness is sustained through relationships, not just plans. The multi-year planning process itself was a training forum; recurring cycles and mentorship preserve expertise through turnover.

Takeaways & Forward Look

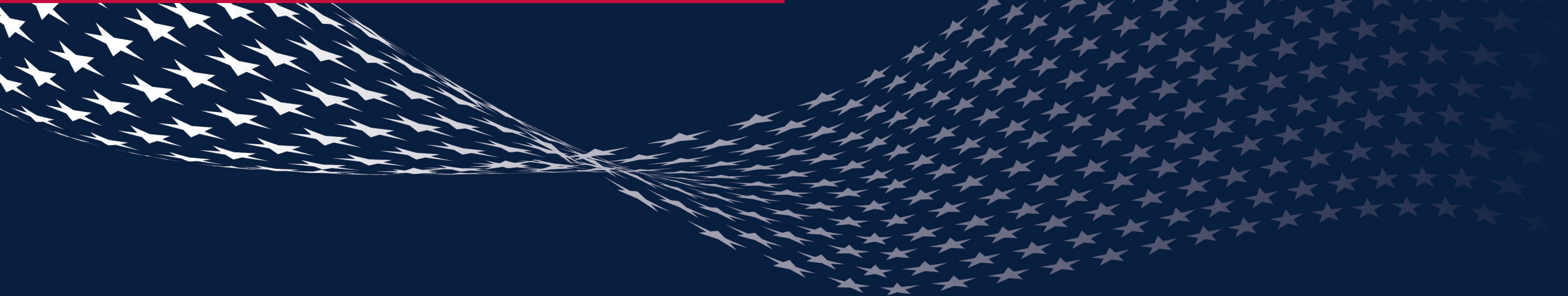
- ◆ **Largest, most complex U.S. radiological CM exercise to date**
CM25 served as an operational test bed for binational consequence management with proven value in stressing real-world coordination.
- ◆ **Relationships sustain preparedness**
Institutionalize recurring training cycles, mentorship, and cross-border familiarization to keep radiological-response expertise current despite turnover.
- ◆ **Standardize data validation, SOPs, and analytical communication**
Translate complex technical outputs into operationally relevant information for non-technical decision-makers and the public.

For cross-border coordination and data-sharing analysis, see the Cobalt Magnet 2025 International After-Action Report (released October 2025).

Regional Update

Radiological Assistance Program

July 29, 2026



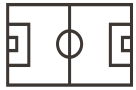
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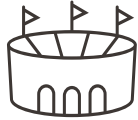


FIFA World Cup 2026 (USA)



MATCHES

78



STADIUMS

11



HOST
CITIES

11



TEAMS

48



DATES

11JUN to 19JUL



Region 2 Request For Assistance/Outreach



Provided radiation training/exercise support to:

- JHAT World Cup Prep, Kansas City, MO
- NUWAIX 2026, Ft. Campbell, KY
- Regional Render Safe Training (RRST), Norfolk, VA
- Regional Render Safe Training (RRST), Nashville, TN
- Regional Render Safe Training (RRST), Jackson, MS
- Regional Render Safe Training (RRST), New Orleans, LA



Participated in:

- Community Unified Response Radiological Incidents Emergencies (CURRIE), Jackson, MS
- Isotope Crossroads TTX, Nashville, TN

Preventive Radiological / Nuclear Detection - Support to Special Events:

- 2026 Sugar Bowl, New Orleans, LA
- 2026 Mardi Gras, New Orleans, LA
- 2026 Thunder Over Louisville
- 152nd Kentucky Derby, Louisville, KY
- 2026 FIFA World Cup, Kansas City, MO



21

Region 3 Request For Assistance/Outreach



Suspected Soviet Era Pu-238 Powered Pacemaker

- Received notification from Florida Bureau of Radiation Control (BRC) that a hospital in Orlando had removed a pacemaker they suspected contained Pu-238 from the USSR. It was implanted in Kiev, Ukraine in 1992 and no records were available. The device was being stored in a nuclear medicine hot lab in St. Petersburg, FL pending disposition.
 - Hospital and Florida BRC explored numerous possible disposition paths but could find none because of the origin of the special nuclear material.
 - The NNSA Orphan Source Recovery Program (OSRP) takes items like this, but only when they contain U.S. origin nuclear materials.
 - RAP 3 deployed a small team to examine the device and determine whether it contained radioactive material and if it was intact.
 - Examined the device visually and with survey equipment. No radioactive signature was detected and research on the model markings on the pacemaker by NEST's Consequence Management Home Team confirmed the device was powered by a conventional battery.



Preparing for 2027 Masters and Heritage Golf Tournaments

- Provide PRND support to ensure public safety.
- Partner with FBI, CSTs, USPIS and state and local police and emergency responders.



Region 5 Request For Assistance/Outreach



Provided radiation training/exercise support and outreach to:

- FBI Chicago, Chicago Fire and local municipal JHAT Training, MAR 2026
- FBI Chicago & Kane County RRST training St. Charles IL, APR 2026
- FBI Chicago & Indianapolis for RRST training Burns Harbor IN, MAY 2026
- 5th CST and Chicago Fire Training on Vehicle Mounted Detection Systems, Bolingbrook IL, MAY 2026

Participated in:

- Illinois State Rad Table-Top-Exercise Springfield IL, MAR 2026
- RSAR TTX for Illinois Public Health and Safety, Peoria IL, MAR 2026
- Wisconsin Rad Field Training & NPP exercises APR-JUL 2026
- RSAR Workshop for Iowa Public Health and Safety, Des Moines IA, APR 2026
- FEMA Region Nuclear Functional Exercise, Aurora IL, MAY 2026
- Silent Thunder, Columbus OH, JUN 2026

Preventive Radiological / Nuclear Detection Support to Special Events:

- UFC Fight at White House, JUN 2026
- FIFA World Cup Dallas, Boston, Newark, Philadelphia (SEAR 2), JUN-JUL 2026
- Chicago Fourth of July at Navy Pier (SEAR 2)



Region 6 Request For Assistance/Outreach

Provided support to:

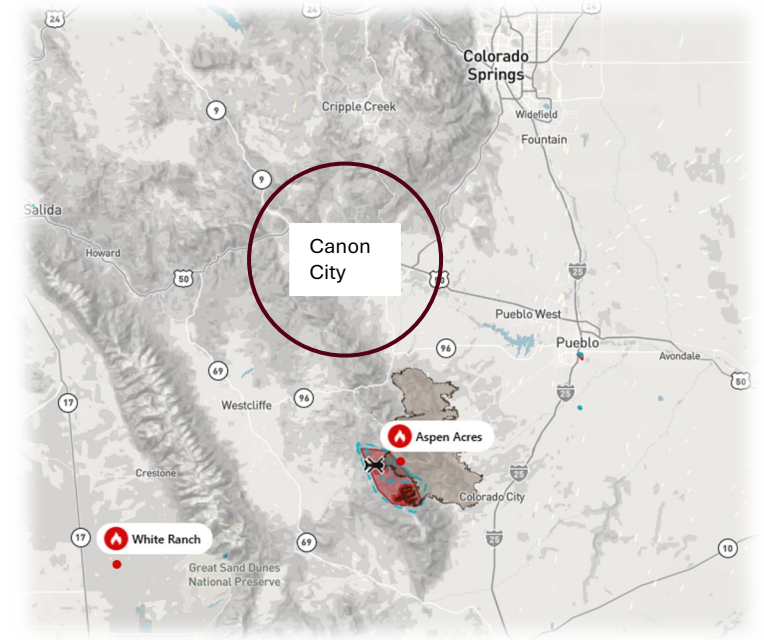
- Colorado Department of Public Health and Environment (CDPHE)
- In response to wildfires that got within 15 miles of the Cotter Mill remediation site

Located in:

- Canon City, Colorado

Actions taken:

- July 22/23, 2026
- Assist the state in surveying land and residential areas surrounding the former site in preparation of a potential wildfires at the site



Region 7 Request For Assistance/Outreach

Provided radiation training/exercise support and outreach to:

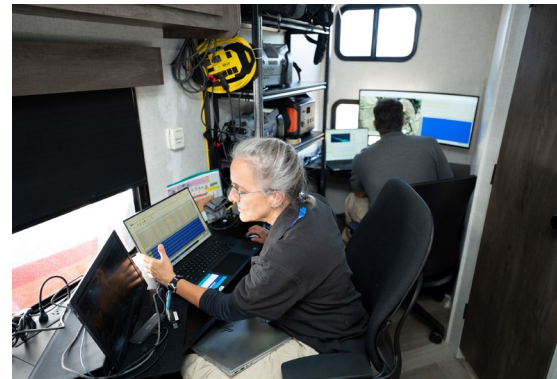
- Bay Area Rapid Transportation (BART) training
- Transportation Security Administration Ground-Based Uniformed Operations training
- San Jose Fire rad basics training
- Turlock Fire rad basics training
- Alameda Cty Fire/Sheriff's Office exercise
- Regional Response Team IX meeting
- RADRx exercise
- Las Vegas Isotope Crossroads

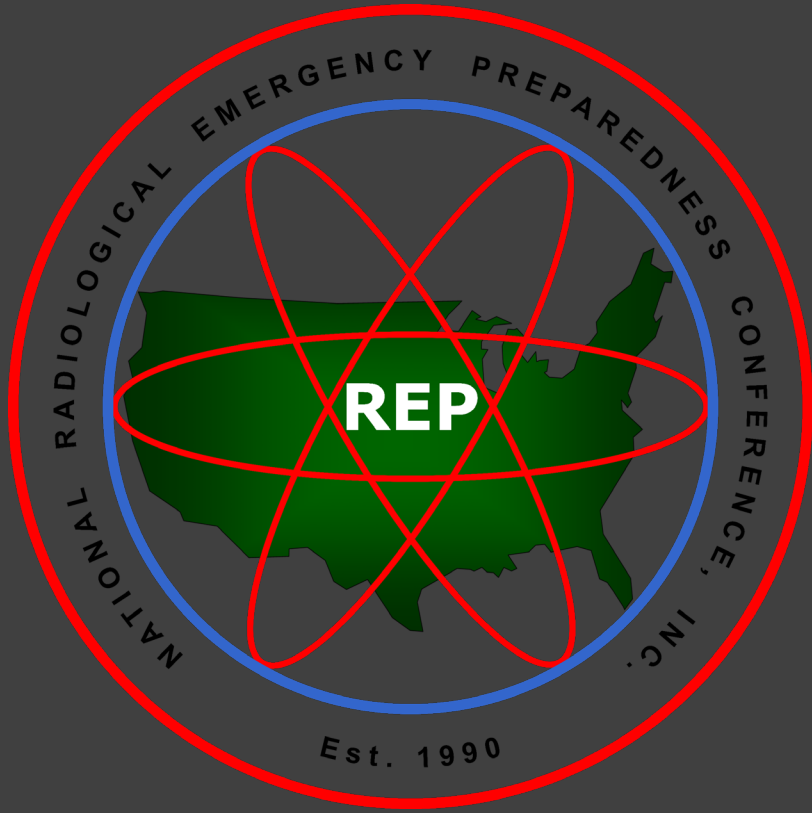
Deployments:

- Sandy Fire, Southern California

Preventive Radiological / Nuclear Detection - Support to Special Events:

- Super Bowl LX, World Cup





NREP Conference

April 12-15, 2027
Glendale, AZ

Stay tuned for abstract submittal onformation

Training Day: Monday, 4/12

Conference: Tuesday, 4/13- Thursday, 4/15

Registration: \$675

Hotel: Renaissance Glendale

[Register at NationalREP.org](https://NationalREP.org)



FRMAC Updates

**Conference of Radiation
Control Program Directors, Inc. (CRCPD)**

Tanya Ridgle, Chairperson

July 29, 2026

HS/ER – 4 – ROSS



Busy as usual



Now over 700 people have received ROSS training!



Awaiting the launch of the Virtual Evaluation Scenario Tool

HS/ER 5 – Committee on Emergency Response Planning

Productive meetings held during NREP

Working on determining Lab Capabilities with
HS/ER-12 and other partners

Monitoring impact of Executive Orders on REP
Program

HS/ER-18 –Training Coordinating Committee



Public Health Decision Makers Courses in Minnesota (August) and Connecticut (September)



Awaiting dates for FY'27 RAPTER training

HS/ER 20 – Portal Monitor and RIID Directory

The Commercial Directory for Portal Monitors for Vehicles and Radionuclide Identification Detectors has been updated and posted to the CRCPD Website. The directory will be reviewed and updated annually.



Image source: <https://www.lisedunetwork.com/directory/>

https://crcpd.org/wp-content/uploads/2024/06/Portal-HSER-20_18-Nov-25.pdf

RadResponder – Update on CRCPD Efforts

- CRCPD and H-43 continue to work with AttainX to test reported system fixes.
 - Some issues have been resolved, while others remain.
- Testing continues to uncover additional issues, even as previously identified problems are addressed.
- The CRCPD Board has agreed to continue to monitor the situation and will consider potential next steps at its November meeting.

CRCPD Actions on NRC Rulemaking



G-80 Task Force Established to Address NRC Rulemaking



Requests for Comments for each Rulemaking Package sent to Members – Comments incorporated into CRCPD Public Comment



Requests for Comment Period Extension sent for Each Proposed Rulemaking Package

CRCPD Annual Meeting

- May 24th through 27th 2027
 - Rancho Mirage, California
- Registration opening early 2027

WE HOPE TO SEE YOU THERE!

FRMAC Partner Updates



State and Federal Agency

Updates

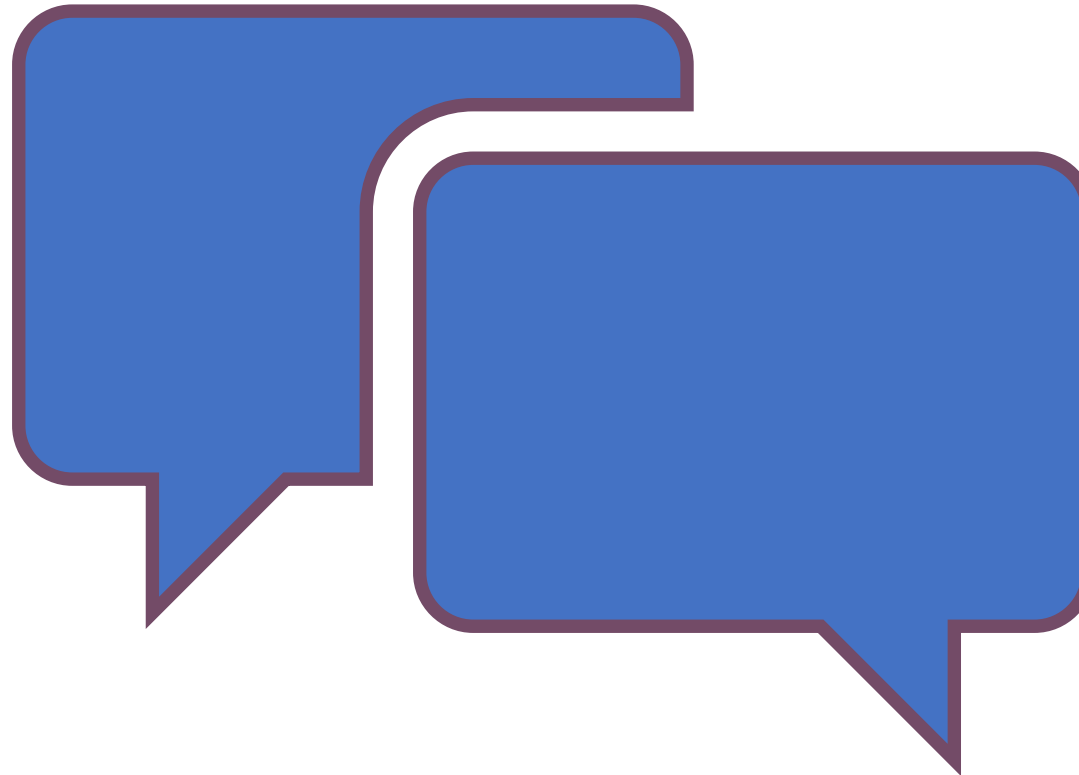


FEMA Ingestion Pathway Schedule



MON	2026	2027	2028
JAN		20 Turkey Point DR (RAP 3)	
FEB		09-10 Turkey Point IPX (RAP 3)	
MAR	25 Perry OUT (RAP 5)		28-29 Braidwood IPX (RAP 5)
APR		07-08 Comanche Peak DR (RAP 4)	11-12 Cooper DR (RAP 4)
MAY		11-12 Comanche Peak IPX (RAP 4)	16-17 Cooper IPX (RAP 4)
JUN		15-16 Wolf Creek DR (RAP 4)	13-14 Millstone IPX (RAP 1) 20-21 Arkansas Nuclear One DR (RAP)
JUL	28-30 Calver Cliffs DR (RAP 1)	12 Point Beach IPX (RAP 5) 19-23 Surry IPX (RAP 2)	
AUG		17-18 McGuire IPX (RAP 3) 30 Peach Bottom IPX (RAP 1) 31 Wolf Creek IPX (RAP 4)	22-23 Arkansas Nuclear One IPX (RAP 2) 29 FERMI II DR #1 (RAP 5)
SEP	9-11 Salem/Hope Creek DR (RAP 1) 16-18 Calvert Cliffs IPX (RAP 1) 21-25 Perry IPX (RAP 5) 29-30 Salem/Hope Creek OUT (RAP 1)	01 Wolf Creek IPX (RAP 4)	12 FERM II DR #2 (RAP 5) 26-17 FERMI IPX (RAP 5) 27 Seabrook IPX (RAP 1)
OCT	6 Comanche Peak OUT (RAP 4)	Braidwood OUT (RAP 5)	
NOV	17-19 Salem/Hope Creek IPX (RAP 1)		
DEC			

Open Discussion and Questions



Next Webinar

Wednesday, January 27 , 2027



Visit the site below for additional content

<https://www.nnss.gov/pages/programs/FRMAC/FRMAC.html>