

#### **Agenda**

- Welcome from FEMA Office of Emerging Threats (OET) Branch Chief and ROSS Program Manager Jon Gill,
   PhD and Jeramie Calandro
- Welcome from CRCPD ROSS Program Manager Bill Irwin, ScD, CHP, FEMA Type 1 ROSS
- ROSS Public Health Decision-Making in a Radiation Emergency Train-the-Trainer Course Adela Salame-Alfie, PhD, FEMA Type 1 ROSS
- ROSS Mission Ready Package project Greg Funderburk, FEMA Type 3 ROSS, CTOS ROSS Training Instructor
- ROSS Experiences at a Department of Energy Silent Thunder tabletop exercise Andrew Najjar, Harvard Children's Hospital, FEMA Type 4 ROSS
- New MissionEdge and Cadre Management trainings with follow-up videos Angela Leek, PhD, CHP, FEMA Type
   1 ROSS
- Competency Maintenance Problem Set: CBRNResponder and Data Thresholds Angela
- Closing Remarks FEMA OET







# FEMA Office of Emerging Threats Welcome and Opening Remarks Jon Gill & Jeramie Calandro



Source: GAO. I www.gao.gov

https://www.gao.gov/products/gao-19-164 accessed 2/23/23.

#### **FEMA OET Updates**

- Leadership discussion on ROSS Program
  - □ Internal changes to the ROSS Program
  - Upcoming changes on the horizon
  - VEST and CTOS
- Current Focus
  - MissionEdge activities
  - Outlining contingency options





Bill Irwin, ScD, CHP, FEMA Type 1 ROSS, CRCPD ROSS Program Manager





Questions? william.lrwin@vermont.gov

#### **Major Happenings This Past Quarter!**



 ROSS Training at the National Radiological Emergency Preparedness (NREP) and Conference of Radiation Control Program Directors (CRCPD) annual meetings.

The training was mostly interactive with three teams playing the Emergency
 Operations Center, the EOC Data Validation Group, and the Field Sampling Teams.

The scenario was a nuclear power plant release in North Carolina that affected the nearby lake, other downwind recreational areas, agricultural land, suburban developments, and a major metropolitan area with radioactive material deposition.

We are planning to build a version to share with ROSS virtually.

Our ROSS Advancement Section will work on making this happen in the coming

months.







#### **Other Major Happenings**



- An Emergency Management Assistance Compact (EMAC) Mission Ready Package (MRP) for the ROSS
  - Greg Funderburk has used his extensive experience as a professional firefighter and officer to help us build our first MRPs, one for Type 1 ROSS in Vermont and 1 for Type 1 ROSS in Georgia.
  - With some tweaking, these can be converted to Type 2 and 3 ROSS MRPs for those states.
  - With some training and assistance, each state can build one according to their specific emergency management agency guidelines.
- Greg has helped us in HS/ER-4 better understand the EMAC process which is crucial to ROSS deployments in emergencies. He will share more with you later,









#### **Initial Training for 2025 from CTOS**

Counterterrorism Operations Support taught an initial training course in Boston in May.

CTOS has four more scheduled for 2025:

Madison, Wisconsin 4 to 7 August

Harrisburg, Pennsylvania
 11 to 14 August

Orlando, Florida
 30 September to 3 October

Brooklyn, New York18 to 21 November

For more information go to <u>Registration and Evaluation System (RES) - Course Schedule</u> at the FEMA National Training and Education Division, search for PER-388, and click on the <u>PER-388</u> and <u>Course Details links</u>.

You need to not only connect with CTOS, but also the POC where the class is being scheduled.





4	Course Name
	Radiological Operations Support Specialist (ROSS)
	*

#### Radiological Operations Support Specialist (ROSS)

Start Date: 2025-08-04 End Date: 2025-08-07 Start Time: 08:00 AM Course Length: 32.0 Training Method: Mobile Training Provider: NTS

Contact Info: ctosmttreg@nv.doe.gov

City: Madison State: WI

PER-388

Zip Code: 53705

Course Details Link



#### Virtual Evaluation Scenario Training (VEST) Coming in 2025



- CTOS is wrapping up the improvised nuclear device (IND) VEST now for a summer delivery.
- The radiological dispersal device (RDD) VEST will follow later in FY 26.
- These VESTs will help you qualify for numerous
   Type 3 Position Task Book (PTB) tasks, perhaps ten or more each for IND and RDD.
- Several ROSS advanced significantly using the 2021 piloting by LLNL and the CRCPD.







#### NATIONAL QUALIFICATION SYSTEM (NQS)

FOR THE POSITION OF

#### RADIOLOGICAL OPERATIONS SUPPORT SPECIALIST

Version: October 2019

C	heck	ct	he	appropriate	position	type:
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Type 1	☐ Type 2	☐ Type 3

	POSITION TASK BOOK ASSIGNED TO:
TRAINEE'S NAME:	
DUTY STATION:	
PHONE NUMBER:	
E-MAIL:	
	POSITION TASK BOOK INITIATED BY:
OFFICIAL'S NAME:	
TITLE:	
DUTY STATION:	
PHONE NUMBER:	
E-MAIL:	
	POSITION TASK BOOK WAS INITIATED:
LOCATION:	
DATE:	



#### Welcome New Volunteers for CRCPD HS/ER-4!

- Really special people have joined us:
  - Amy Hass from Minnesota
  - Jill Slubowski from Ohio
  - Albert Condello from Pennsylvania
- We will send out an invitation for more volunteers through the CRCPD soon.
- With more than 525 trained people now, we have a lot to do, and many hands make the work lighter.
- With that, I would like to thank our sponsors!







Jim

#### Rogers















- I have had the pleasure of working with FEMA on this since 2014, and would like to thank the ROSS Program Managers I have worked with:
  - Jim Rogers, who led us through the pilot class, the next four classes and the first 100 ROSS:
  - Luis Garcia, who led us through the NQS Position Qualification, the NIMS Position Task Book, and the CRCPD/LLNL VEST pilot;
  - Steve Chase, the first HP, who led us through Covid, the RAND Report and expansion of the CRCPD team; and
  - Jon Gill, who has led us through the post-COVID period, helped increase productivity from NTED and CTOS, through CM25 with special recognition for ROSS in international play.
- I wish FEMA OET the best outcome following the analysis of the FEMA Review Committee.









#### Then, There is the Department of Energy, Our Source of Exercises

- Dr. Dan Blumenthal is the key I call him the Godfather of the ROSS. He created it around 2013 to fill the gap in state and local radiological and nuclear emergency response and recovery subject matter experts.
- With Dan moving on to other important projects, Alvin Morris has been the big brother for the ROSS as an advisor to HS/ER-4.
- DOE has been critical to giving ROSS the kinds of experiences they need to be ROSS and to lead other ROSS. They have helped us get ROSS to exercises, including:
  - □ Vibrant Response 14, 15, 17 and Gotham Shield (IND);
  - Cobalt Magnet 19 (NASA), 22 (RDD) and 25 (NPP); and
  - Nearly 100 tabletop exercises including Silent Thunder, Isotope Crossroads, RASReX\*, and CURRIE\*

\*RASReX: Radiological Awareness Security & Response Exercise and CURRIE: Community Unified Response to Radiological Incidents and Emergencies









#### Finally, We Have the Department of Homeland Security

- The ROSS Program would not exist if it were not for the DHS National Urban Security and Technology Laboratory.
- Since 9/11, NUSTL has shepherded millions of dollars to support:
  - The initial development of the ROSS Working Group
  - The job task analysis and the original lesson plans piloted in the first ROSS class in 2016
  - The subsequent CTOS initial ROSS training, PER-388
  - The ROSS Toolkit in RadResponder
  - The ROSS Job Aids
  - The IND and RDD Virtual Evaluation Scenario Tool development
  - The ROSS-Prepared Curriculum for university HP programs







#### **Another Great Source of Support is the CDC**

- We had a great response to the deployment request for the CDC Public Health Decision-Makers Train-the-Trainers course. Adela will speak to this next.
- Thank you to all the ROSS who volunteered for the deployment:

7	Mike Firsick (	(CT)	Abria Grimmett	(AL	) Juan	Garcia	(CA)
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Amy Hass (MN)
 Bill Irwin (VT)
 Angela Leek (IA)

Mohamed Musa (OR)
 Tanya Ridgle (CA)
 Jason Smith (MI)

Shelly Stancil (GA)
 Nancy Stanley (NJ)
 Blain Workman (AR)

Trae Windham (TX)

Deep appreciation to the CRCPD for working out the logistics, but especially to the CDC for making this ROSS training and competency development even possible!







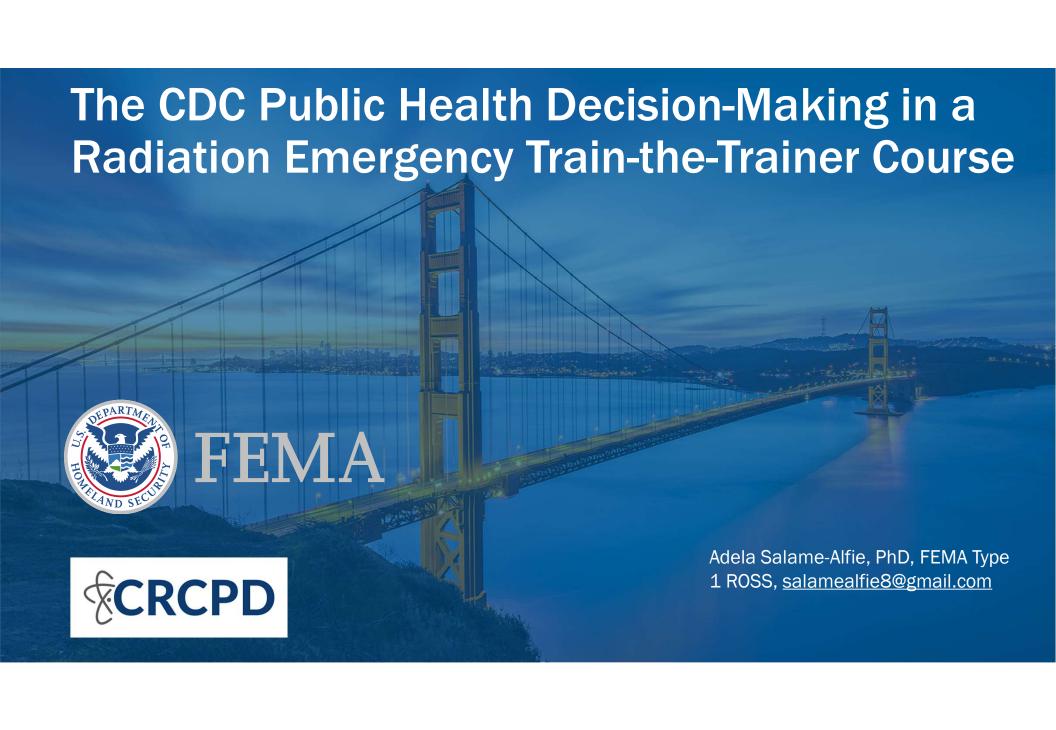


#### But, We are Saddened by the Loss of So Many Colleagues

- On our March 30<sup>th</sup> ROSS Quarterly Call, several ROSS from the CDC were on as they have been continuously since 2017. They engaged meaningfully in the dialog that occurred, particularly about their work in Cobalt Magnet 25.
- On April 1<sup>st</sup>, the entire Environmental Health Division where our ROSS colleagues work was eliminated.
- Similar losses in ROSS partner agencies have occurred through the "fork in the road" retirement option and reductions in force.
- We understand change to improve efficiency but recognize the challenges these changes create.
- FEMA, DOE, DHS, and the CRCPD are continuously evaluating contingencies to ensure the ROSS effort thrives, so in a radiological emergency, states can respond better so we recover faster.







#### Public Health Decision Making in a Radiation Emergency Course

- 3-day in-person course developed by CDC and SciMetrika
- Offers beyond-the-basics training and development in response to radiation emergencies, focusing primarily on ESF-8 and ESF-6 (public health and medical).
- Uses a nuclear detonation scenario as a basis
- Designed for professionals (public health, emergency management, radiation control) at the local, state and federal levels who are expected to take on decision-making roles or support those who do.





#### **3-Day Course**

#### **Objectives**

- Discuss public health (PH) responsibilities related to nuclear/radiological response.
- Identify key PH decisions in a nuclear/radiological response.
- Identify resources to support PH decision making in a nuclear/radiological response.
- Develop capacity to make key PH decisions in a nuclear/radiological response.
- Recognize the role of partner agencies in a nuclear/radiological response.

#### Prerequisites

Understanding of radiation concepts, IND response



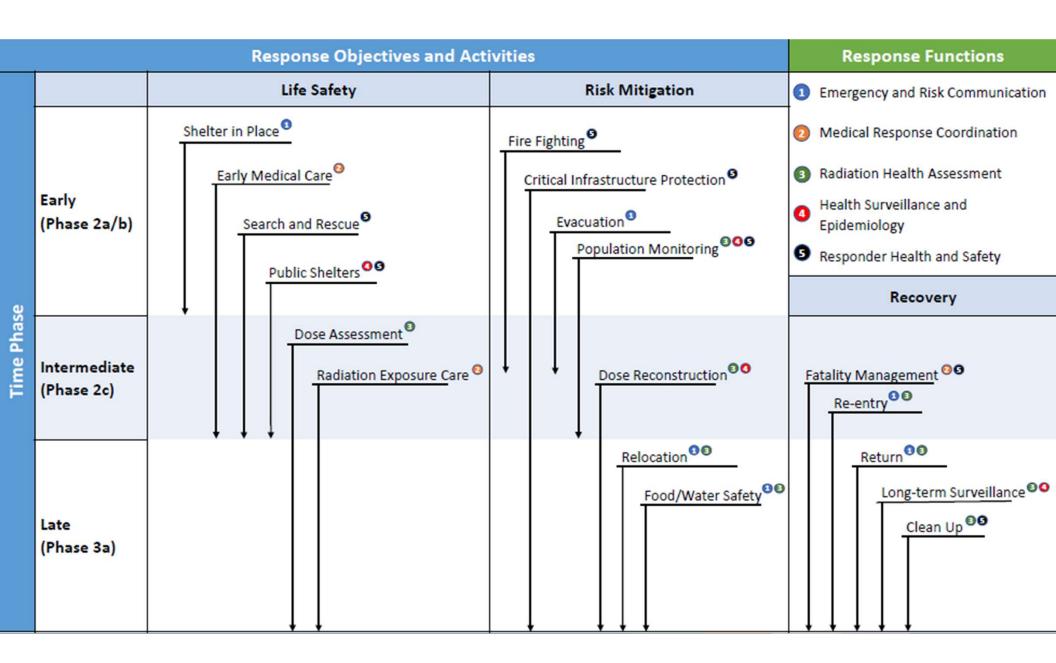


#### **Course Structure**

- Two days of didactic training with group activities
- Covers early, intermediate and late phases
- Focuses on life safety, risk mitigation and recovery
- 18 modules ranging from shelter-in-place/evacuation to fatality management, dose reconstruction, early medical care, long-term surveillance, relocation/return/recovery
- Day three is a full day Capstone Exercise







#### **Current status**

- Conducted 2 pilots in 2023 and course was revised based on participant feedback
- Delivered it successfully 3 times in 2024 (twice in MI, once in CA) about 100 participants
- We received very positive feedback from the participants
- Received several requests from states to bring the class to their state unfortunately, as of now, no new classes are currently scheduled.





#### **5-Day Train-the-Trainer Course**

- Goal to prepare a cadre of course instructors that could deliver the training for the next several years.
- Designed for an initial cadre of 10-12 Type1/Type 2 Radiological Operations Support Specialists (ROSS) that would be available to deliver the course in their state or as part of a regional training event in the foreseeable future.
- Includes the core content of the Public Health Decision Making in a Radiation Emergency course as well as several modules focused on adult learning concepts (designed by ORAU)
- Provides opportunities for the students to demonstrate understanding of the materials through teach-back and other feedback opportunities.
- Includes a Facilitator Guide that has instructor-specific content and provides insights and examples for how the course resources could be used to deliver the training.





#### **Participant Prerequisites**

- Potential instructors will have recent, working knowledge of radiation concepts and how they are applied during a radiation emergency.
- Participation in emergency response exercises involving radiation is highly preferred.
- Familiarity with the Planning Guidance for Responding to a Nuclear Detonation and related concepts is highly recommended as the course focuses on the response to a Nuclear Detonation.
- An example of sufficient preparation would be an individual that has been typed as Type 1 or Type 2 ROSS (although Type 3 ROSS with demonstrated knowledge and experience would be good candidates).





#### **Pilot Train-the-Trainer**

- Course is being offered for the first time to be held at CDC Campus (Atlanta) July 14-18, 2025
- 13 ROSS have been selected
- Travel will be sponsored by CRCPD (grant from CDC)
- Trained instructors will be able to access course content and all needed materials to teach the course on the CRCPD Members Only section of the website (location TBD) and at an ORAU Sharepoint site.







Adela Salame-Alfie <u>NuRaC.llc@gmail.com</u> <u>salamealfie8@gmail.com</u>



#### The Emergency Management Assistance Compact (EMAC)

- EMAC is run by the National Emergency Management Association (NEMA) as an all hazards, all disciplines mutual aid system for all fifty states, DC and the territories.
- It provides an EMAC Operating System (EOS) where events are opened for resource requests.
- It runs through State and Territorial Emergency Management Agencies (EMAs).
- Resource requests start with the closest states, and Resource Providers with Mission Ready Packages (MRPs) can connect almost instantly.
- A Requesting and Assisting Agency create a Resource Support Agreement (RSA) using the EOS, after which resources can mobilize, deploy and eventually demobilize.
- Resources and their agencies are reimbursed for the expenses for mobilization, deployment, and demobilization.





#### **Building Mission Ready Packages for the ROSS**

- Ideally, each State and Territory will build a Mission Ready Package for each Type ROSS they have in their jurisdiction.
- For the ROSS, there are no significant differences between an MRP for a Type 1 in a State or Territory and the Type 2, Type 3 and Type 4 ROSS. We all sort of have the same logistical needs:
  - Lodging
  - Transportation
  - Communications
  - Per Diem for meals and incidentals
  - Reimbursement for salary while activated
  - Insurance



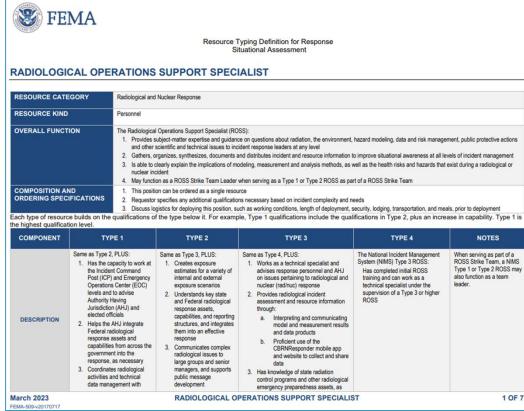


#### **Building Mission Ready Packages for the ROSS**

- The differences are specific to the people who are listed as Type 1, 2, 3 or 4 ROSS and their costs to mobilize, deploy and demobilize.
  - The differences by Type are described in the FEMA Position Description shown here.
  - Each of us has a different cost, for example salary if employed, insurance, personal vehicle costs, and the availability of laptops, phones, and other devices.







Federal Emergency Management Agency

## The Mission Ready Package Provides the Documentation for ROSS

- It is a set of worksheets (tabs) in an Excel workbook that itemize the commonalities as well as the specific differences among resources.
- The commonalities are efficiently handled by having one MRP for each ROSS Type (1, 2, 3 or 4).
- Here is page 1 of 5 of the MRP worksheet for a Type 1 ROSS.
- It comes in large part from the FEMA ROSS Position Description.





	NIMS Category:	Fire	and H	azardo	us Ma	te	Kind:	Perso	nnel				Type:	Туре	1	
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	Metrics:	ıc														
6.	5. Identify Emergency Support Functions (ESFs) Supported:															
	ESFs 5, 8, 10, 11, 15															
7.	Mission Capabil	ilitie	š:													
	Provides subject-matter expertise and guidance on issues related to radiation, the environment, hazard modeling, data and risk management, public protective actions.															
8.	Detailed Resour	ırce	)escri	ption:	:											
	Provides subject- and risk manager leaders at any lew information to imp the implications o that exist during a See FEMA's Reso	ment vel. G prove of mo a radi	, public athers, situation deling, ologica	organ organ onal a meas	ctive ad lizes, s waren ureme uclear i	otions ynthe ess a ent an ncide	s and o esizes, at all le id ana ent. Ma	other s documents of lysis n ly func	cientifi ments fincide nethod ion as	and d ent ma s, as a RO	inica distrib anage well :	l issu outes emer as th strike	incide nt. Is a e hea Team	incide ent an ble to th rist /Task	ent resp d resou clearly ks and l force Le	onse irce explain hazards eader.

10. Space and Size Requirements Needed to Carry out Mission:

## The Mission Ready Package Provides the Documentation for ROSS

- The differences are handled by entering the specific facts about each of the ROSS by type in different tabs of the workbook.
- There are worksheets (tabs) for Travel Costs, Personnel Salaries and Fringe Benefits, Equipment (for us, mostly computers and communications), and Commodities (office supplies, fuels, water, snacks, ice, etc.).
- Here is the one of the more complex worksheets, that for travel expenses.





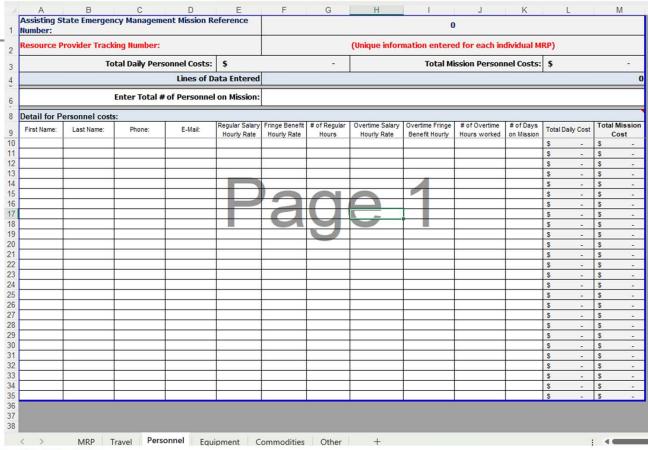
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Resource	Provide	r Tracking Numb	oer:		(Uni	que information	n entered for MRP)	each individual	
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			Enter D	etailed Travel (	Costs Be	elow:			
Personal	Vehicle:	_					_		
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Total Air	Travel:								
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mission site.								\$ -	
Meals/Tip	os:					4			
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While traveling to	Daily Per Diem Rate:		Per Diem Rate	# of Days @ Rate	# 0	of Personnel	Per Diem		
and from or							\$ -		
while on a mission,			Per Diem Rate	# of Days @	# 0	of Personnel	Per Diem		

#### Mission Ready Package Preparation

- Parts of the Mission Ready Package may be prepared ahead of time, e.g., the equipment and commodities worksheets.
- Other parts may be partially completed before a request, e.g. the MRP and Personnel Worksheets
- Other parts are best completed just before deployment, e.g. the travel costs.
- Emergency Management Agency Personnel are good at this.







Federal Emergency Management Agency

#### Mission Ready Package Preparation Guidance

- Health physicists, radiation protection staff, the Authority
   Having Jurisdiction, and the State ROSS Coordinators are not used to the tools of mutual aid requests and acquisition.
- The ROSS EMAC Mission Ready Package Job Aid is designed to help. Along with working with your EMA EMAC staff.
- It walks the person creating an MRP for Type 1, 2, 3, and 4 ROSS through each step and page of the workbook.
- Most steps are easy.
- Those that are more complex might be done once and revised periodically to make the process of deployment as efficient as possible when ROSS are needed.





#### -DRAFT-

Developing a Radiological
Operations Support
Specialist (ROSS)
Emergency Management
Assistance Compact
Mission Ready Package
Job Aid





Revision 1.0

June 2025

## Our Plan for Each State to Develop Mission Ready Packages for Each Type ROSS

- We recognize this is not an easy set of tasks.
- It may take months to complete. Vermont and Georgia are starting theirs' now.
- It is needed for any jurisdiction likely to need mutual aid. Those with a large ROSS cadre may not need as much mutual aid.
- It is necessary to protect the liabilities of ROSS, Resource Requesters, and Resource Suppliers.
- Fortunately, the professionals for the work do this often, especially for natural disasters.
- It requires State ROSS Coordinators work with those professional, the Emergency Management Agency EMAC personnel on the MRPs.
- It also requires us in CRCPD HS/ER-4 to provide a lot of support, and we will!







#### **Camel City Silent Thunder**

- Winston-Salem, NC
- 60+ attendees
- Cs-137 Blood Bank Scenario
- Promoted ROSS program
  - □ ~5 health physicists present
- DVSRS member interested in ROSS
- Takeaways: know your reporting requirements!







#### MissionEdge and Cadre Management Trainings

#### **AHJ and State ROSS Coordinators only**

June 30, 2025

1300 - 1430 eastern



July 8, 2025 1500 – 1630 eastern







If you have not received an invite to the respective meeting, please contact FEMA-ROSS@fema.dhs.gov



## ROSS Quarterly Problem Set June 2025

#### CBRN Responder and Data Thresholds

- 1. Read CRCPD E-43 Endorsed Threshold Sets White Paper
- 2. Watch **Severity Thresholds** video in CBRNResponder
- Apply CRCPD Endorsed thresholds to June 2025 Q
   Problem June 2025 Data Thresholds event
- 4. Answer Problem Set Questions

Message will go out this afternoon via MissionEdge with instructions attached





## Radiological Operations Support Specialist Continuing Education Competency Maintenance Program

ROSS	Quarterly Problem Set June 2025			
MissionEdge Course Code	ROSS_CE_THRESHOLDS_06.25			
Answers Due By:	No end date			
Submit Answers and Supporting Attachments via MissionEdge:	Click on Responder Profile tile     Click on Manage button next to Training History     Click Request Credit button at top of page     Click the search box and enter the course code: ROSS_CE_THRESHOLDS_06.25     Click Select next to the course     Tenter the date you are uploading as the effective date     Attach a document with your answers to the problem set as instructed     If you are requesting specific evaluation of tasks for signoff related to the completion of this problem set, enter this request in the comments section.			
Questions about problem:	Angela Leek - angelaleek@quantumradsolutions.com			
Task Sign Off Potential  Successful completion of this quarterly problem allows you to request evaluation for signoff of these tasks	ROSS Position Task Book (PTB)  Task Number 9 (MissionEdge 968)			
Note – if you would like to apply this problem set to one or more tasks in your PTB, you must enter the task evaluation request in the comments section of your submission as stated in step 9 above	Partial signoff on other tasks related to data assessment or situational awareness – discuss with evaluator			
Expected Answer Format	Short answers to questions, including screenshots.			

#### June 2025 Quarterly Problem Set Notes:



- If you need assistance with your access to CBRNResponder.net, please contact support@cbrnresponder.net
- If you cannot access the event, please click on Request and we will allow you access.
- Only Event Managers can apply or change thresholds
  - All personnel in the ROSS org have been set to Event Manager for this event so you can apply the thresholds. If you do not have the proper permissions to apply the thresholds, please contact Angela Leek at angelaleek@quantumradsolutions.com
- Please do not make any other changes to the event other than adjusting the thresholds.
   Other changes may adversely impact others completing this assignment.
- This problem set is using the Field Survey thresholds only we do not have data for the Accumulated Dose thresholds. We will explore these on a future problem set.

