

ROSS, Authority Having Jurisdiction, and State ROSS Coordinator Training

- Key roles in the ROSS Program
- History of the ROSS
- ROSS Qualification
- State ROSS Coordinators
- Competency maintenance



FEMA



Key Roles in the ROSS Program

- Radiological Operations Support Specialist (ROSS)
 - A FEMA National Qualification System (NQS) position.
 - A radiological and nuclear emergency response and recovery subject matter expert.
- Authority Having Jurisdiction (AHJ)
 - The individual to whom a ROSS reports for duty within their home jurisdiction.
 - In most cases, this is the state Radiation Control Program Director
- State ROSS Coordinator (SRC)
 - Appointed by AHJ to assist those who want to become ROSS and to assimilate ROSS into the jurisdiction's radiological emergency preparedness capability.
 - They do not have to be ROSS, but most are.
- FEMA Office of Emerging Threats (OET)
 - Federal government ROSS Program Management.
 - Has been leading the ROSS effort since soon after 9/11.



FEMA



Players in the ROSS Program

- Conference of Radiation Control Program Directors (CRCPD)
 - Represents the state and territorial radiation protection agencies.
 - A non-profit organization directed by STT RCPDs.
- CRCPD Homeland Security/Emergency Response Committee 4 (HS/ER-4)
 - Manages ROSS functions within states and compatible with NQS guidance.
 - Host the Qualification Review Board (QRB) to independently assess advancement by type.
- ROSS Steering Committee
 - Leadership that help ensure ROSS activities meet federal, state, local, territorial and tribal needs.
 - FEMA OET
 - CRCPD HS/ER-4 Chair
 - DHS National Urban Security Technology Laboratory (NUSTL) leadership
 - DOE National Nuclear Security Administration (NNSA) leadership

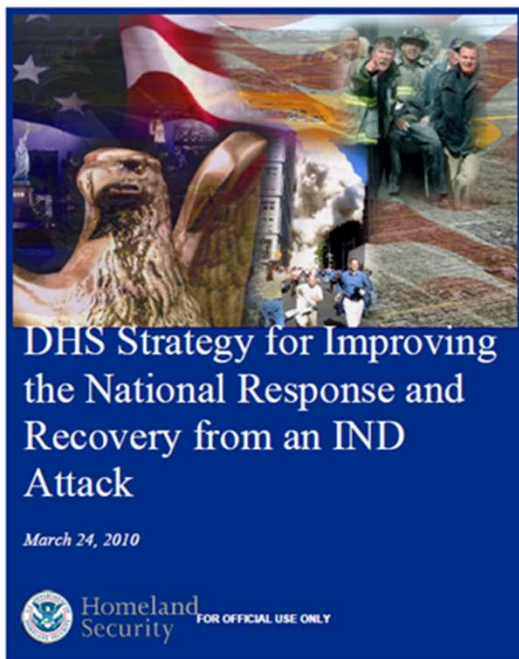


FEMA



History of the ROSS – the Beginning

- The ROSS grew out of the Improvised Nuclear Device (IND) Forum, an assessment of gaps in the nation's preparedness for an IND.
- One gap identified: an insufficient number of subject matter experts (SMEs) to respond to a nuclear detonation, especially at the state and local level.
- FEMA led a program to develop these SME responders with the support of the DHS NUST and the DOE NNSA.
- Starting in 2014, the role was piloted in nuclear detonation exercises, including the Department of Defense's Vibrant Response series.
- State SMEs were provided to test the ROSS by the CRCPD.



FEMA



History of the ROSS – the Focus Areas

National Planning Scenarios



Key Scenario Sets	National Planning Scenarios
1. Explosives Attack – Bombing Using Improvised Explosive Device	Scenario 12: Explosives Attack – Bombing Using Improvised Explosive Device
2. Nuclear Attack	Scenario 1: Nuclear Detonation – Improvised Nuclear Device
3. Radiological Attack – Radiological Dispersal Device	Scenario 11: Radiological Attack – Radiological Dispersal Device
4. Biological Attack – With annexes for different pathogens	Scenario 2: Biological Attack – Aerosol Anthrax Scenario 4: Biological Attack – Plague Scenario 13: Biological Attack – Food Contamination Scenario 14: Biological Attack – Foreign Animal Disease
5. Chemical Attack – With annexes for different agents	Scenario 5: Chemical Attack – Blister Agent Scenario 6: Chemical Attack – Toxic Industrial Chemicals Scenario 7: Chemical Attack – Nerve Agent Scenario 8: Chemical Attack – Chlorine Tank Explosion
6. Natural Disaster – With annexes for different disasters	Scenario 9: Natural Disaster – Major Earthquake Scenario 10: Natural Disaster – Major Hurricane
7. Cyber Attack	Scenario 15: Cyber Attack
8. Pandemic Influenza	Scenario 3: Biological Disease Outbreak – Pandemic Influenza



Scenario 1: Nuclear Detonation – Improvised Nuclear Device



Scenario 11: Radiological Attack – Radiological Dispersal Device



FEMA



History of the ROSS – the Job Task Analysis

- Evaluators followed the ROSS and wrote after action reports on the skills, knowledge and abilities (SKAs) ROSS used in the exercises.
- Lawrence Livermore National Laboratory (LLNL) conducted focused outreach to the health physics and response communities to document the SKAs useful to people who might become ROSS and people who might need ROSS.
- LLNL used the SKAs as objectives for a set of training lesson plans



FEMA



History of the ROSS – the Job Task Analysis

- A pilot course was hosted by the CRCPD and delivered to sixteen health physicists in 2016.
- After a second pilot hosted by the Centers for Disease Control and Prevention (CDC), the lesson plans were turned over to Counterterrorism Operations Support (CTOS).
- CTOS conducted three pilot courses to have the course PER-388 accepted into FEMA's National Domestic Preparedness Consortium catalog in 2018.
- Leading ROSS teach the CTOS class technical content.



FEMA



Job Task Analysis

- It is important that the ROSS not just be book smart, but also skilled in radiation protection, rad/nuc emergency response and specialized software.
- ROSS must equally do well leading teams and working within teams.

Basic Health Physics Knowledge

Note: Passing Part 1 of the AAHP Exam represents at least an "Intermediate" proficiency in all categories. CHP or PhD in Radiological Health Physics represents at least "Advanced" in all categories. NRRPT Certification represents at least a "Novice" proficiency in all categories.

1. Measurements and Instrumentation

- 1.1 Types of Measurements
- 1.2 Selection of Instruments
- 1.3 Analytical Techniques for Sampling
- 1.4 Measurement Methods
- 1.5 Interpretation and Reporting of Results
- 1.6 Quality Control and Data Quality Objectives
- 1.7 Instrument Calibration, Maintenance, and Performance Testing

2. Standards and Requirements

- 2.2 History and Development (regulation basis and past exposures and events)
- 2.3 Use and Application
- 2.4 Types of Regulations (jurisdiction / authorities)
- 2.5 Interpretation and Knowledge

3. Hazards Analysis and Controls

- 3.1 Hazard Identification
- 3.2 Evaluate and Assess Significance/Consequence
- 3.3 Devise and Implement Controls
- 3.4 Types of Engineered Controls
- 3.5 Designs and Specifications
- 3.6 Selection and Evaluations (PPE, dosimetry, shielding, & decon)
- 3.7 Use and Operations
- 3.8 Document and Communicate

4. Operations and Procedures

- 4.1 Standard Operating Practices and Procedures
- 4.2 Emergency Response (see Radiological Response Knowledge and Tools)
- 4.3 Basis for Operations and Program
- 4.4 Program Types
- 4.5 Records

5. Fundamentals and Education

- 5.1 Skills of the Trade - explain
- 5.2 Types
- 5.3 Other Fundamentals

Note: these are taken from CHP required knowledge categories

ROSS Minimum Knowledge

Type 1 (Highest)	Type 2	Type 3
Intermediate	Novice	Novice
Intermediate	Novice	Novice
Intermediate	Novice	Novice
Intermediate	Novice	Awareness
Intermediate	Novice	Awareness
Awareness	Awareness	Awareness
Novice	Awareness	Awareness
Type 1 (Highest)	Type 2	Type 3
Intermediate	Novice	Awareness
Intermediate	Novice	Awareness
Intermediate	Novice	Awareness
Intermediate	Novice	Awareness
Type 1 (Highest)	Type 2	Type 3
Novice	Awareness	
Novice	Awareness	Awareness
Intermediate	Novice	Novice
Novice	Awareness	
Novice	Novice	Awareness
Intermediate	Novice	Novice
Awareness	Awareness	Awareness
Novice	Novice	Awareness
Type 1 (Highest)	Type 2	Type 3
Intermediate	Novice	Novice
Advanced	Intermediate	Novice
Novice	Novice	Awareness
Novice	Awareness	
Novice	Awareness	
Type 1 (Highest)	Type 2	Type 3
Intermediate	Intermediate	Novice
Novice	Novice	Awareness
Intermediate	Intermediate	Intermediate

Job Task Analysis

Radiological Response Knowledge & Tools

		ROSS Capability Type		
		Type 1 (Highest)	Type 2	Type 3
RR1. Models and Software Tools				
RR1.1 Atmospheric Dispersion Modeling (e.g. Hot Spot, RASCAL, HPAC, NARAC)		Novice	Awareness	Awareness
RR1.2 Dose Assessment Modeling (e.g., RESRAD-RDD & TurboFRMAC)		Awareness	Awareness	
RR1.3 Monitoring Planning (10 point strategy, MARSIM Methodology, & Visual Sample Plan)				
Emergency Monitoring Strategies (e.g., 10 point Strategy)		Intermediate	Intermediate	Intermediate
Software tool (e.g., Visual Sampling Plan (VSP) & MARSIM)		Awareness		
RR1.4 Information Management / Data Telemetry / Databases				
RadResponder	Note: For resources that require an account to access	Intermediate	Intermediate	Intermediate
CMWeb	Awareness Know how to request access	Intermediate	Novice	Awareness
HSIN	Novice Have an active account and understand how to navigate	Novice	Awareness	Awareness
	Intermediate Active account and familiar with sending, receiving, and requesting data			
RR1.3 FRMAC/IMAAC Product Interpretation & Customization		Intermediate	Intermediate	Novice
RR2. Radiological Emergency Response Standards and Guidance (e.g., NCRP, ICRP, ANSI, & IAEA - see references)		Intermediate	Novice	Awareness
RR3.0 Response Doctrine and Framework		Type 1 (Highest)	Type 2	Type 3
RR3.1 Federal, State, and Local Radiological Response Doctrine (Federal, State, and Local Plans manuals frameworks, & playbooks - see reference list)		Intermediate	Novice	Awareness
RR3.2 Federal Radiological Response Assets & Capabilities				
Advisory Team for the Environment, Food, and Health	Awareness Know it exists and what it does	Intermediate	Intermediate	Novice
FRMAC	Novice Know how to activate and use asset	Intermediate	Novice	Awareness
All other resources (see ROSS Resource Guide)	Intermediate Know activation, expected timelines, and response integration.	Novice	Awareness	Awareness
RR3.3 State Radiological Response (e.g. implication of a NRC agreement vs. non-agreement State & Impact on Home Rule vs Dillon Rule governance)		Intermediate	Novice	Awareness
RR4. Radiological Threats		Type 1 (Highest)	Type 2	Type 3
Understanding Radiological Terrorism, sources of concern, and potential impacts		Intermediate	Novice	Awareness
Understanding Nuclear Terrorism and potential impacts		Intermediate	Novice	Awareness

History of the ROSS - - a National Qualification

- In 2019, the FEMA National Integration Center assisted in the development of a FEMA NQS Position Qualification (NIMS 509) and a Position Task Book (PTB) for the ROSS.
- It follows the SKAs in the job task analysis and builds on the initial training in CTOS PER-388.
- After national engagement to answer questions and respond to comments about the NIMS 509 and PTB, they were incorporated into the NQS.
- The NIMS 509 is here: [Radiological Operations Support Specialist](#)
- The PTB is here: [Radiological Operations Support Specialist PTB](#)



“There is a shared recognition that FEMA cannot only plan for events we are capable of responding to; rather, we must plan for catastrophic events that will overwhelm capabilities at all levels of the government and private sector and challenge even the most scalable structures and systems.”

– Administrator Craig Fugate



FEMA





Resource Typing Definition for Response
Situational Assessment

Provides a description of Types 1, 2, 3 and 4 and the experiential, educational and training requirements of each type.

RADIOLOGICAL OPERATIONS SUPPORT SPECIALIST

RESOURCE CATEGORY	Radiological and Nuclear Response
RESOURCE KIND	Personnel
OVERALL FUNCTION	<p>The Radiological Operations Support Specialist (ROSS):</p> <ol style="list-style-type: none"> 1. Provides subject-matter expertise and guidance on questions about radiation, the environment, hazard modeling, data and risk management, public protective actions and other scientific and technical issues to incident response leaders at any level 2. Gathers, organizes, synthesizes, documents and distributes incident and resource information to improve situational awareness at all levels of incident management 3. Is able to clearly explain the implications of modeling, measurement and analysis methods, as well as the health risks and hazards that exist during a radiological or nuclear incident 4. May function as a ROSS Strike Team Leader when serving as a Type 1 or Type 2 ROSS as part of a ROSS Strike Team
COMPOSITION AND ORDERING SPECIFICATIONS	<ol style="list-style-type: none"> 1. This position can be ordered as a single resource 2. Requestor specifies any additional qualifications necessary based on incident complexity and needs 3. Discuss logistics for deploying this position, such as working conditions, length of deployment, security, lodging, transportation, and meals, prior to deployment

Each type of resource builds on the qualifications of the type below it. For example, Type 1 qualifications include the qualifications in Type 2, plus an increase in capability. Type 1 is the highest qualification level.

COMPONENT	TYPE 1	TYPE 2	TYPE 3	TYPE 4	NOTES
DESCRIPTION	<p>Same as Type 2, PLUS:</p> <ol style="list-style-type: none"> 1. Has the capacity to work at the Incident Command Post (ICP) and Emergency Operations Center (EOC) levels and to advise Authority Having Jurisdiction (AHJ) and elected officials 2. Helps the AHJ integrate Federal radiological response assets and capabilities from across the government into the response, as necessary 3. Coordinates radiological activities and technical data management with 	<p>Same as Type 3, PLUS:</p> <ol style="list-style-type: none"> 1. Creates exposure estimates for a variety of internal and external exposure scenarios 2. Understands key state and Federal radiological response assets, capabilities, and reporting structures, and integrates them into an effective response 3. Communicates complex radiological issues to large groups and senior managers, and supports public message development 	<p>Same as Type 4, PLUS:</p> <ol style="list-style-type: none"> 1. Works as a technical specialist and advises response personnel and AHJ on issues pertaining to radiological and nuclear (rad/nuc) response 2. Provides radiological incident assessment and resource information through: <ol style="list-style-type: none"> a. Interpreting and communicating model and measurement results and data products b. Proficient use of the CBRNResponder mobile app and website to collect and share data 3. Has knowledge of state radiation control programs and other radiological emergency preparedness assets, as 	<p>The National Incident Management System (NIMS) Type 3 ROSS: Has completed initial ROSS training and can work as a technical specialist under the supervision of a Type 3 or higher ROSS</p>	<p>When serving as part of a ROSS Strike Team, a NIMS Type 1 or Type 2 ROSS may also function as a team leader.</p>

History of the ROSS – Management & Facilitation

- The FEMA Office of Emerging Threats manages the ROSS Program.
- A ROSS Steering Committee is comprised of a representative from FEMA, DHS NUSTL, DOE NNSA and the CRCPD.
- The ROSS Steering Committee provides guidance from a national perspective.
- The FEMA OET ROSS Program may be contacted at FEMA-ROSS@FEMA.DHS.GOV.




History of the ROSS – Continuing Support

■ The FEMA OET ROSS Program and the ROSS Steering Committee help ensure ROSS are built on a consistent national framework through the:

- NQS FEMA 509 and PTB
- CTOS initial training (PER-388)
- ROSS Toolkit in CBRNResponder
- ROSS Job Aids
- ROSS-Ready curriculum for college and university health physics programs
- Virtual Evaluation Scenario Tool (VEST) for ROSS continuing education
- National level tabletop and full-scale exercises



History of the ROSS – Continuing Support



Radiological Operations Support Specialist (ROSS) – Incident Command System Initial Response Job Aid



Radiological Operations Support Specialist (ROSS) – Planning Process Job Aid



Radiological Operations Support Specialist (ROSS) – Emergency Operations Center Job Aid

September 2018



Approved for Public Release

RNRR-T-G-4



All the ROSS Job Aids and the ROSS Toolkit of critical guidance information are in RadResponder



RADIOLOGICAL OPERATIONS SUPPORT SPECIALIST

ENTER



FEMA



History of the ROSS – Continuing Support

- CRCPD HS/ER-4 helps foster connections among ROSS and between ROSS and government agencies.
- CRCPD supports ROSS training and exercise opportunities, quarterly calls and competency maintenance problem sets.
- CRCPD supports relationships between ROSS and the ROSS Steering Committee, State RCPDs and the State ROSS Coordinators
- <https://crcpd.org/ross-portal/>



HOME ▾ ABOUT ▾ ANNUAL MEETING



The ROSS Program is managed by FEMA as guided by a Steering Committee of FEMA CBRN, the DHS National Urban Security Technology Laboratory, the DOE National Nuclear Security Administration and the CRCPD.

If you have questions about becoming a ROSS or using ROSS contact the ROSS Steering Committee at FEMA-ROSS@FEMA.DHS.GOV

Testimonials

Silent Thunder - "The most satisfying part of the Silent Thunder exercises seeing the responders polled on their confidence to respond to an RDD and seeing the improvement from the start to the completion of the exercise."



ROSS Stories



FEMA



History of the ROSS – Continuing Support

Homeland Security Information Network ROSS Community of Interest is also provided by the CRCPD

The screenshot displays the HSIN (Homeland Security Information Network) website interface. At the top, the HSIN logo and navigation menu are visible. The main heading is "Radiological Operations Support Specialists". Below this, a description states: "During hazardous radiological preparedness or response operations, the Radiological Operations Support Specialist (ROSS) identifies and provides critical information to responders, key leaders, and decision-makers. The ROSS is a state and local subject matter expert (SME) with the ability to bridge the gap between response and radiological knowledge in order to minimize the impact of a potential or actual incident involving the release of radiological or nuclear materials."

Announcements

FOUO Reminder by Jeffrey D. Semancik (JEFFREY.SEMANCIK)	9/16/2021 3:17 PM
For Official Use Only (FOUO) Handling Requirements Reminder on For Official Use Only.pdf	
ROSS Directory by Jeffrey D. Semancik (JEFFREY.SEMANCIK)	6/3/2020 5:48 PM
When you first sign in, please enter your information in the ROSS directory. Add new announcement	

Highlighted Content

- IC_WorldWideThreatAssessment-2021-Unclassified-Report
- ROSS PTB Task Completion Documentation Guidance
- NQS_S09_ROSS
- NQS_PT8_ROSS

ROSS In Action

Search By Event Type

- IND
- Lost/Stolen Source
- NPP Commercial
- NPP Military
- Nuclear Detonation
- Nuclear Weapons Incident
- Occupational Incident
- PRND
- Public Contamination/Exposure
- RDD
- RED
- Satellite Launch/Reentry Anomalies
- Special Event
- Transportation Incident
- Other

Search By Focus Area

- Administrative
- Communications and Information Management
- Dose Assessment
- Equipment
- Health Effects, Monitoring and Countermeasures
- Incident Command
- Public Information
- Public Protection
- Responder Protection and Dosimetry
- Response Strategy
- Safety Planning
- Sampling and Monitoring
- Source Term, Technical Info

Search By Training Type

- Continuing Education
- Initial Training
- Just in Time Training
- Professional Development

ROSS Qualification

- The initial step in ROSS Qualification is training in accordance with the Position Qualification and completing PER-388 and its prerequisites.
- The remaining steps use the PTB to complete tasks to advance from Type 4 to Type 3 to Type 2 and to Type 1.
- Task sign off by higher ranked ROSS and the authority having jurisdiction (AHJ).

MISSIONEDGE Dashboard Welcome Leek, Angela

Grant Endorsements

Ridgle, Tanya - Radiological Operations Support Specialist (ROSS) - Type I

Endorsable Tasks - C

Competency	Behavior	Tasks
Other Competencies	Demonstrate Core Position Skills	1

Task	Codes	# Endorsements Required	Status
Select Manage multiple ROSS Strike Teams engaged in different radiological incident management functions for the most geographically widespread and resource-intensive response and recovery operations	C, E, F, I, J, T	1	0 of 1

MissionEdge, a tool provided to the ROSS by Chainbridge Technologies through the CRCPD is the easy means to document the qualification.

See MissionEdge training for more!

ROSS Qualification

- Once all the tasks of a Type 3, 2 or 1 PTB are signed off by an evaluator, the PTB is sign-off by the AHJ.
- Independent review is then conducted by the CRCPD HS/ER-4 Qualification Review Board (QRB).
- Credentialing as Type 3, Type 2 or Type 1 ROSS is completed by the AHJ as the Certifying Official.





FEMA

NATIONAL QUALIFICATION SYSTEM (NQS)

POSITION TASK BOOK
FOR THE POSITION OF

RADIOLOGICAL OPERATIONS SUPPORT SPECIALIST

Version: October 2019

Check the appropriate position type:

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:

- There are 63 tasks (41 for Type 3, 15 more for Type 2, and 7 more for Type 1).
- The toughest is Type 3, as we want all Type 3 to be technically sound.
- Type 2 can lead a ROSS Task Force and a Type 1 can lead multiple ROSS Task Forces.
- Like most FEMA Type 1 positions, it takes a lot to reach the highest level.
- The AHJ, his/her designees, and higher Typed ROSS can sign off tasks.



FEMA



EVALUATION RECORD FORM

TRAINEE NAME:
TRAINEE POSITION:
Evaluation Record Number:
Evaluator's name:
Incident/office title and agency:
Evaluator's home unit address and phone:
Name and location of incident or simulation/exercise:
Incident kind:
Number and kind of resources:
Evaluation period:
Position type:
Recommendation: The above named trainee performed the initialed and dated tasks under my supervision. I recommend the following for this trainee's further development: <input type="checkbox"/> The trainee has successfully performed all required tasks for the position. The AHJ should consider the individual for certification. <input type="checkbox"/> The trainee could not complete certain tasks or needs additional guidance. See comments below. <input type="checkbox"/> Not all tasks were evaluated on this assignment. An additional assignment is needed to complete the evaluation. <input type="checkbox"/> The trainee is severely deficient in the performance of tasks and needs further training prior to additional assignment(s) as a trainee for this position.
Additional recommendations/comments:
Date:
Evaluator's initials:
Evaluator's relevant qualification:

- For all tasks completed during an evaluation period, an Evaluation Record Form (PTB page 6) must be completed.
- A completed Type 3 PTB may require several Evaluation Record Forms for the 41 tasks as each ERF is for a training event like a class, an exercise, on the job work activity, or an incident response.
- MissionEdge can also be used for these steps.



FEMA



EVALUATOR VERIFICATION

(Do not complete this form unless you are recommending the trainee for all-hazards certification.)

FINAL EVALUATOR VERIFICATION

I verify that _____
has successfully completed all tasks as a trainee and should therefore be considered for certification in
this position. I also verify that all tasks are documented with appropriate initials.

FINAL EVALUATOR'S SIGNATURE:

DATE:

FINAL EVALUATOR'S PRINTED NAME:

TITLE:

DUTY STATION:

PHONE NUMBER:

E-MAIL:

DOCUMENTATION OF AGENCY CERTIFICATION

DOCUMENTATION OF AGENCY CERTIFICATION

I certify that _____
has successfully met all of the criteria set out in the National Incident Management System (NIMS) Job
Title/Position Qualifications document for the position and will hereby receive certification of his/her
qualification.

OFFICIAL'S SIGNATURE:

DATE:

OFFICIAL'S NAME:

TITLE:

DUTY STATION:

PHONE NUMBER:

E-MAIL:

- Once all tasks for a Type are completed, the AHJ completes the Final Evaluator Verification.
- The AHJ then sends the Final Evaluation Verification and Documentation of Agency Certification, along with a text or spreadsheet linking the PTB tasks to ERFs to the QRB. Both forms are on Page 2 of the PTB.
- The QRB will notify the AHJ of the finding of its independent review.
- MissionEdge can also be used for these steps.



FEMA



State ROSS Coordinators



The vital link between the National ROSS Program and the Authority Having Jurisdiction for the ROSS



FEMA





THE STATE ROSS COORDINATOR FILLS A KEY ROLE IN EMERGENCY PREPAREDNESS

- ROSS are trained as radiological and nuclear emergency response and recovery subject matter experts with most being developed at the state and local level where the need for them is greatest.
 - We hope all State ROSS Coordinators eventually become ROSS themselves. We hope State Radiation Control Program Directors do, too.
- Some ROSS, especially those from government agencies, will easily integrate into state and local emergency plans and emergency management organizations.
 - These ROSS, however, are more likely to be engaged by their home agency and unavailable to help other jurisdictions.



CONNECTING UNALIGNED ROSS TO OTHER STATE RADIOLOGICAL AND NUCLEAR EMERGENCY RESPONDERS

- ROSS from medicine, academia, laboratories, other industries and even retirement, are essential as “forces in reserve” both within the home jurisdiction and other jurisdictions.
 - It is critical that we help these “unaligned” ROSS integrate into their state and local response plan and organizations.
- Once connected to your jurisdiction’s radiological/nuclear emergency plan and organization, these ROSS are available to serve when a major emergency arises or in exercises, as well as beforehand as a plan development and training resource.
 - Except when a State activates via EMAC or otherwise chooses to compensate these “volunteer” ROSS, this resource is free to the State. Most ROSS will enjoy volunteering to help!
 - COVID taught us we can never have enough technical experts who can readily work within the incident management system. ROSS are specifically trained to be effective SMEs within the ICS.

THREE PRIMARY FUNCTIONS OF THE STATE ROSS COORDINATORS: THE FIRST IS MAINTAINING A ROSTER OF ROSS IN YOUR JURISDICTION

- Share the up-to-date roster with the CRCPD on an annual basis.
 - The CRCPD will ask you to verify the name, email and phone number each year.
 - CRCPD will share the roster with the ROSS Program at the FEMA OET to connect all ROSS to the national efforts of competency maintenance and cadre management.
- Together, the FEMA OET and CRCPD will support:
 - Competency maintenance through ROSS Quarterly Calls where program updates and problem sets are provided, and through national level exercise opportunities.
 - Cadre management through MissionEdge and Emergency Management Assistance Compact (EMAC) tools, maintenance of the Position Task Book (PTB) and Position Qualification, and national certification of ROSS by Type.

**THREE PRIMARY FUNCTIONS OF THE STATE ROSS COORDINATORS:
THE SECOND IS HELPING ROSS CONNECT TO EVALUATORS WHO CAN
SIGN OFF TASKS IN THEIR PTB**

- There are two evaluators who can sign off tasks in the ROSS PTBs:
 - The Authority Having Jurisdiction (AHJ) for radiological and nuclear emergency decisions in each jurisdiction.
 - This is a statutory role usually held by the jurisdiction's Radiation Control Program Director.
 - Any higher Type ROSS can sign off tasks for lower Typed ROSS.
 - A Type 1 can sign off any other ROSS' PTB; a Type 2 can sign off for Type 3 ROSS; and a Type 3 can sign off for Type 4 ROSS working to become Type 3.
- The rostering function should also help connect ROSS to the AHJ and higher Typed ROSS.

THREE PRIMARY FUNCTIONS OF THE STATE ROSS COORDINATORS: THE THIRD IS HELPING PEOPLE WHO WANT TO TAKE THE ROSS TRAINING REGISTER FOR IT

- Connect the interested person to the Counter Terrorism Operations Support Specialist (CTOS) registrar at ctosreg@nv.doe.gov.
- There are instructions for registering at the CTOS webpage ([Center for Radiological Nuclear Training Home Page](#))
- Get the interested person to complete the FEMA registration form.
- The prospective student fills the form out, signs, obtains his or her supervisor's approval and then gets the State Training Coordinator's approval.
 - The State Training Coordinator often works for the Homeland Security or Emergency Management agency in States. CTOS has a list of them.

OTHER FUNCTIONS THAT WILL BENEFIT FROM STATE ROSS COORDINATOR ASSISTANCE

- Advocating for ROSS:
 - Integration into jurisdictional emergency plans and response and recovery organizations;
 - Planning for scenarios too often neglected, but where the ROSS has been specifically trained – nuclear detonations, radiological dispersal devices and nuclear power plants.
 - Inclusion in exercises in the jurisdiction; and
 - Training the emergency response workforce.
- Share radiological and nuclear emergency response and recovery information with the ROSS.
 - For example, jurisdictional plans and procedures and information about upcoming training or exercises within the jurisdiction that ROSS may attend.
- Be a point of contact for ROSS deployed for real incidents in the State whether the ROSS are “home grown” or mutual aid.
- The FEMA OET (fema-ross@fema.dhs.gov) and CRCPD HS/ER-4 (william.lrw@vermont.gov) are available to help.

State ROSS Coordinators

No.	State	Certifying Official	Email	State ROSS Coord.	Email
1	Alabama	Cason Coan	cason.coan@adph.state.al.us	Jerome Coleman	jerome.coleman@adph.state.al.us
2	Arizona	Brian Goretzki	brian.goretzki@azdhs.gov	Sonia Carpena	Sonia.Carpena@azdema.gov
3	Arkansas	Bernard Bevill	bernard.bevill@arkansas.gov	Bernard Bevill	bernard.bevill@arkansas.gov
4	California	Anthony Chu, Acting	Anthony.Chu@cdph.ca.gov	Juan Garcia	juan.garcia@cdph.ca.gov
5	Connecticut	Jeff Semancik	Jeffrey.Semancik@ct.gov	Jeff Semancik	Jeffrey.Semancik@ct.gov
6	Florida	Clark Eldridge	clark.eldredge@flhealth.gov	John Williamson	john.williamson@flhealth.gov
7	Georgia	David Matos	david.matos@dnr.ga.gov	Shelly Stancil	shelly.stancil2@dnr.ga.gov
8	Indiana	Courtney Eckstein	ceckstein@dhs.IN.gov	Courtney Eckstein	ceckstein@dhs.IN.gov
9	Illinois	Adnan Khayyat	adnan.khayyat@illinois.gov	David Culp	dave.culp@illinois.gov
10	Iowa	Patty Riesberg	patty.riesberg@hhs.iowa.gov	Scott Wendt	khequ@iastate.edu
11	Kansas	Jason Meinholdt	jason.meinholdt@ks.gov	Jason Meinholdt	jason.meinholdt@ks.gov
12	Kentucky	Matt McKinley	mattheww.mckinley@ky.gov	Matt McKinley	mattheww.mckinley@ky.gov
13	Louisiana	Jerry Lang	jerry.lang@la.gov	Jessica Walker	jessica.walker@la.gov
14	Maine	Nathan Saunders	nathan.saunders@maine.gov	Jay Hyland	jay.hyland@maine.gov
15	Maryland	Eva Nair	eva.nair@maryland.gov	Marci Cattlett	marci.cattlett@maryland.gov
16	Massachusetts	Jack Priest	jack.priest@mass.gov	Rusty Sorensen	william.lorenzen@childrens.harvard.edu
17	Michigan	T.R. Wentworth	wentwortht@michigan.gov		
18	Minnesota	Mary Navara	mary.navara@state.mn.us	Amy Hass	amy.hass@state.mn.us
19	Missouri	John Langston	john.langston@health.mo.gov	jeremy Wilson	jeremy.wilson@health.mo.gov
20	Montana	Ross Barnes	ross.barnes@mt.gov	Brett Lloyd	brett.lloyd@mt.gov
21	Nebraska	Becki Harisis	becki.harisis@nebraska.gov	Ahaileas (Larry) Harisis	aharisis@unl.edu
22	Nevada	John Follette	jfollette@health.nv.gov	John Follette	jfollette@health.nv.gov
23	New Hampshire	Augustinus Ong	augustinus.ong@dhhs.nh.gov	Brennen Brunner	Brennen.brunner@dhhs.nh.gov
24	New Jersey	Patrick Mulligan	patrick.mulligan@dep.nj.gov	Nancy Stanley	nancy.stanley@dep.nj.gov
25	New York	Alex Damiani	alex.damiani@health.ny.gov	Cynthia Costello	cynthia.costello@health.ny.gov
26	North Carolina	Louis Brayboy	louis.brayboy@dhhs.nc.gov	Bennifer Pate	bennifer.pate@dhhs.nc.gov
27	Ohio	Gene Philips	gene.philips@odh.ohio.gov	William Lohner	william.lohner@odh.ohio.gov
28	Oregon	David Howe	david.m.howe@oha.oregon.gov	Hillary Haskins	hillary.k.haskins@oha.oregon.gov
29	Pennsylvania	Dwight Shearer	dwshearer@pa.gov	David Baracco	dbaracco@pa.gov
30	Rhode Island				
31	South Carolina	Susan Jenkins	jenkinse@dhec.sc.gov	Nathan Gauthier	gauthinl@dhec.sc.gov
32	Tennessee	Beth Shelton	beth.shelton@tn.gov	Andrew Holcomb	andrew.holcomb@tn.gov
33	Texas	Lisa Bruedigan	lisa.bruedigan@dshs.texas.gov	Clint Taylor	clint.taylor@dshs.texas.gov
34	Vermont	William Irwin	william.irwin@vermont.gov	William Irwin	william.irwin@vermont.gov
35	Virginia	Lea Anna Perlas	lea.perlas@vdh.virginia.gov	Brian Iverson	brian.iverson@vdem.virginia.gov
36	West Virginia	Tera Patton	tera.E.Patton@wv.gov	Jason Lively	jason.k.lively@wv.gov
37	Wisconsin	Mark Paulson	mark.paulson@dhs.wisconsin.gov	Charles Adams	charles.adams@dhs.wisconsin.gov



FEMA



Summary of ROSS Cadre Orientation

- The ROSS journey starts with State ROSS Coordinators helping interested people getting into CTOS' PER-388 to include completion of its prerequisite courses (the requirements for Type 4).
- Position Task Books are assigned to new ROSS by the FEMA OET Office.
- ROSS interested in advancing by Type work with their AHJ and higher typed ROSS to complete tasks toward Type 3, 2 and 1 certification by work:
 - For the ROSS Quarterly Calls
 - In exercises
 - In Virtual Evaluation Scenario Tool (VEST) sessions
 - On the job
 - As radiological and nuclear emergency planners and trainers
- If an emergency arises, we work within our own jurisdictions and, if available, through EMAC mutual aid to other jurisdictions.



FEMA



ROSS Information Sources

ROSS Program Manager – Jonathan Gill, PhD
FEMA, Office of Emerging Threats

- FEMA-ROSS@fema.dhs.gov

CRCPD ROSS Web Portal:

- <https://crcpd.org/ross-portal/>

Join the
ROSS LinkedIn Community



FEMA

