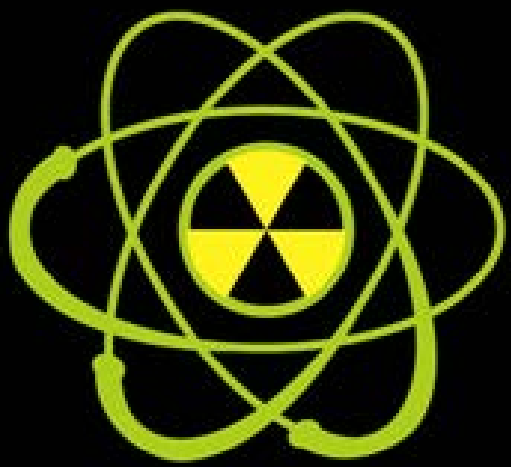
2016

Providence (RI) Regional RITN Tabletop Exercise After-Action Report/Improvement Plan



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EXERCISE OVERVIEW

Exercise Name	Providence Regional RITN Tabletop Exercise (TTX)
Exercise Date	September 7, 2016 9:00 AM – 12:00 PM
Capabilities	Public Health & Medical Services Operational Coordination, Medical Surge, Responder Safety & Health, Mass Care
Objectives	**Objective 1:** Clarify the organizational roles and responsibilities of participating agencies in responding to a surge of casualties with radiological injuries to the Providence region. **Objective 2:** Identify the process for casualty reception and distribution within the Federal Coordinating Center (FCC)/National Disaster Medical System (NDMS) framework. **Objective 3:** Identify the critical resources available to assist hospitals and treatment centers during a surge of radiation-injured patients and discuss resource gaps. **Objective 4:** Anticipate guidance that non-Radiation Injury Treatment Network (RITN) hospitals will need with regard to receiving radiation-injured patients; of particular concern is triage, treatment, tracking and surveillance of self-referral cases from the area of radiation impact and distribution of medical countermeasures.
Threat or Hazard	Radiological
Scenario	Medical surge due to a distant detonation of an Improvised Nuclear Device (IND)
Sponsor	Radiation Injury Treatment Network® (RITN) National Marrow Donor Program (NMDP) Office of Naval Research (ONR)
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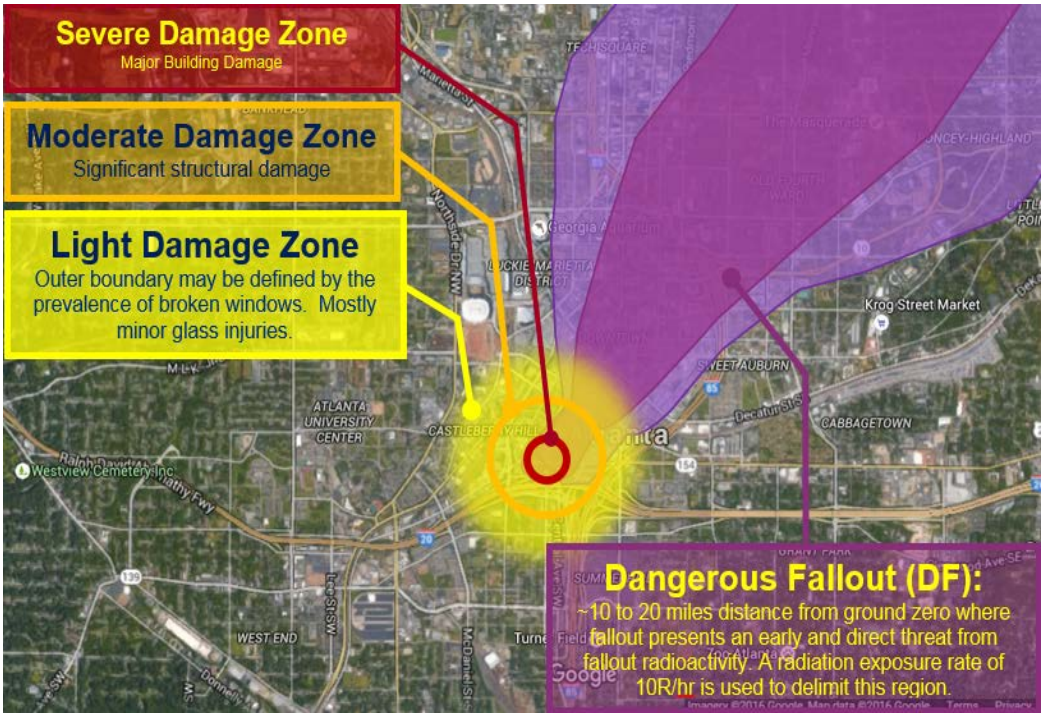
EXERCISE SUMMARY

On September 7, 2016, RWMC, the Providence Veteran's Administrations Medical Center (PVAMC), Rhode Island Blood Center (RIBC), The Hospital Association of Rhode Island (HARI), HHS/ASPR, FEMA - Region I, VA – Boston, Rhode Island EMS (RIEMA) and the RITN Control Cell participated in a tabletop exercise to discuss the organizational roles and responsibilities of key agencies, identify resources required to provide treatment for a surge of radiation injury patients, describe medical management of patients (to include inpatient, outpatient and self-referral), discuss casualty reception and receipt within the FCC model, and identify resource needs for family assistance. Exercise participants addressed these objectives in a scenario-driven, facilitated discussion based on a surge of casualties with radiological injuries arriving to the Providence area.

Exercise Scenario

Initial Event

- A ten-kiloton Improvised Nuclear Device (IND) was detonated in Atlanta, GA.



- Estimated casualties:
  - 300,000 fatalities in the Severe Damage Zone; 150,000 in Moderate Damage Zone.
  - 60,000 urgent casualties in Moderate Damage Zone; 90,000 in Light Damage Zone.

  - 40,000 non-urgent casualties in Moderate Damage Zone; 60,000 in Light Damage Zone.
  - 300,000 worried well across geographical area.
  - **16,400 radiation casualties** across geographical area.

- Secretary of Health and Human Services (HHS) declares a Public Health Emergency and activates the HHS Emergency Management Group.
- The National Marrow Donor Program (NMDP) activates the RITN Control Cell. Control Cell staff begin to monitor the situation and send out Situation Reports (SITREPs) to the RITN facilities as well as notification to fill out and submit the HCS capacity survey.

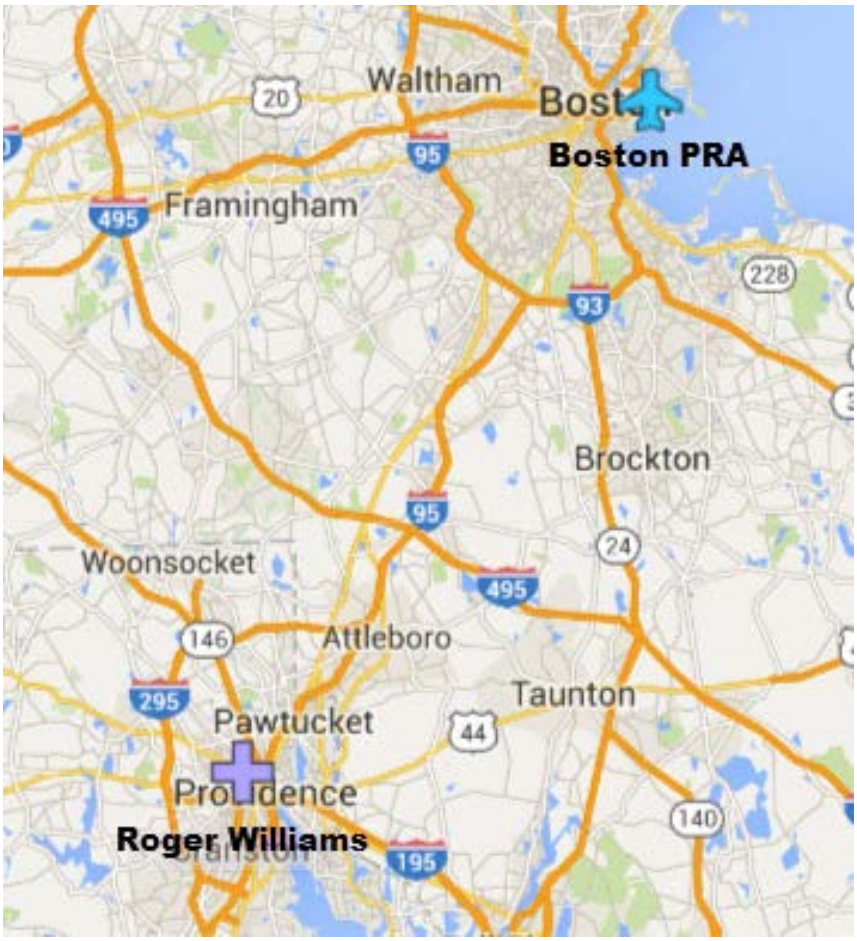
Initial Event +4 Days

- National Disaster Medical System (NDMS) issues activation protocol for Providence, indicating the region will be receiving casualties from the disaster zone via NDMS.
- The Veterans Administration initiates actions to establish a Patient Reception Area (PRA) FCC at Logan International Airport where NDMS patients will be received.

Initial Event +5 Days

Approximately five days after the detonation patients start to arrive at the FCC established at Logan International Airport. Upon arrival patients will be screened and triaged for transportation to the local RITN hospital (RWMC) for treatment. RWMC is expected to receive 40 patients with marrow toxic injuries. These patients typically will arrive in waves of 20 patients and may be spread out over the next 1-2 days.

Some RITN patients are anticipated to be treated on an outpatient basis. Mass care services for patients and family members are also anticipated.



Exercise Objectives and Core Capabilities

The following exercise objectives in Table 1 describe the expected outcomes for the exercise. The objectives are linked to core capabilities, which are distinct critical elements necessary to achieve the specific mission area(s). These objectives and aligned core capabilities are guided by elected and appointed officials and were selected by the Exercise Planning Team.

Table 1. Exercise Objectives and Associated Core Capabilities

Exercise Objective	Core Capability	Healthcare Preparedness Capability
Objective 1: Clarify the organizational roles and responsibilities of participating agencies in responding to a surge of casualties with radiological injuries to the Providence region.	Public Health & Medical Services	Emergency Operations Coordination

Exercise Objective	Core Capability	Healthcare Preparedness Capability
Objective 2: Identify the process for casualty reception and distribution within the Federal Coordinating Center model.	Public Health & Medical Services	Emergency Operations Coordination
Objective 3: Identify the critical resources available to assist hospitals and treatment centers during a surge of radiation-injured patients and discuss resource gaps.	Public Health & Medical Services	Medical Surge
Objective 4: Anticipate guidance that non-Radiation Injury Treatment Network (RITN) hospitals will need with regard to receiving radiation-injured patients; of particular concern is triaging, treatment and tracking/surveillance of self-referral cases from the area of radiation impact and distribution of medical countermeasures.	Medical Countermeasures Dispensing	Responder Safety & Health

ANALYSIS OF CAPABILITIES

Question Block 1: Pre-Arrival of Patients

The following are the primary concerns at this point in the scenario:

HARI	RIEMA	RWMC (RITN Facility)	FEMA Region I
• Prepare to accept patients discharged from RWMC (decompress) • Situational awareness • Supporting all hospitals for 72 hours • Extended impacts on hospitals • The outpatients my eventually become permanent residents	• Coordinate/develop communications for both staff and the public. • Prepare for behavioral/mental health needs of the people who are arriving from the disaster and the staff. • Start to think about outpatient lodging and transportation.	• Activate EOC • Coordinate patient surge plans • Determine what patients can be discharged • Update RITN bed availability • Continuity of operations • Crisis/altered standards of care • Coordination with the FCC	• Information exchange hub. • Supporting the regional EOC and Rhode Island Department of Health (RIDOH).

Activation: FEMA Region 1 would be activate emergency operations and serve as the hub for information exchange. This information would be disseminated to the states within the region. When the disaster happens, RITN steps back, the rest of the system (including NDMS) will serve in a lead role. The ESF-8 coordinator would support in the regional EOC communicating with RI DOH. Those non-medical evacuees (i.e., family) would be managed between FEMA 1 and RIEMA.

- Regarding pending surge for RWMC:
  - The emergency operations center (EOC) would be opened
  - Coordinate patient surge plans
  - Nurse managers will discharge patients
  - There are other hospitals and sister hospitals that can be used for discharge
  - Ambulatory surgery unit (ASU) would be used for direct admit of patients (as a result, the ASU would be shut down and patients discharged or transferred).
  - They can take 5 patients within 4 hours and an additional 5 within 12 hours

Coalition Coordination: The inpatients wouldn't be as much of a concern for the other HARI hospitals. HARI can utilize all resources to support an event up to 72 hours. The main concern is that this may be an extended impact on the hospitals within the association and that will need to address long-term absorption. HARI would coordinate communications between hospitals and the State as well as Providence Emergency Management Agency (PEMA). Daily conference calls

would be conducted with HARI members prior to patient arrival. The main focus of these conference calls would be resource coordination.

RWMC Considerations: As soon as the expected patient load is known, there is a need to determine what can be provided through local suppliers and then make requests for federal assets (e.g., SNS). Resource requests would need to go from RWMC to the Coalition who would bump it up to the State or Region up to the feds. In addition, there is a need to ensure that call centers are initiated to receive calls from patient family members. There is limited staffing for the call center function at RWMC.

If a patient is admitted into the bone marrow transplant (BMT) unit, there could be an extended time spent as an inpatient because of the time involved in donor matching (up to two months in some cases). The BMT currently has 8 beds and 2 beds on reserve. Care of a patient until they get transplants could create a significant load. The outpatients may eventually become permanent residents. They will be monitored/treated for several weeks. In this scenario, they are estimating receipt of 40 outpatients. As it relates to HIPAA waivers, RWMC would need to request those from the State, which would clear through HHS.

Patient Transport from the FCC: It was stated that critical patients would be transported by Boston Emergency Medical Services (EMS). In addition, FEMA would activate the contract with AMR. Secondary screening will occur at the patient reception area (PRA); Boston Fire will survey patients with support from the Boston VAMC.

Strengths

Strength 1: HARI provides a consistent and coordinated healthcare system response for Rhode Island hospitals to include support for the need for RWMC to decompress.

Strength 2: There are sufficient transportation assets to move patients from the FCC in Boston to RWMC and other hospitals in Providence.

Areas for Improvement

Area for Improvement 1: There is a need for the FCC to have real time awareness of outpatient capacity at RWMC. Related recommendations include:

- Determine what outpatient capacity is at RWMC and what support the hospital association can provide. If the HCS reports don't make it to the FCC, they can contact RWMC or the State EOC directly.

Area for Improvement 2: There aren't any current NDMS MOU hospitals in Rhode Island. Related recommendations include:

- HARI should explore the constraints and feasibility of establishing Rhode Island hospitals as NDMS recipients.

Area for Improvement 3: It is important to understand in advance the type of resources that would be needed and the expectations for coordinating housing and transportation logistics. Related recommendations include:

- Continue to include RIEMA in planning and exercising for receipt of NDMS and RITN patients.

Area for Improvement 4: Call center resources need to be identified and FAQs/call scripts developed to address calls from friends or family members of RITN patients. Related recommendations include:

- Examine other options for staffing a call center such as with the State or 211. There is a need to ensure separation of calls between people who just want general information and those who are looking for a family member.

Area for Improvement 5: There is a need for HARI and RWMC to further understand reimbursement through the Stafford Act. Related recommendations include:

- Explore the steps necessary for documentation of reimbursement to include patient tracking reports from J-PATS and other mechanisms to support reimbursement.

Area for Improvement 6: Develop strategies to educate the community via the media on what RWMC does in this type of event. The RI DOH would assist in this.

- Conduct a functional/drill exercise to develop media messaging for a receipt of RITN/NDMS casualties.
- References to assist with messaging strategies and templates include, but are not limited to:
    - U.S. HHS Radiation Emergency Medical Management (REMM) website - Information Resources for Public Information Officers. http://www.remm.nlm.gov/remm_pio.htm
    - FEMA. "Improvised Nuclear Device Response and Recovery: Communicating in the Immediate Aftermath" – June 2013. http://www.fema.gov/media-library-data/20130726-1919-25045-0618/communicating_in_the_immediate_aftermath__final_june_2013_508_ok.pdf

Question Block 2: Arrival of Patients

Inpatient vs. Outpatient: It is expected that patients will arrive in two waves of 20 patients each in this scenario. The considerations for inpatient vs. outpatient will include the following:

- How sick they are for whatever reason (level of acuity)
- It is doubtful they would know ahead of time what their dose estimate is
- If febrile, will be inpatient
- Once they get off the plane, they should be registered in J-PATS
- Will need to closely monitor blood counts; will utilize RIBC or American Red Cross for blood transfusions
- There will be an increased need for intensive care unit (ICU) resources

The expectation is that there will be far more ambulatory patients. RWMC will need to determine how they address those patient needs with current staffing levels.

Behavioral and Mental Health (BMH): RWMC has a robust BMH capability. While waiting for patient arrival, they would train the BMH staff on the incident. The State capability (Behavioral Health Disaster Assistance for Hospitals) can also be accessed.

Situational Status Reporting: RITN will want Healthcare Standard (HCS) reports pushed out daily from RWMC. RITN will not insert into existing communications with the State or FCC. Reports from RWMC to the FCC should include current status and any treatment that has been received. If requested, the VA can send someone to RWMC to support situational awareness reporting.

Staffing and Resource Needs: HHS indicated that RWMC needs to think about staffing needs while waiting for patient arrival. Credentialing will need to be done by RWMC or HARI. Credentialing can be streamlined through Rhode Island Response (volunteer management database). RWMC will request resources directly from HARI or RI-DOH. There are MOUs for facilities within HARI to share equipment and supplies. Sharing staff is more of a challenge. HARI will coordinate outreach to facilities; if they don't have will need to go to the regional level, then will go to the State. Hematologists and oncologists not currently at RWMC. There would not be a role within inpatient, but they may need to use them with outpatient.

Patient and Family Lodging: Due to a recent buyout, RWMC no longer has MOUs with housing providers. As a result, they will develop a blanket purchase order in an expanded service area to accommodate this need in Providence. There was much discussion over the need to pass on the planning issues for outpatient and family lodging to other State and Federal agencies to allow RWMC to focus on inpatient care.

Strengths

Strength 1: The VA provides a great deal of support to RWMC for situational reporting if needed.

Strength 2: RWMC has a relatively robust MBH capability as well as the capabilities at the State level.

Areas for Improvement

Area for Improvement 1: HICS at RWMC needs to ensure someone is assigned as an interface/liaison with J-PATS and medical records so the correct treatment information is entered.

Area for Improvement 2: Additional planning is needed to determine what lodging will be used for non-medical attendants arriving with patients; this requires collaboration between local and federal partners. Details from the federal NDMS plans as far as reimbursement and duration of coverage need to be incorporated into the plans.

Area for Improvement 3: Ensure that hotels are well informed of the lack of risk involved from housing RITN outpatients (i.e., they won't contaminate the premises).

Area for Improvement 4: In addition to staff messaging, offer education opportunities on radiation to reduce anxiety and ensure that people come to work during a disaster. These should be offered both to medical staff as well as support staff such as administrative and environmental services (as well as other relevant community members that may support mass care operations).

- Explore RITN sponsored Radiation Emergency Assistance Center/Training Site (REAC/TS) training for medical personnel (https://orise.orau.gov/reacts/capabilities/continuing-medical-education/default.aspx)
- Conduct and promote RITN trainings (http://ritn.net/training/) and consider downloading to have access in the event that infrastructure goes down.

Area for Improvement 5: Hematologists and oncologists are not currently at RWMC. There would not be a need for treatment of inpatients, but they may need to use them with outpatient. RWMC and HARI should start this conversation to identify trigger points and thresholds. The demand/need would be greater for nurses.

Area for Improvement 6: Consider the use of home health care nurses for low acuity patients. It wouldn't be logistically feasible to send a team from RWMC to the hotels to see outpatients.

HOTWASH

Strengths

- HARI and blood center involvement was beneficial
- RITN SOP is included as an appendix with EOP
- MOUs with hotels are important to RWMC
- Intro to the RITN would be helpful to deliver to community partners (e.g. hotels)
- RI hazmat teams can help with surveys and decontamination if necessary.
    - RWMC also has a team
- The fact that many parties were involved was important

Improvement Planning

- Need to determine what to do with outpatient. Are we going out there?
- Ambulatory vs. inpatient capacity. If inpatient is maxed, what additional demand on staff will be expected?
- Need to have an understanding of how all parts work together (fed, state, local). Flow of communications and funding expectations.
- For housing, may need to look at shelters because hotels may not have the availability.
- Triggers for when they need additional staffing needs to be developed
- Finance needs to be involved to understand the pathways for reimbursement
- Conduct educational briefings/education for BMH providers
- Education of the community that these patients are not going to contaminate (e.g. the hotel). Train hotel employees.
- Consider materials for foreign-language speaking patients
- Explore where other types of resources for families can be found (e.g. pets, food, transportation, etc.).
- Need to understand that the beginning of the emergency won't work perfectly, but it will take a while for it to start running smoothly.
- Consider medical ethics
- Educate other patients in the hospital regarding the risks

APPENDIX A: IMPROVEMENT PLAN

This improvement plan template has been developed specifically for the RITN centers participating in the 2016 RITN Regional Exercises. RWMC and partner organizations can utilize this table to organize the opportunities for improvement to augment and develop their own corrective actions.

Core Capability	Issue/Area for Improvement	Corrective Action	Capability Element[1]	Primary Responsible Organization	Organization POC	Start Date	Completion Date
Core Capability 1: [Capability Name]	1. [Area for Improvement]	[Corrective Action 1]					
		[Corrective Action 2]					
		[Corrective Action 3]					
	2. [Area for Improvement]	[Corrective Action 1]					
		[Corrective Action 2]					

[1] Capability Elements are: Planning, Organization, Equipment, Training, or Exercise.

APPENDIX B: EXERCISE PARTICIPANTS

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APPENDIX C: ACRONYMS

Acronym	Term
AAR	After Action Report
AMR	American Medical Response
ARC	American Red Cross
ARS	Acute Radiation Syndrome
ASPR	Assistant Secretary for Preparedness and Response
BMT	Bone Marrow Transplant
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
FAQ	Frequently Asked Question
FCC	Federal Coordinating Center
FEMA	Federal Emergency Management Agency
G-CSF	Granulocyte-Colony Stimulating Factor
HARI	Hospital Association of Rhode Island
HCS	Healthcare Standard
HHS	Health and Human Services
ICS	Incident Command System
ICU	Intensive Care Unit
IND	Improvised Nuclear Device
J-PATS	Joint Patient Assessment and Tracking System
MOU	Memorandum of Understanding
NDMS	National Disaster Medical System
NMDP	National Marrow Donor Program
PRA	Patient Reception Area
PIO	Public Information Officer
PVAMC	Providence Veteran's Administration Medical Center
REAC/TS	Radiation Emergency Assistance Center/Training Site
REMM	Radiation Emergency Medical Management
RIBC	Rhode Island Blood Center
RI DOH	Rhode Island Department of Health
RIEMA	Rhode Island Emergency Management Agency
RITN	Radiation Injury Treatment Network
RWMC	Roger Williams Medical Center
SAT	Service Action Team
SITREP	Situation Report
SNS	Strategic National Stockpile
SOC	Secretary Operations Center (DHHS)
TTX	Tabletop Exercise
VA	Veterans Administration

Acronym	Term
VAMC	Veterans Administration Medical Center