

RITN Tabletop Exercise (TTX) After-Action Report/Improvement Plan

Exercise Date: August 13, 2025
Report Date: September 3, 2025



EXERCISE OVERVIEW

Exercise Name	2025 RITN Tabletop Exercise (TTX)
Exercise Date	August 13, 2025
Scope	The exercise was a distance-based tabletop exercise scheduled for 2 hours. Exercise play was limited to RITN facilities to examine the response by RITN hospitals to accommodate patient surge and care to include activating family reunification centers, identifying mental health resources, and coordinating with local, state, and federal public health agencies to track and report patient conditions.
Mission Area(s)	Response
Capabilities	Medical Surge Healthcare and Medical Response Coordination Community Resilience Information Sharing
Objective	<p>Objective 1: Participants will describe the procedures for activating a family reunification center, including identifying staff, location, required resources, and the timing for activation. They will also identify potential challenges to activation and propose solutions.</p> <p>Objective 2: Participants will explain the integration of hospital-level family reunification processes with county and regional efforts, including coordination with healthcare coalitions and local public health agencies, and outline any necessary support from these partners.</p> <p>Objective 3: Participants will describe the mental health resources and educational support services to be activated in response to a radiological emergency, including how to address the psychological impact on healthcare workers, patients, families, and vulnerable populations, while ensuring accurate public messaging and coordination with external agencies.</p> <p>Objective 4: Participants will outline how the hospital coordinates with local, state, and federal public health agencies to track and report patient conditions, manage long-term health effects of radiation exposure, and share data for population health monitoring during a radiological event.</p>
Hazard	Radiological
Scenario	Medical surge from a distant radiological incident
Sponsor	Radiation Injury Treatment Network® (RITN) Office of Naval Research (ONR)
Participating Organization	Cooper Health (NY) Dana Farber (MA)



- Dartmouth-Hitchcock Medical Center (NH)
- Massachusetts General Hospital (MA)
- Scripps Green Hospital (CA)
- St. David’s Medical Center (TX)
- University of Chicago (IL)
- University of Colorado Hospital (CO)
- University of Kansas Medical Center (KS)
- University of Maryland Greenebaum (MD)
- University of Miami (FL)
- University of Pennsylvania Medical Center (PA)
- University of Wisconsin Hospital and Clinic (WI)
- Westchester Medical Center (NY)
- West Virginia University Hospitals (WV)

Point of Contact

RITN Control Cell
RITN@NMDP.ORG
(612) 884-8276

EXERCISE SUMMARY

On August 13, 2025, 15 Radiation Injury Treatment Network (RITN) centers participated in an online tabletop exercise (TTX) to determine their hospitals' capacities for activation of family reunification and mental health support to healthcare workers, patients, families, and vulnerable populations following a mass casualty radiological event. A facilitated series of exercise tasks were provided to participants for their consideration, response, and group discussion organized by the exercise scenario summary below.

Note that only 14 of the 15 participating organizations submitted written responses to the RITN survey and therefore, the data used in this report is limited to those 14 responses. Anecdotal information regarding all 15 facilities may be used but this information was gathered during the exercise and was not submitted in writing.

Scenario Summary: The following points illustrate the scenario events considered for participant discussion:

Exercise Scenario:

- A 10 kiloton Improvised Nuclear Device (IND) was detonated in a major metropolitan area.
- Infrastructure and hospitals are severely damaged in the area surrounding the blast (at least 25-mile radius).
- The blast occurred at least 500 miles from your hospital and there is no concern of fallout affecting your location.
- RITN Control Cell staff begin to monitor the situation and start sending out daily Situation Reports (SitReps).
- The nuclear explosion and fallout is expected to result in thousands of casualties with marrow toxic injuries who will need to be transported to other healthcare facilities across the country.
 - Those with mild to moderate trauma and those seeking evaluation for radiation exposure will self-evacuate to other metro areas.
 - Other patients experiencing radiation exposure will be evacuated in the coming days through the National Disaster Medical System (NDMS).

ANALYSIS OF CAPABILITIES

Module 1: Family Reunification

Participants demonstrated strong foundational knowledge of their facility's existing capabilities related to family reunification and public health coordination in the aftermath of a large-scale radiological emergency. Ten (10) out of 14 respondents reported having pre-identified spaces or protocols in place to accommodate family members arriving at their facilities, and several noted existing policies that could be adapted for a reunification center. Some facilities had designated staff roles, such as social workers or security personnel, assigned to manage reunification logistics. Communication strategies, including scripting and signage for families, were mentioned as required assets, although only a minority of facilities indicated these were already developed. One common strength across several organizations was the routine integration of public health partners in emergency planning efforts.

However, participants also identified several limitations in their current preparedness. Notably, nine out of 14 respondents indicated that their reunification plans were either in draft form or lacked detail regarding roles, triggers for activation, and integration with local public health or healthcare coalition partners. Only four respondents indicated familiarity with the federal NDMS patient tracking process or how it interfaces with their hospital's system. Several facilities also expressed uncertainty about how to manage patients who arrive outside the federal system, particularly those self-transported from the blast zone. There was limited clarity around how mental health support for staff and families would be activated, with many noting this was managed by Human Resources (HR) but lacking formal protocols for emergency activation.

Participants broadly agreed that increased collaboration with regional and federal partners, clearer activation criteria, and cross-training for staff on reunification procedures were needed to strengthen future readiness. Recommendations included establishing formal Memoranda of Understanding (MOU) with public health agencies and coalition partners, standardizing patient tracking and registration procedures (especially for non-NDMS patients), and integrating family reunification scenarios into ongoing drills. Additional suggestions included developing multi-language signage and materials in advance, identifying alternate spaces for family intake, and incorporating behavioral health responders into reunification planning.

Strengths

The following strengths were demonstrated:

Strength 1: Ten (10) out of 14 responding facilities reported having either pre-identified spaces or draft policies in place to accommodate family members seeking loved ones following a mass casualty event. This demonstrates a baseline level of preparedness across the network for initiating family reunification operations.

Strength 2: Eight (8) out of 14 participants noted that specific hospital personnel such as social workers, security teams, or administrative staff, were already identified or informally tasked with responsibilities related to family support and reunification, indicating that core staffing considerations are actively being addressed within many facilities.

Strength 3: Six (6) out of 14 facilities highlighted ongoing collaboration with public health agencies and healthcare coalitions during planning and preparedness activities. This cross-sector engagement strengthens coordination pathways and aligns hospital response strategies with broader community and regional response efforts.

Areas for Improvement

The following areas require improvement:

Area for Improvement 1: Nine (9) out of 14 facilities indicated their reunification procedures are either in draft form or lack key operational details such as triggers for activation, defined roles, and integration with external partners. To address this, facilities should prioritize the finalization of comprehensive, operational reunification plans that clearly identify activation thresholds, staffing assignments, and protocols for coordination with healthcare coalitions and public health agencies. Reunification plans should be integrated into future hospital exercises.

Area for Improvement 2: Only four out of 14 facilities reported understanding how the federal NDMS system interfaces with their hospital's patient tracking workflows, and several expressed uncertainty about managing self-transported patients outside of the NDMS framework. To close this gap, hospitals should conduct staff training on NDMS protocols and establish supplemental tracking procedures for self-reporting patients (non-federally transported) to ensure accountability and family notification.

Area for Improvement 3: Ten (10) out of 14 facilities reported lacking formal procedures for rapidly activating behavioral health services during emergencies, with many indicating such services are only available through standard HR pathways. To address this, hospitals should develop clearly defined behavioral health response protocols that include pre-identified mental health providers/resources, establish criteria for activation during disasters, and incorporate behavioral health components into regular emergency preparedness exercises.

Module 2: Mental Health Support Considerations

Participants widely acknowledged the escalating psychological impacts of the radiological incident on patients, staff, and the broader public. Of the 14 respondents, 11 expressed concern about rising anxiety, fear of contamination, and misinformation, particularly among hospital staff who were unsure about their own safety and how to address public concerns. Although most facilities recognized the need for trauma-informed care and emotional support, only five reported having any specific plans or protocols to manage acute behavioral health surges during incidents of this magnitude. Several respondents noted that their Employee Assistance Programs (EAPs) were already overwhelmed or not structured for large-scale, acute disaster support.

Coordination with external agencies for mental health and public health surveillance was identified as a significant gap. Only four out of 14 facilities reported existing formal partnerships or pre-established agreements with external behavioral health organizations or public health departments to assist with mental health response or syndromic surveillance. In the absence of these partnerships, some participants stated they would rely on informal outreach or ad hoc mutual aid agreements. When discussing surveillance and public health data sharing following a radiological incident, the lack of real-time data-sharing infrastructure was a common concern, with several respondents noting their hospital systems were not well integrated with state or federal surveillance platforms.

Despite these challenges, participants identified creative strategies and internal assets to help bridge resource gaps. Multiple facilities indicated that chaplains, social workers, and trained nursing staff could be mobilized to support psychological first aid in the short term. Others discussed the value of just-in-time (JIT) training for frontline staff, the importance of unified messaging to reduce fear and misinformation, and the need to embed mental health professionals into command center operations. Participants emphasized the urgency of turning these informal assets into formalized, scalable protocols in collaboration with coalition partners and mental health agencies.

Strengths

The following strengths were demonstrated:

Strength 1: Five (5) out of 14 respondents noted that their facility had the capacity or intent to deliver just-in-time training to frontline staff to support behavioral health needs or reinforce key radiation safety messages. This capability enhances operational flexibility by equipping non-specialist staff with the tools to respond confidently during dynamic and evolving incidents.

Strength 2: Seven (7) out of 14 facilities identified internal resources such as chaplains, social workers, and nursing staff, who could be mobilized to provide short-term emotional support or psychological first aid, demonstrating institutional agility in the absence of formal behavioral surge protocols.

Strength 3: Nearly half of the respondents (6 out of 14) highlighted the importance of proactive, unified communication to address radiation-related fear among staff and the public, underscoring a readiness to mitigate panic and misinformation through strategic internal and external messaging.

Areas for Improvement

The following areas require improvement:

Area for Improvement 1: Ten (10) out of 14 participants reported that their hospital's EAP was the primary or only mechanism for behavioral health support, despite acknowledging that EAPs were not designed for large-scale, acute psychological crises. To strengthen surge capacity, hospitals should expand beyond traditional EAP frameworks by establishing rapid-access contracts with external mental health providers or organizations, developing tiered behavioral support systems, and incorporating these resources into their emergency operations plans.

Area for Improvement 2: Only four out of 14 respondents indicated their facility had pre-existing agreements with external behavioral health organizations or local public health agencies to support mental health services during emergencies. Facilities should formalize partnerships through MOUs with local mental health agencies, integrate those partners into emergency operations planning, and participate in joint training to ensure coordinated behavioral response efforts during future radiological or mass casualty events.

Area for Improvement 3: Nine (9) out of 14 participants indicated that their hospital lacked the ability to interface with local, state, or federal surveillance platforms for tracking radiation exposure or behavioral health trends. To improve this, facilities should assess their current surveillance capabilities, coordinate with public health departments to align reporting workflows, and invest in necessary technical upgrades and staff training to enable timely, bidirectional data sharing during radiological and other public health emergencies.

APPENDIX A: IMPROVEMENT PLAN

This improvement plan template has been developed specifically for the RITN centers participating in the 2025 RITN Tabletop Exercise conducted on August 13, 2025. RITN centers can utilize this table to organize the opportunities for improvement to augment and develop their own corrective actions. The improvement plan is intended to strengthen the response of RITN hospital core capabilities identified in this report.

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

Participating Organizations		
Organization	Name	Email Address
Cooper University	Bob Saunders	Saunders-udieut@cooperhealth.edu
Cooper University	Peyman Sigaroudi	Sigaroudi-payman@cooperhealth.edu
Cooper University	Simon Saukisian	Saukisian-simon@cooperhealth.edu
Dana Farber	Abby Dunn	Abigail_dunn@dfci.harvard.edu
Dana Farber	Nate Almeida	Nathanielg_almeida@dfci.harvard.edu
Dana Farber	Thomas Mahan	thomas_mahan@dfci.harvard.edu
Dartmouth-Hitchcock	Beverle Fillingame	Beverle.c.fillingame@hitchcock.org
Dartmouth-Hitchcock	Cassidy Smith	Cassidy.m.smith@hitchcock.org
Dartmouth-Hitchcock	Catherine Rodriguez	Catherine.j.rodriguez@hitchcock.org
Dartmouth-Hitchcock	Deborah Scribner	Deborah.f.scribner@hitchcock.org
Dartmouth-Hitchcock	Eileen Hays-Bonaccolto	Eileen.a.hays-bonaccolto@hitchcock.org
Dartmouth-Hitchcock	Eve Zukowski	Eve.m.zukowski@hitchcock.org
Dartmouth-Hitchcock	Heather Jarvis	Heather.m.jarvis@hitchcock.org
Dartmouth-Hitchcock	Jay Sparks	Jay.a.sparks@hitchcock.org
Dartmouth-Hitchcock	John Hill	John.m.hill@hitchcock.org
Dartmouth-Hitchcock	Kate Caldon	Kate.l.caldon@hitchcock.org
Dartmouth-Hitchcock	Norma Blanchard	Norma.r.blanchard@hitchcock.org
Dartmouth-Hitchcock	Sivon Rotenberg	Sivon.rotenberg@hitchcock.org
Dartmouth-Hitchcock	Wes Miller	d.wesley.miller@hitchcock.org
Massachusetts General Hospital	Allie Karan	akoran@mgb.org
Massachusetts General Hospital	Andrew Baghoei	abaghoei@mgh.harvard.edu
Massachusetts General Hospital	Debra Drumm	ddrumm@mgb.org
Massachusetts General Hospital	Donna McEachern	dmceachern@mgh.org
Massachusetts General Hospital	Frank Resch	fresch@mgh.harvard.edu
Massachusetts General Hospital	Jen Shearer	Jshearer1@mgb.org
Massachusetts General Hospital	Josh Bough	jbaugh@mgb.org
Massachusetts General Hospital	Kate Marenschi	
Massachusetts General Hospital	Kathryn Wann	kmwann@mgb.org
Massachusetts General Hospital	Kelsey Flynn	Kflynn16@mgb.org
Massachusetts General Hospital	Melissa Quinone	Mapinw@mgh.harvard.edu
Massachusetts General Hospital	Mike Morrison	mdmorrison@mgb.org
Massachusetts General Hospital	Nicole Hartford	nhartford@mgh.harvard.edu
Massachusetts General Hospital	Patrick Donoghue	pdonoghue@mgb.org
Massachusetts General Hospital	Rachel Gill	Rgill2@mgh.harvard.edu
Massachusetts General Hospital	Serena Bronde	sbroude@gmail.com
Massachusetts General Hospital	Stacey Kokaram	skokaram@mgh.harvard.edu
Massachusetts General Hospital	Stephanie Cooper	sacooper@mgb.org
Massachusetts General Hospital	Teresa Klink	tklink@mgb.org
Massachusetts General Hospital	Tom Spitzer	Tspitzer@mgh.harvard.edu
Scripps Green Hospital	Candice Hsu	Hsu.kaiyin@scrippshealth.org
Scripps Green Hospital	James Mason	Mason.james@scrippshealth.org
Scripps Green Hospital	Laurie Cobarrugia	Cobarrugia.laurie@scrippshealth.org
Scripps Green Hospital	Ron Hudnet	Hudnet.ronald@scrippshealth.org
Scripps Green Hospital	Tracy Fulton	Fulton.tracy@scrippshealth.org
St. David's South Austin Medical Center	Alan McMillin	alan.memillin3@redcross.org
St. David's South Austin Medical Center	Amanda Baker	amanda.baker@stdavids.com
St. David's South Austin Medical Center	Amanda Hebert	amanda.hebert@stdavids.com
St. David's South Austin Medical Center	Aravind Ramakrishnan	aravind.ramakrishnan@hcahealthcare.com
St. David's South Austin Medical Center	Caitlin Reedholm	caitlin.reedholm@stdavids.com
St. David's South Austin Medical Center	Carrie Martin	carrie.martin@stdavids.com
St. David's South Austin Medical Center	Cody Hyde	Cody.hyde@austintexas.gov
St. David's South Austin Medical Center	Faheem Ahmed	Faheem.ahmed@hcahealthcare.com
St. David's South Austin Medical Center	Faheem Ahmed	faheem.ahmed@hcahealthcare.com
St. David's South Austin Medical Center	Heather Cooks-Sinclair	Heather.cooksinclair@austintexas.gov

St. David's South Austin Medical Center	Holly Myers	holly.myers@stdavids.com
St. David's South Austin Medical Center	Julia Brown	julia.brown@stdavids.com
St. David's South Austin Medical Center	Kate Deneffe	kathryn.deneffe@stdavids.com
St. David's South Austin Medical Center	Kate Regan	katherine.regan@hcahealthcare.com
St. David's South Austin Medical Center	Kathy Adams	katherine.adams@stdavids.com
St. David's South Austin Medical Center	Kelly Clemmer	kelly.clemmer@stdavids.com
St. David's South Austin Medical Center	Keri Collins	keri.collins@hcahealthcare.com
St. David's South Austin Medical Center	Kirsten Rederos	kirsten.rederos@stdavids.com
St. David's South Austin Medical Center	Richard Crowell	richard.crowell@stdavids.com
St. David's South Austin Medical Center	Shahbaz Malik	shahbaz.malik@hcahealthcare.com
St. David's South Austin Medical Center	Stephanie Carr	stephanie.jones4@stdavids.com
St. David's South Austin Medical Center	Uttam Rao	uttam.rao@hcahealthcare.com
St. David's South Austin Medical Center	Whitney Dhyne	whitney.dhyne@hcahealthcare.com
University of Chicago	Andrea Fadel	Andrea.Fadel@uchicagomedicine.org
University of Chicago	Grace Miller	Grace.miller@uchicagomedicine.org
University of Chicago	Marc Paloma	Marc.paloma@uchicagomedicine.org
University of Chicago	Maria Padron-Dielle	Maria.padron-dielle@uchicagomedicine.org
University of Chicago	Michael Clifford	Michael.clifford@uchicagomedicine.org
University of Chicago	Mylove Mortel	Mylove.mortel@uchicagomedicine.org
University of Chicago	Satyajit Kosuri	skosuri@uchicagomedicine.org
University of Colorado	Charles Little	
University of Colorado	Daniel Rice	
University of Colorado	Dierdre Elder	
University of Colorado	Faith Lieder	
University of Colorado	Jared Orton	
University of Colorado	Jason Rersoff	
University of Colorado	Jessica Ryder	
University of Colorado	John Ragvo	
University of Colorado	Natasha Vandeford	
University of Kansas Health System	Andy Marshall	amarshall4@kumc.edu
University of Kansas Health System	Anurag Singh	asingh3@kumc.edu
University of Kansas Health System	Marvin Browning	mbrowning@kumc.edu
University of Kansas Health System	Shaun DeJarnette	sdejarnette@kumc.edu
University of Kansas Health System	Stephanie Burger	sburger@kumc.edu
University of Kansas Health System	Stephanie Nigro	snigro@kumc.edu
University of Maryland Greenebaum	Briana Kracke	Briana.kracke@umm.edu
University of Maryland Greenebaum	James Stoddard	James.stoddard@umm.edu
University of Maryland Greenebaum	Kathleen Ruehle	kruehle@umm.edu
University of Miami	Anahita Heshmat	axh2570@med.miami.edu
University of Miami	Ann Martin	amm607@med.miami.edu
University of Miami	Claudette Edwards	cedwards2@med.miami.edu
University of Miami	Debrra Chinquee	DChinquee@med.miami.edu
University of Miami	Delgado, Cristina Olga	c.delgado16@miami.edu
University of Miami	Denise Pereira	dpereira2@med.miami.edu
University of Miami	Diana Rosa Hernandez	drh85@med.miami.edu
University of Miami	Diana Zapata	dxz282@med.miami.edu
University of Miami	Enrique Menedez	emenendez@med.miami.edu
University of Miami	Gabrielle Mejia	gjm160@med.miami.edu
University of Miami	Giancarlos Carreras	gxc1923@med.miami.edu
University of Miami	Jenny Leeseth Carvajal	jlc436@med.miami.edu
University of Miami	Jose Alfonso	jda107@miami.edu
University of Miami	Kassandra Lange	klage@med.miami.edu
University of Miami	Kristen Murphy	kpm60@med.miami.edu
University of Miami	Kristine Ruche	k.bustinza1@med.miami.edu
University of Miami	Lisa Merheb	lmerheb@med.miami.edu
University of Miami	Lisa Worley	LWorley2@med.miami.edu
University of Miami	Maria Rueda-Lara	mrueda2@med.miami.edu
University of Miami	Maria Santamaria	m.santamaria@med.miami.edu
University of Miami	Maxwell Amurao	mxa5672@miami.edu

University of Miami	Meilin Diaz Paez	mdiazpaez@med.miami.edu
University of Miami	Michael Iriban	mxi291@med.miami.edu
University of Miami	Natacha Caballero	NVelazquez2@med.miami.edu
University of Miami	Natalie Alderete	nalderete@miami.edu
University of Miami	Nicole Doell	ndoell@med.miami.edu
University of Miami	Paola Pagan	p.pagan@med.miami.edu
University of Miami	Reggie Perez	reggie.perez@miami.edu
University of Miami	Sila Shalhoub	sds198@med.miami.edu
University of Miami	Stephanie Varela	slvarela@miami.edu
University of Miami	Stephen Friedman	s.friedman1@med.miami.edu
University of Miami	Vera Suzuki	vld39@med.miami.edu
University of Miami	Vincent Torres	vjt3@miami.edu
University of Miami	Walter Lamar	wel22@miami.edu
University of Miami	Yissel Hernandez	Y.Hernandez6@miami.edu
University of Pennsylvania	Andrew Matthews	Andrew.Matthews@Penntmedicine.upenn.edu
University of Pennsylvania	Elizabeth Hexner	EHexner@penntmedicine.upenn.edu
University of Pennsylvania	Gregory Lewis	Gregory.Lewis@penntmedicine.upenn.edu
University of Pennsylvania	Jack Welsh	John.welsh@penntmedicine.upenn.edu
University of Pennsylvania	Jeffrey Henne	Jeffrey.Henne@penntmedicine.upenn.edu
University of Pennsylvania	Jessica Carro	Jessica.Carro@Penntmedicine.upenn.edu
University of Pennsylvania	Jillian Tuzio	Jillian.Tuzio@penntmedicine.upenn.edu
University of Pennsylvania	Jonathan Bar	Jonathan.bar@penntmedicine.upenn.edu
University of Pennsylvania	Marni Kessler	Marni.Kessler@penntmedicine.upenn.edu
University of Wisconsin	Abbey Van Haren	Abbey.vanharen@wisc.edu
University of Wisconsin	Alaina Little	Alaina.little@wisc.edu
University of Wisconsin	Becca Wallschkeger	bwallschkeger@uwhealth.org
University of Wisconsin	Ben Toomby	btoomby@uwhealth.org
University of Wisconsin	Casey Farnum	cfarnum@uwhealth.org
University of Wisconsin	Emily Muzzillo	Emily.eggars@wisc.edu
University of Wisconsin	Erica Dill	Erica.dill@wisc.edu
University of Wisconsin	Gary Trulson	gtrulson@wuhealth.org
University of Wisconsin	Jon Haas	Jon.haas@wisc.edu
University of Wisconsin	Julie Thiry	jthiry@uwhealth.org
University of Wisconsin	Nick Bell	Nbell2@uwhealth.org
University of Wisconsin	Robin Valley-Massey	Rvalley-massey@uwhealth.org
University of Wisconsin	Rusty Clifton	fclifton@uwhealth.org
University of Wisconsin	Sara Benzel	sbensel@uwhealth.org
University of Wisconsin	Shawn Arneson	sarneson@uwhealth.org
University of Wisconsin	Steve Huskell	shuskell@uwhealth.org
University of Wisconsin	Tyler Bogerma	tbogerma@uwhealth.org
West Virginia University Hospitals	Ashley Barrill	ashley.pratt1@wvumedicine.org
West Virginia University Hospitals	Guang Yu	guang.yu@wvumedicine.org
West Virginia University Hospitals	Joshua Cook	joshua.cook5@wvumedicine.org
West Virginia University Hospitals	Lauren Veltri	lveltri@hsc.wvu.edu
West Virginia University Hospitals	Lesley Ross	lesley.kennedy@wvumedicine.org
West Virginia University Hospitals	Lindsey Gladish	gladishl@wvumedicine.org
West Virginia University Hospitals	Phoebe Weiler	phoebe.weiler@wvumedicine.org
Westchester Medical Center	Doug Foster	Douglas.Foster@wmchealth.org
Westchester Medical Center	Melinda Brugger	Melinda.Brugger@WMCHHealth.org
Westchester Medical Center	Roger King	Roger.King@wmchealth.org
Westchester Medical Center	Sandra Fabricator	Sandra.Fabricatore@wmchealth.org
Westchester Medical Center	Scott Frae	Scott.Frae@wmchealth.org
Westchester Medical Center	Sophia King	Sophia.King@wmchealth.org
Westchester Medical Center	Steven Mazza	Steven.Mazza@wmchealth.org
Westchester Medical Center	Tim Mitzel	Charles.Mitzel@wmchealth.org

APPENDIX C: PARTICIPANT FEEDBACK

RITN Centers were asked to provide feedback via an online questionnaire following the exercise. The comments below are organized by observed strengths, challenges, and recommendations for future exercises.

Participating hospitals in the August 5, 2025, exercise were asked to rank the usefulness of the tabletop exercise; **71% rated it as “Very Useful”, 21% rated it as “Somewhat Useful”, and 8% rated it as “Neutral.”**

Strengths

- *Family Reunification Plan has been developed and could be implemented in such an event.*
- *DHMC has a strong relationship between our emergency management department, incident command and the Dartmouth Cancer Center. The Transplant and Cellular Therapy Program has strong ties with radiation oncology and radiation safety officer. This embedded collaboration provides seamless ability to mobilize resources as a health system and offer up subspecialty expertise needed to handle the unique components of a mass casualty event of this scale as it pertains to a radiation exposure event.*
- *One key strength identified was that Massachusetts General Hospital is fortunate to have access to a large and knowledgeable faculty. Through partnerships with external organizations such as COBTH, and as part of the broader Mass General Brigham system—which includes many satellite locations—we are well-positioned with resources to support a response of this scale.*
- *We are very familiar with preparing for disasters such as hurricanes. Additionally, the COVID pandemic and to some degree the civil unrest during that time prepared our system for the unthinkable. Our strength is that we have a fully integrated campus (including the school) that is under one Emergency Management Preparedness Department. The process of preparing for radiological casualties is part of our routine disaster preparedness drills. Our facility is within close proximity of the Turkey Point Nuclear facility.*
- *Our collaborative efforts in tracking and treating patients with the surrounding local hospitals, NGO agencies, the healthcare coalition, and federal partners is one of our strengths.*

- *Given our geographic location being in a major metropolitan area and being exposed to managing large crowds routinely due to annual events (Lollapalooza, NASCAR, DNC, Taste of Chicago, etc.), we are prepared to respond to incidents such as described in this exercise.*
- *We are also integrated well with the emergency response teams at the city level, county level, and state level. We also have a dedicated university police (solely responsible for the grounds in Hyde Park campus and surrounding neighborhoods) in addition to the Chicago Police Department.*
- *Our facility and local community are very used to handling crowds effectively due university sporting events which take place on the medical facility campus, which we can draw experience from when needing to potential manage the populace surge that may occur with an influx of patients and subsequently their family members*
- *Our center is extremely large and integrated into the community. Our center emergency manager mentioned that our local HCC often looks to our center for guidance versus our center looking to them. Our center is also an academic center with lots of resources and expertise that we can call upon internally.*
- *We have a multistate regional patient tracking and family reunification process that has been tested with JPATS. We have a scalable behavioral health system with up to state level support that has been used in incidents for many years.*

Challenges

- *Determining the procedures Public Health might use for reporting and response during a radiological event.*
- *The biggest challenge we identified was on the topic of how to track patients outside of our health system and understand resources we would need to learn and rely on in order to flag incoming self-reports and/or create a tracking system within our system to flag NMDS transfers/self-reports.*
- *Understandably, the public's concern and anxiety would be significant and must be a core consideration in any response plan. It is important to note that most hospitals already operate at or above capacity, with crowded emergency departments even under normal conditions. So, one of the largest challenges would be managing care for existing patients while simultaneously responding to an influx of mass casualty victims would place immense strain on bed availability, staffing, and medical resources. Additionally, a*

scenario of this magnitude presents long-term challenges, such as housing displaced individuals from out of state and addressing the mental health and well-being of hospital staff involved in the response.

- *For prolonged response personnel resources may be challenged.*
- *Ensuring adequate supply to service the needs that may arise given the size of our metropolitan area and the expansive growth that has taken place.*
- *One of the challenges would be the logistics of family reunification such as allocation of staff, verification of visitor identity, and interpreter services.*
- *Our center has not activated the family reunification center in an extremely long time - we see opportunities to perform a mock setup to review/update our policies and procedures.*
- *Lack of distinct contacts related to new staff in EPM. Easily correctable and this exercise has facilitated new connections.*
- *Updated information and community support resources needed for EOP. New EPM in place to rectify.*
- *The level of coordination between local, state, and federal partners. This will require a significant effort to coordinate and without everyone at the table and willing to participate, it could quickly breakdown. Cities will be overwhelmed and resources will be needed immediately.*
- *Supply chain breakdown - redeploy supplies without disrupting patient care outside of the incident.*

Future Exercises

- *Acquisition of specialty pharmaceuticals that will be needed in volume but generally have small PAR levels at most facilities, especially when all will be “competing” for those limited resources.*
- *Treatment of patients with ARS*
- *As we were the last center to report out, we would have loved the opportunity to have more time and feel that if there was a timekeeping element for other centers to give their responses this would have been an improved workflow.*

- *RITN consistently does an excellent job of raising thoughtful questions and introducing important topics to explore this scenario from multiple perspectives each year. While some themes have been addressed in previous exercises, revisiting them—particularly at-the-elbow training, patient education, and balancing care for established hospital patients alongside mass casualty victims—adds valuable depth. These topics remain important areas for continued discussion in future tabletop exercises.*
- *Logistics and timelines of pharmacy and blood product availability may be good to address in future RITN exercises in addition to the allocation of physical space and resources.*
- *I think going back to focus on managing outpatient patient flow (ambulatory operations) will be a great next topic since it has been a while.*
- *An exercise which focuses on staff education and management with relation to a radiologic event and the requisite response from a RITN facility.*
- *Clinically focused drill related to additional service lines that may be necessary for RITN patients being sent to facility. Also including if a family/friend that was previously cleared comes to visit a RITN transplant patient and begins to show increased development of ARS signs.*
- *How do we rapidly screen patients a push the lower risk to regional cancer centers and outpatient.*

APPENDIX D: ACRONYMS

Acronym	Term
AAR	After Action Report
EAP	Employee Assistance Program
HR	Human Resources
IND	Improvised Nuclear Device
JIT	Just-In-Time Training
MOU	Memorandum of Understanding
NMDS	National Disaster Medical System
ONR	Office of Naval Research
RITN	Radiation Injury Treatment Network
SitReps	Situation Reports
TTX	Tabletop Exercise