# 2010 RITN Tabletop Exercise

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Incident Message Assumptions Initial Incident Response Steps Exercise Questions

# Deadline for submission of answers to exercise questions is July 31, 2010

# **Recommended Reading Material**

It will be helpful for members of the response team to review the following references before the exercise.

- 1. Planning Guidance for Response to a Nuclear Detonation
  (http://hps.org/hsc/documents/Planning\_Guidance\_for\_Response\_to\_a\_Nuclear\_Detonation\_
  FINAL.pdf) specifically pages 7-10 and 61-78
- 2. *Medical Response to a Radiological/Nuclear Event: Integrated Plan.* DHHS-ASPR. (http://download.journals.elsevierhealth.com/pdfs/journals/0196-0644/PIIS0196064407018999.pdf)
- 3. Hospital Triage in the First 24 Hours after a Nuclear or Radiological Disaster. Radiation Emergency Assistance Center/Training Site (REAC/TS). (http://orise.orau.gov/reacts/files/triage.pdf)
- 4. *Emergency Support Function #8 Public Health and Medical Services Annex.* National Response Framework. (http://www.fema.gov/pdf/emergency/nrf/nrf-esf-08.pdf)
- 5. Radiation Event Medical Management: Decontamination Procedures. DHHS. (<a href="http://www.remm.nlm.gov/ext\_contamination.htm">http://www.remm.nlm.gov/ext\_contamination.htm</a>)
- 6. Commission to Assess the Threat to the U.S. from Electromagnetic Pulse (EMP) Attack. Statement before the House Armed Service Committee. (http://empcommission.org/docs/GRAHAMtestimony10JULY2008.pdf)
- 7. Altered Standards of Care in Mass Casualty Events. Agency for Healthcare Research and Quality, DHHS. (<a href="http://www.ahrq.gov/research/altstand/altstand.pdf">http://www.ahrq.gov/research/altstand/altstand.pdf</a>)
- 8. *Mass Medical Care with Scarce Resources*. Agency for Healthcare Research and Quality, DHHS. (<a href="http://www.ahrq.gov/research/mce/mceguide.pdf">http://www.ahrq.gov/research/mce/mceguide.pdf</a>)
- 9. Who Should Receive Life Support During a Public Health Emergency? Using Ethical Principles to Improve Allocation Decisions. Annals of Internal Medicine. (http://chpe.creighton.edu/events/images/life\_support.pdf)
- 10. About the Medical Reserve Corps, (http://www.medicalreservecorps.gov/About)

#### **MEMORANDUM**

TO:	Members of the Radiation Injury Treatment Network
FROM:	
<b>DATE:</b>	February 15, 2010
<b>SUBJECT:</b>	Radiation Injury Treatment Network 2010 tabletop exercise

Attached you will find the tabletop exercise, which is one of the required Radiation Injury Treatment Network (RITN) tasks.

Please review the scenario and answer the applicable questions enclosed to the best of your ability. Answers will only be accepted when submitted through the Internet link no later than **July 31, 2010** (unless otherwise coordinated). Only one person should submit answers for each RITN center. Some questions may be repeated from previous exercises, please determine the current answer. The web link for answer submission is:

This exercise presents a scenario that would likely involve RITN. This exercise should be completed with a group of appropriate staff members. <u>The intent of this exercise</u> is to stimulate communication through a low stress exercise about the possible ramifications resulting from the scenario with your staff and with your critical partners.

This group of staff should meet for approximately two hours to review the scenario and determine the best possible answers to the questions. Each participant should review a copy of the standard operating procedures (SOPs) at his/her centers germane to RITN prior to participating in the exercise. SOPs related to RITN should be scrutinized for applicable updates and improvements.

Examples of possible participants include but are not limited to:

# **Transplant Center:**

- Medical director
- ➤ Additional physicians
- Primary coordinator
- > RITN point-of-contact (POC)
- ➤ Nurse leader
- ➤ Admission process representative
- ➤ Administrator/hospital executive
- > Emergency management staff
- ➤ Pharmacy staff member
- Health Physicist/Radiation Safety Officer
- ➤ Representative from Social Services
- Representative from Psychiatry/Psychology
- Blood center representative
- > Other staff as needed

# **Donor Center:**

- Medical director
- > Primary coordinator
- > RITN POC
- ➤ Representative from physical exam provider
- Representative from collection center/apheresis center
- Vendor/contractors (laboratory for IDMs, etc...)
- > Other staff as needed

#### **Cord Blood Bank:**

- Medical director
- Primary coordinator
- > RITN POC
- **▶** Administrator
- > Other staff as needed

A panel that includes all of the above examples would be the "dream team" of exercise participants. Do what is reasonable for your center.

This scenario may not have all the information that you feel is necessary to provide a fully informed response. As with most emergency situations, decisions must be made with less than complete information. Therefore, please attempt to formulate your response based on the information provided. If you have questions, please feel free to contact at at or Thank you for your time and participation in this critical national response initiative.

# **Initial Incident Response Steps**

- 1. Assign an Exercise Controller (aka facilitator) to manage the exercise discussion.
  - a. The controller may participate in the exercise.
  - b. The controller keeps the exercise on task and within the scope of the scenario to maximize the value of time dedicated to the exercise.
  - c. The controller allows both sides to state their opinion if a conflicting discussion occurs, ensures the recorder captures the points from all sides and presses the group to continue.
- 2. Assign a recorder to capture your responses for submission, points for later discussion and recommendations for SOP updates.
- 3. Activate center emergency response plans per your organizations SOP.
- 4. Gather your incident response team to determine your center's response capabilities.

6. Discuss your center's initial steps will be in response to the emergency situation.

- 5. Review the emergency activation and notification process. Did everyone receive timely notification with pertinent information to react accordingly?
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### Radiation Injury Treatment Network (RITN) 2010 Exercise

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====== This message serves as NOTIFICATION OF ACTIVATION of RITN========
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### **SITUATION:**

Five days ago, foreign terrorists detonated a surface burst10-kiloton nuclear device containing Highly Enriched Uranium (HEU) in a hijacked truck. The attack occurred in the major metropolitan center of Hewstone. Many buildings within ½ mile of the detonation were severely damaged. An Electro-Magnetic Pulse (EMP) damaged many electronic devices within 5 kilometers (~ 3 miles). A small mushroom cloud rose above the city and radioactive debris covers a large area.

Emergency Support Function (ESF) #8 (*Public Health and Medical Services Annex* to the National Response Framework, see recommended reading list) was activated as part of the Federal response. Sorting of victims by local and federal authorities occurred in established tiered triage sites. Delayed and immediate patients were processed for care in accordance with the January 2009 *Planning Guidance for Response to a Nuclear Detonation* (see recommended reading list). Many patients are being sent from regional medical centers to evacuation centers for national distribution.

The RITN centers have been asked by The Department of Health and Human Services Assistant Secretary for Preparedness and Response (DHHS-ASPR) to accept **20,000** patients who are classified as Immediate based on having received moderate to high radiation dose in the 200-600 rads (2-6 Gy) range. Approximately half of these have either minimal or no traumatic injuries.

Standard supportive care for acute radiation syndrome (ARS) will favorably impact the outcome for these victims. The scarcity of resources is expected to be a critical factor in the best use of supportive care for this population.

RITN submitted an initial estimate of 1,000 total available beds at its 42 transplant centers to DHHS-ASPR. The number of patients who will require intensive, specialized care far exceeds this number. RITN centers are asked to consider every contingency for how to expand their surge capacity, as well as which conditions will require the use of altered standards of care.

Each RITN transplant center should expect to receive 500 patients the day after tomorrow.
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# **Assumptions**

- 1. The NMDP shall stop all recruitment activity to focus Network activity on these victims.
- 2. NMDP contracted laboratories (typing and IDM) have established contingency clauses requiring expedited processing during an NMDP declared emergency; high resolution typoing shall be completed with-in 72 hours of receipt.
- 3. NMDP will maintain standard typing, CT and IDM procedures to protect patient's health.
- 4. National authorization for altered standards of medical care were requested but not yet authorized by the Department of Health and Human Services. State authorizations should be pursued through your state Department of Public Health.
- 5. Several Medical Reserve Corps units have been activated. MRC units are community-based and function as a way to locally organize and utilize medical volunteers. MRC representatives are overwhelmed with requests but limited support may be available.
- 6. FDA Emergency Use Authorization is pending for the use of Neupogen/G-CSF for ARS treatment.
- 7. The Strategic National Stockpile (SNS) is authorized to provide Neupogen/G-CSF for use in reconstituting marrow function (to be requested through the NMDP).
- 8. Congress is considering the funding of emergency relief and medical cost reimbursement.
- 9. RITN composition: 42 transplant centers, 8 donor centers and 7 cord blood banks



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# **Exercise Questions**

(submit online via:

All Centers answer questions 1-5 Transplant Centers ONLY answer questions 6-23 Cord Blood Banks ONLY answer questions 24-27 Donor Centers ONLY answer questions 28-34

- 1. Contact information of person submitting answers to RITN for the 2010 Exercise questions: name, email, phone
- 2. Select the RITN center that you are associated with (Each center must submit separately)
- 3. How many people participated in your exercise (keep a list of all who participated by name)?
- 4. Identify all members of your incident response team (Select all that apply).
  - a. Medical director
  - b. Another physician
  - c. Physicians Assistant or Nurse Practitioner
  - d. Nurse (RN, LPN, etc.)
  - e. Emergency management staff
  - f. Executive management (administration)
  - g. Emergency medicine staff (ER)
  - h. Pharmacy staff
  - i. Health physicist/Radiation Safety Officer
  - j. Logistics staff
  - k. Primary coordinator
  - 1. RITN POC
  - m. Admission process representative
  - n. Social worker
  - o. Representative from psychiatry/psychology
  - p. Radiation oncologist
  - q. Blood bank representative
  - r. Other

### **Donor Centers**

- a. Representative from physical exam provider
- b. Representative from collection center or apheresis center
- c. Vendor/contractors (laboratory for IDMs, etc.)
- 5. Select the Center type you are responding for.
  - a. Transplant Center
  - b. Cord Blood Bank
  - c. Donor Center

Transplant Centers ONLY answer questions 6-23, CBB advance to question 24-27, Donor Centers to question 28-34

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# Transplant Centers ONLY answer questions 6-23, CBB advance to question 24-27, Donor Centers to question 28-34

- 6. If a patient needs to be transferred to a burn/trauma center, how will you track their ARS?
- 7. By the end of FY2010 will the SOP you submit to RITN include your contact in your state Department of Public Health to receive material requested through the NMDP from the Strategic National Stockpile (SNS)?
- 8. By the end of FY2010 will the SOP you submit to RITN include your point of contact if you need aid from your state emergency management agency?
- 9. By the end of FY2010 will the SOP you submit to RITN include your point of contact at the state level if you need aid from a National Guard Civil Support Team (CST)?

Transplant Centers ONLY continue and answer questions 10-23

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Transplant Centers ONLY answer questions 6-23, CBB advance to question 24-27, Donor Centers
to question 28-34

# The Exercise Controller should reveal the following questions only after the previous questions have been answered.

Announce: "500 patients have arrived at the nearby airport. The local school district provided buses to move ambulatory patients while ambulances are transporting litter patients. Patients should arrive at your facility within the hour. The Department of Health and Human Services has asked RITN to provide information about our radiation decontamination capabilities. All patients arriving currently are believed to have completed gross (basic) decontamination."

- 10. Does your center have a procedure for external decontamination for radiation contaminants? Briefly describe.
- 11. Do you have any mutual aid agreements that would facilitate patient decontamination?
- 12. Where will you house patients waiting to be screened for radiation contamination?
- 13. Who in the facility is responsible for coordinating for external decontamination of radiation patients (name and position)?
- 14. How many patients can your system decontaminate in an 8-hour period?
- 15. Identify the types of radiation survey equipment available?
- 16. How many staff are trained to conduct radiation surveys?
- 17. How long (on average) does it take a trained staff member to complete a radiation survey of an ambulatory patient?
- 18. Which types of radiation sources can your equipment identify (alpha, beta, gamma, other)?
- 19. Does your organization have radiation survey portals?
- 20. Does your organization have access through a partner organization to borrow radiation survey portals?
- 21. In the absence of an Emergency Use Authorization from the FDA, would your center use G-CSF off-label for a recipient with Acute Radiation Syndrome? Explain.
- 22. Once cord blood bank licensure occurs, will your center require an Emergency Use Authorization from the FDA before requesting cord blood units for infusion of recipients with Acute Radiation Syndrome, a diagnosis not covered by the currently proposed licensing guidance? Explain.

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- 23. By the end of FY2010 will the SOP you submit to RITN include the following:
  - a. Point of contact for transporting mass radiation patients to your facility
  - b. On-hand decorporation agents
  - c. Point of contact for housing patients beyond normal capacity
  - d. Point of contact for approval of altered standards of care

# Question 23 is the final question for Transplant Centers

# **Cord Blood Banks Only answer question 24-27**

- 24. Last year you were directed to incorporate detailed information answering the 2009 TTX questions into your SOP. By the end of FY2010 will your SOP include:
  - a. Primary shipping company for cord blood shippers
  - b. Back-up shipping company for cord blood shippers
  - c. Name of person to contact and day phone numbers
  - d. After hours phone numbers and email (when appropriate)
- 25. Is more than one person trained to conduct each or your critical tasks necessary to ship CBUs?
- 26. Do you have an established process to request NMDP contingency cord blood shippers?
- 27. Once cord blood bank licensure occurs, will your center require an Emergency Use Authorization from the FDA before shipping product for recipients with Acute Radiation Syndrome, a diagnosis not covered by proposed licensing guidance?

Question 27 is the final question for Cord Blood Banks
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## **Donor Centers Only answer questions 28-34**

- 28. Last year you were directed to incorporate detailed information answering the 2009 TTX questions into your SOP. By the end of FY2010 will your SOP include:
  - a. Primary hotel for donors
  - b. Back-up hotel for donors
  - c. Secondary back-up hotel for donors
  - d. Addresses for hotels
  - e. Names of persons to contact and day phone numbers at each hotel
  - f. After hours phone numbers for each hotel
  - g. Transportation assets for donors
  - h. Back-up transportation for donors
  - i. Names of persons to contact and day phone numbers for transportation companies
  - j. After hours phone numbers for each transportation company
  - k. Primary physical exam facility
  - 1. Back-up physical exam facility
  - m. Secondary back-up physical exam facility
  - n. Addresses for physical exam facilities
  - o. Names of persons to contact and day phone numbers at each physical exam facility
  - p. After hours phone numbers for each physical exam facility
- 29. Is more than one person trained to conduct each of your critical tasks necessary to process donors for collection?
- 30. Do you plan to utilize volunteers to handle the potential increased work load?
- 31. If you plan to use volunteers, identify the roles you plan to have these volunteers fulfill. (Select all that apply).
  - a. Transportation to/from appointments
  - b. Answering/returning telephone calls
  - c. Administrative or clerical support
  - d. Data entry
  - e. General office errands (i.e. copies, faxing, restocking supplies, etc...)
  - f. Shipping samples to labs with appropriate blood borne pathogen training
  - g. Receiving donors at entrance
  - h. Other
  - i. Will not use volunteers
- 32. If you plan to utilize volunteers do you have a documented process to train them?
- 33. Do you anticipate regulatory issues if performing collections for recipients with Acute Radiation Syndrome? Describe.
- 34. Do you anticipate human research subject concerns if performing collections for recipients with Acute Radiation Syndrome? Describe.

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