2011 RITN Tabletop Exercise

Contents (8 pages total):

Deadline for submission of answers to exercise questions is
December 31, 2011

Please distribute this packet in its entirety to all exercise participants.

References

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, 2nd edition* (http://hps.org/hsc/documents/Planning_Guidance_for_Response_to_a_Nuclear_Detonation-2nd_Edition_FINAL.pdf

2. *NDMS Federal Coordinating Center Guide (June 2010).* (http://ritn.net/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=2147483772&libID=2147483772)

   - Transportation of patients pp 10-12
   - Funding for costs incurred pg 14
   - Patient Information to be collected pg 43
     "NDMS …. and other care providers" will be paid for care of patients pg 63
   - Discharge and return pg 63
   - Financial reimbursement pp 64-69
   - Patient data to be submitted pp 67-68
   - Expense tracking format pg 69

3. *Medical Response to a Radiological/Nuclear Event: Integrated Plan.* DHHS-ASPR. (http://download.journals.elsevierhealth.com/pdfs/journals/0196-0644/PIIS0196064407018999.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. *Altered Standards of Care in Mass Casualty Events.* Agency for Healthcare Research and Quality, DHHS. (http://www.ahrq.gov/research/altstand/altstand.pdf)

6. *Mass Medical Care with Scarce Resources.* Agency for Healthcare Research and Quality, DHHS. (http://www.ahrq.gov/research/mce/mceguide.pdf)

7. *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)

8. *About the Medical Reserve Corps.* (http://www.medicalreservecorps.gov/About)

   - Information about supplementing medical staff for surge activities

9. *Emergency System for Advance Registration of Volunteer Health Professionals* (ESAR-VHP) (http://www.phe.gov/esarvhp/Pages/default.aspx)

   - National network of state-based programs that verifies the identity, licenses, and credentials of potential volunteer health professionals before a disaster occurs

MEMORANDUM

TO: Members of the Radiation Injury Treatment Network

FROM: [redacted]

DATE: March 21, 2011

SUBJECT: Radiation Injury Treatment Network 2011 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 **December 31, 2011**. 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:

[redacted]

This exercise presents a scenario that would likely involve RITN. This exercise should be completed with a group of appropriate staff members. The intent of this exercise 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 plan to meet for approximately two hours to review operational plans 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
- Hospital Emergency Department Representative
- VA Representative
- NDMS Representative
- Public Health Representative
- County Emergency Manager
- Quality Representative
- Regulatory Representative
- Infectious Disease Specialist
- Cell Processing Lab Representative
- Environmental Health and Safety Rep.
- Other staff or partners

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 responses based on the information provided. If you have questions, please feel free to contact [redacted] Thank you for your time and participation in this critical national response initiative.

Scenario

Purpose:
This scenario outlines the anticipated integration of RITN into the national response to a mass casualty incident resulting in marrow toxic injuries.

Description of RITN:
RITN centers are affiliated with the National Marrow Donor Program network of care providers; including transplant centers, donor centers, and cord blood banks. These centers are stand alone entities that are voluntarily participating and planning for the response to a mass casualty incident.

Incident:
A mass casualty incident that results in marrow toxic injuries most likely would result from a terrorist detonation of an improvised nuclear device or a catastrophic industrial accident. The Department of Homeland Security's National Planning Scenarios include 16 possible terrorist incidents that would significantly impact the United States. Each scenario describes the scope of the incident and offers estimates of the number of resulting casualties. One of these scenarios is the detonation of a 10 kT (kiloton) improvised nuclear device, which is approximately equivalent to the bomb detonated over Hiroshima during World War II.

Response flow:
It is extremely difficult to confidently predict how the national response to an improvised nuclear device would play out. Based on established plans, the Assistant Secretary for Preparedness and Response in the Department of Health and Human Services will be in charge of the provision of medical care (known as Emergency Support Function #8).

If an improvised nuclear device is detonated in a major metropolitan city, the destruction within a 1-2 mile radius will be severe (roads most likely will be un-drivable in this area due to debris). There will be many vehicular accidents due to flash blindness and there will be a plume of debris that will cause fallout downwind of the detonation.

It is imperative to keep in mind that the response to all disasters begins at the local level. Thus, local fire departments, ambulances, hospitals and law enforcement will be the first people on scene to provide aid. State, regional and national response assets will not immediately be available to assist. Within minutes to hours after the detonation, victims will begin to collect at ad hoc sites surrounding the area of significant damage. Hospitals and other medical care sites will be rapidly overwhelmed, first close to the detonation and then over increasing distances from the site.

Patients that are stabilized and identified as requiring specialized care will be triaged for transportation and distribution to healthcare facilities around the country. This transportation can be by air or ground depending on the distance, urgency and availability of transportation assets. Injured casualties who have radioactive dust on their clothing and body will be decontaminated prior to transfer to other centers. However, it is possible that some transferred casualties will have low levels of contamination through ingestion, inhalation or imbedding of radioactive material.

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The National Disaster Medical System will transport the patients to a regional Federal Coordinating Center, where patients will be further distributed to hospitals across the nation that participate in the National Disaster Medical System or to centers of specialized care (e.g. RITN).

Timeline:

As described above, this process of casualty collection and multiple iterations of triage will take several days. Thus, patients are not expected to arrive at RITN centers for at least 96 hours after the detonation, with the exception of casualties who self evacuate by car or other means. The time period between radiation exposure and neutropenia can extend between 3-30 days. Thus, some casualties may arrive at RITN centers even before the onset of neutropenia.

Additional doses of myeloid growth factors (*e.g.* G-CSF) may be available through the Strategic National Stockpile or through a vendor-managed inventory system. The timeliness of the distribution and whether it will be sent to the disaster site or to the specialized care facilities will depend on the situation and should not be counted on for care of patients as they arrive.

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Exercise Questions

(submit online via: [redacted] :

Contact information of person submitting answers to RITN:

1. Name

2. Email

3. Phone

4. Select your RITN transplant center.

5. How many people participated in your exercise (keep a list of all who participated by name)?

6. Identify all members of your incident response team (Select all that apply).

    a. Medical director
    b. Additional physicians
    c. Primary coordinator
    d. RITN point-of-contact (POC)
    e. Nurse leader
    f. Admission process representative
    g. Administrator/hospital executive
    h. Emergency management staff
    i. Pharmacy staff member
    j. Radiation Safety Officer/Health Physicist
    k. Representative from Social Services
    l. Representative from Psychiatry/Psychology
    m. Blood center representative
    n. Hospital Emergency Department representative
    o. VA Representative
    p. NDMS Representative
    q. Public Health Representative
    r. County/City/State Emergency Manager
    s. Quality Representative
    t. Regulatory Representative
    u. Infectious Disease Specialist
    v. Cell Processing Lab Representative
    w. Environmental Health and Safety Representative
    x. Emergency Department Staff
    y. Other staff or partners

7. RITN centers will likely receive patients through NDMS for specialized care. Is your hospital contracted with the National Disaster Medical System?

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8. Where is the NDMS Federal Coordinating Center (FCC) in your NDMS region?

9. Who is the FCC coordinator (provide name, position, and phone number)?

10. What is the highest level position in your hospital to be briefed on RITN?

11. Have you participated in exercises with (check all that apply):
    a. Hospital, including Emergency Department
    b. Local city or county government
    c. Regional/National government (e.g. FEMA, HHS)
    d. NDMS

12. How many doses of G-CSF are available in your pharmacy today (inpatient, outpatient or both)?

13. Are there particular medications (e.g. antibiotics), supplies (e.g. IV tubing, blood products), or equipment (e.g. beds, IV pumps) that you anticipate would be in short supply at your center and therefore limit your ability to care for a large number of irradiated casualties? If so, which?

14. What is your plan for housing family members who arrive with injured casualties?

15. What is the protocol for prevention of transfusion-associated graft-versus-host disease at your center? Is this applied to all transfusions or only to specified patients?

16. Would your center utilize antimicrobial prophylaxis (bacterial, viral or fungal) in irradiated casualties with anticipated or proven neutropenia? If so, which agents and for what period?

17. Would your center utilize antimicrobial prophylaxis or preemptive monitoring for Cytomegalovirus, Pneumocystis, zoster or other infections in irradiated casualties? If so, which agents and for which casualties during which time period after exposure?

18. At your center, which irradiated casualties would be HLA-typed and when?

19. Similarly, which irradiated casualties would be appropriate candidates for a donor search (related or unrelated) and when during the course of care would the search be initiated?

20. Which casualties would be appropriate candidates for allografting and when during the course of care?

21. If allografting is necessary, what would your center utilize for conditioning (if any) and graft-versus-host disease prophylaxis (if any)?

22. What expertise and facilities are available at your center for managing casualties with internal contamination?

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23. Centers may have the opportunity to select which irradiated casualties are appropriate candidates for transfer to their center. If your center is asked to receive 200 casualties, including a mix of some with traumatic injuries only and others with radiation exposure only, how will your center decide the appropriate number from each category?

24. Comments (free text)

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