2019

RITN Tabletop Exercise (TTX) Situation Manual (SitMan)

Medical Focus

Deadline for submission of answers to exercise questions is

August 31, 2019

Rev 1.0

PREFACE

There are two options for how your organization completes the RITN Tabletop Exercise in 2019; the first is to participate in a web-based exercise facilitated by the Mier Group and the RITN Control Cell. The second option is to conduct the exercise independently, as you have in the past. We encourage you to participate in the web-based exercise, if convenient. If you plan to participate in the web-based exercise, please register for one of the five sessions through this link by May 31, 2019 https://register.gotowebinar.com/rt/6143720629533533196. If you plan to coordinate the exercise yourself, please use these materials to coordinate and conduct your exercise and then submit the answers to the questions in this packet.

If participating in one of the web-based TTXs **answers must be submitted within 10 days** from the exercise to receive credit. For centers conducting the exercise on their own, answers must be submitted by **August 31, 2019**. Only one person should submit answers for each RITN center. The web link for answer submission is:

https://www.surveymonkey.com/r/FY19_TTX_MedTrack

EXERCISE PARTICIPANTS

This exercise should be completed with a group of appropriate staff members. To determine exercises participants the **RITN Coordinator should work with hospital emergency management staff to review the exercise materials** and identify what departments/organizations would be required. The departments/organizations listed below are only examples and should not be considered as a definitive list of participants.

EXERCISE OVERVIEW

Exercise Name	2019 RITN Tabletop Exercise (TTX)			
Web Based Exercise Dates **(Med Track Only)** --- ***Registration Required***		**Eastern Time**	**Central Time**	**Pacific Time**
	June 19, 2019	Start: 2:00PM End: 3:30PM	Start: 1:00PM End: 2:30PM	Start: 11:00AM End: 12:30PM
	July 16, 2019	Start: 12:00PM End: 1:30PM	Start: 11:00AM End: 12:30PM	Start: 9:00AM End: 10:30AM
	August 7, 2019	Start: 11:00AM End: 12:30PM	Start: 10:00AM End: 11:30AM	Start: 8:00AM End: 9:30AM
Core Capabilities	Public Health & Medical Services			
Threat or Hazard	Radiological			
Scenario	Medical surge from a distant radiological incident			
Sponsors	Radiation Injury Treatment Network (RITN) National Marrow Donor Program (NMDP) Office of Naval Research (ONR)			
Point of Contact	RITN Control Cell RITN@nmdp.org (612)884-8276			

GENERAL INFORMATION

Exercise Learning Objectives and Core Capabilities
The following exercise learning 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). The objectives and aligned core capabilities are guided by elected and appointed officials and selected by the Exercise Planning Team.

Table 1. Exercise Learning Objectives and Associated Core Capabilities

Exercise Learning Objective	Core Capability
Objective 1: Medical staff are able to describe their approaches used for hematopoietic cell transplantation (HCT) in patients who appear to have received myeloablative doses of radiation.	Public Health & Medical Services

Participant Roles and Responsibilities
The term *participant* encompasses many groups of people, not just those playing in the exercise. Groups of participants involved in the exercise, and their respective roles and responsibilities, are as follows:

Players. Players are personnel who have an active role in discussing or performing their regular roles and responsibilities during the exercise. Players discuss or initiate actions in response to the simulated emergency.

Observers. Observers do not directly participate in the exercise. However, they may support the development of player responses to the situation during the discussion by asking relevant questions or providing subject matter expertise.

Facilitators. Facilitators provide situation updates and moderate discussions. They also provide additional information or resolve questions as required. Key Exercise Planning Team members also serve as subject matter experts (SMEs) during the exercise.

Evaluators. Evaluators are assigned to observe and document certain objectives during the exercise. Their primary role is to document player discussions, including how and if those discussions conform to plans, polices, and procedures.

Exercise Structure
This exercise will be a facilitated exercise. Players will participate in the following modules:

Module 1: Patient Treatment

Exercise Guidelines
This exercise will be held in an open, low-stress, no-fault environment. Varying viewpoints, even disagreements, are expected.

Respond to the scenario using your knowledge of current plans and capabilities (i.e., you may use only existing assets) and insights derived from your training.
Decisions are not precedent setting and may not reflect your organization's final position on a given issue. This exercise is an opportunity to discuss and present multiple options and possible solutions.

Issue identification is not as valuable as suggestions and recommended actions that could improve response efforts. Problem-solving efforts should be the focus.

Exercise Assumptions and Artificialities
In any exercise, assumptions and artificialities may be necessary to complete play in the time allotted and/or account for logistical limitations. Exercise participants should accept that assumptions and artificialities are inherent in any exercise, and should not allow these considerations to negatively impact their participation. During this exercise, the following apply:

The exercise scenario is plausible and events occur as they are presented.

The scenario may not have all the information that you feel is necessary to provide a fully informed response. Please attempt to formulate your responses based on the information provided.

Exercise Evaluation
Players will be asked to complete participant feedback forms. These documents, coupled with facilitator observations and notes, will be used to evaluate the exercise and compile the After-Action Report (AAR).

Participants requesting continuing education credits must complete and submit the evaluation in order to receive credits.

EXERCISE SCENARIO

Incident Occurs

- 10 kiloton Improvised Nuclear Device (IND) was detonated in a major metropolitan area. The blast occurred at least 500 miles away from your facility 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) to the network. As part of this all centers are requested to begin submitting daily Healthcare Standard (HCS) capabilities matrix.

Day 6

- The National Disaster Medical System (NDMS) issues activation protocol for your region and the local Federal Coordinating Center (FCC) establishes a Patient Reception Area (PRA) and expects patients to start arriving in the next 24-48 hours.

Day 9

- The first NDMS aircraft evacuating patients with radiation only injuries arrives at the PRA. NDMS officials expect there will be multiple aircraft a day arriving for the next several days. Given your facility is one of the few that can provide specialized care for ARS you'll be asked to accept as many as you can.

Day 21

Module 1

EXERCISE VENUE QUESTIONS

1. Contact information of person submitting answers to RITN exercise questions.
2. Select your RITN center.
3. What TTX session did you take participate in?
4. How many people participated in your exercise?
5. Identify the disciplines that participated in your exercise (select all that apply).

MODULE 1: PATIENT TREATMENT

Scenario Update

- Choose one of the patients below to work through questions 6-12.

Pediatric Patient

- 9 year-old male with no comorbidities who received an estimated 8 Gy dose of fallout radiation over a two hour period. No additional injuries were sustained.
- He began G-CSF treatment three days after the exposure, which has been continued daily.
- He has normal renal, liver and other organ functions and remained afebrile since day 13 when he was started on broad-spectrum antibiotics.
- He developed 2nd degree skin burns that have now resolved.
- Peripheral blood WBC count has been <0.1 since day seven and he is dependent on platelet transfusions.
- HLA typing of the patient and his 12 year-old brother confirmed that they are HLA matched. The brother accompanied the patient to your center.
- An unrelated donor search was also initiated, but by day 21 after detonation, no matching donors have been identified.
- On day 19 after detonation, bilateral bone marrow aspirates were performed and show aplastic marrow. He remains profoundly pancytopenic.

Adult Patient

- 33 year-old male with no comorbidities who received an estimated 8 Gy dose of fallout radiation over a two hour period. No additional injuries were sustained.
- He began G-CSF treatment three days after the exposure, which has been continued daily.
- He has normal renal, liver and other organ functions and remained afebrile since day 13 when he was started on broad-spectrum antibiotics.
- He developed 2nd degree skin burns that have now resolved.
- Peripheral blood WBC count has been <0.1 since day seven and he is dependent on platelet transfusions.
- HLA typing of the patient and his 37-year old brother that they are HLA matched. The brother accompanied the patient to your center and is willing to donate.
- An unrelated donor search was also initiated, but by day 21 after detonation, no matching donors have been identified.
- On day 19 after detonation, bilateral bone marrow aspirates were performed and show aplastic marrow. He remains profoundly pancytopenic.

Discussion Questions

Activity 1:

6. It is now day 21 since detonation. Would you proceed with HCT at this time?
7. If not, at what day would you repeat her marrow assessment and/or decide to proceed to HSCT if he remains aplastic?
8. When you decide to proceed with HCT, what preparative regimen if any would you give?
9. Would you use the brother's peripheral blood stem cells or bone marrow?
10. Would you utilize in vitro or in vivo T-cell depletion and if so, how?
11. If his brother was only matched for one haplotype, how would your choice of donor, cell product and/or conditioning change?

12. Adult centers: If the patient was 67 years old and his brother was 64 years old, how would your approach change?
    Pediatric centers: If the patient was 2 years old and his brother was 5 years old, how would your approach change?

APPENDIX B: ACRONYMS

Acronym	Term
AAR	After Action Report
ARS	Acute Radiation Syndrome
ASPR	Assistant Secretary for Preparedness and Response
FCC	Federal Coordinating Center
Gy	Gray
G-CSF	Granulocyte-Colony Stimulating Factor
HCS	Healthcare Standard
HCT	Hematopoietic Cell Transplantation
HHS	Health and Human Services
HLA	Human Leukocyte Antigen
IND	Improvised Nuclear Device
NMDP	National Marrow Donor Program
NDMS	National Disaster Medical System
ONR	Office of Naval Research
PRA	Patient Reception Area
RITN	Radiation Injury Treatment Network
SITREP	Situation Report
SME	Subject Matter Expert
TTX	Tabletop Exercise
WBC	White Blood Cell Count

APPENDIX C: REFERENCES

Encourage exercise participants to review the following before the exercise:

RITN Training Materials:
http://ritn.net/Training/

RITN ARS Treatment Guidelines:
http://ritn.net/WorkArea/DownloadAsset.aspx?id=2147483696