



Disaster Medical Specialist TNG-30S

Program of Instruction

Updated: August 2009



Texas Engineering Extension Service
Urban Search and Rescue



TEEX is a member of the
National Domestic Preparedness Consortium

Course Details

Course Length: Five days long, approximately nine training hours each day (50 total training hours).

Delivery Location: Delivered in [Disaster City®](#), TX – within the city limits of College Station, TX or equivalent training facility.

GSA and Grant Funding Approval:

The Disaster Medical Specialist course is listed on GSA Schedule 84. TEEX has special registration requirements for GSA participants. Please contact the TEEX US&R Division to register for a GSA-approved course. For more information on ordering from Federal Supply Schedules, please visit: www.gsa.gov



The Disaster Medical Specialist course is a DHS G&T Approved State Sponsored Course. The G&T State-Sponsored course number is TX-003-RESP. Jurisdictions may utilize UASI and SHSP grant funding to attend this course. For more information on the G&T State-Sponsored courses, [click here](#).



Certificate: TEEX certificate of completion

Prerequisites: Prior to attending this course, participants must be certified as one of the following:

- State or National [Emergency Medical Technician at the Paramedic level](#)
- Registered Nurse
- Licensed Medical Doctor

Due to strenuous nature of search and rescue activities, participants should secure a professional evaluation of their medical condition prior to enrolling in these courses.

Target Audience:

This course has been developed for city, state and federal urban search and responders. The target audience also includes all emergency responders from municipal and industrial agencies tasked with performing medical duties at a US&R or terrorist incident. Course participants include emergency responders from the following five disciplines/services:

- Fire Service (FS)
- Law Enforcement (LE)
- Healthcare (HC)
- Emergency Medical Services (EMS)
- Industrial Customers (IND)
- Military (MT)

Mission Area: Respond

Level of Training: Performance – Offensive

Required Equipment:

This course requires students to bring with them specific equipment. The course participants should arrive with the following items:

- Helmet (must be ANSI rated Z89.1 – Type 1) with headlamp
- Steel toe safety boots (must be ANSI Z41 PT99 M1/75 C/75)
- Eye protection (must be ANSI Z-87.1)
- Work gloves and knee pads
- Standard work/duty clothing including long sleeve shirts for every day of class
- Raingear suitable for search and rescue operations. Class is conducted rain or shine

NOTE: N-95 dust masks and ear plugs will be provided by TEEX

Course Overview

Course Background

The Disaster Medical Specialist course was designed to provide classroom and field time to medical professionals that will deploy and respond with an urban search and rescue task force to natural disasters or terrorist incidents.

Course Description

This course is designed to provide students with the knowledge, skills, and abilities to perform medical assessment and care at a structural collapse disaster scene due to natural disasters or terrorist incidents. This course exposes the students to the injury types consistent with structural collapse incidents. A heavy focus is placed on providing medical care in a confined space. This course is 50% classroom and 50% field-based exercises. This course also provides a half day on search canine veterinary care for medical specialists who would be the first to treat injured search canines on scene.

Course Purpose

The purpose of the Disaster Medical Specialist course is to provide jurisdictions with the same training received by the FEMA US&R Medical Specialists. This course has significant hands on labs in Disaster City® to ensure that students received the necessary knowledge, skills and abilities to practice medicine at an urban search and rescue incident. First responders completing this course will be prepared to work as a part of a team to respond to rescue situations involving structural collapses.

Course Format

Classes will begin at 7:00 a.m. each day. Participants should plan travel to arrive the night before classes begin. For the purpose of making hotel arrangements, participants could make reservations in the cities of Bryan, TX or College Station, TX. Course delivery consists of didactic instruction, participant activities, and hands-on task-oriented practical exercises. Course delivery consists of 50 percent didactic classroom presentations and lectures, and 50 percent hands-on and task-oriented practical training in both the Technical Skills Training Area (TSTA) and Disaster City®.

Students can attend the Disaster Medical Specialist course in two formats:

1. Open enrollment classes – TEEEX offers the course on fixed dates approximately three times per. Any student meeting the prerequisites may enroll in the course online. This course typically has a broad cross section of responders and offers an excellent ability for lessons learned from other departments.
2. Contract classes – TEEEX can provide this course exclusively for a jurisdiction or region. These courses must have a minimum of 18 and can have a maximum of 32 participants. When conducting contract classes, TEEEX can add curriculum to meet specific requirements of the sponsoring jurisdiction.

Course Scope

The scope of this course addresses priorities and capabilities that Department of Homeland Security is encouraging state and local jurisdictions to establish. This course assists with establishing priorities for the National Planning Scenarios¹, the National Preparedness Guidelines², the Target Capabilities List³, and the Universal Task List⁴.

National Planning Scenarios

The National Planning Scenarios¹ are a reference to help federal, state, local, and tribal entities at all levels of government evaluate and improve their capabilities to perform their assigned missions and tasks in major events. This course gives a state/region the capability to conduct wide area search operations in twelve out of the fifteen National Planning Scenarios¹:

- Scenario 1: Nuclear Detonation – 10-Kiloton Improvised Nuclear Device
- Scenario 2: Biological Attack – Aerosol Anthrax
- Scenario 3: Biological Disease Outbreak – Pandemic Influenza
- Scenario 4: Biological Attack – Plague
- Scenario 5: Chemical Attack – Blister Agent
- Scenario 6: Chemical Attack – Toxic Industrial Chemicals
- Scenario 7: Chemical Attack – Nerve Agent
- Scenario 8: Chemical Attack – Chlorine Tank Explosion
- Scenario 9: Natural Disaster – Major Earthquake
- Scenario 10: Natural Disaster – Major Hurricane
- Scenario 11: Radiological Attack – Radiological Dispersal Devices
- Scenario 12: Explosives Attack – Bombing Using Improvised Explosive Devices

National Preparedness Guidelines

The National Preparedness Guidelines² defines what it means for the Nation to be prepared for all hazards. There are four critical elements of the *Guidelines*:

- (1) The ***National Preparedness Vision***, which provides a concise statement of the core preparedness goal for the Nation.
- (2) The ***National Planning Scenarios***¹, which depict a diverse set of high consequence threat scenarios of both potential terrorist attacks and natural disasters. Collectively, the 15 scenarios are designed to focus contingency planning for homeland security preparedness work at all levels of government and with private sector. The scenarios form the basis for national planning, training, exercises, and grant investments needed to prepare for emergencies of all types.
- (3) The ***Target Capabilities List***³ (***TCL***), which defines 37 specific capabilities that communities, the private sector, and all levels of government should collectively possess in order to respond effectively to disasters.
- (4) The ***Universal Task List***⁴ (***UTL***), which is a menu of some 1,600 unique tasks that can facilitate efforts to prevent, protect against, respond to, and recover from the major events that are represented by the National Planning Scenarios. It presents a common vocabulary and identifies key tasks that support development of essential capabilities among organizations at all levels.

Course Scope (continued)

The *Guidelines* establish a capabilities-based approach to preparedness. Simply put, a capability provides the means to accomplish a mission. The *Guidelines* address preparedness for all homeland security mission areas: prevention, protection, response, and recovery. A capability consists of the combination of elements required to deliver the desired outcome.

TEEX US&R courses primarily deal with the Search and Rescue (Land-Based) capabilities found within the Respond Mission Area and the outcome is: The greatest number of victims (human and, to the extent that no human remain endangered, animal) are rescued and transferred to medical or mass care capabilities, in the shortest amount of time, while maintaining rescuer safety.

In order to support a consistent nationwide approach to implementation, the Guidelines establish three capabilities-based preparedness tools and a National Preparedness System. To help correctly balance the potential threat of major events with the requisite resources to prevent, respond to, and recover from them, the *Guidelines* also includes seven national priorities. The priorities fall into two categories: overarching priorities that contribute to development of multiple capabilities, and capability-specific priorities that build selected capabilities from the TCL for which the Nation has the greatest need. **Priorities that apply to this course are highlighted in red.** The overarching priorities are:

- 4.1 Expand Regional Collaboration
- 4.2 Implement the NIMS⁶ & the National Response Framework⁵
- 4.3 Implement the National Infrastructure Protection Plan

Additionally, the National Preparedness Guidelines² has four capability specific priorities:

- 4.4 Strengthen Information Sharing and Collaboration Capabilities
- 4.5 Strengthen Interoperable and Operable Communications Capabilities
- 4.6 **Strengthen CBRNE Detection, Response, and Decontamination Capabilities – *this course specifically addresses this National Preparedness Goal priority***
- 4.7 Strengthen Medical Surge and Mass Prophylaxis Capabilities

Course Scope (continued)

Target Capabilities List

The September 2007 version of the Target Capabilities List³ (TCL) provides guidance on the specific capabilities and levels of capability that Federal, State, local, and tribal entities will be expected to develop and maintain. The TCL is designed to assist jurisdictions and agencies in understanding and defining their respective roles in a major event, the capabilities required to perform a specific set of tasks, and where to obtain additional resources if needed. The TCL is considered a “living” document that will continue to be refined over time. The TCL identifies 37 essential capabilities. The applicable tables of the Response Mission: Search and Rescue (Land-Based) – Target Capabilities (page 407 thru 419 of the September 2007 TCL) that deal with Search and Rescue are included below. **Personnel having completed the Disaster Medical Specialist course give jurisdictions the capabilities that are highlighted in red.**

Capability Definition

Search & Rescue (Land-Based) is the capability to coordinate and conduct search and rescue (SAR) response efforts for all hazards, including searching affected areas for victims (human and, to the extent that no humans remain endangered, animal) and locating, accessing, medically stabilizing, and extricating victims from the damaged area.

Outcome

The greatest number of victims (human, and to the extent that no humans remain endangered, animal) and rescued and transferred to medical or mass care capabilities, in the shortest amount of time, while maintaining rescuer safety.

Performance Measures and Metrics and Critical Tasks

Activity: Direct Search & Rescue Tactical Operations	
Definition: In response to notification of entrapment, provide management and coordination of SAR capability, through demobilization for single or multiple teams	
Critical Tasks	
Res.B4a 3.1	Receive and accept SAR request/activation order
Res.B4a 3.2	Participate in SAR planning process and operational briefings
Res.B4a 3	Plan and coordinate SAR operations at incident site
Res.B4a 3.4.1	Direct SAR resources according to the National Incident Management System (NIMS), the Incident Command System (ICS), and consensus-level technical rescue standards
Res.B4a 3.4.3	Determine need for deployment of additional SAR assets
Res.B4a 3.6.1	Provide timely situational awareness and response information
Res.B4a 3.6.1.1	Establish and maintain a chronological log of events in the field
Res.B4a 3.6.2	Document and collect SAR operations information, including chronological log of events in the field for use in after action review
Res.B4a 3.7.3	Re-assign/rotate technical specialists, as needed
Res.B4a 3.3.3	Maintain accountability of all SAR personnel
Res.B4a 3.2.1	Identify logistics capability of incident site to determine whether deployed SAR teams must be self-sustaining
Res.B4a 3.7	Develop SAR team reassignment/demobilization plan

Course Scope (continued)

Target Capabilities List (continued)

Activity: *Activate Search & Rescue*

Definition: In response to notification, mobilize and arrive at the incident scene to begin operations

Critical Tasks

Res.B4a 3.1	Receive and accept SAR request/activation order
Res.B4a 4.3	Participate in Search and Rescue (SAR) planning process and operational briefings
Res.B4a 4.2	Initiate mobilization procedure
Res.B4a 4.2.1	Assemble personnel and equipment at designated location
Res.B4a 4.2.2	Deploy Federal, State, regional or local SAR resources commensurate with request
Res.B4a 4.2.2	Transport team (personnel and equipment) to incident scene
Res.B4a 4.2.3	Collect and analyze incident information to assist SAR capability deployment decisions

Activity: *Provide Materiel and Other Support*

Definition: Upon arriving on scene, provide, track, and maintain equipment and supplies as well as support base of operations

Critical Tasks

Res.B4a 4.3	Participate in Search and Rescue (SAR) planning process and operational briefings
Res.B4a 5.1	Establish base of operations
Res.B4a 5.2	Maintain accountability of team equipment/supplies
Res.B4a 5.1.1	Provide medical care for SAR personnel, including the K-9 first responders

Activity: *Conduct Search and Rescue Reconnaissance*

Definition: Once on scene and equipped, provide rapid assessment of assigned SAR work areas and recommend search priorities/tactics to management.

Critical Tasks

Res.B4a 6.1.1	Assess incident site to determine search and rescue course of action
Res.B4a 6.1.2	Assess the incident site for hazardous materials (hazmat) and other environmental conditions
Res.B4a 6.1.3	Develop map of search area to be used in SAR tactical operations
Res.B4a 6.3	Communicate findings and recommend priorities to Team Management

Activity: *Search*

Definition: Upon being assigned search area, begins search operations.

Critical Tasks

Res.B4a 4.3	Participate in SAR planning process and operational briefings
Res.B4a 7.1	Ensure scene/site safety (security, shoring, debris)
Res.B4a 7.2	Conduct area search for victims
Res.B4a 7.2.1	Search for victims using canine, physical, and electronic search capabilities
Res.B4a 7.2.2	Identify and record potential/actual victim locations (live and dead)
Res.B4a 7.3	Direct ambulatory victims to safe assembly point
Res.B4a 7.4	Report progress of search efforts on a regular basis to SAR lead
Res.B4a 7.5	Maintain accountability for search personnel, equipment, and supplies

Course Scope (continued)

Target Capabilities List (continued)

Activity: *Extricate*

Definition: Upon notification of location of victim, perform extrication.

Critical Tasks

Res.B4a 4.3	Participate in SAR planning process and operational briefings
Res.B4a 7.1	Ensure scene/site safety (security, shoring, debris)
Res.B4a 8.1.1	Coordinate extrication strategy with medical personnel
Res.B4a 8.1	Extricate trapped victims
Res.B4a 8.2	Provide periodic progress reports while rescuing
Res.B4a 8.3	Maintain accountability of extrication personnel, equipment, and supplies

Activity: *Provide Medical Treatment*

Definition: Upon access to victim, coordinate with medical personnel to treat and transfer victim to more definitive medical care.

Critical Tasks

Res.B4a 4.3	Participate in US&R planning process and operational briefings
Res.B4a 9.1.1	Coordinate medical treatment with extrication and medical personnel
Res.B4a 9.2	Transfer victims to more definitive medical care
Res.B4a 9.1.2	Medically stabilize trapped victims according to Task Force Operations Manual and Medical Protocols
Res.B4a 9.1.2.1	Ensure victims are medically stabilized according to Task Force Operations Manual and Medical Protocols throughout packaging and extrication
Res.B4a 9.3	Maintain accountability of medical personnel, equipment, and supplies

Activity: *Demobilize/Redeploy*

Definition: Upon completion of assigned mission, disengage from incident site, and debrief personnel

Critical Tasks

Res.B4a 10.2.1	Repackage equipment cache
Res.B4a 10.2	Demobilize base of operations
Res.B4a 10.1.1	Arrange transportation for personnel and equipment
Res.B4a 10.1.2	Debrief SAR capability personnel

Course Scope (continued)

Universal Task List

The Universal Task List⁴ (UTL) is a useful planning reference: a comprehensive menu of tasks that may be performed in major events illustrated by the National Planning Scenarios¹. The UTL describes “what” tasks need to be performed. Federal, state, local and tribal entities reserve the flexibility to determine “who” needs to perform them and “how” to perform them. While no single jurisdiction or agency is expected to be able to perform all the tasks, it is expected that tasks will be chosen based on specific roles, missions, and functions. The UTL should be used by entities at all levels of government as a reference to help them plan, organize, equip, train, exercise, and evaluate personnel from the critical tasks that they may need to perform in major events that could occur across town or across the Nation. The UTL is considered a “living” document that will continue to be refined over time. The applicable tables of the UTL (pages 82 thru 83 of the Version 2.1 issued May 23, 2005) that deal with Search and Rescue are included below. **Jurisdictions with personnel that have completed the Disaster Medical Specialist course will have the capacity to perform the following tasks outlined in red:**

Function ID	Sequence Number	Task
Res.B.4	1	Develop plans, procedures, and protocols to prepare for urban search and rescue operations
Res.B.4	1.1	Develop policies and procedures for urban search and rescue
Res.B.4	1.2	Establish, maintain, and manage the national urban search and rescue response system
Res.B.4	1.3	Ensure appropriate legal issues pertaining to liability claims, including the application of the good Samaritan laws, are understood and resolved
Res.B.4	1.4	Establish plans, procedures and protocols for logistical support for urban search and rescue assets
Res.B.4	2	Develop and conduct exercises and training for search and rescue
Res.B.4	2.1	Develop urban search and rescue training programs
Res.B.4	2.2	Provide training for urban search and rescue augmenting organizations
Res.B.4	3	Coordinate urban search and rescue response
Res.B.4	3.1	Provide resource & technical support
Res.B.4	3.1.1	Manage urban search and rescue mutual aid agreements
Res.B.4	3.1.2	Provide technical assistance, training, and operational support to urban search and rescue teams and assets
Res.B.4	3.1.2.1	Provide portable shelters for use by urban search and rescue task force
Res.B.4	3.1.2.2	Provide mobile feeding units for urban search and rescue task force
Res.B.4	3.1.3	Identify need for additional assistance
Res.B.4	4	Conduct Search and Rescue
Res.B.4	4.1	Assess situation and needs
Res.B.4	4.2	Assess incident site to determine search and rescue course of action
Res.B.4	4.2.1	Collect assessment information from damage assessment teams for inclusion in situation reports and for decision-making regarding US&R resources
Res.B.4	4.2.2	Issue additional advisories and alert and activation orders as required
Res.B.4	4.2.3	Determine need for deployment of additional US&R assets
Res.B.4	4.3	Conduct urban search and rescue operations
Res.B.4	4.3.1	Activate urban search and rescue support (US&R)
Res.B.4	4.3.1.1	Activate the national urban search and rescue response system for any incident of national significance

Course Scope (continued)

Universal Task List (continued)

Function ID	Sequence Number	Task
Res.B.4	4.3.2	Deploy urban search and rescue task forces or teams
Res.B.4	4.3.3	Evaluate the disaster site for hazardous materials
Res.B.4	4.3.3.1	Identify heavy machinery support requirements
Res.B.4	4.3.4	Direct search and rescue teams and collapse-site teams
Res.B.4	4.3.5	Search and extract victims from site
Res.B.4	4.3.5.1	Direct the use of heavy machinery in recovery effort
Res.B.4	4.3.5.2	Stabilize and support entry and exit points for urban search and rescue operations
Res.B.4	4.3.6	Provide status reports on urban search and rescue operations
Res.B.4	4.3.6.1	Provide timely situational awareness and response information and establish and maintain chronological log of events in the field
Res.B.4	4.3.7	Formulate redeployment plans for urban search and rescue assets and personnel
Res.B.4	4.3.7.1	Formulate decisions on the demobilization of regional and State first responder assets and personnel
Res.B.4	4.3.8	Provide care for rescuers, including the K-9 first responders

Course Scope (continued)

Additional Courses

TEEX US&R can provide additional courses related to search and rescue at Disaster City® or on-site at your jurisdiction:

US&R Medical Program:

1. [Disaster Medical Specialist](#)
2. [WMD Considerations for the Medical Specialist](#)
3. [Medical Effects of Primary Blast Injuries](#) NOTE: offered online at no cost to any eligible participant
4. [EMS Operations & Planning for WMD](#) NOTE: offered at no cost to any eligible jurisdiction

US&R Search Program:

1. [Disaster Technical Search Specialist](#)
2. [Disaster Canine Search Specialist](#)
3. [Disaster Canine Workshop](#)
4. [Wilderness Search and Rescue](#)
5. [Wide Area Search](#) NOTE: offered at no cost to any eligible jurisdiction
6. [Canine Emergency Medical Care](#) NOTE: offered online at no cost to any eligible participant

US&R Rescue Program:

1. [Structural Collapse - Awareness](#)
2. [Collapse Rescue Operations](#)
3. [Structural Collapse Technician 2](#)
4. [Advanced Structural Collapse 3](#)
5. [Advanced Structural Collapse 4](#)
6. [Medical Considerations for the Rescue Technician](#)
7. [Rescue in a Contaminated Environment \(RICE\)](#)

US&R Hazardous Materials Specialist Program:

1. [WMD – Enhanced US&R Operations](#)
2. [WMD Considerations for US&R Hazardous Materials Specialists](#)

Swift Water & Flood Rescue Program:

1. [Swift Water Rescue – Awareness](#)
2. [Swift Water Rescue – Operations](#)
3. [Swift Water Rescue – Technician](#)
4. [Swift Water Rescue – Technician Refresher](#)

US&R Command Staff Program:

1. [Search and Rescue Plans Officer](#)
2. [Search and Rescue Safety Officer](#)
3. [Search and Rescue Communications Specialist](#)
4. [Disaster Logistics Specialist](#)
5. [ICS for Structural Collapse Incidents](#)
6. [Developing a State/Regional CBRNE Task Force](#)

International US&R Program:

1. [International Urban Search and Rescue](#)
2. [International Structural Collapse Rescue](#)

US&R Full-Scale Exercise Program

Course Scope (continued)

Resource Requirements

The following items are provided by TEEX for the delivery of this course:

- Classroom capable of handling all course participants
- Computer loaded with Microsoft PowerPoint®
- Computer Projector and screen
- Flip chart and/or whiteboard or chalkboard
- Flip chart markers and/or whiteboard markers or chalk
- Student Manual
- Instructor Manuals
- Module 1 – 11 Microsoft PowerPoint® presentation slides
- All tools, equipment, and supplies required to complete field exercises
- All patient simulators and live victims.

Unit Summary

Unit #	Unit Title	Time Allocation
Day One		
Unit 1	Section I - Welcome and Introductions	30 minutes
Unit 1	Section II – Administrative and Ground Rules	15 minutes
Unit 1	Section III – Course Information	15 minutes
	Hurricane Katrina ESF-9 Response Overview	1 hour
Unit 2	US&R Response System Overview	30 minutes
Unit 3	US&R Task Force and Medical Team	2 hours
Unit 4A	Public Health and Environmental Issues	1 hour
Admin 0.1	Lunch	1 hour
Unit 4B	Sudden Onset Calamities: Realities of Field Response	2 hours
Unit 4C	Extended Incident Stress During US&R Deployment	1 hour
Unit 5A	Crush Syndrome	2 hours
Day Two		
Unit 5B	Improvised Explosive Devices and Blast Injury	1 hour
Unit 5C	Victim Medical Problems	1 hour
Unit 6A	Confined Space Medical Considerations	1.5 hours
Unit 6B	Confined Space Tactical Considerations	1.5 hours
Unit 6C	Confined Space Medical Operations	1.5 hours
Admin 0.2	Lunch	1 hour
Unit 7A	Introduction to Day 2 Medical Team Skills Stations	30 minutes
Unit 7B	Skill Station Rotation 1 – Confined Space Maneuvers	1.5 hours
Unit 7C	Skill Station Rotation 2 – Evaluation of Partially Accessible Patient	1.5 hours
Unit 7D	Skill Station Rotation 3 – Airway Management	1.5 hours
Day Three		
Unit 7A	Introduction to Day 3 Medical Team Skills Stations	30 minutes
Unit 7E	Skill Station Rotation 4 - Vascular Access and Fluid Administration	2 hours
Unit 7F	Skill Station Rotation 5 - Immobilization and Extrication	2 hours
Admin 0.3	Lunch	1 hour
Unit 7G	Skill Station Rotation 6 - Patient Monitoring and Packaging	2 hours
Unit 8A	WMD Review	1.5 hour
Unit 8B	Protective Clothing and Decontamination	1.5 hour
Day Four		
Unit 9A	Introduction to Patient Care Scenarios	30 minutes
Unit 9B	“48 Hours”	2 hours
Unit 9C	“The Tunnel”	2 hours
Admin 0.4	Lunch	1 hour
Unit 9D	“The Windy Room”	2 hours
Unit 10	Introduction to the Field Exercise	1 hour
Admin 0.5	Dinner	1 hour
Unit 10	Field Exercise in Disaster City®	6 hours

Unit Summary (continued)

Unit #	Unit Title	Time Allocation
Day Five		
Unit 11A	Search Canine Veterinary Care	2 hours
Unit 11A	Canine Care Skills Station	2.5 hours
	Course Summary and Evaluation	30 minutes
TOTAL CLASS HOURS		50 hours

¹ Students build on skills throughout the training, demonstrating each skill before progressing. Students end the course with a final written exam testing their knowledge.

Unit 1: Welcome and Introductions

Summary: The students will become familiar with the general overview of the course, and instructors will explain the goal of the course, and describe the course outline and structure. Students will also complete all registration and class rosters forms.

Instructional Resources Required:

- Unit 1 presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this course, participants will be able to perform the duties of the Disaster Medical Specialist on a State or Regional Urban Search and Rescue (US&R) Task Force.

Enabling Objectives: Upon the conclusion of this course, participants will be able to:

- 1-1 Explain the role of the National Response Plan, the National US&R Response System, the National Disaster Medical System, and the medical entities with which the Medical Teams may interact.
- 1-2 Explain the immediate post-disaster environment and its health and safety concerns.
- 1-3 Explain the critical issues involved in preparing the medical cache and Medical Team personnel for timely deployment when the Task Force is activated.
- 1-4 Explain the role of the Medical Team in keeping the task force members healthy and functional under austere and stressful conditions.
- 1-5 Explain crush syndrome, high explosives and blast injuries, and other patient care problems that the Medical Team may be called upon to address.
- 1-6 Demonstrate the ability to function in a safe and effective manner in the US&R confined-space environment.
- 1-7 Demonstrate a working knowledge of the medical problems experienced by collapsed structure victims and the adaptations necessary to manage these and more common problems when in the confined-space and austere post-disaster environments.
- 1-8 Explain on-scene medical care in a WMD environment.
- 1-9 Demonstrate advanced life support and extrication of a victim involved in a confined space emergency.
- 1-10 Working under ICS, demonstrate patient care in a simulated urban search and rescue environment.
- 1-11 Explain basic veterinary care and avenues for obtaining advanced veterinary care for Search Team canines.

Duration: 1 hour

Method of Instruction: Facilitated seminar format in a classroom environment

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 2: US&R Response System Overview

Summary: This unit provides an overview of the National Urban Search and Rescue Response System and how that system was developed. Participants discuss legislation, laws, and the National Incident Management System (NIMS) as they relate to US&R response. Additionally, the participants discuss the National Response Framework (NRF) and the role of the National Disaster Medical System (NDMS).

Instructional Resources Required:

- Unit 2 presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the successful completion of this unit, participants will be able to describe the National Urban Search and Rescue Response System within FEMA, including the FEMA US&R Program Office and the US&R Advisory Organization.

Enabling Objective: Upon conclusion of the unit, participants will be able to:

- 2-1 Describe the history of disaster response and US&R;
- 2-2 Describe the National Incident Management System (NIMS);
- 2-3 Describe the National Response Framework (NRF);
- 2-4 Describe the Robert T. Stafford Disaster Relief and Emergency Assistance Act and how it impacts the National US&R Response System;
- 2-5 Describe the mechanism to activate federal assets;
- 2-6 Identify the role of the National Disaster Medical System (NDMS); and
- 2-7 Identify the licensure and liability issues involved in medical disaster response.

Duration: 30 minutes

Method of Instruction: Facilitated seminar format in a classroom environment

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 3: US&R Task Force and Medical Team

Summary: This unit examines the roles of the Medical Team on a US&R Task Force. This unit is designed to introduce the Medical Team member to the concepts of disaster response. It also reviews the information necessary to understand organizational issues of a US&R Medical Team. Traditional field disaster response emphasizes minimal on-scene care and immediate evacuation to intact medical facilities. However, a different response scenario exists for US&R Medical Teams, which are sophisticated units that expect less “mass care” and more critically injured yet salvageable patients in need of sustained care.

Instructional Resources Required:

- Unit 3 presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the successful completion of this unit, participants will be able to describe the US&R Task Force and Medical Team.

Enabling Objectives: Upon the conclusion of this unit, participants will be able to:

- 3-1 Define requirements of effective US&R response;
- 3-2 Identify the organization of the US&R Task Force;
- 3-3 Identify the role of each Medical Team position;
- 3-4 Identify important medical cache issues;
- 3-5 Describe Medical Team tasks required before deployment; and
- 3-6 Articulate the need for post-deployment review and documentation.

Duration: 2 hours

Method of Instruction: Facilitated seminar format in a classroom environment

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 4A: Public Health and Environmental Issues

Summary: This unit discusses the problems associated with a destroyed or damaged infrastructure during a disaster response and the numerous problems that may affect personal health and safety issues of the team. This unit also discusses the responsibilities of the Medical Team to ensure safe supplies of water, food, and shelter for the US&R team.

Instructional Resources Required:

- Unit 4A presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the successful completion of this unit, participants will be able to recognize public health and environmental issues that affect personal health and safety of the Medical Team as well as the type of medical care it can render to any victim.

Enabling Objective: Upon the conclusion of this unit, participants will be able to:

- 4A-1 Identify the necessary requirements for a safe water supply: needs, sources, rehydration, containers, testing, and disinfecting non-portable water;
- 4A-2 Identify the necessary requirements for safe food: handling, sources, preparation, service, cleaning and sanitizing, and waste management;
- 4A-3 Identify the necessary requirements for shelter; and
- 4A-4 Identify medical evacuation issues.

Duration: 1 hour

Method of Instruction: Facilitated seminar format in a classroom environment

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 4B: Sudden Onset Calamities: Realities of Field Response

Summary: This unit assigns participants to teams that will participate in a tabletop exercise and solve various assigned medical related problems. The instructors will act as facilitators and provide the teams with details such as type of event, time of day, overview of the community, demographics, available resources, number of injured, killed, and missing and a working Incident Action Plan.

Instructional Resources Required:

- Unit 4B presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the successful completion of this unit, participants will be able to formulate plans to mobilize a task force through its arrival at the established Mobilization Center.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 4B-1 Establish appropriate objectives and prioritize assignments to ensure their completion; and
- 4B-2 Report your findings by delivering a portion of the Task Force Briefing

Duration: 2 hours

Method of Instruction: Facilitated seminar format in a classroom environment and tabletop deployment exercise

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 4C: Extended Incident Stress During US&R Deployment

Summary: This unit provides an overview of the stress factors that effect responders during a disaster incident response and the Medical Team’s role in recognizing and mitigating those factors. The unit addresses the systems approach and individual approach to reducing stress during the response, during demobilization, and post disaster response.

Instructional Resources Required:

- Unit 4C presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the successful completion of this unit, participants will be able to mitigate incident stress during US&R deployments.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 4C-1 Define *extended incident stress* and its distinction from *critical incident stress*;
- 4C-2 Identify incident stressors inherent in collapsed structure response;
- 4C-3 Recognize the Medical Team’s role in mitigating incident stress; and
- 4C-4 Define, with examples, stress recognition and stress intervention (personnel, IST, task force management, and Medical Team).

Duration: 1 hour

Method of Instruction: Facilitated seminar format in a classroom environment

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 5A: Crush Syndrome

Summary: This unit provides an overview crush injury, crush syndrome, and compartment syndrome, which are common in trapped victims of collapses structures. Participants learn that victims of crush injury should be provided with prompt care inside of the collapsed structure during the extrication because of the potential for post-extrication medical deterioration and death. The unit discusses controversial interventions, including field amputations, arterial tourniquets, and field fasciotomy.

Instructional Resources Required:

- Unit 5A presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this unit, participants will be able to explain crush syndrome in the US&R environment.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 5A-1 Define *crush injury*, *compartment syndrome*, and *crush syndrome*;
- 5A-2 Describe the pathophysiology of crush injury;
- 5A-3 Identify the causes of death from crush injury;
- 5A-4 Identify the potential clinical manifestations of crush syndrome;
- 5A-5 Identify how myoglobin is indicated in diagnosis;
- 5A-6 Identify therapeutic modalities;
- 5A-7 Describe care of the local injury;
- 5A-8 Describe management of crush syndrome in the rubble; and
- 5A-9 Identify controversial interventions.

Duration: 2 hours

Method of Instruction: Facilitated seminar format in a classroom environment

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 5B: Improvised Explosive Devices and Blast Injury

Summary: This unit discusses the improvised explosive devices (IED) and the injuries that result from their detonation. This unit provides an overview of the problems and challenges encountered by medical team personnel responding to the scene of an improvised explosive device detonation, including historical overviews, IED types, and blast mechanics.

Instructional Resources Required:

- Unit 5B presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this unit, participants will be able to discuss high explosive and blast injuries.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 5B-1 Identify high explosives;
- 5B-2 Identify mechanisms of blast injury;
- 5B-3 Discuss blast pathophysiology; and
- 5B-4 List injuries common to secondary structural collapse.

Duration: 1 hour

Method of Instruction: Facilitated seminar format in a classroom environment

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 5C: Victim Medical Problems

Summary: This unit provides a baseline understanding of the spectrum of patient care problems that all medical team members may be called upon to address. This unit will refresh participant's current knowledge of pre-hospital emergency and emergency medicine.

Instructional Resources Required:

- Unit 5C presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this unit, participants will be able to discuss patient care problems that all medical team members may be called upon to address.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 5C-1 Describe the general respiratory problems in confined space patients;
- 5C-2 Describe management of airway/ventilation injuries;
- 5C-3 Explain hydration status determination and monitoring;
- 5C-4 Identify the methods of IV access;
- 5C-5 Identify the cause of hypothermia;
- 5C-6 Describe the treatment of hypothermia;
- 5C-7 Describe burn care;
- 5C-8 Describe the treatment of orthopedic injuries;
- 5C-9 Describe the treatment of carbon monoxide poisoning; and
- 5C-10 Discuss sedation/pain management control.

Duration: 1 hour

Method of Instruction: Facilitated seminar format in a classroom environment

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 6A: Confined Space Medical Considerations

Summary: This unit provides a more detailed description of the US&R Medical Team concept and the medical care aspects of the team. This unit provides a conservative medical approach to patient management, which is based on proven therapy. The procedures and methodology advocated in this unit are those that have been shown through medical practice and in the medical literature to be safe and effective.

Instructional Resources Required:

- Unit 6A presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this unit, participants will be able to discuss US&R medical considerations in Confined Space Medicine.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 6A-1 Identify the differences between US&R medical care and hospital emergency care and between US&R medical care and pre-hospital care;
- 6A-2 Identify the unusual medical care problems and variations of common problems;
- 6A-3 Identify confined space medical care objectives;
- 6A-4 Identify the confined space medicine operational approach; and
- 6A-5 Identify documentation tasks.

Duration: 1.5 hours

Method of Instruction: Facilitated seminar format in a classroom environment

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 6B: Confined Space Tactical Considerations

Summary: This unit discuss the requirements to function safely and efficiently in confined spaces. This unit is designed to prepare the participant to function in the confined spaces by introducing them to the hazards associated with confined spaces and describing methods that improve functional efficiency in confined spaces.

Instructional Resources Required:

- Unit 6B presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this unit, participants will be able to describe methods that improve functional efficiency in confined spaces.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 6B-1 Identify the types of collapse and void spaces that are formed in building collapses;
- 6B-2 Identify stabilization methods;
- 6B-3 Identify personal protection necessary for rescuer safety;
- 6B-4 Define terms used in atmospheric monitoring: *Threshold Limit Value (TLV)*, *Immediately Dangerous to Life and Health (IDLH)*, *Lower Explosive Limit (LEL)*, *Upper Explosive Limit (UEL)*, *carbon monoxide*, *natural gas (methane)*, *carbon dioxide*, and *oxygen*;
- 6B-5 Identify common problems of confined space atmospheric monitoring;
- 6B-6 Identify universal precautions for confined space tactics;
- 6B-7 Identify use of lifelines in confined space;
- 6B-8 Identify issues of mobility in confined space; and
- 6B-9 Identify issues of routes of egress in confined space.

Duration: 1.5 hours

Method of Instruction: Facilitated seminar format in a classroom environment

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 6C: Confined Space Medical Operations

Summary: This unit provides the systematic patient care format that must be used to effectively apply medical care within the difficult environs of a collapsed structure. This unit discusses approaches to medical care, the efficient evaluation and treatment and eventual hand-off that occurs with the local medical response organization.

Instructional Resources Required:

- Unit 6C presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this unit, participants will be able to explain a systematic patient care format to apply to confined space operations.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 6C-1 Identify impediments/obstacles to quality medical care in a confined space;
- 6C-2 Identify the Medical Team organization for confined space operations;
- 6C-3 Identify the Medical Team functional structure for confined space operations;
- 6C-4 Discuss the approach to medical care in a confined space;
- 6C-5 Identify components of efficient evaluation/treatment in a confined space;
- 6C-6 Identify the scope of practice for evaluation/treatment in a confined space; and
- 6C-7 Identify hand-off issues.

Duration: 1.5 hours

Method of Instruction: Facilitated seminar format in a classroom environment

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 7A: Introduction to Medical Team Skills Stations

Summary: This unit explains the six different medical team skills stations and the objectives and format of each station. This unit explains how the next six course units are designed to prepare the participant to perform medical functions in the confined spaces.

Instructional Resources Required:

- Unit 7A presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this unit, participants will understand the objectives, format and ground rules of the medical skills stations.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 7A-1 Describe the objectives and format of the “Confined Space Maneuvers” skill station;
- 7A-2 Describe the objectives and format of the “Evaluation of the Partially Accessible Patient” skill station;
- 7A-3 Describe the objectives and format of the “Airway Management” skill station;
- 7A-4 Describe the objectives and format of the “Vascular Access/Fluid Administration” skill station;
- 7A-5 Describe the objectives and format of the “Patient Monitoring and Packaging” skill station; and
- 7A-6 Describe the objectives and format of the “Immobilization and Extrication” skill station.

Duration: 1 hour

Method of Instruction: Facilitated seminar format in a classroom environment

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 7B: Confined Space Maneuvers

Summary: This unit provides the participants with seven different areas to practice working in a confined space. Experience has shown that the level of exposure to confined spaces of medical personnel participating in these exercises is limited. The purpose of this skills station is to reinforce basic safety procedures in confined spaces and to introduce you to the problems with simple procedures such as self-movement, equipment access, and patient extrication in a confined space atmosphere. This skill station is not intended to challenge you with advanced access techniques and stabilization skills. It is also not for instruction of advanced confined space rescue techniques or to replace the rescue component of the task force.

Instructional Resources Required:

- Unit 7B presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this unit, participants practice maneuvers and standard safety procedures in confined space.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 7B-1 Practice moving in a confined space with equipment and a “packaged” patient;
- 7B-2 Practice standard safety procedures in the confined space; and
- 7B-3 Understand and demonstrate hazard recognition in the confined space.

Duration: 1.5 hours

Method of Instruction: Practical exercise in Disaster City®

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: This skill station is primarily an exercise for the students to work within a safe, confined space environment. It requires the construction of a site and the monitoring of the participants as they navigate the course. Safety issues should be stressed and standard emergency signaling employed as needed.

Unit 7C: Evaluation of the Partially Accessible Patient

Summary: This unit provides the participants with scenarios to evaluate a patient within a confined space, given the participant’s limited vision and mobility and the limited access to the patient’s body, may require significant adaptations from everyday medical care. The skill stations are designed to challenge you to develop an ability to modify the patient evaluation in order to reliably obtain the most complete evaluation possible.

Instructional Resources Required:

- Unit 7C presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this unit, participants will be able to determine all available assessment information and procedures that should be performed despite a limited patient exposure situation.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 7C-1 Review the initial assessment, focused history, and physical trauma assessment;
- 7C-2 Review techniques to maximize information gathering through the use of the examiner’s senses, normal EMS, and search; and
- 7C-3 Perform an exam and obtain as much patient information as possible despite limited patient contact.

Duration: 1.5 hours

Method of Instruction: Practical exercise in Disaster City®

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 7D: Airway Management

Summary: This unit provides the participants with the opportunity to practice airway control in the confined space which is paramount to a patient in a pre-hospital environment. This unit reviews the standard basic and advanced airway management procedures, followed by performing variations of those airway procedures while in a confined space environment.

Instructional Resources Required:

- Unit 7D presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this unit, participants will be able to perform variations of standard basic and advanced airway procedures while in a confined space environment.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 7D-1 Discuss the various methods of airway control adapted for the confined space environment; and
- 7D-2 Discuss the problems associated with dust inhalation for both the victim and rescuer in a confined space environment.

Duration: 1.5 hours

Method of Instruction: Practical exercise in Disaster City®

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 7E: Vascular Access and Fluid Administration

Summary: This unit provides the participants with the opportunity to practice gaining intravenous (IV) access for fluid and medication. The stations in this unit expose you to a variety of access techniques that will allow you to overcome the technical difficulties imposed by the confined space. This unit is designed to review basic and advanced IV access techniques through demonstrations and hands-on opportunities. Participants will be familiar with the different equipment and techniques that may be required for vascular access, fluid administration, and invasive monitoring.

Instructional Resources Required:

- Unit 7E presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this unit, participants will be able to perform vascular access procedures in a confined space.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 7E-1 Discuss equipment and techniques for vascular access in confined space;
- 7E-2 Discuss the advantages and disadvantages of the different methods of venous access;
- 7E-3 Discuss the advantages and disadvantages of different techniques that may be required for vascular access, fluid administration, and invasive monitoring; and
- 7E-4 Practice selected techniques in a darkened/confined space.

Duration: 2 hours

Method of Instruction: Practical exercise in Disaster City®

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 7F: Immobilization and Extrication

Summary: This unit provides the participants with the opportunity to practice patient immobilization and extrication from a confined space. This unit utilizes the expertise of the pre-hospital provider (using immobilization devices) and the physician (using splinting and pain meds) that may be required to complete the extrication. This unit addresses procedures that may be required when securing a patient so that hoisting, lowering, and turning the patient on his or her side may be safely accomplished.

Instructional Resources Required:

- Unit 7F presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this unit, participants will be able to perform immobilization of a patient in a confined space using standard EMS immobilization equipment and techniques.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 7F-1 Review methods of splinting injured extremities to allow patient extrication;
- 7F-2 Secure a patient to a SKED and Miller Halfback to safely allow hoisting and other basket manipulations during egress; and
- 7F-3 Discuss the assessment and preparation of an egress route.

Duration: 2 hours

Method of Instruction: Practical exercise in Disaster City®

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 7G: Patient Monitoring and Packaging

Summary: This unit provides the participants with the opportunity to practice monitoring a patient’s medical parameters within a tight, confined space and during extrication/egress from the collapsed structure. The unit addresses the difficulty experienced when trying to monitor a victim who is “packaged” for immobilization, hypothermia, or protection during the extrication and discusses the appropriate monitoring strategy and techniques for an extended egress from a collapsed structure.

Instructional Resources Required:

- Unit 7G presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this unit, participants will be able to prepare a patient for an extended extrication while retaining the ability to closely monitor and treat the patient.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 7G-1 Discuss monitoring strategies for patients in confined spaces;
- 7G-2 Discuss appropriate devices and techniques for monitoring oxygen saturation levels, adequate ventilation, temperature, pulse rate, blood pressure, and cardiac rhythm;
- 7G-3 Demonstrate placement of a patient monitor; and
- 7G-4 Use the hypothermia wrap and package a patient for extrication while retaining the ability to closely monitor and treat the patient.

Duration: 2 hours

Method of Instruction: Practical exercise in Disaster City®

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 8A: WMD Review

Summary: This unit discusses mainstays of patient care when responding to a WMD incident. Participants review the standard precautions when treating victims of a WMD incident and the various types of hazardous materials that are likely to be encountered.

Instructional Resources Required:

- Unit 8A presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this unit, participants will be able to explain on-scene medical care in a WMD environment.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 8A-1 Recognize potential agents used;
- 8A-2 Identify the signs, symptoms, pathophysiology, pharmacology, and treatment in WMD; and
- 8A-3 Recognize acute and chronic effects of Chemical, Biological, Radiological, and Nuclear (CBRN) materials.

Duration: 1.5 hours

Method of Instruction: Facilitated seminar format in a classroom environment

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 8B: Protective Clothing and Decontamination

Summary: This unit emphasizes the importance of detection and monitoring in a WMD environment, using appropriate Personal Protective Equipment (PPE), and developing a medical safety plan. Participants will discuss force protection issues, medical monitoring, and developing a safety plan for WMD operations.

Instructional Resources Required:

- Unit 8B presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this unit, participants will be able to develop a medical safety plan that addresses the appropriate PPE and monitoring considerations for use by EMS personnel.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 8B-1 Identify the levels of Personal Protective Equipment (PPE);
- 8B-2 Identify medical monitoring considerations;
- 8B-3 Identify the importance of developing and integrating a safety plan for medical operations into the Incident Safety Plan;
- 8B-4 Identify factors that contribute to the potential for secondary contamination;
- 8B-5 Identify decontamination concerns for Medical Specialists; and
- 8B-6 Identify precautions necessary to prevent body fluid exposure.

Duration: 1.5 hours

Method of Instruction: Facilitated seminar format in a classroom environment

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 9A: Introduction to Patient Care Scenarios

Summary: This unit explains the four different patient care scenarios and the objectives and format of each scenario. This unit explains how the next four course units are designed to prepare the participant to perform various medical functions during a US&R team deployment.

Instructional Resources Required:

- Unit 9A presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon the completion of this unit, participants will be able to understand the objectives of the scenarios, safety during the scenarios, the instructors' role, the participants' roles and the functions to be covered.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 9A-1 Describe the “48 Hours” skills station;
- 9A-2 Describe the “The Tunnel” skills station;
- 9A-3 Describe the “The Windy Room” skills station; and
- 9A-4 Discuss the role of all participants and instructors during the scenarios.

Duration: 30 minutes

Method of Instruction: Facilitated seminar format in a classroom environment

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 9B: “48 Hours”

Summary: The “48 Hours” scenario focuses on significant medical problems that require immediate interventions in the hole to stabilize the patient’s condition. The participants will spend time treating a patient while performing a fairly simple extrication. The primary immobilization device for this scenario is the Miller Board or standard backboard.

Instructional Resources Required:

- Recorder/Safety Person
- Three Medical Providers
- Anticipator
- Equipment/Supply Person
- Medical Control Physician

Terminal Learning Objective: Upon the completion of this scenario, participants will be able to perform the necessary medical assessment and procedures to stabilize a patient who has been trapped in a confined space for at least 48 hours.

Enabling Objective: At the conclusion of this scenario, the participants will be able to perform the following on a patient that has been trapped in a confined space for at least 48 hours:

- 9B-1 Practice providing safe, advanced life support and extrication of a victim involved in a confined-space emergency by using the materials, skills, and equipment demonstrated throughout the course;
- 9B-2 Assess Organize into a Medical Team with specifically assigned roles: Medical Provider, Recorder/Safety Person, Anticipator, Equipment/Supply Person, and Medical Control Physician;
- 9B-3 Adequately establish a safe, systematic approach to reach and extricate a victim in a confined space;
- 9B-4 Systematically perform complete BTLS patient assessment and reassessments during the scenario;
- 9B-5 Appropriately identify and treat the medical injuries of the patient, including, but not limited to, minor abrasions, oxygenation, psychiatric intervention, hypothermia, and pain; and
- 9B-6 Record timely patient assessments, vital signs, gas monitoring levels, patient treatment, and progress of the extrication through communications to the Recorder/Safety Person.

Duration: 2 hours

Method of Instruction: Practical exercise in Disaster City®

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 9C: “The Tunnel”

Summary: The “Tunnel” scenario emphasizes extrication and patient movement through very restrictive spaces using the SKED as the primary immobilization device. The patient is relatively stable with complaints that essentially require support and immobilization.

Instructional Resources Required:

- Recorder/Safety Person
- Three Medical Providers
- Anticipator
- Equipment/Supply Person
- Medical Control Physician

Terminal Learning Objective: Upon the completion of this scenario, participants will be able to perform the necessary packaging and movement and assessment of a patient while utilizing a SKED immobilization device.

Enabling Objective: At the conclusion of this scenario, the participants will be able to perform the following on a patient while extricating them on a SKED immobilization device:

- 9C-1 Practice providing safe, advanced life support and extrication of a victim involved in a confined-space emergency by using the materials, skills, and equipment demonstrated throughout the course;
- 9C-2 Organize into a Medical Team with specifically assigned roles: Medical Provider, Recorder/Safety Person, Anticipator, Equipment/Supply Person, and Medical Control Physician;
- 9C-3 Adequately establish a safe, systematic approach to reach and extricate a victim in a confined space;
- 9C-4 Systematically perform complete BTLs patient assessment and reassessments during the scenario;
- 9C-5 Appropriately identify and treat the medical injuries of the patient, including, but not limited to, minor abrasions, oxygenation, psychiatric intervention, hypothermia, and pain; and
- 9C-6 Record timely patient assessments, vital signs, gas monitoring levels, patient treatment, and progress of the extrication through communications to the Recorder/Safety Person.

Duration: 2 hours

Method of Instruction: Practical exercise in Disaster City®

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 9D: The “Windy Room”

Summary: The “Windy Room” scenario deals with a contaminated environment. In this situation, all rescuers will be in Level C protection. The patient will be moved using a SKED out of a contaminated collapsed building to an evacuation slide and then is evacuated to the “simulated” decontamination area. The goal of this scenario is to expose participants to working in upper levels of protective clothing found that could be used in a WMD environment. After arriving at the entrance of the “simulated” decontamination corridor, the patient will be considered clean and will then be treated as time permits.

Instructional Resources Required:

- Recorder/Safety Person
- Two Medical Providers
- Anticipator
- Equipment/Supply Person
- Medical Control Physician

Terminal Learning Objective: Upon the completion of this scenario, participants will be able to describe task force operations through a systematic approach at a CBRNE incident..

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 9D-1 Practice providing safe, advanced life support and extrication of a victim involved in a confined-space emergency by using the materials, skills, and equipment demonstrated throughout the course;
- 9D-2 Organize into a Medical Team with specifically assigned roles: Medical Provider, Recorder/Safety Person, Anticipator, Equipment/Supply Person, and Medical Control Physician;
- 9D-3 Adequately establish a safe, systematic approach to reach and extricate a victim in a confined space;
- 9D-4 Systematically perform complete BTLs patient assessment and reassessments during the scenario;
- 9D-5 Appropriately identify and treat the medical injuries of the patient, including, but not limited to, minor abrasions, oxygenation, psychiatric intervention, hypothermia, and pain; and
- 9D-6 Record timely patient assessments, vital signs, gas monitoring levels, patient treatment, and progress of the extrication through communications to the Recorder/Safety Person.

Duration: 2 hours

Method of Instruction: Practical exercise in Disaster City®

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 10: Introduction to the Field Exercise

Summary: This unit discusses how the participants will be applying the lessons from the different Patient Care Scenarios, Skill Stations, and lectures into a full functional field exercise in Disaster City®. In the exercise, the participant teams will work simultaneously and at times in conjunction to accommodate patient care. The participants will work in a simulated disaster environment under less-than-optimal conditions. The participants will utilize the Incident Command System in the urban search and rescue environment and work as a team at a multi-patient event.

Instructional Resources Required:

- Unit 10 presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon completion of this unit, students will understand the safety requirements, instructor roles, and participants' roles of the field exercise.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 10-1 Describe the purpose of the field exercise;
- 10-2 Describe the safety requirements of the field exercise;
- 10-3 Describe the instructor roles during the field exercise; and
- 10-4 Describe the participants' role during the field exercise.

Duration: 6 hours

Method of Instruction: Classroom presentation and practical exercise in Disaster City®

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Unit 11A: Search Canine Veterinary Care

Summary: This unit discusses the role of the Disaster Medical Specialist in canine emergency care and how preventive medicine is part of the mission of the Task Force Medical Team until veterinary medical care and consultation becomes available. Participants will learn how to assist the handler with health maintenance issues, care of the animal with minor to moderate injuries/illness, and arrange for veterinary care for more serious or esoteric problems.

Instructional Resources Required:

- Unit 11A presentation slides
- Participant Manual
- Computer
- Projector

Terminal Learning Objective: Upon completion of this unit, you will be able to explain the role of the US&R Medical Team in taking care of search dogs.

Enabling Objective: At the conclusion of this unit, the participants will be able to:

- 11A-1 Identify the Medical Team's responsibilities and roles in canine care;
- 11A-2 Discuss the canine evaluation model;
- 11A-3 Discuss canine illness and injury in urban search and rescue; and
- 11A-4 Identify euthanasia issues.

Duration: 4.5 hours

Method of Instruction: Facilitated seminar format in a classroom environment

Instructor Ratio: 1:15

Required Reading: None

Special Instructions: None

Reference Material

This program of instruction references a number of Department of Homeland Security documents which are included below for reference:

1. National Planning Scenarios, Department of Homeland Security
<https://odp.esportals.com>
2. National Preparedness Guidelines, Department of Homeland Security, September 2007
<http://www.fema.gov/pdf/government/npg.pdf>
3. Target Capabilities List (TCL), Department of Homeland Security, September 2007
<http://www.fema.gov/pdf/government/training/tcl.pdf>
4. Universal Task List (UTL), Department of Homeland Security, version 2.1
http://www.ojp.usdoj.gov/odp/docs/UTL2_1.pdf
5. The National Response Framework, Department of Homeland Security
<http://www.fema.gov/emergency/nrf>
6. National Incident Management System (NIMS)
<http://www.fema.gov/nims/index.shtm>
7. Emergency Support Function 9 (ESF-9), National Response Framework
<http://www.fema.gov/pdf/emergency/nrf/nrf-esf-09.pdf>
8. Homeland Security Presidential Directive 5
<http://www.whitehouse.gov/news/releases/2003/02/20030228-9.html>
9. Homeland Security Presidential Directive 8
<http://www.whitehouse.gov/news/releases/2003/12/20031217-6.html>
10. Office of Grants and Training, Department of Homeland Security
<http://www.dhs.gov/>
11. TEEX website
<http://www.teex.org>
12. National Fire Protection Association
<http://www.nfpa.org>