

CONTENTS

COURSE PLAN	vi
INTRODUCTION	vii
CHAPTER 1 Structural Fires	1
EMS Response Within the Incident Command System	2
The EMS Branch	2
Setting Up Transport Sector Command	3
Crisis Standards of Care	5
Patient Management	7
Burned Patients	7
Thermal Burn Injuries	7
Fluid Resuscitation	8
Prehospital Management of Critically Burned Patients	8
Transport or Transfer to a Burn Center	8
Spontaneous Volunteers	9
Credentialing Spontaneous Volunteers	9
Surge Capacity	9
Four Components of Surge Capacity	9
The American College of Emergency Physicians Position on Surge Capacity	9
Multiple Fatalities	10
Clinical Issues	10
Fire Fighter Rehabilitation	11
Criteria for Further Medical Evaluation	11
Summary	12
References and Additional Resources	12
CHAPTER 2 Radiologic Events	15
When Does a Radiologic Event Become a Disaster?	16
Initial Assessment of the Incident	16
Types of Radiologic Incidents	16
The Worried Well	17
Radiation Physics	17
Types of Ionizing Radiation	17
Radiation Pathophysiology	18
Acute Radiation Dose	18
Chronic Radiation Dose	18
EMS Response to a Radiologic Event	21
Dose Versus Rate of Exposure	21
Radiation Measuring Devices	22
Initial Management of a Radiologic Incident	23
Intentional Impact of Radiation Release by Device	23
Incident Command for a Radiologic Event	23
Managing Life Hazards	23

Establishing the Hot, Warm, and Cold Zones	25
Hot Zone: Greater Than 2 mR/h	25
Warm Zone: 2 mR/h	25
Cold Zone: Less Than 2 mR/h	25
Decontamination	25
Verification of Decontamination	26
Summary	26
References and Additional Resources	27

CRITICAL THINKING SKILL STATION: Practitioner Preparedness Self-Assessment 29

CHAPTER 3 Natural Disasters and Infrastructure Failures 31

The Disaster Cycle	32
Situations That Require Evacuation	32
Phases of Evacuation	33
Shelter-in-Place Versus Evacuation	35
Vulnerable Patients	35
Patient Tracking	36
Summary	37
References and Additional Resources	37

CHAPTER 4 Triage 39

Triage and All Hazards Disasters	40
Primary Triage	40
Secondary Triage	40
Limitations of Triage Systems	40
SALT	42
Working an MCI	42
Which Priority 1 (Red Tag) Patient Goes First?	43
Essential Patient Information	43
Summary	44
References and Additional Resources	44

CRITICAL THINKING SKILL STATION: Triage Exercise 47

CHAPTER 5 Transportation Incidents 49

Role of Emergency Medical Dispatchers	50
Scene Size-up	50
Levels of Command	50
Ambulance Strike Team	52
Scene Safety	52
Patients With Special Needs	52
Summary	53
References and Additional Resources	53

CRITICAL THINKING SKILL STATION: LCAN Report 55

CHAPTER 6 Infectious Disease 57

Infectious and Communicable Diseases	58
Infectious Agents	58
Bacteria	58
Viruses	59
Fungi	59
Parasites	59
Stages of the Infection Process	59
Latent Period	59

Incubation Period	59
Communicability Period	59
Disease Period	59
Epidemics and Pandemics	60
The Chain of Infection	60
Reservoir/Host	60
Portal of Exit	60
Transmission	61
Portal of Entry	61
Host Susceptibility	61
Credible Sources of Information	62
Centers for Disease Control and Prevention	62
World Health Organization	62
State-Level Departments of Health	62
Biologic Agents	63
Summary	65
References and Additional Resources	65

CRITICAL THINKING SKILL STATION: Mass-Casualty

Tabletop Exercise 67

CHAPTER 7 Active Shooter: Evolving Concepts of Care 69

What Is an Active Shooter?	70
Incidence and Prevalence of Active Shooter Events	70
Incidence	70
Casualties	71
Shooters	71
The Hartford Consensus	72
THREAT Response	72
The Hartford Consensus Zones	73
Personal Protection of the EMS Provider During Active Shooter Incidents	73
Ballistic Vests	74
Shock Management	74
Hemorrhage Control	74
Postincident	75
Signs of EMS Provider Stress	75
Summary	76
References and Additional Resources	76

CRITICAL THINKING SKILL STATION: All Hazards Disaster Response Active Shooter Tabletop Exercise Situation Manual—Participant 79

GLOSSARY 83

INDEX 85



Figure 1 Disaster response training