Mississippi Trauma
Transitional Block (Paramedic)
2012 – 2014

2012 Mississippi Paramedic Transitional Training Curriculum- Trauma

Introduction

This material provides the statewide training framework for Paramedic Trauma Transitional Training is to include Mississippi Trauma System, CDC Field Decision Scheme versus .Past Trauma Guidelines, Criteria/Considerations for Air Transport, Bleeding, Shock and Resuscitation, Abdominal Trauma, Chest Trauma, Genitourinary Trauma, Orthopedic Trauma, Soft Tissue Trauma, Head, Face, Neck, and Spinal Trauma(to include Morgan lens), Trauma involving the Nervous System, Environmental Trauma, Multi System Trauma and Special Considerations in Trauma. Development of this material is contingent with content from current, national, as well as state approved, paramedic training curricula. **The scope of knowledge covered in the transitional refresher does not imply scope of practice in Mississippi. Each block/session will include information about cognitive and psychomotor objectives removed from the previous curriculum. Paramedics must adhere to state and local protocols.**

Organizational Guidelines

Trauma transitional training requires a minimum of 8 clock hours of instruction provided by approved community colleges within the state. The transitional training consists of 6 separate training sections that are 8 clock hours each. Participants may take sessions independently of each other from any approved instructional site with proof of successful training completion issued by the training location individually.

Training Materials

The community college offering transitional training may choose to require participant textbooks. Any required textbooks should be stated in sufficient time prior to the beginning of transitional section to allow participants to obtain mandatory textbook(s).

Evaluation

Trauma transitional training sessions will require cognitive as well as pertinent related psychomotor skill completion. Participants are required to obtain a minimum of 75% as well as successfully completing all critical evaluation criteria on cognitive and psychomotor evaluations. Failure to successfully complete cognitive and/or psychomotor skills evaluation(s) will result in unsuccessful transitional session completion. Following remediation in area(s) of deficiency, the participant may attempt to complete evaluation(s) for a second time on that date. Two additional attempts at remediated material evaluations are allowed by participants either on the same date as transitional training or return at a later date at the discretion of the transitional instructor. Failure to complete mandatory cognitive and/or psychomotor evaluation(s) by any course participant will result in failure to complete the Trauma transition training section, and will require the participant to attempt the Trauma transition training again at the time and/or location of choice.

Course Size Limitation

Current instructor/student participant ratio must adhere to the following standard:

Lecture/Cognitive Objective Instruction	1:35
Lab/Psychomotor Evaluations	1:10

Trauma Transition Training Approval

The Mississippi State Department of Health, Bureau of Emergency Medical Services will approve prospective trauma transitional training prior to the beginning of the session. To receive approval, the session sponsor must submit the following:

Course Request/Instructor Verification Form (30 days prior to training)

Copies of the Lead Instructor/Course Coordinator's Credentials

The Mississippi State Department of Health, Bureau of Emergency Medical Services will provide notification of approval for transitional training and an approval course number.

Training Documentation

The lead instructor is responsible for supplying to the Mississippi State Department of Health, Bureau of Emergency Medical Services the following document within two weeks of transitional session conclusion:

Final Course Roster

Lead instructors are also responsible for providing to course participants, and maintaining documentation for a minimum of five years following session conclusion, the following documents:

Handbook/Syllabi

Transitional Training Schedule(s)

Lesson Plans/Training Outlines

Cognitive and/or Psychomotor Evaluations

Remediation Documentation as necessary

Trauma Transitional Training Learning Outcomes as Correlated to National EMS Educational Standards for Paramedic

1. This course will provide advanced instruction in the integration of pathophysiological principles and assessment findings to formulate a field impression and implement a treatment/disposition plan for an acutely injured trauma patient.

2. Integrate comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest states associated with trauma.

3. Integrate a comprehensive knowledge of the causes and pathophysiology into the management of shock, respiratory failure or arrest with emphasis on early intervention to prevent arrest.

4. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with chest trauma:

5. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with abdominal and genitourinary trauma:

6. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with orthopedic trauma.

7. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with head, facial, neck, and spinal trauma.

8. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with nervous system trauma.

9. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with Soft Tissue Trauma

10. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with special considerations/needs.

11. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with environmental concerns.

12. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with multi system trauma.

Cognitive Objectives

I. Integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an acutely injured patient (OVERVIEW)

A. Identification and categorization of trauma patients

1. National Trauma Triage Protocol/ Center for Disease Control and Prevention. Guidelines for Field Triage of Injured Patients: Recommendations of the National Expert Panel on Field Triage. MMWR 2008:58 RR-1-35.

2. Http://cdc.gov/fieldtriage contains the National Trauma Triage Protocols and additional instructional materials.

a. Step One: Physiologic Criteria

i. Glasgow Coma Scale

ii. Systolic Blood Pressure

iii. Respiratory Rate

b. Step Two: Anatomic Criteria

i. Crushed, Degloved, Mangled, or Pulseless Extremity

ii. Chest Wall Instability or Deformity

iii. All Penetrating Injuries to Head, Neck, Torso and Extremities Proximal to Elbow or Knee

iv. Amputation Proximal to Wrist or Ankle

1. Tourniquet Use
2. Pelvic Fractures

c. Step Three: Mechanism of Injury

i. Falls

ii. High-risk Auto Crash

iii. Automobile versus Pedestrian/Bicyclist

iv. Motorcycle Crash

d. Step Four: Special Considerations

i. Older Adults

ii. Children

iii. Anticoagulants ad Bleeding Disorders

iv. Burns

v. Pregnancy >20 weeks

vi. EMS Provider Judgment

3. CDC Field Decision Scheme

4. Mississippi Trauma System

5. Air medical support

6. Destination Considerations

7. Glasgow and Trauma score

B. Incidence/significance of trauma.

1. Mortality

2. Morbidity

3. Years of Life Lost

4. Deaths due to Trauma in the United States

C. Trauma System

1. Components

2. Levels and Qualifications

3. Triage and Transport Guidelines

D. Types of Injury

1. Blunt Trauma

2. Penetrating Trauma

E. Trauma Assessment

II. Integrate comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest states. Integrate a comprehensive knowledge of the causes and pathophysiology into the management of shock, respiratory failure or arrest with emphasis on early intervention to prevent arrest.

A. Bleeding

B. Shock

C. Resuscitation

III. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with chest trauma:

A. Traumatic aortic disruption

B. Pulmonary contusion

C. Blunt Cardiac injury

D. Hemothorax

E. Pneumothorax

1. Open

2. Simple

3. Tension

F. Cardiac Tamponade

G. Rib fractures

H. Flail chest

I. Commotio Cordis

J. Tracheobronchial disruption

K. Diaphragmatic rupture

L. Traumatic asphyxia

IV. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with abdominal and genitourinary trauma:

A. Vascular injuries

B. Solid and hollow organ injuries

C. Blunt vs. penetrating injuries

D. Evisceration

E. Retroperitoneal injuries

F. Injuries to the external genitalia

V. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with orthopedic trauma.

A. Pediatric fractures

B. Tendon laceration/transaction/rupture (Achilles and Patellar)

C. Compartment syndrome

D. Upper and lower extremity orthopedic trauma

E. Open fractures

F. Closed fractures

G. Dislocations

VI. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with Soft Tissue Trauma.

A. Wounds

B. Avulsions

C. Bite wounds

D. Lacerations

1. Direct Pressure

2. Tourniquet

E. Puncture wounds

F. Burns

1. Electrical

2. Chemical

3. Thermal

VII. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with head, facial, neck, and spinal trauma.

A. Unstable facial fractures

B. Orbital injuries and fractures

1. Anatomy

2. Assessment

3. Morgan lens cup

C. Perforated tympanic membrane

D. Skull fractures

1. Brain injuries

2. Harmful hyperventilation

E. Penetrating neck trauma

F. Laryngeotracheal injuries

G. Spinal trauma

1. Dislocations/subluxations

2. Fractures

3. Sprains/strains

H. Mandibular fractures

I. Oral injuries

VIII. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with nervous system trauma.

A. Cauda Equine Syndrome

B. Nerve root injury

C. Peripheral nerve injury

D. Traumatic brain injury

1. Brain anatomy

2. Brain Trauma Foundation

3. Neurological assessment

4. Consequences of hyperventilation

E. Spinal cord injury

F. Spinal shock

IX. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with special considerations/needs.

A. Obstetrical patient

B. Pediatric patient

C. Geriatric patient

D. Cognitively impaired patient

X. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with environmental concerns

A. Near drowning

B. Temperature related illness

C. Bites and envenomation

D. Dysbarism

1. High altitude

2. Diving injuries

E. Electrical injuries

f. High altitude illnesses

XI. Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for an injured patient with multi system trauma.

A. Multi system trauma

1. Critical thinking skills

2. Kinematics

B. Blast injuries

Reference List

1. 2011 Mississippi Paramedic Curriculum
2. 2009 National EMS Education Standards Gap Analysis Template
3. 2009 National Emergency Medical Services Educational Standards: Paramedic Instructional Guidelines
4. McNeil B., *Emergency Care, and Transportation of the Sick and Injured Case Studies*
5. Bledsoe B., *Essentials of Paramedic Care* 2nd, Edition 3rd Edition Update

6 http://cdc.gov/fieldtriage