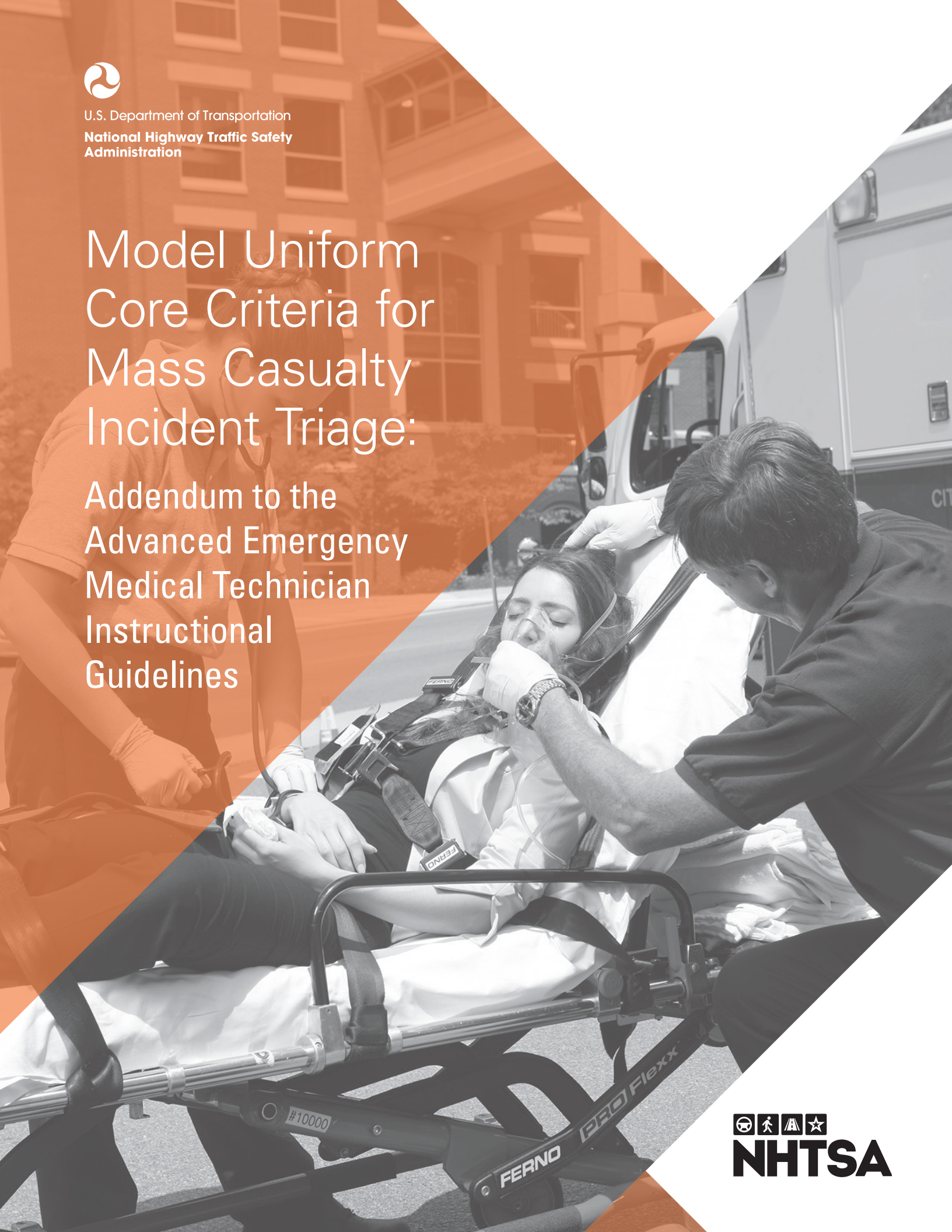
U.S. Department of Transportation
National Highway Traffic Safety Administration

Model Uniform Core Criteria for Mass Casualty Incident Triage:

Addendum to the Advanced Emergency Medical Technician Instructional Guidelines



NHTSA

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Addendum to Mass Casualty Incidents Due to Terrorism and Disaster: Model Uniform Core Criteria (MUCC) for Mass Casualty Incident Triage

AEMT Education Standard

Knowledge of operational roles and responsibilities to ensure the safety of patients, the public, and personnel.

AEMT – Level Instructional Guideline Addendum

This instructional guideline addendum covering the MUCC for Mass Casualty Incident Triage is intended for all levels of EMS providers, as outlined in "Mass Casualty Triage: An Evaluation of the Science and Refinement of a National Guideline." (http://journals.cambridge.org/download.php?file=%2FDMP%2FDMP5_02%2FS1935789300003360a.pdf&code=e91e3a089bd382a9ff41ae708a1ef5e1).

This addendum covers mass casualty incident (MCI) triage and is **not** to be confused with individual trauma field triage as outlined by the Centers for Disease Control and Prevention (www.cdc.gov/mmwr/preview/mmwrhtml/rr6101a1.htm).

Material To Be Taught to Students

I. Mass casualty incident triage is "the process of prioritizing multiple victims when resources are not sufficient to treat everyone immediately."[1]

II. How it differs from everyday triage, including guidelines for the field triage of injured patients.

III. The triage system utilized in your learners' jurisdiction(s) is _____, and should emphasize:

a. General considerations;

b. Global sorting;

c. Lifesaving interventions; and

d. Individual assessment.

IV. While there exist multiple systems for mass casualty triage, there is one national guideline: the MUCC for Mass Casualty Incident Triage which can be used to measure the essential elements within various MCI triage systems.

V. “MUCC is a group of 24 criteria that have been recommended as essential elements of an MCI triage system. Having a standard for triage systems increases interoperability between MCI triage systems and provides guidelines for the revision of existing MCI triage systems.”[1]

VI. MUCC Compliant Triage Systems

a. MUCC is not a mass casualty triage system

b. Adapting existing triage systems to MUCC

c. Connecting your prior triage training to MUCC

Additional Background Information for Instructors

I. Background

The MUCC criteria are provided here as background knowledge for instructors. MUCC was created to address the issues inherent in mass casualty incidents that cross jurisdictional lines, where responders may be using different triage systems. As Lerner et al. (2011) write, “for operational simplicity, communication interoperability, and clinical efficiency, it is preferable for all of the responders at a given incident to use the same triage system, or at the very least operate from some common elements.”[1]

a. History of MUCC

b. Rationale

c. Development process

i. Sort-Assess-Lifesaving Interventions-Triage/Treatment (SALT) triage (see Appendix A of the FICEMS report *National Implementation of the Model Uniform Core Criteria for Mass Casualty Incident Triage*[3])

ii. Levels of evidence supporting MUCC: Science, Indirect Science and Consensus

d. Scope

i. Primary triage

II. MUCC Categories

a. General Considerations

1.1 Triage systems and all of their components must apply to all ages and populations of patients.

1.2 Triage systems must be applicable across the broad range of mass casualty incidents in which there is a single location with multiple patients.

1.3 Triage systems must be simple, easy to remember, and amenable to quick memory aids.

1.4 Triage systems must be rapid to apply and practical for use in an austere environment.

1.5 Triage systems are resource dependent, and the system must allow for dynamic triage decisions based on changes in available resources and patient conditions.

1.6 The triage system must require that the assigned triage category for each patient be visibly identifiable (e.g.,triage tags, tarps, markers).

1.7 Triage is dynamic and reflects patient condition and available resources at the time of assessment. Assessments must be repeated whenever possible and categories adjusted to reflect changes.

b. Global Sorting

2.1 Simple commands must be used initially to prioritize patients for individual assessment.

2.2 The first priority for individual assessment is to identify those who are likely to need a lifesaving intervention.They can be identified as those who are unable to follow commands and do not make purposeful movements,or those who have an obvious threat to life (e.g., life-threatening external hemorrhage).

2.3 The second priority for individual assessment is to identify those who are unable to follow the command to ambulate to an assigned place but are able to follow other commands (e.g., wave) or make purposeful movement.

2.4 The last priority for individual assessment is to identify those who follow commands by ambulating to an assignedplace (or make purposeful movements) and have no obvious life-threatening conditions (e.g., life-threatening external hemorrhage).

2.5 All patients must be assessed individually regardless of their initial prioritization during global sorting. This includes the assessment of walking patients as soon as resources are available.

c. Lifesaving Interventions

3.1 Lifesaving interventions are considered for each patient and provided as necessary, before assigning a triage category. Patients must be assigned a triage category according to their condition after any lifesaving interventions.

3.2 Lifesaving interventions are performed only if the equipment is readily available, the intervention is within the provider’s scope of practice, the intervention can be

performed quickly (i.e., in less than 1 minute), and the intervention does not require the provider to stay with the patient.

3.3 Lifesaving interventions include the following: controlling life-threatening external hemorrhage,opening the airway using basic maneuvers (for an apneic child, consider two rescue breaths), performing chest decompression, and providing autoinjector antidotes.

d. Individual Assessment

4.1 Each patientmust be assigned to 1 of 5 triage categories (immediate, delayed, minimal, expectant, dead). Each category must be represented with an associated color: immediate/red, delayed/yellow, minimal/green, expectant/gray, dead/black.

4.2 Assessment must not require counting or timing vital signs and instead use yes-or-no criteria. Diagnostic equipment must not be used for initial assessment.

4.3 Capillary refill must not be used as a sole indicator of peripheral perfusion.

4.4 Patients who are not breathing after one attempt to open their airway (in children, two rescue breaths may also be given) must be classified as dead and visually identified as such.

4.5 Patients are categorized as immediate if they are unable to follow commands or make purposeful movements, OR if they do not have a peripheral pulse, OR they are in obvious respiratory distress, OR they have a life-threatening external hemorrhage; provided their injuries are likely to be survivable given available resources.

4.6 Patients are categorized as expectant if they are unable to follow commands or make purposeful movements OR they do not have a peripheral pulse, OR they are in obvious respiratory distress, OR they have a life-threatening external hemorrhage, AND they are unlikely to survive given the available resources. These patients should receive resuscitation or comfort care when sufficient resources are available.

4.7 Patients are categorized as delayed if they are able to follow commands or make purposeful movements, AND they have peripheral pulse, AND they are not in respiratory distress, AND they do not have a life-threatening external hemorrhage, AND they have injuries that are not considered minor.

4.8 Patients are categorized as minimal if they are able to follow commands or make purposeful movements, AND they have peripheral pulse, AND they are not in respiratory distress, AND they do not have a life-threatening external hemorrhage, AND their injuries are considered minor.

4.9 Patients categorized as immediate are the first priority for treatment and/or transport, followed by patients categorized as delayed and minimal. Patients categorized as expectant should be provided with treatment and/or transport as resources allow. Efficient use of transport assets may include mixing categories of

patients and using alternate forms of transport.

III. Additional Implications for Learners

a. Use of MUCC-compliant triage systems supporting interoperability in a multi-jurisdictional response

b. See the full Instructional Guidelines for the age-related variations for pediatric and geriatric assessment and management

c. Triage tags/labeling mechanism

IV. References

1. Lerner, E. et al. (2011). Mass Casualty Triage: An Evaluation of the Science and Refinement of a National Guideline. *Disaster Med Public Health Preparedness, 5*:129-137, doi: 10.1001/dmp.2011.39.

2. Model Uniform Core Criteria for Mass Casualty Triage. (2011). *Disaster Med Public Health Preparedness*, *5*:125-128, doi: 10.1001/dmp.2011.41.

3. National Implementation of the Model Uniform Core Criteria for Mass Casualty Incident Triage: A Report of the FICEMS. July 8, 2013.

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