

(Underlined sections are new or replacements; [bracketed] sections are deleted.)

BEFORE THE BOARD OF COMMISSIONERS

FOR THE COUNTY OF MULTNOMAH

ORDINANCE NO. 576

An Ordinance adopting a recommendation of the EMS Policy Board to amend Emergency Medical Services Rule 631.552(B) by revision of the Trauma Patient Identification criteria; and, to amend Emergency Medical Services Rule 631.502 by revision of the Advanced Life Support Treatment Protocols and declaring an emergency.

Multnomah County ordains as follows:

Section 1. Findings.

1. MCC 6.31.060 authorizes the BCC to adopt rules concerning procedures and prehospital treatment protocols, upon recommendation of the Emergency Medical Services Policy Board.

2. Multnomah County has used an Interim Trauma System consisting of Trauma Patient Identification Criteria and Advanced Life Support protocols to assure accident victims the highest level of care. The Interim Trauma System was intended

to be used until the Oregon State Health Division implemented a new Trauma Plan.

3. On May 2, 1988, the Oregon State Health Division implemented a new Trauma Plan for the identification, care, and transport of patients in and around Multnomah County.

4. The EMS Policy Board, pursuant to MCC 6.31.062, conducted public hearings on April 4, 1988 concerning certain changes to the criteria and protocols based upon the State's new Trauma Plan and has recommended that the Board of County Commissioners adopt these changes.

5. The EMS Medical Advisory Board recommends the adoption of relevant portions of the State Trauma Plan through revisions to the criteria and protocols in EMS Rules 631.552(B) and 631.502.

6. The recommended changes to the County's rules are consistent with the purposes of MCC Chapter 6.31 and are in the public interest. The Statement of Need adopted by the Emergency Medical Services Policy Board, attached as Exhibit "I" and incorporated herein by reference, is adopted by this Board as support for these changes.

Section 2. Amendment.

EMS Rule 631.552(B) is amended by repeal of the Exhibit A referred to in the Rule. A new Exhibit A is adopted. That exhibit is attached to this ordinance (marked as Exhibit A) and is incorporated herein by reference.

Section 3. Amendment.

EMS Rule 631.502 is amended by repeal of page T1 - T5 of Exhibit F referred to in the Rule. New pages T1 - T5 of Exhibit F are attached to this ordinance (marked as Exhibit B) and incorporated herein by reference.

Section 4. Adoption.

This Ordinance, being necessary for the health, safety, and general welfare of the people of Multnomah County, an emergency is declared and the Ordinance shall take effect upon its execution by the County Chair, pursuant to Section 5.50 of the Charter of Multnomah County.

ADOPTED this 12th day of May, 1988, being the date of its first reading before the Board of County Commissioners of Multnomah County.

BOARD OF COUNTY COMMISSIONERS  
MULTNOMAH COUNTY, OREGON

(SEAL)

By *Gladys McCoy*  
Gladys McCoy  
Multnomah County Chair

APPROVED AS TO FORM:

LAURENCE KRESSEL, COUNTY COUNSEL  
FOR MULTNOMAH COUNTY, OREGON

By *Sandra Duffy 5-11-88*  
Sandra Duffy  
Assistant County Counsel

1140R/dm  
051188:2:1

TRAUMA PROTOCOL

I. Patients are to be entered into the trauma system in ATAB I (Multnomah, Washington, Clackamas, Columbia, Clatsop, Tillamook, and Yamhill Counties) when they meet the following criteria and have been involved in a trauma incident.

A. Physiological criteria:

1. A systolic blood pressure of less than 90 mm/Hg.
2. Respiratory distress as evidenced by a respiratory rate of less than ten or greater than twenty-nine.
3. Altered mental status as evidenced by a Glasgow Coma Scale Score of thirteen or less.

B. Mechanism of the patient injury:

1. Extrication from a motor vehicle which takes greater than twenty minutes and uses heavy tools.
2. Death of an occupant in the same car as the patient.
3. Ejection of the patient from an enclosed vehicle.

C. Anatomical Criteria:

1. The patient has a flail chest
2. The patient has two or more obvious proximal long bone fractures (humerus, femur).
3. The patient has a penetrating injury of the head, neck, torso, or groin associated with an energy transfer.
4. The patient has in the same body area a combination of trauma and burns (1st and 2nd) of fifteen percent or greater, or burns (greater than or equal to second degree) involving the face and/or airway.
5. The patient has an amputation proximal to the wrist or ankle.
6. The patient has one or more limbs which are paralyzed.

D. EMT Discretion:

1. If in the EMT's judgement, the patient has been involved in a trauma incident, which, because of a high energy exchange, causes the EMT to be highly suspicious that the patient is severely injured, the patient should be entered into the trauma system.

Delete the trauma protocols on pages T1-T5 and replace with the following:

TRAUMA PROTOCOL

- I. Patients are to be entered into the trauma system in ATAB I (Multnomah, Washington, Clackamas, Columbia, Clatsop, Tillamook, and Yamhill Counties) when they meet the following criteria and have been involved in a trauma incident.
  - A. Physiological criteria:
    1. A systolic blood pressure of less than 90 mm/Hg.
    2. Respiratory distress as evidenced by a respiratory rate of less than ten or greater than twenty-nine.
    3. Altered mental status as evidenced by a Glasgow Coma Scale Score of thirteen or less.
  - B. Mechanism of the patient injury:
    1. Extrication from a motor vehicle which takes greater than twenty minutes and uses heavy tools.
    2. Death of an occupant in the same car as the patient.
    3. Ejection of the patient from an enclosed vehicle.
  - C. Anatomical Criteria:
    1. The patient has a flail chest
    2. The patient has two or more obvious proximal long bone fractures (humerus, femur).
    3. The patient has a penetrating injury of the head, neck, torso, or groin associated with an energy transfer.
    4. The patient has in the same body area a combination of trauma and burns (1st and 2nd) of fifteen percent or greater, or burns (greater than or equal to second degree) involving the face and/or airway.
    5. The patient has an amputation proximal to the wrist or ankle.
    6. The patient has one or more limbs which are paralyzed.

TRAUMA PROTOCOL (Cont'd)

IT IS ESSENTIAL THAT EARLY RADIO COMMUNICATIONS BE ESTABLISHED CONCERNING THE TRAUMA VICTIM. After assessing a trauma situation and making the determination that the patient should enter the trauma system, the EMT certified to the highest level should contact the Medical Resource Hospital\* at the earliest time which is practical, and provide the following:

1. Number of patients (age and sex)
2. Entry criteria (brief description of patient condition)
3. Location of the incident
4. Estimated time of departure from the scene/ETA
5. Unit number and mode of transport
6. Destination based on patient origin

In case of radio failure with medical direction, contact the EMS dispatch point for hospital information.

C. Emergency Medical Technician in inter-hospital transfer to Medical Resource Hospital/Trauma Communications Center:

- 1) Upon entering radio range of MRH/TCC, the EMT shall inform MRH/TCC on the HEAR (155.340 MHZ) or on Med Net 4 of the following:
  - a. Ambulance unit identification and county of origin
  - b. Patient destination
  - c. Brief description of patient condition
  - d. Estimated time of arrival
- 2) Upon entering the radio range of the destination hospital, the EMT must contact the receiving trauma center on the HEAR frequency to communicate to them the present condition of the patient and any deterioration or improvement in patient condition which occurred enroute.

D. Medical Resource Hospital/Trauma Communications Center\* or medical direction (level 3 or 4 service area) (MD) to EMT:

- 1) The MRH/TCC\* shall inform the EMT if the destination hospital is unable to receive the patient.
- 2) In the event that multiple patients (if five or more ALS ambulances are, or will be used, refer to the MCI protocol and contact regional hospital on Med Net 1) are to be entered into the trauma system, MRH/TCC<sup>1</sup> will assist the EMT in determining patient destinations.

\* If the EMT is unable to reach MRH, the usual on-line medical control is to be contacted, and then MRH as soon as possible if the patient is to be transferred to a level 1 or 2 hospital.

TRAUMA PROTOCOL (Cont'd)

- d. If multiple patients from the same scene, patient destination to be that assigned by the above service areas unless the designated trauma center advises MRH/TCC or medical direction (level 3 or 4 service area) (MD) that the facility cannot accept additional patients. In this instance, the MRH/TCC MD will assist the EMT in determining patient destination.
- 2) Designated trauma center destination from the scene if by air transport to be determined by flight personnel based upon the following criteria:
    - a. Regardless of patient origin, the patient destination to be alternated between the designated trauma centers.
    - b. If two patients are transported in the same transport, patient destinations to be same designated trauma center.
    - c. In the event that the designated trauma center, which is to be the patient destination, is unable to accept the patient, MRH/TCC will assist the flight crew in determining patient destination.
  - 3) Designated trauma center destination from a level three or four hospital, or a non-designated trauma hospital to be based upon the following criteria.
    - a. Transferring physician to determine designated trauma center destination after conferring with the receiving physician.
    - b. In the event that the transferring physician has not determined the destination, the MRH/TCC will assist the EMT in determining patient destination.
- B. Patient to the closest level 3\* or level 4\* hospital if more than 30 minutes from the level 1 or 2 and the level 3 or 4 is closer.
  - C. If airway unable to be established, patient to the nearest acute care facility.
  - D. In Columbia County existing patient referral trends are to be maintained until the ATAB plan addresses out of state hospitals.

\* Trauma hospital applicants are to be considered as trauma designated for purposes of this protocol.

TRAUMA PROTOCOL (Cont'd)

VII. TRAUMA CARE PRIORITIES FOR PRE-HOSPITAL CARE PERSONNEL:

- A. Assess and Maintain Airway: Protect Cervical Spine
  - 1. Chin lift/jaw thrust
  - 2. Clear airway of foreign bodies
  - 3. Oropharyngeal/nasopharyngeal airway
  - 4. Bag-valve-mask with oxygen supplementation as indicated.
  - 5. Endotracheal/nasotracheal intubation or needle cricothyrotomy
  
- B. Breathing Control
  - 1. Assessment
    - a) Expose chest and neck
    - b) Rate and depth of respirations
    - c) Inspect and palpate for unilateral and bilateral chest movement, subcutaneous emphysema, sucking chest wounds
    - d) Distended neck veins or deviated trachea
    - e) Auscultate
  
- C. Breathing Control (Cont'd)
  - 1. Management
    - a) Seal open pneumothorax
    - b) Start oxygen therapy
    - c) Alleviate tension pneumothorax (needle thoracentsis)
    - d) Support ventilation
  
- D. Circulatory Control
  - 1. Identify exsanguinating hemorrhage
    - a) Apply direct pressure to bleeders
    - b) Apply tourniquet if bleeding uncontrollably or on extremity
    - c) Open MAST on stretcher and place patient on stretcher - apply if necessary (see Shock Protocol)
  - 2. Assess for pulses
    - a) Generally if:
      - 1) radial pulses present - systolic pressure 80 mmHg
      - 2) femoral pulse present - systolic pressure 70 mmHg
      - 3) carotid pulse present - systolic pressure 60 mmHg
  - 3. Evaluate perfusion
    - a) Pulse, rate and character
    - b) Capillary refill
    - c) Skin color; i.e. pink, pale, cyanotic, mottled.
  - 4. Initiate two large bore I.V.s with a volume expander during transport.
  - 5. Obtain blood pressure. This is low priority, consider during transport.
  
- E. Assess neurologic status per Glasgow Coma Scale
  - 1. Eye Opening
  - 2. Best Verbal Response
  - 3. Motor Response
    - a) Standardized pain stimulus is either supraorbital ridge pressure or fingernail pressure