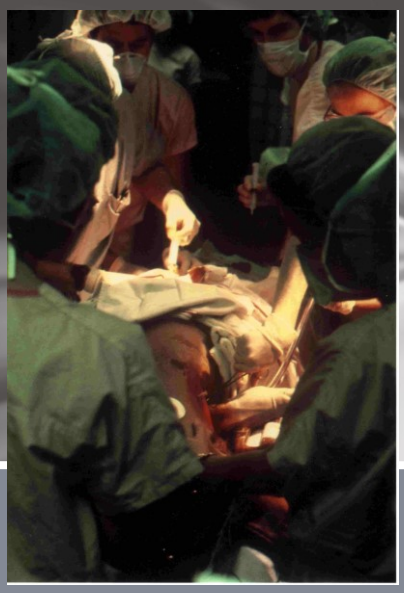
Trauma Team Response



"If You Build It, They *Will* Come"

Why have a trauma *team* response?

Organization and delivery of resources optimizes the episodic critical care of the injured patient. This can be accomplished by:

Pre-organization based on need

- team activation triggers/guidelines
- pre-identified and defined members/roles
- accessible and functional equipment & supplies
- specifically designed forms (trauma flow sheet)
- notification procedures

We know critical care is best delivered in a pre-organized team framework. Ideally, that process involves identification of the type of team needed and the components to make the team response effective:

- When the team should be mobilized
- What types of team members are required
- The location and configuration of the response
- Responsibilities and tasks of the team members
- Organization of required equipment, supplies and medications used during the response
- Documentation forms, orders, checklists, policy/procedures and references
- Methods for notifying team members to respond

Trauma Team

What's different about a Trauma Team?

- Potential **Surgical** focus
- **Early** identification and **intervention** of life-threatening injuries
- **Prioritized** coordination of care
- **Early** recognition of need to **transfer** definitive care
- **Stabilizatio**n interventions
- Documentation "to go"
- COBRA/EMTALA procedures

Consider the differences that make developing a Trauma Team different than other types of team responses

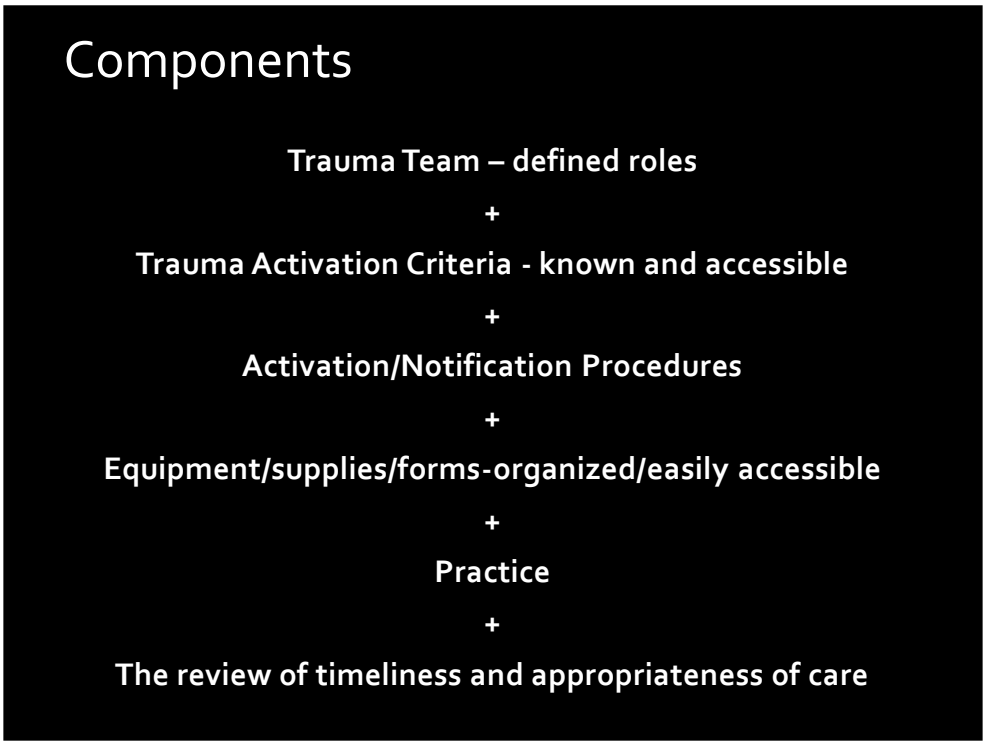
Key to this is the early identification of life-threatening injuries-CHI with GCS < 8, hemopneumothorax, tension pneumothorax, internal and/or external bleeding, intra-abdominal injuries, pelvic fractures

Documentation to go includes Trauma Flow Sheet, EMS report, imaging, H&P, labs

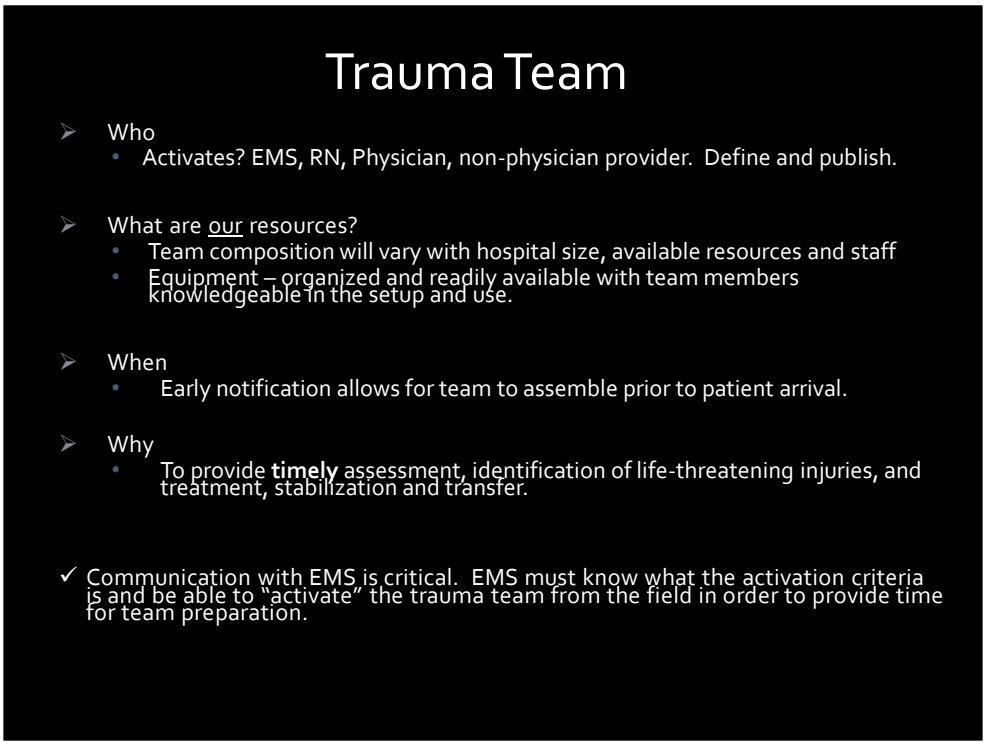
The Goal

Rapid assembly and immediate provision of:

- **Multidisciplinary** personnel and equipment
- **ATLS** assessment/intervention
- **Coordinated, interdependent** & **standardized** approach
- **Optimal** communication
- **Timely** treatment, stabilization, and transfer (if unable to provide definitive care)



The Trauma Response consists of these specific components and the successful process of “linking” them together locally.

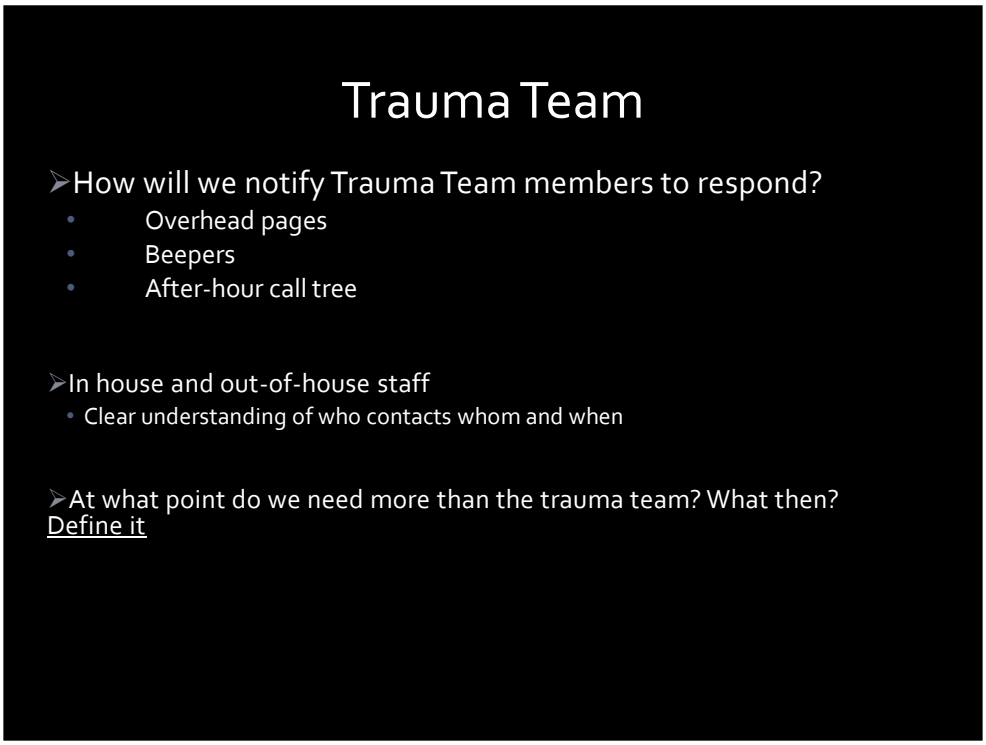


These are some hallmark questions to ask when developing your Trauma Response procedures. The answers to these specific questions provide for design of the process that will be most effective.

You cannot depend on resources you don't have, so each facility's procedures are dependent on identification and organization of its resources with design of procedures putting them to best use.

EMS should be considered the "first phase of care", an essential part of the local Trauma Team Response and must be knowledgeable about local Trauma Team Activation criteria. They must understand and be active in early identification of the trauma patient, provide early and effective communication to the hospital so staff may act on that information and activate the Trauma Team Response.

Pre-organized and pre-assembled Trauma Team members ready to greet the trauma patient on arrival at the hospital provide more effective care.



Develop a method for notifying Trauma Team members consistent with the available local communication capabilities.
Trauma Team activation "after hours" may involve calling in specific staff. Depending on the time of day, Trauma Team activation may involve utilizing staff currently in-house and available. Either way, the situation and whether the patient meets activation criteria determines Trauma Team activation, NOT time of day or whether staff were "already here so we didn't have to call anyone in".

When does a facility need to activate MORE than its Trauma Team? At what point does a facility need to activate its Disaster/Emergency Response Plan?
Each facility needs to determine the base number of simultaneous patients or critical patients it is truly capable of providing effective care to (in many cases it's 2-4 patients, either arriving at the same time or critically ill/injured). Once that number of multiple or very sick patients has been determined, be sure it's addressed in the Disaster/EP and all staff are educated.
An effective Trauma Team Response process allows staff to improve their delivery of effective care to one patient at a time . This improved "patient-by-patient" proficiency of care is an effective method for increasing quality of care for multiple patients, enhancing Disaster/EP capabilities.
"An effective trauma system is the backbone of the Disaster/EP system"*

Trauma Team Members

- Team Leader: Surgeon, Emergency Physician, Mid-level/non-physician provider
- Anesthesia, CRNA, OR Team
- Emergency/Other RNs (x 2-3)
- Charge/House Nursing Supervisor
- EMTs stay/assist
- Respiratory therapy
- XRAY, CT, Radiologist
- Lab, Blood bank
- Documentation/Scribe
- LPN, Aide, HUC, Support Staff
- Social Services, Chaplain
- Other Medical Specialties if/as available: Intensivists, ENT, Ortho, Neuro, Pediatricians, etc.

Specific members of your Trauma Team depend on the professional resources you have available

Building your Trauma Team

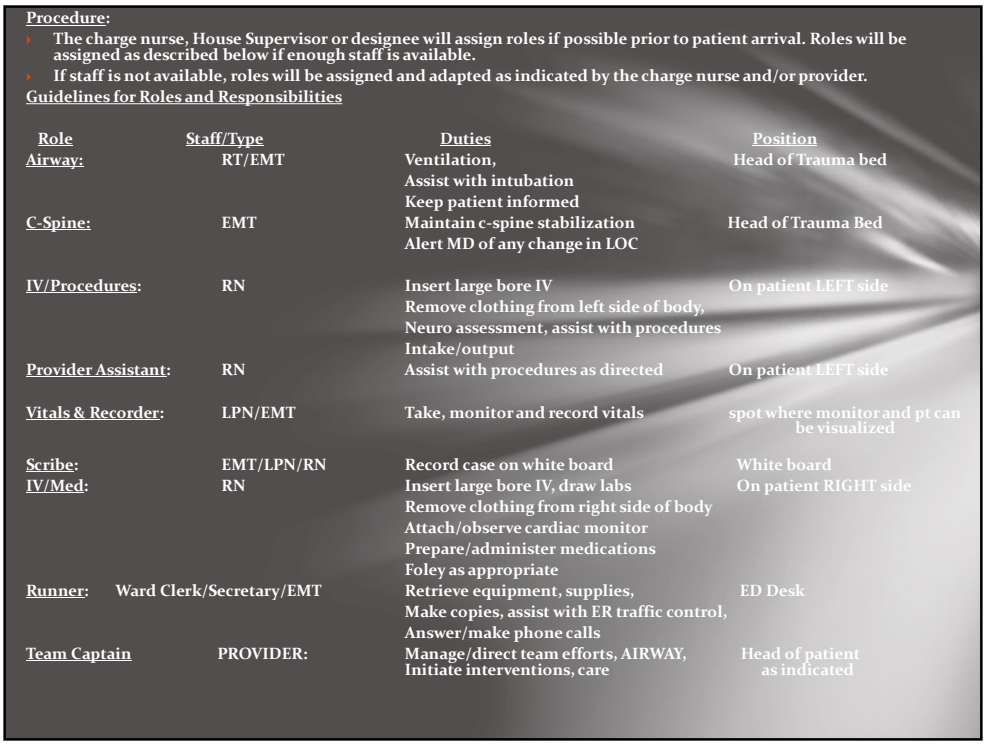
Identify who has authority/responsibility for team activation and make certain this is well documented and communicated in advance

Identify what standard actions need to be accomplished during your activations

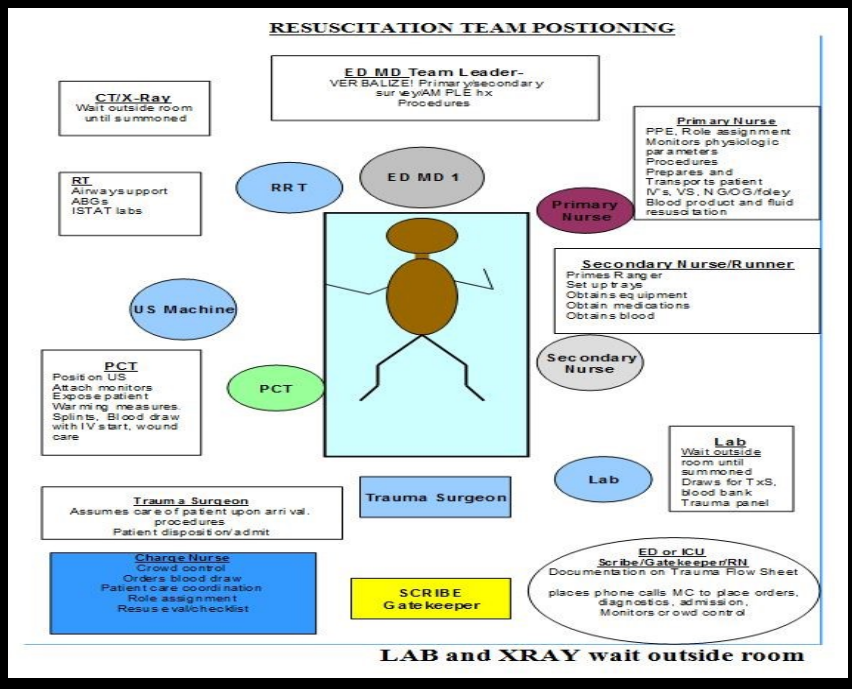
Identify which role is going to do it, assign in advance

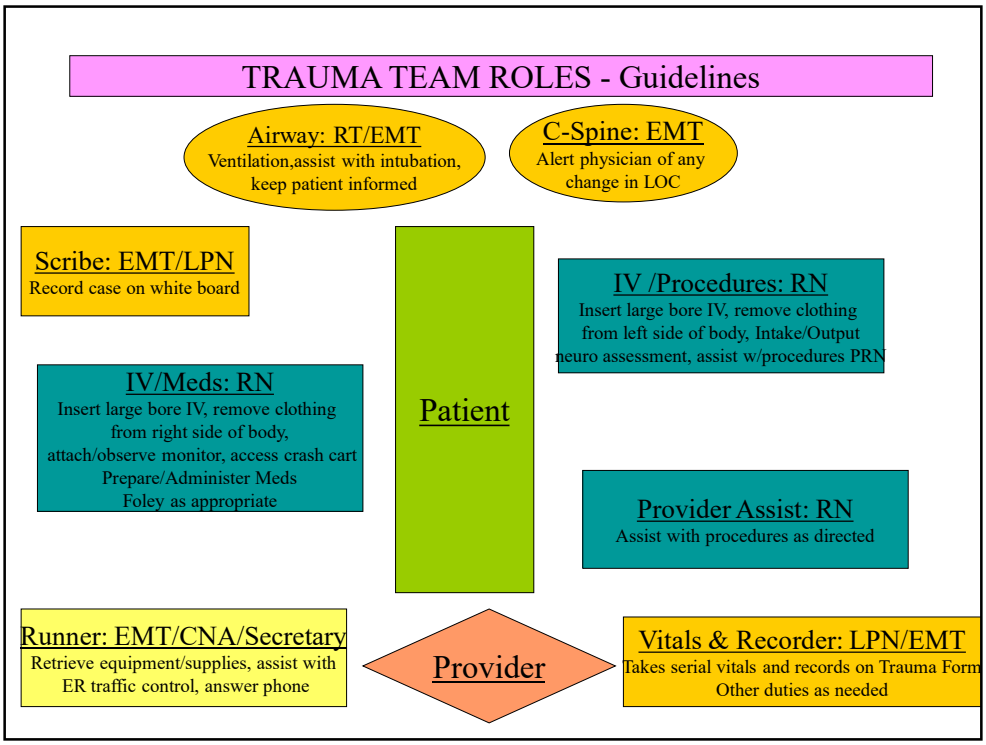
How many people are to be in the room to meet these action goals?

Where do they position themselves?



This busy diagram illustrates a very basic team, its members, their identified duties and physical positions in relation to the patient.
Your facility's team may look different, but this general template can serve as a guide for developing your team composition and role responsibilities.
Be sure to include your facility's available team members.
Educate staff and provide the guide for all to easily refer to during a Trauma Team Response.


RESUSCITATION TEAM POSTIONING
ED MD Team Leader-
VERBALIZE! Primary/secondary survey/AMPLE hx
Procedures
CT/X-Ray
Wait outside room until summoned
RT
Airways support
ABGs
ISTAT labs
RRT
ED MD 1
Primary Nurse
PPE, Role assignment
Monitors physiologic parameters
Procedures
Prepares and Transports patient
IV's, VS, NG/OG/foley
Blood product and fluid resuscitation
Secondary Nurse/Runner
Primes Ranger
Set up trays
Obtains equipment
Obtain medications
Obtains blood
US Machine
PCT
Position US
Attach monitors
Expose patient
Warming measures.
Splints, Blood draw with IV start, wound care
PCT
Secondary Nurse
Lab
Wait outside room until summoned
Draws for TxS, blood bank
Trauma panel
Lab
Trauma Surgeon
Assumes care of patient upon arrival. procedures
Patient disposition/admit
Trauma Surgeon
Charge Nurse
Crowd control
Orders blood draw
Patient care coordination
Role assignment
Resuscitation/checklist
SCRIBE
Gatekeeper
ED or ICU
Scribe/Gatekeeper/RN
Documentation on Trauma Flow Sheet
places phone calls MC to place orders, diagnostics, admission,
Monitors or crowd control
LAB and XRAY wait outside room


TRAUMA TEAM ROLES - Guidelines
Airway: RT/EMT
Ventilation,assist with intubation, keep patient informed
C-Spine: EMT
Alert physician of any change in LOC
Scribe: EMT/LPN
Record case on white board
IV /Procedures: RN
Insert large bore IV, remove clothing from left side of body, Intake/Output neuro assessment, assist w/procedures PRN
IV/Meds: RN
Insert large bore IV, remove clothing from right side of body, attach/observe monitor, access crash cart Prepare/Administer Meds Foley as appropriate
Patient
Provider Assist: RN
Assist with procedures as directed
Runner: EMT/CNA/Secretary
Retrieve equipment/supplies, assist with ER traffic control, answer phone
Provider
Vitals & Recorder: LPN/EMT
Takes serial vitals and records on Trauma Form Other duties as needed


Radiology Technician
CRNA, Anesthesia
Respiratory Therapist
Trauma Surgeon
Emergency Medicine Physician
Trauma Primary Nurse
Trauma CRNP
Trauma Technician
Chaplain/ Social Services
Trauma Nurse Scribe

Other Trauma Team Roles

- Lab, XRAY, RT
- Family Support
- Team Support
  - Child Care
- Next shift needs
- Coordinate the rest of the Department & Hospital

There are other Trauma Team roles to consider (again based on your facility's available resources) that can meet important needs.

Depending on facility size and scope of the situation, consideration may also need to be given to identifying resources for coordinating the rest of the Emergency Department, subsequent shifts and the rest of the hospital.

Plenty of help, lots of resources and all of the necessary equipment at our fingertips! We're a well-oiled machine!

THIS IS GREAT!!!

Here is the **reality** of the Trauma Team members, resources and equipment we may actually have available.

Crew Resource Management

- Pre-designation of roles
- Does the team communicate and validate communication before and after arrival?
- Can the team prioritize?
- Can the team adapt to different patient scenarios?
- Is everyone on the team in touch with what is going on and distributing the workload?
- Is there cross checking of data and activities as well as performance monitoring?
- Are members willing to challenge each other in a reasonable way and do they have conflict resolution skills?

Effective teams don't just happen. Becoming a team takes good leadership, preparation, definition, commitment and PRACTICE. These are concepts to consider and think about when organizing, developing and educating your staff in the realities of becoming a team.

Team Leader

- Studies show that the presence of a single identified trauma resuscitation team leader leads to a better secondary survey, ATLS adherence, and team coordination.

  Townsend RN. Et.al. ATLS-based videotape trauma resuscitation review: education and outcome 1993

Trauma and Teams

- Nurses, physicians, and EMS are educated in isolation of one another
  - We all learn the same ABCs of trauma care but, we learn to do so as if we are alone
- Trauma patient care is delivered by a team of these individuals who know what *they* are doing but may not know *what the other members* are doing.
- "Situational awareness" is especially important in a task-oriented structure
- Models have been developed to teach teamwork

We all have education, experience and background preparation. Melding those varying skills, personality styles and leadership abilities into effective Teamwork CAN be challenging!

Team Leader

- Leadership matters: effective leadership is a powerful combination of well-executed knowledge, direction and approach
- Understanding of the roles & responsibilities
- Effective communication
- Cooperation
- Organized
- Leads the pre-arrival briefing/post debrief

Effective team leadership is based on experience and wise application of calm, collected, reasonable, well-prioritized direction. Even inexperienced staff will perform well if effectively led and directed.

Teams do not perform well when leadership is fragmented, chaotic and disorganized.

More importantly, **patients** do not do well if care is fragmented, chaotic and disorganized.

Working as a Team

- Assigning roles BEFORE patient arrives
- Use closed-loop communication: once asked to do something, team member repeats back to clarify & ensure correct info
- Only one person talking at a time.
- Delegate task to individual, not to everyone
- Challenge culture; anyone on team may validate decisions or provide input into care
- Communicate plan to whole room/team
- Practice on EVERY ED patient

These tips will assist staff in becoming a more effective team.

Trauma Team Pitfalls

Forgetting the PATIENT'S Perspective

It's important to remember the PATIENT as we pay so much attention to our available resources, organizational structures, technology, tasks and procedures!

Trauma Response

- Choices made based on each facility's resources, patient volumes and needs; be realistic
- ? Different levels of activation/response or "All Hands on Deck" single response structure: be realistic
- Determining factor: ? Surgeon available to direct trauma patient resuscitation & surgical services (OR, Anesthesia)

As you develop your Trauma Team Response plan, remember to BE REALISTIC and use what you HAVE, not what you'd LIKE TO HAVE.

Should you develop different levels of Trauma Team Response? (larger volumes of trauma patients and larger pool of resources)
OR
Are your resources such that a single level of response will be most effective (fewer trauma patients, fewer resources)?

Can you offer different levels of response? Do you have a surgeon to direct trauma care or surgical services to provide operative intervention?
ALL of the time? SOME of the time? NEVER?

Activation of team response levels based on

pre-determined field and hospital trauma triage criteria

KISS: Keep it Simple

Whatever you do, to be successful, design it simply and
DO NOT OVER-COMPLICATE your procedures

MT Field Trauma Decision Scheme/Trauma Team Activation Criteria

Step 1. Physiologic Criteria; good predictor of severe injury

Obtain Vital Signs and Level of Consciousness ASAP

Systolic BP < 90

Glasgow Coma Scale ≤ 13, decreased responsiveness

Severe respiratory distress or need for ventilatory support,
Respiratory Rate < 10 & > 29

< 20 infant

Pediatric; poor skin perfusion (color, cool extremities, weak distal pulses)
Heart rate;

child < 1 yr; < 60/min or > 130/min

child 1-8yr; < 80/min or > 120/min

EMS discretion

If "Yes" to any of the above, activate/contact Medical Control.

If "No" go to step 2

Montana Field Decision Scheme/Trauma Team Activation Criteria (consistent with CDC Field Triage Decision Scheme, with some revisions for Montana setting) to be utilized in the pre-hospital setting to contact medical control, advise hospital of patient status and advise Trauma Team Activation and/or utilized in the hospital to identify patients in need of Trauma Team Activation.

CDC Criteria have been developed to facilitate decisions to transport trauma patients to Trauma Centers. The rural nature and generally long distances between healthcare facilities in Montana necessitates using the same criteria for providing trauma response for all identified trauma patients.
When there ARE multiple healthcare facilities in close proximity to the scene, patients meeting these criteria should preferentially be transported to Trauma Facilities.
Physiologic Criteria provide a good predictor of severe injury and should be at the top of your activation criteria.

Step 2. Anatomic Criteria

May have "normal" VS & GCS but still have sustained severe injuries

All penetrating injuries of head, neck, torso and extremities proximal to knee/elbow

Chest wall instability or deformity (e.g. Flail Chest)

Paralysis

Pelvic fractures/instability

Open or depressed skull fractures

2 or more proximal long-bone fractures

Crushed, de-gloved, mangled or amputated extremity

Major burns

Hypothermia

If "Yes" to any of the above, Activate/Contact Medical Control.

If "No" go to step 3

Anatomic Criteria

Patients with these injuries may not meet "Physiologic" criteria, have "normal "Vital Signs and GCS, but still have sustained severe injuries

* Major Burns has been moved up to the Anatomic Criteria section for Montana.
CDC Triage Criteria state
" Burns without traumatic mechanism; triage to burn center"
" Burns with traumatic mechanism; triage to trauma center"
Montana has no current burn centers, so "Major Burns" was moved to Anatomic Criteria for Trauma Team Activation
Hypothermia has been added for Montana due to the need for mobilization of facility resources

Step 3. Mechanism of Injury Criteria: CONSIDER

Do not always produce severe injury, but certainly CAN so use to CONSIDER activation

Motor Vehicle Crashes

- Ejection
- Death of occupant in same vehicle
- Intrusion, including roof; > 12 inches, occupant compartment
- Extrication time > 20 minutes

Auto vs Pedestrian/bicyclist thrown, run over or significant impact

Contact Medical Control, advise of mechanism of injury for early consideration of activation

It's important that TTA does not occur on MOI criteria alone, as *over-triage can result. Assembling trauma team members based on MOI criteria alone repeatedly for patients who turn out to have insignificant injuries will result in team "burn-out", and reluctance to respond, undermining TTA process.

All TT Activations should be evaluated for appropriateness ,*overtriage/undertriage and activation criteria broadened or tightened accordingly.

***Overtriage**: Activation w/discharge home from ED

OR, Using mechanism/co-morbidities to activate for patient not meeting clinical (Physiologic/Anatomic) criteria and patient discharged to home

***Undertriage**; No activation and patient transferred to higher level of care, admitted to ICU/OR or died

OR no activation when patient met Physiologic/Anatomic criteria

3. Mechanism of Injury Criteria (CONTINUED):

Falls; Adult > 20 ft

Children > 10 ft or 2-3x height of child

Horse/Animal rollover/ejection

Motorcycle/Snowmobile/ATV crash > 20MPH

Contact Medical Control, advise of mechanism for early consideration of activation

If "No", go to Step 4

*MOI Continued:
Horse/animal rollover/ejection added here for Montana
Snowmobile/ATV crash > 20 MPH added here for Montana w/CDC motorcycle criteria

4. Special Considerations: Comorbidities; Utilize to CONSIDER activation

May not meet physiologic, anatomic or mechanism criteria but underlying issues create higher RISK for severe injury

Older Adult; Risk of injury increases > 55 years

SBP < 110 MAY represent shock after age 65 years

Low impact mechanisms (e.g. ground level falls) MAY result in severe injury

Child Age < 15 yr

Anticoagulation/Bleeding disorders (Coumadin/Warfarin, Plavix, Pradaxa, etc.)

Patients with head injury are at high risk for rapid deterioration

Time sensitive extremity injury (Open fx, major joint dislocation, fx with neurovascular compromise, etc.)

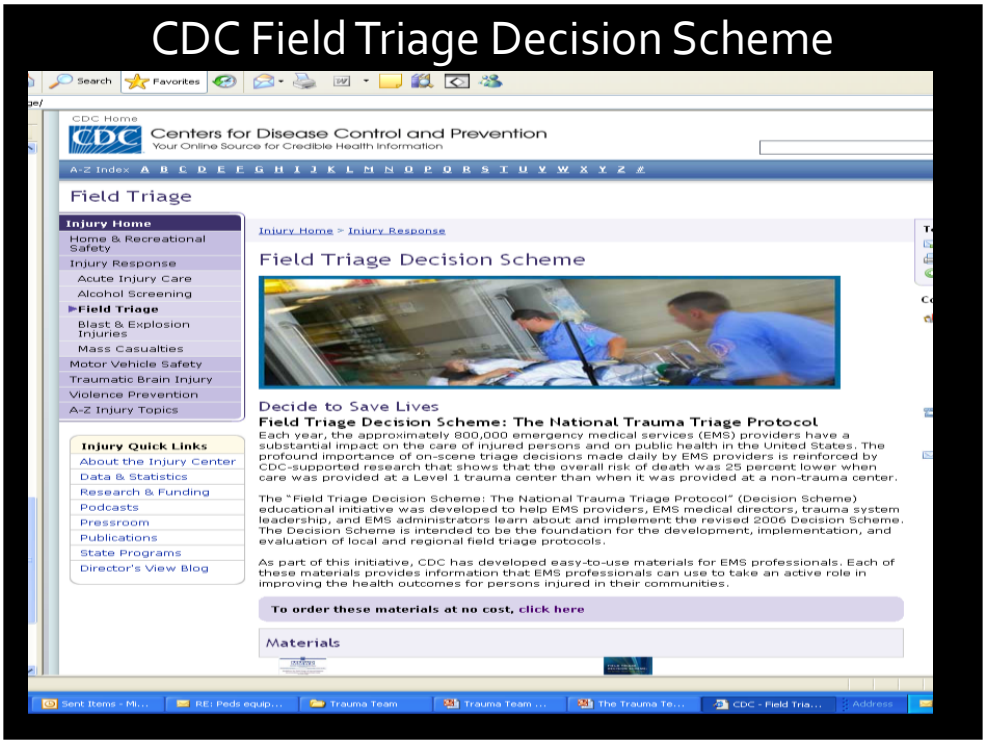
Pregnancy > 20 weeks

Multiple patient situations

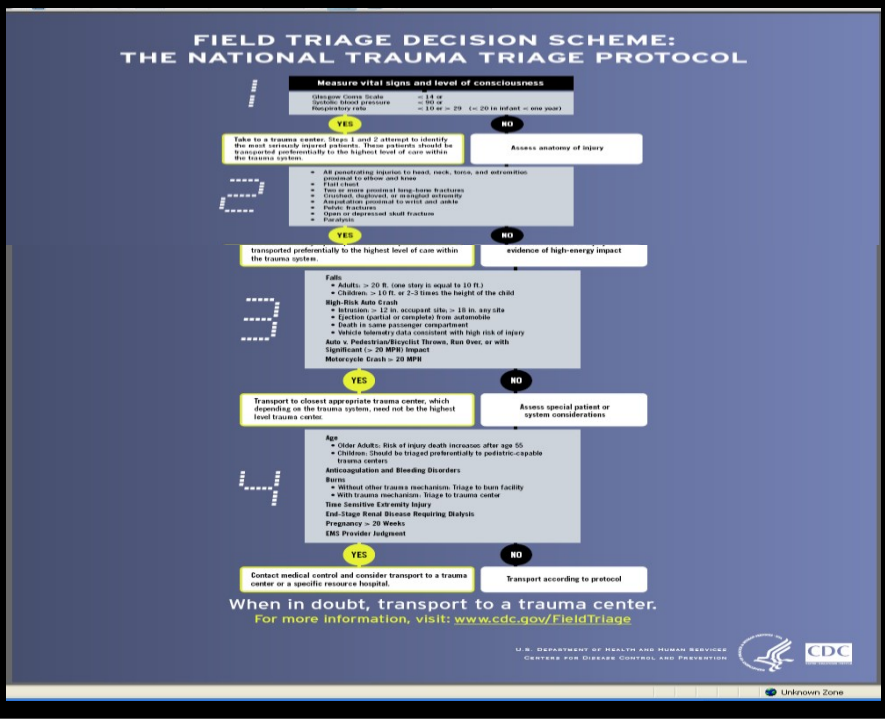
EMS/Provider judgement

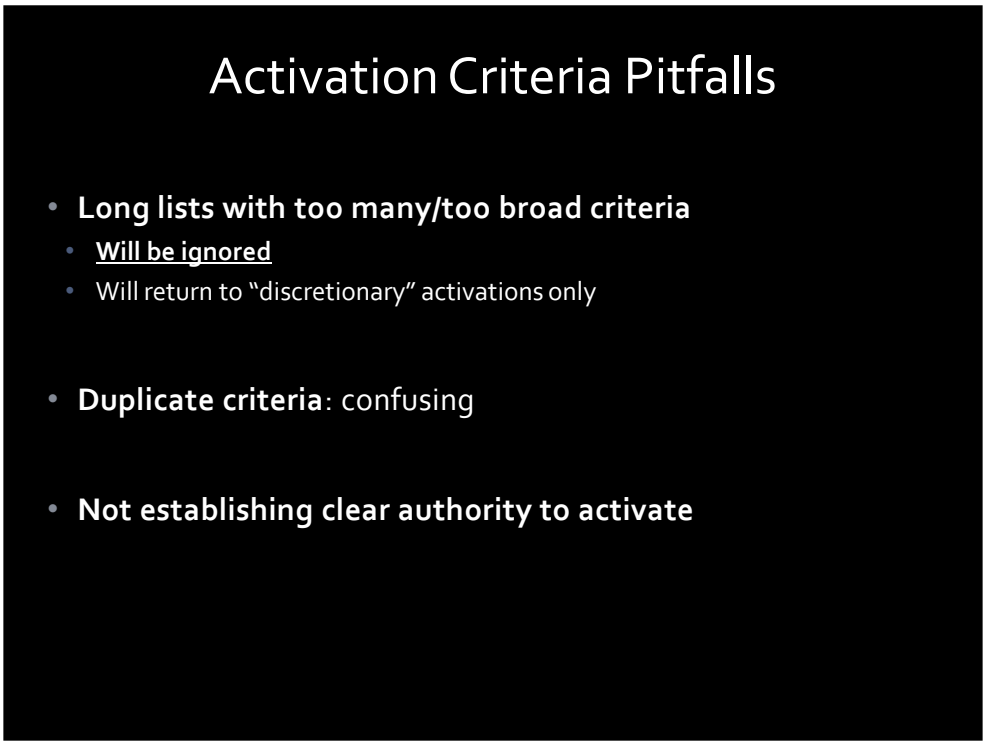
Contact Medical Control, advise of comorbidities for early consideration of activation

CDC Field Triage Decision Scheme



CDC Field Triage Decision Scheme materials can be found on the CDC website


FIELD TRIAGE DECISION SCHEME:
THE NATIONAL TRAUMA TRIAGE PROTOCOL
1
Measure vital signs and level of consciousness
Glasgow Coma Scale < 14 or
Systolic blood pressure < 90 or
Respiratory rate < 10 or > 29 (< 20 in infant < one year)
YES
NO
Take to a trauma center. Steps 1 and 2 attempt to identify the most seriously injured patients. These patients should be transported preferentially to the highest level of care within the trauma system.
Assess anatomy of injury
2
All penetrating injuries to head, neck, torso, and extremities proximal to elbow and knee
Flail chest
Two or more proximal long-bone fractures
Crushed, degloved, or mangled extremity
Amputation proximal to wrist and ankle
Pelvic fractures
Open or depressed skull fracture
Paralysis
YES
NO
transported preferentially to the highest level of care within the trauma system.
evidence of high-energy impact
3
Falls
Adults: > 20 ft. (one story is equal to 10 ft.)
Children: > 10 ft. or 2–3 times the height of the child
High-Risk Auto Crash
Intrusion: > 12 in. occupant site; > 18 in. any site
Ejection (partial or complete) from automobile
Death in same passenger compartment
Vehicle telemetry data consistent with high risk of injury
Auto v. Pedestrian/Bicyclist Thrown, Run Over, or with Significant (> 20 MPH) Impact
Motorcycle Crash > 20 MPH
YES
NO
Transport to closest appropriate trauma center, which depending on the trauma system, need not be the highest level trauma center.
Assess special patient or system considerations
4
Age
Older Adults: Risk of injury death increases after age 55
Children: Should be triaged preferentially to pediatric-capable trauma centers
Anticoagulation and Bleeding Disorders
Burns
Without other trauma mechanism: Triage to burn facility
With trauma mechanism: Triage to trauma center
Time Sensitive Extremity Injury
End-Stage Renal Disease Requiring Dialysis
Pregnancy > 20 Weeks
EMS Provider Judgment
YES
NO
Contact medical control and consider transport to a trauma center or a specific resource hospital.
Transport according to protocol
When in doubt, transport to a trauma center.
For more information, visit: www.cdc.gov/FieldTriage
U.S. Department of Health and Human Services
Centers for Disease Control and Prevention
CDC
Unknown Zone



Be aware of the organizational pitfalls that can derail effective use of TT Activation Criteria.

Activation Criteria Pitfalls

- Criteria not known to/accessible by all -
- Where are they? Posted? Buried? Lost?

- No periodic review/evaluation/revision of criteria:
  - review all activations to be sure criteria work
  - review non-activations for appropriateness
  - revise your criteria to fix what's not working

Activation Criteria Pitfalls

- **Too many Scores**; hard to calculate

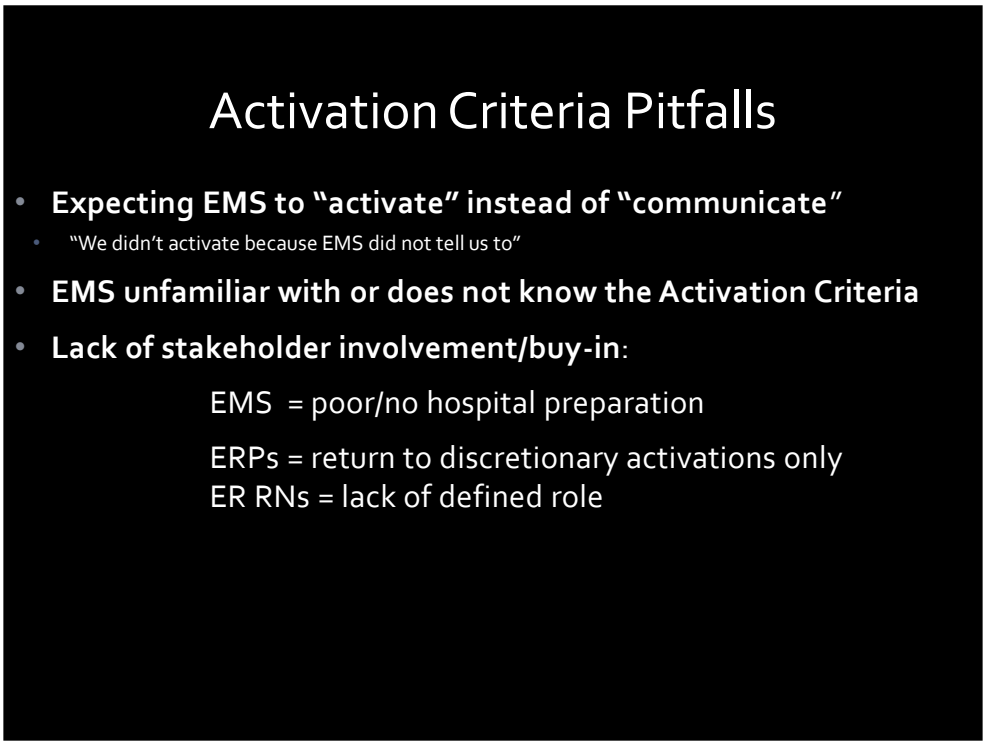
  DELETE Revised Trauma Score for TTA:

  - Gained popularity as field trauma triage method for assessing patient severity
  - Well-established predictor of MORTALITY
  - Lack of primary evidence supporting use as primary triage tool & as predictor for outcomes other than mortality

  Complex, difficult to use in field

- ONLY score to use is the GCS

  AVPU too limited/need evaluation over time



Once again, while it is essential that EMS is knowledgeable in the Trauma Team Activation criteria and uses it to consistently notify the hospital early in the call to maximize advance preparation for the trauma patient, EMS is NOT responsible to activate the hospital team.

As EMS and hospital staff begin to work more closely together, establishing trust and effective communication, notification from the field that EMS is caring for an injured patient who meets activation criteria will result in appropriate and effective activations. It is important staff and providers recognize it is their decision to activate the team and assemble their resources whether EMS "tells them to" or not.

An important part of Performance Improvement is the process of reviewing all activations for appropriateness (including communication), making sure EMS & the hospital are working together and identifying opportunities for improvement.

If any of the "links" in the process are not fully engaged or participating, it's important to find those reasons and fix them.

Activation Criteria Pitfalls

- **Not activating when patient meets physiologic and/or anatomic criteria**
  - = **Under triage**
- **Using mechanism of injury and co-morbidities without clinical indications of patient status to activate**
  - = **Over triage**
- **Not addressing lack of activation when indicated**

In order to keep Trauma Team Activation effective, both Undertriage and Overtriage need to be tracked. Not activating when we should and activating when we don't need to can both undermine the process quickly.
If criteria to activate aren't working, they need to be revised.

What if we have criteria but are not consistently activating?

- Look at reasons:
  - Criteria too complex/lengthy/confusing?
  - Too many over-triage activations?
  - Not enough physician buy-in?
  - Not enough "trust" w/EMS reports for accuracy?
  - EMS not playing?
  - Not enough administrative support?

It's important to identify reasons for not activating when a patient meets our criteria and address those reasons.

Levels of Activation Response

Larger Facilities with more patient volumes & resources

(Level I, II, III, MT Regional/Area):

Three levels:

- Trauma Alert/Full: Activation of full team w/immediate response of: surgeon, OR crew, Anesthesia & time of response
- Trauma Standby/Partial: Activation of portion of team w/ secondary response of surgeon, expected time of response longer
- Trauma Consult/Evaluation: General surgeon to examine patient, time not specific

Trauma Team Activations may be implemented in different levels, based on volumes of patients and the size/resources of the facility.

Activation Response

Level III/IV (Area/Community)

Two Levels:

- Trauma Alert/Full: Activation of full team w/immediate response of: surgeon and OR/Anesthesia if available, time-specific
- Trauma Standby/Partial: Activation of portion of team; may not require calling in staff not currently in the hospital

ACS Level III/IV/Montana Area or Community Trauma Hospitals may utilize two levels of Trauma Team Activation

Activation Response

Level III/IV (Community/Trauma Receiving Facility)

One Level:

- Trauma Team Activation: All identified Trauma Team members to immediately respond

ACS Level III/IV and Montana Community and Trauma Receiving Facilities may use a single level “all hands on deck” approach for Trauma Team Activation.

Documentation

- Effective Documentation - *ALWAYS AN ISSUE*
- Complete, accomplished in "real time",
- Accessible to staff, accurate, legible
- Ready to go with the patient when they go
- "Tells the entire story"
  - Time of interventions with response to interventions
  - I/Os, meds, imaging, VS, etc.
- Provides opportunity for evaluation of care processes so opportunities for improvement can be identified and action plans developed

Documentation is an ongoing issues for ALL facilities, EVERYWHERE. While documentation is important, other issues demand staff attention during patient resuscitation and scarce resources may mean documentation is incomplete. The mantra everyone hears about the importance of documentation is "if it wasn't documented, it wasn't done". While this is certainly true and there is legal risk involved as a result, it is simply not a truly compelling argument for the person providing care at the bedside.
A more effective approach for patient care staff is to emphasize that complete documentation really provides them with deserved credit for good care. Without complete documentation, it is difficult (if not impossible) to evaluate the care provided or identify opportunities for improvement.

Documentation

- Trauma Flowsheets
  - Most facilities document traumas on paper as computer programs are complicated/cumbersome
  - Forms organized to flow with the care of the patient
  - Provide "cues"/reminders as to what should be documented
  - Comprehensive, user-friendly, staff-designed
  - Accessible: kept where staff will USE them
  - "Tells the story"
- Pitfalls: too complex, not user-friendly, too much detail, imposed on staff, kept "elsewhere", not organized to the flow of care

What promotes effective, complete documentation for an injured trauma patient? The Trauma Flowsheet.

Many good examples exist. Involve clinical staff to "cut and paste" examples to design a comprehensive form that works for THEM. Implementing a form without staff support and "buy-in" means CERTAIN failure of that form.

Trauma flowsheets that are NOT utilized are too complicated, don't flow well, designed by someone who doesn't use them and not kept where staff can easily access them.

Electronic Medical Records present different issues. Episodic critical care (Medical or Trauma resuscitations) requires "real-time" documentation for accuracy. EMR documentation is extremely difficult to implement "as it happens" and often requires "re-construction" of events sometime later. For that reason, the American College of Surgeons strongly recommends that Trauma Team Activations be documented on paper Trauma Flowsheets and NOT in the EMR formats. Often, trauma patients must be transferred to higher/different levels of care. EMS & ED documentation must accompany the patient wherever they are transferred to.

Education

- Activation criteria
- Roles & responsibilities of team members
- Development of teamwork
- Communication & documentation
- Equipment, supplies and medications;
- Storage, usage, procedures
- Specific injury management
- Transfer procedures & documentation
- "Mock Trauma" practices
- Case reviews & PI: How did we do?

  Were good decisions made & actions taken?

Education for all team members (including EMS) needs to consist of many components. This cannot be over-emphasized. Strides made managing trauma patients well as a team can be replicated for any other type of "time-sensitive" patient.

“When we became better at managing trauma patients, we became a better ER and a better hospital”
- Kirby Peden, MD

TEAM Course conducted in Circle, MT being instructed by Kirby Peden, MD


Together Everyone Achieves More
As each goose flaps its wings,
it creates an uplift for the birds that follow
By flying in a V-formation, the whole flock
adds 71% greater flying range than if each flew alone
"Communication + Co-Operation = Success"

Resources

- EMS & Trauma Systems:

http://dphhs.mt.gov/publichealth/EMSTS/traumasystems/tcresources.aspx

- CDC Field Triage Decision Scheme: the National Trauma Triage Protocol
- FREE wall chart, written guide &pocket card

  http://www.cdc.gov/FieldTriage/
- American College of Surgeons "Orange Book"
- Barach, Paul, and M. Weingart. "Trauma team performance." *Trauma: Resuscitation, anesthesia, surgery, and critical care. New York: Marcel Dekker, Inc* (2003): 96-150.
- American College of Surgeons Committee on Trauma ATLS 9th ed. 2012

Many resources are available to help you with this process.