Northern Virginia Emergency Medical Services Council
Prehospital and Inter-hospital
Regional Trauma Triage Plan 2021-2024

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Revised and Approved December 16, 2021
Revised and Approved February 16, 2023

Table of Contents

Northern Virginia Executive Summary

Trauma centers and the system that supports them can save lives and allow individuals who have sustained traumatic injuries to return to productive lives. Trauma systems can lessen death and disability because of their emphasis on getting the injured patient to the appropriate level of care without delay. Recognizing the complexity of Virginia's variability in demographics and geography, the State Trauma Triage Plan has been designed to set a template for the regional EMS councils to develop, monitor, and revise a regionalized trauma triage plan.

The Statewide Trauma Triage Plan establishes minimum criteria for identifying trauma patients and the expectation that these patients shall enter the "trauma system" and receive rapid definitive trauma care at appropriate hospitals. Regional trauma triage plans may augment the Commonwealth's minimum trauma triage standards by providing additional point of entry information such as hospital capabilities, air medical services, and others.

The Virginia Trauma System is an inclusive system, and therefore all hospitals are required to participate in the Trauma Triage Plan. Establishing a comprehensive statewide emergency medical care system, incorporating healthcare facilities, transportation, human resources, communications, and other components as integral parts of a unified system serves to improve the delivery of emergency medical services and thereby decrease morbidity, hospitalization, disability, and mortality. This document will provide a uniform set of criteria for prehospital and inter-hospital triage and transport of trauma patients.

The Northern Virginia EMS Council's Regional Trauma Triage Plan reflects the concept of an inclusive trauma care system in which every health care provider or facility with resources to care for the injured patient is incorporated. Input from each of the key participants at each stage of trauma system decision-making is essential to establishing a workable system. Effective trauma systems require clear integration of all components in each phase of care and draw upon the capacity of health care providers to reduce mortality and disability regardless of the severity of the injury involved.

An inclusive trauma care system not only incorporates provisions for designated trauma centers to care for the most severely injured patients but also recognizes the importance of other acute care facilities within a trauma system in caring for less severely injured patients. Our goal of an inclusive trauma care system is to match each trauma care facility's (or provider's) resources to the needs of injured patients so that every patient receives optimal care from the initial recognition of the injury through return to the community.

The Northern Virginia regional trauma system consists of hospitals, EMS personnel, and public service agencies that have a pre-planned response to caring for injured patients. This includes the use of coordinated communication mechanisms, accurate identification of the level of care needed for an injured patient, rapid transport to the appropriate care facility, and integration of support and rehabilitative services designed to return the patient in a productive way back to the community.

The Commonwealth of Virginia Department of Health, Office of EMS (OEMS) shall be the State lead agency which is ultimately responsible for coordinating trauma system

design, as well as establishing the minimum standards for system performance and patient care. See Appendix A – State Executive Summary for additional information on the State Trauma Triage Plan.

Within the Northern Virginia region, implementation of the trauma care system plan shall be under the direction of the Northern Virginia EMS Council through the Council's Regional Trauma System Committee.

The region's common goal is **to provide the optimal level of care for injured persons in our community**.

Northern Virginia Vision

Patients in the Northern Virginia EMS region:

- will be promptly entered into the emergency medical services system, when appropriate, by knowledgeable family members or bystanders through the universal enhanced 9-1-1 emergency telephone number or other appropriate means
- will be assisted and reassured by family members or bystanders until emergency medical assistance arrives through guidance provided by trained emergency medical dispatchers with specific emphasis on the maintenance of a viable airway, bleeding control, and the prevention of further injury
- will receive prompt at-scene treatment and stabilization by trained first responders and emergency medical personnel in accordance with local medical protocols and the statewide trauma scene criteria
- will receive prompt transportation to the most appropriate emergency department or most appropriate trauma center utilizing ground and/or air transportation
- will be promptly transported or transferred to the most appropriate trauma center as injuries warrant
- will be promptly and appropriately treated and stabilized in the emergency department or trauma center setting and moved to the appropriate critical care unit for continuing care as necessary
- will receive continuing care and rehabilitation in such a manner as to provide for the highest opportunity for a complete recovery in the shortest time frame possible

This vision can only be realized with the active involvement of the general public, public safety dispatchers, first responder agencies and personnel, public and private emergency medical services agencies and personnel, hospital administrators, physicians, nurses, and the many technicians involved in the daily care of the injured patient. The Northern Virginia Regional Trauma System Committee will conduct quarterly reviews to monitor system efficacy and effectiveness. The Committee recognizes the importance of ongoing education for providers and the community in injury prevention and trauma care.

Definition of Trauma and a Trauma Patient

The Joint Legislative Audit and Review Commission's (JLARC) report on trauma centers states the following: "trauma refers to injuries that are caused by external forces applied to the body either deliberately or unintentionally. Injuries associated with a motor vehicle and motorcycle crashes or falls can be categorized as blunt, instead of penetrating injuries that result from foreign objects such as knives or bullets passing through body tissue. A broad array of diagnoses can be labeled as traumatic injuries, but their severity can range widely, from a simple arm fracture to irreversible brain injury. The injury severity score (ISS) is the standard methodology used by the medical community to capture whether a patient is severely injured or not."

A trauma patient may be defined as a person who has acquired serious injuries and/or wounds brought on by either an outside force or an outside energy. These injuries and or wounds may affect one or more body systems by blunt, penetrating, or burn injuries. These injuries may be life-altering, life-threatening, or ultimately fatal.

The region has a two-tiered system for the recognition of a trauma patient.

- Initial field triage in the prehospital environment (prehospital criteria), and;
- Secondary triage or trauma patient recognition and appropriate, timely triage by all Virginia hospitals

The purpose of the Regional Trauma Triage Plan is to establish prehospital and hospital criteria for the purpose of identifying the trauma patient. In the Northern Virginia region, the best point of entry into the trauma system is through the enhanced 911 call centers with rapid transport by an effective and efficient prehospital system. Many factors such as geography, hospital capabilities, air medical services, and others will help to guide to where the identified trauma patient will be transported or transferred.

Field Trauma Triage Decision Scheme

The Virginia scheme was developed by members of the Emergency Medical Service Advisory Board's (EMS Advisory Board), Trauma and Administrative Governance (TAG) Committee with input from the Medical Direction Committee. The CDC *Field Triage Decision Scheme: The National Trauma Triage Protocol* was utilized as the basis for the development of the Virginia scheme.

The Virginia scheme differs from the CDC scheme in two ways. First, Steps One and Two replace the term "transported preferentially to the highest level of care within the trauma system" with "transported preferentially to a Level I and Level II trauma center." Level I and Level II trauma centers are the highest level of trauma care in Virginia. The second difference is between Steps Three and Four. The CDC language that states: "transport to the closest appropriate trauma center" was changed to "transport to the closest appropriate hospital." This was done to accommodate for the fact that the CDC document was created with consideration for systems that have Level IV and Level V trauma centers, which Virginia does not have.

Note: Prehospital providers should generally transfer trauma patients with persistent airway compromise, or if there is CPR in progress, to the closest hospital for stabilization and transfer.

The Medical Direction Committee of the EMS Advisory Board requested that the following statement from page 23 of the CDC's *Guidelines for Field Triage of Injured Patients; Recommendations of the National Expert Panel on Field Triage* be included in this document:

> Transition from Step Three to Step Four of Field Trauma Triage Decision Scheme: The answer of "yes" at Step Three of the Decision Scheme mandates transport of the patient to the closest appropriate trauma center, not necessarily to a center offering the highest level of trauma care available, as is the case in Steps One and Two. Which center is the most appropriate at any given time will depend on multiple factors, including the level of trauma center readily available, the configuration of the local or regional trauma system, local EMS protocols, EMS system capacity and capability, transport distances and times, and hospital capability and capacity. Patients whose injuries meet mechanism-of-injury criteria, but not physiologic or anatomic criteria do not necessarily require the highest level of care available. At the time of evaluation, these patients are hemodynamically stable, have a GCS of >14, and have no anatomic evidence of severe injury. Their risk lies only in the mechanism by which they were injured. Thus, they require evaluation but do not need immediate transport by EMS providers to a Level I or Level II facility. If a severe injury is identified at the initial hospital evaluation, these patients may be transferred subsequently to a higher level of trauma care. For patients who do not meet Step Three criteria, the EMS provider should proceed to Step Four of the Scheme (Centers for Disease Control and Injury Prevention, 2009, p. 23).

To review the above information, the evidence supporting the guideline, and other detailed information about the rationale for field trauma triage, the reader is referred to the document *"Guidelines for Field Triage of Injured Patients, Recommendations of the National Expert Panel of Field Triage."* The document was released by the Centers for Disease Control and Injury Prevention via the Morbidity and Mortality Weekly Report (MMWR) on January 23, 2009 / Vol. 58 / No. RR-1. This report and other resource materials are available online at http://www.cdc.gov/FieldTriage/ .

Table 1 - Virginia Field Trauma Triage Decision Scheme

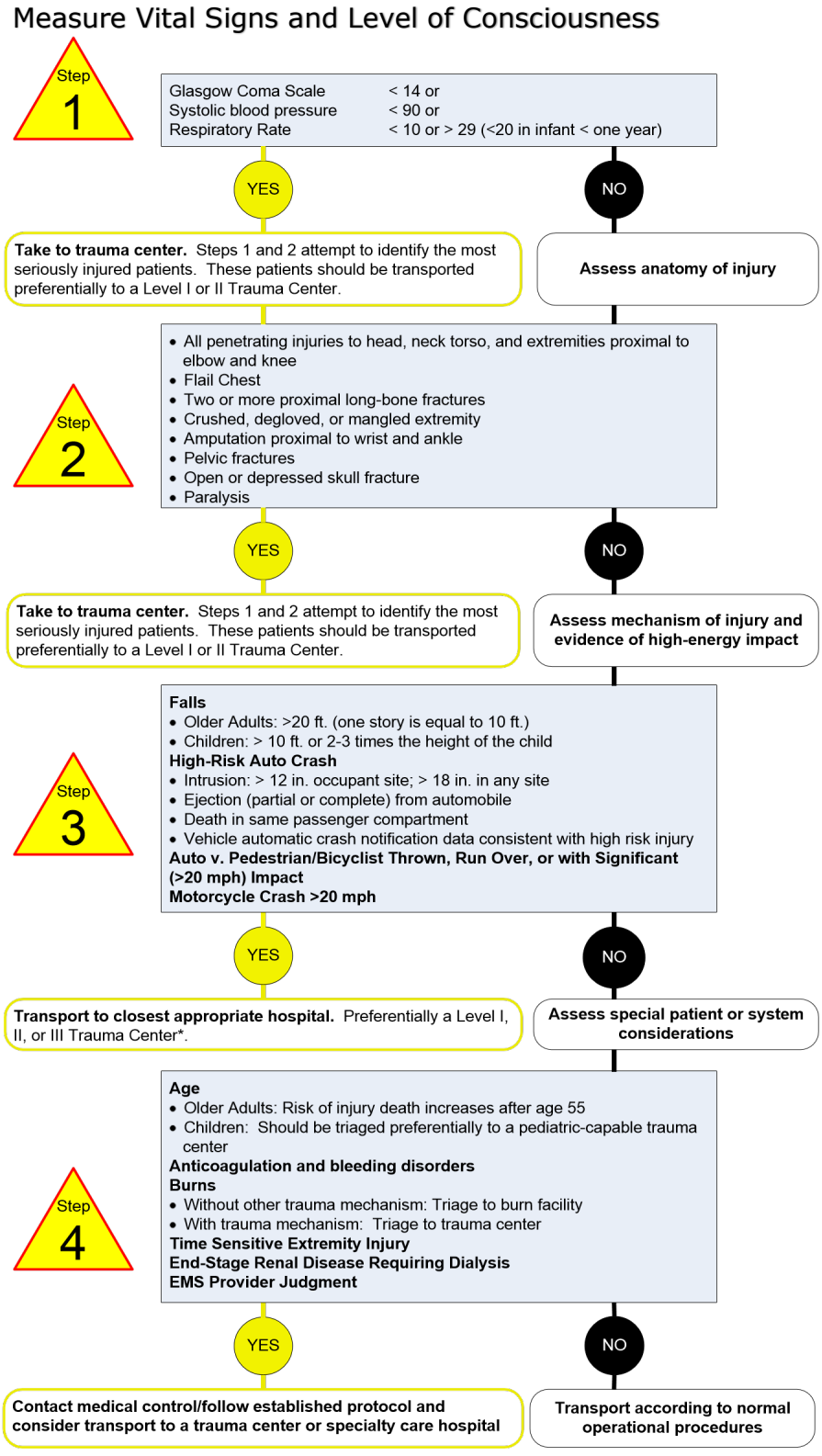

Table 2 – Inter-Hospital Triage Criteria

Hospitals not designated by the Virginia Department of Health as a Trauma Center should enter injured patients that meet the below physiological and/or anatomic criteria into the trauma system (rapid transfer to an appropriate level designated Trauma Center)

Adult Patient	Pediatric Patient
	Pediatric Trauma Score ≤ 6. * See pediatric trauma score on next page
Respiratory Bilateral thoracic injuries Significant unilateral injuries in pt's>60 (e.g. pneumothorax, hemopneumothorax, pulmonary contusion, >5 rib fractures). Significant unilateral injuries in patients with pre-existing cardiac and/or respiratory disease. Respiratory compromise requiring intubation. Flail chest.	**Respiratory** Bilateral thoracic injuries Significant unilateral injuries in patients with pre-existing cardiac and/or respiratory disease. Flail chest.
CNS (Central Nervous System) Unable to follow commands. Open skull fracture Extra-axial hemorrhage on CT, or any intracranial blood. Paralysis Focal neurological deficits GCS ≤ 12	**CNS (Central Nervous System)** Open skull fracture Extra-axial hemorrhage on CT. Focal neurological deficits
Cardiovascular Hemodynamic instability as determined by the treating physician. Persistent hypotension. Systolic B/P <100 without immediate availability of surgical team	
Injuries Any penetrating injury to the head, neck, torso or extremities proximal to the elbow or knee without a surgical team immediately available*. Serious burns or the combination of trauma with burns. Significant abdominal to thoracic injuries in patients where the physician in charge feels treatment of injuries would exceed capabilities of the medical center.	**Injuries** Any penetrating injury to the head, neck, chest abdomen or extremities proximal to the knee or elbows without a surgical team immediately available. Any injury or combination of injuries where the physician in charge feels treatment of the injuries would exceed the capabilities of the medical center. Combination of trauma with burn injuries.
Special Considerations Trauma in pregnancy (≥24 weeks gestation) Geriatric Bariatric Special Needs Individuals	

***Prehospital providers and local hospitals need to be aware of regional and/or local protocols that deal with issues of where to transport patients with uncontrolled airway, uncontrolled hemorrhage or if there is CPR in progress in the trauma patient.**

Pediatric Trauma Score

COMPONENT	+2	+1	-1
Size	Child/adolescent, >20 Kg.	Toddler, 11-20 Kg.	Infant, <10 Kg.
Airway	Normal	Assisted O2, mask, cannula	Intubated: ETT, Cricothyrotomy, Supraglotic or simple airway adjuncts, or assisted ventilations.
Consciousness	Awake	Obtunded; loss of consciousness	Coma; unresponsiveness
Systolic B/P	>90 mm Hg; good peripheral pulses, perfusion	51-90 mm Hg; peripheral pulses, pulses palpable	<50 mm Hg.; weak pulse rate or no pulses
Fracture	None seen or suspected	Single closed fracture anywhere	Open, multiple fractures
Cutaneous	No visible injury	Contusion, abrasion; laceration <7 cm; not through fascia	Tissue loss; any GSW/Stabbing; through fascia

Burn Related Injuries

The American Burn Association has identified the following injuries that usually require referral to a burn center.
• Partial thickness and full thickness burns greater than 10% of the total body surface area (BSA) in patients under 10 or over 50 years of age. • Partial thickness burns and full thickness burns greater than 20% BSA in other age groups. • Partial thickness and full-thickness burns involving the face, eyes, ears, hands, feet, genitalia or perineum of those that involve skin overlying major joints. • Full-thickness burns greater than 5% BSA in any age group. • Electrical burns, including lightning injuries; (significant volumes of tissue beneath the surface may be injured and result in acute renal failure and other complications). • Significant chemical burns. • Inhalation injuries. • Burn injury in patients with pre-existing illness that could complicate management, prolongs recovery, or affect mortality. • Any burn patient in whom concomitant trauma poses an increased risk of morbidity or mortality may be treated initially in a trauma center until stable before transfer to a burn center. • Children with burns seen in hospitals without qualified personnel or equipment for their care should be transferred to a burn center with these capabilities. • Burn injury in patients who will require special social and emotional or long-term rehabilitative support, including cases involving child abuse and neglect.

Trauma Patient Transport Considerations

EMS Patient Care Protocols must address transport considerations. Each jurisdiction is unique in its availability of trauma resources. Consideration should be given to the hospital(s) that is/are available in the region and the resources that they have available to trauma patients when developing a point of entry plan. Pre-planning for times when the primary hospital is not available to receive trauma patients because of multiple patients, diversion, or loss of resources such as electric power need to be made in advance of being on the scene with a critical trauma patient.

Consideration should also be given to prehospital resources, including the level of care available by the ground EMS crews, the closest appropriate Medevac service [Helicopter EMS (HEMS)] available at the time of the incident, and other conditions such as transport time and weather conditions. The use of Medevac services can assist with trauma patients reaching definitive trauma care in a timely fashion.

The developers of this Plan identified the following criteria to initiate field transports by helicopter of trauma patients as defined in this Plan. Field transport of trauma patients by helicopter would be expected to:

1. Lessen the time from on scene to a hospital compared to ground transport;
2. Bypass a non-trauma designated hospital to transport directly to a trauma center in not greater than 30 minutes;
3. Meet the clinical triage criteria for transport to the closest Level I or Level II Trauma Center, or when appropriate, the closest Level III Trauma Center;
4. Meet the greater level of care needed by the patient, provided that the Medevac unit can be on scene in a time shorter than the ground unit can transport to the closest hospital; and/or,
5. Document extenuating circumstances such as safety, egress/access similar to other "extraordinary" care scenarios.

Inter-Hospital Transports by Helicopter

The developers of this Plan determined that any one or more of the following criteria should be met in order to initiate inter-hospital transports by helicopter of trauma patients as defined in this Plan:

1. All trauma patients meeting the inter-hospital triage criteria as identified in Table 2 and being transported by helicopter must be transferred to the closest appropriate Level I or Level II trauma center or burn center.
2. Patient requires a level of care greater than can be provided by the local hospital.
3. Patient requires time critical intervention, out of hospital time needs to be minimal, or distance to definitive care is long.
4. Utilization of local ground ambulance leaves local community without ground ambulance coverage.

Point of Entry Plan

Major Trauma Transport Considerations

The Northern Virginia region has a large population in a relatively small geographic area (1,328 square miles). It is a mix of urban, suburban, and rural areas. A significantly large number of commuters adds to the daytime population, and traffic congestion makes it very difficult to transport a patient to the most appropriate hospital rapidly.

Several interstate highways cross the region, five military installations, including the Pentagon, one national and one international airport within Northern Virginia, and a metro and interstate rail system. The Potomac River surrounds much of the landmass. Several significant tourist attractions, such as Arlington Cemetery, Manassas National Battlefield, and Potomac Mills Shopping Center, also add to the daytime population. The construction of new homes and businesses is expanding tremendously.

Ground transportation resources include the following:

1. Fire-based agencies
2. Fire/EMS municipal agencies
3. Combination and Volunteer agencies
4. Private ambulances

Ambulances are dispatched via the jurisdictions' enhanced 911 call centers. A call is received, an emergency is defined, and necessary resources are dispatched.

Current transportation/destination policies require patients to be transported to the most appropriate hospital. These policies are written and approved by the agency's Operational Medical Director (OMD). ***The patient transport destination decision to a level I trauma center will rest with the local OMD with consideration given to time and distance traveled.***

For inter-facility transports, all regional hospitals follow COBRA and EMTALA regulations.

Mass Casualty Incident Regional Emergency Preparedness

The Northern Virginia regional trauma system recognizes the need to prepare for mass casualty events. With the region's proximity to Washington, DC, the Pentagon, and other federal and military facilities, terrorist attacks have become a reality. Given the region's large population in a relatively small geographic area and its many interstate highways and train routes transporting hazardous materials daily, the regional response system must be ready for any large-scale event.

A major component of any large-scale response is communications. There is an established communication mechanism through the NV Regional Hospital Coordinating Center (RHCC) with the EMS agencies within Northern Virginia that provides information on a timely basis on hospital bed availability throughout the region and links all the hospitals with up-to-date information. RHCC is activated by EMS as defined in the RHCC Activation Protocol.

The Northern Virginia EMS agencies follow the Regional Mass Casualty Incident Response Plan, the same Plan used throughout the National Capital Region (NCR).

These plans represent a tiered response to growing numbers of patients:

- MCI Plan/Disaster Response Plan
- Surge Capacity Plans

The plans build upon one another. The Regional Trauma Plan is intended to guide treatment for a smaller number of patients that can be managed by resources available during normal day-to-day operations. The Regional MCI/Disaster Response Plan provides additional guidance to agencies, municipalities, and medical facilities when their regular resources are strained or overwhelmed. The Regional Surge Plan was developed to meet the needs of large-scale events that may require caring for hundreds, even thousands, of patients.

NoVA Regional Hospital Coordination Center (RHCC) EMS Activation Protocol

Purpose: One of the responsibilities of the NoVA RHCC is to coordinate with EMS personnel to ensure the timely and appropriate distribution of patients to Northern Virginia Hospital Alliance member facilities, including both acute-care hospitals and freestanding emergency care centers; and to improve the communication between field personnel and receiving hospitals. The goal of this coordination is to match patients to the most appropriate hospital resources, based on the circumstances of the event, in a timely and efficient manner.

Scope: The RHCC will be notified to activate in support of EMS agencies in Northern Virginia for incidents meeting **ANY** of the following criteria:

1. A single, non-HAZMAT event in NoVA, involving (10) or more patients that will require transportation to an NVHA hospital; and/or where (3) or more NVHA hospitals are to receive patients
2. A single HAZMAT event in NoVA involving (3) or more patients that will be decontaminated in the field by EMS before being transported to an NVHA hospital
3. An event in NoVA involving a suspected or confirmed Category A biological agent
4. A NoVA Fire/EMS agency has activated an Urban Search & Rescue Team for an event occurring in the National Capital Region
5. A NoVA Fire/EMS agency has activated a Mass Casualty Unit, Task Force, or equivalent for an event occurring in the National Capital Region.
6. A NoVA EMS agency has accessed and/or requested a CHEMPACK or MMRS Rx cache
7. A NoVA Emergency Operations Center (EOC) has activated and staffed the Health & Medical Services (ESF 8) function

Procedures:

1. If an incident occurs that meets the criteria enumerated under the SCOPE, an appropriate Fire/EMS agent will immediately contact the RHCC at;

   (1) ***Phone:*** 888-987-RHCC (7422); or

   (2) Medcomm Talk Group *For Hospital and Public Health Use Only*
   Alexandria ..... Zone **14** Channel **1** (H1 RHCC4)
   Arlington ..... Zone **5** Channel **10** (H RHCC4), Channel **11** (H RHCC6)
   Fairfax ..... Zone **14** Channel **1** (49A RHCC4), Channel **16** (49P RHCC6)
   Prince William ..... Zone **11** Channel **1** (9*A RHCC4), Channel **16** (9P RHCC6)
   Loudoun ..... Zone **69** Channel **2** (B RHCC6) – New APX radios
   MWAA ..... Zone **21** Channel **11P** (RHCC 4)

2. The appropriate agent[1] will request the immediate support of the Regional Hospital Coordination Center (RHCC) via Phone or Radio per the communication mechanisms listed in (1);

3. The appropriate EMS agent will provide RHCC staff the following information if known:
   - Total number of patients/casualties (actual and/or estimate)
   - Location and jurisdiction of the incident
   - Type of incident (i.e., explosion, major car accident, chemical fire)
   - A telephone number (or Radio Talk Group) and Point of Contact from the agency contacting the RHCC to be for ongoing communication
   - A Casualty Assessment (i.e., number of red/immediate, yellow/delayed, and green/minor patients)
   - The exact support needed from the RHCC
   - Product information, if known, in HAZMAT incident
   - Level of decontamination provided on-scene, if known, in HAZMAT incident
   - The radio channel and/or phone number to use for ongoing communications during the event

4. The information listed in (3) will be immediately conveyed by the RHCC to regional hospitals[2] as detailed in the RHCC activation procedures outlined in the Northern Virginia Regional Hospital Emergency Operations Plan (RHEOP);

5. The RHCC will gather from all NVHA hospitals their immediate casualty capacity information (i.e., the number of red/immediate, yellow/delayed, and green/minor patients they could manage within the next 30 minutes). This information will be collected and relayed to the appropriate EMS field officer (i.e., Medical Communications Coordinator) within 10 minutes of activation to assist with patient disposition.

6. Final hospital destination decisions will be decided by an appropriate EMS field officer (i.e., Medical Communications Coordinator) in coordination with the RHCC. At a **minimum**, the EMS field officer will relay to the RHCC the following information for each transporting unit, preferably BEFORE the unit leaves the scene:

   a) Unit Number
   b) Destination facility
   c) Number and Category[3] of patients on the unit (with notice for peds)

7. The RHCC will relay information provided in (6. a-c) to the designated receiving facilities via pre-established communication channels;

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[1] The individual who constitutes an "appropriate agent" is to be determined by each jurisdiction per their standard operating procedures.

[2] **Facilities automatically notified:** Fauquier Hospital, Fort Belvoir Community Hospital, Inova Alexandria, Inova ECC – Fairfax, Inova ECC— Springfield Healthplex, Inova ECC— Ashburn , Inova ECC – Cornwall, Inova ECC—Reston, Inova Fair Oaks, Inova Fairfax Hospital, Inova Mt. Vernon, Inova Loudoun Hospital, Mary Washington Hospital, Reston Hospital Center, Sentara NV Medical Center, StoneSprings Medical Center, UVA Haymarket Medical Center, UVA Prince William Hospital, Virginia Hospital Center, DC Children's Clearinghouse (DC & Suburban Maryland Hospitals) and Winchester Medical Center (if the event is located in Loudoun)

[3] i.e., Red, Yellow, Green

8. The appropriate EMS officer (i.e., Medical Communications Coordinator) will keep the RHCC informed of major developments on the scene that could affect Northern Virginia Hospitals. Likewise, the RHCC will keep the designated EMS officer apprised of all major changes to the status of Northern Virginia Hospitals. All requests for on-scene support from Northern Virginia Hospitals (i.e., additional equipment, supplies, on-scene physician/nursing support, etc.) will be directed through the RHCC and not individual hospitals;

9. The appropriate EMS officer (i.e., Medical Communications Coordinator) will notify the RHCC when the scene incident has been demobilized and/or the last patient has been transported off-site;

10. At the conclusion of the scene incident, the designated EMS Branch Director or designee will cross-check their patient transfer information with the RHCC. The RHCC will be responsible for cross-checking their patient transfer information with all of the receiving facilities. A copy of the final incident/transport record will be sent to the affected jurisdictional Fire and Rescue Department and a copy maintained in the RHCC records for a minimum of 7 years.

Version 7.3

For additional information contact:

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Regional Trauma Triage Quality Monitoring
(Performance Improvement Committee)

The Northern Virginia Regional Trauma Systems Committee shall be the Trauma Performance Improvement Committee for the region. It shall meet quarterly to review the regional trauma system's efficacy and effectiveness using four modalities:

1. Inappropriate triage
   - severely injured patient being transported to a non-trauma center
   - non-severely injured patient being transported to a trauma center

2. Inappropriate use of helicopter services

3. Inter-facility transfer

   - refusal of transfer
   - misinformation of clinical presentation leading to incorrect transfer
   - inadequate stabilization of patients for transfer
   - delay in transfer

4. Trauma deaths
   - why
   - could anything else have been done

Measurement will include but not be limited to the following (information captured from hospitals and EMS agencies):
- number of admissions
- number of ED visits
- number of trauma cases
- destinations
- number of inter-facility transports

Methodology – Committee members will share their data quarterly with the Committee.

Review – review of data will be brought by Committee members and discussed. It may include education and remediation, disposition of patients, looking for trends, feedback to agencies and hospitals, and trauma system modification.

Committee Membership - Membership shall include prehospital EMS providers, EMS physicians, ED nurses, Physician Assistants, Nurse Practitioners, air medevac agencies, Trauma Medical Directors, Trauma Program Directors, and other EMS stakeholders.

Rules for the Committee - Committee members shall follow Robert's Rules of Order.

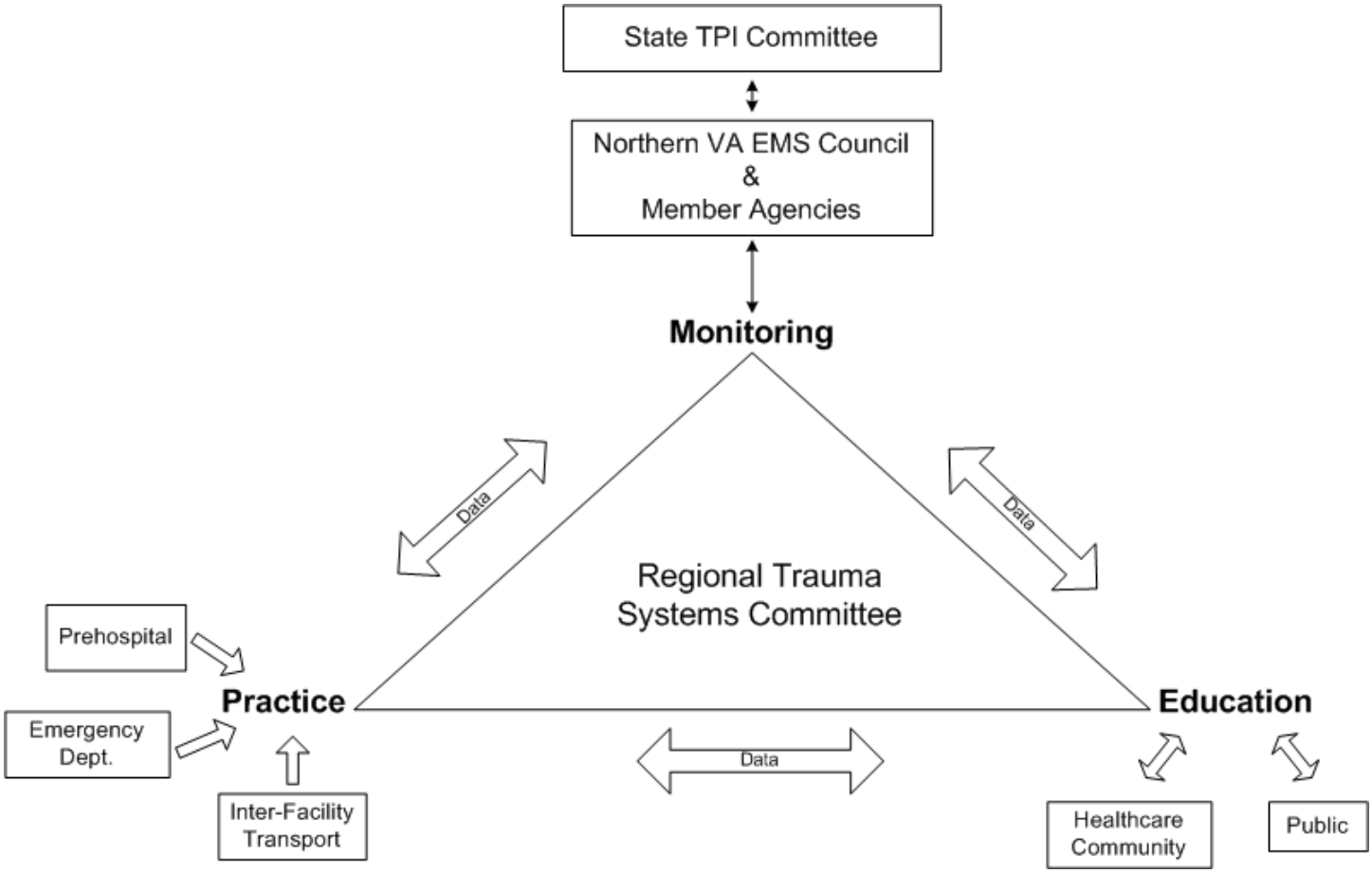
Confidentiality - To maintain the integrity of the Committee and protect patient and provider privacy, each member at all times will maintain strict confidentiality. However, communication with other entities of the system is essential. All reasonable efforts will be taken to sanitize records and maintain patient anonymity.

Schedule and Topics - The Committee shall determine the schedule and topics. The topics could include but are not limited to the review of possible inappropriate triage, use of

helicopters, inter-facility transfers, and trauma deaths. The Committee shall determine the schedule at the beginning of the fiscal year.

In accordance with § 32.1-116.2. of the Code, any such data or information in the possession of or transmitted to the Northern Virginia Regional Trauma Systems Committee shall be privileged and shall not be disclosed or obtained by legal discovery proceedings, unless a circuit court, after a hearing and for good cause shown arising from extraordinary circumstances, orders disclosure of such data.

Northern Virginia Performance Improvement Schematic



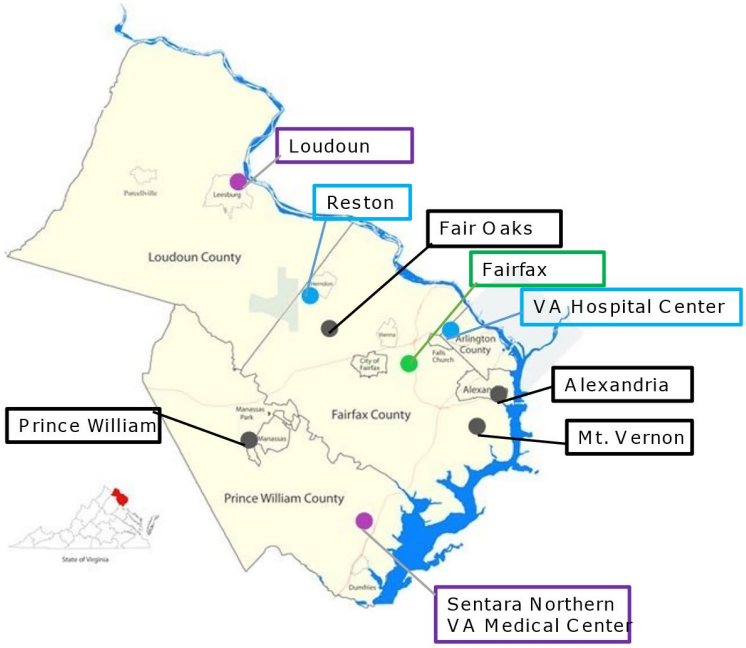
Regional Trauma Centers and Hospitals

In the Northern Virginia region, there is one Level I trauma center located within Northern Virginia – Inova Fairfax Trauma Center in Fairfax County, Virginia. Reston Hospitals and Virginia Hospital Center are Level II trauma centers. Inova Loudoun Hospital and Sentara Northern VA Medical Center are Level III trauma centers. The region also utilizes other trauma centers located in the Washington, DC area. These include MedStar Georgetown University Hospital, MedStar Washington Hospital Center, Children's National Medical Center and Children's National Medical Burn Center, and George Washington University Hospital. In the western Loudoun County area, trauma patients may sometimes be taken to Winchester Hospital, which is a Level II trauma center in the Lord Fairfax region.

The following is a listing of all the hospitals and emergency centers within the Northern Virginia region:

Inova Alexandria Hospital
Inova Emergency Center – Fairfax
Inova Emergency Center – Reston
Inova Fairfax Hospital
Inova Fair Oaks Hospital
Inova Healthplex ER – Ashburn
Inova Healthplex ER - Lorton
Inova Healthplex ER – Springfield
Inova Loudoun Hospital
Inova Loudoun Hospital Cornwall Campus
Inova Mount Vernon Hospital
Reston Hospital
Sentara Northern VA Medical Center
StoneSprings Hospital
UVA Haymarket Medical Center
UVA Prince William Medical Center
Virginia Hospital Center

For the most current listings of Virginia Trauma Centers, go to the Virginia Office of EMS website:https://www.vdh.virginia.gov/emergency-medical-services/trauma-critical-care/virginia-trauma-centers/



Northern Virginia Hospitals

Level 1 Trauma Center
Level 2 Trauma Center
Level 3 Trauma Center
Non-Trauma Center

Regional Demographics

Northern Virginia, as is recognized by the Commonwealth, includes the counties of Arlington, Fairfax, Loudoun, and Prince William; the cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park; and the Metropolitan Washington Airports Authority (Reagan National and Washington Dulles International Airports). There are approximately 5,600 EMS providers. Transport times range from 1 minute to 45 minutes one-way. All of the jurisdictions continually reviewing their current staffing and service levels to ensure adequate resources. The following is a listing of Northern Virginia licensed EMS agencies:

Fire and EMS Agencies

Alexandria Fire Department
Arlington County Fire Department

Falls Church Volunteer Fire Department
City of Fairfax Fire Department
City of Manassas Fire and Rescue
City of Manassas Park Fire Department
DeWitt Army Hospital
Fairfax County Fire and Rescue
Fort Belvoir Community Hospital EMS
Fort Belvoir Fire Department
Loudoun County Fire and Rescue
Aldie Volunteer Fire Department
Arcola-Pleasant Valley Fire Department
Ashburn Volunteer Fire Department
Hamilton Volunteer Fire Department
Hamilton Volunteer Rescue Squad
Leesburg Volunteer Fire Department
Loudoun County Volunteer Rescue Squad
Lovettsville District Fire and Rescue
Lucketts Volunteer Fire Department
Philomont Volunteer Fire Department
Purcellville Volunteer Rescue Squad
Round Hill Volunteer Fire Department & Rescue
Sterling Park Rescue Squad
Sterling Park Volunteer Fire Department
Manassas Volunteer Fire Company
Metro-Washington Airports Authority
Prince William County Department of Fire and Rescue
Buckhall Volunteer Fire and Rescue
Dale City Volunteer Fire Department
Dumfries-Triangle Rescue Squad
Dumfries-Triangle Volunteer Fire Department
Lake Jackson Volunteer Fire Department
Nokesville Volunteer Fire Department & Rescue Squad
OWL Fire Department & Rescue Squad
Stonewall Jackson Volunteer Fire Department & Rescue Squad
Yorkshire Volunteer Fire Department

Private Ambulance Services

AEC Medical Transport & Medical Response
American Medical Response - NOVA
First Med
LifeCare Medical Transports
Lifestar Response
Virginia Medical Transportation, LLC dba Physicians Transport Service

Air Ambulance Services

Aeromedical Transport Specialists

Air Medevac Agencies That Service Northern Virginia

Fairfax County Police Helicopter Division
MedSTAR –Mid-Atlantic Air Transport Service
PHI Air Medical Virginia
U.S. Park Police – EAGLE

Within the Northern Virginia region there exist several Federal military installations. When the regional EMS system is involved with a patient transfer, trauma patients coming from these various facilities are handled in accordance with agreements between the Federal facility and the local EMS system.

Regional Trauma Training

EMS agencies within the Northern Virginia region maintain an appropriate level of training for their prehospital personnel to enable them to make appropriate trauma triage decisions regarding destination and method of transfer of the patient based upon local protocols and in compliance with the Virginia Trauma Plan criteria.

Virginia is using the Virginia EMS Educational Standards Curriculum to train providers at the EMR, EMT, A-EMT, and Paramedic levels. Virginia's levels mirror National Registry levels with the exception of the Intermediate level, which will be nationally phased out. Virginia will retain the Intermediate level as a state ALS level of practice but no longer trains new providers at the Intermediate level.

The minimum standard for all transporting prehospital personnel is the EMT level. Recertification follows Virginia OEMS guidelines. In addition to the above listed courses, additional training in trauma education includes:

- ITLS
- PALS
- PEMSTP
- PHTLS
- Specialized Trauma Courses
- PEPP
- GEMS

Trauma Training for Hospital Personnel includes the following:

- TNCC
- TCAR/PCAR
- BTLS
- ATLS/ATCN
- ENPC
- Specialized Trauma Courses

Continuing Education – At a minimum, all prehospital personnel follow the continuing education requirements of the Virginia OEMS. Hospital personnel follow requirements. The Northern Virginia EMS Council also contains a library of DVDs which may supplement CEU information and helps to sponsor the annual Virginia EMS Symposium where several courses on trauma care are taught. Virginia Continuing Education credits are also available online through several commercial vendors and other allied health professionals in the state.

Regional Communications

All of the communication systems in Northern Virginia use the enhanced 911 public access system. Most of the systems have a second remote site that is fully capable of dispatching calls. Some systems have a 7-digit number that the telephone company can re-route 911 calls which come in on a different system. All are now on the 800 MHz frequency and most of the systems include electronic patient data collection on the scene.

Dispatchers are trained in a nationally recognized Emergency Medical Dispatcher (EMD) Program such as APCO or Medical Priorities Dispatch or use an in-house program approved by the Medical Director. Some systems utilize the police department to dispatch, while others have civilian-trained call takers. All of the systems have medical director oversight.

Bystander care is based upon an EMD program. EMD instructions are provided to non-English speaking persons calling 911. EMD instructions can be provided to deaf and hearing or speech impaired persons via a text telephone (TTY) device.

Community Organizations

There are several groups that interact with the trauma system in the Northern Virginia Region. They include:

MADD
SAFE Kids
NRA
AAA
VDOT
NHTSA
Local CERT Teams

Public Information and Prevention

There are several trauma educational programs targeting injury prevention in the Northern Virginia region. The fire/EMS agencies, the regional trauma centers, and the community hospitals have been providing trauma education for years.

In Northern Virginia, there is a large concentration of highly trained EMS providers and hospitals providing aggressive and continuous injury prevention education to consumers and trauma care education to healthcare providers. These programs include but are not limited to:

- Educational programs such as Survival Skills; Latch Key Program; "Make the Right Call"; Crash Simulations; Life Safety Trailers; "Stop the Bleed," and "Be the Help Before Help Arrives."

- Fire Prevention programs include: safety tips disseminated throughout the community; "Operation Firesafe" – smoke detectors and batteries available at no charge; and other fire and injury prevention tips

- Media information includes: "Safety Tips" – a media packet of seasonal safety tips, feature stories, and upcoming events.

- Safety Program Events – Child Passenger Safety Seat Program; Bicycle Safety Helmet Program; SAFE Kids Coalitions; Falls Prevention Program

- Community Programs – community risk reduction committees; speakers bureau – fire and EMS personnel available to local clubs and organizations

- Trauma education

APPENDICES

Appendix A -State Executive Summary 3-11-11

Under the *Code of Virginia* § *32.1-111.3*, The Virginia Department of Health (VDH), has been charged with the responsibility of maintaining a Statewide Trauma Triage Plan. EMS Regulation 12 VAC 5-31-390 states that all Emergency Medical Services (EMS) agencies shall participate in trauma triage plans. This Plan is to include prehospital and inter-hospital patient transfers. All trauma triage plans must be submitted to the VDH Office of Emergency Medical Services, (OEMS) for approval.

The Statewide Trauma Triage Plan establishes minimum criteria for identifying trauma patients and the expectation that these patients shall enter the "trauma system" and receive rapid definitive trauma care at appropriate hospitals. Regional trauma triage plans may augment the Commonwealth's minimum trauma triage standards by providing additional point of entry information such as hospital capabilities, air medical services, and others. At no time shall a regional or local plan set standards lower than prescribed by the state trauma triage plan or trauma center criteria. Individual regional and local systems may adapt the trauma triage plan to reflect the operational context in which they function.

VDH and the Trauma and Administrative Governance (TAG) Committee of the State EMS Advisory Board endorse the Centers for Disease Control (CDC) *Field Triage Decision Scheme: The National Trauma Triage Protocol* and its accompanying document the *Guidelines for Field Triage of Injured Patients: Recommendations of the National Expert Panel on Field Triage and* utilized these documents as the basis for this Plan. The CDC is now home to the national trauma program and has assumed responsibility for establishing the national standard for trauma triage in cooperation with the American College of Surgeons (ACS) who has traditionally developed these criteria.

The Virginia Trauma System is an inclusive system; therefore, all hospitals are required to participate in the Trauma Triage Plan. Establishing a comprehensive statewide emergency medical care system, incorporating healthcare facilities, transportation, human resources, communications, and other components as integral parts of a unified system serves to improve the delivery of EMS and thereby decrease morbidity, hospitalization, disability, and mortality. This document will provide a uniform set of criteria for prehospital and inter hospital triage and transport of trauma patients.

Source: Centers for Disease Control and Prevention, 2011

Virginia Designated Trauma Centers and Designation Descriptions

Level I Trauma Centers

Level I trauma centers have an organized trauma response and are required to provide total care for every aspect of injury, from prevention through rehabilitation. These facilities must have adequate depth of resources and personnel with the capability of providing leadership, education, research, and system planning.

Level II Trauma Centers

Level II trauma centers have an organized trauma response and are also expected to provide initial definitive care, regardless of the severity of injury. The specialty requirements may be fulfilled by on call staff that are promptly available to the patient. Due to some limited resources, Level II centers may have to transfer more complex injuries to a Level I center. Level II centers should also take on responsibility for education and system leadership within their region.

Level III Trauma Centers

Level III centers, through an organized trauma response, can provide prompt assessment, resuscitation, stabilization, emergency operations and also arrange for the transfer of the patient to a facility that can provide definitive trauma care. Level III centers should also take on responsibility for education and system leadership within their region.

Minimum Surgical & Medical Specialties for Trauma Designation

Surgical Clinical Capabilities: (On call and promptly available)	**Level of Designation**		
	I	**II**	**III**
Trauma/General Surgery	**X**	**X**	**X**
Anesthesiology	**X**	**X**	**X**
Orthopedic Surgery	**X**	**X**	**X**
Thoracic Surgery	**X**	**X**	
Cardiac Surgery	**X**		
Pediatric Surgery	**X**		
Hand Surgery	**X**		
Microvascular/Replant Surgery	**X**		
Neurological Surgery	**X**	**X**	
Plastic Surgery	**X**	**X**	
Maxillofacial Surgery	**X**	**X**	
Ear, Nose & Throat Surgery	**X**	**X**	
Oral Surgery	**X**		
Ophthalmic Surgery	**X**	**X**	
Gynecological Surgery/Obstetrical Surgery	**X**	**X**	

Medical Clinical Capabilities: (On call and promptly available)	**Level of Designation**		
	I	**II**	**III**
Cardiology	**X**	**X**	
Pulmonology	**X**		
Gastroenterology	**X**		
Hematology	**X**		
Infectious Disease	**X**		
Internal Medicine	**X**	**X**	**X**
Nephrology	**X**		
Pathology	**X**	**X**	**X**
Pediatrics	**X**		
Radiology	**X**	**X**	**X**
Interventional Radiology.	**X**		

Trauma Triage Related Resources

Virginia Office of EMS Trauma Web page:
https://www.vdh.virginia.gov/emergency-medical-services/trauma-critical-care/

Centers for disease Control and Injury Prevention
CDC Field Triage Main page:
https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6101a1.htm

CDC Field Triage PowerPoint:
http://search.msn.com/results.aspx?q=CDC+Trauma+triage&FORM=CBPW&first=1

American College of Surgeons – Committee on Trauma
http://www.facs.org/trauma/index.html

Appendix B - Trauma Triage Quality Monitoring

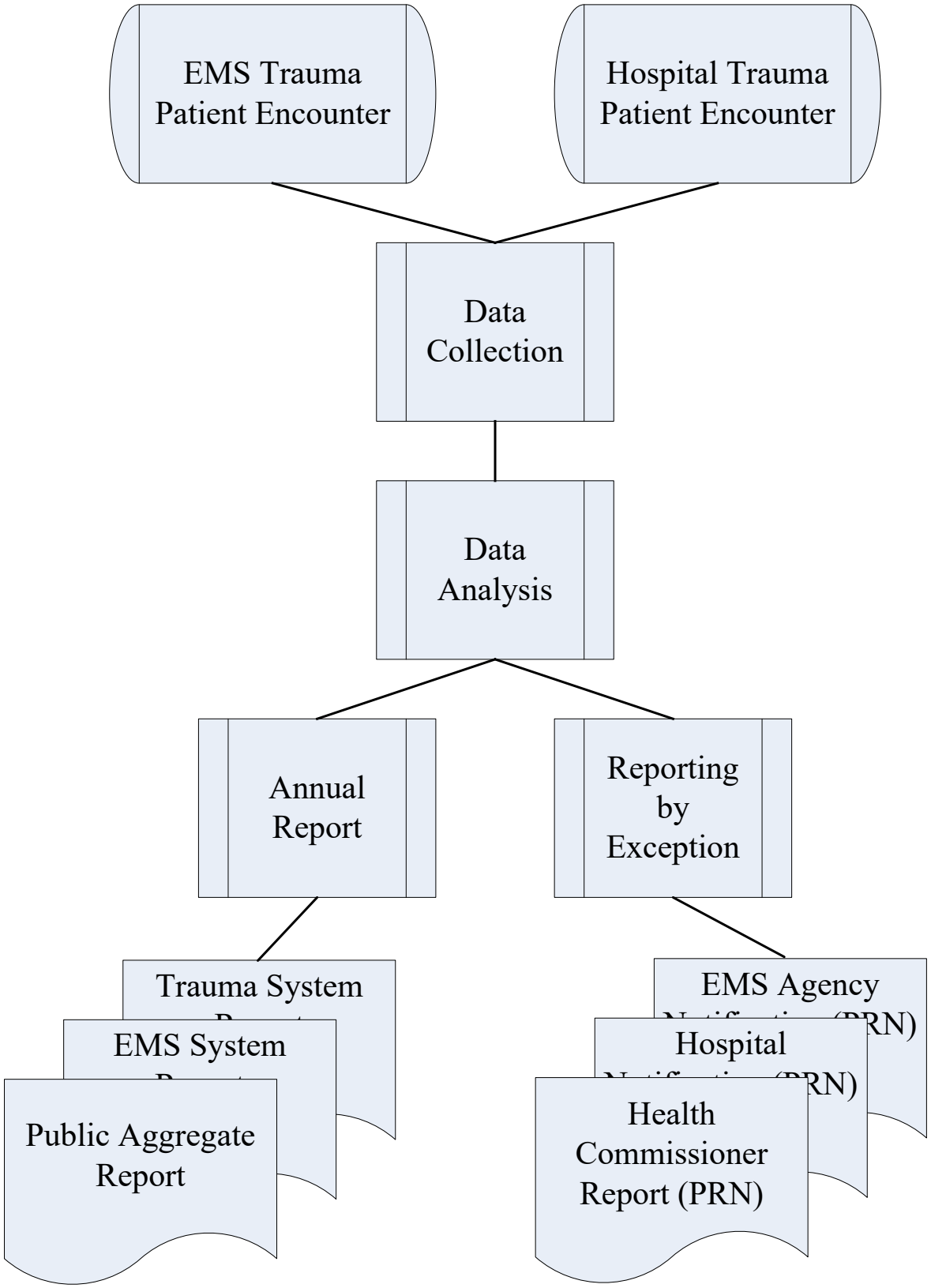
Virginia Department of Health's Virginia Office of EMS is responsible for monitoring and ensuring the quality of trauma care and trauma triage in the Commonwealth. Quality monitoring and assurance is accomplished through several means including, but not limited to, the trauma center designation process, analysis of data from the Emergency Medical Services Patient Care Information System (EMS and Trauma Registries) and from other existing validated sources, the trauma performance improvement committee, feedback mechanisms, and performance improvement groups throughout the Commonwealth.

The Commissioner of Health will report aggregate trauma triage findings annually to assist the EMS and Trauma Systems to improve local, regional and statewide trauma triage programs. A de-identified version of the report will be available to the public and will include, minimally, as defined in the statewide Plan, the frequency of (i) incorrect triage in comparison to the total number of trauma patients delivered to a hospital prior to pronouncement of death and (ii) incorrect inter-facility transfer for each region.

The program will ensure that each emergency medical services director or hospital is informed of any patterns of incorrect prehospital or inter-facility missed triage, delayed or missed inter-facility transfer as defined in the statewide Plan, specific to the provider and will give the entity an opportunity to correct any facts on which such a determination is based, if the entity or its providers assert that such facts are inaccurate.

The Commissioner shall ensure the confidentiality of patient information, in accordance with § 32.1-116.2. Such data or information in the possession of or transmitted to the Commissioner, the EMS Advisory Board, or any committee acting on behalf of the EMS Advisory Board, any hospital or prehospital care provider, or any other person shall be privileged and shall not be disclosed or obtained by legal discovery proceedings as is written in the Code of Virginia, unless a circuit court, after a hearing and for good cause shown arising from extraordinary circumstances, orders disclosure of such data.

The figure on the next page illustrates the quality monitoring and assurance process.


EMS Trauma Patient Encounter
Hospital Trauma Patient Encounter
Data Collection
Data Analysis
Annual Report
Reporting by Exception
Trauma System
EMS System
Public Aggregate Report
EMS Agency
Hospital
Health Commissioner Report (PRN)

Appendix C- EMS Regulations & Code of Virginia

12 VAC 5-31-390. Destination/trauma triage

An EMS agency shall participate in the Regional Trauma Triage Plan established in accordance with § 32.1-111.3 of the Code of Virginia.

32.1-111.3. Statewide emergency medical care system.

A. The Board of Health shall develop a comprehensive, coordinated, emergency medical care system in the Commonwealth and prepare a Statewide Emergency Medical Services Plan which shall incorporate, but not be limited to, the plans prepared by the regional emergency medical services councils. The Board shall review, update, and publish the Plan triennially, making such revisions as may be necessary to improve the effectiveness and efficiency of the Commonwealth's emergency medical care system. Publishing through electronic means and posting on the Department website shall satisfy the publication requirement. The objectives of such Plan and the system shall include, but not be limited to, the following:

1. Establishing a comprehensive statewide emergency medical care system, incorporating facilities, transportation, manpower, communications, and other components as integral parts of a unified system that will serve to improve the delivery of emergency medical services and thereby decrease morbidity, hospitalization, disability, and mortality;
2. Reducing the time period between the identification of an acutely ill or injured patient and the definitive treatment;
3. Increasing the accessibility of high quality emergency medical services to all citizens of Virginia;
4. Promoting continuing improvement in system components including ground, water and air transportation, communications, hospital emergency departments and other emergency medical care facilities, consumer health information and education, and health manpower and manpower training;
5. Ensuring performance improvement of the Emergency Medical Services system and emergency medical care delivered on scene, in transit, in hospital emergency departments, and within the hospital environment;
6. Working with professional medical organizations, hospitals, and other public and private agencies in developing approaches whereby the many persons who are presently using the existing emergency department for routine, non-urgent, primary medical care will be served more appropriately and economically;
7. Conducting, promoting, and encouraging programs of education and training designed to upgrade the knowledge and skills of health manpower involved in emergency medical services, including expanding the availability of paramedic and advanced life support training throughout the Commonwealth with

particular emphasis on regions underserved by personnel having such skills and training;

8. Consulting with and reviewing, with agencies and organizations, the development of applications to governmental or other sources for grants or other funding to support emergency medical services programs;
9. Establishing a statewide air medical evacuation system which shall be developed by the Department of Health in coordination with the Department of State Police and other appropriate state agencies;
10. Establishing and maintaining a process for designation of appropriate hospitals as trauma centers and specialty care centers based on an applicable national evaluation system;
11. Maintaining a comprehensive emergency medical services patient care data collection and performance improvement system pursuant to Article 3.1 (§ 32.1-116.1 et seq.);
12. Collecting data and information and preparing reports for the sole purpose of the designation and verification of trauma centers and other specialty care centers pursuant to this section. All data and information collected shall remain confidential and shall be exempt from the provisions of the Virginia Freedom of Information Act (§ 2.2-3700 et seq.);
13. Establishing and maintaining a process for crisis intervention and peer support services for emergency medical services and public safety personnel, including statewide availability and accreditation of critical incident stress management teams;
14. Establishing a statewide emergency medical services for children program to provide coordination and support for emergency pediatric care, availability of pediatric emergency medical care equipment, and pediatric training of medical care providers;
15. Establishing and supporting a statewide system of health and medical emergency response teams, including emergency medical services disaster task forces, coordination teams, disaster medical assistance teams, and other support teams that shall assist local emergency medical services at their request during mass casualty, disaster, or whenever local resources are overwhelmed;
16. Establishing and maintaining a program to improve dispatching of emergency medical services including establishment of and support for emergency medical dispatch training, accreditation of 911 dispatch centers, and public safety answering points;
17. Identifying and establishing best practices for managing and operating agencies, improving and managing emergency medical response times, and disseminating such information to the appropriate persons and entities;
18. Ensuring that the Department of Criminal Justice Services and the Virginia Criminal Injuries Compensation Fund shall be contacted immediately to deploy assistance in the event there are victims as defined in § 19.2-11.01, and that the Department of Criminal Justice Services and the Virginia Criminal Injuries Compensation Fund become the lead coordinating agencies for those individuals determined to be victims; and
19. Maintaining current contact information for both the Department of Criminal Justice Services and the Virginia Criminal Injuries Compensation Fund.

B. The Board of Health shall also develop and maintain as a component of the Emergency Medical Services Plan a statewide prehospital and interhospital Trauma Triage Plan designed to promote rapid access for pediatric and adult trauma patients to appropriate, organized trauma care through the publication and regular updating of information on resources for trauma care and generally accepted criteria for trauma triage and appropriate transfer. The Trauma Triage Plan shall include:

1. A strategy for maintaining the statewide Trauma Triage Plan through formal regional trauma triage plans that incorporate each region's geographic variations and trauma care capabilities and resources, including hospitals designated as trauma centers pursuant to subsection A. The regional trauma triage plans shall be reviewed triennially. Plans should ensure that the Department of Criminal Justice Services and the Virginia Criminal Injuries Compensation Fund shall be contacted immediately to deploy assistance in the event there are victims as defined in § 19.2-11.01, and that the Department of Criminal Justice Services and the Virginia Criminal Injuries Compensation Fund become the lead coordinating agencies for those individuals determined to be victims; and maintain current contact information for both the Department of Criminal Justice Services and the Virginia Criminal Injuries Compensation Fund.
2. A uniform set of proposed criteria for prehospital and interhospital triage and transport of trauma patients developed by the Emergency Medical Services Advisory Board, in consultation with the Virginia Chapter of the American College of Surgeons, the Virginia College of Emergency Physicians, the Virginia Hospital and Healthcare Association, and prehospital care providers. The Emergency Medical Services Advisory Board may revise such criteria from time to time to incorporate accepted changes in medical practice or to respond to needs indicated by analyses of data on patient outcomes. Such criteria shall be used as a guide and resource for health care providers and are not intended to establish, in and of themselves, standards of care or to abrogate the requirements of § 8.01-581.20. A decision by a health care provider to deviate from the criteria shall not constitute negligence per se.
3. A performance improvement program for monitoring the quality of care, consistent with other components of the Emergency Medical Services Plan. The program shall provide for collection and analysis of data on emergency medical and trauma services from existing validated sources, including but not limited to the emergency medical services patient care information system, pursuant to Article 3.1 (§ 32.1-116.1 et seq.), the Patient Level Data System, and mortality data. The Emergency Medical Services Advisory Board shall review and analyze such data on a quarterly basis and report its findings to the Commissioner. The Emergency Medical Services Advisory Board may execute these duties through a committee composed of persons having expertise in critical care issues and representatives of emergency medical services providers. The program for monitoring and reporting the results of emergency medical and trauma services data analysis shall be the sole means of encouraging and promoting compliance with the trauma triage criteria.

The Commissioner shall report aggregate findings of the analysis annually to each regional emergency medical services council. The report shall be available to the public and shall identify, minimally, as defined in the statewide Plan, the frequency of (i) incorrect triage in comparison to the total number of trauma patients delivered to a hospital prior to pronouncement of death and (ii) incorrect interfacility transfer for each region.

The Emergency Medical Services Advisory Board or its designee shall ensure that each hospital or emergency medical services director is informed of any incorrect interfacility transfer or triage, as defined in the statewide Plan, specific to the provider and shall give the provider an opportunity to correct any facts on which such determination is based, if the provider asserts that such facts are inaccurate. The findings of the report shall be used to improve the Trauma Triage Plan, including triage, and transport and trauma center designation criteria.

The Commissioner shall ensure the confidentiality of patient information, in accordance with § 32.1-116.2. Such data or information in the possession of or transmitted to the Commissioner, the Emergency Medical Services Advisory Board, any committee acting on behalf of the Emergency Medical Services Advisory Board, any hospital or prehospital care provider, any regional emergency medical services council, licensed emergency medical services agency, or group or Committee established to monitor the quality of care pursuant to this subdivision, or any other person shall be privileged and shall not be disclosed or obtained by legal discovery proceedings, unless a circuit court, after a hearing and for good cause shown arising from extraordinary circumstances, orders disclosure of such data.

C. The Board of Health shall also develop and maintain as a component of the Emergency Medical Services Plan a statewide prehospital and interhospital Stroke Triage Plan designed to promote rapid access for stroke patients to appropriate, organized stroke care through the publication and regular updating of information on resources for stroke care and generally accepted criteria for stroke triage and appropriate transfer. The Stroke Triage Plan shall include:

1. A strategy for maintaining the statewide Stroke Triage Plan through formal regional stroke triage plans that incorporate each region's geographic variations and stroke care capabilities and resources, including hospitals designated as "primary stroke centers" through certification by the Joint Commission or a comparable process consistent with the recommendations of the Brain Attack Coalition. The regional stroke triage plans shall be reviewed triennially.
2. A uniform set of proposed criteria for prehospital and interhospital triage and transport of stroke patients developed by the Emergency Medical Services Advisory Board, in consultation with the American Stroke Association, the Virginia College of Emergency Physicians, the Virginia Hospital and Healthcare Association, and prehospital care providers. The Board of Health may revise

such criteria from time to time to incorporate accepted changes in medical practice or to respond to needs indicated by analyses of data on patient outcomes. Such criteria shall be used as a guide and resource for health care providers and are not intended to establish, in and of themselves, standards of care or to abrogate the requirements of § 8.01-581.20. A decision by a health care provider to deviate from the criteria shall not constitute negligence per se.

D. Whenever any state-owned aircraft, vehicle, or other form of conveyance is utilized under the provisions of this section, an appropriate amount not to exceed the actual costs of operation may be charged by the agency having administrative control of such aircraft, vehicle or other form of conveyance.

(1996, c. 899; 1997, c. 321; 1998, c. 317; 1999, c. 1000; 2005, cc. 632, 686; 2006, c. 412; 2007, c. 15; 2008, cc. 66, 567; 2009, cc. 222, 269; 2012, c. 418.)

§ 32.1-116.2. Confidential nature of information supplied; publication; liability protections.

A. The Commissioner and all other persons to whom data is submitted shall keep patient information confidential. Mechanisms for protecting patient data shall be developed and continually evaluated to ascertain their effectiveness. No publication of information, research or medical data shall be made which identifies the patients by names or addresses. However, the Commissioner or his designees may utilize institutional data in order to improve the quality of and appropriate access to emergency medical services.

B. No individual, licensed emergency medical services agency, hospital, Regional Emergency Medical Services Council or organization advising the Commissioner shall be liable for any civil damages resulting from any act or omission preformed as required by this article unless such act or omission was the result of gross negligence or willful misconduct.

(1987, c. 480.)

Appendix D - Definitions

AAA – American Automobile Association – A publicly held organization serving the needs of the automobile drivers in the US, which offers a wide variety of traffic safety education materials.

APLS – Advanced Pediatric Life Support – A course jointly developed and sponsored by the American College of Emergency Physicians and the American Academy of Pediatrics which covers the knowledge and skills necessary for the initial management of pediatric emergencies, including trauma.

ATLS – Advanced Trauma Life Support – A course developed and sponsored by the American College of Surgeons Committee on Trauma for physicians which covers trauma knowledge and skills.

CATN – Course in Advanced Trauma Nursing – A two-day course developed and sponsored by the Emergency Nurses Association.

Citizen Access – The act of requesting emergency assistance for a specific event.

COBRA – Consolidated Omnibus Budget Reconciliation Act – Federal Medicare law which details the requirements Medicare hospitals must meet in providing screening examinations for individuals presenting at the emergency department, and the requirements that must be met prior to transferring a patient in an unstable medical condition or who is pregnant and having contractions.

Designation – Formal recognition of hospitals as providers of specialized services to meet the needs of the severely injured patient; usually a contractual relationship and is based on adherence to standards.

Direct Medical Control – Immediate medical direction to prehospital personnel in remote locations (also known as online medical control) provided by a physician or an authorized communications resource person under the direction of a physician.

EMS – Emergency Medical Services – A system that provides for the arrangement of personnel, facilities, and equipment for the effective and coordinated delivery of health care services in appropriate geographical areas under emergency conditions.

EMTALA – Emergency Medical Treatment and Active Labor Act - Establishes requirements for emergency departments to provide medical screening examination to anyone on whose behalf a request is made to determine whether or not the individual is in an emergency medical condition. If the hospital has determined that the individual is in an emergency medical condition, the hospital must provide further medical examination and treatment to stabilize the medical condition.

ENPC – Emergency Nurses Pediatric Course – A two-day pediatric trauma course developed and sponsored by the Emergency Nurses Association.

EOC – Emergency Operations Center – A communication network where emergency calls are received and dispatched.

ITLS –International Trauma Life Support – A course for prehospital providers sponsored by the American College of Emergency Physicians

Incident Management System (IMS) – A standardized, organized on-scene emergency management system used by the emergency response community to respond safely, operate efficiently and protect the public during incident scene operations. The term "incident command system" (ICS) is also used.

In-Direct Medical Control – The establishment and monitoring of all medical components of an EMS system, including protocols, standing orders, education programs, and the quality and delivery of direct medical control. (Also known as off-line medical control)

Injury – The result of an act that damages harms, or hurts; unintentional or intentional damage to the body resulting from acute exposure to thermal, mechanical, electrical or chemical energy or from the absence of such essentials as heat or oxygen.

Injury Control – The scientific approach to injury that includes analysis, data, acquisition, identification of problem injuries in high risk groups, option analysis and implementing and evaluating countermeasures.

Injury Prevention – Efforts to forestall or prevent events that might result in injuries.

Lead Agency – An organization that serves as the focal point for program development on the local, regional, or State level.

MADD – Mothers Against Drunk Driving – A 501©(3) non-profit grass roots organization whose focus is to look for effective solutions to the drunk driving and underage drinking problems, while supporting those who have already experienced the results of these crimes.

Major Trauma – That subset of injuries that encompasses the patient with or at risk for the most severe or critical types of injury and therefore requires a system approach in order to save life and limb.

Mass Casualty Incident - A mass casualty incident is one which generates a sufficient number of injured to exceed a system's capability to deal with the incident using normal procedures and resources.

Mechanism of Injury – The source of forces that produce mechanical deformations and physiologic responses that cause an anatomic lesion or functional change in humans.

Medical Control – Physician direction over prehospital activities to ensure efficient and proficient trauma triage, transportation, and care, as well as ongoing quality management.

Morbidity – The relative incidence of disease.

Mortality – The proportion of deaths to population.

NHTSA – National Highway Traffic Safety Administration – Part of the Department of Transportation – It is responsible for reducing deaths, injuries and economic losses resulting from motor vehicle crashes.

NRA – National Rifle Association – An association incorporated in 1871 to provide firearms training and encourage interest in the shooting sports.

OEMS – Office of Emergency Medical Services – Virginia State Office, under the Health Department

PALS – Pediatric Advanced Life Support – A course developed and sponsored by the American Heart Association and the American Academy of Pediatrics, for healthcare workers covering the application of advanced life support therapies to pediatric patients.

PEMSTP – Pediatric Emergency Medical Services Training Program – a 5-day course taught to prehospital providers by the Children's National Medical Center.

PHTLS – Prehospital Trauma Life Support – A verification course for prehospital care providers that teaches concepts of basic and advanced trauma life support. It is developed and sponsored by the National Association of Emergency Medical Technicians in cooperation with the American College of Surgeons Committee on Trauma.

PCAR – Pediatric Care After Resuscitation is the pediatric-specific version of the adult-focused TCAR course, ideal for nurses who occasionally or primarily care for injured children.

Protocols – Standards for EMS practice in a variety of situations within the EMS system.

Quality Improvement – A method of evaluating and improving processes of patient care which emphasizes a multidisciplinary approach to problem solving, and focuses not on individuals, but systems of patient care which might be the cause of variations.

Quality Management – A broad term which encompasses both quality assurance and quality improvement, describing a program of evaluating the quality of care using a variety of methodologies and techniques.

Regionalization – The identification of available resources within a given geographic area and coordination of services to meet the needs of a specific group of patients.

Rehabilitation – Services that seek to return a trauma patient to the fullest physical, psychological, social, vocational, and educational level of functioning of which he or she is capable, consistent with physiological and anatomical impairments and environmental limitations.

SAFE Kids – A national organization that seeks to reduce unintentional injuries to children by concerted community action, including promoting public awareness of unintentional childhood injury prevention strategies and facilitating public appreciation for the safety measures necessary to protect children.

Trauma – A term derived from the Greek for "wound"; it refers to any bodily injury.

TCAR – Trauma Care After Resuscitation course was specifically created to meet the learning needs of INPATIENT trauma nurses. This course targets the educational needs of nurses managing patients throughout their post-injury experience, emphasizing the continuum of care.

Trauma Center – A specialized hospital facility distinguished by the immediate availability of specialized surgeons, physicians specialists, anesthesiologists, nurses, and resuscitation and life support equipment on a 24-hour basis to care for severely injured patients or those at risk for severe injury.

TNCC – Trauma Nursing Core Course – A verification course providing core-level trauma knowledge and psychomotor skills associated with the delivery of professional nursing care to trauma patient. Developed and sponsored by the Emergency Nurses Association.

Trauma Registry – A collection of data on patients who receive hospital care for certain types of injuries. Such data are primarily designed to ensure quality trauma care and outcomes in individual institutions and trauma systems but have the secondary purpose of providing useful data for the surveillance of injury morbidity and mortality.

Triage – The process of sorting injured patients on the basis of the actual or perceived degree of injury and assigning them to the most effective and efficient regional care resources, in order to insure optimal care and the best chance of survival.

Triage Criteria – Measures or methods of assessing the severity of person's injuries that are used for patient evaluation, especially in the prehospital setting, and that use anatomic and physiologic considerations and mechanism of injury.

Uncompensated Care – Care for which no reimbursement is made.

Under triage – Directing fewer patients to trauma centers than is warranted because of incorrect identification of patients as having minor injuries when retrospective analysis indicates severe injuries.

VDOT – Virginia Department of Transportation – Is responsible for building, maintaining, and operating the state's roads, bridges, and tunnels. Through the Commonwealth Transportation Board also provides funding for airports, seaports, rail, and public transportation.