Northern Virginia

Regional Protocol Guidelines

These guidelines apply across the spectrum of EMS agencies and the patients they encounter. Individual EMS agencies may wish to employ additional or alternative strategies.

Reviewed and Approved by NVEMSC Board of Directors June 20, 2024

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Northern Virginia EMS Council
Regional Protocol Guidelines
Medical – Stroke / TIA

* Patients with signs and symptoms of **acute stroke syndrome** should be assessed to identify and define the following:
    - Time of onset of signs/symptoms
    - Nature and degree of signs/symptoms
    - Co-morbid conditions impacting short and long-term management
    - Identify and address causes of secondary insult – hypoxia, hypotension, hypoglycemia, trauma, coagulopathy, etc.
* Selection of destination facility and mode of transport are the domain of the individual agencies and should be based on operational and geographic considerations.
* It is recommended that a defined stroke screening tool be utilized.

Northern Virginia EMS Council
Regional Protocol Guidelines
Medical – Altered Mental Status

* For patients presenting with a complaint or signs of **altered mental status** consider the potential underlying causes and manage appropriately. These include the following clinical conditions:
    - Opiate overdoses – (management may include administration of opiate antagonist agents)
    - Hypoglycemia
    - Hypoxia and hypotension
    - Stroke, seizure and other acute neurologic emergencies
* Additional interventions/medications may be considered at the agency level.

Northern Virginia EMS Council
Regional Protocol Guidelines
Medical – Allergic Reaction / Anaphylaxis

- For patients presenting with signs/symptoms of a **systemic anaphylactic reaction** the following are recommended:
  - Epinephrine administration
- The following may be considered:
  - Antihistamines
  - Steroids
- Additional interventions/medications may be considered at the agency level.

Northern Virginia EMS Council
Regional Protocol Guidelines
Medical - ST Elevation Myocardial Infarction (STEMI)

✱ For patients with symptoms and/or a history of present illness consistent with an acute myocardial infarction the following are recommended:

- Rapid identification of ischemia/infarction

  Time/Care Goals

  - ✓ 12-Lead EKG within 5 minutes of patient contact
  - ✓ Physician consult for Cath. Lab activation within 5 minutes of STEMI identification
  - ✓ <10 minute on scene time from STEMI identification
  - ✓ Minimum of 2 ALS providers at patient's side during transport

- Supplemental oxygen to maintain O2 saturation of ≥ 94%
- Aspirin
- Nitroglycerin
- Apply electrophysiology pads to patient throughout treatment and transport

✱ Transmit EKG and consult physician. We recommend the following decision to initiate a STEMI Alert from the field.

1) Does the clinical picture suggest acute MI? (Yes/No/Uncertain)

2) Does the ALS provider interpret the 12-Lead to demonstrate ST-segment elevation suggestive of acute MI? (Yes/No/Uncertain)

3) Does the automated algorithm reading state acute MI? (Yes/No/Uncertain)

STEMI ALERT when all three criteria are met with YES.

✱ Additional interventions/medications may be considered at the agency level.

Northern Virginia EMS Council
Regional Protocol Guidelines
Medical – Diabetic - Hypoglycemia

* For patients with signs/symptoms believed and/or demonstrated to be due to **hypoglycemia** the following are recommended:
    - Administer glucose
* For those patients in whom an IV cannot be established glucagon administration is recommended.
* Additional interventions/medications may be considered at the agency level.

Northern Virginia EMS Council
Regional Protocol Guidelines
Medical – Respiratory Distress / Asthma / COPD / Croup / Reactive Airway

- For patients with **Respiratory Distress (SOB)** believed to be due to **asthma/reactive airway disease/COPD/emphysema** the following are recommended:
  - Supplemental oxygen
  - Inhaled Bronchodilators
  - Consideration of inhaled anticholinergics in select patients
  - Consideration of steroids in select patients
- NIPPV (CPAP/BiPAP) may be beneficial in select patients
- Additional interventions/medications may be considered at the agency level.

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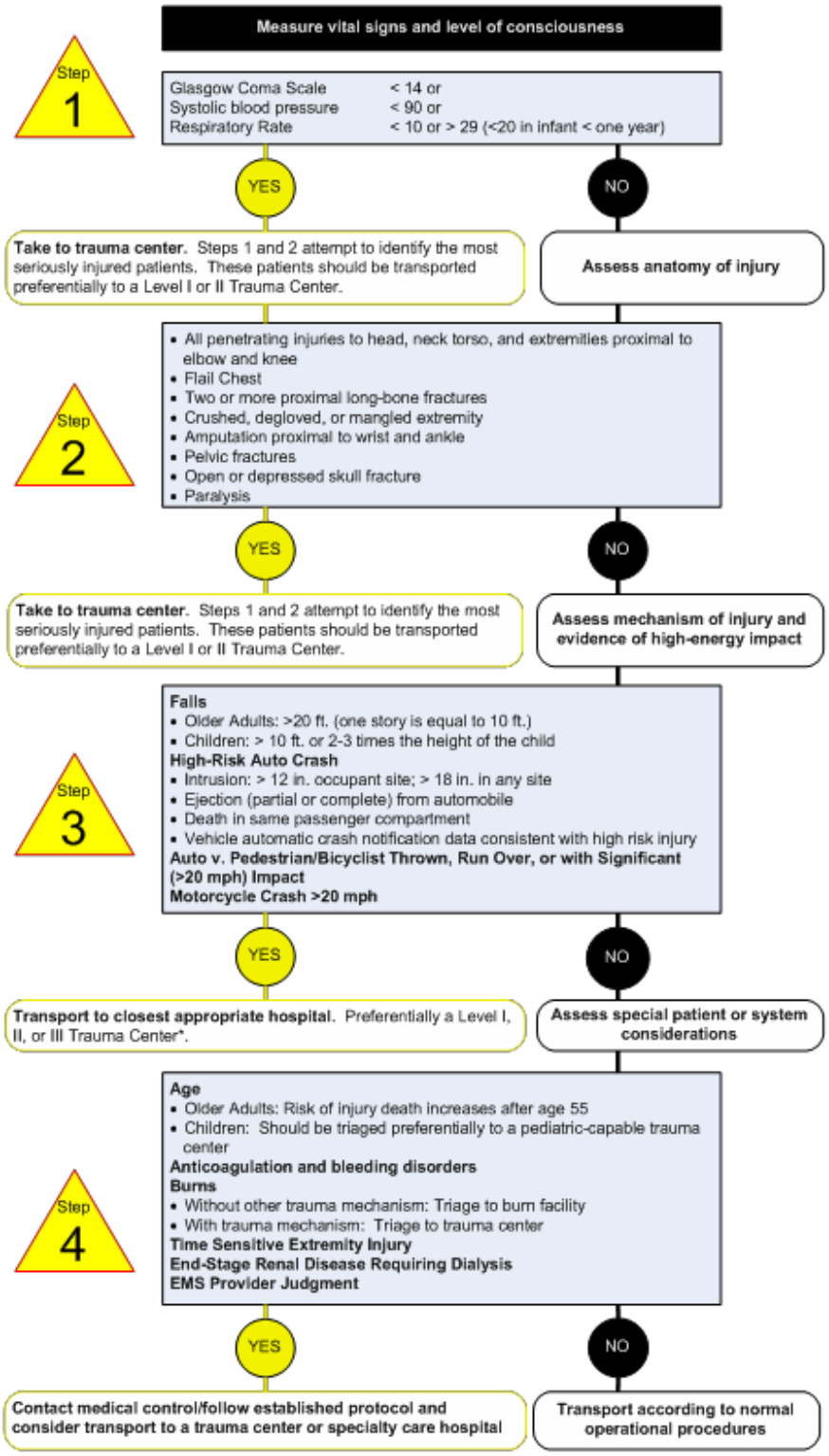
- For patients with **Respiratory Distress (SOB)** believed to be due to **pulmonary edema due to CHF** the following are recommended:
  - Supplemental Oxygen
  - NIPPV (CPAP/BiPAP) may be beneficial in select patients
  - Nitroglycerin
  - Consideration of diuretics in select patients
- Additional interventions/medications may be considered at the agency level

Northern Virginia EMS Council
Regional Protocol Guidelines
Medical – Seizure

* For patients with presenting with signs/symptoms believed to be due to **seizures** the following are recommended:
    - Evaluate for hypoglycemia as the cause of seizures and treat accordingly
    - Benzodiazepines for persistent or ongoing seizures

Northern Virginia EMS Council
Regional Protocol Guidelines
Virginia Trauma Triage Scheme



Northern Virginia EMS Council

Blood Administration

**** The administration of blood products is restricted to Paramedics individually and specifically trained and authorized to perform this procedure by their Operational Medical Director. ****

Background:

The Field-Available Component Transfusion Response (FACT*R) program is a novel approach to making blood products available for prehospital use in select trauma scenarios. Blood products remain a scarce resource with challenges in proper storage and forward deployment in the field. This program creates a virtual supply which can be requested by EMS, packaged and brought from the hospital blood bank to the incident scene.

Potential Indications:

1. Hemodynamically unstable trauma patient (signs/symptoms consistent with hemorrhagic shock)*

WITH

a) Severe entrapment (anticipated greater than 30 minute extrication time)

OR

b) Prolonged patient removal (e.g. Appalachian Trail, confined space)

2. Multiple patient incident with demonstrated/anticipated need for on scene blood products.

*An isolated head injury is not an indication for blood products. Potential candidates should have injuries that resulted in major blood loss and which are felt to be potentially survivable (some degree of consciousness witnessed by trained first responders).

Procedure Considerations:

- Generally it will take 20 minutes or longer from the time of request for blood products to arrive on scene (depending on distance from supplying hospital).
- FACT*R program Blood products for field deployment are maintained at Inova Loudoun Hospital and Inova Fairfax Hospital.
- Early recognition of need by an experienced provider on scene is paramount for early activation and timely arrival.
- Activation of the FACT*R process is initiated by the Attendant in Charge (AIC) in cooperation with the Incident Commander (IC) through a direct phone call with the OMD via ECC phone patch.
- Products will be available at the respective facility within 15 minutes of the request.
- Chain of custody for all blood products is required.
- The following will be included when blood products are requested (*depending on product availability*):
    - 5 units of packed red blood cells (PRBC's)
    - 5 units of liquid plasma
    - 1 unit of platelets

Warnings:

- Potential benefits of transfusion should outweigh risks.

- Transfusion of blood products is generally considered safe but involves some chance of complications including:
    - Transfusion reaction
    - Transmission of infectious disease
- Do not delay transport of patient to definitive care. If the patient is extricated and ready for transport, do not wait on scene for blood to arrive.
- Medications shall not be administered through the same line with blood products due to the potential for incompatibility.
- If the temperature dot indicator on the blood products has changed to red, the products shall not be used.
- Platelets are stored at controlled room temperature and shall be administered directly to the patient and not flowed through the fluid warmer.

Performance Indicators:

- Proper communication chain and seamless administration.
- Proper documentation and chain of custody of the blood.
- Improvement and/or stabilization in the patient's vitals and condition.

Blood Administration

1. AIC will identify the potential need for blood products
    a. Are they severely trapped with expected scene time > 30 min?
    b. Are they hemodynamically unstable from blood loss?
    c. Will they benefit from early blood administration?
2. AIC will notify the Incident Commander (IC) of the potential need for blood products on scene and that contact will be made with the Medical Director for authorization.
3. Obtain Proper Authorization
    a. Contact the Medical Director through ECC phone patch
    b. Advise OMD of the situation (including gender and approximate age < or >50 as appropriate) and findings which support need for blood products.
    c. Request will be approved or denied. If approved, OMD or designee will notify appropriate hospital to prepare the blood products.
        1. Inova Loudoun 703-858-6095
        2. Inova Fairfax 703-776-3401
4. Arrange through the IC for approved courier to pick up the blood products.
    a. A separate incident will be created in CAD.
    b. ECC Dispatch algorithms will dispatch closest appropriate unit to pick up blood and supplies at designated emergency dept., and bring to scene.
5. Establish 2 large bore IV's when practical and age appropriate. IOs are an option for blood but infusion rates are slower. Administer IV fluid as necessary to maintain perfusion while waiting for blood products to arrive. If

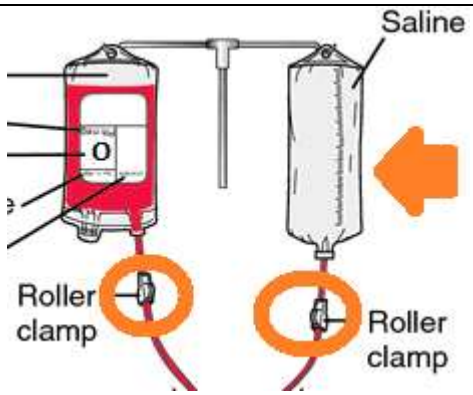
fluid warmer is available on scene, use it to administer warm IV fluids. Instructions on warmer setup begin at step #19.

6. Prior to administration of products, obtain a full set of appropriate vitals to include patient temperature.

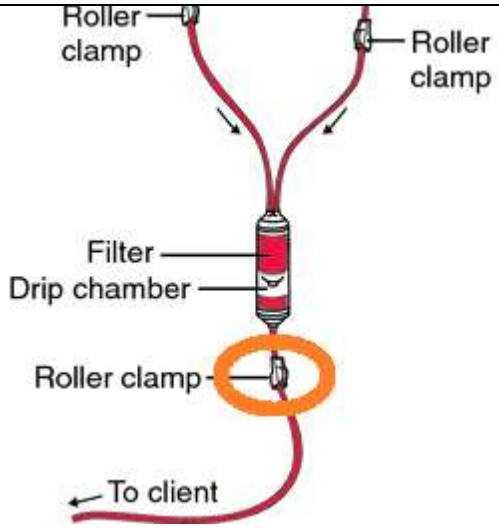
7. Obtain informed consent for blood transfusion *if* patient is capable of giving consent (or someone legally authorized to consent for the patient is present to give consent in a reasonable time under the circumstances). If unable to get informed consent, blood may be given under the concept of implied consent.

*****Note:** While the information and pictures below depict saline being administered first and always connected to the administration tubing, this is not a requirement. If blood products are immediately available they may be given without delay. You may also utilize the additional Y-port to prepare your next product (pRBC's, plasma, etc) while the current product is flowing. **Absolutely** only one side of the Y-port shall be flowing at a time.

8. In preparation of receiving blood products, utilize open Y-type blood tubing, close both upper roller clamps, and spike a 1L bag of normal saline.



9. Open the upper roller clip attached to the saline bag and prime the tubing. Once the tubing is primed close the lower roller clamp.



10. Begin infusing IV fluids through this setup.

11. Preserve the blood products upon their arrival and be sure to keep the box shut unless removing units. This is especially important for the box of platelets which should be opened *last* after all other products administered.

12. The blood products will arrive in two identical shaped boxes as pictured below. One will be marked "blood products" and the other "platelets".


DONOR SERVICES
HUMAN BLOOD
RUSH
PERISHABLE
PROTECT FROM
EXTREME
TEMPERATURE

13. PRBC's


UNCROSSMATCHED
BLOOD
0
Rh NEGATIVE
VOLUNTEER DONOR
RED BLOOD CELLS
15 NOV 2018

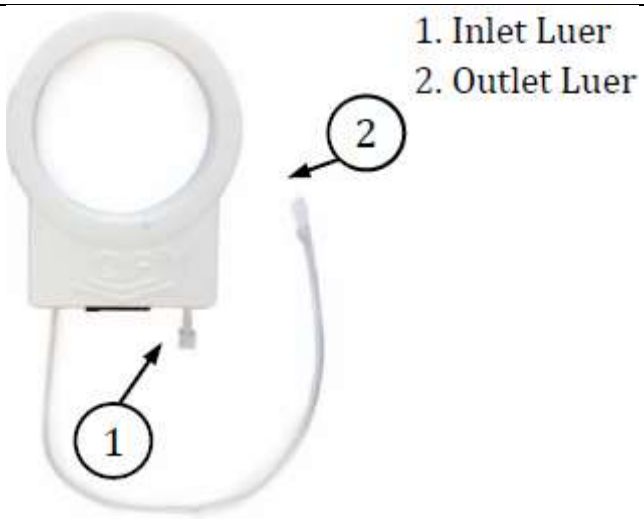
14. Liquid plasma	
15. Platelets	
16. **Note:** Plasma and platelets look very similar in appearance; however, they will be packaged in different boxes and the bag of platelets is larger in size than the plasma. Pictured below.	

17. Blood product labeling:

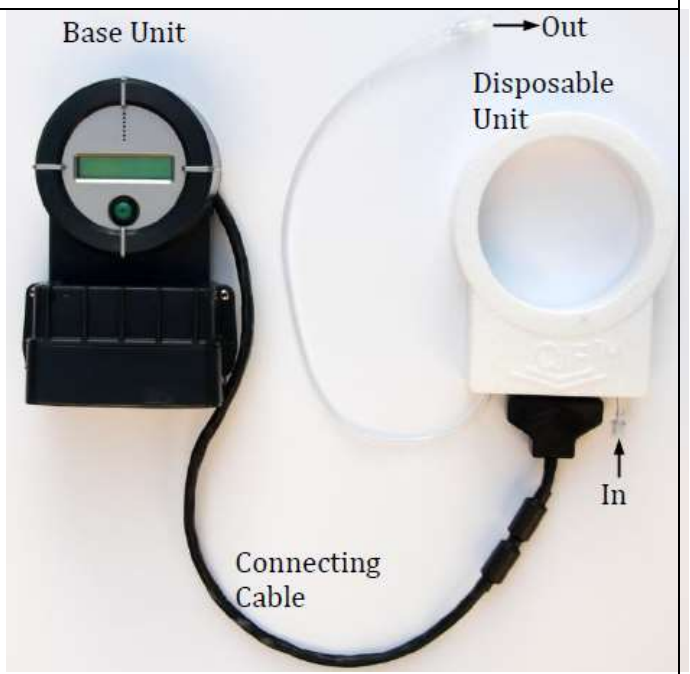
18. The QinFlow Warrior will arrive in a StatPack. Its contents are pictured below:

19. Remove the QinFlow Warrior base unit with battery from the StatPak.

20. Remove the disposable unit and open its sterile packaging.



21. Connect the disposable unit to the base unit.



22. Close off the lower roller clamp of the tubing. Disconnect the IV tubing from the patient and connect the tubing to the inlet luer of the Disposable Unit. Ensure patient's IV is not back-flowing when temporarily disconnected.

23. Open the lower roller clamp and start flowing saline through the Disposable Unit. Once the tubing is completely primed/flushed with saline, activate the Warrior device by turning on its power switch located on the back of the unit. The LCD displays the "Initializing…" message and will you will hear a steady beep for a few seconds.

24. The system will reach its set-point temperature in a few seconds. The LCD displays: Heating Tout: outflow temp (inflow temp).

25. Connect the outlet luer directly to the patient's IV/IO catheter or extension set and begin flowing.

    ***Note: remove any excess tubing other than a simple extension set between the outlet luer and IV catheter. Excess tubing slows flow and can cool fluid prior to entering the patient.

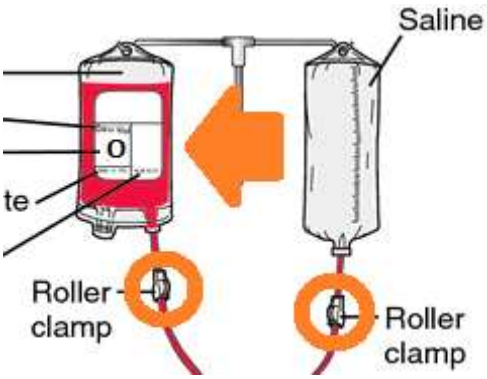
26. Verify the system warms the intravenous fluid to the set-point temperature and check the LCD display from time to time to verify normal system operation. Check the LCD display following any audio notification (short or steady beep).

27. Prior to administration of any and all products, confirm only universal donor (type O PRBCs and type AB or A Plasma).
    a. Premenopausal females should receive O negative PRBCs when possible.
    b. Men and postmenopausal women can receive O positive or O negative pRBCs.

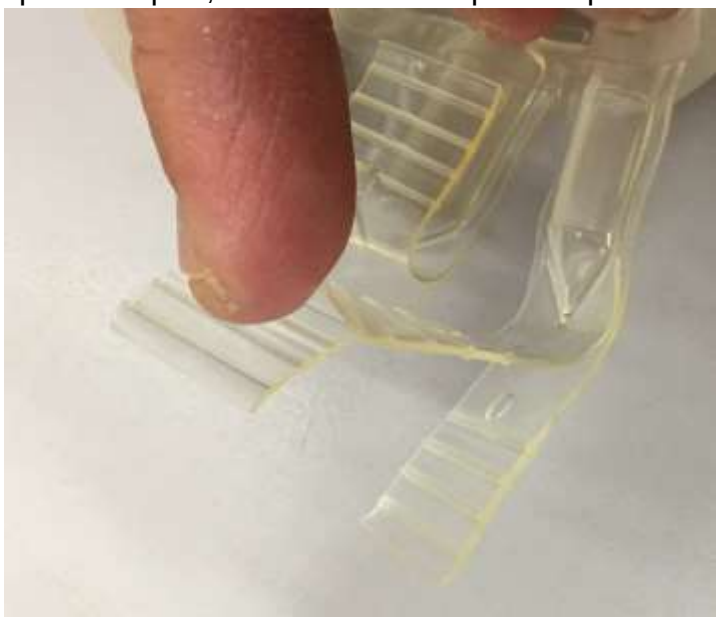
28. Handle products carefully and be sure to not touch the temperature dot placed on the product (may be located on the front or back of the product). Visualize the temperature dot is intact and indicating appropriate temperature.

29. Prior to administering any blood products, the provider shall confirm the product type and expiration date with a second provider.

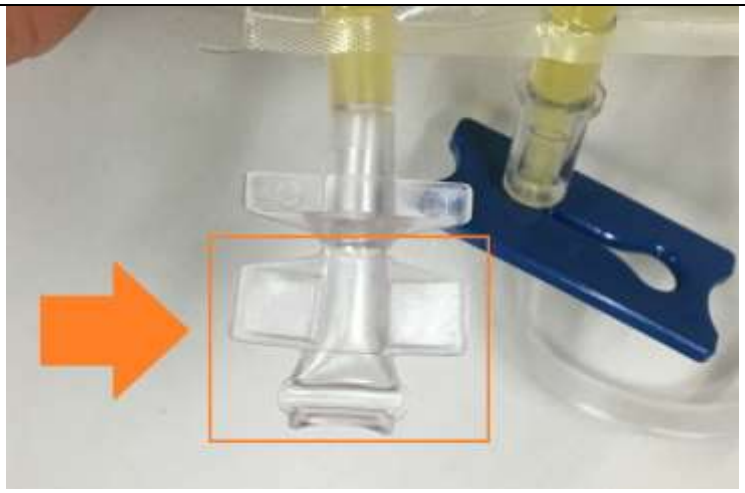
30. Spike a unit of PRBC with the empty Y-port of the tubing. Close off the roller clamp for the saline, and open the roller clamp on the PRBC's. Note: only one of the ports should be running at one time.



31. To spike a bag of PRBC, choose one of the ports on the bag, peel back the covering to expose the port, then utilize the Y-port to spike the bag.

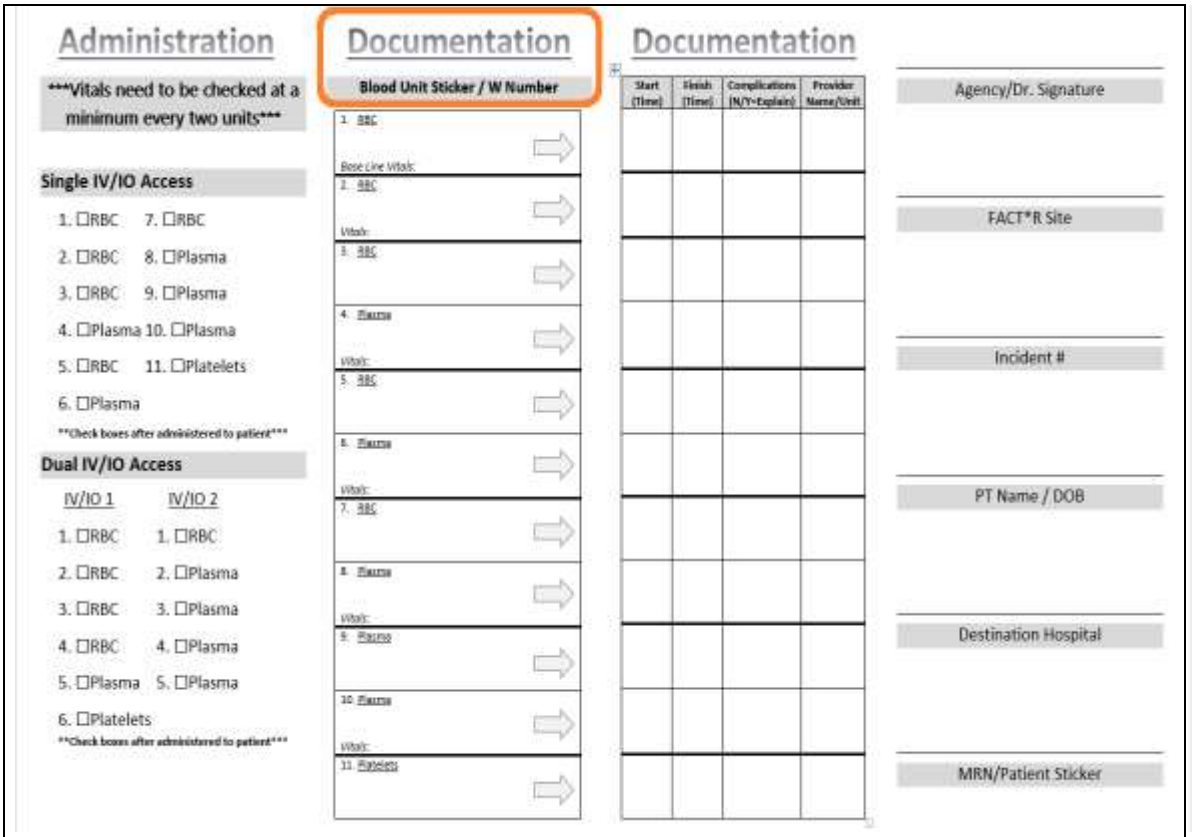


32. To spike a bag of plasma or platelets, twist off the highlighted cap below, then utilize the Y-port to spike the bag.



33. Infuse the blood products at an appropriate rate (pressure infuse if necessary), verifying the in-line filter is flowing correctly with no clotting.
    a. Pediatric dosing is 10 – 20 ml/kg to start, titrated to effect.
    b. If administering products to a smaller pediatric patient, utilize a syringe for controlled and accurate dosing.
    c. Goal is administration of products in 1:1:1 ratio when practical.

34. Upon infusing products, Providers shall record the Unit Number or W Number on the Field Transfusion Record (pictured below). If the product doesn't have a sticker, the provider shall write it in the appropriate spot on the form.



Administration

Vitals need to be checked at a minimum every two units

Single IV/IO Access

1. ☐RBC 7. ☐RBC
2. ☐RBC 8. ☐Plasma
3. ☐RBC 9. ☐Plasma
4. ☐Plasma 10. ☐Plasma
5. ☐RBC 11. ☐Platelets
6. ☐Plasma

Check boxes after administered to patient*

Dual IV/IO Access

IV/IO 1	IV/IO 2
1. ☐RBC	1. ☐RBC
2. ☐RBC	2. ☐Plasma
3. ☐RBC	3. ☐Plasma
4. ☐RBC	4. ☐Plasma
5. ☐Plasma	5. ☐Plasma
6. ☐Platelets	

Check boxes after administered to patient*

Documentation

Blood Unit Sticker / W Number

1. RBC
Base Line Vitals:
2. RBC
Vitals:
3. RBC
4. Plasma
Vitals:
5. RBC
6. Plasma
Vitals:
7. RBC
8. Plasma
Vitals:
9. Plasma
10. Plasma
Vitals:
11. Platelets

Documentation

Start (Time)	Finish (Time)	Complications (N/Y=Explain)	Provider Name/Unit

Agency/Dr. Signature

FACT*R Site

Incident #

PT Name / DOB

Destination Hospital

MRN/Patient Sticker

35. Each blood product will be accompanied by its own triplicate form (pictured below). The provider is **not** responsible to complete this form. Only the OMD or authorizing physician will sign this form.

1BLDREC

Name: _____
MR #: _____
ABORH: _____
DOB: ____/____/____
BRID: _____
Order#: _____
Antibodies:
Special Messages:

Component: RBC LR (R63)
Unit #: W0898 18 454053 87
ABORH: O POS
Exp Date: 11 / 20 / 18 23 59
Volume: 300 mL
Crossmatch: _____
Antigen NEG for: _____
Attributes:

Pre-filled by Blood Bank

I am authorizing the release of
UNCROSSMATCHED blood for emergency transfusion _____ M.D.
(signature required)

ISSUE DATE ____/____/____ TIME ____:____ TECH X12345 / X67890

WE HAVE VERIFIED AT THE BEDSIDE:
- ☐ Informed consent on the chart or EMR ☐ Order to transfuse on the chart or EMR
- ☐ Patient Name, MR#, BRID# on this form & the Transfusion Label MATCH the PATIENT ID BAND and BRID BAND
- ☐ Donor #, expiration date & ABORH of the blood product match this form

Signature of Transfusionist: _____
Signature of Verifier: _____
Transfusion Start Date ____/____/____ Time Started ____:____

BLOOD PRODUCT ADMINISTRATION - Complete if the vital signs are not documented elsewhere in the medical record.
☐ See electronic record

VITAL SIGNS	Time	BP	PULSE	RESP	TEMP
◦ Pre					
◦ 15 Min					
◦ 1 HR					
◦ 2 HR					
◦ 3 HR					
◦ POST					

TRANSFUSION COMPLETED OR STOPPED
TRANSFUSION ENDED: DATE: _____ TIME: _____ SIGNATURE: _____
AMOUNT TRANSFUSED: ☐ 1/4 ☐ 1/2 ☐ 3/4 ☐ ALL

TRANSFUSION REACTION OBSERVED - Follow instructions & check symptoms observed
- ☐ STOP TRANSFUSION AND NOTIFY PHYSICIAN
- ☐ NOTIFY BLOOD BANK
- ☐ ORDER TRANSFUSION REACTION IN COMPUTER
- Obtain specimen
- Return blood product container / IV fluids / tubing (no needles) to the blood bank
- Order UA and send 1st voided urine to the lab
- FAX completed form to the blood bank

CHECK SYMPTOMS
- ☐ Fever ☐ Hives
- ☐ Hematuria ☐ SOB
- ☐ Hypotension ☐ Itching
- ☐ Nausea ☐ Back Pain
- ☐ Chills ☐ Oozing

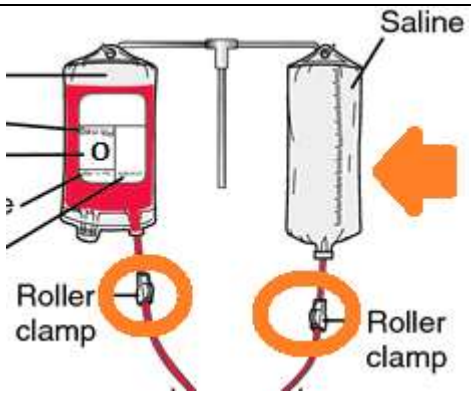
Other _____

PATIENT IDENTIFICATION
Patient Name: _____
Medical Record #: _____
Gender: Male / Female
DOB: __ / __ / ____
Hospital Admitted to: _____

INOVA HEALTH SYSTEM
TRANSFUSION RECORD – EMERGENCY ISSUE

CAT # 87658

36. While the first unit of product is infusing, prepare the next bag of blood product as outlined in steps 28-35 for use on the other side of the Y port. Upon administration of the full bag of PRBC (or appropriate pediatric dose), close its roller clamp, and open the roller clamp for the next appropriate product.



37. Remove the empty bag of PRBC's and replace it with next bag of product. If products still remain in the bag of PRBC, prevent them from leaking out.

38. Proper sequence of blood product administration is:

a. Start with 2 units PRBCs (for adults) then infuse equal amounts of PRBCs and Plasma.
b. Platelets would be administered last.
c. End point for transfusion is evidence of adequate perfusion.

39. During administration be sure to check the filter for adequate flow, and the lower part of the tubing for smooth flow and absence of clot formations.

40. If clot formation is noted or flow rate becomes slow, discontinue administration, and disconnect the set-up from the patient. A new set of blood tubing and Warrior disposable unit should be used if additional blood products are needed.

41. Periodically verify the temperature input/output on the QinFlow Warrior.

42. If an alarm sounds on the QinFlow Warrior, immediately observe the LCD screen and take appropriate action as necessary. If the alarm is due to a high temperature and Warrior does not automatically correct in a few seconds, immediately discontinue administration, and troubleshoot per manufacturer guidelines.

43. If a second IV site is available and supplies allow, begin at step 7 above to begin administering warm IV fluids and additional products through second site as indicated.

44. Upon complete administration of pRBCs and plasma, begin administration of platelets. **Do not warm the platelets**. Prior to platelet administration, remove the blood tubing from the inlet luer of the QinFlow Warrior and connect directly to the patient's IV.
    a. Adult: administer the full unit
    b. Pediatric: administer 10 ml/kg

45. All used blood product supplies (bags, tubing, Disposable Unit, etc.) shall be left with the patient for later analysis.

46. Unused products may potentially be used/returned to the blood bank. Coordinate with blood banks (receiving facility and origin facility) to discuss procedure for return of unused blood as needed. The receiving facility will be able to determine viability of the remaining products and assist with additional cooling if necessary for return.

47. Complete the Field Transfusion Record that came with the blood in its entirety. The ability to link each unit of blood products to the exact patient that received that unit of blood product is extremely important. The physician signature will be the physician who authorized the blood.

48. The completed form must be submitted as soon as practical but no greater than 72 hours after administration. This includes the authorizing physician signature.

Northern Virginia EMS Council
Regional Protocol Guidelines
Forms & Policies

Regional EMS Drug Dispensing Record

Northern Virginia Emergency Medical Services Council

This form shall be used to obtain medications from all Northern Virginia Emergency Departments or Pharmacies

- Providers must be in uniform and show department or agency identification for issue
- Pharmacy sends the completed form to the EMS agency for reconciliation and/or billing

Revised 01/2021

Hospital Name:		**Date Issued:**
Reason for issue: □Patient care □Breakage* □Expiration* □Other_____	**Patient Name:** (Last, First, Middle): **DOB:** **Medical Record #:**	**Affix hospital medical record sticker here** (*if available)*

**** Providers replacing expired or damaged drugs must present those directly to the pharmacy during normal business hours****

Quantity	Item	Quantity	Item
	Acetaminophen 325mg/10.15mL for PO use		Ibuprofen 100mg/5mL for PO use
	Acetaminophen 500mg tablet for PO use		Ipratropium bromide 0.5mg/2.5mL bullet
	Activated Charcoal 50 grams/240 mL		Ketorolac 30mg/1mL vial
	Adenosine 6mg/2mL vial		Labetolol 100 mg/20mL vial
	Albuterol 2.5mg/3mL bullet		Lidocaine 2%100mg/5mL PFS
	Albuterol 2.5mg/0.5mL bullet		Lidocaine Premix 2gram/500mL
	Amiodarone 150mg/3mL vial		Magnesium Sulfate 1g/2mL vial
	Aspirin 81mg tablet, chewable		Magnesium Sulfate 4g/100mL vial
	Atropine 1mg/10mL PFS		Magnesium Sulfate 5g/10mL vial
	Calcium Chloride 1g/10mL PFS		Methylprednisolone 125mg/2mL vial
	Calcium Gluconate 10% 5g/50mL		Metoprolol 5mg/5mL vial
	Celecoxib 200mg tablets for PO use		Misoprostol (Cytotec) 200mg IR Tablet
	Dexamethasone 10mg/1mL vial		Naloxone 2mg/2mL PFS or vial
	Dextrose 10% (D10W) 250mL bag		Nitroglycerin bottle 0.4 mg tablets
	Dextrose 50% 25g/50mL PFS		Nitroglycerin infusion 50mg/250mL
	Diltiazem 25mg/5mL vial		Nitroglycerin paste 2% unit dose 1”
	Diltiazem 125mg/25mL vial		Nitroglycerin 0.4 mg spray
	Diphenhydramine 50mg/1mL vial		Norepinephrine 4mg/4mL vial
	Diphenhydramine liquid 25mg/10mL		Ondansetron 4mg ODT
	Dopamine pre-mixed 400mg/250mL		Ondansetron 4mg/2mL vial
	DuoNeb 3mL solution for inhalation		Promethazine 25mg/1mL amp or vial
	Epinephrine (1:10,000) 1mg/10mL PFS		Racemic Epi 11.25mg/0.5mL
	Epinephrine (1:1000) 1mg/1mL amp or vial		Rocuronium bromide 50mg/5mL
	Epinephrine (1:1000) 30mg/30mL vial		Sodium Bicarb 4.2% 10mL PFS
	Etomidate 40mg/20mL vial		Sodium Bicarb 8.4% 50mL PFS
	Famotidine 10mg/1mL 2 mL vial		Succinylcholine 20mg/mL 20mL vial
	Furosemide 100mg/10mL vial		Terbutaline 1mg/1mL
	Glucagon 1mg kit or vial		Tetracaine 0.5 % ophthalmic solution
	Hypertonic Saline (23.4%) 100mL vial		Tranexamic acid 1000mg/10mL
	Haloperidol 5mg/1mL vial		Vecuronium 10mg powder
	Ibuprofen 200mg tablets for PO use		***TOTAL ITEMS ISSUED***

Unit ID:	**EMS Agency:**	**EMS Incident Number:**
EMS Attendant in Charge (Print)		**EMS Attendant in Charge** (Signature)
RN/NP/PA/MD (If applicable) (Print)		**RN/NP/PA/MD** (Signature)
Hospital Pharmacy Tech or Pharmacist (Print)		**Hospital Pharmacy Tech or Pharmacist** (Signature)

Northern Virginia EMS Council
Regional Protocol Guidelines
EMS — Pharmacy Policy

Members of the Northern Virginia EMS Council, Inc. (NVEMSC) EMS/Pharmacy Committee oversee this policy working as a cohesive team. The goal is to provide a means of maintaining essential emergency medical supplies, including Drug Kits on licensed EMS vehicles, through a drug kit exchange system with hospital emergency departments and hospital pharmacies. All NVEMSC policies, procedure and guidelines in this plan have received final approval from the NVEMSC Board of Directors.

SCOPE:

This policy pertains to all participating licensed EMS vehicles operated by agencies within the Northern Virginia Region, Planning District 8, and all participating acute care hospitals within the Northern Virginia EMS Council (NVEMSC) region.

PURPOSE:

To provide a means of maintaining essential emergency medications, including Controlled Substance Kits (CSK) on licensed EMS vehicles, through a drug exchange system, as well as a CSK exchange with hospital emergency departments and hospital pharmacies in Planning District 8.

POLICY ELEMENTS:

1. This is a shared EMS/Pharmacy policy to help guide the pharmacies and EMS agencies to best practices to help facilitate quality patient care within our region and promote efficient drug stocking, exchange, and accountability.

2. Participating Hospitals in the NVEMSC region agree to exchange with participating EMS agencies on a drug and CSK basis. These items are for use by certified EMS agency providers on patients treated at the scene and/or transported to hospitals as a result of emergency calls.

3. Because this policy applies only to patient care rendered for emergency calls, it is specifically noted that no differentiation is made between not-for-profit and for-profit EMS agencies. This policy is strictly intended to promote and maintain standardized emergent patient care throughout the NVEMSC region, consistent with the agency's prehospital patient care protocols, and to provide for patient safety and appropriate control and inventory of pharmaceuticals and supplies.

4. EMS personnel agree to use the Regional EMS Drug Dispensing Sheet and the CSK Exchange Form to document and facilitate the exchange of medications as requested. EMS personnel further agree to use an Electronic Patient Care Report, to document the use of medications.

5. This drug and CSK exchange program also applies to community assist and helicopter assist calls where a participating EMS agency may expend pharmaceuticals on emergency calls that do not result in a patient transport by that agency. In such cases, participating hospitals agree to exchange in the same manner as when a patient is transported by the EMS agency, but only when the participating EMS agencies provide the exchanging hospitals with appropriate patient identifier information.

6. Meetings of the EMS/Pharmacy committee will be held semi-annually and on an as needed basis to evaluate the exchange system. The committee will be comprised of hospital emergency department nurse managers, hospital pharmacists, EMS agency managers and NVEMSC staff. This standing EMS/Pharmacy Committee, representative of the NVEMSC region, also will be responsible for developing standardized forms and records, as well as updating this policy, to meet the needs of the program.

7. Recommended revisions and updates to the Exchange Program will be reviewed by the standing EMS/Pharmacy Committee and its recommendations forwarded to the NVEMSC Board of Directors. Changes will be implemented as indicated and as approved by program participants.

CSK Exchange Program

8. The contents of the controlled substance kits will be determined by a joint effort between the Regional Operational Medical Direction, EMS Chiefs, and EMS Pharmacy Committees and outlined in the Regional CSK Exchange Form.

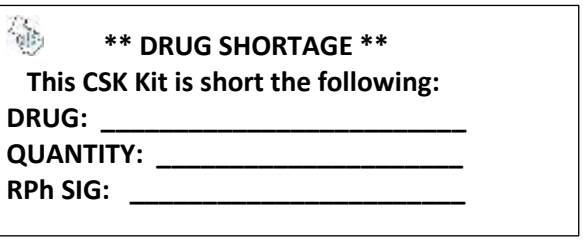
9. The agencies will audit use of drugs contained in the CSK on a quarterly basis and submit a report to hospital pharmacies within 30 days after the end of each quarter. The Northern Virginia EMS Council will create and distribute this report to the pharmacist in charge of each hospital, as well as the EMS program administrators of the EMS agencies beginning with Q1 of 2018.

10. The hospital pharmacies will prepare and distribute the CSKs for use paying particular attention to the following:
    - Each medication type is packaged individually within the CSK bag
    - All medications and expiration dates are visible through the outer CSK bag
    - Remove air from the bag before sealing
    - All contents agree with the exterior label to include the **expiration date to the end of the previous month if expiring on the 1st of the month or the exact date as written on the label**. For example, 1Jun2018 can be expressed on the label as 1 June 2018, 6/1/2018, 6/1/18, May 31, 2018, May 2018 or 5/18. When the date is labeled as the month and year only, the expiration is the end of the labeled month. For example, 5/18 expires on the last day of May 2018, which is one day before June 1, 2018.

11. During exchange, the pharmacy and EMS representative will inspect the contents of the new CSK bag together and agree on the following prior to issue to the EMS unit:
    - The integrity of the CSK pouch (proper sealing technique, no evidence of tampering or damage).
    - Ensure appropriate medication type, concentration, and quantity of the vials placed inside the CSK pouch.
    - Ensure integrity, within reasonable effort, of the drug container stored within the semi-transparent CSK pouch (no visible evidence of tampering, such as damage, previous use, or missing caps, broken seals, etc.).

- Ensure all contents of the CSK have not exceeded their expiration dates and the expiration dates are recorded properly on the outer label.

12. If there is a critical shortage in a medication, the pharmacy will note the shortage using a regional shortage sticker (printed in a vibrant color), outlined below, affixed to the white label on the outside of the CSK bag. The pharmacies agree to communicate shortages to the EMS leaders in their area directly or through the EMS council to all EMS leaders in the region as needed.



Diversion

13. EMS personnel agree to perform accountability checks at least monthly or more often depending on individual department policy.

    Accountability checks will include the following:
    - The CSK pouch must be present and match the last entry in the agency's logging database.
    - The CSK pouch must be inspected to ensure the integrity of the pouch (seal is adhered properly, no evidence of tampering, no evidence of inappropriate access or physical damage).

    The contents of the CSK must be inspected and have the following accounted for:
    - The contents match the listed medication types, concentrations, and quantities listed on the CSK pouch and are in adherence to Operating Procedure 650.03.
    - The integrity of each vial, ampule, and/or Carpuject vial (no evidence of tampering or breeched containers, such as missing caps, and no evidence of physical damage)
    - Expiration dates recorded on the CSK pouch shall be checked to ensure that all contents are within date.

        i. In the case of multiple expiration dates, the date of the medication that expires first shall be used.
        ii. CSKs that expire within the calendar month should be exchanged on the 15th of that month. This exchange shall be noted in the agency's logging database.

14. If a CSK discrepancy is found the following shall occur:
    Agency responsibilities:
    - ☐ The agency will perform an internal investigation to rule out tampering or inappropriate use according to their local protocols and policies.
    - ☐ If tampering or inappropriate use cannot be ruled out the agency will report the diversion to their operational medical director and the pharmacist in charge of the issuing hospital.
    - ☐ The agency will provide the pharmacy with the current copy of their diversion policy and continue an internal investigation, notifying the pharmacy when each of their internal steps occurs.
    - ☐ Notify the operational medical director and the pharmacist in charge of any

regulatory agency involvement as it occurs

- ☐ Communicate with the operational medical director and pharmacist in charge until the case is closed or resolved.

Pharmacy responsibilities:

- ☐ Notify the agency's operational medical director and EMS agency manager
- ☐ Federal notifications
- ☐ Board of Pharmacy notifications
- ☐ Perform an internal investigation to rule out pharmacy involvement
- ☐ Provide the EMS agency with their current diversion policy, notifying the agency when each of their internal steps occur
- ☐ Notify the operational medical director and the agency involved of any regulatory involvement as it occurs
- ☐ Communicate with the operational medical director and agency involved until the case is closed or resolved.

Regional Drug Exchange

15. The EMS agencies agree to use the Regional Drug Exchange Form for all drug exchanges.
16. The pharmacies agree to stock the drugs listed on the form
17. The pharmacies agree to notify the Northern Virginia EMS Council of any drug shortages related to items on the Regional EMS Drug Dispensing Sheet or the Regional CSK Exchange Form.
18. The Northern Virginia EMS Council will provide agencies with drug shortage notifications.

Northern Virginia EMS Council
COVID-19 EMS PPE Donning
&
Doffing Procedures at Hospitals

BACKGROUND

Global response efforts to COVID-19 have created supply chain shortages of personal protective equipment (PPE), critical to the safety of emergency medical services (EMS) providers, hospital staff, and community members. First responder and receiver organizations share the common goal of implementing approaches that maximize the availability of PPE and reduce possible infectious disease exposure to patients, providers, and staff.

At the request of the Northern Virginia Fire Chiefs Committee, the region's Operational Medical Directors (OMD), EMS Chiefs, and representatives from area hospitals met to identify a standardized, regional approach to address concerns with bringing potentially contaminated equipment into hospitals, streamlining donning and doffing procedures for first responders, and maximizing the limited supply of PPE.

PURPOSE

The purpose of this document is to outline the regional approaches for EMS PPE donning and doffing procedures during transfer of COVID-19 patient care at Northern Virginia hospitals.

REGIONAL APPROACHES

Approach 1

- Upon arrival at a receiving facility, staff will meet the patient and EMS providers at the entrance of the building to transfer the patient. EMS providers will not enter the building, nor change PPE prior to contact with hospital staff.

Approach 2

- EMS agencies will adhere to donning and doffing procedures, as identified by area hospitals (please see Appendix A for a full list of procedures). As part of the patient transfer process, the hospitals will provide a minimum of one isolation gown per EMS unit. This will ensure EMS providers have the appropriate level of protection to properly decontaminate their units upon exiting the facility. If reentering the hospital, EMS providers will doff and dispose of all PPE used to decontaminate their unit.

Approach 3[1]

- EMS providers will enter the facility, transferring the patient to hospital staff without changing PPE. Providers will immediately exit the hospital without touching any surfaces.

[1] This approach will not be utilized within any Inova care site.

NEXT STEPS

At the discretion of each hospital, the following next steps may be taken:

- Updates will be made to the Virginia Hospital Alerting & Status System (VHASS) indicating the respective hospital's approach.
- Signage will be established at the emergency department entrance indicating the respective hospital's approach.

Appendix A: EMS Donning and Doffing Procedures at Northern Virginia Hospitals

Facility	PPE Donning and Doffing Approach
Fauquier Hospital	Approach 1
Inova Health System	Approach 2
Mary Washington Hospital & Emergency Department at Lee's Hill	Approach 3
Novant	Approach 1
Reston Hospital Center	Approach 3
Sentara Northern Virginia Medical Center	Approach 3
Stafford Hospital	Approach 3
StoneSprings Hospital Center	Approach 3
Virginia Hospital Center	Approach 2

Northern Virginia EMS Council
Unsafe Patient
ED Pre-alert Policy

BACKGROUND

When delivering a patient report to a receiving facility in the presence of a potentially unsafe or violent patient the terminology used to explain the patient's condition has the potential to escalate the situation and create an even more unstable and unsafe environment for both the patient and the first responders.

PURPOSE

The purpose of this document is to outline the regional approach for delivering a verbal report from transporting EMS units to Northern Virginia hospitals so that the receiving facility can be ready for the arrival of a potentially unsafe patient without aggravating an already delicate situation for the patient and first responders on-scene or enroute to hospital.

REGIONAL APPROACHES

North Virginia Regional Fire, EMS and hospital systems will utilize a common phrase to pre-alert EDs about a potentially violent patient and the need to have security available on their arrival.

When delivering a verbal report prior to arrival to a facility, EMS will use the phrase **"I have a patient for room 100"**.

This policy should not change any of the operational procedures that are currently in place regarding ED staff and security response. The receiving facility will take appropriate internal action to prepare for a potentially unsafe patient.

This is a terminology update for notifying a receiving ED of a potentially violent patient arrival without letting the patient hear the request from EMS. The patient may not be currently violent, however the EMS crew may feel that the patient has the potential to become violent or agitated in the ED.

Here is a sample of how the message can be relayed.

- **EMS phone/radio report:**
  - EMS Provider: I have a 37 year old male for room 100. He is complaining of x, y, z.
  - Communications Nurse: "Direct. You will be going to room 100."
  - ***CLOSED LOOP COMMUNICATION***