PRACTICAL EXAMINATION LOGISTICS MANUAL

DEPARTMENT OF HEALTH

Edward G. Rendell, Governor
Calvin B. Johnson, M.D., M.P.H., Secretary of Health

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Purpose of Evaluation Book

This book has been prepared for evaluators and lead evaluators to use during PA DOH State EMT/FR Practical Examinations. The book has been created to provide an evaluator with the essential information needed to assess the knowledge and skill abilities of students that are being tested.

This book has been "standardized" to provide the essential testing information. Regional councils may wish to include additional information concerning specific regional council evaluator guidelines. The core content has been created to allow evaluators to do their job, observe a student's ability and not complete a lot of paperwork.

An evaluator need only concentrate on three area of documentation:

1. **Student Rotation Form**
2. **Student Log In Sheet**
3. **Scenario Evaluation Form**

General Information

Evaluators will need to complete a scenario evaluation form for each group of students being tested. The student log-in sheet should be filled out and left in the book until the end of the examination. The lead evaluator to verify students completed a specific station uses this form. Students carry the student rotational form to each station. The evaluator is to initial the form. A student must have all three evaluator initials to have a valid rotational form. The rotational form is turned into the lead evaluator at the end of their last station. The lead evaluator validates the evaluator's initials on the rotational form and collects the student(s) evaluation forms from those evaluators.

Using a scoring template, the lead evaluator will score each of the student evaluation forms. The lead evaluator will then advise students of their status.

At the conclusion of the examination, the evaluator should return this evaluation book to the lead evaluator.

Don't forget to Sign In and Sign Out on the evaluator sign in form.

The Examination Format

Examination Format Overview:

The practical examination is comprised of three separate stations, known as patient care stations (PC).

- **PC 1 (Basic Life Support) Station**
- **PC 2 (Trauma) Station**
- **PC 3 (Medical Emergency) Station**

Individual students are asked to partner with another candidate to form a team of two. If odd numbers of candidates exist, after everyone in the test has been partnered, the lone candidate will proceed through the examination stations by being partnered with another student who already completed their examination. It is not acceptable to have a team of three or four candidates test.

The examination candidates are provided with a tracking number and are to record the number onto their rotation form. The exam candidates proceed to stations and wait for a station to open. At each station the station evaluator initials the candidate's rotational form, as a validation of completion for that station; it has no inference on the candidates examination score. Upon the completion of the three stations within their bank, the candidates return to the briefing area for a status report regarding their examination performance. Whenever possible, students should be informed of their examination status, by the examination coordinator, prior to leaving the practical examination.

Station Specifics:

Each of the PC stations is formatted to meet specific educational objectives. This section identifies the specific station logistics related to setup, personnel, equipment, and the overall management of the evaluation station.

PC1 Basic Life Support (BLS)

This station assesses individual basic life support skills and a team's adult cardiac arrest management skills. Using Department of Health approved scenarios; the station evaluator briefs the team of two (2) examination candidates directly outside the testing area. The first testing component is cardiac arrest management. The station evaluator states, "following the completion of the cardiac arrest management scenario, each of you will "individually" complete a separate BLS skill scenario. Upon the conclusion of the cardiac arrest scenario, each candidate will perform a separate/random BLS skill, i.e. adult foreign body airway obstruction, infant CPR, etc. ". Individual skill assessment sheets are used to assess the random skills.

Individual skills testing can be done prior to the team Cardiac Arrest Management. If the team is done first, it is suggested that we cover up (with a sheet) the other manikin/equipment for the individual skills, so as not to confuse the students.

Station Time:	**Cardiac Arrest Management**	**10 Minutes for each team**
	Individual Skill Scenario	**5 Minutes for each candidate**
	Maximum Station Time	**20 Minutes**

Station Equipment:
- ***In working order*:**
- **Live or Placebo AED**
- **AED defibrillation compatible manikin (live AED) Torso or Full Body CPR Manikin (placebo AED)**
- **Adult Intubation Manikin or airway compatible manikin**
- **Child CPR Manikin (Skill Dependent)**
- **Infant CPR Manikin (Skill Dependent)**
- **Complete O2 System (key, BVM, Airways, Adjuncts, Full Bottle) Oxygen tank and regulator assembled.**
- **Complete Patient Assessment Kit (DOH Accreditation Equipment List)**
- **Suction Unit (DOH Accreditation Equipment List)**
- **Blankets**
- **Long spine board or other lifting & moving device**

Personnel:
(1) Live Patient Actor (Scenario Specific)
(1) State Evaluator

Evaluation Supplies:
- **Appropriate Realism Props For Scenario**
- **Evaluation Scenario & Documentation Materials**

If the student candidates, on a live patient actor measure an airway, allow the candidate to measure the airway, but tell them to lay it aside, rather than insert it.

Cardiac Arrest Management:

The crew will assess a conscious or unconscious "live" patient actor or a manikin, (scenario dependent). The candidates will respond as a transporting team of two persons. The student team is to carry the patient care equipment they feel they need in order to handle the station. At a pre-determined point in the scenario, the patient actor will become unconscious and / or cease breathing. At this point, the treatment activities are to be move from the "live" patient actor to the pre-setup CPR manikins. For the conscious patient, the patient actor will be moved to the floor prior to switching to the manikin. The live patient actor will be excused from the testing area. At a pre-determined point, the patient actor may be again assessed once the AED has been used on the manikin; this action will be scenario dependent.

At the conclusion* of the cardiac arrest management scenario, each candidate will complete a separate BLS management skill. Using two different scenarios, each testing candidate will complete the management of the skill without the assistance of their partner. The station concludes when each candidate completes the individual skill management scenario. Both candidates remain in the testing station during the individual testing.

***The cardiac arrest management can be done before or after the individual skills.**

PC 2 Trauma:

A team of two candidates will respond to a single person, non-transporting unit. At this station, the candidates are to identify, assess, treat, and immobilize the live patient actor. A "bystander" may be available as dictated by the scenario. This bystander will interact with the crew only if asked questions. The information will be specific and identified within the station scenario. The bystander may also assist with certain treatment procedures, (i.e. holding the patient's cervical spine, supporting the backboard, assisting with a logroll procedure, holding an injured extremity). The by-stander will NOT offer any medical or treatment advice. If a bystander is present and asked to assist, he or she should respond: "Tell me or show me how."

Station Time: Trauma Scenario 20 Minutes

Station Equipment:

- **Complete O2 System (Bottle and Regulator assembled, key, BVM, Airways, Adjuncts, Full Bottle)**
- **Patient Assessment Kit**
- **Long Spineboard with CID**
- **Short Spineboard (Wrap-around KED type)**
- **Spider Strap set Or (4) 9' straps**
- **Cervical Collars (rigid) (various sizes)**
- **PASG (Adult)**
- **Rigid Splints (Frac Pak, Board Splints, Ladder Splints, etc.)**
- **Traction Splints (Hare or Sager type)**
- **Pneumatic (Vacuum or Air)**
- **Blanket and Pillow**

Personnel: - Patient Actor
- Bystander
- Station Evaluator

Evaluation Supplies: - Appropriate realism props for the scenario
- Scenario and Documentation Forms

The team is to appropriately manage the patient actor's injuries.

PC 3 Medical Emergency:

An examination candidate will proceed through this station as single rescuer in a non-transporting unit. Only one (1) candidate will be allowed in the testing station at a time. The medical emergency scenario will require the single candidate to assess, treat, and to call a medical facility/medical commander regarding the patient's status.

The testing candidate will carry the patient care equipment into the testing station.

Station Time: Candidate A 12 Minutes
Candidate B 12 Minutes

Total 24 Minutes

Station Equipment:

- **Complete O2 System (Bottle and Regulator assembled, cylinder key, BVM, Airways, masks, Adjuncts)**
- **Patient Assessment Kit**
- **Placebo Props (Tic-Tacs, Binaca Spray, Inhalers, Epi-Pens with patient identification.)**
- **Blanket & Pillow**

Personnel: Live Patient Actor
Station Evaluator

Evaluation Supplies: - Appropriate realism props for the scenario
- Scenario and Documentation Forms

Examination Setup:

The practical examination area should be large enough to contain (1) briefing room and enough additional rooms for the station areas. The briefing room should contain enough tables and chairs for the initial group of candidates being evaluated. The briefing room is used for the initial briefing of the candidates, a holding area for candidates waiting for the examination, and a debriefing area for candidates completing the examination.

A testing facility often determines the composition of the examination setup. Large testing rooms can be used if barriers between the stations can be erected. Candidates being tested in large testing areas, who are waiting to be tested, need to be positioned between stations in a "neutral area", which they are not able to observe other students taking their examinations.

All examination areas are to be designated as non-smoking areas. Rest room facilities should be available to the examination candidates during the examination. The testing facility will dictate the exact examination setup.

Examination candidates should be instructed to arrive 15 minutes prior to the announced starting time for the examination. Upon entering the briefing area, the candidate should be instructed to pick-up, read and / or sign the following forms:

1. **Risk Agreement Form**
2. **Rotational Form**

The examination coordinator will then "brief" the candidates regarding the practical examination:

1. **Assign the examination candidates partners. Teams of two (2) are to be formed. If odd numbers of candidates exist following the creation of the two person teams, the single candidate will be partnered with a student that has already completed the station/test.**
2. **A roll call of the eligible testing candidates is conducted. Only pre-registered, pre-authorize candidates will be allowed to test. The examination coordinator should review the course files prior to the start of the examination to determine the eligibility of the candidates. For challenge students, photo identification or other identification should be checked prior to assigning the candidates to a bank of stations.**

3. **Using the examination overview, review the examination process with the examination candidates. Specifically identify the pass/fail criteria, retest options, time, written exam date and time, rotational form, and the completion of the risk agreement form. Each candidate needs to be aware that leaving the examination without authorization by the examination coordinator warrants an immediate failure for the test. Each candidate will receive notification of his or her examination performance from the examination coordinator.**
4. **Optional: Assign each examination candidate a tracking number assignment. When the station areas are completely filled with registered candidates, the examination coordinator should have the candidates proceed to their assigned areas. The remaining exam candidates will then be assigned their tracking numbers and station assignments.**

   NOTE:

   This selection process is best done at random, unless certain students indicate work-related excuses to complete the examination in the first round.
5. **The remaining candidates not immediately going to the stations are to remain in the briefing area. Optional: The examination coordinator will call the remaining candidates by their tracking numbers. This is done for each assigned station area, thus candidates with the next tracking numbers will likely be called to stand outside the testing stations in a relatively short period of time.**

As the examination coordinator briefs the candidates, the evaluators should be locating their stations, briefing their patient actors and by-standers, and preparing the station area for the start of the examination. Patient actor's moulage should match the station scenario. Any additional realism props should be positioned around the patient actor prior to the candidates entering the testing area. A baseline set of the actual patient actor's vital signs is to be taken in the medical station by the station evaluator and documented on the station log sheet.

Notification of Scores and Candidate Questionnaire:

Upon completion of the three stations in their station assignment, the exam candidates are to return to the briefing area. They are to bring their rotational forms to the exam coordinator. The exam coordinator is to attain the evaluation forms from the evaluators. As individual teams, the exam coordinator should privately advise each of the teams of candidates of their individual status. Feedback will be provided to each group of students concerning their examination performance. For candidates needing a retest, the date, time, and location of the retest should be identified. Candidates should complete a Candidate Questionnaire form prior to their being notified of their examination results.

Personnel:

This section deals with the duties, responsibilities, and qualifications of the examination personnel. A successful examination relies upon the cooperation of all of the examination personnel and examination candidates. Each of the personnel plays an essential role in the examination process.

A. Examination Coordinator

The exam coordinator is the principal representative for the PA Department of Health at the state practical certification examination. This individual is responsible for up holding the validity and integrity of the examination process.

1. Qualifications:

- **Regional council representative, Department of Health representative, or an individual appointed by either the regional council or Department of Health.**
- **Currently certified as a PA DOH EMT, Paramedic, or PHRN**
- **Current certified as a PA DOH EMT Instructor.**
- **Currently recognized as a prehospital CPR provider (AHA or ARC)**
- **Currently certified as a CPR Instructor by either (AHA or ARC)**
- **A recognized state evaluator for at least 2 years**
- **Satisfactory completion of a PA DOH approved Evaluator training course.**
- **Completion of the state evaluator update for the revised examination process**
- **Completion of EMT-B course, transition course, or rollout**

2. Duties:
Of the following duties, some may be shared duties between the examination coordinator and the regional EMS council. However, all of the following tasks must be addressed prior to, during, or following the practical examination:

1. **Project the number of candidates being tested and determine the number of station evaluators, and patient actors/by-standers that are required.**
2. **Prepare the evaluation scenarios and documentation forms for the exam:**
    - **Evaluation scenarios for each bank area**

- **Examination Overview, Student Rotational Forms, and Risk Agreement Forms**
- **Tracking Forms, Evaluator Documentation Forms**
- **Supplemental Realism Props for each examination area**
- **Spare DOH Registration Materials, Criminal History Forms, etc.**

3. **Contact the training institute with equipment needed for each station area.**
4. **Advise the training institute of the realism (makeup) for the patient actors.**
5. **Set up the briefing area (candidate materials on tables).**
6. **Identify the time, location, and date of the written exam and the practical exam retest.**
7. **Set up a separate area for the evaluators and patient actors.**
8. **Review the course records and assures the eligibility of the exam candidates.**
9. **Review each exam area for sufficient equipment, personnel, and overall set up.**
10. **Review eligibility of exam candidates (challengers), have all candidates read and sign the Risk Agreement Form, have candidates complete the demographic section of the Student Rotational Form.**
11. **Assign Scenario Numbers and Optional: Tracking Numbers to the exam candidates.**
12. **One hour into the examination, collect examination scores from the station areas.**
13 **Monitor the overall examination performance and "flow" of the examination.**
14. **Monitor the examination scores for any indications of a class deficiency.**
15. **Monitor the completion of students at the examination stations. Advise the staff when they can tear down the station areas and begin their clean up.**
16. **Review the check sheets and student performance.**
17. **Using a reporting form, document any student conference or unsatisfactory scores.**
18. **By individual teams, advise the candidates of their practical exam scores.**
19. **Complete the evaluator sign in sheet and any other additional documentation.**
20. **During the examination, monitor and assess the evaluator's techniques used to evaluate the candidates.**
21. **LEAVE THE TESTING SITE IN BETTER CONDITION THAN WHEN YOU ARRIVED!**

B. Station Evaluator:

The station evaluator is a recognized PA Department of Health trained evaluator, hired by the regional EMS council. The evaluator is to objectively assess an EMS candidate's abilities to provide emergency medical care in accordance with the Commonwealth's scope of practice for EMS personnel.

1. **Qualifications:**
   - **PA DOH Certified EMT, Paramedic, or PHRN.**
   - **Satisfactory completion of a PA DOH approved Evaluator training course.**
   - **Completion of the EMT-B evaluation update.**
   - **Current prehospital CPR provider (AHA or ARC).**
   - **Current CPR Instructor recommended (AHA or ARC) *Mandatory for BLS Station.**
   - **Completion of an EMT-B Rollout, EMT-B Transitional or EMT-B Course.**
   - **Minimum of (2) years of prehospital experience.**
   - **Minimum age of 18.**
   - **Recommendation from accredited training institute attesting to the candidate's evaluation skills (regional option.)**

2. **Duties:**

   1. **Using approved DOH practical examination scenarios, the evaluator will provide the examination candidates with the scenario's information and use the scenario to objectively evaluate the candidates' ability to provide quality prehospital care.**
   2. **Prepare the station area and patient actor's programming for the scenario.**
   3. **Secure the necessary equipment and documentation materials for the scenario.**
   4. **Will be professional, understanding, and objective in their assessment.**
   5. **Remove any bias from their decisions regarding the performance of candidates.**
   6. **Will not evaluate personnel that they personally know and /or work with.**
   7. **Properly document only the activities completed by the examination candidates.**
   8. **Interact with candidates as outlined by the scenario (vitals, by-stander info).**
   9. **Advocate an understanding of the importance for candidates to meet or exceed the minimum skills necessary for them to function as an EMS provider.**
   10. **Will maintain confidentiality of candidate performance at their exam station.**
   11. **Assist the examination coordinator and institute staff administer the test.**
   12. **Pre-assess patient actor vital signs before the start of the station.**

C. Patient Actor:

Is an individual who possesses acting skill necessary to simulate real-life reactions of an injured or ill patient.

1. Qualifications:

- **Age 14 or Older (Parental consent required for 17 year old or less)**
- **Experience in prehospital medicine preferred.**

2. Duties:

1. **Using the DOH scenario, act out the realistic conditions, feelings, and reactions for the scenario.**
2. **Use supplemental realism props and makeup to present a realistic appearing patient.**
3. **Act only within the scope of the scenario's information.**
4. **Communicate appropriate assessment and treatment information to the station evaluator as was performed by the examination candidates.**
5. **Assist the evaluator setup and conduct the testing station.**

D. Bystander:

This individual is a patient actor not associated with the instruction of the candidates being tested.

1. Qualifications:

- **Age 14 or older (Parental consent required for 17 year old or less)**
- **Prehospital EMS experience is preferred**
- **If secondary instructor, no teaching contact with any of the candidates**

2. Duties:

1. **Act out the role of the bystander at the trauma station**
2. **Provide only the information identified by the station scenario.**
3. **Offer assistance only when asked by the team of examination candidates. No medical or trauma care alternatives are to be offered to the examination candidates.**
4. **Assist only with specific "non-lifting" tasks. (Holding the C-spine, an injured extremity, assisting with log rolling a patient actor onto a backboard, supporting a backboard). If asked to assist state "Tell me or show me how."**
5. **Assist the evaluator with any input regarding the performance of the candidates.**

Specific Evaluation Critical Areas:

1. AED:

During the cardiac arrest management scenario, the team is to follow the PA DOH AED protocol to use the AED unit on the simulated cardiac arrest victim. The team's ability to use the protocol to effectively deliver the appropriate number and order of defibrillation is a critical evaluation element. Assuring the scene safety and candidate safety when using a placebo or live AED is not only an evaluation element, but is a station evaluation element.

2. Oxygen Administration:

Individual candidates will use supplemental O2 delivery devices and adjuncts to treat patients in all three testing stations. Knowing when to apply, how to apply, and what devices to apply are assessed in each of the station areas.

Once a candidate applies and turns on the O2 device (i.e. non-rebreather mask), the evaluator may remove the oxygen mask and turn off the O2 cylinder.

3. Trauma Management:

The station scenarios will contain either a patient who is a "load & go" or will be a "stay & treat" trauma patient. The crew's ability to make an appropriate decision between the two types of patients is a critical evaluation element. Additionally, the crew's ability to assess, treat life threatening situations, adequately immobilize the patient are other critical evaluation elements.

4. Medical Emergency Management:

The medical emergency station is designed to assess each individual candidate's prehospital management skills. Individual performance and management of a medical emergency patient is assessed in this station area. Patient communication skills, patient assessment, initial treatment interventions, and an oral report of pertinent patient findings to a medical command physician, a receiving facility, or a responding transporting unit (BLS or ALS) are the critical evaluation elements for this station.

5. Vital Sign Assessment:

Accurate vital sign assessment is a critical testing element at all stations. Each candidate at the medical emergency station will accurately assess the vital signs of the patient actor and report their findings to the medical direction facility. Vital signs shall be within the following percentages or variances: 10% for BP: systolic and diastolic; 10% for and Pulse and 25% for respirations.

6. Radio Report:

Communicating accurate patient information to healthcare providers is essential. At the medical emergency station, each candidate will provide a precise, accurate, and professional oral radio report to a medical command physician, a medical facility or a responding BLS or ALS transporting unit. The content of the radio report shall contain:

- **Patient chief complaint**
- **Approximate age, sex, weight of the patient**
- **Pertinent patient assessment findings**
- **Vital sign assessment**
- **Treatments**

Optional: Bank/Station Determination:

NOTE: A regional council may decide upon a coordination system that works for their system. The system described below is provided as an example.

Determination of the number of banks/stations is proportional to the number of candidates being tested. The following chart estimates the number of banks/stations required for specific numbers of candidates:

Strongly Recommended:

Number of Candidates	No. Scenarios Required
< 16	3 stations
16 - 36	6 stations
36 - 54	9 stations
54+ (Not Staggered)	12 stations
54+ (Staggered @ 1.5 Hr. Intervals)	9 stations

Staggering groups of candidates can allow an examination to be conducted with fewer banks. A minimum of 1.5 hours between groups should be allowed. This provides sufficient time for the registration and briefing of the new group, plus allows the first group of candidates to finish their station areas. Care should be given to ensuring that adequate staff is available to assist the lead evaluator/test coordinator with administrative and logistic duties at large volume examinations. This will ensure that the practical examination will run in a smooth and timely manner.

Examination Scheduling:

The regional EMS council and the training institutes cooperatively establish the state testing dates and times for the certification examinations. Efforts to consolidate the state testing between training programs at various training sites should be made to minimize the costs and maximize the logistics of the examinations.

For example, if one training site, with 26 students, is completing their training program two weeks ahead of another training site in the same county/area, with 22 students, efforts to consolidate the classes into a single examination site should be pursued. Cost, logistics, staff time, evaluator utilization, and facility utilization are factors that need to be considered when scheduling examinations

Tracking Examination Candidates:

Upon entering the examination briefing room, each examination candidate is to complete a student rotation form. This form is to be taken to each examination station area and is to be initialed by the station evaluator. The rotational form is used to verify the attendance at all three of the examination stations within a bank. The rotation form is turned into the examination coordinator upon completion of all three examination stations.

Each rotational form may contain a tracking number for the exam candidate. This tracking number corresponds to a tracking number on the examination coordinator's master form. The tracking identification number enables the examination coordinator to "track" the examination candidate through the examination. The tracking number is also contained on the station evaluator's scoring form. When the examination coordinator collects the station check sheets, they can easily match the scores for the candidate on the different forms.

Examination Flow:

The examination coordinator, with assistance from the local training institute personnel, need to assure that the examination stations have an ample supply of candidates to be tested at each station area. The examination coordinator needs to closely monitor the "flow" of the exam and insert the new examination candidates before a station area is to open.

<u>Throughout the Exam</u>:

The examination coordinator or assistant rotates through the station areas collecting the evaluation forms from the station evaluators.

The exam coordinator will go through each station to observe exam candidates and/or evaluator performance on the examination. Any major discrepancies or concerns must be made known to the regional council immediately.

Student Rotation Form (Sample)

PA DOH Practical Examination
Rotational Form

Name: _____ Date: ___/____/_____
Exam Location: _____
Training Program Location: _____
Certification Level: ___ FR ___ EMT ___ Paramedic ___ PHRN ___ Other

Tracking Number: _____ Bank Number: _____

Station Area Evaluator Initials
PC 1 (BLS) _____
PC 2 (Trauma) _____
PC 3 (Med.Emerg) _____

(Evaluator Use Only) Clothing Identification:
_____

Student Rotation Form (Sample)

PA DOH Practical Examination
Rotational Form

Name: _____ Date: ___/____/_____
Exam Location: _____
Training Program Location: _____
Certification Level: ___ FR ___ EMT ___ Paramedic ___ PHRN ___ Other

Tracking Number: _____ Bank Number: _____

Station Area Evaluator Initials
PC 1 (BLS) _____
PC 2 (Trauma) _____
PC 3 (Med.Emerg) _____

(Evaluator Use Only) Clothing Identification:
_____

OPTIONAL
PA Department of Health Practical Examination (Sample)
Examination Coordinator Tracking Form

Exam Location: _____ Date: ____/____/_____
Exam Coordinator Name: _____
Candidates Evaluated: _____ # Unsatisfactory Scores _____
Conferences _____ # Retests _____ # Fail _____
*Class Deficiency _____
Number of Banks: _____ Number of Evaluators _____
Write in Bank Id. Numbers Used:
_____

Key: S = Satisfactory U = Unsatisfactory C = Conference "x" Scores Given

Station	In	Tracking Number	**Candidate Name**	**PC1**	**PC 2**	**PC3**	**Indiv. Skills**	**Comment**
1		A – 1						
		A – 2						
		A – 3						
		A – 4						
		A – 5						
		A – 6						
2		B - 1						
		B - 2						
		B - 3						
		B - 4						
		B - 5						
		B - 6						
3		C - 1						
		C - 2						
		C - 3						
		C - 4						
		C - 5						
		C - 6						
1		D - 1						
		D - 2						
		D - 3						
		D - 4						
		D - 5						

		D - 6						
Station#	**In**	Tracking Number	**Candidate Name**	**PC1**	**PC 2**	**PC3**	**Indiv. Skills**	**Comment**
2		E - 1						
		E - 2						
		E - 3						
		E - 4						
		E - 5						
		E - 6						
3		F - 1						
		F - 2						
		F - 3						
		F - 4						
		F - 5						
		F - 6						
1		G - 1						
		G - 2						
		G - 3						
		G - 4						
		G - 5						
		G - 6						
2		H - 1						
		H - 2						
		H - 3						
		H - 4						
		H - 5						
		H - 6						
3		I - 1						
		I - 2						
		I - 3						
		I - 4						
		I - 5						
		I - 6						
1		J - 1						
		J - 2						
		J - 3						

		J - 4						
		J - 5						

Station #	In	Tracking Number	**Candidate Name**	**PC1**	**PC 2**	**PC3**	**Indiv. Skills**	**Comment**
2		K- 1						
		K - 2						
		K - 3						
		K - 4						
		K - 5						
		K - 6						
3		L - 1						
		L - 2						
		L - 3						
		L - 4						
		L - 5						
		L - 6						
1		M - 1						
		M - 2						
		M - 3						
		M - 4						
		M - 5						
		M - 6						
2		N - 1						
		N - 2						
		N - 3						
		N - 4						
		N - 5						
		N - 6						
3		O - 1						
		O - 2						
		O - 3						
		O - 4						
		O - 5						
		O - 6						

1		P - 1						
		P - 2						
		P- 3						
		P - 4						
		P - 5						
		P - 6						

OPTIONAL

PA Department of Health Practical Examination

Evaluator Documentation Form (Sample)

Station Evaluator Name: _____ Date: ____/____/_____
Examination Location: _____
Station Scenario Title: _____ Station Scenario #: _____

Tracking #	**Candidate Name**	**Time Started**	**Time End**

Equipment List for Complete Oxygen Equipment List

Airway Sets
- Oropharyngeal
- Nasopharyngeal

Bag-valve-mask with oxygen connecting tubing and reservoir
- Adult
- Pediatric

Oxygen Regulators
- Flow restricted oxygen powered ventilation device (demand valve)

Oxygen Tanks with cases or storage methods (D size min.)
Nasal Cannulae, sanitized (one per patient)
Non-rebreather Mask, sanitized (one per patient)
Pocket Mask with One-way valve w/oxygen inlet
Suction, electric powered
Suction Catheters: assorted including:
- rigid, soft

Patient Assessment Jump Kit Equipment List

Sphygmomanometer
Single Stethoscope
Penlights
Adhesive Tape
Bandages: assorted including self-adherent/roller gauze, and triangular
Chemical packs (hot/cold)
Dressings, assorted including: 4X4, occlusive and universal
Gloves, Disposable
Masks, Disposable
Gown, disposable
Scissors
Eye protection
Saline for Nasopharyngeal airway
Tongue Blades
Burn Sheet (for trauma station)
OB Kit (for medical station)

PA Department of Health
Treatment Protocols

Evaluators should consult and use the following treatment protocols when questions arise concerning the use of the AED, Epi-Pen, or Inhaler. These are the approved DOH treatment protocols and are to be used to instruct students. Use of another treatment protocol will not be recognized for state certification testing purposes.

Please ensure that the most up-to-date protocols are being utilized.

(SEE APPENDIX D)

MEMORANDUM OF AGREEMENT AND ASSUMPTION OF RISK AGREEMENT

The Pennsylvania EMT (Emergency Medical Technician) certification examination is made up of two parts -- a written portion and a practical portion. This is the practical portion, which consists of three stations where your ability to perform specific skills will be assessed. You will be given hypothetical and contrived situations in which your ability to treat a simulated victim will be evaluated.

There are three (3) stations. Stations are called "Patient Care Stations" (PC) and are numbered 1, 2, and 3.

PC 1 Station consists of two components. The first component deals with your ability to cooperatively (with a partner) treat and manage a cardiac arrest situation. The second component assesses your ability to perform individual basic life support skills (i.e. oral airway insertion, infant CPR) The PC 2 Station deals with your ability to cooperatively (with a partner) treat and manage a trauma victim. The PC 3 Station deals with your ability to individually treat and manage a medical emergency patient.

At PC 1 and PC2 stations, a maximum of 20 minutes has been allotted. For PC 3, a maximum of 12 minutes has been allotted. All treatments are to be completed within these time frames.

You may take a blank piece of paper or tape into the station with you to write on after you have entered the station.

Successful completion of the examination is based on attaining all satisfactory scores in each testing station. A Satisfactory score indicates that a candidate was able to identify the problem or task presented. The student has demonstrated appropriate treatment and performed correct skills that meet the objectives being assessed. An Unsatisfactory score indicates that the candidate was unable to demonstrate appropriate treatment or skills, based on the objectives being assessed. The candidate performed skills that would adversely affect patient outcome. In order to be eligible for the written examination, you successfully complete the practical examination.

Students who attain unsatisfactory scores are eligible for a retest of the station/skill areas. The following chart identifies retest criteria:

Unsatisfactory Score (By Candidate)	Action Required For Retest
Trauma Station	Retest Trauma Station
Medical Station	Retest Medical Station
BLS Station: Cardiac Arrest Mgt.	Retest Cardiac Arrest Management Station
Individual BLS Skill	Retest Individual Skill

Upon completion of all your stations, you will be notified regarding your performance during the examination. Each student will receive feedback regarding his or her performance during the examination. Questions or concerns regarding the practical examination should be directed to the regional EMS council that administered the practical examination.

The PC station scenarios have been developed to simulate realistic settings. Once in a testing area, the evaluator is not to answer questions about the setting. The evaluator's interaction shall be limited to providing placebo vital signs (if indicated) and/or patient specific information. The evaluator will be your dispatcher for all stations At the BLS (PC1) and Medical Emergency (PC3) stations; the evaluator will act as the Medical Command Physician, if one is required. The evaluator will only recognize and react to information provided by the candidate's in their oral report.

Relax! Take some deep breaths just before you enter your stations. While you wait, think about how you would react to various patient treatment situations. Visualize yourself performing a skill, (e.g. AED application, medical patient assessment). Review the treatment protocols that are used to assist a patient self-administer their medications or to use the AED unit.

Tobacco usage during the state certification briefing and testing is prohibited. Check with the local testing center as to what areas you are permitted to smoke.

The undersigned assumes all responsibility for all risk of damage or injury that may occur to the undersigned while attending or participating in a practical examination. In consideration of being accepted as a participant in such practical examinations, the undersigned hereby releases, discharges, and holds harmless the emergency medical services council and any associated organizations and successors and their owners, employees, and agents from all claims, demands, rights of causes of action, present and future, whether known, anticipated or unanticipated, and resulting from or arising out of, or incident to, the undersigned's attendance at, participation in or intended participation in practical examinations.

I HAVE READ, UNDERSTAND, AND SIGNED THE AFORESAID MEMORANDUM OF AGREEMENT AND ASSUMPTION OF RISK AGREEMENT AND RELEASE THIS

_____ Day of _____ _____
(Number) (Month) (Year)

_____ _____
Examinee Witness

Practical Examination Ethics

The "Realistic EMT-B Practical Examination" has been developed to create a realistic test-taking environment. Efforts have been made to minimize evaluator, patient actor, and student bias. If during the completion of this examination, you (as a student, patient actor, or evaluator) encounter a situation in which you feel you may not receive/render/or have unfair influence over an evaluation, you are to immediately contact the examination coordinator.

Ideally, an evaluator from the same EMS agency should not evaluate students from the same service. Evaluators must not have instructed in the course areas that they are evaluating. Evaluator shall be selected from out-of-county, whenever possible. The evaluator shall not have a family relationship with any student being evaluated.

PRACTICAL EXAMINATION INCIDENT REPORT

Incident Date:_____ Incident Location:_____

Individual(s) Involved in Incident:_____

Description of Incident:

Witness to Incident:_____

Action(s) taken to address Incident:_____

Incident Report Filed By: _____ Date Filed:_____

EMS TRAINING – PRACTICAL EVALUATIONS
EVALUATORS' COMMENT SHEET

Station #_____

Evaluator's Name_____ID #_____

Class Location_____Date:_____

Station/Skill Area_____

Victim/Patient's Name _____

Helper, if applicable:_____

Please comment below on the overall performance of personnel you evaluated.

STRENGTHS:

WEAKNESSES

Comments/suggestions regarding this date's evaluation

Please use the reverse side for any additional comments. Thank you.

PA Department of Health
EMT-B Practical Examination
Candidate Questionnaire

You have just completed your state practical examination. We need to ask you for your first impressions of your examination experience.

Undoubtedly, you probably were nervous going into the exam and still may have some test anxiety following the exam. These are normal feelings after being placed into a stressful situation.

For the questions below, use this rating scale to answer them:

1	2	3	4	5
(Strongly) Disagree	(Somewhat) Disagree	(Neutral)	(Somewhat) Agree	(Strongly) Agree

Place your number response on the line provided in front of each statement:

1. _____ I was adequately prepared to take this practical examination.
2. _____ I feel good about my performance on the practical examination.
3. _____ Realistic settings and props were used during the practical examination.
4. _____ The patient actors appeared to be lifelike.
5. _____ The scenarios portrayed realistic settings and fairly assessed my skills.
6. _____ The patient actors wore makeup.
7. _____ The examination was what I expected it to be.
8. _____ The evaluators were friendly and understanding of our anxiety levels.
9. _____ The station areas were easy to locate and easy to enter/exit.
10. _____ The examination was conducted within a reasonable time frame.
11. _____ The examination was a good assessment of my abilities as an EMT-B.
12. _____ Examination was presented in an organized manner.
13. _____ All the equipment I needed was available/accessible/in good condition.
14. _____ Examination coordinators were knowledgeable and organized.
15. _____ This examination was a valuable education experience for me.

Write in your comments about the examination:

What you liked best:	What you liked least:
_____	_____
_____	_____
_____	_____

Recommendations for improvement: _____
_____
_____

Candidate Orientation to the Practical Examination

The Examination Coordinator/Lead Evaluator must read the following orientation to all candidates for the practical examination:

Good [morning, afternoon, evening]. My name is [Examination Coordinator/Lead Evaluator]. I will be the Examination Coordinator/Lead Evaluator administering this examination. On behalf of the Pennsylvania Department of Health Emergency Medical Services Office, the [regional EMS Council hosting], and [Name of Sponsoring Institution], I would like to welcome you here today. We extend our sincere wishes for your successful completion of this examination process and obtaining subsequent Pennsylvania certification.

I will now read the roster to confirm attendance before we begin the orientation. Please identify yourself when I call your name so that I may record your attendance on the official roster.

Examination Coordinator/Lead Evaluator now calls the roll.

Continue reading to all candidates:

If I did not call your name, please identify yourself so that I can record your attendance today.

The instructions I am about to give pertain to the practical examination. Please pay close attention, as these instructions will not be repeated at a later time.

The Scenario Evaluators utilized today were selected because of their expertise in the assigned skill. The Scenario Evaluator is an observer and recorder of your actions. Each Scenario Evaluator documents your performance in relationship to criteria established by the Pennsylvania Department of Health Emergency Medical Services Office (EMS Office) that adheres to the National Standard Training Curricula.

The Scenario Evaluator will call you into the skill when it is prepared for testing. No candidate, at any time, is permitted to remain in the testing area while waiting for his/her next station. You must wait outside of the room until the station is opened and you are called.

You are not permitted to take any books, pamphlets, brochures, study materials, or any other electronic or mechanical devices. At this time, all pagers, cellular telephones, personal digital assistants, and similar electronic communication devices must be turned off.
If you attempt to use any of these devices during the examination for any reason whatsoever, you will be immediately dismissed from the remainder of the examination, including the written examination if you have not yet completed it.

As you enter the room, the Scenario Evaluator will greet you and ask for your first and last name. Please provide the proper spelling of your name so that your results may be reported accurately. The Scenario Evaluator will then read aloud the Scenario Dispatch Information exactly as printed on the scenario sheet provided by the EMS Office. This information is read to each of you in the same manner to ensure consistency and fairness. Please pay close attention to the information as they correspond to similar information you might receive on an EMS call and give you valuable information on what will be expected of you during your performance. The Scenario Evaluator will ask if you understand the instructions and will be happy to repeat any portion if necessary. Do not ask the Scenario Evaluator to supply additional information not contained in the instructions, as this is not permitted.

The stations are supplied with several types of equipment for your selection. You will be given time at the beginning of each station to survey and select the equipment necessary for the appropriate management of the patient. Do not feel obligated to use all of the equipment. The Scenario Evaluator will offer to point out any specific operational features of the equipment if you are unfamiliar with any device. If you brought any of your own equipment, it must be inspected and approved by the Examination Coordinator/Lead Evaluator before you enter the skill.

As you progress through the practical examination, each Scenario Evaluator will be observing and documenting your performance. Do not let their documentation practices influence your performance. There is no correlation between the volume of their documentation and the quality of your performance. You are encouraged to explain the things you are doing within the scope of the time limit. The Scenario Evaluator may also ask questions for clarification purposes only. Simply answer any questions and do not assume they are meant to provide feedback on the quality of your performance.

If the skill has an overall time limit, the examiner will inform you of this during the instructions. However, if you complete the skill before your allotted time, inform the Skill Examiner that you have finished your performance. You may be asked to

remove equipment from the Simulated Patient before leaving the station. You are not permitted to make any copies or recordings of any scenario at any time.

Candidates sometimes complain that Scenario Evaluators are abrupt, cold, or appear unfriendly. No one is here to add to the stress and anxiety you already feel. It is important for you to understand that the Scenario Evaluators have been instructed to avoid any casual conversation with you. This is necessary to ensure fair and equal treatment of all candidates throughout the exam. Please recognize this behavior as professional and simply perform the skills to the best of your ability. We have instructed the Scenario Evaluators not to indicate to you in any way your performance in any skill. Do not interpret any remarks as an indication of your overall performance.

You are not permitted to discuss any specific details of any scenario with each other at any time. Please be courteous to the candidates who are testing by keeping all excess noise to a minimum. Be prompt in reporting to each station so that we may complete this examination within a reasonable time period.

There are four scoring areas. Two of the areas are team scored and two are individually scored. To pass the examination, the candidate must attain satisfactory scores at each station. If you attain an unsatisfactory score (s), you will be eligible for retesting under the EMS Office's retesting policy.

The purpose of certification by the Commonwealth of Pennsylvania is to verify achievement of minimal competencies for safe and effective practice after the educational component has been completed. All candidates will be informed of their scores. In addition to Pass/Fail status, the Examination Coordinator/Lead Evaluator will provide information regarding your performance at the examination stations. This information is for your benefit and is NOT subject to discussion or debate, it is merely a method by which you can focus your remediation to better prepare you for a retest opportunity. Please remember that today's examination is a formal verification process. The Skill Examiners have not played any role in the establishment of pass/fail criteria, but merely observe and document your performance in each skill.

If you feel you have a complaint concerning the practical examination, a formal complaint procedure does exist. You may initiate any complaint with the Examination Coordinator/Lead Evaluator today or submit a written complaint to your regional EMS council or the EMS Office.

If you feel that you have been discriminated against, you should contact the Examination Coordinator/Lead Evaluator immediately to initiate the complaint process.

We are here today to ensure that fair, objective, and impartial evaluations occur in accordance with EMS Office policy. If you have any concerns, notify the Examination Coordinator/Lead Evaluator immediately to discuss your concerns. I will be visiting all skills throughout the examination to verify adherence to these guidelines.

Does anyone have any questions concerning the practical examination at this time?

Scenario Evaluators Orientation to the Practical Examination

The Examination coordinator/Lead Evaluator must read the following to all Skill Examiners, Bystanders, and Simulated Patients:

Good [morning, afternoon, evening]. My name is [Coordinators name]. I will be the Examination Coordinator administering this examination. On behalf of the Pennsylvania Department of Health EMS Office, [regional EMS Council hosting] and [Name of Hosting Institution], I would like to thank you for serving as a Scenario Evaluator today. All data relative to a candidate's performance is based upon your objective recordings and observations. You were chosen as an Scenario Evaluator today because of your expertise in the assigned skill and ability to fairly and accurately observe and document various performances. All performances must be reported with the greatest degree of objectivity possible. The forms you are using today have been designed to assist you in objectively evaluating the candidates.

Let me emphasize that this examination is a formal verification procedure not designed for teaching, coaching, or remedial training. Therefore, you are not permitted to give any indication whatsoever of satisfactory or unsatisfactory performance to any candidate at any time. You must not discuss any specific performance with anyone other than the lead evaluator or myself. If you are unsure of scoring a particular performance, notify me as soon as possible. Do not sign or complete any evaluation form in which you have a question until we have discussed the performance. If I'm busy with other duties, make notes of the performance and continue on with your evaluation of other candidates if possible, as soon as possible, get the coordinators attention and address the issue.

You must act in a professional manner at all times, paying particular attention to the manner in which you address candidates. The Pennsylvania Department of Health does not discriminate or harass and it will not tolerate any type of discrimination or harassment by anyone involved with administration of the practical examination. You must be consistent, fair, and respectful in carrying out your duties as a formal Scenario Evaluator. The safest approach is to limit your dialogue to examination-related material only. Be careful of the manner in which you address candidates, as many will interpret your remarks as some indication of their performance.

You may also have to stimulate a candidate to perform some action. If a candidate states, "I'd do a quick assessment of the legs," you must interject and ask the candidate to actually perform the assessment as they would in a field situation.

We suggest you introduce yourself to each candidate as you call them into your room. No candidate, at any time, is permitted to remain in the testing area while waiting for his/her next station. As the candidate enters, be sure they did not bring any books, pamphlets, brochures, study materials, calipers, calculators, or any other electronic or mechanical devices. Take a few moments and clearly print the candidate's first and last name on the evaluation form as well as your name, the date, and scenario or set number if required. We suggest you use ink pens and follow good documentation practices when completing these forms. You should then read aloud the scenario dispatch information exactly as printed on the scenario outline for your particular station. You may not add to or detract from these instructions but you may repeat any portion as requested. The instructions must be read to each candidate in the same manner to ensure consistency and fairness. Give the candidate time to inspect the equipment if necessary and explain any specific design features of the equipment if you are asked. If the candidate enters with any equipment, be sure the lead evaluator or myself have inspected it and you are familiar with its use prior to evaluating the candidate.

When the candidate begins their performance, document the time started on the evaluation form if required. As the candidate progresses through the skill, fill out the evaluation form in the following manner:

1. **Place a check in the appropriate space at the time each item is completed.**

2. **Leave the box blank for any step that was not completed or was performed in an unacceptable fashion (inappropriate, haphazard, in excessive and potentially detrimental delay).**

All forms should be filled-out in a manner that prohibits the candidate from directly observing any scoring or comments you may note. Do not become distracted by searching for specific statements on the evaluation form when you should be observing the candidate's performance. Ideally, you should be familiar with these forms, but if this occurs, simply turn the form over and concisely record the entire performance on the backside.
After the candidate finishes the performance, complete the front side of the evaluation form in accordance with the documented performance.

Please remember the most accurate method of fairly evaluating any candidate is one in which your attention is devoted entirely to the performance of the candidate.

You must observe and enforce all time limits for the scenarios. When the time limit has been reached, simply stop the candidate's performance promptly, document the time the performance ended, and direct the candidate to move on to the next station, making sure that no candidate takes any notes or recording of the scenario (notes on vital signs, scenario information, etc.).

You are responsible for the security of all evaluation materials throughout the examination and must return all materials to me before you leave this site. If you need to take a break, inform the Examination Coordinator or me and secure all evaluation instruments that were issued to you. After you receive your materials, proceed to your station and check the props, equipment, and moulage to ensure all equipment is available and functioning properly. You should orient any Simulated Patients and EMT Assistants to their roles today. The Simulated Patients should act as a similar patient would in a field situation and the bystanders should perform as an untrained bystander would, performing only those tasks requested by the testing candidate(s). Please emphasize the importance of their consistent and professional performance throughout today's examination. You must read through your material and instructions, brief your Bystanders and Simulated Patients, and review the evaluation form prior to evaluating any candidate. Please wait until I have inspected your room and answered any of your specific questions before opening your skill. I will also be visiting all skills during the examination and will try to avoid interference as much as possible.

Are there any questions before we dismiss?

DEPARTMENT OF HEALTH

Edward G. Rendell, Governor
Calvin B. Johnson, M.D., M.P.H., Secretary of Health

Emergency Medical Technician – Basic
BLS Skill Sheets

Pennsylvania Department of Health
Emergency Medical Services Office

December 10, 2002

TABLE OF CONTENTS

FORWARD

The skill sheets contained within this document are a compilation of the most up-to-date standards as found in the National Standard Curriculum for Emergency Medical Technician (EMT) – Basic. They will be revised and updated as new information, research, technology, and knowledge of the EMS system throughout the United States changes.

For their significant contribution in developing this resource, we would like to thank the Pennsylvania Emergency Health Services Council, EMS Education Task Force specifically David Kirchner, Chairman and for their support of this on-going project, we would also like to thank the Medical Advisory Committee, chaired by Jack Damiano, MD. Barb Seifert, Prehospital Education Coordinator, staffed the Emergency Medical Services Office development and completion of this document.

PURPOSE

The skill sheets contained in this document were designed to help facilitate the learning process of Pennsylvania's EMT-Basic student. Developed from the National Standard Curriculum (where applicable), these skill sheets will describe in detail the steps to be taken in order for a student to successfully complete the skills utilized by the EMT-Basic. It is intended to function only as a student learning aid. It is not intended to provide indications/ contraindications for the performance of these skills and should be used in conjunction with appropriate educational materials (i.e., textbooks).

BSI & GLOVE REMOVAL (VINYL OR LATEX)

DESCRIPTION OF SKILL

Practitioner will properly remove, and dispose of, contaminated gloves without contacting the contaminant(s).

_____ 1. Using a gloved hand, the practitioner will pinch the glove on the other hand just distal to the cuff.

_____ 2. With a distal movement, the practitioner will remove the pinched glove, turning it inside out while removing the hand.

_____ 3. Practitioner will grasp the inside portion (now outside) of the removed glove with their un-gloved hand.

_____ 4. Using the removed glove as a barrier, the practitioner will grasp the distal cuff area of the gloved hand.

_____ 5. With the same movement used in step 2, practitioner will remove the second glove making sure not to make contact between the gloves outer surface and their skin.

_____ 6. Used gloves will be placed in an appropriate container /Red Biohazard Bag.

_____ 7. Practitioner will wash hands by an acceptable method.

CRITICAL CRITERIA

_____ Uses appropriate BSI (body substance isolation) precautions
_____ Maintains appropriate BSI precautions
_____ Correctly removes BSI equipment
_____ Correctly disposes of BSI equipment

DIAGNOSTIC / VITAL SIGNS PROCEDURES

DESCRIPTION OF SKILL

Level of Consciousness

Assess patient's level of consciousness by evaluating the person's responsiveness and orientation.

_____ 1. Determine patient's responsiveness (**AVPU**):
- _____ a) Patient is conscious & **Alert** upon your arrival **or**
- _____ b) Patient responds to **Verbal** stimuli **or**
- _____ c) Patient responds to **Painful** stimuli [tactile (touch)] **or**
- _____ d) Patient does not respond to any stimuli (**Unresponsive**).

_____ 2. Determine patient's orientation:
- _____ a) Ask person his/her name (person)
- _____ b) Ask person his/her current location (place)
- _____ c) Ask person current time, year, month, approximate date (time)
- _____ d) Ask person what happened (event)

_____ 3. Record findings.

Pulse (Radial)

Monitor patient's radial pulse for rate and quality.

_____ 1. Locate radial artery (anterior thumb side of wrist).

NOTE: If radial pulse is inaccessible use another pulse point

_____ 2. Palpate pulse using, two fingers, for 30 seconds and multiply by 2.

_____ 3. Record findings, to include:
- _____ a) Rate
- _____ b) Quality - **Strong**, **Weak**, **Regular**, **Irregular**

Respirations

Monitor patient's respirations for rate and quality by palpation or observation.

_____ 1. Observe rise & fall of patient's chest for a 30-second period and multiply by 2.

_____ 2. Record findings, to include:
- _____ a) Rate
- _____ b) Quality - **Normal**, **Shallow**, **Labored**, **Noisy**

Diagnostic/ Vital Signs Procedures (Continued)

Observation of the Rise and Fall of Patient's Chest

Skin Temperature/ Color

Assess patient's skin to determine adequacy of perfusion.

_____ 1. Check patients skin temperature by placing the back of your hand on the patient's skin.

NOTE: The most common area for assessing the skin temperature is the forehead.

_____ 2. Record findings: i.e. **hot**, **warm**, **cool**, **cold**.

_____ 3. Check patient's skin condition.

_____ 4. Record findings: i.e. **dry**, **moist** (clammy).

_____ 5. Check patient's skin color in nail beds, oral mucosa, or conjunctiva.

_____ 6. Record findings: i.e. **normal**, **cyanotic**, **pale**, **red**

For patients less than six years of age:

_____ 7. Assess capillary refill by pressing on the patient's skin or nail beds and determine time for return to initial color.

_____ 8. Record findings: **normal** < 2 seconds **abnormal** > 2 seconds

Pupils

_____ 1. Check both pupilsby observing for size (**dilated, constricted, normal**).

_____ 1. Check both pupils for equality (**equal** or **unequal**).

_____ 1. Check both pupils for reactivity (**fixed, reactive, sluggish**).

_____ 1. Check pupil reaction to light. As appropriate, either expose to or shade from light on the pupil to check for reaction.

_____ 2. Repeat step (1) for other eye. Compare to the first.

_____ 3. Record observations.

Diagnostic/ Vital Signs Procedures (Continued)

Blood Pressure

Take patient's blood pressure using a sphygmomanometer, by either auscultation or palpation method. (The palpation method should be used when one cannot hear the pulse sounds due to the background noise levels)

Auscultation

_____ 1. Expose the arm and position blood pressure cuff above the elbow, centering bladder over the brachial artery.

_____ 2. Palpate brachial pulse at the crease of elbow, place diaphragm of stethoscope at that point.

_____ 3. Inflate cuff until mercury column or needle of dial stops moving with the pulse; increase pressure by 20-30mmHg so as not to miss the first systolic pulse sound.

_____ 4. Release air slowly from the cuff; observe mercury column fall or aneroid dial return to zero.

_____ 5. Record as the systolic pressure the point on the gauge at which the sound of the first pulse is heard.

_____ 6. Record as the diastolic pressure the point on the gauge at which the sound disappears or distinctly changes to a very dull sound.

_____ 7. Blood pressure is recorded as **Systolic/Diastolic**, i.e., "130/80"

Palpation

_____ 1. Palpate the radial pulse point on the arm to which the cuff has been applied. (Maintain pulse point contact.)

_____ 2. Inflate the cuff as explained under auscultation, which is to increase pressure by 20-30mmHg after the radial pulse is no longer palpated.

_____ 3. Deflate the cuff slowly while continuing to palpate the radial pulse point.

_____ 4. When the pulse is felt, observe gauge.

_____ 5. Record, as the systolic pressure, the point on the gauge at which the pulse is first felt. Record as **Systolic by palpation or "130/p".**

Diagnostic/ Vital Signs Procedures (Continued)

Vital Sign Reassessment

Patient vital signs should be taken and recorded according to the following guidelines:

_____ 1. Every 15 minutes, at minimum, for a stable patient.

_____ 2. Every 5 minutes, at minimum, for an unstable patient.

_____ 3. Following all medical interventions and then either every 5 or 15 minutes depending on patient condition.

CRITICAL CRITERIA

_____ Uses appropriate BSI (body substance isolation) precautions
_____ Vital signs assessed within the following percentages or variances: 10% for BP (systolic and diastolic); 10% for pulse and 25% for respirations
_____ Assess all vital signs
_____ Uses stethescope appropriately and places it in the proper position
_____ Uses blood pressure cuff appropriately and places it in the proper position

Lung Sounds

(Note: Lung sounds are not considered a vital sign, but rather an assessment skill that takes practice and is integrated with the patient assessment skill)

Auscultate patient's chest to determine quality of air exchange in lungs.

_____ 1. Place stethoscope directly against skin (on the mid-clavicular line at the apices and the mid-axillary line at the bases. See diagram below)

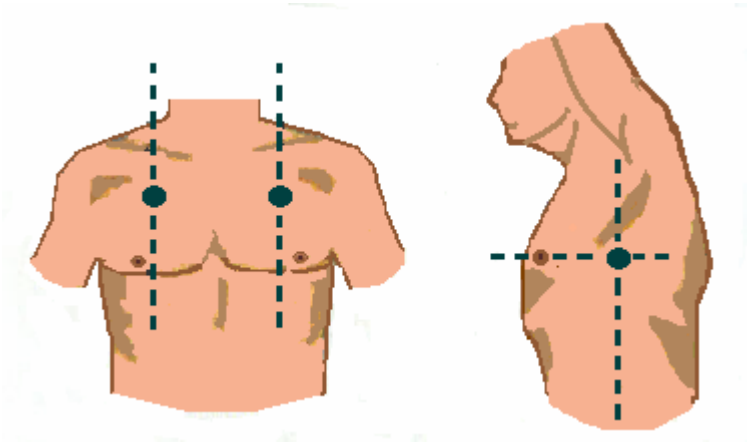
_____ 2. Listen for quality of air exchange. Note if sounds heard are **normal** (clear); **abnormal** (noisy); **diminished** or **absent** (may be one-side only).

_____ 3. Repeat steps (1) and (2) on the opposite mid-clavicular line at the apices.

_____ 4. Repeat steps (1), (2), and (3) over both right and left mid-axillary lines at the bases.

NOTE: Same steps may be used for assessing front, back or sides of chest/ lungs.

_____ 5. Record findings.



Mid-Clavicular Mid-Axillary

CRITICAL CRITERIA

_____ Uses appropriate BSI (body substance isolation) precautions
_____ Uses stethescope appropriately
_____ Auscultates in appropriate areas
_____ Compares lung sounds bi-laterally

LIFTING AND MOVING PATIENTS

Body Mechanics

DESCRIPTION OF SKILL

Lifting

Rules of Lifting:

A. Consider the weight of the patient and the equipment.
B. Know your physical ability and limitations.
C. Keep your back in a neutral alignment (natural inward or posterior curve [lordosis] in the lumbar spine).
D. Lift without twisting.
E. Use your leg, abdominal, and back muscles and have feet positioned properly.
F. Keep the weight close to your body.
G. Communicate clearly & frequently with your partner.

_____ 1. Practitioner will approach the patient/stretcher and evaluate the total weight.

_____ 2. Practitioner will determine if weight is within the limits for a two-person crew.
_____ a) If yes, begin lift.
_____ b) **If no, summon additional help**.

Practitioner will use either the power-lift or squat lift, depending upon which one can most comfortably maintain your lumbar posture.

_____ 3a. Power-lift position (advantageous for people with weak knees or quadriceps)
Practitioner will:
_____ 1) Place feet a comfortable distance apart (at least shoulder width apart to provide a wide base for more stability).
_____ 2) Tighten the back & abdominal muscles to keep the back in a slight lordosis.
_____ 3) Straddle the object, if possible.
_____ 4) Keep feet flat on the floor & distribute weight on the balls of the feet or slightly behind them.

NOTE: If the practitioner must lift the object in front of his/her feet:
1. Do not reach more than 15-20 inches in front of your body.
2. Carry the load as close to the body as possible while maintaining a slight lordosis, in good spinal alignment.
3. Avoid bending at the waist, placing the weight of the load on the pelvis and the strong leg muscles (by bending at the hips), while taking the weight off the lower back.

_____ 5) Practitioner maintains body angle from the hip and not the waist.

Body Mechanics (Continued)

DESCRIPTION OF SKILL

_____ 3b. Squat-lift position (alternate for people with one weak leg or ankle, or for those with healthy knees & strong legs)

_____ 1) Practitioner will place the weakest leg or the leg with any knee or ankle pain slightly forward.

_____ 2) Practitioner maintains this foot flat on the ground throughout the lift.

_____ 3) Practitioner will squat down until he/she can grasp the cot or stretcher.

_____ 4) Practitioner will push up with the strong leg.

_____ 4. Practitioner will grasp the object they intend to lift (see power grip below)

_____ 5. Practitioner will complete the lift while tightening the back and abdominal muscles to keep the back in a slight lordosis position and standing up leading with the head.

To assist in properly lifting, squeeze the shoulder blades together and lift the chin slightly.

_____ 6. When setting the stretcher/backboard down, practitioner will reverse the lift exactly.

Power Grip

The power grip is a cylindrical grip. Use the power grip to lift an object, when controlling the force such as pushing or maneuvering the stretcher, or when grasping the stretcher backrest release mechanism.

_____ 1. Practitioner grips the object with palm and fingers in contact with the object.

_____ 2. Practitioner assures that all fingers are bent at the same angles.

_____ 3. Practitioner will position the hands at least 10 inches apart.

Body Mechanics (Continued)

DESCRIPTION OF SKILL

Carrying

Rules of Carrying:

A. Know the weight (Ask patient's weight if possible and add weight of the cot or stretcher).
B. Know your, and your partner's capabilities.
C. Have a plan and communicate it.
D. Keep the weight as close to your body as possible.
E. Keep your back in a neutral alignment and don't twist.
F. Keep your back straight.
G. Bend from the hips, not the waist.
H. Do not hyperextend the back (leaning back from the waist).

Correct Carrying Procedure

_____ 1. Practitioners will pair off according to height (and/or strength). Paired practitioners will stand opposite each other when getting ready to lift the object.

_____ 2. Practitioner uses correct lifting technique to lift the stretcher. Avoid leaning toward or away from the weight.

Body Mechanics (Continued)

One-Handed Carrying

_____ 1. Practitioner picks up the equipment with the back in neutral alignment.

_____ 2. Practitioner carries the object keeping the back in neutral alignment and avoids leaning to either side.

Correct Carrying On Stairs

_____ 1. Practitioners assure that they have enough help to accomplish the move safely.

_____ 2. Practitioners use the correct lifting technique to lift the stretcher. Avoid leaning toward or away from the weight.

_____ 3. Practitioners complete the carry keeping their backs in neutral alignment, bending from the hips - not the waist.

_____ 4. Practitioners keep the weight, and their arms, as close to their body as possible.

DESCRIPTION OF SKILL

Reaching

Rules for Reaching:

A. Keep your back in neutral alignment.
B. When reaching overhead, avoid a hyperextended (swayback) position.
C. Never twist your back when reaching.

_____ 1. Practitioner avoids forward reaches greater than 15-20 inches in front of the body.

_____ 2. Practitioner maintains the reach for as short a time interval as possible, hopefully six seconds or shorter.

Correct Reaching for Log Rolling the Patient

_____ 1. Practitioner leans over the patient to grasp them for the roll.

_____ 2. Practitioner keeps the back straight, leaning from the hips and using the strong shoulder muscles to help with the roll.

Body Mechanics (Continued)

Pushing and Pulling

Rules for Pushing & Pulling:

A. Push whenever possible.
B. Always keep your back in neutral alignment by tightening the back and abdominal muscles, maintaining a slight lordosis, in good spinal alignment.
C. Bend your knees whenever you pull so that the line of pull is through the center of your body.
D. Keep the weight close to your body.

_____ 1. Practitioner keeps the back straight and maintains the load between the shoulders and hips. If the object is below waist level, then the push or pull should come from a kneeling position.

_____ 2. Practitioner keeps the elbows bent and arms as close to the side as possible.

_____ 3. Practitioner positions the hands and arms to allow the force of the push/pull to be through the center of his/her body.

_____ 4. As practitioner is moving during the push/pull, he/she maintains the back in neutral alignment by tightening the back and abdominal muscles and maintaining a slight lordosis.

_____ 5. Practitioner accomplishes all maneuvering of the patient/stretcher with the use of shoulder, arm, leg muscles, and good foot positioning - not body weight or back muscles.

Sitting

Rules for Sitting:

A. Don't sit for longer than 45 minutes without a break. Change positions often if possible.
B. Sit up straight using your muscles or a lumbar roll to maintain the normal inward posture.
C. Don't slouch.
D. When leaning forward while sitting, bend from the hip not from the waist.

_____ 1. Practitioner sits keeping the lower back curved inward and the shoulder from rounding forward.

_____ 2. Practitioner keeps the feet flat on the floor or crossed at the ankles, not crossed from the hips or crossed at knees.

Recovery Position

DESCRIPTION OF SKILL

Patient position used for unresponsive patients without suspected spine injury.

_____ 1. Practitioner kneels beside the victim and straightens the victim's legs.

_____ 2. Practitioner then rolls the patient towards himself/herself without twisting the patient's body.

NOTE: Rolling patient onto his/her left side is preferred for most patients:

- Patients presenting with paralysis - paralyzed side down.
- Patients presenting with chest trauma - injured side down.

_____ 3. Practitioner arranges the patient's arm/hand that is on the bottom so that it supports his/her head and prevents their mouth from touching the ground.

NOTE: This position should avoid any pressure on the chest that impairs breathing, allows good observation of and access to the airway, promote fluid drainage from mouth and nose, as well as prevent the mouth from touching the ground. .

_____ 4. Practitioner further positions the patient's head so that it is slightly down to allow for drainage of secretions or vomitus.

_____ 5. Practitioner flexes the patient's superior leg and positions it over the inferior leg so that the superior knee is touching the ground.

_____ 6. Practitioner continually monitors the patient for airway compromise.

_____ 7. Practitioner uses proper body mechanics to accomplish the skill.

CRITICAL CRITERIA FOR ALL LIFTING AND MOVING

_____ Able to lift 33" and carry 10'
_____ Moves patient in a safe an effective manner
_____ Prevents further aggravation/injury to patient
_____ Prevents injury to self by using correct technique

Log Roll

DESCRIPTION OF SKILL

_____ 1. Practitioner applies and/or maintains in-line immobilization of the patient's head and neck throughout the procedure.

NOTE: If available and indicated by patient's condition, a properly sized cervical immobilization device (collar) can be applied to the patient at this time by a second practitioner.

_____ 2. One to three additional practitioners kneel at the patient's side to control movement of the rest of the body. All practitioners kneel on the same side of the patient.

_____ 3. Practitioners (except person at head) will grasp the patient as appropriate to enable support of the body as the roll is being accomplished. (i.e. one practitioner will support at the shoulders and belt line; two practitioners can support: one at the shoulders and buttocks, one at the belt line and mid-thigh; etc.)

_____ 4. On command of the first practitioner (at patient's head), all practitioners roll patient toward them, keeping patient in a straight line.

_____ 5. When ready, the patient is lowered back to the supine position on command of the first practitioner still keeping the patient's spinal column in alignment.

_____ 6. Practitioner uses proper body mechanics to move the patient.

CRITICAL CRITERIA FOR ALL LIFTING AND MOVING

_____ Able to lift 33" and carry 10'
_____ Moves patient in a safe an effective manner
_____ Prevents further aggravation/injury to patient
_____ Prevents injury to self by using correct technique

Blanket Drag

DESCRIPTION OF SKILL

Emergency move used to get a patient from an area of immediate danger to a safe area. Dependant upon the ability of the practitioner to secure a blanket for use.

_____ 1. Practitioner will prepare the blanket by pleating (folding) it approximately two-thirds of the way in.

_____ 2. Practitioner will place the pleated blanket lengthwise beside the patient with the pleats toward the patient's body and the leading edge on top.

_____ 3. Practitioner will kneel beside the patient, opposite blanket.

NOTE: Supine Patient Only!

_____ 4. Practitioner will grasp the patient's clothing at the hip & shoulder area and roll the patient gently toward himself/herself and onto his/her knees. Move body as a unit if possible.

_____ 5. Practitioner will reach across the patient and pull the folded part of the blanket close to the patient's body. Tuck some of the blanket as far underneath the patient as possible.

_____ 6. Practitioner will allow the patient to roll, or gently roll the patient, while protecting the patient's head, to a supine position on top of the blanket.

_____ 7. Practitioner will gently roll the patient away from the practitioner enough to be able to smooth out the pleats underneath the patient.

_____ 8. Practitioner will allow the patient to roll back onto the center of the blanket.

_____ 9. Practitioner will wrap the patient in the blanket.

_____ 10. Practitioner will grasp the blanket under or alongside the head and neck.

_____ 11. Practitioner will pull the patient, using the blanket, to a safe area.

_____ 12. Proper body mechanics are used throughout the skill.

CRITICAL CRITERIA FOR ALL LIFTING AND MOVING

_____ Able to lift 33" and carry 10'
_____ Moves patient in a safe an effective manner
_____ Prevents further aggravation/injury to patient
_____ Prevents injury to self by using correct technique

Clothes Drag

DESCRIPTION OF SKILL

Emergency move used to get a patient from an area of immediate danger to a safe area.

_____ 1. Practitioner will position patient on the back.

_____ 2. Practitioner will kneel at the patient's head, facing the patient.

_____ 3. Practitioner will grasp the patient's clothing (shirt) while, if possible, supporting the victim's head in his/her forearms.

_____ 4. Practitioner will pull, long axis if possible, while keeping the patient's head and shoulders close to the ground.

_____ 5. Practitioner maintains proper body mechanics throughout move.

CRITICAL CRITERIA FOR ALL LIFTING AND MOVING

_____ Able to lift 33" and carry 10'
_____ Moves patient in a safe an effective manner
_____ Prevents further aggravation/injury to patient
_____ Prevents injury to self by using correct technique

Shoulder Drag

DESCRIPTION OF SKILL

Emergency move used to get a patient from an area of immediate danger to a safe area.

_____ 1. Practitioner will position patient on the back.

_____ 2. Practitioner will kneel at the patient's head, facing the patient.

_____ 3. Practitioner will place his/her arms under the patient's armpits (from the back) and grasp the patient's forearms.

_____ 4. Practitioner will drag the patient, long axis if possible, to a safe environment.

_____ 5. Practitioner maintains proper body mechanics throughout move.

NOTE: Rescue can be accomplished in a crouched or standing position depending upon practitioner/patient size and situation encountered.

CRITICAL CRITERIA FOR ALL LIFTING AND MOVING

_____ Able to lift 33" and carry 10'
_____ Moves patient in a safe an effective manner
_____ Prevents further aggravation/injury to patient
_____ Prevents injury to self by using correct technique

Fireman's Drag

DESCRIPTION OF SKILL

Emergency move used to get a patient from an area of immediate danger to a safe area. Need cravat or similar item to tie patient's hands.

_____ 1. Practitioner will position patient on the back.

_____ 2. Practitioner will tie patient's hands together with cravats or similar item.

_____ 3. Practitioner will straddle patient's body and pass his/her head through patient's arms.

_____ 4. Practitioner will raise his/her upper body (which will raise the patient's body) just clear of the floor.

_____ 5. Practitioner will crawl on the hands and knees - dragging the patient along. Drag should be in the direction of the long axis of the body when possible.

_____ 6. Practitioner uses proper body mechanics while doing the patient drag.

CRITICAL CRITERIA FOR ALL LIFTING AND MOVING

_____ Able to lift 33" and carry 10'
_____ Moves patient in a safe an effective manner
_____ Prevents further aggravation/injury to patient
_____ Prevents injury to self by using correct technique

Extremity Lift

DESCRIPTION OF SKILL

A non-urgent move used to transfer a patient from one area to another such as a stretcher or bed. This move is only appropriate for patients who have NO SUSPECTED SPINAL INJURY.

_____ 1. Practitioner kneels at the patient's side near the patient's knees.

_____ 2. Practitioner grips the patient's wrists and, with help from the second practitioner, pulls the patient to a sitting position.

_____ 3. The other practitioner crouches on one knee, at the patient's head - facing patient; while supporting patient with the other knee, the practitioner slips his/her hands under the patient's arms and grasps the patient's wrists.

_____ 4. Practitioner will position the patient so the patient's legs are spread and knees flexed.

_____ 5. Practitioner then crouches on one knee, between patient's legs facing away, and grips patient's legs behind the knees.

_____ 6. On command, both practitioners lift patient and move the patient as needed.

_____ 7. Proper body mechanics are followed throughout the move.

CRITICAL CRITERIA FOR ALL LIFTING AND MOVING

_____ Able to lift 33" and carry 10'
_____ Moves patient in a safe an effective manner
_____ Prevents further aggravation/injury to patient
_____ Prevents injury to self by using correct technique

Direct Carry – Transfer of Supine Patient From Bed to Stretcher

DESCRIPTION OF SKILL

Non-urgent move that can be used to transfer a supine patient from a bed to a stretcher or vise versa. Can be accomplished with two or three practitioners.

_____ 1. Practitioners will position stretcher parallel to the bed with head end of stretcher at foot end of bed.

_____ 2. Practitioners will prepare stretcher for patient (unbuckle straps, remove items, etc.).

_____ 3. Practitioners will position themselves between the bed and stretcher, facing patient.

NOTE: Specific order of #4 through #7 is not critical to patient care.

_____ 4. Practitioner slides one arm under patient's neck and cups patient's shoulder.

_____ 5. The other practitioner slides hand under hip and lifts slightly.

_____ 6. The other practitioner slides other arm under patient's back.

NOTE: If a third practitioner is available, he/she should place both arms under the patient's waist and the other two practitioners slide their arms either up to the mid-back or down to the buttocks as appropriate.

_____ 7. The other practitioner places other arm under calves.

_____ 8. Practitioners slide patient to edge of bed, as a unit as much as possible.

_____ 9. On signal, practitioners lift patient and curl them towards the practitioner's chests.

_____ 10. On signal, practitioners rotate the patient and position patient for placement on the stretcher.

_____ 11. On signal, patient is gently lowered onto the stretcher.

_____ 12. Patient movement is accomplished using proper body mechanics.

CRITICAL CRITERIA FOR ALL LIFTING AND MOVING (Same as other lifting skills)

Direct Ground Lift

DESCRIPTION OF SKILL

A non-urgent move used to transfer a patient from one area to another such as a stretcher or bed. This move is only appropriate for patients who have NO SUSPECTED SPINAL INJURY. Appropriate for two or three practitioners.

_____ 1. Practitioners will kneel on one knee (preferably the same for all practitioners), all on the same side of the patient.

_____ 2. Practitioners will place and secure, if appropriate, the patient's arms on the patient's chest.

_____ 3. Practitioner at head will place one arm under the patient's neck and shoulder to cradle the patient's head.

_____ 4. Practitioner at head will place the other arm under the patient's lower back.

NOTE: If a third practitioner is available, he/she should place both arms under the patient's waist and the other two practitioners slide their arms either up to the mid-back or down to the buttocks as appropriate.

_____ 5. Second practitioner will place one arm under the patient's knees.

_____ 6. Second practitioner places other arm under the patient right above the buttocks.

_____ 7. On signal, the practitioners lift the patient to their knees and roll the patient in toward their chests.

_____ 8. On signal, the practitioners stand and move the patient as needed.

_____ 9. To lower the patient, the steps are reversed.

_____ 10. Proper body mechanics are used when lifting and/or moving the patient.

CRITICAL CRITERIA FOR ALL LIFTING AND MOVING

_____ Able to lift 33" and carry 10'
_____ Moves patient in a safe an effective manner
_____ Prevents further aggravation/injury to patient
_____ Prevents injury to self by using correct technique

Draw Sheet Move

DESCRIPTION OF SKILL

Non-urgent move that can be used to transfer a supine patient from a bed to a stretcher or vise versa. Can be accomplished with two or more practitioners.

_____ 1. Practitioners will loosen the bottom bed sheet (under the patient).

_____ 2. Practitioners will prepare stretcher for patient (unbuckle straps, remove items, etc.).

_____ 3. Practitioners will position the stretcher next to the bed.

_____ 4. Practitioners will grasp the sheet firmly allowing for control of the patient's head and body throughout the move.

NOTE: Exact practitioner placement is dependent upon patient size, location, and number of practitioners available. Two practitioners can either be on the same side (patient's head, chest, hips & knees) or one on each side of the bed supporting the sheet at the neck and hip area. Three practitioners would allow one to control the head and neck with the other two guiding the patient's body.

_____ 5. On signal, practitioners will gently slide the patient onto the stretcher.

_____ 6. Patient movements are accomplished using appropriate body mechanics.

CRITICAL CRITERIA FOR ALL LIFTING AND MOVING

_____ Able to lift 33" and carry 10'
_____ Moves patient in a safe an effective manner
_____ Prevents further aggravation/injury to patient
_____ Prevents injury to self by using correct technique

Application of Scoop Stretcher

DESCRIPTION OF SKILL

Scoop stretcher is NOT adequate when used alone for standard immobilization of a spinal injury.

_____ 1. Practitioner unfolds the scoop stretcher, if necessary.

_____ 2. Practitioner adjusts the length as needed by sliding lower end out of upper end and locking it into position with lock pegs.

_____ 3. Separate both halves of scoop stretcher by grasping head part of stretcher and depressing catch device, apply outward pressure.

_____ 4. Repeat step 3 for foot end of scoop stretcher.

_____ 5. Place one half of the scoop stretcher on each side of the patient's body without passing the parts over the patient. Place the scoop blades toward patient and head end at patient's head.

_____ 6. Place half of scoop stretcher under patient by having a second practitioner or bystander gently roll patient. Be careful not to pinch the patient.

_____ 7. Place other half of scoop stretcher under patient, foot end first.

_____ 8. Lock the lower end of the scoop stretcher together by securing the latch (be careful not to pinch the patient).

_____ 9. Place the upper end of the second half of the scoop stretcher under the patient with the assistance of a second practitioner or bystander (to gently roll the patient), if needed.

_____ 10. Lock the upper part of the scoop stretcher together being careful not to pinch the patient.

_____ 11. Secure patient to the scoop stretcher - minimum of two appropriately placed straps or other securing device.

_____ 12. Device is lifted using proper body mechanics.

CRITICAL CRITERIA FOR ALL LIFTING AND MOVING

_____ Able to lift 33" and carry 10'
_____ Moves patient in a safe an effective manner
_____ Prevents further aggravation/injury to patient
_____ Prevents injury to self by using correct technique

Flexible Stretcher

DESCRIPTION OF SKILL

There are multiple makes of flexible stretchers available for EMS use (such as Reeves Sleeve®, etc.). This skill sheet is specifically designed to guide the student through the application of a **Ferno Model 131**. Follow manufacturer's recommendations when dealing with an alternate make or model device.

_____ 1. Patient is placed onto the flexible stretcher.
   a) If spinal injury is suspected, patient should be immobilized to a long spine board with cervical collar applied. Patient can then be lifted by the backboard and placed on the center of the stretcher.
   b) If no spinal injury is suspected, patient can be log rolled onto the stretcher and then slid to the center.

_____ 2. Sides of the stretcher are drawn up around the patient and straps are secured.

_____ 3. Practitioner will tighten the built-in straps, starting at the hips, then feet, then chest (these are directions for the Ferno Model 131 from the manufacturer).

NOTE: The EMT-B National Standard Curriculum states that longboard straps should be applied to the torso, head, then legs.

Straps should be tight enough to not allow the patient to move while in the stretcher.

_____ 4. Two, four, or six practitioners can be used to carry the device:
   a) If two practitioners - one at the head and one at the feet.
   b) If four practitioners - one each side of both head and feet.
   c) If six practitioners - one each side at head, waist, and feet.

_____ 5. Practitioners will kneel on one knee, preferably all the same knee, and grasp the handle build into the device.

_____ 6. Upon signal, practitioners will stand, lifting the stretcher to arms length height.

_____ 7. Stretcher is lowered, upon signal, by kneeling.

_____ 8. Proper body mechanics are used throughout the procedure.

CRITICAL CRITERIA FOR ALL LIFTING AND MOVING

_____ Able to lift 33" and carry 10'
_____ Moves patient in a safe an effective manner
_____ Prevents further aggravation/injury to patient
_____ Prevents injury to self by using correct technique

AIRWAY

DESCRIPTION OF SKILL

_____ 1. Practitioner will take appropriate BSI precautions.

_____ 2. Determine that the patient is unable to maintain an open airway.

_____ 3. Practitioner will select the proper size airway by measuring the distance from the bottom of the earlobe/or angle of the jaw to the corner of the mouth.

_____ 4. Practitioner will open the patient's mouth with the crossed finger technique, and hyperextend the head (if no neck injury suspected).

_____ a) Practitioner will insert the airway upside down (with tip facing toward the roof of the patient's mouth) into the patient's mouth. (If patient gags or coughs, remove the airway - consider a nasal airway)

_____ b) Advance the airway gently until you feel resistance, as the airway approaches the posterior wall of the pharynx (near the back of the tongue). The practitioner will rotate the airway (180°) so that it comes to rest with the flange on the patient's lips or teeth. (If the patient gags or coughs, remove the airway - consider a nasal airway).

Alternate Method (preferred for infants and children):

_____ 5. Practitioner may use a wooden tongue depressor to press the tongue down and forward and out of the airway while inserting the airway/right side up (If the patient gags or coughs remove the airway-consider a nasal airway).

_____ 6. After insertion, hyperextend the neck (if no neck injury), to verify that the airway is the correct size. The flange should rest on the patient's lips. If it does not touch the lips, the airway is not the correct size.

_____ 7. Practitioner will insure that the procedure has resulted in an adequately open airway. Provide oxygen, and ventilate as needed.

CRITICAL CRITERIA

_____ Determines that the patient is unable to maintain an open airway
_____ Uses appropriate BSI (body substance isolation) precautions
_____ Selects appropriate size oropharyngeal airway
_____ Correctly measures oropharyngeal airway
_____ Correctly inserts oropharyngeal airway
_____ Maintains a patent airway
_____ Appropriately monitors patient respiratory effort

Nasopharyngeal Airways

DESCRIPTION OF SKILL

_____ 1. Practitioner will take proper BSI precautions.

_____ 2. Determine that the patient is unable to maintain an open airway.

_____ 3. Practitioner will select the proper sized airway by measuring the distance from the tip of the nose opening to the tip of the patient's ear.

_____ 4. Practitioner will lubricate the airway, preferably with sterile water-soluble jelly or water.

_____ 5. Practitioner directs the bevel opening of the airway towards the nasal septum in preparation for insertion.

_____ 6. Practitioner inserts the airway, using care, keeping it close to the nasal septum and along the floor of the nostril into the back of the pharynx behind the tongue.

_____ 7. Practitioner stops insertion if any resistance is met. The practitioner can attempt insertion into the other nostril if appropriate.

_____ 8. Practitioner insures that the procedure has resulted in an adequately open airway. Provide oxygen and ventilate as necessary.

CRITICAL CRITERIA

_____ Determines that the patient is unable to maintain an open airway
_____ Uses appropriate BSI (body substance isolation)
_____ Selects appropriate size nasopharyngeal airway
_____ Correctly measures the nasopharyngeal airway
_____ Uses appropriate lubricant for the airway
_____ Fully inserts the airway, bevel facing the septum
_____ Maintains a patent airway
_____ Appropriately monitors patient respiratory effort

Oxygen Setup/Teardown

DESCRIPTION OF SKILL

_____ 1. Practitioner will identify contents of the cylinder by checking the label or tag, not just the color and remove the protective seal.

_____ 2. Practitioner will check the regulator & cylinder valve area to make sure they are free of foreign materials (including oil and grease) and in good mechanical condition.

NOTE: If a regulator or cylinder valve is found to be dirty or defective, it should be labeled and put aside until proper cleaning/maintenance can be accomplished.

_____ 3. Practitioner will ensure that outlet valve is aimed away from people and objects, then .quickly open & close the cylinder valve (crack) to eliminate dust or other particles that may be lodged in the valve outlet.

_____ 4. Practitioner will attach the regulator/flowmeter to the oxygen cylinder making sure that:
_____ a) The index pins match the holes in the cylinder valve.
_____ b) A gasket is in place between the regulator and the valve.

_____ 5. Practitioner will open the cylinder valve (counter-clockwise) to insure adequate flow to the regulator.

NOTE: If a leak is heard, close the valve, remove the regulator and inspect the gasket then repeat steps 4 and 5.

_____ 6. Practitioner will attach the appropriate delivery device and adjust the flow to the desired setting by turning the appropriate valve/knob on the regulator (flow can be read using the flow gauge)

_____ 7. Practitioner will apply the oxygen delivery device to the patient.

To discontinue administration:
_____ 8. Practitioner will remove the device from the patient

_____ 9. Turn off the flow at the flowmeter.

_____ 10. Practitioner will shut down the cylinder valve (clockwise).

_____ 11. Practitioner will bleed the regulator by opening the flow-meter valve until flow has stopped.

_____ 12. Practitioner will return flowmeter valve to closed position and disconnect the regulator from the cylinder.

CRITICAL CRITERIA
_____ Selects appropriate equipment
_____ Adjust flow rate appropriately for the delivery device being applied
_____ Ensures adequate flow of oxygen prior to placing delivery device on the patient
_____ Completes all steps in the setup or operation of the oxygen system to ensure adequate oxygen administration and safety

Nasal Cannula

DESCRIPTION OF SKILL

The nasal cannula is a low concentration oxygen delivery device.

_____ 1. Practitioner(s) take proper BSI precautions.

_____ 2. Practitioner will select the appropriate device and set up the oxygen delivery system.

_____ 3. Practitioner will attach cannula to oxygen regulator and adjust to low flow. (up to 6 LPM).

_____ 4. Practitioner will insure that oxygen is flowing through the nasal prongs by listening and feeling for oxygen movement.

_____ 5. Practitioner will apply the cannula to the patient by placing the nasal prongs in the nostril(s) (bevel facing inward & downward) and secure as appropriate.

_____ 6. Practitioner will monitor the patient for possible airway or respiratory compromise.

To Discontinue Administration:

_____ 7. Practitioner will remove the device from the patient.

_____ 8. Turn off the flow at the flowmeter.

_____ 9. Practitioner will shut down the cylinder valve (clockwise).

_____ 10. Practitioner will bleed the regulator by opening the flow-meter valve until flow has stopped.

_____ 11. Practitioner will return flowmeter valve to closed position and disconnect the regulator from the cylinder.

CRITICAL CRITERIA

_____ Selects appropriate equipment
_____ Correctly applies the nasal cannula
_____ Maintains proper device fit
_____ Oxygen flow rate set appropriately
_____ Maintains patent airway
_____ Appropriately monitors patient respiratory effort/ventilation support

Non-Rebreathing Face Mask

DESCRIPTION OF SKILL

The non-rebreathing facemask is a high concentration oxygen delivery device.

_____ 1. Practitioner(s) take proper BSI precautions.

_____ 2. Practitioner will select the appropriate size mask and set up the oxygen delivery system.

_____ 3. Practitioner will attach mask to oxygen regulator and adjust the flow rate so that when patient inhales, the bag does not collapse (15 lpm).

_____ 4. Practitioner inflates the reservoir bag by placing a clean, gloved finger/thumb over the rubber valve gasket, between the bag and the mask, and holding it closed until the bag is full.

_____ 5. Practitioner will apply the mask to the patient's face and assure that a proper seal is achieved by pulling the elastic straps to secure the mask against the face and molding the metal nosepiece to the patient's nose.

_____ 6. Practitioner will monitor the patient for possible airway or respiratory compromise.

To Discontinue Administration:

_____ 7. Practitioner will remove the device from the patient.

_____ 8. Turn off the flow at the flowmeter.

_____ 9. Practitioner will shut down the cylinder valve (clockwise).

_____ 10. Practitioner will bleed the regulator by opening the flow-meter valve until flow has stopped.

_____ 11. Practitioner will return flowmeter valve to closed position and disconnect the regulator from the cylinder.

CRITICAL CRITERIA

_____ Selects appropriate equipment
_____ Correctly applies the non-rebreather
_____ Maintains proper face/mask seal
_____ Oxygen flow rate set appropriately
_____ Maintains patent airway
_____ Appropriately monitors patient respiratory effort/ventilation support
_____ Assures continuous oxygen supply to delivery device

Bag-Valve-Mask (BVM) – Two Person

DESCRIPTION OF SKILL

It is recommended that this is a two-practitioner skill; but one practitioner can accomplish the skill if proper ventilations are delivered to the patient.

_____ 1. Practitioner(s) take proper BSI precautions.

_____ 2. Practitioner assembles the bag-valve-mask with the correct mask size (adult, infant or child) while the other practitioner starts/continues ventilations by an alternate method.

_____ 3. Practitioner attaches the B-V-M to supplemental oxygen (using reservoir), as soon as available at 15 LPM flow.

_____ 4. Practitioner positions himself at the top of the patient's head, and when able (not in the other practitioner's way) places the mask appropriately on the patient's face.

NOTE: Place the apex of mask over the bridge of the nose, then lower the face piece of the device over the patient's mouth and upper chin. If the mask has round cuff surrounding a ventilation port, center port over the mouth.

_____ 5. While keeping the patient's head extended*, practitioner will seal the mask by positioning thumbs over top half of the mask, index and middle fingers over bottom half, and using the ring and little fingers to grasp the mandible and bring it up to the mask.

NOTE:

- ***Use head-tilt chin-lift when no neck injury is suspected. Use the Jaw Thrust if a spinal injury is possible.

- If available, the other practitioner applies continuous cricoid pressure during ventilation.

- If alone, form a "C" around the ventilation port with thumb and index finger; use middle, ring and little fingers under jaw to maintain chin lift and complete the seal.

_____ 6. If available, the other practitioner grasps the bag, and squeezes the bag softly and gently to insure ventilation (until chest rises adequately, preferably 6 to 7 mL/kg over 2 seconds) while applying continuous cricoid pressure during ventilation.

NOTE: If necessary, the second practitioner may squeeze the bag against leg for increased volume.

_____ 7. Practitioner(s) will observe adequate chest rise to assess the patient for adequate ventilation.

BVM – Two Person (Continued)

_____ 8. Practitioner(s) continue artificial ventilation of patient as appropriate, one maintaining the mask seal and the other compressing the bag.

NOTE: Artificial respiration rates are: Once every 5 seconds for Adults. Once every 3 seconds for Infants and Children.

_____ 9. As appropriate, practitioner will insert an airway (oral or nasal).

NOTE: Insertion of an airway should not delay ventilation.

CRITICAL CRITERIA

_____ Selects appropriate equipment
_____ Correctly applies the BVM
_____ Maintains proper face/mask seal
_____ Oxygen flow rate set appropriately
_____ Maintains patent airway
_____ Appropriately monitors patient respiratory effort/ventilation support
_____ Maintains continuous cricoid pressure during ventilation

Bag-Valve-Mask (BVM) – One Man

DESCRIPTION OF SKILL

It is recommended that this is a two-practitioner skill; but one practitioner can accomplish the skill if proper ventilations are delivered to the patient.

_____ 1. Practitioner takes proper BSI precautions.

_____ 2. Practitioner assembles the bag-valve-mask with the correct mask size (adult, infant or child).

_____ 3. Practitioner attaches the B-V-M to supplemental oxygen (using reservoir), as soon as available at 15 LPM flow.

_____ 4. Practitioner positions himself at the top of the patient's head, and places the mask appropriately on the patient's face.

NOTE: Place the apex of mask over the bridge of the nose, then lower the face piece of the device over the patient's mouth and upper chin. If the mask has round cuff surrounding a ventilation port, center port over the mouth.

_____ 5. While keeping the patient's head extended*, practitioner will seal the mask by

NOTE:

- *Use head-tilt chin-lift when no neck injury is suspected. Use the Jaw Thrust if a spinal injury is possible.
- Form a "C" around the ventilation port with thumb and index finger; use middle, ring and little fingers under jaw to maintain chin lift and complete the seal.

_____ 6. Practitioner grasps the bag, and squeezes the bag slowly and gently against his/her thigh or arm to insure ventilation (until chest rises adequately, preferably 6 to 7 mL/kg over 2 seconds).

NOTE: Two person BVM & continuous cricoid pressure is recommended.

_____ 7. Practitioner will observe adequate chest rise to assess the patient for adequate ventilation.

_____ 8. Practitioner continues artificial ventilation of patient as appropriate, maintaining the mask seal and compressing the bag.

NOTE: Artificial respiration rates are: Once every 5 seconds for Adults. Once every 3 seconds for Infants and Children.

_____ 9. As appropriate, practitioner will insert an airway (oral or nasal).

NOTE: Insertion of an airway should not delay ventilation.

Bag-Valve Mask (BVM – One Person (continued)

CRITICAL CRITERIA
_____ Selects appropriate equipment
_____ Correctly applies the BVM
_____ Maintains proper face/mask seal
_____ Oxygen flow rate set appropriately
_____ Maintains patent airway
_____ Appropriately monitors patient respiratory effort/ventilation support

Flow Restricted, Oxygen Powered, Ventilation Device (FROPVD) with 40 lpm Restrictor Valve

Appropriate for use on adult patient's only

DESCRIPTION OF SKILL

_____ 1. Practitioner(s) take proper BSI precautions.

_____ 2. Practitioner readies the flow restricted, oxygen powered ventilation device with the correct mask size while the other practitioner starts/continues ventilations by an alternate method.

_____ 3. Practitioner positions himself at the patient's head, and when able (not in the other practitioner's way) places the mask appropriately on the patient's face.

NOTE: Place the apex of mask over the bridge of the nose, then lower the face piece of the device over the patient's mouth and upper chin. If the mask has round cuff surrounding a ventilation port, center port over the mouth.

_____ 4. While keeping the patient's head extended*, practitioner will seal the mask by positioning thumbs over top half of the mask, index and middle fingers over bottom half, and using the ring and little fingers to grasp the mandible and bring it up to the mask.

NOTE:

- *Use head-tilt chin-lift when no neck injury is suspected. Use the Jaw Thrust if a spinal injury is possible.

- If alone, form a "C" around the ventilation port with thumb and index finger; use middle, ring and little fingers under jaw to maintain chin lift and complete the seal.

_____ 5. Practitioner will trigger (depress the button) the valve at the prescribed rate to inflate the patient's lungs. Inflate only until chest rises adequately (approx. 1 to 2 seconds).

_____ 6. Practitioner(s) will observe adequate chest rise to assess the patient for adequate ventilation.

NOTE: Observe for gastric distention. If observed, reposition the head and ensure open airway.

_____ 7. Practitioner(s) continue artificial ventilation of patient as appropriate, maintaining the mask seal.

NOTE: Artificial respiration rates are: Once every 5 seconds for adults.

_____ 8. As appropriate, practitioner will insert an airway (oral or nasal).

NOTE: Insertion of an airway should not delay ventilation.

FROPVD (Continued)

CRITICAL CRITERIA

_____ Selects appropriate equipment
_____ Correctly applies the flow restricted, oxygen powered ventilation device
_____ Maintains proper face/mask seal
_____ Oxygen flow rate set appropriately
_____ Maintains patent airway
_____ Appropriately monitors patient respiratory effort/ventilation support
_____ Maintains continuous cricoid pressure (if second rescuer available)

Suction

DESCRIPTION OF SKILL

_____ 1. Practitioner takes proper BSI precautions, assembles needed equipment and insures it's operational. Suction unit can be left on throughout the skill.

_____ 2. Practitioner will determine need to suction the patient's airway, removing the oropharyngeal airway if needed.

NOTE: If the patient has secretions or emesis that cannot be removed quickly and easily by suctioning, the patient should be log rolled and the oropharynx should be cleared.

_____ 3. Practitioner chooses appropriate catheter, places it on the suction hose and runs water through it by placing the tip in the water bottle.

NOTE: Rigid catheter is better suited for suctioning gastric contents and thick secretions due to its large diameter. Use a rigid catheter when suctioning the mouth of an infant or child. Soft "French catheters" are long and flexible. The soft catheters with low to medium suction or bulb suction devices are ideal for nasal suctioning.

_____ 4. Practitioner will open the patient's mouth (cross-finger maneuver) and insert the catheter without suction to the base of the tongue only.

NOTE: Insert catheter only as far as you can see, DO NOT touch the back of the airway, especially for infants and children

_____ 5. Practitioner will suction on withdrawal (close the finger port on the catheter) no longer than 15 seconds unless the patient continues to vomit, or until an open airway is obtained.

NOTE: If patient produces frothy secretions as rapidly as suctioning can remove, suction for 15 seconds, artificially ventilate for two minutes, then suction for 15 seconds, and continue in this manner. Consult medical direction for this situation.

_____ 6. Practitioner will place the suction tip in the water bottle to clear the tubing, if necessary.

_____ 7. Practitioner will repeat steps 4-6 as necessary.

_____ 8. Practitioner will insert/re-insert the airway adjunct as appropriate

If performing CPR, compressions need to be stopped for the log roll.

CRITICAL CRITERIA

_____ Determines that the patient is unable to maintain an open airway.
_____ Important: Uses appropriate BSI precautions.
_____ Turns on unit. Prepares tubing and tip.
_____ Assures presence of suction.
_____ Measures suction catheter (suctions only as far as practitioner can see)
_____ Inserts suction catheter into mouth without suction applied.
_____ Applies suction while withdrawing the catheter.

Pocket Mask With One-Way Valve

DESCRIPTION OF SKILL

_____ 1. Practitioner takes proper BSI precautions.

_____ 2. Practitioner will prepare the pocket mask with one-way valve.

_____ 3. Practitioner will maintain an open airway using either the head tilt-chin lift or modified jaw thrust maneuver (as appropriate).

_____ 4. Practitioner places the mask appropriately on the patient's face.

NOTE: Place the apex of mask over the bridge of the nose, then lower the face piece of the device over the patient's mouth and upper chin. If the mask has round cuff surrounding a ventilation port, center port over the mouth.

_____ 5. While keeping the patient's head extended*, practitioner will seal the mask by positioning thumbs over top half of the mask, index and middle fingers over bottom half, and using the ring and little fingers to grasp the mandible and bring it up to the mask.

NOTE: *Use head-tilt chin-lift when no neck injury is suspected. Use the Jaw Thrust if a spinal injury is possible.

NOTE: If alone, form a "C" around the ventilation port with thumb and index finger; use middle, ring and little fingers under jaw to maintain chin lift and complete the seal.

_____ 6. Practitioner will ventilate patient, through the one-way valve.

_____ 7. Practitioner will remove his/her mouth from the mask to allow for patient exhalation.

_____ 8. Practitioner will continue artificial ventilation as needed

NOTE: Artificial respiration rates are: Once every 5 seconds for adults. Once every 3 seconds for infants and children.

_____ 9. As appropriate, practitioner will insert an airway (oral or nasal), and attach mask to high flow (15 LPM) oxygen as soon as possible.

NOTE: Insertion of an airway or attachment to oxygen should not delay ventilation.

CRITICAL CRITERIA

_____ Selects appropriate equipment
_____ Correctly applies the pocket mask
_____ Maintains proper face/mask seal
_____ Oxygen flow rate set appropriately
_____ Maintains patent airway
_____ Appropriately monitors patient respiratory effort/ventilation support

PATIENT ASSESSMENT

Scene Size-Up

DESCRIPTION OF SKILL

_____ 1. Practitioner will take body substance isolation (BSI) precautions appropriate to the situation.
- _____ a) Practitioner dons gloves, if necessary.
- _____ b) Practitioner dons eye protection, if necessary.
- _____ c) Practitioner dons gown, if necessary.
- _____ d) Practitioner dons mask, if necessary.

_____ 2. Practitioner will assess scene safety.
- _____ a) Determine if safe for practitioner to enter.
- _____ b) Determine if safe for patient to remain there.
- _____ c) Determine if there are any bystanders who are in danger of becoming patients.

_____ 3. Practitioner will determine Mechanism of Injury (MOI) or Nature of Illness (NOI).

Medical
Determine why EMS was activated by questioning patient, family, or bystanders.

Trauma
Determine MOI by talking to patient, family, or bystanders and/or inspection of the scene.

_____ 4. Practitioner will determine total number of patients.

_____ 5. Practitioner will determine what resources are currently committed to this incident.

- _____ a) Current crew can manage the situation:
  1. Consider spinal precaution

     NOTE: Spinal precautions are especially important on trauma calls; but, may also be appropriate on certain medical calls.

  2. Proceed to Initial Assessment
- _____ b) Additional manpower is needed:
  1. Obtain additional help.
  2. Begin triage.

CRITICAL CRITERIA
_____ Uses appropriate BSI (body substance isolation) precautions
_____ Determines that the scene is safe
_____ Correctly identifies hazards
_____ Takes appropriate action to handle or react to a hazard

Initial Assessment

DESCRIPTION OF SKILL

_____ 1. Practitioner will form a General Impression of the patient's condition by considering the following:

_____ a) Consider Mechanism of Injury (MOI) or Nature of Illness (NOI).
_____ b) Consider patients age, sex, & race.
_____ c) Assess for life threatening condition

- None noted, continue to step 2
- Condition noted: Immediately treat condition.

_____ 2. Practitioner will assess the patient's mental status by completing the following:

_____ a) Introduce yourself.
_____ b) Determine patient's mental status

1. **A**lert
2. Responds to **V**erbal stimuli
3. Responds to **P**ainful stimuli
4. **U**nresponsive - no gag or cough

_____ 3. Practitioner will assess the patient's airway status:

_____ a) Responsive patient

1. Determine if the patient is talking or crying
   If *yes*, move to step 4
   If *no*, move to **U**nresponsive patient

_____b) Unresponsive patient

1. Open patient's airway using appropriate method considering MOI/NOI.
2. Determine if airway is clear
   If *yes*, move to step 4
   If *no*, Clear the airway.

_____ 4. Practitioner will assess the adequacy of the patient's breathing.

_____ a) Adequate breathing / Responsive patient
Oxygen may be indicated.
_____ b) Breathing >24 or <8 / Responsive patient and indicated by patient condition
Oxygen at high flow (15 lpm) by nonrebreather.
_____ c) Adequate breathing / Unresponsive patient

1. Open & maintain the airway.
2. Oxygen at high flow (15 lpm) by nonrebreather.

_____ d) Breathing >24 or <8 / Unresponsive patient and indicated by patient condition

1. Open & maintain the airway.
2. Assist ventilations.
   Administer oxygen

_____e) Non-breathing / Unresponsive patient

1. Open & maintain the airway.
2. Assist ventilations.
   Administer oxygen

Initial Assessment (Continued)

_____ 5. Practitioner will assess the adequacy of the patient's circulation.

_____ a) Patient is <8 years old

1. Assess circulation by feeling for a radial pulse

NOTE: Brachial pulse is checked for patients one year old or less.

- If pulse present, go to step 6
- If pulse absent, palpate carotid pulse
- If present, go to step 6
- If absent, start CPR

_____ b) Patient is >8 years old

NOTE: Assess circulation by feeling for a radial pulse.

- If pulse present, go to step 6.
- If pulse absent, palpate carotid pulse.
- If present, go to step 6
- If absent:
  Trauma patient:
  Start CPR, consider application of the AED
  Medical patient:
  Apply AED

_____ 6. Practitioner will check the patient for major bleeding

_____ a) If present, control bleeding

_____ 7. Practitioner will assess the patient's perfusion.

_____ a) Assess patient's skin **C**olor.

_____ b) Assess patient's skin **T**emperature.

_____ c) Assess patient's skin **C**ondition.

Patient < 6 years old

_____ d) Assess capillary refill

_____ 8. Practitioner will identify priority patients

If priority (see identification of priority patients on following page):

_____ 1. Expedite transport - Conduct Rapid Trauma Assessment

NOTE: Additional surveys and treatments can be conducted enroute to a medical facility.

_____ 2. Consider ALS back up.

If no priority exists:

_____ Continue to Focused History & Physical Exam.

Identification of Priority Patients:

- Poor general impression
- Unresponsive patient - no gag or cough
- Responsive, not following commands
- Difficulty breathing
- Shock (hypoperfusion)
- Complicated childbirth
- Chest pain with BP <100 systolic
- Uncontrolled bleeding
- Severe pain anywhere

Initial Assessment (Continued)

CRITICAL CRITERIA

_____ Uses appropriate BSI (body substance isolation) precautions
_____ Identifies and assumes spinal stabilization, if indicated
_____ Important: Determines mental status: responsive/unresponsive (AVPU)
_____ Determines airway status: clear/obstructed
Initiates appropriate treatment (i.e. head-tilt, jaw thrust)
_____ Determines breathing status: adequate/inadequate (>24, <8, none)
Initiates appropriate treatment (i.e. O_2, BVM, airways)
_____ Determines circulation status - assess pulse (radial and/or carotid);
assess for systemic bleeding; initiates treatment (i.e. CPR, AED, bleeding control)
_____ Important: Evaluates patient's perfusion: skin color, temperature, and condition
_____ Determines patient's priority status:
Critical: 10 minutes (treatment and packaging)
Stable: 20 minutes (treatment and packaging)

Focused History & Physical Exam (Trauma)

* **DCAP-BTLS** = Deformities, Contusions, Abrasions, Punctures/Penetrations-Burns, Tenderness, Lacerations, Swelling

DESCRIPTION OF SKILL

_____ 1. Practitioner will classify patient due to the significance of the mechanism of injury (MOI) or clinical findings.
- a) Significant MOI - go to step 2
- b) No significant MOI - go to step 3

_____ 2. Practitioner will perform a rapid trauma assessment of the patient to determine life-threatening injuries.
- _____ a) Continue spinal stabilization.
- _____ b) Consider ALS request (if not already done)
- _____ c) Reconsider transport decision (if appropriate).
- _____ d) Assess patient's mental status.
- _____ e) Assess head, inspect & palpate for injuries or signs of injury. - **DCAP-BTLS* & Crepitation.**
- _____ f) Assess neck, inspect & palpate for injuries or signs of injury. - **DCAP-BTLS*, Crepitation,** and **Jugular Vein Distention** (JVD) and **tracheal deviation.**
- _____ g) Apply appropriately sized cervical collar.
- _____ h) Assess chest, inspect and palpate for injuries or signs of injury. - **DCAP-BTLS*, Crepitation, Paradoxical motion,** and **Breath sounds** (present, absent, equal)
- _____ i) Assess abdomen, inspect & palpate for injuries or signs of injury. - **DCAP-BTLS*, Firm, Soft,** or **Distended**
- _____ j) Assess pelvis, inspect & palpate for injuries or signs of injury. **-DCAP-BTLS***
  - <u>If no pelvic pain noted:</u> Gently compress the pelvis to determine tenderness or motion (instability).
- _____k) Assess all four extremities, inspect & palpate for injuries or signs of injury. - **DCAP-BTLS*, Distal Pulse, Motor function, Sensation (PMS) function.**
- _____ l) Roll patient (using spinal precautions) & assess posterior body, inspect & palpate for injuries or signs of injury.
- _____ m) Assess baseline vital signs. (could be done in transit for priority patients)
- _____ n) Assess SAMPLE history. (could be done in transit for priority patients)

Once completed, move on to Step 4

_____ 3. Practitioner will perform a focused assessment (on specific injury site) based on components of the rapid assessment.
- _____ a) Assess appropriate area(s) of patient as described previously under rapid assessment.
- _____ b) Assess baseline vital signs.
- _____ c) Assess SAMPLE history.

_____ 4. Proceed according to Focused History & Physical Exam findings.
- _____ a) Appropriately package & transport patient within 10 minutes for a priority (critical) patient.

Focused History & Physical Exam: Trauma (Continued)

CRITICAL CRITERIA
_____ Uses appropriate BSI (body substance isolation) precautions
_____ Differentiates between trauma and medical patient assessment
_____ Differentiates between rapid assessment and focused assessment
_____Transports a priority (critical) patient within 10 minutes.

If patient unconscious:
_____ Performs a hands-on assessment to identify life-threatening and non life-threatening injuries
_____ Important: Completes a hands-on assessment within 2 minutes of initial patient contact
_____ Hands-on assessment performed looking for DCAP-BTLS on the following body areas: head, neck, chest, abdomen, pelvis, extremities, back.
_____ Assures spinal immobilization and airway control during the assessment
_____ Attempts to minimize additional injury to non life-threatening injuries when presented with life-threatening situations (e.g., isolated leg injury associated w/unconsciousness)
_____ Integrates treatment interventions into the assessment approach, as are indicated: bleeding control, oxygen, cervical collar, fracture stabilization, etc.
_____ Performs the following assessments on the patient actor: lung sounds, baseline vital signs (respiration, pulse, BP), pupils
_____ Important: Assesses pulse, motor function and sensation (PMS) in extremities
_____ Conducts a SAMPLE history assessment, whenever warranted. All or part of SAMPLE may be required depending on the scenario
_____ Selects appropriate treatment/transport intervention(s) based on the assessment

If patient conscious:
_____ Perform a hands-on assessment of areas of chief complaint or the isolated injury, (DCAP-BTLS)
_____ Assess baseline vital signs
_____ Perform SAMPLE history assessment
_____ Integrates treatment interventions into the assessment approach, as are indicated: bleeding control, oxygen, cervical collar, fracture stabilization, etc.
_____ Selects appropriate treatment/transport intervention(s) based on the assessment

Significant MOI / Clinical Finding	**Acronyms**
• Ejection from vehicle • Death in same passenger compartment • Falls > 20 feet • Roll-over of vehicle • High-speed vehicle collision • Vehicle-pedestrian collision • Motorcycle crash • Unresponsive or altered mental status • Penetrations of the head, chest, or abdomen • Hidden injuries (?): a) Seat belts b) Airbags c) Deformed steering wheel Infants &Children (additional) • Falls > 10 feet • Bicycle collision • Vehicle in medium speed collision	**DCAP-BTLS** - Deformities Contusions Abrasions Punctures/penetrations Burns Tenderness Lacerations Swelling **JVD -** Jugular vein distension **MOI -** Mechanism of Injury **NOI -** Nature of Illness **PMS -** Pulse/Motor function/Sensation **SAMPLE History -** Signs/Symptoms Allergies Medications Pertinent Past History Last oral intake: Solid or Liquid Events leading to injury / illness

Focused History & Physical Exam (Medical)

DESCRIPTION OF SKILL

_____ 1. Practitioner will classify patient according to level of responsiveness.
Responsive - go to step 2.
Unresponsive - go to step 3.

_____ 2. Practitioner will assess complaints / signs & symptoms by:
_____ a) Questioning the patient in the following areas:

OPQRST
_____ 1. **O**nset
_____ 2. **P**rovocation
_____ 3. **Q**uality
_____ 4. **R**adiation
_____ 5. **S**everity
_____ 6. **T**ime since onset

NOTE: Consider Interventions (i.e., patient interventions such as medication taken before arrival of EMS)

SAMPLE
_____ 7. **S**igns/Symptoms
_____ 8. **A**llergies
_____ 9. **M**edications
_____ 10. **P**ertinent Past History
_____ 11. **L**ast oral intake
_____ 12. **E**vents leading to the illness

b) Performing a rapid assessment
_____ 1. Assess the head
_____ 2. Assess the neck
_____ 3. Assess the chest, including lung sounds
_____ 4. Assess the abdomen
_____ 5. Assess the pelvis
_____ 6. Assess the extremities
_____ 7. Assess the posterior body

c) Assess baseline vital signs

d) Provide emergency care based on signs and symptoms.

Go On To Step 4

_____ 3. Practitioner will gather as much information concerning the patient's condition as available by doing the following:
_____ a) Perform a rapid assessment.
_____ 1. Assess the head
_____ 2. Assess the neck
_____ 3. Assess the chest
_____ 4. Assess the abdomen
_____ 5. Assess the pelvis
_____ 6. Assess the extremities
_____ 7. Assess the posterior body

Focused History & Physical Exam: Medical (Continued)

_____ b) Assess baseline vital signs.

_____ c) Position patient to protect airway.

_____ d) If available, obtain SAMPLE history from bystanders, family, and friends prior to leaving scene. Consider interventions that may have already been done by the patient or bystanders.

_____ 4. As appropriate, package and transport patient to medical facility continuing care & assessment(s).

CRITICAL CRITERIA

_____ Uses appropriate BSI (body substance isolation) precautions
_____ Differentiates between trauma and medical patient assessment
_____ Differentiates between rapid assessment and focused assessment
_____Transports a priority (critical) patient within 10 minutes.

If patient unconscious:

_____ Performs a hands-on assessment to identify life-threatening and non life-threatening injuries
_____ Important: Completes a hands-on assessment within 2 minutes of initial patient contact
_____ Hands-on assessment performed on the following body areas: head, neck, chest, pelvis, extremities, back, abdomen
_____ Assures spinal immobilization and airway control during the assessment
_____ Attempts to minimize additional injury to non life-threatening injuries when presented with life-threatening situations (i.e. isolated leg injury associated w/unconsciousness)
_____ Integrates treatment interventions into the assessment approach, as are indicated: bleeding control, oxygen, and suctioning, etc.
_____ Performs the following assessments on the patient actor: lung sounds, baseline vital signs (respiration, pulse, BP), pupils
_____ Important: Assesses pulse, motor, sensation (PMS) in extremities (situation dependant)
_____ Conducts a SAMPLE history assessment, whenever warranted. All or part of SAMPLE may be required depending on the scenario
_____ Performs OPQRST assessment, whenever warranted. All or part of OPQRST assessment may be required depending on the scenario
_____ Selects appropriate treatment/transport intervention(s) based on the assessment

If patient conscious:

_____ Perform OPQRST and SAMPLE history assessment
_____ Assess baseline vital signs, pupils, lung sounds
_____ Perform rapid hands-on assessment of areas of chief complaint
_____ Important: Assesses pulse, motor, sensation (PMS) in extremities (situation dependant)
_____ Integrates treatment interventions into the assessment approach, as are indicated: bleeding control, oxygen, and suctioning, etc.
_____ Selects appropriate treatment/transport intervention(s) based on the assessment
_____ Rechecks blood pressure within two minutes of post administration of nitroglycerine

Sample History

DESCRIPTION OF SKILL

Sign - any medical or trauma condition displayed by the patient & identifiable by the EMT-Basic using his/her senses.
Symptom - any condition described by the patient (e.g. feeling short of breath, nausea).

Rescuer will obtain a **SAMPLE** history on the patient.

_____ 1. Rescuer will gather information concerning patients **S**igns/**S**ymptoms.

_____ 2. Rescuer will identify if the patient has any **A**llergies: medications, latex, food, environmental. Consider medical identification tag.

_____ 3. Rescuer will identify any **M**edications that the patient is taking: prescription & non-prescription. Consider medical identification tag.

_____ 4. Rescuer will determine **P**ertinent **P**ast history: medical, surgical, trauma. Consider medical identification tag.

_____ 5. Rescuer will determine patient's **L**ast oral intake (Solid or liquid)
_____ a) Time (when taken)
_____ b) Quantity

_____ 6. Rescuer will determine **E**vents leading up to the injury or illness.

CRITICAL CRITERIA
_____ Student completes an appropriate SAMPLE history

Detailed Physical Exam

DESCRIPTION OF SKILL

* **DCAP-BTLS** – Deformity, Contusion, Abrasion, Puncture/Peneration – Burns, Tenderness, Lacerations, Swelling.

The detailed physical exam is used to gather additional information on certain patients, primarily while en route to the medical facility. Not all patients (e.g. cut finger) will require a detailed physical exam.

_____ 1. Practitioner will determine whether the patient needs a detailed physical exam.
If *no,* Go to *On-Going Assessment*
If *yes,* proceed to 2.

_____ 2. Assess head, inspect & palpate for injuries or signs of injury. - **DCAP-BTLS*.**

_____ 3. Assess the face, inspect & palpate for injuries or signs of injury. - **DCAP- BTLS*.**

_____ 4. Assess the ears, inspect & palpate for injuries or signs of injury. - **DCAP-BTLS*, drainage**.

_____ 5. Assess the eyes, inspect & palpate for injuries or signs of injury. - **DCAP-BTLS*, discoloration**, **unequal pupils**, **foreign bodies**, **blood in anterior chamber**.

_____ 6. Assess the nose, inspect & palpate for injuries or signs of injury. - **DCAP-BTLS*, drainage**, **bleeding**.

_____ 7. Assess the mouth, inspect & palpate for injuries or signs of injury. - **DCAP-BTLS*, teeth**, **obstructions, swollen** or **lacerated tongue**, **odors**, **discoloration.**

_____ 8. Assess neck, inspect & palpate for injuries or signs of injury. - **DCAP-BTLS*, crepitation,** and **jugular vein distention (JVD) and tracheal deviation.**

_____ 9. Assess chest, inspect and palpate for injuries or signs of injury. - **DCAP-BTLS*, crepitation, paradoxical motion,** & **breath sounds** (present, absent, equal)

_____ 10. Assess abdomen, inspect & palpate for injuries or signs of injury. - **DCAP-BTLS*, firm, soft,** or **distended**

_____ 11. Assess pelvis, inspect & palpate for injuries or signs of injury. – **DCAP-BTLS***
If no pelvic pain noted:
_____ Gently compress the pelvis to determine tenderness or motion (instability).

_____ 12. Assess all four extremities, inspect & palpate for injuries or signs of injury. - **DCAP-BTLS*, distal pulse, motor function, sensation (PMS).**

_____ 13. Roll patient (using spinal precautions) & assess posterior body, inspect & palpate for injuries or signs of injury.

_____ 14. Re-assess vital signs.

_____ 15. Initiate or modify patient care according to findings.

CRITICAL CRITERIA
_____ Uses appropriate BSI (body substance isolation) precautions
_____ Manages oxygen

On-Going Assessment

DESCRIPTION OF SKILL

The on-going assessment is done on all patients, unlike the detailed physical exam. It is completed periodically during transport of the patient to a medical facility.

_____ 1. Practitioner will repeat the initial assessment:
- _____ a) Reassess mental status
- _____ b) Maintain open airway
- _____ c) Reassesses breathing for rate & quality
- _____ d) Reassess pulse for rate & quality
- _____ e) Monitors patient skin color & temperature
- _____ f.) Re-establishes patient priorities

_____ 2. Practitioner will reassess and record vital signs.

_____ 3. Repeat focused assessment regarding patient's complaint or injuries.

_____ 4. Checks interventions:
- _____ a) Assure adequacy of oxygen delivery / artificial ventilation.
- _____ b) Assure management of bleeding.
- _____ c) Assure adequacy of other interventions.

Stable Patient -	Repeat & Record every 15 minutes.
Unstable Patient -	Repeat & Record every 5 minutes (minimum).

CRITICAL CRITERIA

_____ Uses appropriate BSI (body substance isolation) precautions
_____ Reassesses ABCs
_____ Manages oxygen

CHILDBIRTH AND CHILDBIRTH COMPLICATIONS

Childbirth

DESCRIPTION OF SKILL

Determine the imminence of delivery by patient interview.

_____ 1. Determine the number of previous pregnancies.

_____ 2. Determine complications of past pregnancies.

_____ 3. Determine known complications with the current pregnancy.

_____ 4. Determine the anticipated due date.

_____ 5. Determine how far apart contractions are occurring.

_____ 6. Determine if there has been any bleeding or discharge.

_____ 7. Determine if the patient feels the urge to move her bowels or push.

_____ 8. Explain the need to examine for crowning.

_____ 9. Take proper BSI precautions.

_____ 10. Conduct the examination for crowning in a professional and modest manner.

NOTE: If delivery is eminent with crowning, prepare for delivery. If delivery does not occur within 10 minutes, contact medical direction for permission to transport.

Prepare the patient for delivery.

_____ 11. Position your partner or the patient's labor coach at the patient's head.

_____ 12. Assemble equipment while maintaining a sterile field.

_____ 13. Drape the patient to maintain a sterile field.

Delivery of the baby.

_____ 14. Place a gloved hand on the baby's head or buttocks as it presents, and exert gentle pressure to prevent an explosive birth. Avoid the infant's "soft spot" or fontanelle.

_____ 15. Support the baby's head as it delivers.

_____ 16. If the amniotic sac has not broken, use a clamp or other dull instrument to puncture it and clear it from the baby's head and mouth as it appears.

_____ 17. Check to see if the cord is around the baby's neck. If it is, gently loosen it and slip it over the head or shoulder if unable to slip it over head. If this is unsuccessful, the cord will need to be clamped in two places and cut between the clamps to free the baby's neck.

Childbirth (Continued)

_____ 18. Clear the baby's mouth and nose of body fluids using a bulb syringe.

NOTE: Compress the syringe prior to inserting it in the baby's mouth or nose. Avoid contacting the back of the mouth with the syringe.

_____ 19. Support the shoulders and head during delivery.

_____ 20. Document the time of delivery of the baby and placenta.

Post-partum management

_____ 21. Wrap the baby in a blanket and place the baby on a side with head lowered to allow drainage of body fluid from the mouth and nose, and maintain the airway. Keep baby at the same level as mother's vagina to prevent blood from returning through the umbilical cord to the placenta.

One practitioner should:

_____ 22. Wipe mucous from baby's face with sterile gauze, suction mouth and nose with a bulb syringe.

_____ 23. Dry the baby with a clean towel and bundle appropriately for weather—keep the head covered. Babies can become hypothermic very quickly.

_____ 24. Provide tactile stimulation including suctioning and drying the baby should stimulate breathing. You may also need to rub the back or flick the soles of the feet.

_____ 25. When the cord pulsation stops, clamp or tie the cord approximately four (4) finger width from the baby. A second clamp or tie is secured two inches further away from the baby than the initial clamp. The cord is then cut between the two clamps or ties.

_____ 26. Determine the baby's APGAR Score 1 minute and 5 minutes following birth.

Childbirth (Continued)

AREA OF ACTIVITY	APGAR SCORE		
	2	1	0
Appearance	Entire infant is pink	Body is pink, but hands and feet remain blue	Entire infant is blue or pale
Pulse	More than 100 beats/minute	Fewer than 100 beats/minute	Absent pulse
Grimace or Irritability	Infant cries and tries to move foot away from finger snapped against it's sole	Infant gives a weak cry in response to stimulus	Infant does not cry or react to stimulus
Activity or Muscle Tone	Infant resists attempts to straighten out hips and knees	Infant makes weak attempts to resist straightening	Infant is completely limp, with no muscle tone
Respiration	Rapid respirations	Slow respirations	Absent respirations

The other practitioner should:

_____ 27. Not delay transport more than 30 minutes waiting for the placenta.

_____ 28. (The mother will feel contractions as the placenta prepares to deliver) — Encourage her to push. As the placenta delivers, wrap it in a towel and place it in a plastic bag. The placenta must be transported to the hospital with the mother. Never pull the umbilical cord to try to force the placenta to deliver.

_____ 29. After the placenta has delivered, place a sterile/sanitary napkin over the vaginal opening.

_____ 30. If excessive bleeding (in excess of 500cc) occurs, massage the abdomen at the fundus of the uterus to help control bleeding.

_____ 31. Begin transport and notify the hospital as soon as possible. The newborn should be restrained in an approved safety seat for the transport.

CRITICAL CRITERIA

_____ Uses appropriate BSI (body substance isolation) precautions
_____ Recognizes a “childbirth complication” situation and takes appropriate actions
_____ Ensures adequately open airway for mother and infant
_____ Transports patients in a timely manner, even if placenta has not yet delivered

Childbirth Complications

Appropriate BSI should be taken in all of the situations described below.

DESCRIPTION OF SKILL

Prolapsed Cord

_____ 1. Place the mother in a position that removes pressure from the cord (head down and/or pelvis elevated).

_____ 2. Administer high flow oxygen (15 L/min) to mother.

_____ 3. Encourage mother to pant and not push through contractions.

_____ 4. With sterile gloved hand, insert several fingers into the vagina to gently push the baby off the cord to maintain cord pulsations. Do not attempt to replace the cord in the vagina.

_____ 5. Maintain this position enroute to the hospital.

_____ 6. If any portion of the cord is visible outside the vagina, apply moist sterile dressings to the cord.

_____ 7. Begin transport and notify the hospital immediately.

Limb Presentation

_____ 1. Place the mother in a position that removes pressure from the cord (head down and/or pelvis elevated).

_____ 2. Place the mother on high flow oxygen (15L/min).

_____ 3. Begin transport and notify the hospital immediately.

Multiple Births

Delivery is assisted in the same way as other births with the following considerations: Multiple births have a higher rate of complications than single births.

_____ 1. Call for assistance and be prepared for more than one resuscitation.

NOTE: Consider oxygen application

_____ 2. After delivery of the first infant, when the cord stops pulsating, clamp or tie and cut the umbilical cord.

_____ 3. When contractions begin again, usually within 5-10 minutes of the first delivery, assist the delivery of the subsequent infant(s) as usual.

_____ 4. When the cord stops pulsating, clamp or tie and cut the umbilical cord of the second infant.

_____ 5. Provide maternal care as for a single birth.

NOTE: Keep in mind that premature or low birth weight babies are common in multiple births.

Meconium

_____ 1. Assist with delivery as normal.

_____ 2. Do not stimulate the baby to breathe before suctioning the oropharynx.

_____ 3. Suction as soon as possible.

_____ 4. Maintain on open airway.

_____ 5. Begin transport and notify the hospital of the presence of meconium immediately.

Premature Birth

Premature births (less than 28 weeks gestation or 5.5 lbs.) have a higher rate of complications than full-term births.

_____ 1. Keep the infant warm. Make sure to dry and wrap the baby, including the baby's head, in a blanket.

NOTE: Consider oxygen application

_____ 2. Suction as needed.

_____ 3. Monitor the umbilical cord to assure that there is no bleeding. If there is bleeding, place an additional clamp on the cord closer to the infant.

Breech Birth

_____ 1. Place the mother in a position that removes pressure from the cord (head down and/or pelvis elevated).

_____ 2. Administer high flow oxygen (15 L/min) to mother.

_____ 3. Begin transport, notify the hospital immediately, and watch for a prolapsed cord.

If delivery begins, and the head fails to deliver,

_____ 4. Place a gloved hand into the patient's vagina with your palm facing the baby's face. Make a V with your index and middle fingers on either side of the baby's nose. Push he vaginal wall away from the baby's face until the head delivers. Do not hyperextend the baby's head while pushing the vaginal wall away from the face. If the head does not deliver, transport immediately. Do not attempt to force delivery by pulling on the trunk or legs of the infant.

CRITICAL CRITERIA

_____ Uses appropriate body substance isolation (BSI) precautions
_____ Recognizes a childbirth complication.
_____ Appropriately manages a childbirth complication
_____ Recognizes a "load and go" situation and takes appropriate actions
_____ Ensures adequately open airway for mother and infant
_____ Transports patients in a timely manner, even if placenta has not yet delivered

SPLINTING
General Principles

Treatment for **P**ainful **S**wollen **D**eformities (PSD's)

DESCRIPTION OF SKILL

_____ 1. Practitioner will conduct a scene size-up.

_____ 2. Practitioner will take appropriate BSI precautions.

_____ 3. Practitioner will conduct an initial assessment.

_____ 4. Practitioner will start a focused trauma assessment, which may be interrupted for any life or limb threatening injuries found.

NOTE: In general, PSD's do not present with life threats that will interrupt the initial survey although absence of pulse distal to major PSD's is regarded as an orthopedic emergency, if uncorrectable, and should be transported immediately.

_____ 5. Practitioner will expose the injury and check for pulse, motor function, and sensory (PMS) impairment distal to the injury.

_____ 6. Practitioner will align the injury, with gentle traction if severe deformity is noted or the distal extremity is cyanotic or lacks pulses.

NOTE: If the injury is a "joint injury", the extremity should only be straightened (gentle traction) if **no resistance is met**. If resistance is met, splint in position found.

_____ 7. Practitioner will dress and bandage all open wounds (controlling external bleeding as needed).

_____ 8. Practitioner will determine appropriate splinting material and prepare it for use (Pad as needed).

_____ 9. Practitioner will immobilize the injury area -
Long bones - joint above and below
Joint injury - long bone above and below

_____ 10. Practitioner will secure the splint to the injury area using materials applied firmly but not so tightly, that circulation is impaired.

_____ 11. Practitioner will reassess PMS after splint is applied.

_____ 12. Practitioner will treat the patient for hypoperfusion (including administration of high flow oxygen).

_____ 13. Practitioner will apply cold pack(s) to the area to reduce swelling.

_____ 14. Practitioner will elevate the extremity.

_____ 15. Practitioner will complete focused assessment, treat as appropriate, and package the patient for transport.

_____ 16. Practitioner will continue treatment and monitoring of patient during transport.

Treatment for PSD's (Continued)

CRITICAL CRITERIA
_____ Manual stabilization for isolation multi-system injury
_____ Assesses pulse distal to injury
_____ Important: Assesses motor function and sensation
_____ Selects and sizes appropriate splinting device
_____ Securely applies splinting device
_____ Important: Maintains position of function in hand/foot splinting
_____ Prevents excessive movement
_____ Immobilizes joint above bone and below injury site
_____ Reassesses pulse distal to injury

Site of PSD	Suggested Splint Type(s)
Shoulder	Sling & swathe, support & immobilize (pillow) in most comfortable position for patient.
Upper Arm	Padded board splint, Padded wire ladder splint, Sling & swathe, SAM® splint
Elbow	Padded board splint, Sling and swathe, padded wire splint, Air splint, Vacuum splint, SAM® splint.
Forearm	Padded board splint, Padded wire ladder splint, Air Splint, Vacuum Splint, Sling & swathe, SAM® splint
Wrist/Hand	Padded board splint, Padded wire ladder splint, Air Splint, Vacuum Splint, Sling & swathe, SAM® splint
Pelvis	Scoop stretcher, Long back board, MAST
Hip	Long back board (with pillow between legs), Scoop stretcher, MAST
Femur	Traction splint, Long padded board splint(s), Other leg
Knee	Padded board splint, SAM® splint. Air splint, Vacuum splint, Other leg
Tibia/Fibula	Padded board splint, SAM® splint, Air splint, Vacuum splint, Other leg
Ankle/Foot	Pillow splint, Air splint, Vacuum splint, Blanket splint

THE CENTRAL NERVOUS SYSTEM

Cervical Collar

DESCRIPTION OF SKILL

_____ 1. Practitioner(s) determine the need for cervical spine immobilization during scene size-up (Mechanism of Injury)

_____ 2. Practitioner manually stabilizes the patient's head by placing one hand on each side to prevent movement.

NOTE:
- The other practitioner should talk to the patient, keeping the patient's attention, while the first practitioner gets into position to take stabilization.
- The other practitioner conducts a focus cervical spine assessment to determine the need for continued cervical immobilization.

_____ 3. The other practitioner properly sizes and applies cervical collar. (Follow manufacturer's recommendations.)

NOTE: The other practitioner should survey for DCAP-BTLS (Deformities, Contusions, Abrasions, Punctures-Burns, Tenderness, Lacerations, Swelling) of the neck prior to application of the collar.

_____ 4. Practitioner continues to stabilize the patient's head until it is secured to a short, wrap around, or long board with a cervical immobilization device (CID) or other appropriate device used with long spine boards.

_____ 5. The other practitioner starts patient surveys and treatment.

CRITICAL CRITERIA
_____ Maintains patient's head in neutral in-line position
_____ Maintains manual immobilization until head is secure
_____ Important: Reassesses pulse, motor function, and sensation (PMS)
_____ Applies appropriately sized c-collar

*Statewide BLS Protocols will be developed for determining the need for C-spine immobilization.

Cervical Immobilization Device (CID)

DESCRIPTION OF SKILL

_____ 1. Practitioner will secure the patient's cervical spine by grasping the patient's head, bringing it into a neutral in-line position (if needed), and providing manual immobilization. Immobilization is maintained until the patient's head is securely fastened to a long backboard.

_____ 2. The other practitioner will apply an appropriately sized cervical collar to the patient.

_____ 3. Patient is placed onto a long spine board (see specific skill).

NOTE: Some commercial CIDs come with bases that require attachment to the long board prior to movement of the patient onto the board.

_____ 4. The other practitioner will place appropriate object(s) along both sides of the patient's head to secure it from moving. Appropriate items include:

Foam Blocks	Head Blocks (commercial)
Rolled Towels	Rolled Blanket(s)
Clothing	Paper towel rolls

Sandbags are **not** appropriate head immobilization devices.

_____ 5. The other practitioner will hold the objects in place while the first practitioner slips the hands out from between the objects and patient's head.

_____ 6. The first practitioner secures the objects in place using one of the following (or similar) materials:

Commercial head straps	Cravats
Roller bandage	Tape

_____ a) Head is secured across the forehead to the long board.
_____ b) Head is secured across the cervical collar to the long board.

_____ 7. Once the head is secured, the second practitioner can cease manual head stabilization.

CRITICAL CRITERIA

_____ Maintains patient's head in neutral in-line position
_____ Maintains manual immobilization until head is secure
_____ Important: Reassesses pulse, motor function, and sensation (PMS)
_____ Applies appropriately sized c-collar
_____ Positions immobilization device appropriately
_____ Chooses appropriate spinal immobilization device
_____ Evaluates patient and adjusts equipment as needed
_____ Immobilizes patient's torso to device
_____ Important: Evaluate and pad as necessary
_____ Immobilizes patients head to device, after torso
_____ Directs movement of patient onto long board
_____ Important: Reassesses pulse, motor function, sensation (PMS) on each extremity
_____ Assesses and corrects excessive movement

Short Backboard Application

DESCRIPTION OF SKILL

There are local variations regarding the application of this skill. The primary concerns are that spinal immobilization is applied with spinal alignment maintained, and that the immobilization device maintains alignment after application. Techniques may be altered as personnel permit.

_____ 1. Practitioner conducts scene size-up and determines possibility of spinal injury.

_____ 2. Practitioner immediately secures the head using manual (hand) stabilization.

NOTE: Manual stabilization is maintained until the patient's head is properly secured to the short spine board.

_____ 3. The second practitioner conducts initial patient assessment.

_____ 4. The second practitioner applies appropriate cervical collar.

NOTE: The second practitioner should survey for deformities, contusions, abrasion, punctures/penetrations, burns, tenderness, lacerations, and swelling (DCAP-BTLS) of the neck prior to application of the collar.

_____ 5. The second practitioner initiates focused trauma assessment and treats injuries found. Practitioner also assesses patient's pulses, motor function & sensory function in all extremities.

NOTE: Short spine board application can be done prior to, as part of, or after the focused assessment depending upon the mechanism of injury (MOI) and patient condition.

_____ 6. The second practitioner prepares short board for application. (Inserts two straps making an "X" on the back of the board with buckles to the front.)

_____ 7. The second practitioner positions the board behind the patient with minimal patient movement.

_____ 8. The second practitioner secures the patient firmly on to the board by buckling the two straps. Buckles are on the patient's chest, while straps go over thighs at the groin, under and around the outside of the thigh, up across the chest to the buckle. Sufficient padding is used where straps/buckles may cause pressure.

_____ 9. The second practitioner fills voids between patient's neck and the board with towel, padding or similar object and secures patient's head to board using forehead straps, cravats or roller bandage. Head must remain in neutral alignment once immobilized.

_____ 10. Practitioner(s) will check torso straps and tighten if appropriate (being careful not to jar or move the patient) while evaluating immobilization.

_____ 11. The second practitioner, with assistance from the first practitioner, will gently lift the patient (one practitioner on each side of the patient with one hand under the patient's armpit and the other one under the patient's buttocks) one or two inches off the seat.

_____ 12. A third practitioner will position the long backboard under the patient with the distal end of the board extending outside the vehicle.

_____ 13. While the third practitioner secures the distal end of the backboard, the first and second practitioners (with additional help if available) will rotate the patient (making sure not to twist his body) and lay patient on the long backboard while supporting patient's legs and feet.

_____ 14. The second practitioner will release the straps around the patient's thighs and slowly, carefully lower the patient's legs simultaneously onto the longboard. Loosen chest straps as needed for patient's comfort.

_____ 15. The second practitioner will properly immobilize the patient to the long spine board (See specific skill)

_____ 16. The second practitioner will reassess distal pulse, motor function, and sensation (PMS) and prepare the patient for transport.

CRITICAL CRITERIA

_____ Maintains patient's head in neutral in-line position
_____ Maintains manual immobilization until head is secure
_____ Important: Reassesses pulse, motor function, and sensation (PMS)
_____ Applies appropriately sized c-collar
_____ Positions immobilization device appropriately
_____ Chooses appropriate spinal immobilization device
_____ Evaluate patient and adjust equipment as needed
_____ Immobilizes patient’s torso to device
_____ Important: Evaluate and pad as necessary
_____ Immobilizes patient’s head to device, after torso
_____ Directs movement of patient onto long board
_____ Important: Reassesses pulse, motor function, sensation (PMS) on each extremity
_____ Assesses and corrects excessive movement

Helmet Removal

DESCRIPTION OF SKILL

This skill sheet describes one of several appropriate methods for helmet removal. Whichever technique is used, the objective of cervical spine immobilization must be accomplished throughout the skill.

_____ 1. Practitioner conducts a scene size-up assessment.

_____ 2. Practitioner determines the possibility of spinal injury by evaluating the mechanism of injury (MOI) and manually stabilizes the patient's head by grasping the helmet (fingers should hold the victim's mandible to prevent slippage within the helmet).

_____ 3. Practitioner determines the need for removal of the helmet.

NOTE: Helmets should only be removed when they are of improper fit and/or there is the possibility of respiratory/airway compromise that may need correction. Otherwise, the helmet should be left on and secured in place on the long spine board.

_____ 4. The other practitioner cuts or loosens the chinstrap (at the D rings).

_____ 5. The other practitioner places one hand on the patient's mandible at the angle (thumb on one side, fingers on the other) and the other under the patient's head at the occipital region. This allows the second practitioner to assume the manual stabilization.

_____ 6. The first removes the helmet by expanding it laterally to clear the ears.

NOTE: If the helmet provides full facial coverage, the nose will impede removal. To clear the nose, the helmet must be tilted backward and raised over it.

_____ 7. After the helmet is removed, the first practitioner replaces his/her hands on either side of the patient's head with his/her palms over the ears.

_____ 8. The second practitioner can then proceed with indicated treatment.

CRITICAL CRITERIA

_____ Maintains patient's head in neutral in-line position
_____ Maintains manual immobilization until head is secure
_____ Important: Reassesses pulse, motor function, and sensation (PMS)
_____ Applies appropriately sized c-collar

Wrap Around Backboard

DESCRIPTION OF SKILL

This skill sheet is designed for use with a Kendrick Extrication Device (KED®). There are multiple devices that accomplish the same goal as the KED® but are used in a slightly different manner. These devices should be applied as specified in the manufacturer's instruction.

_____ 1. Practitioner conducts scene size-up and determines possibility of spinal injury.

_____ 2. Practitioner immediately secures the head using manual (hand) stabilization.

NOTE: Manual stabilization is maintained until the patient's head is properly secured to the short spine board.

_____ 3. The other practitioner conducts initial patient assessment.

_____ 4. The other practitioner applies appropriate cervical collar.

NOTE: The other practitioner should survey for deformity, contusion, abrasion, puncture/penetration – burns, tenderness, lacerations, swelling (DCAP-BTLS) to the neck prior to application of the collar.

_____ 5. The other practitioner initiates focused trauma assessment and treats injuries found. Practitioner assesses patient's pulses, motor function & sensory function in all extremities.

NOTE: Wrap-around spine board application can be done prior to, as part of, or after the focused assessment depending upon the mechanism of injury (MOI) and patient condition.

_____ 6. The other practitioner prepares KED® board:
- _____ a) Smooth side toward patient.
- _____ b) Buckles & Velcro strapping facing away from patient.
- _____ c) Ensure leg straps are accessible.

_____ 7. The other practitioner will position the KED® behind the patient with minimal patient movement.

_____ 8. The other practitioner will place KED® so that it is snug under the armpits (using handles/loops to adjust). Check to insure KED® is in place, centered, and in-line with the patient's spine.

_____ 9. The other practitioner:
- _____ a) Wraps the KED®'s chest supports around the patient's torso.
- _____ b) Fastens the middle, then bottom chest straps & adjusts them until snug.

_____ 10. The other practitioner gently pulls leg straps under the patient's legs and buttocks (using a "see-saw" motion), then crosses the straps at the crotch and inserts the buckle straps on opposite sides of the KED® device. Snug up the leg straps.

NOTE: For suspected groin injury, leg straps may be passed around the legs and buckled on the same side as the strap originated, or they may be eliminated. For severe femur fractures, do not use the leg straps.

Wrap Around Backboard (Continued)

_____ 11. The other practitioner will fold adjusta-pad (or use other materials) to fill void between head and board. Practitioner will maintain head in neutral alignment.

_____ 12. The other practitioner will wrap patient's head in the head support and apply forehead strap, securing it on the Velcro. If second practitioner is unable to fasten straps, transfer of head stabilization can be made to the second practitioner and the first practitioner completes the securing of the head.

NOTE: Once head is secured to the board, the practitioner maintaining stabilization can release the manual stabilization.

_____ 13. The other practitioner will buckle top chest strap and adjust until snug.

_____ 14. The other practitioner will re-evaluate immobilization.

_____ 15. The other practitioner, with assistance from the first practitioner, will gently lift the patient (using the lifting handles or with one practitioner on each side of the patient with one hand under the patient's armpit and the other one under the patient's buttocks) one or two inches off the seat.

_____ 16. The third practitioner will position the long backboard under the patient with the distal end of the board extending outside the vehicle.

_____ 17. While the third practitioner secures the distal end of the backboard, the first and second practitioners (with additional help if available) will rotate the patient (making sure not to twist his body) and lay patient on the long backboard while supporting patient's legs and feet.

_____ 18. The second practitioner will release the leg straps and slowly, carefully lower the patient's legs simultaneously onto the longboard. Loosen chest straps as needed for patient's comfort.

_____ 19. The second practitioner will properly immobilize the patient to the long spine board (See specific skill)

_____ 20. The second practitioner will reassess PMS and prepare the patient for transport.

CRITICAL CRITERIA

_____ Maintains patient's head in neutral in-line position
_____ Maintains manual immobilization until head is secure
_____ Important: Reassesses pulse, motor function, and sensation (PMS)
_____ Applies appropriately sized c-collar
_____ Positions immobilization device appropriately
_____ Chooses appropriate spinal immobilization device
_____ Evaluates patient and adjusts equipment as needed
_____ Immobilizes patient’s torso to device
_____ Important: Evaluate and pad as necessary
_____ Immobilizes patient’s head to device, after torso
_____ Directs movement of patient onto long board
_____ Important: Reassesses pulse, motor function, sensation (PMS) on each extremity
_____ Assesses and corrects excessive movement

Long Board Application

DESCRIPTION OF SKILL

_____ 1. Practitioner conducts scene size-up and determines possibility of spinal injury.

_____ 2. Practitioner immediately secures the head using manual (hand) stabilization.

NOTE: Manual stabilization is maintained until the patient is properly secured to a long spine board with cervical immobilization device (CID), or other appropriate device, in place.

_____ 3. The second practitioner conducts initial patient assessment.

_____ 4. The second practitioner applies appropriate cervical collar.

NOTE: The second practitioner should survey for deformity, contusion, abrasion, puncture/penetration – burns, tenderness, lacerations, swelling (DCAP-BTLS) to the neck prior to application of the collar.

_____ 5. The second practitioner initiates focused trauma assessment and treats injuries found. Practitioner assesses patient's pulses, motor function & sensory function in all extremities.

NOTE: Long spine board application can be done prior to, as part of, or after the focused assessment depending upon the mechanism of injury (MOI) and patient condition.

_____ 6. The second practitioner, with assistance, places the patient onto a long spine board using a long roll, suitable lift or slide, or scoop stretcher.

_____ 7. The second practitioner pads voids, between the patient and board:
_____ a) Adults: Under head & torso as needed.
_____ b) Infants & Children: Under shoulders to toes to establish a neutral position.

_____ 8. The second practitioner will immobilize patient's torso to the board by applying straps across the chest and pelvis, adjust as needed.

_____ 9. The second practitioner will immobilize the patient's head to the board using a cervical immobilization device (CID) or other suitable material.

_____ 10. The second practitioner will fasten the legs to the board, both proximal & distal the knees.

_____ 11. The second practitioner will reassess pulse, motor function, and sensation (PMS) and prepare the patient for transport.

Longboard Application (Continued)

CRITICAL CRITERIA

_____ Maintains patient's head in neutral in-line position
_____ Maintains manual immobilization until head is secure
_____ Important: Reassesses pulse, motor function, and sensation (PMS)
_____ Applies appropriately sized c-collar
_____ Positions immobilization device appropriately
_____ Chooses appropriate spinal immobilization device
_____ Directs movement of patient onto device ensuring integrity of the spine
_____ Important: Evaluate and pad as necessary
_____ Immobilizes patient’s torso to device
_____ Immobilizes patient’s head to device, after torso
_____ Secures legs to device
_____ Important: Secures arms to device
_____ Important: Reassesses pulse, motor function, sensation (PMS) on each extremity

Rapid Extrication

DESCRIPTION OF SKILL

This procedure is indicated in the following situations:

- Unsafe scene.
- Unstable patient condition warrants immediate movement and transport
- Patient blocks the EMT-Basic's access to another, more seriously injured patient.

Several variations of the technique are possible. The skill must be accomplished without compromise to the spine.

_____ 1. Practitioner conducts scene size-up and determines possibility of spinal injury.

_____ 2. Practitioner immediately secures the head, bringing it into neutral in-line position and then maintaining manual (hand) stabilization.

NOTE: Manual stabilization is maintained until the patient's head is properly secured to the long spine board.

_____ 3. The other practitioner conducts initial patient assessment. Need for rapid extrication is determined.

NOTE: The second practitioner should survey for deformity, contusion, abrasion, puncture/penetration – burns, tenderness, lacerations, swelling (DCAP-BTLS) to the neck prior to application of the collar.

_____ 4. The other practitioner applies appropriate cervical collar.

_____ 5. A third practitioner places a long backboard near the door (closest the patient) and then moves to the seat beside the patient.

_____ 6. The second practitioner supports the patient's thorax as practitioner three frees the patient's legs from the pedals.

_____ 7. At the direction of the first practitioner, the second and third practitioners rotate the patient in several short, coordinated moves until the patient's back is in the open doorway and the patient’s feet are on the passenger seat.

_____ 8. Since the first practitioner usually cannot support the patient's head any longer, another available practitioner (#4) or bystander supports the patient's head as the first practitioner gets out of the vehicle and takes support of the head outside of the vehicle.

NOTE: This skill can be accomplished with three trained practitioners and a bystander, when necessary, if the third practitioner does jobs of the fourth practitioner except in step 10 where the bystander stabilizes the end of the long spine board.

_____ 9. The fourth practitioner, or the bystander, places the end of the long backboard on the seat next to the patient's buttocks.

_____ 10. The fourth practitioner supports the other end of the board as practitioners one, and two lower the patient onto it.

_____ 11. The second and third practitioners slide the patient into the proper position on the board in short, coordinated moves.

NOTE: Patient is then transferred to the ambulance stretcher and placed in the ambulance. Application of torso straps and/or CID may be done prior to or after movement to litter depending on situation encountered. Do not drop or injure the patient in haste trying to save 10 seconds!

CRITICAL CRITERIA

_____ Maintains patient's head in neutral in-line position
_____ Maintains manual immobilization until head is secure
_____ Important: Reassesses pulse, motor function, and sensation (PMS)
_____ Applies appropriately sized c-collar
_____ Positions immobilization device appropriately
_____ Chooses appropriate spinal immobilization device
_____ Directs movement of patient onto device ensuring integrity of the spine
_____ Important: Evaluates and pad as necessary
_____ Immobilizes patients torso to device
_____ Immobilizes patient's head to device, after torso
_____ Secures legs to device
_____ Important: Secures arms to device
_____ Important: Reassesses pulse, motor function, sensation (PMS) on each extremity

CRITICAL CRITERIA FOR ALL LIFTING AND MOVING

_____ Able to lift 33" and carry 10'
_____ Moves patient in a safe an effective manner
_____ Prevents further aggravation/injury to patient
_____ Prevents injury to self by using correct technique

PENNSYLVANIA FIELD
PROTOCOLS FOR
PATIENT ASSISTED MEDICATION
and
AUTOMATED EXTERNAL DEFIBRILLATOR

❑**Epinephrine Auto Injector** ❑ **Bronchodilator** ❑**Nitroglycerin** ❑**AED**

Act 45 allows EMT's to perform the skills identified in the National Standard Curriculum (NSC) for EMT's. The regulations provide for Pa Field Protocols for Basic Life Support. The following protocols are specifically related to the Patient Assisted Medications.

An EMT-Basic who has received practical skills training in the application of the epinephrine auto-injector, Bronchodilator, Nitroglycerin and/or AED shall be authorized to assist a patient in the application of these drugs or devices.

Currently certified EMT personnel who were trained and certified prior to the inclusion of this material into their EMT curriculum may receive training in the use of these medications. Prior to utilizing this skill in a field setting an EMT shall have documentation by the service director, medical director or an approved accredited training institute or CE training site. The documentation should verify that the applicant has been appropriately trained to perform this skill, utilizing the lesson plans and protocols approved by the Department of Health. Authorization shall remain on file at the service's headquarters or administrative offices.

Currently certified EMT personnel who were trained and certified prior to the inclusion of AED into their EMT program may receive training in the use of this device. The service must be an AED service, EMT personnel must attend an approved AED provider course. See the Department's AED program requirements for further information.

All protocols are subject to revision by the Department.

PROTOCOL FOR
PATIENT ASSISTED MEDICATION
FOR ALLERGIC REACTION/ANAPHYLAXIS
USING AN EPINEPHRINE AUTO-INJECTOR

Indications:

Chief complaint - Allergic reactions with one or more of the following signs/symptoms present:

1. **difficulty breathing**
2. **hives**
3. **itching**
4. **tongue swelling**
5. **patient cannot swallow**

Conditions: (all three must be present):

1. **Patient has a physician prescribed epinephrine auto injector.**
2. **Patient has a past medical history of allergic reaction and is conscious/unconscious with anaphylaxis.**
3. **Patient complains of respiratory distress or exhibits signs/ symptoms of shock.**

Contraindications:

There are no contraindications when used in a life-threatening situation.

Protocol:

1. **Perform patient assessment**
2. **Administer single unit dose of epinephrine auto injector**
3. **Place the patient on high flow oxygen**
4. **Reassess patient and transport**
5. **Record the administration**
6. **Dispose of the injector in a biohazard container**

Side Effects:

Increased heart rate	**Vomiting**
Pallor	**Excitability**
Dizziness	**Anxiousness**
Chest Pain	**Headache**
Nausea	

Dosage: **Adult 0.3 mg Pediatric 0.15 mg**

An EMT or EMT-B may assist with the medication <u>one time</u> prior to on-line Medical Command with any subsequent administration requiring on-line Medical Command, unless command is not accessible or is not available. The EMT or EMT-B shall notify medical command following the administration of the epinephrine auto injector.

PROTOCOL FOR ASSISTING PATIENTS WITH BRONCHODILATOR SELF-MEDICATION

Indications:

Chief complaint - Difficulty breathing due to 1) bronchial asthma; 2) COPD; or 3) bronchospasm related to allergic reaction. Patient usually has a past medical history of bronchial asthma, COPD, or allergies.

Conditions:

1. Patient has a physician-prescribed bronchial inhaler. Generic name examples: Albuterol, Isoetharine, Metaproterenol, Isoproterenol, etc. Trade name examples: Proventil, Ventolin, Bronkometer, Alupent, Metaprel, Maxair, Brethaire, Tornalate, Combivent, etc.
2. Must be a "short-acting" rapid onset, bronchodilator (see attached list).
3. If in doubt or unsure of the appropriate action, contact medical command.

Contraindications:

1. Inability of patient to use the inhaler.
2. Long-acting, delayed onset, bronchodilator (e.g., Serevent) or other non-bronchodilation inhalants.

Protocol:

1. Administer oxygen.
2. Perform patient assessment and measure vital signs.
3. Identify the prescribed dose ("one" or "two" inhalations) for the specific patient and ascertain how many times the patient has already used the inhaler.
4. Medical direction is required if the patient has self-administered two doses or more (> 2 to 4 inhalations) within a half-hour to your arrival.
5. If necessary for administration, briefly remove oxygen from the patient.
6. Have the patient actuate the inhaler (once or twice, according to the patient's prescription).
7. As the medication is discharged, have the patient breathe deeply and hold his/her breath as long as it is comfortably possible.
8. Replace the oxygen onto the patient (if it has been removed) as soon as possible.
9. Reassess vital sign measurements and the patient's condition.
10. Contact Medical Command for additional doses.
11. Record the administration.
12. Reassess and prepare patient for transport.

Side Effects *(of which to be aware)*:

Hypertension	Increased Heart Rate	Tremors	Vomiting
Angina	Nervousness	Nausea	Sore Throat

Dosage:

Based on patient's prescription, you may assist a patient with a dose. This will be one or two inhalations according to the prescription. Medical direction is required if the patient has self-administered two doses or more within a half-hour prior to your arrival.

An EMT or EMT-B may assist with the medication one time prior to on-line medical command. Any subsequent administration requires on-line medical command, unless command is not accessible or is not available. The EMT or EMT-B shall notify medical command following the administration of the inhaler.

EMT-Assisted Inhaled Bronchodilator Use:

The *Pennsylvania Department of Health* (DOH) is providing a list of inhaled bronchodilator drugs with which basic EMTs can assist patients in terms of self-medication.

Although some persons have expressed concerns that such a list may be considered restrictive or unfeasible to use in an emergency, the overall intent is to encourage EMTs to assist the patient when necessary. This is especially pertinent when the drug may be helpful, but the patient is too ill to either help themselves or simply access the drug. Fortunately, the list is relatively short and can be kept on a small card or pasted into a small booklet such as those often carried by EMS personnel.

The DOH recognizes that new drugs may be introduced and added to the list over time, i.e., the list needs to be upgraded occasionally. The DOH also recognizes that the list may not be all-inclusive in terms of all prescribed medications that are available. However, since it includes most of the commonly prescribed drugs, the DOH considers this list to be a useful tool and not a restrictive device. In that respect, several principles should be kept in mind:

Regarding Inhaled Bronchodilator Drugs with which EMTs can Assist the Patient in Self-Medication:

1. Only short-acting, rapid-onset, beta-2 agonists prescribed by a physician, should be utilized under these circumstances (see list on page 3).
2. The EMT should follow the protocol for patient-assisted medication unless instructed to do otherwise by a physician.
3. Long-acting, slower-onset, beta-2 agonists (e.g., Serevent), or "over-the-counter" drugs (e.g., Primatene Mist), or inhaled steroids (e.g., Flovent, Beclovent, Vanceril, Aero-bid, Azmacort), or anti-cholinergics (e.g., Atrovent), or other inhaled compounds (e.g., Intal, Tilade), should not be utilized under these circumstances.
4. When unsure of the appropriate action, the EMT should contact medical command for further direction.

List of Commonly-Prescribed Short-Acting, Rapid-Onset, Beta-2 Agonist Inhalants:

Brand Names (Generic Name)

Proventil (Albuterol)
Ventolin (Albuterol)
Alupent (Metaproterenol Sulfate)
Isuprel Mistometer (Isoproterenol Hydrochloride)
Bronkometer (Isoetharine Mesylate)
Maxair (Pirbuterol Acetate)
Tornalate (Bitolterol Mesylate)
Brethaire (Terbutaline Sulfate)
Medihaler-Iso (Isoproterenol Sulfate)
Duo-medihaler (Isoproterenol Hydrochloride/Phenylephedrine Combo
Metaprel (Metaproterenol)
Combivent (Albuterol and Ipratroprium)

The following drugs should NOT be used:

Long-acting, Delayed-Onset, Bronchodilators

Serevent (Salmeterol Xinafoate)

Corticosteroids

Aero-bid (Flunisolide)
Azmacort (Triamcinolone Acetonide)
Beclovent (Beclomethasone Dipropionate)
Vanceril (Beclomethasone Dipropionate)
Decadron Respihaler (Dexamethasone Sodium Phosphate)
Dexacort Respihaler (Dexamethasone Sodium Phosphate)
Flovent (Fluticasone Propionate)

Anticholinergics

Atrovent (Ipratropium Bromide)

Non-steroidal Anti-inflammatories

Intal (Cromolyn Sodium)
Tilade (Nedocromil Sodium)

Over-the-Counter Drugs

Primatene Mist (Epinephrine)

PROTOCOL FOR
PATIENT ASSISTED MEDICATION
FOR NITROGLYCERINE

Indications:

Chief Complaint – Chest pain or discomfort and the patient is <u>currently</u> experiencing pain or discomfort.

Conditions:

1. **Patient has his/her own prescribed Nitroglycerin.**
2. **Patient's blood pressure is >100 systolic.**
3. **Patient has NOT taken 3 nitro tablets or sprays within 4 minutes prior to your arrival.**

Contraindications:

1. **Blood pressure is <100 systolic.**
2. **Head injury.**
3. **Infant of Child.**
4. **Patient has already taken 3 nitro tablets prior to your arrival. If patient has, contact medical command immediately.**
5. **Patient has taken Viagra within 24 hours.**

Administration:

1. **Medication is prescribed for the patient.**
2. **Check expiration date (if expired do not use). Ascertain when the bottle was opened.**
3. **Administer one tab or one spray under the patient's tongue.**
4. **Wait for approximately 1-2 minutes, reassess the patient's vital signs and chest paid/discomfort.**
5. **Replace oxygen onto the patient.**
6. **Reassess vitals and patient condition.**
7. **Record the administration.**
8. **Reassess and prepare patient for transport.**

Side Effects:

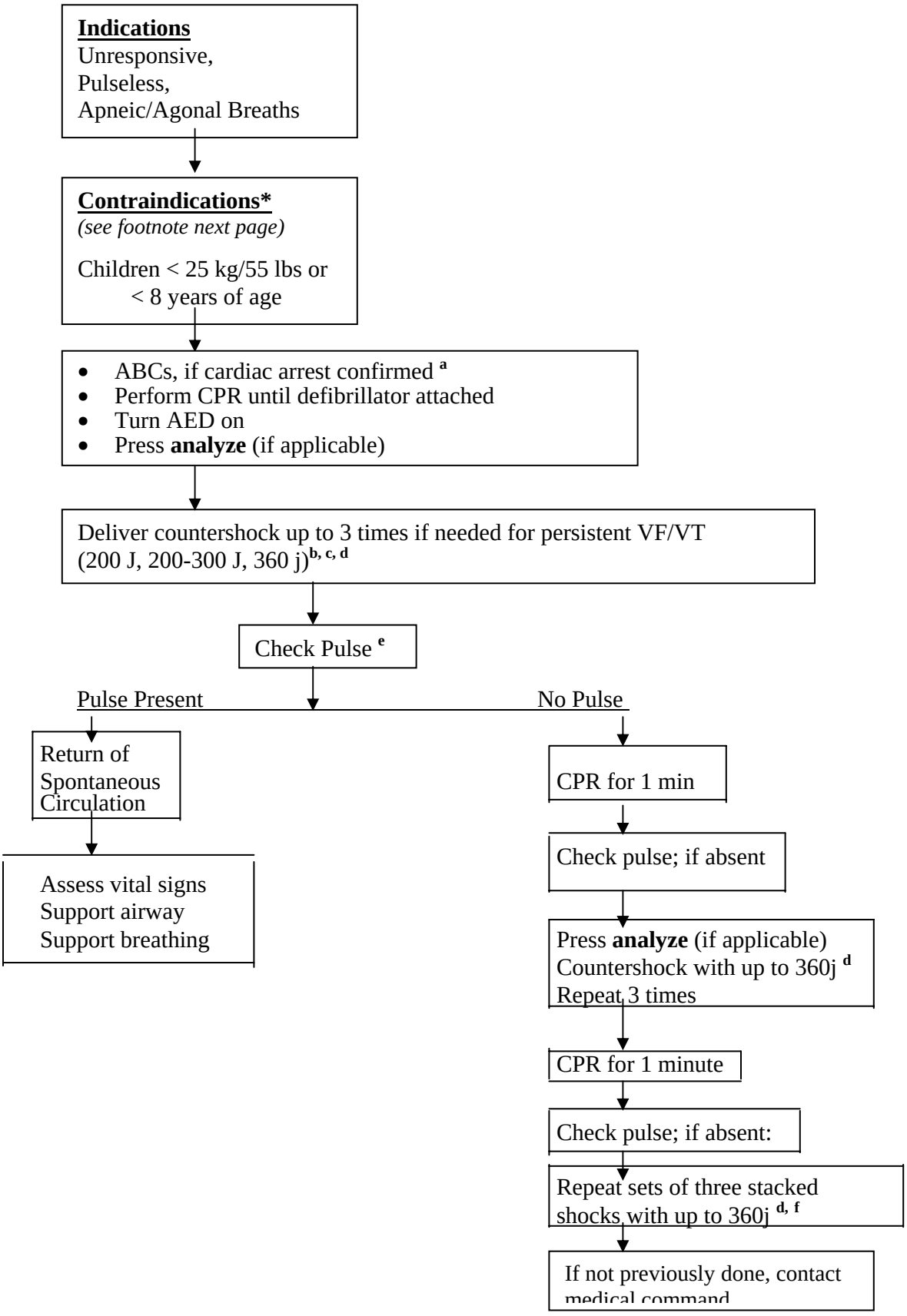
Headache (temporary, but may be severe).
Hypotension

Dosage: One table or metered aerosol dose/sublingual every 3-5 minutes if chest pain/discomfort persists and BP remains above 100 systolic. Not to exceed three tablets.

An EMT or EMT-B may assist with the medication one time prior to on-line Medical Command with any subsequent administration requiring on-line Medical Command. The EMT or EMT-B shall notify medical command following the administration of the nitro.

AUTOMATED EXTERNAL DEFIBRILLATION PROTOCOL REVISED

PROTOCOL FOR AED TRAINING & CERTIFICATION



AUTOMATED EXTERNAL DEFIBRILLATION PROTOCOL REVISED

[a] The single rescuer with an AED should verify unresponsiveness, open the airway (A), give two breaths (B), and check the pulse (C). If a cardiac arrest is confirmed, the AED should be attached, and the rescuer should proceed with the protocol.

[b] Pulse checks not required after shocks 1, 2, 4 and 5 unless a "no shock indicated" message is displayed or indicated.

[c] If no shock is indicated, check pulse, repeat 1 min of CPR if pulseless, check pulse again, and then re-analyze (if applicable). After three “no shock indicated” messages, repeat “analyze” period every 1-2 min. Please note: some AEDs automatically re-analyze for you.

[d] Biphasic devices may shock at lower energy levels**.** In some clinical settings, initial and repeated shocks at these lower energy levels are considered acceptable.

[e] For hypothermic patients, no more than 3 shocks should be delivered. Further action will be directed by medical command.

[f] If VF persists after 9 shocks, contact medical command. A typical order will be to repeat sets of 3 stacked shocks with 1 min of CPR between each set until a "no shock indicated" (VF is no longer present).

*Pediatric Guidelines

Cardiac arrest is less common in infants and children than in adults. The accuracy and efficiency of AEDs has been reported only for adults with cardiac arrest; the computer algorithms used to analyze cardiac rhythm have been developed and tested with adult rhythms. In addition, current AEDs use a monophasic or biphasic energy setting >150 joules for the initial shock, and most do not offer a lower setting generally considered suitable for children.

Therefore, based on body size, the current recommendation is to follow adult BLS guidelines for children aged 8 years and older. This recommendation reflects the sense that the opportunity to defibrillate VF in a child still should not be missed despite the fact that experience with AEDs in pediatric resuscitation is severely limited. Evidence suggests that VF in young people is associated with congenital heart problems, drug abuse (e.g., glue sniffing), or drug overdoses. These patients merit assessment for the presence of VF/VT. The age cutoff of 8 years is based more on the body size than the cause of cardiac arrest. It is appropriate to use an AED when a child older than 8 years (or weighing more than 25 kg/55 lbs.) is in cardiac arrest.

Use of AEDs with infants and children younger than 8 years is not recommended for several reasons. In most pediatric studies, pulseless VT and VF have been documented in well under 10 percent of all pediatric arrest patients, even when the rhythm was evaluated by first responder's within 7 minutes of collapse. In infants and children, respiratory arrest is thought to be a common cause of cardiac arrest, and rapid BLS at the scene has been associated with improved survival. Also, there is concern that using current types of countershock delivery systems, energy levels >20-25 joules/kg may cause significant myocardial injury.

More research is needed on the potential use of AEDs in infants and children to facilitate development of evidence-based recommendations.

PA Department of Health
Emergency Medical Services Office
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