

– Adolescents / Adults : 8 to 10 breaths per minute

4. Disability: Assess the neurological status. Immobilize the spinal column as indicated. Assess the patient’s level of consciousness using the AVPU Method (*See Table 7-2*).

**Table 7-2 : AVPU Mental Status Exam**

<b>A</b>	<u>Alert</u> : Alert and oriented to person, place, time
<b>V</b>	<u>Verbal</u> : Responds to verbal stimulation, not oriented
<b>P</b>	<u>Pain</u> : Responds to painful stimulus only
<b>U</b>	<u>Unresponsive</u> : Does not respond to verbal or painful stimulus

5. Exam:

- Perform a rapid head to toe survey.
- Exsanguinating hemorrhage should be treated immediately.
- When assessing medical patients, quickly evaluate skin signs, central and peripheral pulses for rate and quality to identify immediate life threats.

***Only interrupt a primary assessment for life threatening emergencies, cases of airway obstruction, a need for CPR or controlling exsanguinating hemorrhage.***

C. Secondary Survey

1. Chief Complaint: The secondary survey begins with the patient’s chief complaint (CC). The CC is what the patient states or believes is the primary problem. It is reported in the context of the patient’s age, sex, CC, and its duration.
2. History of Present Illness (HPI)  
The HPI is a concise but complete description of the medical sequence of events, that led to the patient’s request for help, i.e.:
  - “OPQRST” questions (*see Table 7-3*)
  - What was the patient doing when the symptoms began?
  - When did the symptoms start?
  - What has the patient done to relieve his or her symptoms?
  - Have any of these efforts made the patient feel better?
  - What other symptoms does the patient have?

**Table 7-3 : OPQRST Questions**

<b>O</b>	Onset
<b>P</b>	Provocation
<b>Q</b>	Quality
<b>R</b>	Region / Radiation
<b>S</b>	Severity
<b>T</b>	Timing

3. Past History: Obtain an “AMPLE” history (*see Table 7-4*).

**Table 7-4 : AMPLE History**

<b>A</b>	Allergies
<b>M</b>	Medications
<b>P</b>	Past Medical History
<b>L</b>	Last Oral Intake
<b>E</b>	Events Preceding the Incident

4. Physical Exam: “head to toe” survey  
a. For trauma patients employ the techniques of the BTLS secondary survey (*see Table 7-5*).

**Table 7-5 : BTLS Secondary Survey (Head to Toe Exam)**

**Head** - Look for contusions, lacerations, raccoon eyes, Battle’s sign, drainage of blood or fluid from the ears or nose. Assess pupils for symmetry. Reassess the airway again.  
**Neck** - Look for lacerations, contusions, tenderness, distended neck veins, or deviated trachea.  
**Chest** - Reassess breath sounds bilaterally, checking for symmetry.  
**Abdomen** - Look for signs of blunt or penetrating trauma. Feel for tenderness and rigidity.  
**Pelvis** - Palpate for tenderness or instability. Provide inward and downward compression to evaluate, don’t rock the pelvis.  
**Extremities** - Look and palpate for signs of trauma, check distal pulses, sensory and motor function.  
Repeat and record for any splint applications.

- b. For all other patients, perform a detailed head-to-toe physical exam (*see Table 7-6*).

**Table 7-6 : CHAMPION Physical Exam**

<b>C</b>	Cardiac (Heart Sounds, Pulses)
<b>H</b>	HEENT
<b>A</b>	Abdomen
<b>M</b>	Mental Status
<b>P</b>	Pulmonary (Breath Sounds, Work of Breathing)
<b>I</b>	Integumentary (Skin)
<b>O</b>	Other Tests (Vital Signs, Diagnostics)
<b>N</b>	Neuro (Strength, Sensation)

- c. Neurological Survey  
1) Assess the level of consciousness using the Glasgow Coma Scale (*see Table 7-7*).

**Table 7-7 : Glasgow Coma Scale : Adult and Pediatric**

<u>ADULT GLASGOW</u>		<u>PEDIATRIC GLASGOW</u>	
<u>Eye Opening (4)</u>		<u>Eye Opening (4)</u>	
Spontaneous	4	Spontaneous	4
To Speech	3	To Speech	3
To Pain	2	To Pain	2
None	1	None	1
<u>Best Motor Response (6)</u>		<u>Best Motor Response (6)</u>	
Obeys Commands	6	Spontaneous Movement	6
Localizes Pain	5	Withdraws to Touch	5
Withdraws From Pain	4	Withdraws from Pain	4
Abnormal Flexion	3	Abnormal Flexion	3
Abnormal Extension	2	Abnormal Extension	2
None	1	None	1
<u>Verbal Response (5)</u>		<u>Verbal Response (5)</u>	
Oriented	5	Coos, Babbles	5
Confused	4	Irritable Cry	4
Inappropriate	3	Cries to Pain	3
Incomprehensible	2	Moans to Pain	2
None	1	None	1
Total		Total	

- 2) Assess the level of orientation by asking the patient:
  - Person – Does the patient know their own name? The correct name of a friend or family member present? Does the patient recognize police officers, firefighters and/or paramedics?
  - Place – Does the person know where they are now?
  - Time – Can the person correctly state the month, day, year and the season of the year?
  - Circumstance – Does the person know how it is that they came to be speaking to an EMT/paramedic? Do they fully understand their situation in terms of the current incident and their health status? (*Ref. 6.16 Non-Transports*)
- 3) Assess bilateral pupil reaction to light.
- 4) Evaluate motor and sensory function by evaluating for facial droop, testing grip strength and arm strength/pronator drift along with sensation to touch on extremities.
- d. Vital signs will be measured on all patients to include blood pressure, pulse rate and respiratory rate and temperature.
- e. Exposure: A thorough exam cannot be accomplished through clothing. Keep modesty in mind for all patients. Ask for the patient’s permission to raise his/her shirt so that you may examine the back and auscultate the lungs. The patient must be kept warm during the

process. Passive warming (multiple sheets or blankets) techniques are frequently necessary to preserve body temperature.

- f. Continually Monitor: Monitor the patient for changes in condition and document vital signs every 5 minutes for unstable patients and every 15 minutes for stable patients. Assess and record a minimum of two sets of vital signs for each patient transported.
- g. Event Sequence: Application of the above sequence of events in the evaluation of a patient will vary depending on the patient's condition. EMT's and paramedics are to use their best judgment when initially evaluating a patient. Necessary treatment takes precedence over completing a history and physical.

## 7.02 Airway Management

Pulse Oximetry shall be assessed and maintained on all pulsatile patients requiring ventilation assistance.

### A. Two Person Bag-Valve-Mask Ventilation [BLS/ALS]

1. Insert appropriately sized oropharyngeal airway and/or nasal trumpet.
2. Whenever possible, two-persons should operate a bag-valve-mask device.
3. Rescuer #1 uses both hands to form a tight mask-to-face seal. Use pads of thumbs to press mask to face, wrap fingers beneath jawbone to raise jawbone toward mask.
4. Rescuer #2, after ensuring 100% oxygen is being delivered to reservoir bag, delivers one second ventilations which produce visible chest rise.

### B. One Person Bag-Valve-Mask Ventilation [BLS/ALS]

1. Insert appropriately sized oropharyngeal airway and/or nasal trumpet.
2. Use non-dominant hand to form a C-clamp (thumb over mask at bridge or patient's nose, index finger over mask over the patient's chin, remaining fingers wrapped beneath patient's jaw) forming a tight seal between the mask and the patient's face.
3. Dominant hand is then used to squeeze the bag, delivering one second ventilations which produce visible chest rise.

Note: Overaggressive squeezing of the bag will generate high airway pressures and force air into the esophagus and stomach.

### C. Orotracheal Intubation [ALS]

1. If present, video laryngoscopy should be the primary method of orotracheal intubation in adults/adolescents. Use of the bougie may also be used primarily as an airway adjunct. Utilize direct laryngoscopy for children/infants/neonates, or if a video laryngoscope is not present.
2. Place pulse oximetry on patient and pre-oxygenate the patient with Bag-Valve-Mask Ventilation (and oropharyngeal or supraglottic airway if tolerated) to maximize pre-intubation oxygen saturation.
3. Prepare all required equipment
  - Laryngoscope - If unit has video laryngoscope, verify battery is inserted and scope turns on. For children/infants/neonates or personnel without video laryngoscope, ensure appropriate sized blade with a functional light.
  - Turn suction on and verify working with yankauer attached.
  - Select appropriately sized endotracheal tube and verify integrity of the cuff/pilot balloon, and stylet placed in tube. Utilize Pediatric Dosing Guidelines for pediatric ET tube sizes.
  - Have bougie tube introducer available, along with other ET tube sizes as needed.