SAN FRANCISCO EMERGENCY MEDICAL SERVICES AGENCY

Effective: 01/01/11 **Protocol: P-002**
Supersedes: 01/01/11

PATIENT ASSESSMENT
SECONDARY SURVEY

The secondary survey is the systematic assessment and complaint focused relevant physical examination of the patient. The secondary survey may be done concurrently with the patient history and should be performed **after**:

- The Primary Survey and initial treatment and stabilization of life-threatening airway, breathing and circulation difficulties;
- Spinal stabilization as needed;
- Beginning transport in the potentially unstable or critical patient;
- A Rapid Trauma Assessment in the case of significant trauma;
- Investigation of the chief complaint and associated complaints, signs or symptoms;
- An initial set of vital signs:
    - Pulse
    - Blood pressure
    - Respiration
    - Lung sounds
    - Pupils
    - Cardiac rhythm (if indicated)
    - Consider orthostatic vital signs to assess volume status
    - Pulse oximetry (if available)
    - Blood Glucose (if indicated**).**

Give initial treatment including oxygen, ventilation if indicated, hemorrhage control if needed, basic wound/fracture care, and IV access if indicated/capable. IV access refers to an intravenous line, with isotonic crystalloid solution (Normal Saline) at a keep vein open rate, unless otherwise noted in individual protocol.

The above set of assessments / treatments are referred to in these protocols as "**Routine Medical Care (RMC).**" This care should be provided to all patients regardless of presenting complaint. The purpose of the secondary survey is to identify problems, which, though not immediately life- or limb-threatening, could increase patient morbidity and mortality. Exposure of the patient for examination may be reduced or modified as indicated due to environmental factors.

HISTORY:

- Optimally, the history should be obtained directly from the patient. If language, culture, age-related, disability barriers or patient condition precludes a direct history, then consult family members, significant others, scene bystanders or other first responders. Check for advance directives, patient alert bracelets and prescription bottles as appropriate. Be aware of patient's environment and issues such as domestic violence, child or elder abuse or neglect.

- Allergies.
- Medications.
- Past medical history relevant to chief complaint. Examples are previous myocardial infarcts, hypertension, diabetes, substance abuse, seizure disorder and hospital of choice.
- Have patient prioritize his/her chief complaint if complaining of multiple problems.
- Ascertain recent medical history - admissions to hospitals, reasons given, etc.
- Pain questions if appropriate: OPQRST (**O**=onset, **P**=provoked, **Q**=quality, **R**=radiation, **S**=severity, **T**=time) plus location and factors that increase or decrease the pain severity.
- Mechanism of injury if appropriate.
- See "Subjected Findings" section of each Protocol for history relevant to specific patient complaints.

HEAD AND FACE:

- Observe and palpate skull (anterior and posterior) and face for "Deformities, Contusions, Abrasions, Penetrations, Burns, Tenderness, Lacerations, Swelling" (DCAP-BTLS).
- Check eyes for equality, shape, reactivity, and size of pupils, foreign bodies, discoloration, contact lenses, prosthetic eyes, peri-orbital ecchymoses.
- Check nose and ears for foreign bodies, fluid, and blood, battle signs.
- Recheck mouth for potential airway obstructions (swelling, dentures, bleeding, loose or avulsed teeth, vomitus, malocclusion, absent gag reflex) and odors, altered voice or speech patterns, and evidence of dehydration.

NECK:

- Observe and palpate for DCAP-BTLS, jugular vein distention, use of neck muscles for respiration, tracheal tugging, shift or deviation, stoma, and medical information medallions.

CHEST:

- Observe and palpate for DCAP-BTLS, scars, implanted devices (AICD or pacemakers), medication patches, chest wall movement, asymmetry and accessory muscle use.
- Have patient take a deep breath if possible and observe and palpate for signs of discomfort, asymmetry and air leak from any wound.

ABDOMEN:

- Observe and palpate for DCAP-BTLS, scars, diaphragmatic breathing and distention.
- Palpation should occur in all four quadrants taking special note of tenderness, masses and rigidity.

PELVIS/GENITO-URINARY:

- Observe and palpate for DCAP-BTLS, asymmetry, sacral edema, and as indicated for incontinence, priaprism, blood at urinary meatus, or presence of any other abnormalities.
- Palpate and gently compress lateral pelvic rims and symphysis pubis for tenderness, crepitus or instability.

- Palpate bilateral femoral pulses.

SHOULDERS AND UPPER EXTREMITIES:

- Observe and palpate for DCAP-BTLS, asymmetry, skin color, capillary refill, edema, medical information bracelets, and equality of distal pulses, and track marks.
- Assess sensory and motor function as indicated.

LOWER EXTREMITIES:

- Observe and palpate for DCAP-BTLS, asymmetry, skin color, capillary refill, edema, and equality of distal pulses.
- Assess sensory and motor function as indicated.

BACK

- Observe and palpate for DCAP-BTLS, asymmetry, and sacral edema

PRECAUTIONS AND COMMENTS

- Observation and palpation can be done while gathering patient's history.
- A systematic approach will enable the rescuer to be rapid and thorough and not miss subtle findings that may become life-threatening.
- Minimize scene time on trauma patients—for critical trauma patients conduct secondary survey enroute to the hospital when time allows.
- The Secondary Survey should ONLY be interrupted if the patient experiences airway, breathing or circulatory deterioration requiring immediate intervention. Complete the examination before treating the other identified problems.
- Reassess vital signs, particularly in critical or rapidly-changing patients. Changes and trends observed in the field are essential data to be documented and communicated to the receiving facility staff.

NOTES:

*DCAP-BTLS: A mnemonic that stands for:

Deformity
Contusion/Crepitus
Abrasion
Puncture
Bruising/Bleeding
Tenderness
Laceration
Swelling