

## Assessment and Emergency Care of Internal and External Bleeding

### External Bleeding

### Internal Bleeding

#### Scene Size-up

##### Scene Safety

Ensure scene safety. If incident involved violence, ensure that police are on scene. Consider if additional resources are needed. Wear at least gloves and eye protection to protect from bleeding.

Ensure scene safety. Consider if additional resources are needed. Follow standard precautions.

##### Mechanism of Injury/Nature of Illness

Determine the MOI/NOI.

High-energy MOI should increase your index of suspicion for possible internal bleeding.

#### Primary Assessment

##### Form General Impression

Check for responsiveness and look for blood stains or other obvious signs of external bleeding. Assess skin color. Manage significant visible bleeding.

Suspect internal bleeding after blunt or penetrating trauma. Determine level of consciousness using AVPU and check the patient's mental status. Assess skin color. Consider the need for manual spinal immobilization.

##### Airway and Breathing

Ensure a patent airway, look for adequate breathing, and check for breath sounds. If necessary, provide high-flow oxygen or assist ventilation once significant bleeding is controlled.

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##### Circulation

Assess pulse rate and quality, skin color and temperature, and check capillary refill time. Control external bleeding with direct pressure and elevation, or use of a tourniquet. Treat for shock if needed by applying oxygen, improving circulation, and maintaining normal temperature.

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##### Transport Decision

Transport quickly if breathing problem or significant bleeding exists.

If you suspect internal bleeding or signs of shock are present, promptly transport to the hospital.

#### History Taking

##### Investigate Chief Complaint

Ask the patient about the chief complaint, if responsive. Attempt to determine the amount of blood loss.

Ask the patient what happened.

## Assessment and Emergency Care of Internal and External Bleeding, continued

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#### Secondary Assessment

Physical Examinations	Perform a systematic full-body scan. Assess respiratory, cardiovascular, neurologic, musculoskeletal (using DCAP-BTLS), and anatomic regions.	Perform a systematic full-body scan. Assess respiratory, cardiovascular, neurologic, musculoskeletal (using DCAP-BTLS), and anatomic regions. Look for bruising, pain, abdominal distention, and guarding.
Vital Signs	Assess vital signs. Look for signs of shock: systolic blood pressure less than 100 mm Hg with weak, rapid pulse. Pale or gray, cool, moist skin suggests a perfusion problem.	Assess vital signs. Look for signs of shock: systolic blood pressure less than 100 mm Hg with weak, rapid pulse. Pale or gray, cool, moist skin suggests a perfusion problem.

#### Reassessment

Interventions	Repeat the primary assessment and reassess interventions performed. Reassess vital signs and the chief complaint. In cases of severe bleeding, obtain vital signs at least every 5 minutes while providing high-flow oxygen. Control significant bleeding and if signs of shock are present, treat aggressively. Determine whether patient's condition is improving or deteriorating.	Repeat the primary assessment and reassess interventions performed. Internal bleeding is often slow to present. Reassess vital signs and the chief complaint. Provide high-flow oxygen. Determine whether patient's condition is improving or deteriorating.
Communication and Documentation	Report approximate amount of blood lost, how rapidly, and over what period of time. Communicate interventions performed, and how patient has responded to care.	Describe the MOI/NOI and signs and symptoms that make you suspect internal bleeding is occurring. Communicate interventions performed, and how patient has responded to care.

NOTE: Although the steps below are widely accepted, be sure to consult and follow your local protocol.

#### Emergency Care

### External Bleeding

#### Steps to Caring for Patient With External Bleeding

1. Follow standard precautions—at least gloves and eye protection.
2. Maintain cervical stabilization if MOI suggests possible spinal injury.
3. Administer high-flow oxygen as necessary, once significant bleeding is controlled.
4. Control external bleeding using as many of the following means as necessary:
  - Direct pressure, elevation, and pressure dressings
  - Tourniquets
  - Splints
5. Apply direct local pressure to bleeding site, elevate the bleeding extremity, and apply a pressure dressing.
6. If bleeding is not immediately controlled with the use of direct pressure, apply a tourniquet. Follow local protocol for approved methods of bleeding control.

## Assessment and Emergency Care of Internal and External Bleeding, continued

### Emergency Care

#### External Bleeding, continued

##### Applying a Commercial Tourniquet

1. Follow standard precautions.
2. Hold direct pressure over the bleeding site.
3. Place the tourniquet around the extremity just above the bleeding site.
4. Click the buckle into place and pull the strap tight.
5. Turn the tightening dial clockwise until pulses are no longer palpable distal to the tourniquet or until bleeding is controlled.

##### Treating Epistaxis

1. Follow standard precautions.
2. Help the patient to sit, leaning forward, with the head tilted forward.
3. Apply direct pressure for at least 15 minutes by pinching nostrils together.
4. Keep the patient calm and quiet.
5. Apply ice over the nose.
6. Maintain the pressure until bleeding is completely controlled.
7. Provide prompt transport.
8. If bleeding cannot be controlled, transport patient immediately. Treat for shock and administer oxygen via mask if necessary.

#### Internal Bleeding

##### Steps to Caring for Patient With Internal Bleeding

1. Follow standard precautions.
2. Maintain the airway with cervical immobilization if MOI suggests possible spinal injury.
3. Administer high-flow oxygen and provide artificial ventilation as necessary.
4. Control all obvious external bleeding.
5. Apply a splint to an extremity where internal bleeding is suspected.
6. Monitor and record vital signs at least every 5 minutes.
7. Give the patient nothing by mouth.
8. Elevate the legs 6" to 12" in nontrauma patients.
9. Keep the patient warm.
10. Provide immediate transport for patients with signs and symptoms of shock. Report changes in condition to hospital personnel.