

# Hypotension, shock

## (January 2017)

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### Rationale

Hypotension/shock is a frequently encountered, life-threatening emergency. Regardless of the underlying cause, certain general measures are usually indicated that can be life-saving.

### Causal Conditions

(list not exhaustive)

- Cardiac output diminished
  - a. Hypovolemia
    - Hemorrhage
    - Third space loss
    - Other loss
  - b. Cardiac dysfunction
    - Intrinsic
      - a. Myopathy (e.g., ischemic)
      - b. Rhythm abnormalities
      - c. Mechanical (e.g., valvular disease)
    - Extrinsic or Obstructive
      - a. Pulmonary embolus
      - b. Pulmonary hypertension
      - c. Tension pneumothorax

- d. Pericardial disease
  - e. Aortic dissection
  - f. Venacaval obstruction
- Distributive (diminished systemic vascular resistance)
    - a. Sepsis
    - b. Anaphylaxis
    - c. Inadequate tissue oxygenation
      - Neurogenic, autonomic blockade
      - Drugs
      - Spinal shock
      - Addisonian crisis

## Key Objectives

Given a patient with hypotension, the candidate will diagnose the cause and urgency, paying particular attention to the presence or absence of shock. The candidate will initiate an appropriate and timely management plan.

## Enabling Objectives

Given a patient with hypotension, the candidate will

- list and interpret critical findings, including
  - a. symptoms and signs that indicate shock;
  - b. information necessary to diagnose the underlying cause of hypotension;
- list and interpret critical clinical investigations, including
  - a. tests to confirm the presence of shock as well as the underlying cause;
- construct an effective initial management plan, including
  - a. restore tissue perfusion depending on the underlying cause;
  - b. initiate specific therapeutic interventions for the underlying cause of shock.