

## HEART RATE—RESTING (ADULTS)

### TEST POSITION

- Seated or supine; arm relaxed and supported by a comfortable surface or the examiner (Figure 1-1)

### ACTION

- Index and middle fingertip pads lightly palpate the desired pulse points
- Radial or carotid pulse most commonly assessed; other pulse points include: temporal, brachial, femoral, popliteal, tibialis anterior, dorsalis pedis
- Count number of beats in 60 seconds
  - ✧ Shorter duration measurements increase error
    - 60-second count  $\pm$  1 beat/minute
    - 30-second count  $\pm$  2 beats/minute
    - 15-second count  $\pm$  4 beats/minute
    - 10-second count  $\pm$  6 beats/minute

### NORMAL FINDINGS

- 60-100 beats/min<sup>1</sup>
- <60 beats/minute in aerobically trained

### POSITIVE FINDINGS

- Tachycardia (>100 beats/minute)
  - ✧ Suggestive of anemia, hyperthyroidism, fever, anxiety<sup>2</sup>
- Bradycardia (<60 beats/minute)
  - ✧ Possibly due to sinus bradycardia, second-degree or complete heart block<sup>2</sup>
- Skipped or extra beats
  - ✧ Premature atrial, nodal, or ventricular beats, sinus arrhythmia, second-degree heart block—Mobitz Type I<sup>2</sup>

### SPECIAL CONSIDERATIONS

- Resting heart rate is often low in aerobically trained individuals
- Resting heart rate is often elevated during illness or following repetitive days of heavy work
- In hypertensive adults, single heart rate measurements made in the clinic were significantly higher ( $3.8 \pm 8.0$  beats/min) than