

## Blood pressure

| Category | Systolic      | Diastolic       |
|----------|---------------|-----------------|
| Normal   | under 120     | and under 80    |
| Elevated | 120–129       | and under 80    |
| Stage 1  | 130–139       | or 80–89        |
| Stage 2  | 140 or higher | or 90 or higher |
| Crisis   | over 180      | and/or over 120 |

- ✓ **Hypotension:** persistently 90/60 mm Hg or lower.  
**Pulse pressure:** systolic minus diastolic
- ✓ **Cuff:** the bladder covers about 80% of the upper-arm circumference; lower edge 2–3 cm above the antecubital space
- ✓ **Cuff too large** lowers the reading up to 5 mm Hg; **cuff too small** raises it up to 6 mm Hg
- ✓ **Diaphragm** (flat, pressed firmly) = high-pitched: bowel, lung. **Bell** (cone, held lightly) = low-pitched: vascular, heart
- ✓ **If the arms differ**, the provider uses the higher value

## Korotkoff sounds

| Phase | Sound                                   | Means                                    |
|-------|-----------------------------------------|------------------------------------------|
| I     | First sharp tapping                     | <b>Systolic</b>                          |
| II    | Swishing; may vanish = auscultatory gap | Report the gap                           |
| III   | Sharp rhythmic tapping returns          | Mistaken for systolic if I–II are missed |
| IV    | Soft, muffled, fading                   | AHA: diastolic <b>in children</b>        |
| V     | All sound disappears                    | <b>Diastolic</b>                         |

- ✓ **Palpatory method:** inflate until the radial pulse disappears, add 30 mm Hg, deflate slowly; the first return is systolic. Documented 102/P. No diastolic obtainable
- ✓ **Positive tilt test:** pulse rise over 10 bpm *and* systolic drop over 20 mm Hg or diastolic drop over 10 mm Hg
- ✓ **Raises the reading:** legs crossed (2–8 mm Hg systolic), unsupported back (6 mm Hg diastolic), full bladder (up to 10 points), arm below heart level
- ✓ **BMI:**  $\text{weight (lb)} \div \text{height (in)} \div \text{height (in)} \times 703$