

BP TARGET RECOMMENDATIONS

Hypotension

Use of IVF and or vasopressors/inopressors to target the BP based on the underlying conditions

- **Septic shock:** MAP >65 mmHg and DBP >50 mmHg in patients with MAP <85 mmHg.
- **Cardiogenic shock:** MAP >65 mmHg and DBP >60 mmHg.
- **Hemorrhagic shock:** MAP >65 mmHg with cautious permissive hypotension strategy
 - MAP 50–60 mmHg and SBP ≥70 mmHg for uncontrolled bleeding until bleeding is controlled.
- **Post cardiac arrest:** MAP >65 or >80 mmHg.

Hypertension

Use of antihypertensive therapy to target the BP based on the underlying conditions

- **Critically ill patients:** IV antihypertensive therapy for patients with SBP >180 mmHg and/or DBP >110 mmHg with organ dysfunction.
- **Patients with acute severe hypertension** (except for acute aortic dissection): a stepwise strategy:
 - The SBP should be reduced by no more than 25% in the first hour.
 - Then reduced to 160/100–110 mmHg in the next 2–6 h.
 - Then cautiously reduced to the normal level in the following 24–48 h.

Acute ischemic stroke*

- No thrombolysis:
 - Antihypertensive therapy if BP ≥220/120 mmHg to lower the BP by 15% within the first 24-72 hr.
- Use of thrombolysis
 - Before:
 - Antihypertensive therapy if BP ≥185/110 mmHg to maintain BP at or below 180/105.
 - After thrombolytic recanalization:
 - Antihypertensive therapy to maintain SBP at or below 180/105 mmHg.
 - Consider antihypertensive therapy to maintain SBP within 130–140 mmHg within the first 24 hours.

*Adjustments to be made if underlying cardiac conditions.

Acute ICH:

- Antihypertensive therapy if initial SBP 150–220 mmHg to maintain the SBP within 130–150 mmHg.
- Antihypertensive therapy if initial SBP >220 mmHg to maintain the SBP within 140–180 mmHg.

Vasopressors Push-Doses for Emergency Use in the ICU

Requirements:

Ideally, pharmacy-prepared or purchased stocks of standard concentration push-dose vasopressors ready-to-use syringes should be available and stored in a secure way and easily accessible during emergency situations in the ICU.

If ready-to-use syringes are not available during an emergency in the ICU, ad hoc pharmacy and non-pharmacy preparation can be allowed providing the following:

- Clear step-by-step instructions by the provider (intensivist or APP).
- Ad hoc preparations should follow aseptic IV drug preparation procedures and syringes should be properly labeled after preparation.

Purchased stocks of standard-concentration ready-to-use syringes:

- Epinephrine 10 mcg/ml – 10 ml syringe
- Phenylephrine 100 mcg/ml – 10 ml syringe

Ad hoc preparations:

- Epinephrine 10 mcg/ml: Mix 1 ml of cardiac arrest epinephrine (100 mcg/ml) in 9 ml of NS and shake well.
- Norepinephrine 16 mcg/ml: Mix 4 mg in 250 ml of NS (16 mcg/ml) and shake well.
- Vasopressin: Mix 1 ml of vasopressin (20 unit per ml) in a 20 ml syringe filled with 19 ml of 0.9% saline. This will provide 1 unit/ml

Doses

- Epinephrine: 5-10 mcg (0.5-1 ml) slow IV push.
- Norepinephrine: 8-16 mcg (0.5-1 ml) slow IV push.
- Phenylephrine: 50-100 mcg (1-2 ml) slow IV push.
- Vasopressin 1 unit push (1 ml)

Doses can be repeated every 1-5 min as needed.