Postpartum Severe Hypertension: Clinical Management Guide

Background

This resource provides actionable recommendations for blood pressure (BP) management, monitoring, follow-up, and escalation during the postpartum transition from hospital to outpatient care for patients discharged after hospitalization involving severe hypertension. Severe hypertension is defined as SBP ≥160 mm Hg and/or DBP ≥110 mm Hg, confirmed persistent within 15 minutes.

The AIM TA Center adapted this resource from the American College of Cardiology's Postpartum Hypertension Clinic Development Toolkit.[1] This resource supports implementation of the AIM Severe Hypertension in Pregnancy Patient Safety Bundle and the AIM Postpartum Discharge Transition Bundle.

1. At Discharge: Establish the Follow-Up Plan

Complete each step with the patient, ensuring understanding and agreement with the care plan:

- ☐ **Diagnosis:** Confirm the diagnosis, including preeclampsia, HELLP, chronic hypertension with superimposed preeclampsia, or other diagnoses.
- ☐ **Antihypertensives:** Review breastfeeding and pregnancy/contraception plans when selecting medications. If prescribing an ACE inhibitor, ARB, ARNI, or MRA discuss fetal risks, avoiding pregnancy, and contraception, or select an alternative medication that is safe in pregnancy.
- ☐ **Medication regimen:** Review dose, frequency, and instructions for holding, reducing, or increasing doses.
- ☐ **BP supplies:** Confirm patient's access to a validated, properly sized BP cuff and ability to measure and log BP at home. Arrange prompt access to a cuff, if needed.
- ☐ **Remote monitoring[1]:** Enroll the patient when available.
- ☐ **Written instructions[2]:** Provide clear instructions on:
  - ☐ When and how to check BP
  - ☐ BP thresholds for contacting the clinical team or seeking immediate care
  - ☐ Urgent symptoms[3] that require immediate evaluation, regardless of BP
  - ☐ How to contact the clinical team and access urgent/emergency care
- ☐ **Follow-up:** Schedule visits to occur within 72 hours (virtual, if appropriate), again at 7–10 days, and at 6 weeks postpartum.

URGENT SYMPTOMS

Arrange immediate care, regardless of BP:

- Severe or persistent headache
- Vision changes
- Severe epigastric/ right-upper-quadrant pain
- Chest pain
- Shortness of breath
- New weakness or numbness
- Facial drooping
- Difficulty speaking
- Confusion or other altered mental status
- Seizure

1. Prevention, Reproductive Health and Cardio-Obstetrics Sections of the American College of Cardiology. Postpartum Hypertension Clinic Development Toolkit. 2024.
2. The Preeclampsia Foundation. The Cuff Kit. Your Blood Pressure: Check, Know, Share. 2020.
3. The American College of Obstetricians and Gynecologists (ACOG) Foundation. Urgent Maternal Warning Signs. 2026.

2. In the Outpatient Setting: TREAT→MONITOR→TITRATE

TREAT — Initiate or adjust antihypertensive therapy

☐ **Initiate antihypertensive medications:**

Patients taking antihypertensives before pregnancy: Review the pre-pregnancy regimen and resume or modify based on breastfeeding and pregnancy/contraception plans.

Patients not previously taking antihypertensives: Initiate therapy for BP ≥140/90 mm Hg (or institution-specific threshold). In the first 2 weeks postpartum, confirm elevated BP with at least 2 measurements >4 hours apart.

If in-office measurement is a barrier, consider home BP monitoring if appropriate and the patient has a validated cuff and proper measurement training.

☐ **Select antihypertensive medications[4]:**

First-line agents, regardless of breastfeeding status:
1) **Nifedipine** 30mg XL daily **or amlodipine**[5] 5mg daily
2) **Enalapril** 5mg daily (especially for those with pregestational diabetes)
3) **Labetalol** 100mg two or three times daily

Important considerations when initiating antihypertensives:

Pregnancy:
- **When prescribing an ACE inhibitor, ARB, ARNI, or MRA:** Discuss pregnancy risks and contraception; document the contraception plan.
- **When planning pregnancy or pregnant:** Use labetalol or extended-release nifedipine as preferred first-line agents.

Breastfeeding: Enalapril is generally compatible; use caution with premature infants, particularly at higher doses, due to potential renal effects.

Milk supply: Hydrochlorothiazide and furosemide are generally compatible with breastfeeding but may reduce supply, especially at higher doses; ≤25 mg/day and ≤20 mg/day, respectively, are unlikely to affect supply.

Transition of care: Obstetric (OB) teams may manage hypertension early postpartum. Transition to primary care or cardiology by 12 weeks postpartum for ongoing cardiovascular disease (CVD) risk assessment and follow-up.

Severe-range BP: Sustained BP ≥160/110 mm Hg within 6 weeks postpartum requires immediate evaluation in an obstetric evaluation unit or ED. Assess promptly for postpartum preeclampsia.

MONITOR — Establish and use a home BP monitoring plan

☐ **Confirm BP supplies:** Confirm patient's access to a validated[6] properly sized BP cuff and ability to measure and log BP at home. Arrange prompt access to a cuff, if needed.

☐ **Set the monitoring schedule:**

- **First 2 weeks postpartum:** Check BP at least daily; twice daily may be appropriate based on clinical status and treatment needs.
- **After 2 weeks:** If BP is improving and stable, reduce to once daily or several times per week.
- **When controlled:** Reduce to 2–3 measurements per week as appropriate.
- **Duration:** Continue monitoring for 2–6 weeks postpartum; extend for persistent hypertension, medication changes, elevated risk, or ongoing clinical needs.

4. See Medication Tables and Titration Guide, pp. 4.
5. Steady-state plasma levels are achieved after 7 to 8 days of daily dosing of amlodipine.
6. Validated Device Listing. A Public Health Service Supported by the American Medical Association. 2026.

- [ ] **Establish reporting:** Determine how and when the patient will submit readings (e.g., portal, text, app, phone, or manual entry).
- [ ] **Assign responsibility:** Designate the clinician/team responsible for reviewing readings and responding to abnormal results.
- [ ] **Provide a written plan:** Include treatment, BP thresholds, urgent symptoms, and how to access care.

TITRITE — Review readings and take action

Clinical Response	BP Thresholds	Actions
Continue	Average SBP <140 **and** DBP <90 mm Hg, with no concerning symptoms.	Continue current treatment and monitoring.
Review/adjust	Average SBP ≥140 **and/or** DBP ≥90, with SBP <160 and DBP <110 mm Hg.	Advise patient to repeat and contact the clinical team if recurrent. Assess adherence, measurement technique, symptoms, medication changes, and BP trend. Adjust treatment as necessary; reassess within 7 days, sooner after medication changes or if BP rises.
Escalate	SBP ≥160 or DBP ≥110 mm Hg, particularly if persistent/repeated, **or** with any urgent symptoms.	Arrange immediate clinical assessment—do not wait for scheduled follow-up.

- [ ] **Reassess at every follow-up:**
  - [ ] **BP:** Recent readings and trend?
  - [ ] **Urgent symptoms:** Any new or worsening symptoms?
  - [ ] **Medications:** Adherence, side effects, barriers, changes in treatment or response?
  - [ ] **Labs/organ function:** Are abnormal renal, hepatic, hematologic, or proteinuria findings improving? Repeat labs based on diagnosis, clinical status, and discharge findings.
  - [ ] **Transition:** Plan for ongoing BP monitoring and care beyond the immediate postpartum period, including primary care or other appropriate follow-up.
- [ ] **Transition to ongoing BP care:**
  - [ ] **Follow-up:** Establish primary care and/or cardiology follow-up, as appropriate, for ongoing BP management and cardiovascular risk assessment.

Medication Tables and Titration Guide

These tables are reproduced directly from the American College of Cardiology's Postpartum Hypertension Clinic Development Toolkit. The relative infant dose[7] (RID) indicates lactational safety. RID levels < 10% are considered safe.

Medication Therapy Options: First-Line Agents

Drug Name and Class	Starting Dose	Maximum Dose	Titration Interval in Stable Patients	Lactation Safety
Nifedipine XL (CCB)	30mg daily	120mg/day or 60 mg BID	Q5–7 days	SAFE RID 2.3–3.4%
Enalapril (ACEI)	5mg daily	40mg/day or 20mg BID	Q5–7 days	SAFE RID 1.1%
Amlodipine (CCB)	5mg daily	10mg/day	Q5–7 days	SAFE RID 1.7–4.3%
Labetalol (beta blocker)	200mg TID	2400mg/day	Q2–3 days	SAFE RID 3.6%

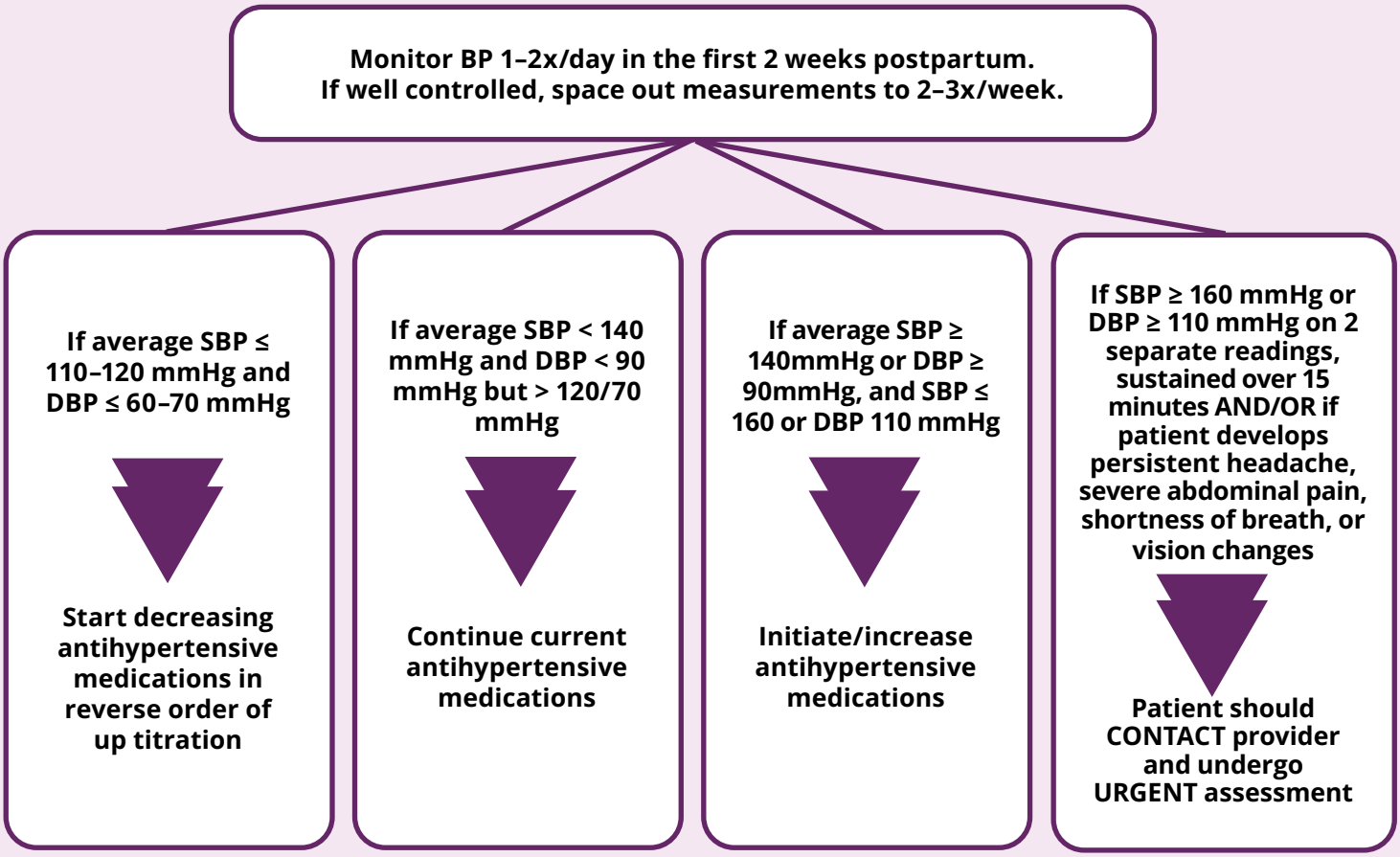
Medication Therapy Options: Alternative Agents

Drug Name and Class	Starting Dose	Maximum Dose	Titration Interval in Stable Patients	Lactation Safety
Hydrochlorothiazide (thiazide thiazide diuretic)	12.5mg daily	50mg per day	Q3–5 days	SAFE RID 0.6–1.2% May decrease breast-milk production (dose dose >25mg/day)
Furosemide (loop diuretic)	10mg daily	160mg per day (can be BID, TID dosing)	Q3–5 days	SAFE May decrease breastmilk production (dose >20 mg/day)
Hydralazine (direct vasodilator)	10mg QID	200mg/day	Q2–3 days	SAFE RID 0.77–3%
Spironolactone (MRA)	12.5mg daily	N/A	Q14–30 days	SAFE RID 2–4.3%
Verapamil (CCB)	80mg daily	360mg daily	Q5–7 days	SAFE RID <1%
Carvedilol (beta blocker)	6.25 mg BID	25mg BID (or 50mg BID if weight >100kg)	Q2–3 days	Limited safety data, likely low risk
Metoprolol tartrate (beta blocker)	12.5mg BID	200mg BID	Q2–3 days	Limited safety data, likely low risk
Bisoprolol (beta blocker)	2.5mg daily	20mg/day	Q5–7 days	Limited safety data
Chlorthalidone (thiazide diuretic)	12.5 mg daily	100mg/day	Q7–14 days	RID 1.9-18.1% Present in breast milk, may decrease breastmilk production
Eplerenone (MRA)	25mg daily	N/A	Q14–30 days	RID 0.01–3.39%, Limited safety data
Lisinopril (ACEI)	25mg daily	40mg/day	Q5–7 days	Limited safety data
Losartan (ARB)	25mg daily	100mg/day	Q5–7 days	Limited safety data
Valsartan (ARB)	20mg daily	320mg/day	Q5–7 days	Limited safety data
Clonidine (alpha antagonist)	0.1mg BID, or 0.1mg patch weekly	2.4mg PO total daily, or two 0.3mg patch/24hrs	Q7 days	RID 0.9–7.1% Limited safety data, present in breastmilk and likely negatively affects lactation

7. Hale's Medications & Mothers' Milk Online Consultant was used to extrapolate RID%. This resource provides RID calculations which are based on studies that consist of larger data (+/- AUC) and is weight-normalized (when weight provided). If maternal weights were not published, 70kg average body weight was used in calculations and daily milk intake of 150mL/kg/day by infant.

Approach to Medication Titration

Goal blood pressure: average < 140/90 mmHg early postpartum, then < 130/80 mmHg longitudinally*



*Approach to medication titration and blood pressure goals should be discussed with the obstetric team at your institution. Optimal blood pressure goals throughout the 4th trimester is currently an evidence-free space and guidelines may differ depending on clinic and remote blood pressure monitoring model.

Recommended approach to increasing medications in stable patients

Initial dose: Nifedipine XL 30mg daily

If BP SBP remains ≥ 140 or DBP ≥ 90 after 5–7 days, increase to 60mg daily
If BP SBP remains ≥ 140 or DBP ≥ 90 after 5–7 days, increase to 90mg daily
If BP SBP remains ≥ 140 or DBP ≥ 90 after 5–7 days, add second antihypertensive agent
OR
Increase to max dose 120mg daily or 60mg twice daily

Initial dose: Enalapril 5mg daily or 2.5mg twice daily

If BP SBP remains ≥ 140 or DBP ≥ 90 after 5–7 days, can double dose to 10mg daily or 5mg twice daily
If BP SBP remains ≥ 140 or DBP ≥ 90 after 5–7 days, can double dose to 20mg daily or 10mg twice daily
If BP SBP remains ≥ 140 or DBP ≥ 90 after 5–7 days, consider addition of second antihypertensive agent
OR
Increase to max dose 40mg daily or 20mg twice daily

Initial dose: Amlodipine 5mg daily

If BP SBP remains ≥ 140 or DBP ≥ 90 after 5–7 days, increase to 10mg daily
If BP SBP remains ≥ 140 or DBP ≥ 90 after 5–7 days, add second antihypertensive agent

Initial dose: Labetalol 100mg or 200mg three times daily

If BP SBP remains ≥ 140 or DBP ≥ 90 after 2–3 days, increase to 200mg or 300mg three times daily
If BP SBP remains ≥ 140 or DBP ≥ 90 after 2–3 days, increase to 400mg three times daily
If BP SBP remains ≥ 140 or DBP ≥ 90 after 2–3 days, consider addition of second antihypertensive agent
OR
Increase dose in increments of 100mg three times daily (max 2400mg/day). If patient reports symptoms suggesting intolerance (i.e., headache, fatigue, hypotension) further titration should be limited

Recommended approach to decreasing medications

If average BP < 110-120/60-70 mmHg:
If on nifedipine, decrease by 30mg and if on 30mg HOLD and monitor for 1 week and call with status
OR
If on labetalol, decrease by 100 or 200mg BID-TID (depending on desired BP change)
OR
If on both nifedipine and labetalol, start with decrease in nifedipine if dose >90mg; otherwise start with decrease in labetalol as above
OR
If on carvedilol, decrease dose by half (i.e. decrease 12.5mg BID to 6.25mg BID) or hold if on 3.125mg
OR
If on enalapril daily or BID, decrease dose by half
OR
If on amlodipine, decrease dose by half

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