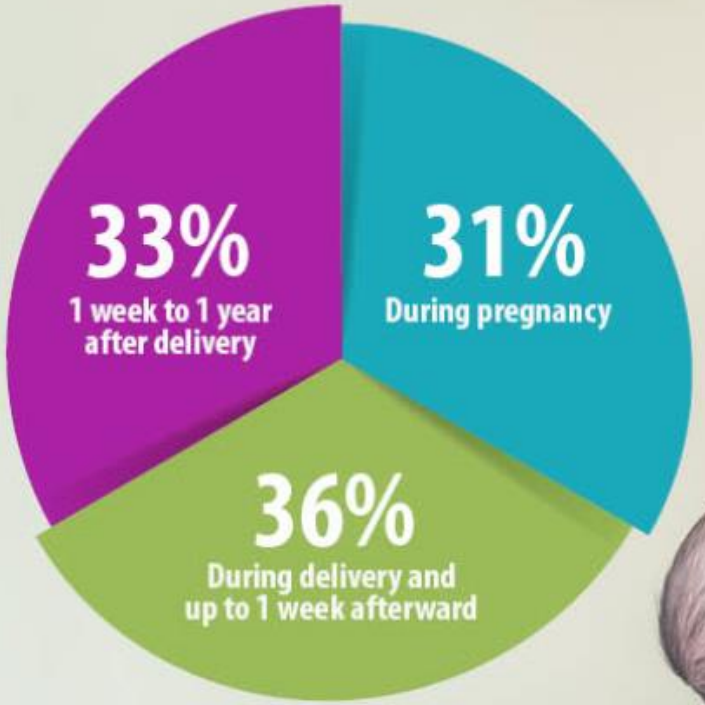
Alaska AIM Hypertension Initiative

Facility Team Meeting
November 23, 2020

Preventing pregnancy-related death every step of the way.

Death can happen up to a year after delivery.

SOURCE: CDC Vital Signs, May 2019



CDC Vitalsigns™

www.cdc.gov/vitalsigns/maternal-deaths

CS303487C

November Implementation Topic

Implement systems to identify pregnant and postpartum patients in all hospital departments

Background

- Up to 26% of eclamptic seizures occur beyond 48 hours and as late as 4-6 weeks after delivery. Most of these cases occur in the first seven 7 days after delivery.
- As many as 78% of these patients have no previous diagnosis of hypertensive disease with the prior pregnancy.
- If medical records are not immediately available, treating personnel may have no knowledge that the patient has recently delivered, resulting in a decreased index of suspicion.
- While the clinical presentation of delayed postpartum preeclampsia may be atypical, the most common complaint is headache in up to 69% of patients. Headache in a recently pregnant patient will likely be isolated but should prompt an investigation into the possibility of delayed postpartum preeclampsia.

California Maternal Quality Care Collaborative (CMQCC). Preeclampsia Care Guidelines and Toolkit.

Problems with readmissions in ED

- Identifying postpartum patients
- Incorrect Treatment of PP HTN
- Poor knowledge about definition of severe for PPHTN
- Calling medicine or cardiology instead of OB
- Delayed transfer to L/D
- Delay in recognition and treatment of severe PPHTN
- No standardized management for readmissions for PPHTN

Rana, S. Alaska AIM Learning Session. February 20, 2020

Best practices

- Algorithms for acute treatment of severe hypertension and preeclampsia readily available in all clinical areas that may encounter pregnant people
- Protocol/Algorithm for OB consult and transfer
- Education for ED providers and staff
- Standardized screening for pregnancy status during triage (EHR integration) and communicating status with treatment team

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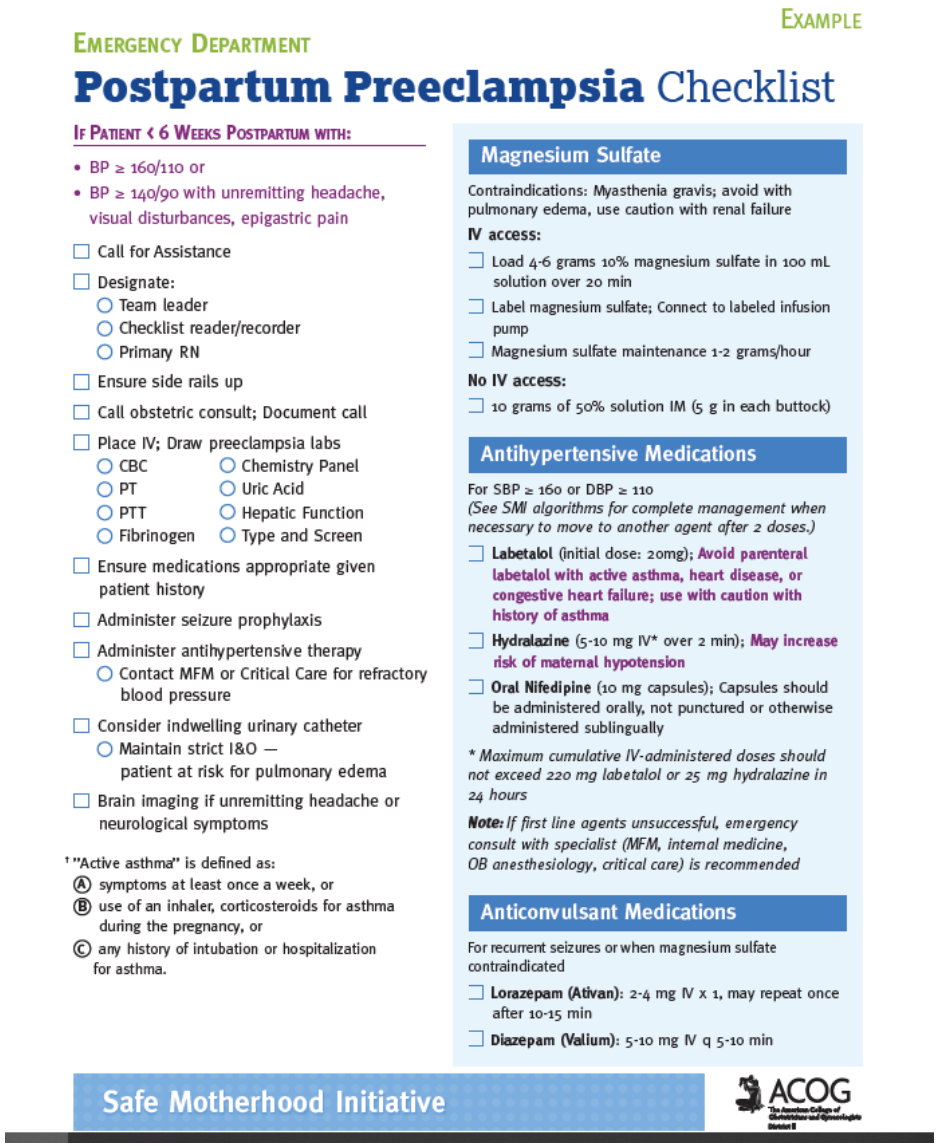


EXAMPLE

EMERGENCY DEPARTMENT

Postpartum Preeclampsia Checklist

IF PATIENT < 6 WEEKS POSTPARTUM WITH:

- BP ≥ 160/110 or
- BP ≥ 140/90 with unremitting headache, visual disturbances, epigastric pain

☐ Call for Assistance

☐ Designate:
- ○ Team leader
- ○ Checklist reader/recorder
- ○ Primary RN

☐ Ensure side rails up

☐ Call obstetric consult; Document call

☐ Place IV; Draw preeclampsia labs
- ○ CBC
- ○ PT
- ○ PTT
- ○ Fibrinogen
- ○ Chemistry Panel
- ○ Uric Acid
- ○ Hepatic Function
- ○ Type and Screen

☐ Ensure medications appropriate given patient history

☐ Administer seizure prophylaxis

☐ Administer antihypertensive therapy
- ○ Contact MFM or Critical Care for refractory blood pressure

☐ Consider indwelling urinary catheter
- ○ Maintain strict I&O — patient at risk for pulmonary edema

☐ Brain imaging if unremitting headache or neurological symptoms

† "Active asthma" is defined as:
- Ⓐ symptoms at least once a week, or
- Ⓑ use of an inhaler, corticosteroids for asthma during the pregnancy, or
- Ⓒ any history of intubation or hospitalization for asthma.

Magnesium Sulfate

Contraindications: Myasthenia gravis; avoid with pulmonary edema, use caution with renal failure

IV access:

☐ Load 4-6 grams 10% magnesium sulfate in 100 mL solution over 20 min

☐ Label magnesium sulfate; Connect to labeled infusion pump

☐ Magnesium sulfate maintenance 1-2 grams/hour

No IV access:

☐ 10 grams of 50% solution IM (5 g in each buttock)

Antihypertensive Medications

For SBP ≥ 160 or DBP ≥ 110
(See SMI algorithms for complete management when necessary to move to another agent after 2 doses.)

☐ **Labetalol** (initial dose: 20mg); **Avoid parenteral labetalol with active asthma, heart disease, or congestive heart failure; use with caution with history of asthma**

☐ **Hydralazine** (5-10 mg IV* over 2 min); **May increase risk of maternal hypotension**

☐ **Oral Nifedipine** (10 mg capsules); Capsules should be administered orally, not punctured or otherwise administered sublingually

** Maximum cumulative IV-administered doses should not exceed 220 mg labetalol or 25 mg hydralazine in 24 hours*

***Note:** If first line agents unsuccessful, emergency consult with specialist (MFM, internal medicine, OB anesthesiology, critical care) is recommended*

Anticonvulsant Medications

For recurrent seizures or when magnesium sulfate contraindicated

☐ **Lorazepam (Ativan)**: 2-4 mg IV x 1, may repeat once after 10-15 min

☐ **Diazepam (Valium)**: 5-10 mg IV q 5-10 min

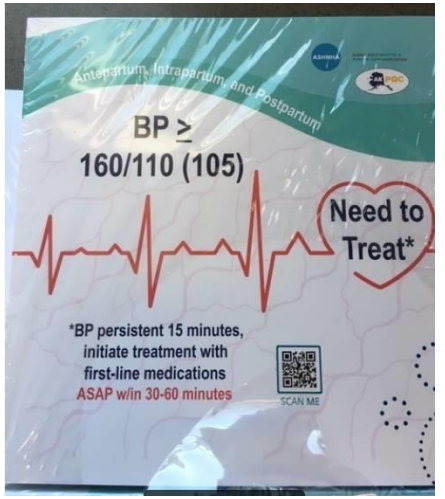
Safe Motherhood Initiative

ACOG

https://www.acog.org/-/media/project/acog/acogorg/files/forms/districts/smi-hypertension-bundle-postpartum-preeclampsia-checklist.pdf

Engaging ED or other units

- Identify provider and nurse champions
- Join staff meetings or rounds—bring snacks and swag
- Share changes/successes/data from your unit
- Invite to SMM reviews or debriefs that involve transfer



Discharge

- Discharge instructions
  - Should include review of warning signs and symptoms for severe manifestations of hypertension in pregnancy
- When planning discharge for hypertensive patient
  - Within 3-7 days if discharged without medication
  - < 72 hours if discharged with medication

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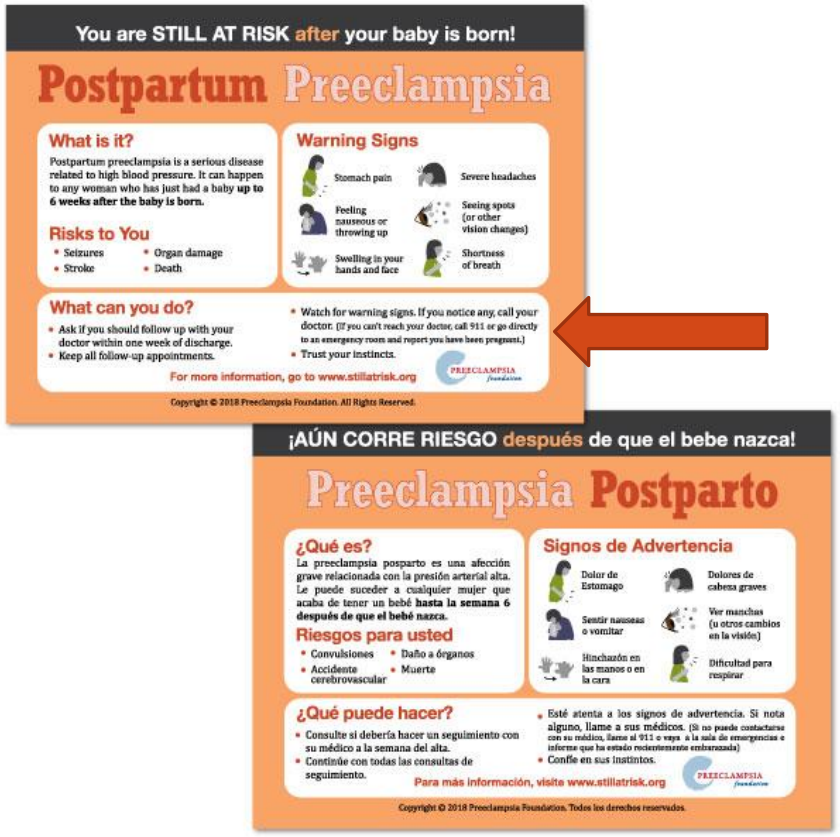
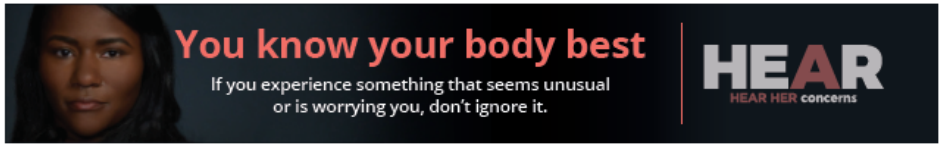
Patient Education





Learn about urgent warning signs and how to talk to your healthcare provider.

During Pregnancy

If you are pregnant, it's important to pay attention to your body and talk to your healthcare provider about anything that doesn't feel right. If you experience any of the urgent maternal warning signs, get medical care immediately.

After Pregnancy

While your new baby needs a lot of attention and care, it's important to remain aware of your own body and take care of yourself, too. It's normal to feel tired and have some pain, particularly in the first few weeks after having a baby, but there are some symptoms that could be signs of more serious problems.

Tips:

- Bring this conversation starter and any additional questions you want to ask to your provider.
- Be sure to tell them that you are pregnant or have been pregnant within a year.
- Tell the doctor or nurse what medication you are currently taking or have recently taken.
- Take notes and ask more questions about anything you didn't understand.

Learn more about CDC's Hear Her Campaign at www.cdc.gov/HearHer

Tear this panel off and use this guide to help you start the conversation:

Urgent Maternal Warning Signs

If you experience any of these warning signs, get medical care immediately.

- Severe headache that won't go away or gets worse over time
- Dizziness or fainting
- Thoughts about harming yourself or your baby
- Changes in your vision
- Fever of 100.4° F or higher
- Extreme swelling of your hands or face
- Trouble breathing
- Chest pain or fast-beating heart
- Severe nausea and throwing up (not like morning sickness)
- Severe belly pain that doesn't go away
- Baby's movement stopping or slowing down during pregnancy
- Vaginal bleeding or fluid leaking during pregnancy
- Heavy vaginal bleeding or leaking fluid that smells bad after pregnancy
- Swelling, redness or pain of your leg
- Overwhelming tiredness

This list is not meant to cover every symptom you might have. If you feel like something just isn't right, talk to your healthcare provider

Use This Guide to Help Start the Conversation:

- Thank you for seeing me.
  I am/was recently pregnant. The date of my last period/delivery was _____ and I'm having serious concerns about my health that I'd like to talk to you about.
- I have been having _____ (symptoms) that feel like _____ (describe in detail) and have been lasting _____ (number of hours/days)
- I know my body and this doesn't feel normal.

Sample questions to ask:

- What could these symptoms mean?
- Is there a test I can have to rule out a serious problem?
- At what point should I consider going to the emergency room or calling 911?

Notes:

HEAR HER CONCERNS

Learn more about CDC's Hear Her Campaign at www.cdc.gov/HearHer

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CDC Hear Her Campaign

Questions?