

Blood Pressure Measurement and Respectful Care

Shelby Smith-Janey, BSN
Alasia Ledford, PhD, BSN



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Learning Objectives

- By the end of this training, participants will:
 - *Describe the current state of maternal morbidity and mortality in the US and the impact of Hypertensive Disorders of Pregnancy (HDP) on maternal and long-term health*
 - *Demonstrate appropriate techniques to accurately assess blood pressures*
 - *Understand the importance of Respectful Care in caring for perinatal patients and discuss key respectful care behaviors*
 - *Incorporate key respectful care behaviors into blood pressure measurement*

Our Core Values



Health Equity

We value health equity -- the idea that everyone should have a fair opportunity to attain their full health potential. This is a staple of our [implementation study](#) and is the driving force behind our organization.



Bidirectional communication

We value listening and communicating with our community to ensure that we are providing relevant and meaningful change aligned with equitable health opportunities. ACHIEVE has held multiple discussions with focus groups, community partners, and our two Patient Action Groups (PAGs), in which we learn about their lived experiences to identify gaps in patient care.

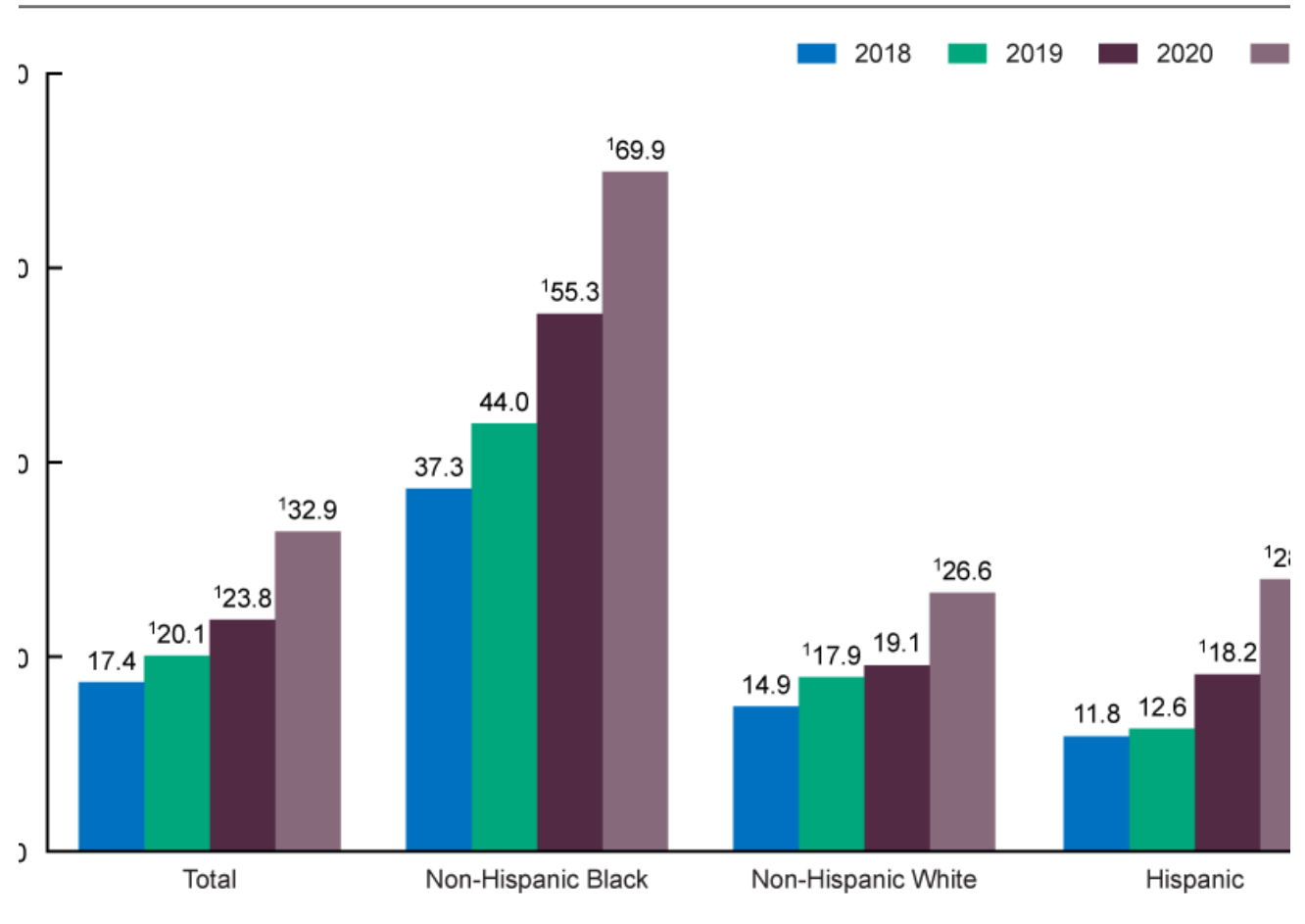


High-quality, evidence-based, respectful care

We value care that is high-quality, evidence-based, and respectful. To achieve this, our initiative is using research-supported implementation practices directly influenced by the conversations we are having with community members.

The State of Maternal Health in the US

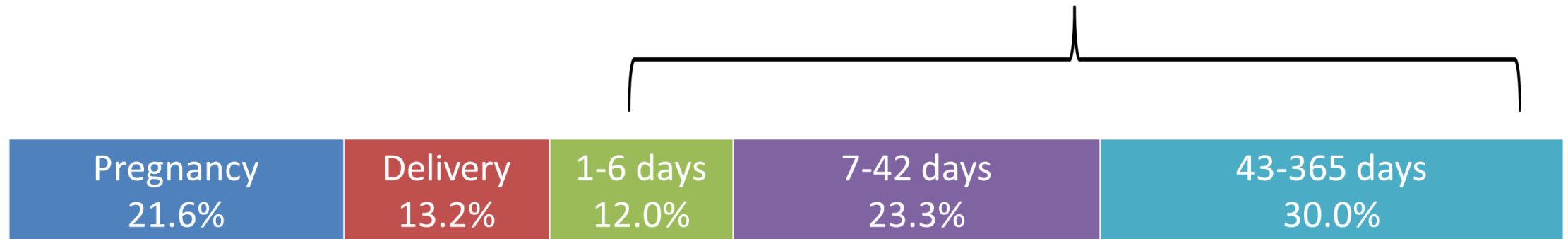
- Maternal mortality increased 40% during the COVID-19 pandemic
- Data shows this trend reversing in 2022 but overall mortality rates and disparities remain unacceptably high
- The mortality rate for Black women is about 3x the rate for white and Hispanic women
- The CDC compilation of data from state maternal mortality review committees indicate that 84% of pregnancy-related deaths in the US were **preventable**



significant increase from previous year ($p < 0.05$).
groups are single race.
National Center for Health Statistics, National Vital Statistics System, Mortality.

Maternal Mortality After Childbirth

Nearly two thirds of pregnancy-related deaths occur after delivery



Pregnancy-Related Deaths: Data From Maternal Mortality Review Committees in 36 U.S. States, 2017–2019

https://www.cdc.gov/maternal-mortality/php/data-research/?CDC_AAref_Val=https://www.cdc.gov/reproductivehealth/maternal-mortality/erase-mm/data-mmrc.html



Maternal morbidity

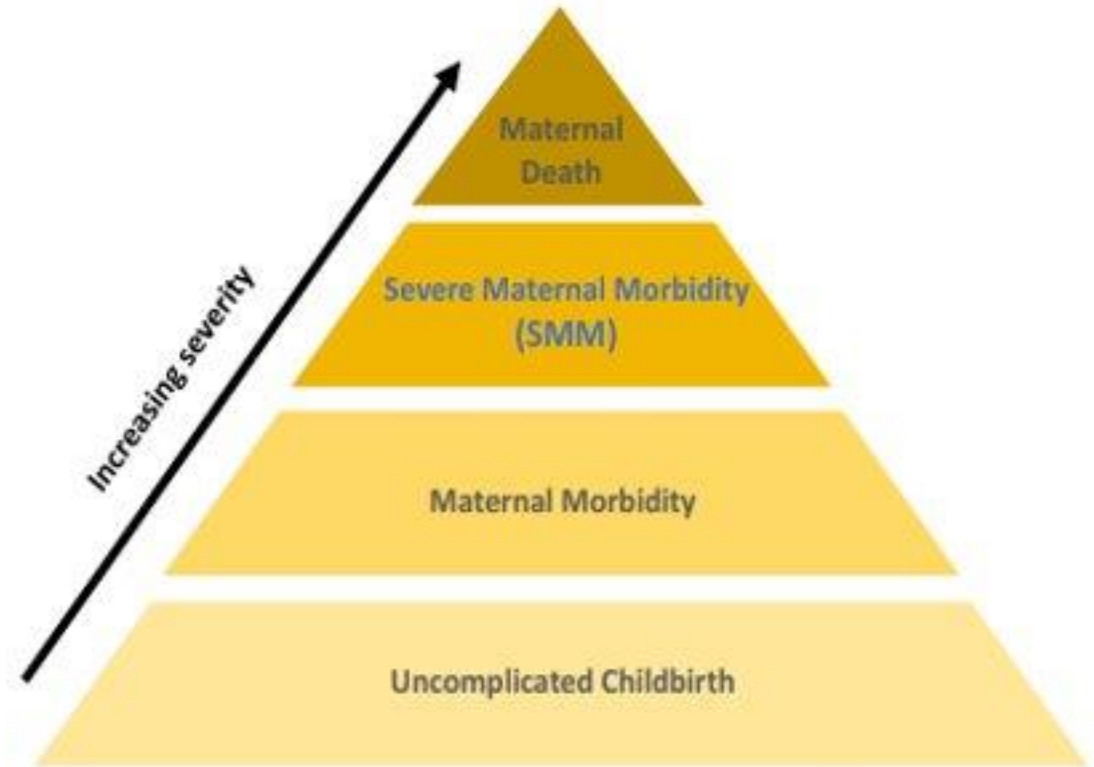
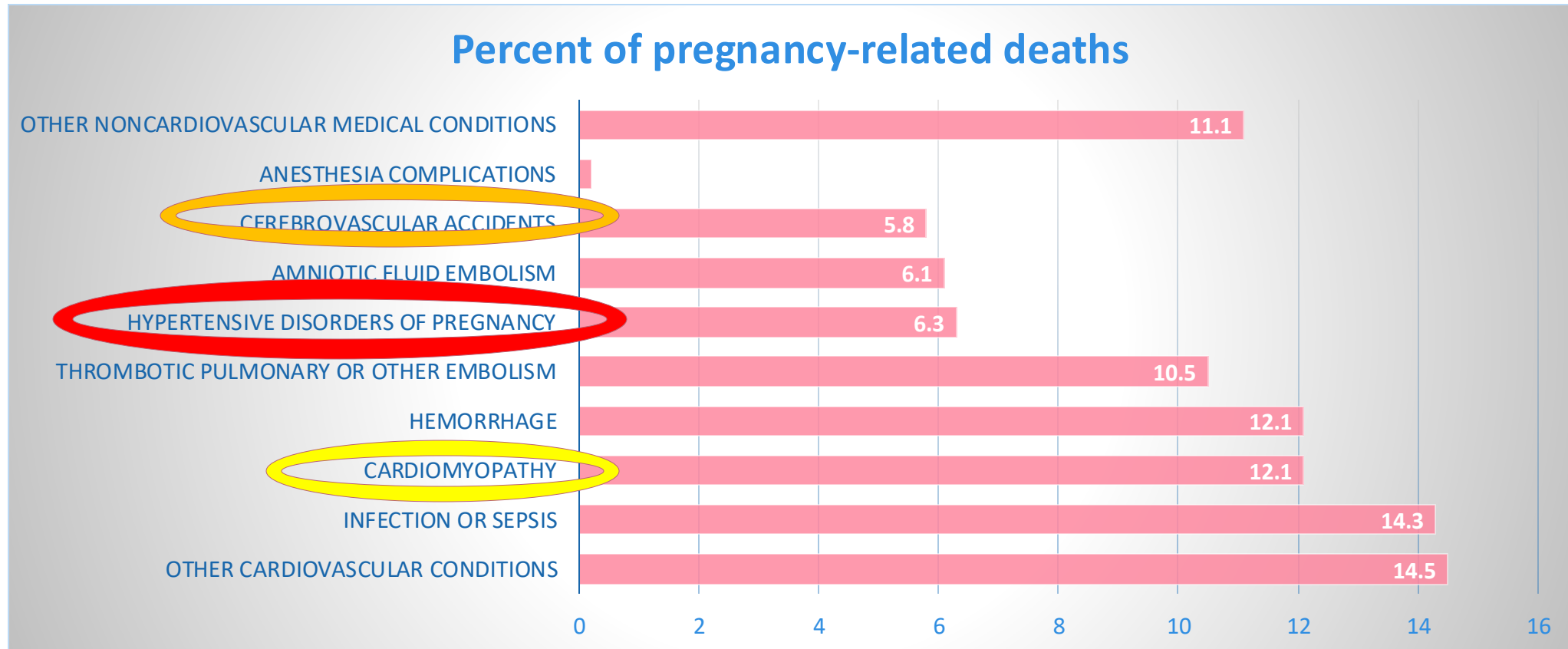


Figure 1. Continuum of maternal morbidity, by severity. (Adapted from NYC Department of Health & Mental Hygiene. 2016. Severe Maternal Morbidity in NYC, 2008-12. New York, NY.)

CAUSES OF PREGNANCY-RELATED DEATH 2017-2019



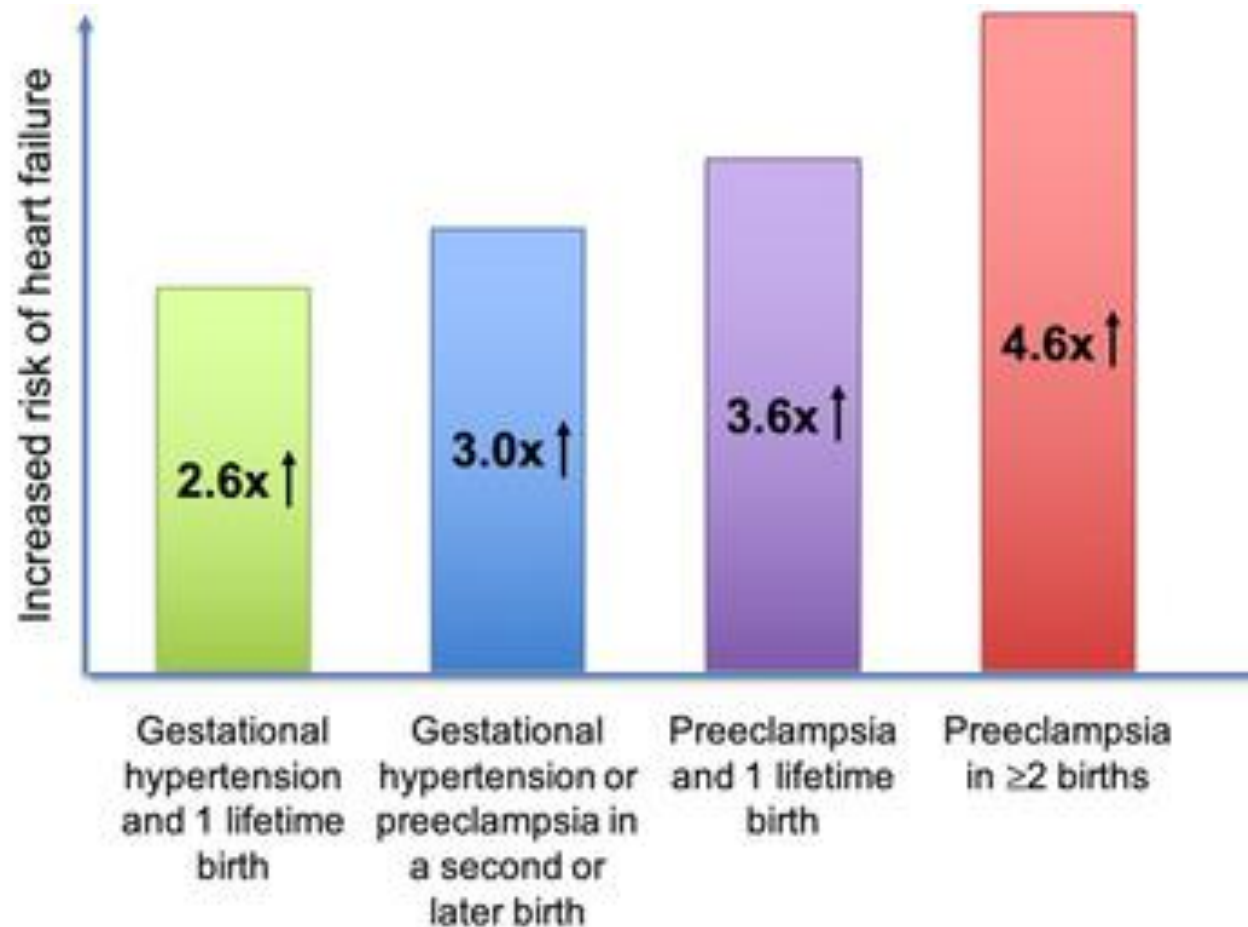
<https://www.cdc.gov/reproductivehealth/maternal-mortality/pregnancy-mortality-surveillance-system.htm>

Why focus on hypertension in pregnancy?



HDP Impact on long-term health

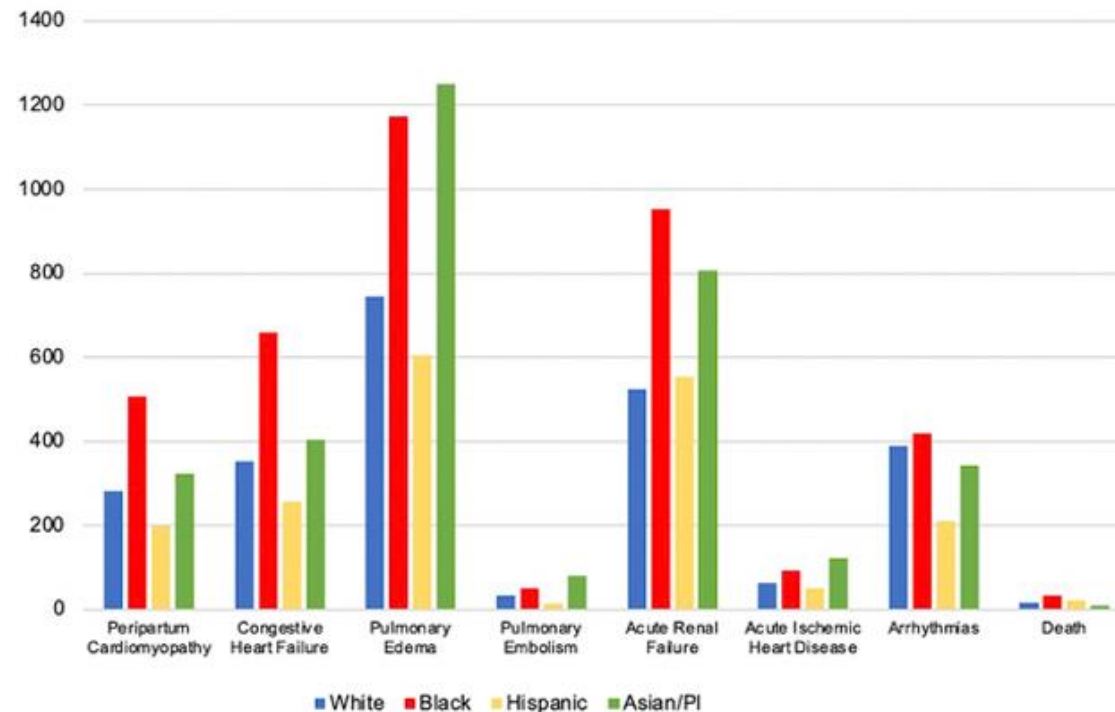
Compared to women with multiple births and no history of hypertension in pregnancy:



RACIAL DISPARITIES IN HDP AND ACUTE CARDIOVASCULAR COMPLICATIONS



Number of Cardiovascular Complications per 100,000 in Women with Preeclampsia



Anum S. Minhas. Hypertension. Racial Disparities in Cardiovascular Complications With Pregnancy-Induced Hypertension in the United States, Volume: 78, Issue: 2, Pages: 480-488, DOI: (10.1161/HYPERTENSIONAHA.121.17104)
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RACISM IS THE RISK FACTOR.

RACE IS NOT THE RISK
FACTOR.

Quote credit: Dr. Joia Crear-Perry

What is respectful care?



- WHO Definition:
 - "Care provided in a manner that maintains patients' dignity, privacy, and confidentiality, ensures freedom from harm and mistreatment, and empowers patients to engage in their care."

What is respectful care?



Accurate Blood Pressure Measurement

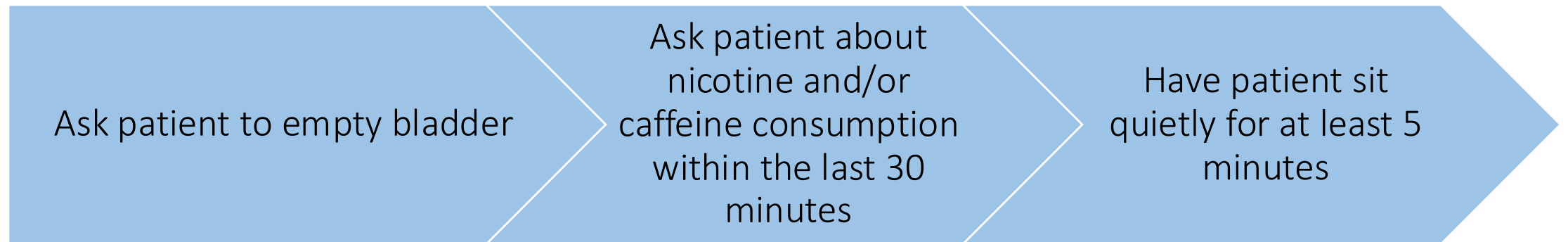
Factor	Magnitude of systolic/diastolic blood pressure discrepancy (mm Hg)
Talking or active listening	10/10
Distended bladder	15/10
Cuff over clothing	5-50/
Cuff too small	10/2-8
Smoking within 30 minutes of measurement	6-20/
Paralyzed arm	2-5/
Back unsupported	6-10/
Arm unsupported, sitting	1-7/5-11
Arm unsupported, standing	6-8/

- Accurate blood pressure (BP) measurement is essential to guide decisions and avoid over- or under-treatment leading to adverse outcomes.

Preparing to Take a Blood Pressure



Preparing to Take a Blood Pressure



Respectful Care – How to Enter A Room

- Always knock for warning before entering AND wait for response
- Eye contact
- Introduce yourself and ask patient their preferred name.
- Acknowledge any support people
 - *Who is with you today?*
- ALWAYS use an interpreter if indicated in the chart or if the patient requests one
- Allow for autonomy
 - *What arm would you like?*
 - *Do you have any questions or concerns before we begin?*



Selecting BP Cuff



Selecting BP Cuff

Use tape measure to measure length of arm from shoulder bone to elbow bone in centimeters

Mark half-length point and measure circumference in centimeters

Reference circumference measurements on cuff to choose correct cuff



Respectful Care – Measuring a Patient's Arm



- Maintain neutral language about the size of the cuff (ex/ "I'm going to switch to this size for a more accurate reading" vs. "Oh no, we need a bigger cuff")
- Ask consent to touch them before beginning measurement
- Explain why it is important to complete this step to build trust and rapport

Positioning



Positioning

Patient is seated or semi-reclined with both feet flat on the floor and not crossed

Bare arm – no clothing

Arm supported at heart level

No gap between the cuff and the arm

Asks patient not to move or talk during measurement

Respectful Care - Positioning

- Be clear and direct but polite
 - *"Please remain still and quiet while the cuff is measuring your BP" vs. "Let's just relax for a moment"*
- Ask patient to move instead of moving body for them
 - *Ex/ arm to heart level, uncrossing their feet*
- If their clothing does not provide adequate coverage while allowing for bare arm measurement, provide a gown or blanket. Be mindful of private space to change if needed.



Taking an accurate BP

Practice these Steps

Key Behaviors

- **Prepare Patient**
 - Ask patient to empty bladder
 - Ask patient about nicotine and/or caffeine consumption within the last 30 minutes
 - Have patient sit quietly for at least 5 minutes
- **Proper BP Cuff Fit**
 - Use tape measure to measure the length of arm from shoulder bone to elbow bone in centimeters
 - Mark half-length point and measure circumference in centimeters
 - Reference circumference measurements on cuff to choose correct cuff
- **Patient Positioning**
 - Patient is seated or semi-reclined with both feet flat on the floor and not crossed
 - Bare arm – no clothing
 - Arm supported at heart level
 - No gap between the cuff and the arm
 - Asks patient not to move their arm or talk during measurement

Hypertension Maternal Warning Signs



Yellow Zone Caution | Take Action

Blood Pressure Ranges $\frac{141-159}{91-109}$

You should take action if: the top number is high, the bottom number is high, or if you have symptoms.

What to Do: Call your provider's office to tell them your blood pressure reading and any symptoms.



Pain in the upper right belly area or in the shoulder



Headaches that don't go away



Seeing spots or flashing lights, blurry vision, or sensitive to light



Feeling nauseated or throwing up



Swelling in face, hands and legs



Hypertension Maternal Warning Signs



Red Zone

Emergency | Take Action!

Blood Pressure 160 or more
Ranges 110 or more

You should take action if: the top number is high, the bottom number is high, or if you have symptoms

What to Do: This is an emergency! Seek immediate medical care!



Pain in the upper right belly area or in the shoulder



Headaches that don't go away with over the counter medicine



Increased anxiety and a sense of doom



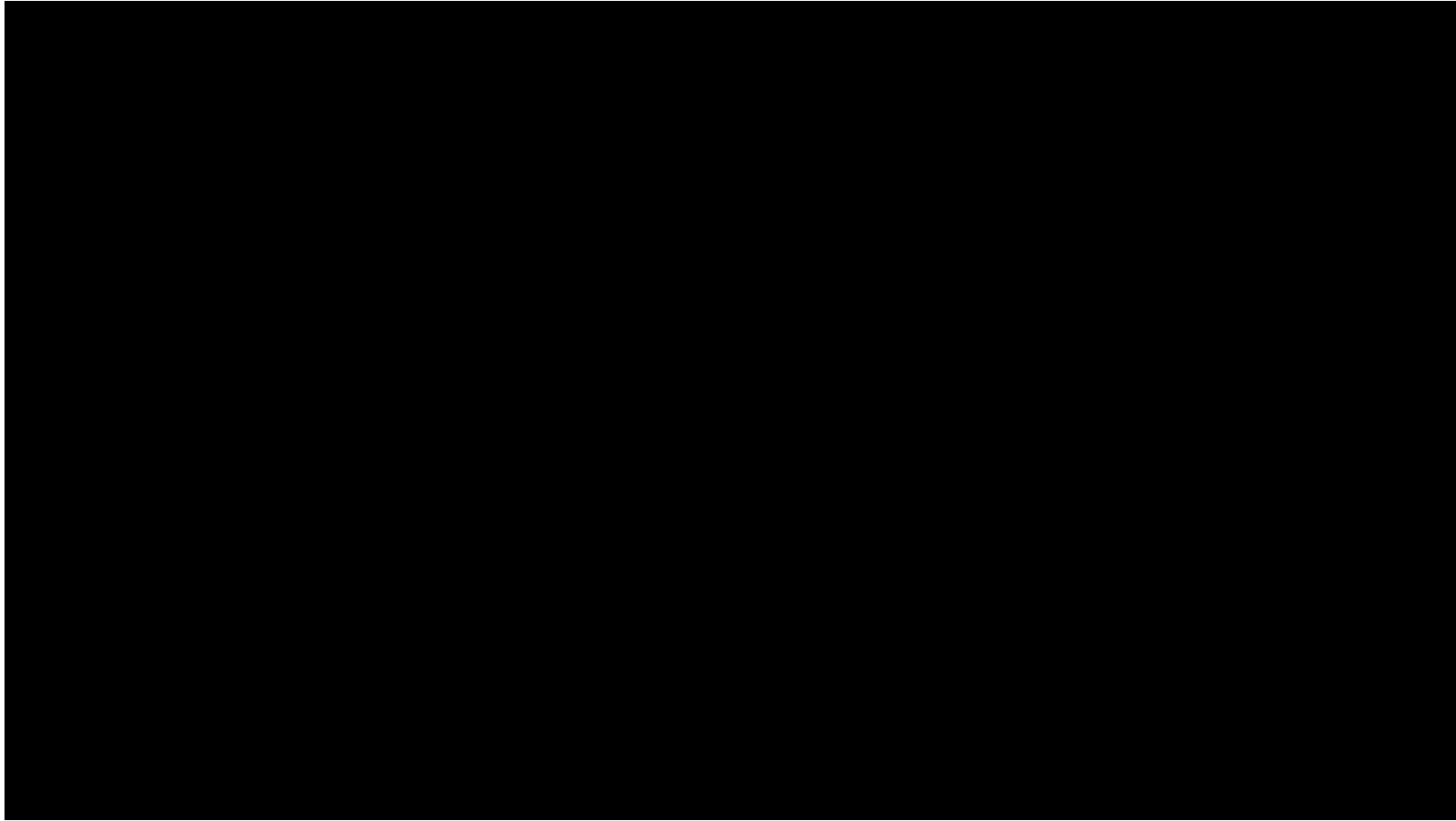
Serious difficulty catching your breath



Any symptoms from Yellow Zone that are getting worse!



Video – Scenario 1



Video – Scenario 1

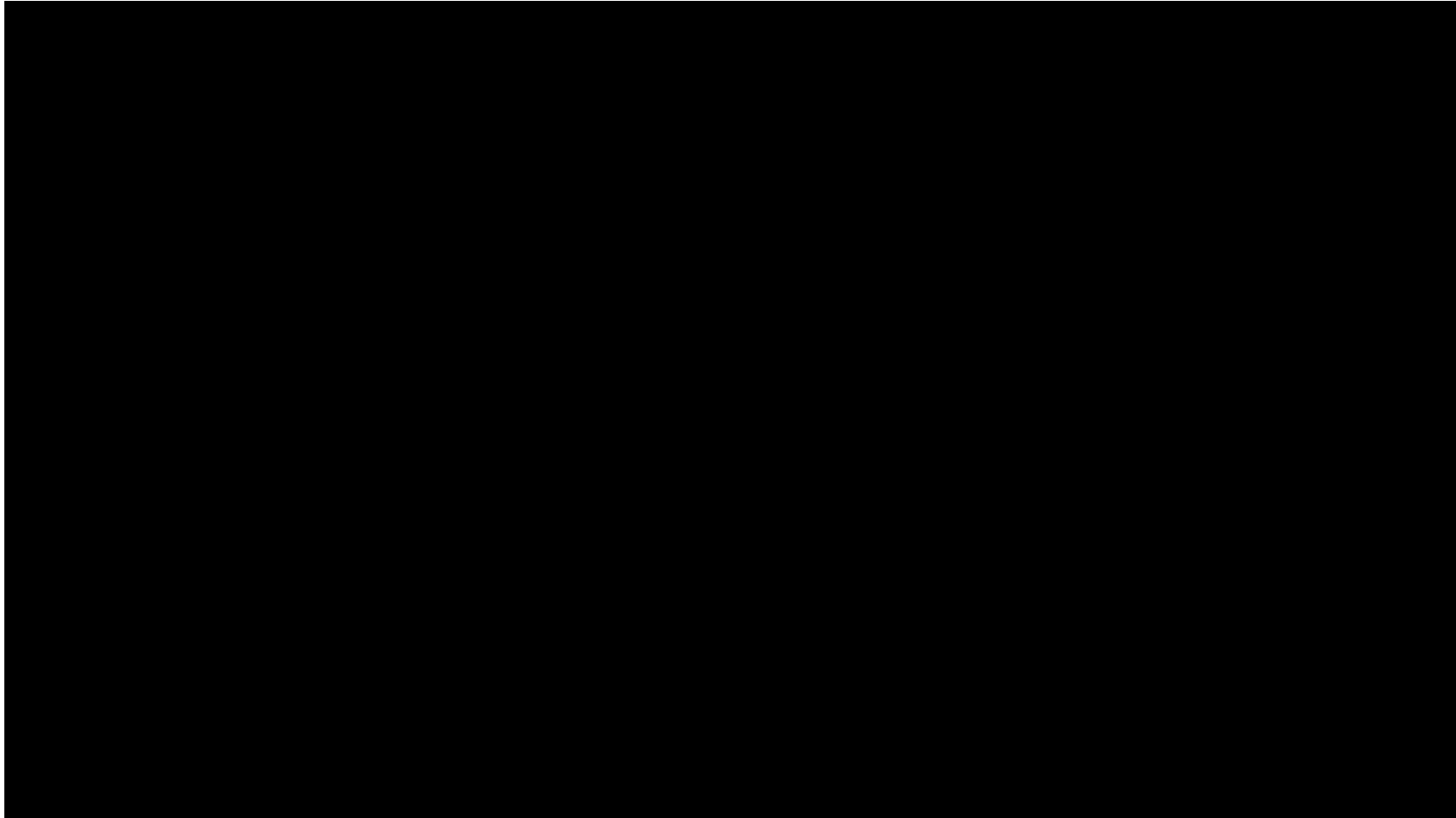


WHAT WAS DONE WELL?



WHAT COULD BE IMPROVED?

Video – Scenario 2



Video – Scenario 2



WHAT WAS DONE WELL?



WHAT COULD BE IMPROVED?

Thank you!

Please let us know
how we did.

