

# Take charge of your health today. Be informed. Be involved.



ESTHER BUSH

## Preeclampsia and heart health

This month, the “Take Charge of Your Health Today” page focuses on preeclampsia and heart health. Erricka Hager, health advocate, and Esther L. Bush, president and CEO, Urban League of Greater Pittsburgh, spoke about this topic.

**EH:** Good afternoon, Ms. Bush. I’m excited to have this conversation with you about an issue that is negatively affecting the communities we serve. This month’s topic means a lot to me because I developed preeclampsia during my first pregnancy. Preeclampsia is a pregnancy complication with symptoms like high blood pressure, swollen hands and feet and protein in urine. If untreated, it can lead to brain seizures and a life-threatening condition called eclampsia.

**EB:** Hello, Erricka. I’m glad we’re covering this topic. Research shows that African American women are more likely to experience preeclampsia during pregnancy versus their white counterparts. The rate of preeclampsia and eclampsia for African American women is 61 percent higher than it is for white women and 50 percent higher than it is for women overall, according to the Agency for Healthcare Research and Quality.

**EH:** That’s important to mention because the disparity gap between African American and white women experiencing preeclampsia during pregnancy in the United States continues to grow. Researchers are trying to understand why African American women are at a higher risk of developing and then dying from preeclampsia. Historically, researchers believed that socioeconomic factors, like poverty or limited education, were the causes of the disparity. However, research has shown that these factors aren’t the only causes. Many of us know the pregnancy complications that Beyoncé and Serena Williams faced during their respective pregnancies.

**EB:** Yes, you are correct. I’m glad to hear that celebrities are bringing attention to the increased pregnancy risks for African American women. Preeclampsia is such an important topic that significantly affects African American women despite their incomes or levels of education. More research is needed to understand why African American women are at an increased risk of experiencing preeclampsia. In the meantime, African American women should continue to be screened for high-risk pregnancy complications and managed as if they are going to develop preeclampsia. Unfortunately, most African American women don’t even know what preeclampsia is or know where to get information about it. That’s why it’s crucial for us to continue to have these conversations about research and health to continue to educate and empower the African American community.

**EH:** I agree! I was one of those women. Before I developed preeclampsia, I had neither heard of it nor did I know what symptoms to look for during pregnancy to discuss with my doctor. When I was contacted by Dr. Catov’s research team, I was excited to participate in her study because it meant that someone was listening. Dr. Catov recognizes that preeclampsia complications could lead to future cardiovascular disease or heart issues and wants to know why. It’s important for our readers to understand that volunteering for research studies is a vital way for researchers to understand why African American women, specifically, are at a higher risk of developing preeclampsia.

**EB:** Thank you so much for sharing your perspective and experience, Erricka. We’ve provided some great information and ways that readers can take charge of their health today. I look forward to chatting with you next month when we discuss poverty and asthma outcomes.



Beyoncé revealed in Vogue’s September 2018 issue that she delivered her twins, Rumi and Sir, in July 2017 by emergency Caesarean section after being bedridden for a month because of “toxemia,” a condition better known as preeclampsia. The only cure for preeclampsia is delivering the baby. Beyonce and twins (Image via Instagram)

## Preeclampsia is leading cause of preterm birth and maternal deaths

Pregnancy is a life-changing time for women and can affect their health in a range of different ways. But, no matter what kind of experience a woman has, researchers are finding that pregnancy can also provide an extraordinary glimpse into a woman’s health—in particular, her heart health.

According to Janet M. Catov, PhD, MS, associate professor of obstetrics, gynecology, and reproductive sciences, School of Medicine, and of clinical and translational science at the University of Pittsburgh, many women experience pregnancies that progress typically and without significant health issues. However, she notes a few conditions that prenatal health care providers watch for and that can affect up to 20 percent of women who are pregnant. These conditions include preterm birth and preeclampsia.

Preeclampsia is a pregnancy complication with symptoms like high blood pressure, swollen hands and feet and protein in urine. If untreated, it can lead to brain seizures and a life-threatening condition called eclampsia. Research shows that it is a leading cause of preterm birth and maternal deaths (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3871181/>). Although some treatments are available, the only known cure is for the mother to give birth.

Researchers like Dr. Catov recognize that preeclampsia and other pregnancy complications may be the body’s way of signaling a future health risk. She likens pregnancy to a stress test—a physical test to see whether the heart can adapt to the stress of exercise.

“We’ve begun to realize that these complications also identify women who are at higher risk for heart disease later in life,” says Dr. Catov, also associate professor of epidemiology at Pitt’s Graduate School



JANET M. CATOV, PHD, MS (Photo by Joshua Franzos)

### The Window Study

The Window Study research opportunity at the University of Pittsburgh is seeking people who are at least 18 years-old, currently not pregnant or have had a baby in the last six months and who delivered a baby at UPMC Magee-Womens Hospital in 2008 or 2009. The goal of the study is to find out whether pregnancy characteristics can provide clues about later heart health in women.

Women who delivered at Magee have stored medical information, specifically data related to the condition of the placenta—a temporary organ that develops during pregnancy to provide oxygen and nutrients to the baby, while also removing waste products. The condition of the placenta may be able to provide insight into the heart health later in life. Researchers hope that by using placental health as a window into heart health that they can develop better ways to predict and treat heart disease in women.

The study involves a 1.5-hour visit followed by seven days of at-home blood pressure monitoring. Compensation and an at-home heart monitor is provided for people who participate.

Link to the study: <https://pittplusme.org> or search the Pitt+Me registry for the Window Study.

of Public Health. “Healthy pregnancy requires every organ system to change. The body’s blood vessels and metabolism adapt significantly. The idea is that when a woman is pregnant and has a complication like preeclampsia, that may be a marker of underlying risk for heart disease. Preeclampsia goes away once the woman is no longer pregnant, but the physical reasons she developed high blood pressure in pregnancy don’t go away. In fact, several years after being pregnant, she may develop hypertension. Our research is trying to understand why.”

Through the Magee-Womens Research Institute and the University of Pittsburgh’s American Heart Association “Go Red for Women” Research Center, Dr. Catov runs the Windows study. The study examines how stress signals in pregnancy can be used to understand more about why some women with pregnancy complications go on to have excess risk for heart disease.

Because there are no certain predictors of preeclampsia, Dr. Catov says researchers need to understand more so they can help learn how to prevent it. But research shows that women who have had one complicated pregnancy have a higher chance of having complications in future pregnancies. Overall, researchers like Dr. Catov want to know more about heart disease risk in women specifically and to help women have better long-term health.

“We don’t know why pregnancy complications happen,” she says. “We really owe women answers. There’s sometimes a tendency to blame women—that somehow they’re doing something wrong, and that’s why they got sick during pregnancy. That’s not the case. We need to talk about and study these health issues so that women feel empowered with understanding so that they can take care of their health.”

## Serena’s childbirth story highlights Black mothers’ high mortality rates

by Clarissa Hamlin

Serena Williams didn’t know that her childbirth survival story would spark conversations about maternal mortality and complications, with rates extremely high among Black women.

Williams, like many African-American mothers, faced a matter of life or death when she brought her baby into the world. She made it through childbirth despite harrowing complications: painful contractions exasperated by a decreased heart rate that forced an emergency C-section in September. But Williams became a hero when she had her beautiful baby girl, Olympia, with her new husband, Alexis Ohanian. She faced afterbirth complications including blood clots that caused severe surgeries, but she overcame her struggles.

The tennis star shared her story of strength and survival to the world, a rallying cry for Black women who know her pain all too well.

“I didn’t expect that sharing our family’s story of Olympia’s birth and all of complications after giving birth would start such an outpouring of discussion from women — especially black women,” Williams said in a Facebook video. She acknowledged that many other women of color have faced similar complications and had their health problems go unaddressed.

The tennis pro was one of the fortunate Black women who survived grueling challenges during and after delivery. However, many women sadly don’t make it. Black women are two to three times more likely to die from



Serena Williams holds her daughter, Alexis Olympia Ohanian Jr., in a scene from the HBO’s “Being Serena,” a five-part documentary series. (HBO via AP)

pregnancy or pregnancy-related ailments than White women, according to the Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion and Centers for Disease Control and Prevention. This abnormally high rate presents a major public health emergency.

Disproportionate rates of Black maternal morbidity during and after childbirth require medical professionals to devise a stronger arsenal of combat weapons, a task that takes much support and advocacy work.

“We have a lot of work to do as a nation and I hope my story can inspire a conversation that gets us to close this gap,” Williams wrote in her post.

Williams recognizes that every woman who

bears a child deserves the most love and care as well as the best medical treatments available.

“Let me be clear: EVERY mother, regardless of race, or background deserves to have a healthy pregnancy and childbirth,” Williams wrote. “I personally want all women of all colors to have the best experience they can have. My personal experience was not great but it was MY experience and I’m happy it happened to me. It made me stronger and it made me appreciate women — both women with and without kids — even more. We are powerful!!!

### Bond of Love

The Duquesne Family Support Center is working to reduce the Black infant mortality rate in the City of Duquesne through its program Bond of Love. Duquesne’s population is 57.9 percent African American. The city has one family medicine doctor and weekly visits from the Ronald McDonald Care Mobile. Otherwise, limited health resources are available. A health care facility is about two miles away from Duquesne; however, its location, via public transportation, requires parents with children in tow to catch two buses. The Bond of Love program goals are for 100 percent of the mothers in the program to carry their babies to at least 37 weeks gestation and to initiate and continue breastfeeding for three months. The Bond of Love program hopes to expand to include mothers from other communities throughout Allegheny County. For more information about Bond of Love, please contact Denise Hill at [dhill@ulpg.org](mailto:dhill@ulpg.org).