



MERCK  
Merck for mothers

**AMCHP**  
ASSOCIATION OF MATERNAL & CHILD HEALTH PROGRAMS

MAKING PREGNANCY AND CHILDBIRTH SAFER IN THE U.S.  
**INSIGHTS FROM 12 STATES**

# DEATHS UNEVITABLE

about the unacceptable  
women dying  
childbirth-related  
United States (U.S.), even  
have declined across the  
an unexpected death  
instances is one of  
s to develop the right  
ture loss.

Mothers – Merck's 10-  
day initiative to end  
deaths – supported a  
o 12 states study the  
died and translate those  
these states convened  
view committees which  
and social factors  
woman's death. Their  
ready led to changes in

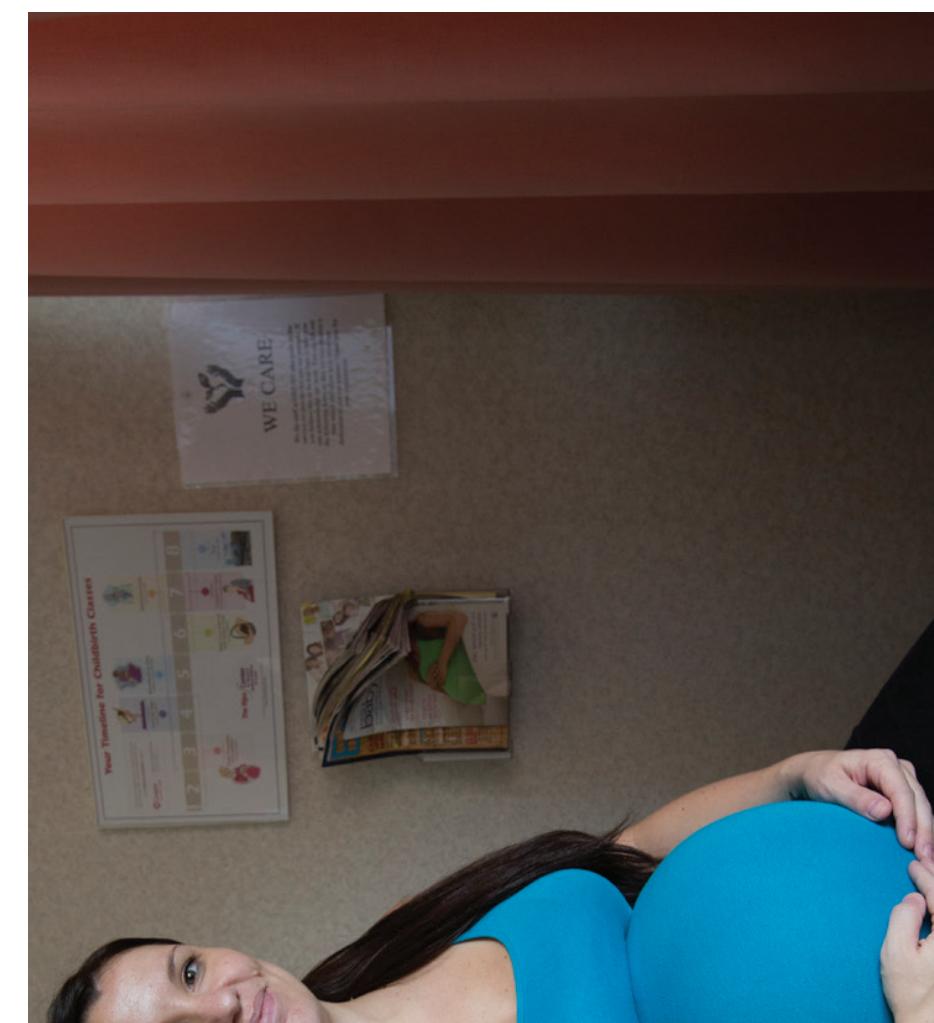
to encourage all states  
aths, disseminate their  
he quality of care and  
o pregnant women and  
is happens, the U.S. will  
reverse the disturbing  
tality and save many





does not have comprehensive data to shed light on the tragedy of a woman dies during or after pregnancy and childbirth, the cause of death certificate does not tell the entire story. Best practice dictates – if a woman dies, a maternal mortality review committee – a multidisciplinary group of physicians, nurses, community health workers and others convenes to discuss the events surrounding her death and recommend changes. However, less than half of states currently have functioning committees.

Committees throughout the U.S. enables health providers, hospitals and others to cover trends in maternal mortality and develop targeted interventions for all women.



## NEW PRACTICES TO SAVE WOMEN'S LIVES

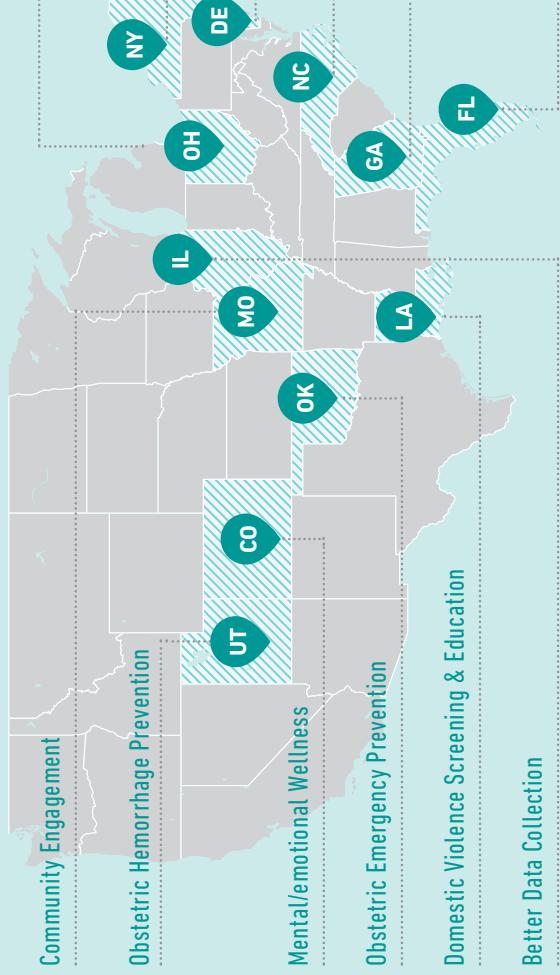
With *Merck for Mothers'* support, the Association of Maternal & Child Health Programs strengthened the capacity of 12 states to understand why women are dying so that they could implement more effective solutions.

The following states – representing one-third of the nation's four million births each year – participated in the *Every Mother Initiative* between 2013 and 2016: Colorado, Delaware, Florida, Georgia, Illinois, Louisiana, Missouri, New York, North Carolina, Ohio, Oklahoma and Utah.

The states' maternal mortality review committees identified underlying causes of maternal death including hypertension and hemorrhage and uncovered emerging causes such as chronic disease, mental health issues, substance use and domestic violence. The committees then used the insights from their individual states to design life-saving solutions for health providers, women

# TRANSLATING KNOWLEDGE INTO ACTION. LEARNINGS FROM 12 STATES

Each state identified and implemented solutions to make sure that no woman's life. These solutions were developed in response to the context in each state – several commonalities across the country. For example, chronic conditions like hypertension and obesity – affect a woman's health during pregnancy and for mental health is critical to improving maternal health outcomes. And teams provide high quality care during an obstetric emergency can save lives. The initiative, innovation and commitment, these states and their partners are making to the trajectory of maternal mortality in the U.S. – their insights and experiences will inform future maternal mortality and morbidity.



## DEPRESSION

## ENSURING GOOD HEALTH BEFORE PREGNANCY

**Review Committee** identified a high number of maternal deaths resulting from substance use.

Pregnant women who experienced a non-fatal/near-miss suicide attempt as their close family, friends and health providers, to identify factors that obtain support and services to address mental health issues. The state then sources for clinicians that provide guidance on how best to identify, treat, and manage depression. Additionally, the Colorado Department of Public Health campaign to encourage pregnant women to disclose their mental health so that they can receive the care they need.

### REVIEW COMMITTEE FINDING

The **Georgia Maternal Mortality Review** committee found that **women with chronic conditions were not receiving the information and support they needed** to avoid pregnancy complications. As part of its review, the team also identified the **importance of promoting women's health** and **addressing chronic conditions more effectively**.

### SOLUTION

The review team partnered with Grady Healthy System and the Georgia Department of Public Health to help health providers provide better counseling to patients on reproduction and contraception. The toolkit includes patient education materials (a video, poster and flyers) for display in clinical centers and three recorded lectures for providers that risks associated with unmanaged chronic diseases and describe how to refer patients to services. The materials have been distributed to clinics and health providers through email.

## DE IRS ON MATERNAL DEPRESSION AND SAFE TRANSPORT OF PREGNANT WOMEN

### FLORIDA: EDUCATING PROVIDERS ON MATERNAL DEPRESSION AND SAFE TRANSPORT OF PREGNANT WOMEN

### REVIEW COMMITTEE FINDING

The **Florida Pregnancy-Associated Mortality Review** committee found that **non-Hispanic Black women were significantly more likely to die** from pregnancy complications than non-Hispanic white women. As part of its review, the team also identified the **importance of promoting pregnancy (preconception) to address chronic conditions more effectively**.

### SOLUTION

The team partnered with **REACHUP Inc** – a community-based health organization – and the Florida Department of Health and Human Services' Office of Minority Health to establish **Preconception programs** within three Historically Black Colleges/Universities and other state colleges on raising awareness about preconception health, maternal mortality and racial disparities. Sixty youth peer educators have been trained to promote the importance of birth control and provide resources to women of childbearing age. Because of its success, the program has expanded to include additional states.

In Delaware, the team identified several providers better manage pregnancy and childbirth complications. These providers include **depression and domestic violence and enhanced communication** between patients and primary care physicians.

In Delaware, the team enlisted a specialist in maternal depression at a special training with the Medical Society of Delaware. The team developed a first-of-its-kind statewide course for nurses on maternal transport – them on a standard of care for transporting pregnant women via ambulance. Delivery nurses in Delaware have completed the course.

# ENLISTING COMMUNITY PERSPECTIVES ON THE CONTRIBUTORS TO MATERNAL MORTALITY

## DATA UN COMPLICATIONS

**Review Committee** identified an opportunity to improve its ability to address developing **new data collection methods for both injury-related maternal complications during pregnancy and childbirth (severe maternal morbidity).**

### REVIEW COMMITTEE FINDING

Upon establishing a review committee in 2011, the **Missouri Pregnancy-Associated** completed a historical analysis of maternal deaths from 1999 through 2008. By 2011, yet engaged community stakeholders, and decided to use its findings as an opportunity **maternal mortality in the state.**

### SOLUTION

The Missouri Department of Health and Senior Services conducted town hall meetings and the public to share its findings from reviewing more than a decade of maternal mortality, the committee wanted to raise awareness of the problem of maternal mortality, the committee wanted to perspectives on the major barriers to care for pregnant women so that it could develop solutions. The committee's feedback was consistent with the committee's findings: limited access to health care, poor health literacy and knowledge of contributors to maternal mortality are all challenges that require greater attention.

## WOMEN WHO ARE AT RISK FOR DOMESTIC VIOLENCE

## NORTH CAROLINA: MEETING THE REPRODUCTIVE HEALTH NEEDS OF WOMEN WITH CARDIOVASCULAR DISEASE

### REVIEW COMMITTEE FINDING

The **North Carolina Pregnancy-Related Mortality Review** team learned that a disproportionate number of maternal deaths in the state were due to complications related to **cardiovascular disease**, and that many women were unaware of how their heart health might affect a pregnancy.

### SOLUTION

The team partnered with state-wide programs to prevent chronic disease and improving reproductive health. The campaign developed the Show Your Heart Some Love social marketing campaign. The campaign urges them to follow a healthy lifestyle to ensure that a healthy pregnancy. Since its launch, the campaign has reached 8,400 women. The team also implemented a pilot project to identify women of childbearing age who have cardiovascular risk factors that put them at risk for pregnancy-related morbidity and mortality. The team used the findings from an analysis to address their reproductive health needs.

## LA

## MISSISSIPPI: ADDRESSING DOMESTIC VIOLENCE AND SUBSTANCE USE

The **Mississippi Mortality Review** uncovered high rates of deaths associated with **domestic violence and substance use.**

### SOLUTION

The team partnered with the **Louisiana Coalition Against** Domestic Violence and Hospitals to address the often-overlooked problem of domestic violence during pregnancy. The partnership developed a range of English and Spanish materials, including educational materials and "shoe cards" – cards small enough to be hidden from the emergency room discovery – which provide information on resources, including emergency domestic abuse. The partnership also trained over 100 health and domestic violence advocates in **16 affiliated programs** across the state on how to effectively screen

# IMPLEMENTING EVIDENCE-BASED PRACTICES TO MANAGE HYPERTENSION AND HEMORRHAGE

## RESOURCES TO HELP PROVIDERS MANAGE OBSTETRIC HEMORRHAGE

REVIEW COMMITTEE FINDING

**Review Committee** identified hypertension and hemorrhage as the leading causes of death in the state.

SOLUTION

artment of Health developed and released **guidelines** for managing preterm birth, which were posted on major websites and disseminated across the Department, the **New York State Perinatal Quality Collaborative** developed maternity care providers, including posters on techniques to accurately identify labor, a **lampsia Recognition Tool**, and a **webinar** for continuing education credits to earn guidelines. Over 300 nurses, physicians, and emergency responders have received training. Resources were distributed to all New York State's 126 birthing hospitals.

**OH**  
PROVIDERS TO RESPOND  
GENCIES

UTAH

# TRAINING HEALTH PROVIDERS TO MANAGE OBSTETRIC HEMORRHAGE

REVIEW COMMITTEE FINDING

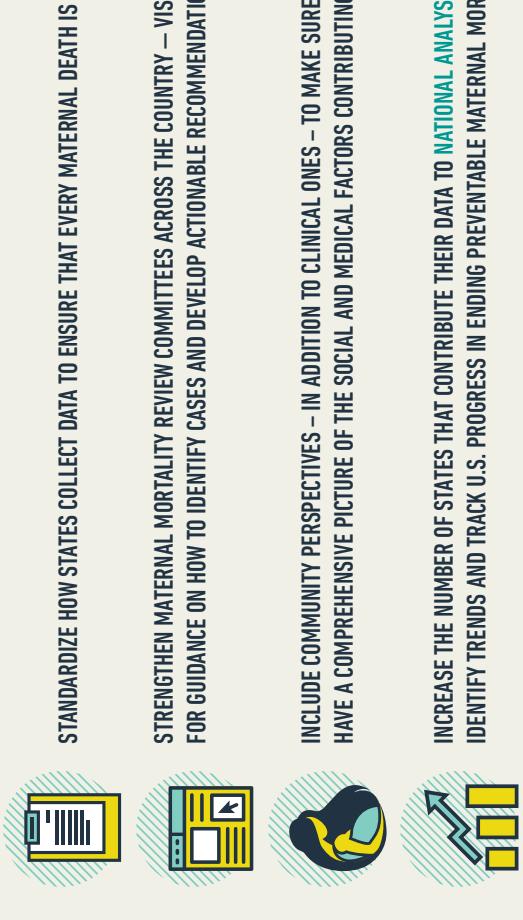
The **Utah Perinatal Mortality Review** identified **hemorrhage** as one of the top three death in the state.

SOLUTION

As a first step in responding to the problem of hemorrhage, the Utah Department of Health on statewide rates of obstetric hemorrhage and circulated the findings to 44 delivery state to raise awareness among providers. The team then **disseminated** tools to help improve clinical management of hemorrhage and instructed 25 hospitals on evidence associated with identifying, treating and responding to complications related to hem pregnancy and childbirth. The team also hosted bi-monthly virtual trainings over six months.

**Project ECHO** – a virtual learning technology platform – hosted by the University of U

Learning from a maternal death is a critical step toward preventing future deaths and translating the findings. To help achieve this goal, we need to:



## ABOUT

### MERCK FOR MOTHERS

**Merck for Mothers** is Merck's 10-year, \$500 million global initiative to help where no woman dies giving life.

### THE ASSOCIATION OF MATERNAL & CHILD HEALTH PROGRAMS

**The Association of Maternal & Child Health Programs** is a national resource advocate for state public health leaders and others working to improve the health of children, youth and families, including those with special health care needs.



