



TESTIMONY BEFORE THE NEW ORLEANS CITY COUNCIL IN SUPPORT OF THE CREATION OF AN OFFICE OF MATERNAL AND CHILD HEALTH

City Council members, thank you for allowing us to share our expertise as you consider establishing a city Office of Maternal and Child Health.

My name is Emily Harville. I am an Associate Professor in the Department of Epidemiology at Tulane's School of Public Health and Tropical Medicine – where I also serve as the co-director of the Center for Emerging Reproductive and Perinatal Epidemiology. I am here with other members of the Maternal and Child Health Coalition who are here to speak about their lived experience and work in the community.

OVERVIEW OF MATERNAL MORTALITY AND MORBIDITY DATA

Between 2011 and 2016, maternal mortality caused 47 deaths per 100,000 births (number 50 in the country); and 45 per 100,000 in 2018 (number 49) in Louisiana. Maternal mortality is caused by hemorrhage, cardiomyopathy, cardiovascular disease; about half are preventable (comparable to other states); many relate to chronic disease. Trauma is the leading non-birth related cause of maternal mortality.

Severe maternal morbidity includes potentially life-threatening or disabling conditions like: renal failure, puerperal sepsis, hemorrhage/transfusion, active HIV, cardiomyopathy, pre-eclampsia, HELLP, ICU admission, surgical complications, cardiac complications, assisted ventilation, stroke, sickle cell crisis, and cardiac arrest. Occurrence of severe maternal morbidity raises costs by 37% for commercial insurance and 47% for Medicaid. One estimate indicates that this affects 135.8 out of every 10,000 patients. Thus, for every maternal death, there are at least 70 pregnancy-related complications that are potentially life-threatening or permanently disabling, and they are estimated to be, 50-60% preventable.

Mortality and morbidity often occur outside the delivery room. Half of such events occur between 24 hours and 42 days after delivery.

There is a racial disparity in SMM as well: 284.8/10000 for black women vs. 170.8/10000 for white women, meaning a risk difference 114 cases/10000 deliveries,, or a relative risk of 1.67 (67% increased risk)

Louisiana has the fourth highest infant mortality rate in the United States and New Orleans has one of the highest rates of maternal mortality in the country.

. In 2013, in Orleans Parish, 45 babies died. In 2015, there were 476 moderately preterm, 129 very preterm; 489 with moderately low birth weight, and 129 very low birth weight. Rates of maternal mortality have increased in Louisiana at a higher rate than national rates, because the state's population is, in general, less healthy than the nation's

DISPARITIES IN BIRTH OUTCOMES

The consequences of low birthweight and preterm birth include death and severe and mild disability. Premature babies are more likely to have learning and behavior problems throughout childhood, low test scores, have to repeat grades, need special education services.

According to an Institute of Medicine report from 2007, US costs are estimated to be \$26.2 billion – 66% on health care, 20% on special education interventions, and 10% on productivity and lost pay.

About 1 in 3 children born prematurely needs special school services, which cost an estimated \$2,200 per year, per child. From a humanitarian and economic standpoint – prevention is better.

Black, white, Asian women in New Orleans have birth outcomes worse than national averages. In Louisiana, Asian women have rates of low birthweight/preterm birth above national averages, both overall and within Asian populations. Asian women tend to have babies with somewhat lower birthweights than US whites or blacks. Vietnamese women tend to have outcomes similar to or slightly worse than other Asian groups.

Black women have somewhere between a 40% and 400% increase in risk of maternal mortality, depending on age. (Ozimek). Black women in New Orleans are twice as likely to have a low birthweight infant compared to White women and about 1.5 times as likely to give birth preterm. The Black infant mortality rate is three times higher than the white infant mortality rate; maternal mortality is four times higher.

Disparities are not solely due to poverty, or lack of prenatal care. They are also not due to smoking (10.5% of white women vs. 6% of black women). We see these issues in all women... but poverty and lack of prenatal care are associated with worse outcomes for women of all races.

From a relative standpoint, neighborhood disadvantage has a stronger effect among whites than blacks. A report summarizing neighborhood effects like poverty, deprivation, racial residential segregation or racial composition, and crime found they raised the risk of PTB for whites by 48% and for low birthweight by 61%; for blacks, the corresponding numbers were 15 and 17% (Ncube 2016)

Every district in New Orleans has a preterm birth and low birthweight rate above the national average, ranging from 10-14%.

Low birth weight

District A=9.7%, +1.5% the national average

District B=12.0%, +3.8% the national average

District C=12.2%, +4% the national average

District D=13.6%, +5.4% the national average

District E=13.5%, +5.3% the national average

Preterm birth

District A=10.3%, +0.4% the national average

District B=12.0%, +2.1% the national average

District C=11.3%, +1.4% the national average

District D=12.0%, +2.1% the national average

District E=13.7%, +3.8% the national average

We are asking to create an Office of Maternal and Child Health. We have many good programs in the city, including Healthy Start and the Office of Youth and Families. But too often there is not coordination among these programs, and the data to identify programs that work are not collected or used. An Office of Maternal

and Child Health can leverage existing resources, strengthening and expand services that benefit mothers, children, and families.

Postpartum home visits are one important solution. The Office of Maternal and Child could establish and oversee a program that would provide these services for all births. Such programs are standard in other countries and have been effective in the US. Such a program and oversight would likely help:

- Recognize signs and symptoms that could indicate worsening problems (i.e. bleeding and pain in legs could indicate deep vein thrombosis, vision/headache/swelling could be preeclampsia, chest pain - embolism, nausea/vomiting - heart disease)
- Link care to those in need. Lack of coverage during this period is important. Child care, substance use, and longer-term visiting programs could help reduce health care costs for children (Kilburn).

Other states have established similar programs. In Michigan, their program improved odds of correctly timed postnatal visit (which provided opportunities to improve maternal health) and child visits (Meghea). The increase in number of child visits was larger than that for postnatal visits, probably because children usually got visits but not mothers.

In Kentucky, home visiting during pregnancy was associated with lower risk of maternal complications (Williams). This program was associated with a substantially lower rate of Pregnancy Induced Hypertension (50% relative reduction in risk, 8.1% of the population) and complications during delivery (40% relative reduction, 1.1% of the population).

Support for women with chronic conditions, esp. hypertension/diabetes/CVD

A trial in Memphis found that home visiting was associated with reduced all maternal mortality over the next twenty years, although the home visiting occurred in early life. This was compared to other aspects of improving care, such as providing transportation and increased developmental screening. (Olds, 2014) This trial also reduced Pregnancy Induced Hypertension and overall blood pressure and might improve maternal mortality or related issues. The estimated ROI: \$3-6 per dollar invested (Jhun report).