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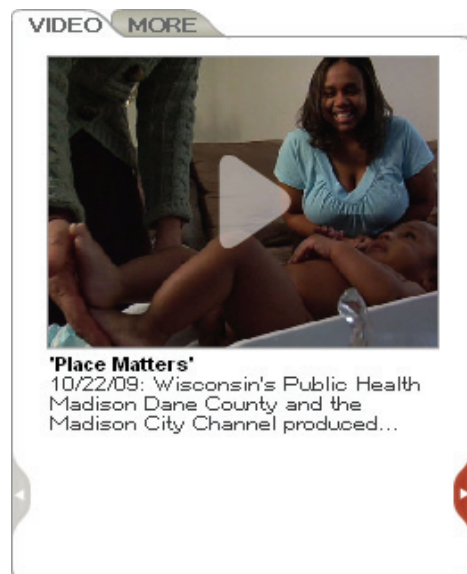
## A Wonderful Mystery

**Black infant mortality has plummeted in one Wisconsin county. Why?**

By **Eve Conant** | Newsweek Web Exclusive  
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Last fall epidemiologist Cynthia Ferre got some of the best, but most mystifying news of her career. Ferre, who works for the Centers for Disease Control and Prevention, knows all too well that the U.S. has one of the worst infant-mortality rates in the developed world, with preterm African-American babies **almost four times** as likely to die as infants than white babies. So why had the black-white infant-mortality gap apparently disappeared in one county in Wisconsin, a state with some of the worst infant-mortality rates in the nation for blacks?

Even an isolated improvement in infant mortality could have far-reaching ramifications for the nation's overall health and health-care costs, but only if authorities can figure out what's actually been happening in Dane County. "This is a very big deal; we've never seen this before," says Ferre, who has been tracking infant-mortality disparities and maternal health issues for the CDC for 18 years.



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America's infant-mortality rate has long been both a black mark on the reputation of our health system, and a **financial burden**. The U.S. ranks 29th in the world, tied with Malta and Slovakia for the second-worst infant-mortality rate among developed nations. In most poor countries infant deaths are often caused by treatable infections like diarrhea, pneumonia, or malaria. But in developed countries the deaths are more often caused by **extreme prematurity or birth defects**. According to a report by the Institute of Medicine, the annual cost associated with preterm birth in the U.S.—at its bare minimum—is \$26.5 billion. It's a grim picture, and nothing really seems to have helped in recent years. Except, it turns out, in Dane County, whose 470,000-odd residents are mostly divided between the capital, Madison, and the surrounding rural areas of

southern Wisconsin.

Dr. Thomas Schlenker, director of public health for Madison and Dane County, is leading the investigation into the turnaround, with help from the University of Wisconsin School of Medicine and Public Health and the state Department of Health Services. When Ferre first got an e-mail from Schlenker last fall, she was skeptical. "We're really not used to seeing improvements like this," she admits. She pored through the Dane County numbers, which were small, but consistent over time. Between 1990 and 2001, the county recorded 73 black infant deaths. The figure dropped to 17 between 2002 and 2007, representing an incredible 67 percent decline from 1990. It is the first known example of the black-white gap closing in any one state or county.

What was behind this extraordinary improvement? "We've got dozens of lines of investigation out," says Schlenker. The first thing he and his team of investigators looked at was an obvious lead. In the '90s, the Healthy Start Program in Wisconsin—Medicaid for pregnant women—was expanded to include almost all low- and middle-income pregnant women. That would seem at first to be the answer, especially since the change was widely advertised in Dane County. But it applied statewide, and other parts of Wisconsin with populations similar to Dane County still have dismal infant-mortality rates. At 17.6 per 1,000 births, Wisconsin's **infant-mortality rate for African-Americans** is among the highest in the nation, and is just below that of the **Gaza Strip**. In certain cities—Racine, for instance—it is a staggering 23 per 1,000 births.

Ferre is also trying to solve the mystery. Looking for possible causes, she wondered if it might be traced to the way fetal-death trends were tallied—if, for example, a baby was born but classified as a fetal death even though it had been outside the womb for several minutes before dying. "That would artificially reduce the rate of infant death," says Ferre. But she says that appears unlikely because fetal and infant deaths were both going down at the same time. She asked about any major changes to the population. Research indicates that foreign-born African immigrants have significantly better birth outcomes—closer to whites—than **U.S.-born black women**. But while the county's African-American population has doubled in the past 20 years, Schlenker has found that only 10 percent of the newcomers were foreign-born. "That wasn't it, either," says Ferre. Nor was it due to improvements in protocols at local hospitals. Schlenker's team found "no significant changes in the local health care systems, infrastructure or practice that corresponded to the improvements," according to a CDC paper written by Schlenker and his colleagues and **reviewed prepublication by Ferre**. "They also have a decrease in the number of teen mothers and pregnant black women who smoke—all established risk factors that support the outcome," says Ferre. "But that is unlikely the whole answer."

Somehow, Dane County had achieved the holy grail—a reduction in the infant-mortality rate. But why? Another positive trend is almost certainly playing a role. "We're also seeing a big decline in the number of very early preterm births, which is unusual because nationally that rate is very stable and resistant to change," says Ferre. The Dane County decrease—from 2.8 percent to 1.1 percent—is dramatic, and no doubt related to the infant-mortality drop. Elsewhere in the U.S., the rate of preterm birth—a leading factor in infant mortality—has increased 36 percent over the past quarter century (to 12.7 percent), in part due to women having babies later in life and reproductive techniques that increase the chances of multiples, but also because black women across the country have a **much higher risk** of preterm delivery than whites. However, when Schlenker and his team examined some 100,000 Dane County birth and death records from 1990 to 2007, exploring birth weight, gestational age, prenatal care, and other infant-mortality risk factors, they found a decrease in the number of births below 28 weeks' gestation, and a drop in newborn mortality for babies weighing less than 3.3 pounds. In other words, black babies were being born later, gaining weight

faster, and surviving. But, again—why?

There is no quick or simple answer, not yet at least. But one area of interest is a former strip mall in a low-income part of Madison that, in the early '90s, was transformed from a bowling alley (and a cluster of jewelry and sub sandwich shops) into a hugely popular one-stop shopping zone for maternal care. Asked to name the facility, members of the community dubbed it **South Madison Health & Family Center—Harambee**, Swahili for "pulling together." Harambee, first created out of community grant funds and private donations, has developed and shifted over time, but is currently a collaboration of five different entities: three medical clinics, including county and city public-health clinics and Planned Parenthood; Head Start; and a public library. Some 600 patients a day visit the dozens of nurses and doctors at the clinics, or come for social programs, which range from parenting classes for soon-to-be fathers, breast-feeding seminars, and even bereavement groups for women who have lost infants or miscarried. Community volunteers, including elders, read to children in waiting rooms. "What is different in Dane County," says former Madison mayor Paul Soglin, who was instrumental in creating Harambee, "is that here a 19- or 25-year-old black woman finds a facility that is not the white man's institution—it's hers." As the center and the community around it began to grow, infant-mortality rates started to drop (though no data have yet proved that one caused the other). Does Ferre see a link? "Yes, I do. When you look at data from other one-stop centers, like in D.C. or Harlem, you'll see their infant-mortality rates have decreased too. I'm suspicious that this type of clinic—Harambee—could have affected the rate." (She points out that not all such one-stop clinics have these great rates, however, which warrants further investigation into what does and does not work in the one-stop-shopping plan for maternal care.) For his part, Schlenker doesn't think Harambee "is the whole answer by any means, but it is certainly part of the answer. It got agencies to work in a synergistic way, drew the community together, and made people feel valued."

Lorraine Lathen of the University of Wisconsin has been canvassing the women of Dane County for answers. "We're finding some non-health-related factors that actually seem to influence outcome," she says. Those factors involve a complex web of relationships between expectant parents and local medical care that Soglin (who is also investigating the Dane County results) describes simply as "access plus trust." Trust, in the words of many of the young black mothers Lathen interviewed, seems to translate into the absence of racial stereotypes. (The women, some of whom have lost babies, talk of feeling prejudged when they lived in other parts of the state—one mother says it might surprise people that black women "do have families," and that the father of her child, for example, is her husband, not "my baby daddy.") The more a woman feels like she's being cared for, says Ferre, the greater the lines of communication, and the more likely she'll want to go back for further appointments.

Other factors may have certainly played a role—including a system of devoted home nurses who work under Schlenker. There are some 60 public-health nurses in the county; at any given time a dozen are on duty for home visits before and after birth for high-risk pregnancies. But no one is exactly sure yet what did the trick. What they do know is that by 1996, says Schlenker, premature-birth rates in the area started to go down, and by 2002 the infant-mortality rate began to drop. Looking at a chart, Schlenker says, "The past six years have been a straight-down precipitous drop, like falling off a cliff." He still can't believe his own data. "It's shocking, for two reasons. One, you almost never see a graph like that in medicine. The second shock is that it's **good news**." When Schlenker flew to Atlanta last February to present his findings, the CDC reserved 70 conference dial-in lines for state and local health officials. But they filled up so quickly that the specialists had to double- and triple-up in their offices.

Other one-stop centers in the U.S. that aim to involve the community and focus on the maternal health of black women have seen significant successes. Washington, D.C.'s Developing Families Birth Center (DFBC), run by 82-year-old MacArthur fellow and nurse-midwife Ruth Lubic, was founded in an old Safeway and includes everything from birthing rooms to nutrition classes. It has reported that while D.C.-wide data for preterm births among African-Americans in 2006 was 15.6 percent, the women who received care from DFBC had rates closer to 5 percent. "We treat people like fellow human beings," says Lubic, whose staff follows the theory that infant mortality is not a medical condition, but a social condition with medical consequences. That same philosophy can be found in New York's Harlem, where Mario Drummonds, executive director of the Northern Manhattan Perinatal Partnership, has overseen one-stop health and career programs targeting high-risk areas. His program has seen infant-mortality rates in the area plummet from 27.7 infant deaths per 1,000 live births in 1990 to a figure now hovering closer to eight.

Ferre has been assigned by the CDC as an adviser to the Dane County investigation, which will take two more years to complete. Meanwhile, centers like Harambee and DFBC are facing budget pressures in the tough economic climate. "Right as we are learning the results of innovative techniques, we have the recession, and these places are starting to lose funding," worries Ferre. But the effort to unlock the wonderful mystery of Dane County continues. Lathen says, "We don't know yet what has happened in Dane, but whatever it is, we want it to be replicated."

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