

# Ensuring Healthy Birth Outcomes

By Jon Davis

*The chair of the Midwestern Legislative Conference, Iowa state Sen. Janet Petersen, is putting a spotlight on healthy birth outcomes in the Midwest, from home visit and safe sleep programs to (sadly, when necessary) child and/or infant death review teams. States can do plenty to help newborns and their parents get a good start to life.*

State policymakers are increasingly realizing that the foundation of successful early childhood development is a healthy birth outcome for parents and their newborns.

The phrase “healthy birth outcome” can encompass numerous initiatives—safe-sleep education to reduce incidents of Sudden Infant Death Syndrome, mentoring and support for new and expectant mothers to combat child and infant mortality, and even the somber task of collecting child and infant mortality data.

It can also include public education campaigns to raise awareness of not-always-apparent health hazards, such as congenital cytomegalovirus, and to reduce stress on new parents and parents-to-be.

This year, Iowa state Sen. Janet Petersen, chair of the Midwestern Legislative Conference, or MLC, aims to put a yearlong spotlight on the role of states in ensuring healthy birth outcomes. That issue is her MLC chair’s initiative for 2017. CSG Midwest provides staff support for the MLC, a nonpartisan association of all legislators from 11 states and four affiliate provinces.

“I’m hoping for dialogue where legislators can learn from each other and get some best practices going,” Petersen said. “So that if you’re having a baby in Iowa or in North Dakota or wherever you live, you don’t have to worry that you won’t have a better chance for your baby’s survival in one state or another because we don’t share best practices.”

It’s a personal mission for Petersen. In 2003, she had a stillborn daughter, due to a true knot in her umbilical cord—a rare occurrence, according to her doctor. But when Petersen learned soon thereafter that (at the time) 1 in 160 pregnancies were ending in stillbirths, she decided to turn personal tragedy into motivation.

“It’s not an issue I’m willing to give up on, and if one should experience the heart-wrenching loss of delivering a full-term baby who was otherwise healthy but has died, you just wouldn’t wish that on anyone,” she said. “So I think I carry (my daughter) Grace in my heart as a way to try and prevent other

families from experiencing the heartache of having something go wrong with their pregnancy.”

She led an effort to make Iowa the first state to expand its birth-defects registry to include stillbirths. And in 2009, she and four other Iowa women founded Healthy Birth Day, a nonprofit that launched the “Count the Kicks” public awareness campaign encouraging expectant mothers to monitor their baby’s in utero kicks, because decreased fetal movement could indicate a problem.

Since the start of Healthy Birth Day, Iowa has gone from 33rd worst in the country for the number of stillbirths to third-best.

## Simple Steps to Big Gains

Another unheralded threat to fetal health that concerns Petersen is congenital cytomegalovirus, or CMV. Per the U.S. Centers for Disease Control and Prevention, CMV is a common virus that infects almost a third of children by the time they hit 5 years of age, and half of adults by age 40. It’s transmitted via direct contact with bodily fluids including saliva, breast milk and urine.

Most people show no symptoms, but it can hurt people with weakened immune systems or babies in utero, who can get it via the mother’s blood passing through the placenta. For those babies, congenital CMV can cause premature births or even a pregnancy loss, as well as lung, liver and spleen problems, seizures or small head or birth sizes.

So, Peterson asks, why not educate pregnant women now about CMV and simple techniques to prevent its transmission, to prevent higher health costs later?

“Very simple things, like when a baby drops a pacifier, don’t just pick it up and wipe it off and put it back in your baby’s mouth because she may have just picked up the virus,” she said. “Don’t kiss your child on the mouth—little things like that. Be very vigilant in how you wash your hands. And screen the baby’s blood to see if they have CMV.”

“If we could help prevent the spread of CMV, we could greatly reduce the number of babies born with health or clinical disabilities including hearing loss.”

### Home Visits Help Expectant Parents

States—on their own and with assistance from the federal government—fund home visit programs to help achieve healthy birth outcomes.

Most, like Kansas' Maternal and Child Health Program's Healthy Start Home Visitor Services, are offered to all pregnant women and families with a baby less than 1 year of age. South Dakota's Bright Start program, however, focuses on first-time mothers with limited economic, social or health resources from pregnancy until the child is 3 years old. The Nebraska Maternal, Infant and Early Childhood Visiting Program is available to pregnant women and families with children up to age 5.

Illinois has programs aimed at specific groups. For example:

- Family Case Management, which provides income-eligible clients access to medical care, pediatric health education and counseling, developmental screening, and referrals to other community services as needed; and
- Better Birth Outcomes, an intensive prenatal case management program in communities with higher-than-average Medicaid costs associated with poor birth outcomes and higher-than-average numbers of women delivering premature infants.

Michigan has four targeted programs:

- The Maternal Infant Health Program, which is for Medicaid-eligible pregnant women and infants and includes services from a licensed social worker and a registered nurse, as well as mental health specialists and dietitians in some instances;
- The Nurse Family Partnership, in which expectant “vulnerable” mothers are partnered early in their pregnancy with a registered nurse and receive ongoing nurse visits through the child's second birthday;
- Parents as Teachers, in which trained professionals go into the homes during the child's early years to help a family have their child “develop optimally” during these crucial years of life; and
- Infant Mental Health, which focuses on social, emotional, behavioral and cognitive development.

Nebraska's general fund budget includes \$1.1 million in each fiscal year for “evidence-based early intervention home visitation programs.” The “evidence-based” language was added in 2014. Likewise for Kansas' Senator Stan Clark Pregnancy Maintenance Initiative, which awards grants to not-for-profit organizations that provide services for women that enable them to carry their pregnancies to term.

### Impact, Implications of the ACA

The Affordable Care Act, or ACA, mandated health insurance coverage of maternity care for all plans created since the law was signed by President Barack Obama. “Grandfathered” plans, those in existence before the ACA was signed into law, don't necessarily have the same coverage.

Before the ACA, only 12 percent of health insurance policies nationwide included maternity coverage, according to the National Women's Law Center. In the Midwest, only Illinois, Michigan and Minnesota required maternity coverage, or the offer of coverage, according to a Kaiser Family Foundation report—Illinois required HMOs to cover it or offer coverage in individual markets; Michigan and Minnesota required coverage or the offer in small-group markets.

According to the *HealthCare.gov* website, under the ACA, all health insurance plans must cover outpatient services including pre- and post-natal doctor visits, medications, lab studies and gestational diabetes screenings; inpatient services including hospitalization and physician fees; and newborn baby care and lactation consulting, including breast pump rentals.

Additionally, all plans must let women see an obstetrician/gynecologist without referral from another doctor and cover the following:

- For pregnant women: Folic acid supplements and screenings for Rh incompatibility, iron deficiency anemia and various infections.
- For newborns and young children: Immunizations, vision and hearing screenings, iron supplements for those at risk of anemia, oral health risk assessments, tuberculosis testing, and screenings for various infections and diseases, autism and lead poisoning.

### When the Worst Happens

Every child or infant death is a personal tragedy. But if patterns can be found in those deaths that can be remedied by public policy or education campaigns, then that information can be used to fix problems, whether they are local environmental conditions or gaps in medical and/or public health systems.

All states have established child death review, or CDR, programs to examine deaths of children age 18 and younger; 26 states—including Illinois, Indiana, Michigan, Nebraska, South Dakota and Wisconsin—also have fetal and infant mortality review, or FIMR, programs to track data specific to

## Baby Boxes

Ensuring newborns have a safe place to sleep after leaving the hospital is one way to help them get a healthy start in life and help parents avoid the tragedy of Sudden Unexpected Infant Death Syndrome.

On March 10, 2017, Ohio became the first Midwestern state (and the second overall, behind New Jersey) to begin providing that safe place by offering “baby boxes” to all new parents.

Baby boxes are a starter kit—a sturdy cardboard box filled with items a new baby needs, which can include clothing, diapers, food, bathing supplies, medical and parenting information, children’s books, or anything else the boxes’ providers care to add, along with a blanket and firm mattress that, once emptied, is a ready-to-go bed for newborns.

The idea originated in Finland in the late 1930s and was made universal there in 1949. Now the boxes are provided to all expecting mothers, but to get one, they must get a prenatal exam during the first four months of pregnancy. Baby boxes are credited with helping drop Finland’s infant mortality rate from 65 deaths per 1,000 births to 2.52 per 1,000 births.

New Jersey and Ohio offer them to parents-to-be, who must first complete an online education course at [babyboxuniversity.com](http://babyboxuniversity.com).

The program isn’t about the boxes *per se* but about education for new and first-time parents, said Dr. Kathryn McCans, chair of New Jersey’s Child Fatality and Near Fatality Review Board, which is tasked with identifying causes of deaths

and near-deaths in infants and children, their relations to governmental support systems, and ways to prevent them.

McCans said the idea to start a universal baby box program in New Jersey came from hearing about a 2016 Temple University Hospital pilot project in Philadelphia. A member of the review board’s Sudden Unexpected Infant Death Subcommittee brought it to the full board’s attention, and “that story got people thinking,” she said.

The program quickly became a public-private partnership of sorts: In November 2016, the Los Angeles-based Baby Box Co. told the board that with seed money, it could find funding to take universal baby box distribution statewide for 2017. The board then decided to tap \$40,000 from a safe sleep grant it had gotten from the Centers for Disease Control and Prevention to get started.

“Ideally, every baby born in New Jersey this year [105,000 births, based on historic data] would get their own box,” McCans said. “If we see a downturn [in SUIDS fatalities], I’ll consider it a success.”

Jennifer Clary, CEO of the Baby Box Co., said more than 12,000 people in New Jersey have completed the online education course since the program launched there on Jan. 25, 2017.

continued on next page

perinatal babies and infants under the age of 1, according to the National Center for Fatality Review and Prevention.

CDR and FIMR teams identify the causes of and ways to prevent such fatalities, improve communication between relevant state and local agencies and the medical community, improve agencies’ responses to child deaths, and provide information for policy-makers to consider legislation for mitigating the number of such deaths, according to the national center.

While most CDR programs are state-level, most FIMR programs are local, said Rosemary Fournier, the center’s FIMR director.

Only Michigan, Indiana, Ohio and Wisconsin provide state-level coordination or financial and/or technical support, including training. At a minimum, states should help facilitate regular meetings of local teams to exchange data and ideas, she said.

“It’s a really great surveillance system. It is core public health surveillance,” Fournier said.

## Baby Boxes, continued from previous page

About 30 states, including some in the Midwest, have inquired about launching similar programs, Clary said. The company is also running a similar program in Canada, in all provinces except Manitoba and Saskatchewan.

The company works with local hospitals and health care providers to produce 30-second to two-minute informational videos for the Baby Box University website. Expectant or new parents log in and get a syllabus tailored to their location, with videos featuring local experts (so someone in Cincinnati will see different videos than someone in Cleveland; urban parents will see different videos than rural parents).

Upon completing the program, parents get a certificate they can use to get a baby box at a designated pickup site or have it delivered directly to their home. In New Jersey, so far, it's about 50-50 between pickups and deliveries, Clary said.

Part of the program's success, she added, is that Baby Box University is a platform designed to reach millennial parents who primarily use cell phones or tablets to get information; anyone can access it from any browser-equipped platform.

In Wisconsin, the Children's Health Alliance of Wisconsin is taking a more targeted approach with a statewide pilot project launched in 2016 to put baby boxes, which they call "newborn nests," in homes. Trained volunteers provide the educational component, paired with home visits to help parents pick a location for the "nest," and ensure sleep safety. Follow-up visits are paid two weeks and two months after nest placement for evaluation.

Although slower than a statewide, universal program, project coordinator Amanda Bagin says the Children's Health Alliance prefers its approach because the efficacy and safety of the boxes and education can be better understood as the program grows.

There's not yet a lot of solid evidence about baby boxes in the United States and "if we can evaluate the program as it goes, we can provide that evidence," she said.

Partly because the volunteer training had to be done first, only 25 to 30 nests have been distributed since the summer of 2016, Bagin said. At least five local health departments are now getting the training for their own staffs so the program should grow faster through 2017, she added.

In Alberta, the nexus of parental education and baby boxes is also the focus of a province-wide study led by Karen Benzies, a nursing professor and associate dean of research at the University of Calgary, examining how supporting first-time mothers can help children get off to a better start.

A total of 563 mothers who were about six to eight months along in their pregnancies, and their "mentors" (a friend or family member) were recruited from late October 2015 through 2016. Questionnaires were given at the start, two months into the study and six months into the study. The study concludes in June, with results to be announced at end of July.

While baby boxes are part of Benzies' study, project coordinator Melody Loewen said the focus is on parenting mentoring and education—i.e., where to find resources and help.

"Yeah, you need a safe sleeping surface, but it's much more than that. It's the education and mentoring, too," Loewen said.

Clary of the Baby Box Co. said evidence from Finland shows the boxes have also reduced rates of post-partum depression and even child abuse, and her company will look over time to see if that result is duplicated here.

"There's very little bad you can say about helping keep babies safe," she said. "It's less political and more emotional. It's something we can all agree upon. Every parent deserves support."

Over time, the work of these state and local research teams has led to legislative action, including graduated driver's-license laws, bicycle helmet and all-terrain vehicle safety rules, and improved death-investigation protocols. Research has also informed efforts to expand home visitation and safe-sleep programs, improve mandatory reporting laws and training requirements regarding child abuse, and pass "Safe Haven" laws, which allow parents to leave newborn infants in designated safe places.

Minnesota may soon join these states. In 2015, its Maternal & Child Health Advisory Task Force released part one of its Infant Mortality Reduction Plan for Minnesota. Among its recommendations: assuring "a comprehensive statewide system that monitors infant mortality."

---

**About the Author**

**Jon Davis** is a policy analyst and assistant editor in The Council of State Governments' Midwest regional office. A former newspaper reporter who covered state and local governments in Illinois, he also provides staff support to the Midwest Interstate Passenger Rail Commission.