Perinatal Care Matters

A Publication of the Regional Perinatal Programs of California *July, 2007*

REGION 1
North Coast Perinatal Access System
415/ 476-3868

REGION 2
No. California Perinatal Outreach Program
916/ 733-1750

REGION 3
East Bay Regional Perinatal Program
510/ 204-3937

REGION 4
MCCPOP.
650/ 723-5763

REGION 5
San Joaquin/Sierra Regional Perinatal Program
559/ 221-6315

REGION 6.1
Perinatal Outreach Education Program
562/ 595-6459

REGION 6.2
South Bay Perinatal Access Project
310/ 222-3651

REGION 6.3-6.6
PAC/LAC
818/ 788-6850

REGION 6.7
Community Perinatal Net.
562/ 945-6484

REGION 7
Inland Counties Regional Perinatal Program
909/ 558-3970

REGION 8
Orange County Regional Perinatal Program
714/ 456-6706

REGION 9
San Diego/Imperial Regional Perinatal System
858/ 536-5090

REGION 10
Northern Kaiser
510/ 987-3430

REGION 11
Southern Kaiser
626/ 405-6052

HEALTHY PEOPLE 2010: MATERNAL AND CHILD HEALTH MIDCOURSE REVIEW

The well-being of mothers, infants, and children is an important public health measure because it predicts the health of the next generation. The goal of Healthy People 2010 is to improve the health and well-being of women, infants, children, and families in the United States.

The objectives of Healthy People 2010 address a wide range of conditions related to the quality of life for mothers and their children. Many of these conditions disproportionately affect select racial and ethnic populations in the United States.

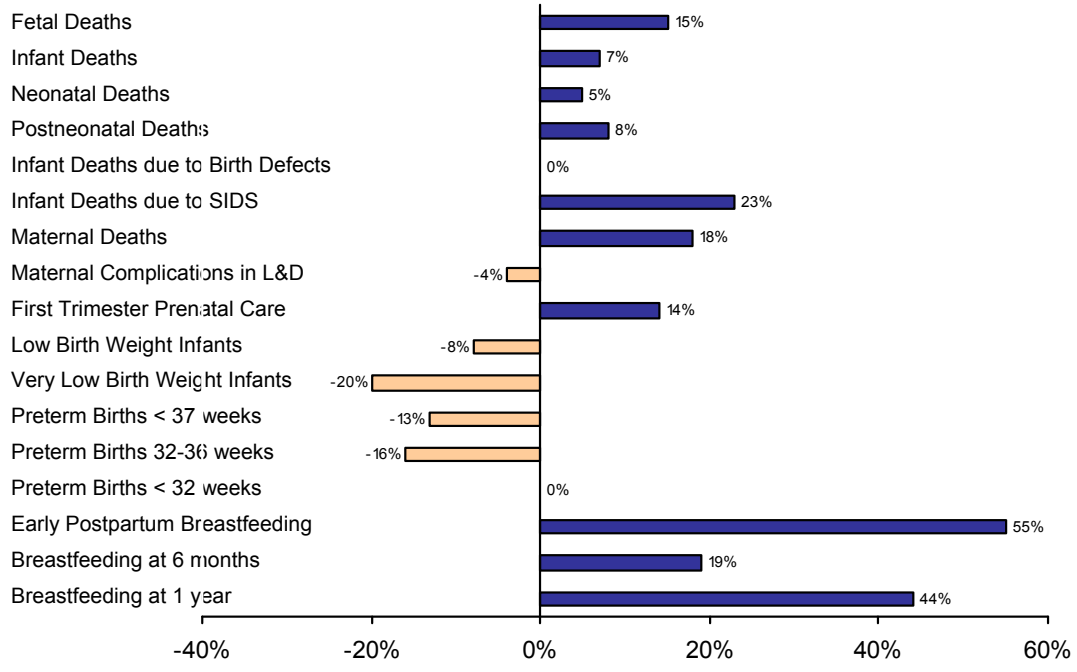
At the midcourse review, progress had been made toward achieving many of the Healthy People 2010 health objectives, most notably reductions in Sudden Infant Death Syndrome (SIDS) by 23%, increases in all categories of breastfeeding and access to prenatal care in the first trimester.

Although significant progress has been made in these areas, rates of prematurity and low birth weight have worsened over the same period. The graph below demonstrates the current state of selected targets. For more data visit http://wonder.cdc.gov/data2010

Objectives and 2010 Targets

- Fetal Death at 20 or more weeks of gestation - 4.1/1,000 Live Births plus Fetal Deaths
- Infant Deaths (within 1 year of birth) - 4.5/1,000 Live Births (LB)
- Neonatal Deaths (in the first 28 days of life) - 2.9/1,000 LB
- Postneonatal Deaths (28 days to 1 year) - 1.2/1,000 LB
- Infant Deaths due to Birth Defects - 0.7/1,000 LB
- Infant Deaths due to SIDS - 0.23/1,000 LB
- Maternal Deaths - 4.3/100,000 LB
- Maternal Complications in Labor & Delivery - 24/100 deliveries
- Prenatal Care in the First Trimester - 90% of LB
- Low Birth Weight Deliveries - 5.0% of LB
- Preterm Births
  - < 37 Weeks Gestation – 7.6% of Live Births
  - 32-36 Weeks Gestation – 6.4% of Live Births
  - <32 Weeks Gestation – 1.1% of Live Births
- Breastfeeding
  - Early Postpartum Period – 75%
  - At 6 months – 50%
  - At 1 year – 25%

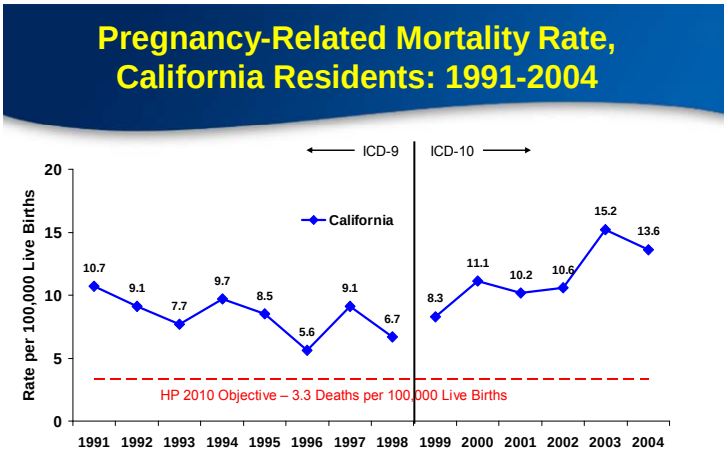
Midcourse Progress for Selected MICH Objectives, Reported 2007 (California)
Percent of Targeted Change Achieved



CALIFORNIA STATE SPONSORED PREGNANCY ASSOCIATED MORTALITY REVIEW

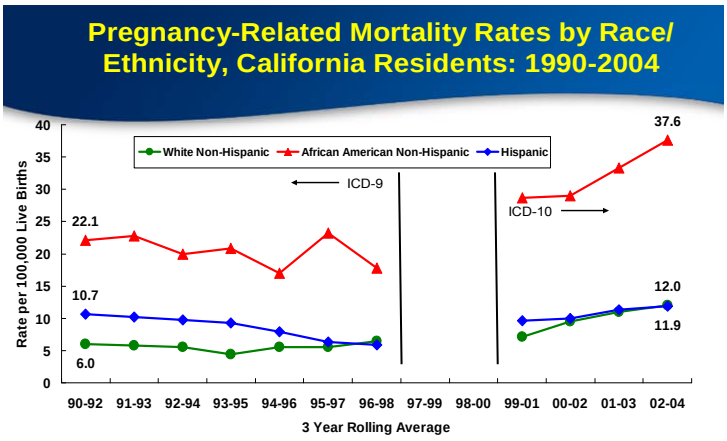
In 1915, the maternal mortality rate was 607.9 deaths per 100,000 live births in the United States. By 2003, the maternal mortality rate had declined to 12.1 deaths per 100,000 live births in the United States. Despite this tremendous overall improvement, maternal mortality continues to be a significant public health issue and commands an enormous amount of attention.

Pregnancy-Related Maternal Mortality rates in the state of California have increased and no one is sure why. Prior to 2000 the rates had been around 9 per 100,000 live births, which is consistent with the rates of most other states. In 2000 the rate climbed to 11.1 per 100,000 and the rate climbed even higher in 2003 and 2004 (see Graph 1 below).



SOURCE: State of California, Department of Health Services, California Birth and Death Statistical Master Files, 1991-2004. Maternal mortality (deaths ≤ 42 days postpartum) calculated 1991-1998 using ICD-9 classification. Pregnancy-related mortality (deaths ≤ 365 days postpartum) calculated beginning 1999 using ICD-10 classification. HP2010 Objective is for maternal mortality. Produced by California Department of Health Services, Maternal, Child and Adolescent Health/Office of Family Planning Branch, March 2006.

All race categories showed significant increases in pregnancy-related mortality rates but note (graph 2) that, the rate for African American mothers is three times higher. Maternal Mortality has the highest racial disparity of all public health indicators.



SOURCE: State of California, Department of Health Services, California Birth and Death Statistical Master Files, 1990-2004. Maternal mortality (deaths ≤ 42 days postpartum) calculated 1990-1998 using ICD-9 classification. Pregnancy-related mortality (deaths ≤ 365 days postpartum) calculated beginning 1999 using ICD-10 classification. Maternal single race code used 1990-1999; multirace code used beginning 2000. Produced by California Department of Health Services, Maternal, Child and Adolescent Health/Office of Family Planning Branch, March 2006.

On February 2, 2007, Elliott Main, MD, chaired the first state-wide Pregnancy Associated Mortality Review (PAMR) Committee that was formed under the direction of Susann Steinberg, MD of the Maternal, Child and Adolescent Health/Office of Family Planning Branch, California Department of Public Health. The need for a state-wide review of pregnancy associated deaths was identified by Dr. Steinberg as a high priority under Title V. The linkage of the review process to the California Maternal Quality Care Collaborative (CMQCC) is a unique model that will serve as a direct link between review and action, and has the potential to benefit pregnant women and their families nationally and internationally.

PAMR Clinical Committee Members (others will be added as the year progresses)

- Elliott Main, MD, Chair, CMQCC
- Debra Bingham, MS, RN, CMQCC
- D. Lisa Bollman, MS, RN, RPPC
- Maurice Druzin, MD, Stanford
- Dodi Gauthier, MEd, RN, AWHONN
- Katherine Gregory, MD, MPH, ACOG
- Kim Gregory, MD, MPH, UCLA/Cedars Sinai
- Thomas Kelly, MD, UC San Diego
- Barbara Murphy, MS, RN, CPQCC
- Carolina Reyes, MD, LA Best Babies
- Linda V. Walsh, CNM, PhD, UCSF
- Lynn Yonekura, MD, USC

Maternal, Child and Adolescent Health/Office of Family Planning Branch

- Susann Steinberg, MD, Chief
- Shabbir Ahmed, DVM, MS, PhD
- Amy Godecker, PhD
- Emmett Gonzalez, MD
- Kate Marie, MPA
- Sue Holtby, MPH, Public Health Institute
- Christy McCain, MPH, Public Health Institute

The first year of the committee is a pilot year where the review process is being developed and refined. The reviews will continue through other years and our aim is that they become an integral part of California maternal quality improvement activities. The case reviews are done from a systems approach to identify patient, community, health facility, and/or professional factors that may have contributed toward these deaths.

Each maternal death is truly a tragedy for everyone involved. We believe that one way to honor the lives of the women who have died and the teams who worked so hard to prevent their deaths is to carefully analyze each story in order to identify opportunities for improvement. CMQCC is the organization that will develop strategies to implement change for all California hospitals through a data-driven, quality improvement approach.

Submitted by: Debra Bingham, MS, RN, CMQCC

Supported in part, by grants from the State of California, Department of Public Health: Maternal, Child & Adolescent Health Branch

TRENDS IN INFANT MORTALITY

The overall U.S. infant mortality rate has declined by 10 percent since 1995, when the rate was 7.57 per 1,000 live births. Declining slightly in 2004 to the lowest level on record, the infant mortality rate was 6.78 deaths per 1,000 live births in 2004 compared to 6.84 in 2003. However, the rate for babies born to black mothers was more than double that of whites.

Non-Hispanic black women had the highest infant mortality rate in the United States in 2004 -- 13.60 per 1,000 live births, compared to 5.66 per 1,000 births among non-Hispanic white women. Women of Cuban ethnicity in the United States had the lowest infant mortality rate -- 4.55 per 1,000 live births, according to the report by the U.S. Centers for Disease Control and Prevention.

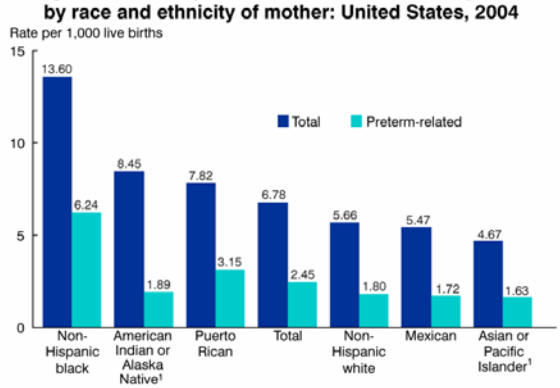
Mortality rates were higher for infants who were born in multiple births or whose mothers were unmarried, the report said. Boys were more likely to die by age 1 than girls, as were infants born prematurely or with a low birth weight.

Trends in Preterm-Related Infant Mortality by Race/Ethnicity: United States, 1999-2004, found that in 2004, 36.1 percent of all infant deaths in the United States were due to preterm-related causes, an increase from 34.5 percent of all infant deaths in 1999.

Nearly half (46 percent) of infant deaths to non-Hispanic black women and 40 percent of infant deaths to Puerto Rican women were due to preterm-related causes. The percentage was somewhat lower for other race/ethnic groups.

Preterm-related infant mortality rates were more than three times higher for non-Hispanic black (6.24) than for non-Hispanic white (1.80) mothers. The preterm-related infant mortality rate for Puerto Rican (3.15) mothers was 75 percent higher than for non-Hispanic white mothers.

Figure. Total and preterm-related infant mortality rates by race and ethnicity of mother: United States, 2004



NOTE: Preterm-related deaths are those where the infant was born preterm (before 37 completed weeks of gestation) with underlying cause of death assigned to one of the following *International Classification of Diseases, Tenth Revision* categories: K550, P000, P010, P011, P015, P020, P021, P027, P070–P073, P102, P220–P229, P250–279, P280, P281, P360–P369, P520–P523, P77."
¹ Includes persons of Hispanic and non-Hispanic origin.
SOURCE: CDC/NCHS, National Vital Statistics System.

MacDorman MF, Callaghan WM, Mathews TJ, Hoyert DL, Kochaneck KD. Trends in Preterm-Related Infant Mortality by Race and Ethnicity: Unites States, 1999-2004. Hyattsville, Maryland: National Center for Health Statistics. 2007.

PRETERM PREVENTION WITH 17P COULD CUT COSTS

According to a report released in the March 2007 issue of the American Journal of Obstetrics and Gynecology the use of 17 alpha-hydroxyprogesterone caproate (17P) to treat expectant mothers with a prior spontaneous preterm birth, could help reduce the recurrence of such births and lead to substantial savings in medical costs.

To date, 17P for the prevention of preterm birth is not covered by many insurers according to one of the authors, Dr. Jennifer L. Bailit. "As a physician trying to help women have healthy babies, this lack of coverage is frustrating," she said. "We wanted to present a financial argument for why this drug should be covered by insurers." To do so, Dr. Bailit of MetroHealth Medical Center and Dr. Mark E. Votruba of Case Western Reserve University, Cleveland examined data from 6 trials estimating medical costs and a further 7 randomized trials which covering outcomes associated with use of 17P.

A single dose of 17P cost about $12, the researchers note, and a standard 17P treatment regimen consists of 21 injections typically administered by a registered nurse. Using this model along with data from the studies, the team estimated that the approach would save about $3800 in initial neonatal hospitalization costs. Moreover, estimated savings over a longer time period would be considerably greater. The reduction in expected medical costs per treated infant through the age of 15 years would be $7500. "Our study suggests that insurers will save substantially in both the short and long term by covering 17P for the prevention of preterm birth," Dr. Bailit concluded. Am J Obstet Gynecol 2007;196:219.

SMOKING AND MENTAL DISORDERS IN PREGNANT WOMEN

New research has identified an association between mental health disorders and nicotine dependence among pregnant women in the US. , This correlates to what has been reported in the general population. The presence of these mental disorders in nicotine addicted pregnant women may make quitting smoking more difficult according to a study published in the April 2007 issue of Obstetrics and Gynecology.

The study included 1,516 pregnant women at least 18 years old who took part in the 2001-2002 National Epidemiologic Survey of Alcohol and Related Conditions, a survey administered by the National Institute on Alcohol Abuse and Alcoholism (NIAAA). Researchers found that 21.7 percent of the pregnant women in the study used cigarettes and among those women, over half were nicotine dependent. These results indicate that in the US an estimated 12.4 percent of pregnant women are addicted to cigarettes. Women with nicotine dependence were more likely to meet criteria for at least one mental disorder (dysthymia - a chronic depressive condition, major depressive and panic disorders) compared to those that did not use cigarettes during pregnancy.

Encouraging women to quit smoking before they become pregnant is important to the health of the fetus, in addition to improving the health of the mother. Pregnant women who smoke cigarettes run an increased risk of having infants with low birth weight and their children face an increased risk for learning and behavioral problems.

CALIFORNIA PUBLIC POLICY

SENATE BILLS TO WATCH

SB 22: Migden – Breastfeeding

This bill would require training for certain hospital staff on policies that promote exclusive breastfeeding, would expand WIC breastfeeding peer counseling programs, and would streamline existing Medi-Cal procedures to improve access to lactation supports and breast pumps.

SB 137:Torlakson – Children's Health, Medical Treatment

This bill would change CCS eligibility to include persons in a family with an annual or monthly income ≤ 400% of the federal poverty level.

SB 164: Migden – Prenatal Screening

This bill would modify the existing Birth Defects Monitoring Program and charge investigators who use pregnancy blood for research purposes for related costs

SB 468: Padilla – Shaken Baby Syndrome

This bill would revise existing law regarding the provision of instructional materials to parents or guardians of newborns upon discharge from a health facility, and would establish the voluntary Shaken Baby Syndrome Education Pilot Program.

SB 775: Ridley-Thomas – Childhood Lead Poisoning

This bill would require DHS to distribute information on lead to all health care providers that administer perinatal care services and would require providers to give this information to pregnant women.

SB 850: Maldanado – Vital Statistics: Certificate of Still Birth

This bill would enact the Missing Angels Act, requiring the local registrar of births and deaths of the county in which a fetal death (≥ 24 weeks gestation) is registered, to issue, upon request, to the parent, a certificate of birth resulting in stillbirth.

ASSEMBLY BILLS TO WATCH

AB 13: Laird – Maternal Dental Health

This bill would request the University of California to host a conference for multidisciplinary experts and community leaders to develop a consensus on best practices or standards of care for the dental treatment of pregnant women.

AB 34: Portantino – Umbilical Cord Blood Banking, Pilot

This bill would require the State Department of Public Health to develop a pilot project to diversify the umbilical cord blood supply collected in public blood banks. *Related Bill: AB 40*

AB 81: Torrico – Child Protection, Safe Surrender

This bill would expand the scope of the Safely Surrendered Baby Law to apply to children who are 30 days old or younger, would designate additional safe-surrender sites, and would allocate $5 million toward a statewide awareness campaign.

For a detailed summary of these bills and other important Maternal and Child Health legislation, please visit http://www.paclac.org/policy/policyLegislative.htm.

SPOTLIGHT ON…ASSEMBLY BILL 741

AB 741: Bass - Infant Mortality: Inter-pregnancy Care

Given the Maternal and Child Health community's growing focus on preconception and inter-conception care, this issue's featured bill is AB 741. This bill recognizes the linkages between a woman's health status and her risk of preterm delivery and acknowledges the role that very low birth weight plays in racial disparity in infant mortality.

This bill would require the State Department of Public Health to develop a 3-year pilot program offering inter-pregnancy care to African American women who voluntarily enroll in the program and meet specified criteria, in an effort to improve child spacing and adverse pregnancy outcomes for women who have had a previous very low birth weight delivery. The bill defines inter-pregnancy care as the "package of health care and ancillary services provided to a woman and her family from the birth of one child to the birth of her next child."

The program would commence March 1, 2008, would operate in two community-based organizations or service providers located in Los Angeles and Oakland, and would provide specified services to eligible participants, including primary health care and social services. This bill would also require the community-based organizations or service providers to contract with an external evaluator to evaluate the effectiveness of the program using specified criteria, and require the department, by March 1, 2011, to submit a report on the program's progress to the legislature.

To voice your opinion on this piece of legislation, please contact Assembly Member Karen Bass's office at (916) 319-2047 or contact your local legislator (to find out who your local representatives are you can visit http://www.assembly.ca.gov and click "Find My District")

LIFE-SAVING PATIENT SAFETY SOLUTIONS

The World Health Organization named the Joint Commission & Joint Commission International as its Collaborating Centre for Patient Safety Solutions in 2005. Joint Commission created this program by identifying widespread problems and challenges to safe care, identifying promising solutions, and vetting them through an extensive field review process that garnered feedback from health care providers, practitioners, and other experts from more than 100 countries. The nine focus issues include:

- Look-Alike, Sound-Alike Medication Names;
- Patient Identification;
- Communication During Patient Hand-Overs;
- Performance of Correct Procedures t Correct Body Site;
- Control of Concentrated Electrolyte Solutions;
- Assuring Medication Accuracy at Transitions in Care;
- Avoiding Catheter and Tubing Mis-Connections;
- Single Use of Injection Devices; and
- Improved Hand-Hygiene to Prevent Care-Associated Infection.

For more information on Patient Safety Solutions visit www.jointcommissioninternational.org/solutions.