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Fetal-Infant Mortality Review
&
Child Death Review Team

Recommendations Report
2009 and 2010

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Humboldt County, CA
Fetal-Infant Mortality Review &
Child Death Review Team

Recommendations Report 2009-2010

Table of Contents

Executive Summary

"Children do well when their families do well, and families do better when they live in supportive communities."
Annie Casey Foundation

This report presents recommendations and findings from the review of 34 fetal, infant, child and adolescent deaths (through age 17). The cases reviewed during 2009-2010 included 23 fetal deaths, seven infant deaths, and four deaths to children age 1-17. Please note that the deaths reviewed in 2009-2010 may have occurred during or before this two-year period. The Team found:

- Maternal depression, which includes perinatal and postpartum depression, is increasingly identified in infant and child cases
- The sleeping environment of infants continues to be a contributing factor in "SIDS", "asphyxia" and "undetermined" infant deaths
- In three out of the four cases age 1-17, the case of death was suicide.

Team Accomplishments 2009-2010:

- The Perinatal and Postpartum Mood Disorder Task Force was convened in 2008 in response to findings that a high number of mothers reported perinatal depression at the time of delivery. The task force created a DVD on postpartum mood disorders featuring local professionals and women and families who had experienced perinatal depression to use for educational outreach.

- An evening workshop "Understanding SIDS and Infant Sleep-Related Deaths: Current Research" was held specifically for medical professionals and child care providers, and a day-long training "Understanding and Coping: SIDS and Infant Sleep-Related Deaths" was held for human service providers. The main speaker was the Deputy Director of the National SIDS and Infant Death Program Support Center in Baltimore, MD.

- Outreach and education on SIDS and a safe infant sleep environment continued with an educational spot playing at a local theatre for three months and a large poster placed on the back of two buses.

- Injury prevention continues to be addressed by the Health Education Division of the Public Health Branch which coordinates the Child Passenger Safety Program, Youth Driving Coalition, and Life Jacket Loaner Program.

It is also important to note that while fewer injury cases were reviewed during this reporting period than in previous years, unintentional injuries remain the leading cause of death in children, adolescents and young adults. Humboldt County has taken steps to address these preventable deaths with the formation of community coalitions who focus on motor vehicle and water safety.

The Youth Safe Driving Coalitions, facilitated by the Department of Health and Human Services and funded for four years by the Office of Traffic Safety, focused on motor vehicle safety for youth ages 15-24. The coalition was successful in offering activities and events that educated students, parents, and the community on safe driving prior to the end of funding in September 2011, and Humboldt County's motor vehicle death rates have decreased:

- Alcohol-involved fatal and injury collisions were reduced by 4 percent from 16.5 to 12.6 percent
- Overall collision rate for 16-20 year-old drivers decreased by 5.4 percent from 16.3 to 10.9 percent

Humboldt County

Fetal-Infant Mortality Review and Child Death Review Team

The Composition and Purpose of the Team

The team is comprised of professionals representing diverse agencies that are involved with protecting and supporting families. There are approximately 25 members on the team representing the Department of Health and Human Services, coroner, law enforcement, hospitals, obstetricians and pediatricians in private practice, community-based organizations, emergency services, alcohol and other drug programs, childcare providers, and others. A multidisciplinary team approach is utilized because it provides the best, most complete process to review cases that may contain numerous complexities and multi-agency involvement.

The purpose of the team is to investigate, in depth, the causes of death to fetuses (20 weeks gestation or over 500 grams), infants, and children up through age 17 years in Humboldt County. The team focuses on social, health, economic and safety issues that affect families and how community resources and local service systems respond to their needs. While some factors that contribute to fetal and infant death may not be modifiable with the skills and resources currently available, there are many factors that can be addressed. Through a comprehensive, broad review of these deaths, we can better understand how and why children die and we can use our findings to take action that can prevent other deaths and improve the health and safety of our children.

Examples of Past Findings

The Humboldt County FIMR/CDR Team has released bi-annual reports since 1993. Recommendations and findings from those reports addressed a number of major areas including:

- Autopsy, death investigations, and cause of death determinations
- Decentralization of service delivery to underserved areas
- Sudden Infant Death Syndrome and safe infant sleep practices
- Infant health
- Late/inadequate prenatal care
- Perinatal substance abuse
- Perinatal and postpartum mood disorders
- Unintentional injuries, particularly motor vehicle and water safety

Historical Background

The California Fetal & Infant Mortality Review (FIMR) Program was created in 1991 using a Federal Title V block grant. Humboldt County became one of 11 counties to contract with the California Department of Health Services, Maternal and Child Health Branch to conduct a local FIMR program. Since that time additional programs have started and there are now approximately 16 FIMR projects and 56 Child Death Review teams in California. Humboldt and a few other small counties have chosen to combine FIMR activities with case review of older child deaths. The combined Humboldt County FIMR and Child Death Review Team (FIMR/CDR) began meeting monthly in 1992. Since the beginning of the program over 330 cases have been reviewed.

FIMR/CDRT Findings 2009 – 2010

Fetal and Infant Deaths

Fetal Deaths

Researchers say lifelong conditions of high stress and low support may contribute to poor nutrition and physical responses that put fetuses at risk.

When fetal death occurs after 20 weeks of pregnancy it is called "stillbirth." There are more than 25,000 stillbirths every year in the United States. Common causes include birth defects, placental problems, poor fetal growth, infections, chronic health problems of the mother, and umbilical accidents. Other, less common, causes of stillbirth include trauma (such as car accidents), postdate pregnancy (a pregnancy that lasts longer than 42 weeks), Rh disease (an incompatibility of the blood type of mother and baby), and lack of oxygen (asphyxia) during a difficult delivery.

In many cases there is no known cause, leaving many parents without answers to the reasons for these deaths.

23 fetal deaths were reviewed during 2009-2010:

- *The leading causes of fetal deaths in these cases were from cord accidents, placental abruption, and prematurity.*
- *Eight out of 23 (35 percent) mothers reported using tobacco.*
- *Sixteen of the women began care in the first trimester; four began care after the first trimester, and three women had no prenatal care.*
- *Six of the 23 cases had maternal toxicology tests at delivery. Two were negative, one was positive for marijuana, two were positive for methamphetamines and marijuana, and one was positive for antidepressants.*

Infant Deaths

Seven infant deaths were reviewed during 2009-2010:

The FIMR/CDR team reviewed five neonatal cases (babies up to 28 days old), and two postneonatal cases (babies 29 days old until their first birthday) during 2009-2010.

- *The leading cause of neonatal deaths was prematurity. One baby died from positional asphyxia.*
- *Of the two postneonatal deaths, one was attributed to SIDS and one was due to aspiration of a foreign body.*
- *Six of the seven women (86 percent) began prenatal care in the first trimester; one woman moved from outside of the area and there was no information about the pregnancy.*
- *Four of the seven (57 percent) of the mothers reported using tobacco.*
- *One mother was given a toxicology test and this was negative.*

Infant mortality refers to the number of infant deaths per 1,000 live births during the first year of life, and the infant mortality rate is considered one of the most important indicators by which the health of the entire population is gauged.

In 2009, the California infant mortality rate reached a record low of 4.9 infant deaths, while in Humboldt County our three-year average for 2008-2010 was 3.8. This is the lowest three-year average our area has experienced. California and Humboldt County have both met the new Healthy People 2020 infant mortality rate objective of 6.0.

Statistics from the National Healthy Start Association highlight some of the factors that play a role in infant mortality:

- Premature birth, low birth weight and shorter gestation periods account for more than 60 percent of U.S. infant deaths.
- Less than 2 percent of births — those of babies born before 32 weeks of pregnancy — account for more than half of the deaths.
- With 13.6 deaths, African Americans have the highest death rates among all ethnic and population groups. African-Americans are four times as likely to die as infants as compared to non-Hispanic white infants.
- Poverty, limited access to health care, stress, racism, poor prenatal care, lack of exercise, and poor diet and nutrition are factors that can contribute to negative pregnancy and birth outcomes, and subsequent high infant mortality rates.
- Researchers say lifelong conditions of high stress and low support may contribute to poor nutrition and physical responses that put fetuses at risk.

Team Recommendations

Fetal and Infant Deaths

A total of 30 cases of fetal and infant deaths were reviewed during 2009 and 2010. Concerns related to the areas of preconception and perinatal health, SIDS, and safe infant sleep environments. Risk factors and issues identified included maternal depression, a lack of grief support, inadequate translation services, social isolation, unintended pregnancies and short interconception periods, and limited services in outlying areas of the county. It was also noted that during pregnancy some women took medication that was not prescribed to them, while some stopped taking needed medication because of pregnancy concerns.

Preconception/Perinatal Health and Prenatal Care Issues

Actions taken:

- ✓ All major local pharmacies were contacted to discuss labeling. The pharmacies all confirmed that prescriptions are labeled when the drug is contraindicated for pregnancy. This includes prescriptions for males as women sometimes take their partners medication.
- ✓ To increase referrals of services that pregnant teens may be more comfortable with, Team members were provided information on all Family Resource Centers, along with referral information. The Perinatal Services Coordinator also maintains a strong relationship with Planned Parenthood and FRC's regarding local resources for these teens.
- ✓ Paso a Paso, a program that provides the Spanish-speaking population with prenatal education and parenting support, developed a brochure and poster for outreach purposes. These materials were provided to team members who assisted with distribution to local medical and community service providers.
- ✓ Beginning July 2009, the Public Health Branch initiated the Nurse Family Partnership home visiting program. This evidence-based program serves first-time mothers and their family, and provides home visits until the child turns age two.
- ✓ The Perinatal Services Coordinator ensured all three birthing hospitals had copies of toxicology screening policy on site.
- ✓ The Perinatal Services Coordinator provided the Team and all OB providers with the 800 number for the University of Illinois at Chicago consulting resource for providers on perinatal mood disorders. (Women often stop taking needed medication when they become pregnant and this may not always be necessary.)
- ✓ The Perinatal Services Coordinator provided information on preconception/interconception health at the Humboldt State University Wellness Fair, and made multiple presentations to Family Resource Centers, medicals offices, and Nurse Family Partnership staff. New parent kits with information on interconception care for women who had home births are now provided by PHB staff during birth registration.

- ✓ The Perinatal Services Coordinator reviewed completion of Newborn Risk Summary forms with all hospitals and improvement noted. Panel presentations including public health nursing and Child Welfare Services staff were conducted at two of the three birthing hospitals as well. The panel topics included the use of the Newborn Risk Summary Form to generate referrals for services.
- ✓ The Team reviewed data from the California Epidemiology Center (EPIC) website and noted that there were very few cases of pediatric choking from 2000-2008 in Humboldt County.
- ✓ To support counseling and grief support resources in Eastern Humboldt, a police chaplain program on the internet was contacted; this group provided an additional contact specific to tribal programs if local tribes want to pursue. The Department of Health and Human Services operates the MEV, formerly known as the Rural Outreach Services Enterprise (ROSE) van, that makes monthly visits to many outlying areas. Program staff were invited to a team meeting to discuss available services. This meeting gave the Team an opportunity to share case concerns regarding depression, grief and limited counseling resources for families in isolated areas.

Challenges:

- ✳ Providing services for at-risk pregnant women can be challenging due to late entry and inconsistent access to prenatal care. Intensive coordinated case management resources can be beneficial for this population. The Department of Health and Human Services now offers Nurse Family Partnership, an intensive home visiting program for first-time mothers who are Medi-Cal eligible. Public Health Nursing also provides home visiting services when referrals are made and families are accepting of services. It is also necessary to support a comprehensive referral system for at-risk families, and for service providers to maintain effective engagement strategies.
- ✳ Translation services for Spanish-speaking families are limited, especially during “medical emergencies”.

Reviews conducted from 2009-2010 show that one infant died from Sudden Infant Death Syndrome, and one from "positional asphyxia". The team recommended that the safe sleeping workgroup continue to conduct education on how to create a safe sleep environment with the following activities completed during this time frame.

Sudden Infant Death Syndrome

Actions taken:

- ✓ In 2010 the Department of Health and Human Services offered two trainings on SIDS for medical and child care providers, public health staff, community home visitors and others. Hanan Kallash, Deputy Director of the National Sudden and Unexpected Infant/Child Death and Pregnancy Loss Resource Center provided the core education on SIDS and education on creation of a safe sleep environment. A speaker from Hospice of Humboldt addressed the topic of grief, and an Emergency Medical Technician and safety expert covered the role of EMT's when responding to sudden unexpected infant death.

- ✓ created a video of an infant in a safe sleeping environment with information reinforced with voice over for view in a local movie theatre. Alternating months were chosen for highest possible attendance due to holidays and school breaks; approximately 75,000 individuals saw this ad.

- ✓ designed a large poster (see page 8) of a safe sleeping environment that was placed on two local county buses that traveled the longest distances within the county. This poster was displayed for six months.

In addition, past activities continued:

- The brochure **"All Babies Need a Safe Place to Sleep"** continues to be distributed via home visiting programs, hospitals, health care providers and children's retail shops.

- Created and distributed a one page flyer in English and Spanish showing an infant in a "safe sleep environment" with brief descriptive comments to hospitals, medical offices, and community-based organizations.

- Public Health Nurses continue to screen, educate, and provide families with "Snuggle Nests" as needed. Staff from other home visiting programs including United Indian Health Services, Northcoast Family Services, and K'IMA:W Medical Center also provide this education and distribute snuggle nests.

- Safe sleeping information is included in the "New Parent Kits" for the home birth community.

Challenges:

- ✳ Reaching the most at-risk families, including those with unstable housing, to educate about SIDS and a safe infant sleep environment continues to be challenging. We will focus our efforts to find and use innovative approaches.

Safe Infant Sleep Environment
Bus & Movie Theatre Campaign

All Babies Need a Safe Sleep Environment!

Baby sleeps on back!

Nothing in bed with baby.

Baby's face uncovered.

Do not overheat or overdress.

Firm mattress in a safety-approved crib covered by a fitted sheet.

No smoking around baby.

Use sleep clothing, such as a one-piece sleeper, instead of a blanket.

Issues Related to Fetal and Infant Mortality

"Infants born at the lowest birthweights and gestation ages have a large impact on the nation's overall infant mortality rate."

Despite advances in medical care, poor birth outcomes continue to be a focus. On a national level each year, 12 percent of babies are born premature, 8 percent are born with low birth weight, and 3 percent have major birth defects. Of women giving birth, 31 percent experience pregnancy complications. Risks associated with poor pregnancy outcomes remain prevalent among women of reproductive age. For example, 11 percent of women smoke during pregnancy, and 10 percent consume alcohol. Of women who could get pregnant, 69 percent do not take folic acid supplements, 31percent are obese, and about 3 percent take prescription or over the counter drugs that are known to cause malformations in the development of an embryo or fetus. In addition, about 4 percent of women have preexisting medical conditions, such as diabetes, that can negatively impact pregnancy if unmanaged. *All of these factors can be addressed with proper health interventions.*

Infant mortality rates vary with maternal age; the highest death rates per 1,000 live births are for infants of teenage mothers (10.28) and mothers aged 40 years and over (7.85). The lowest rates are for infants of mothers in their late twenties and early thirties.

Prenatal Care – Babies born to mothers who received no prenatal care are three times more likely to be born at low birth weight, and five times more likely to die, than those whose mothers received prenatal care. The goal of prenatal care is to monitor the progress of a pregnancy and to identify potential problems before they become serious for either mom or baby. Early comprehensive prenatal care promotes healthier pregnancies by providing health education, early detection and treatment of risk factors and ongoing monitoring.

Humboldt County's 2008-2010 three-year average for early entry to prenatal care is 78.4 percent. California's three-year average for 2007-2009 remains higher at 82.7. The Healthy People 2020 objective is 77.9. It is important to continue to improve in this area.

Prematurity and Low Birthweight - According to the Center for Disease Control, birthweight and period of gestation are the two most important predictors of an infant's subsequent health and survival. Babies who survive an early birth often face the risk of lifetime health challenges, such as breathing problems, developmental disabilities and others. Even babies born just a few weeks too soon (34-36 weeks gestation, also known as late preterm birth) have higher rates of death and disability than full-term babies.

More newborns die from premature births than any other cause. The March of Dimes notes that every year, more than half a million babies are born prematurely in the United States. Since 1981, the premature birth rate has risen by 30 percent. Premature birth costs society more than $26 billion a year. Despite decades of research, scientists have not yet developed effective ways to help prevent premature delivery.

At 7.7 percent in 2010, Humboldt County's premature births fall below the State percentage of 10.1 percent, and the Healthy People 2020 objective of 11.4 percent.

Sudden Infant Death Syndrome - SIDS is the sudden death of an infant less than one year of age that cannot be explained by information collected during a thorough investigation. A thorough investigation includes a complete autopsy, examination of the death scene, and a review of the clinical history.

The cause of SIDS still remains unknown, but researchers have developed several theories. Many experts now believe that SIDS is not a single condition that is always caused by the same medical problems, but infant death caused by several different factors. These factors may include problems with sleep arousal or an inability to sense a build-up of carbon dioxide in the blood. Almost all SIDS deaths occur without any warning or symptoms when the infant is thought to be sleeping.

The biggest gains in reducing the rates of SIDS has come from reducing known risk factors, and by far the most successful intervention has been the “Back to Sleep” campaign. Since the "Back to Sleep" campaign was begun in 1994, the SIDS rate has decreased 52 percent nationally. However, the rate has not continued to decline in the last several years, and has declined less among non-Hispanic Black and American Indian/Alaska Native infants. SIDS remains the third leading cause of infant mortality in the United States and the first leading cause of death among infants 28–364 days.

According to the California SIDS Foundation (Californiasids.com) expectant families, parents, babysitters, grandparents, childcare providers and everyone who cares for a baby should know and follow the Safe Sleep Top Ten recommendations listed below.

1. Infants should be placed for sleep in a supine position (wholly on the back) for every sleep. Side sleeping is not as safe as supine sleeping and is not advised.

2. Use a firm sleep surface. Water beds, quilts, etc., should not be placed under an infant. A firm crib mattress covered by a sheet is the recommended sleeping surface.

3. Keep soft objects, toys, bumper pads and loose bedding out of the baby's sleep area.

4. Do not smoke during pregnancy. Do not expose babies to second hand smoke after birth.

5. A separate, but proximate, sleeping environment is recommended. That is, room-sharing is to be encouraged, but not bed sharing. Babies brought to an adult bed for breastfeeding should be returned to their own sleep area when breastfeeding is finished.

6. Consider offering a pacifier during sleep. A pacifier should not be reinserted if it falls out after the infant is asleep. The pacifier should not be coated with sweet liquids and should be washed and replaced regularly. For breastfed infants, pacifier use should be delayed until one month of age to ensure breastfeeding is firmly established.

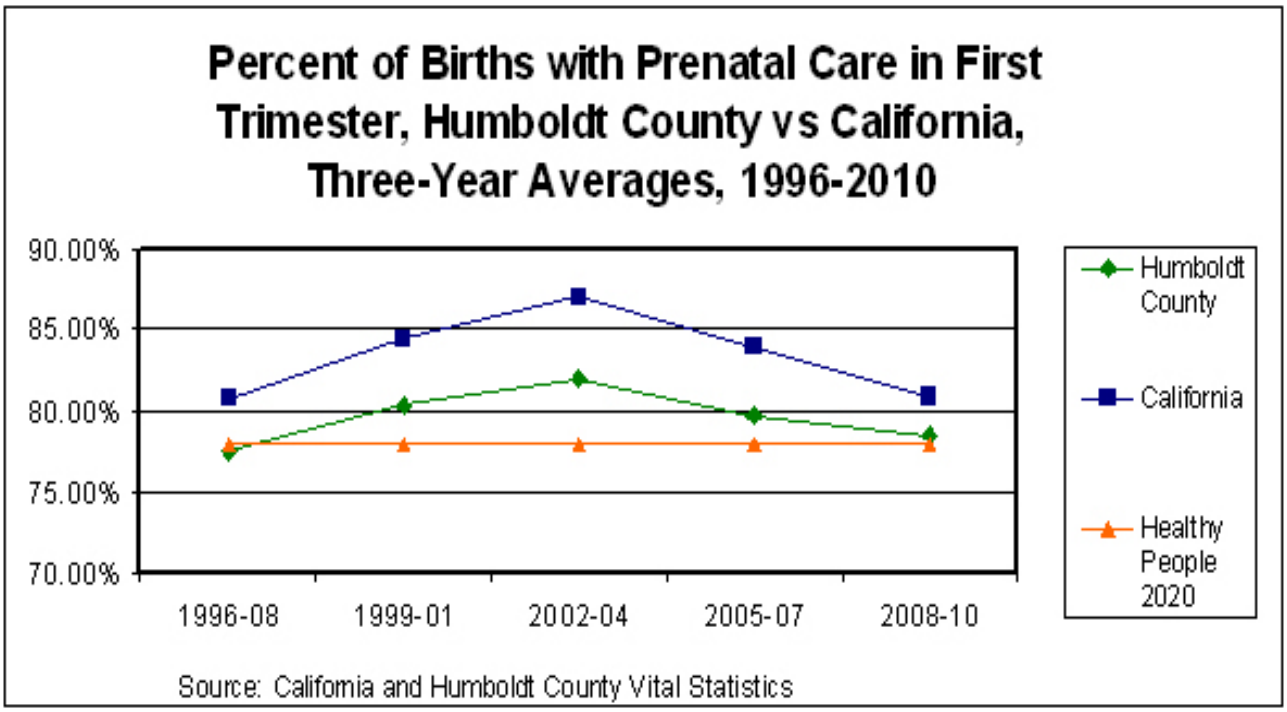
7. Avoid overheating. Over bundling should be avoided and the infant should not feel hot to the touch.

8. Avoid commercial devices marketed to decrease the risk of SIDS such as wedges to maintain an infant's position or "flow-through" mattresses designed to eliminate rebreathing.

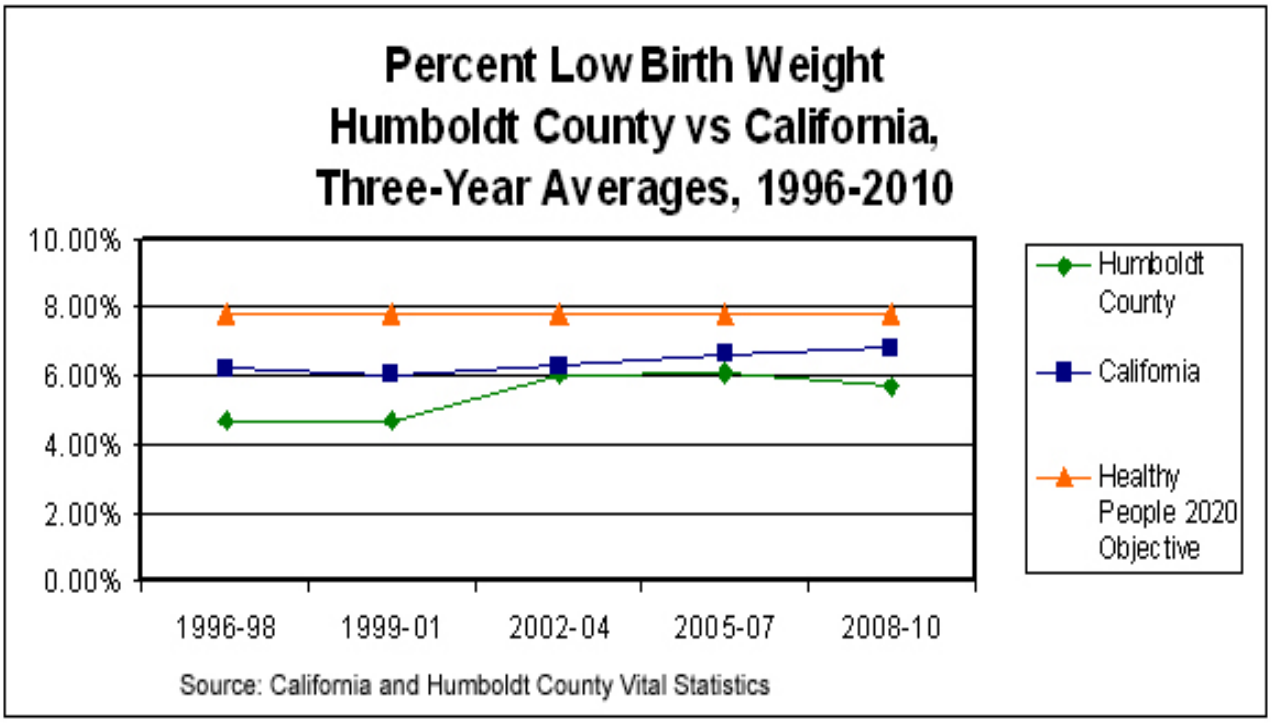
9. Do not use home monitors as a strategy to reduce the risk of SIDS.

10. Avoid the development of flat heads (positional plagiocephaly). Supervised "tummy time" while baby is awake and alternating the sleeping direction of the head during sleep is recommended.

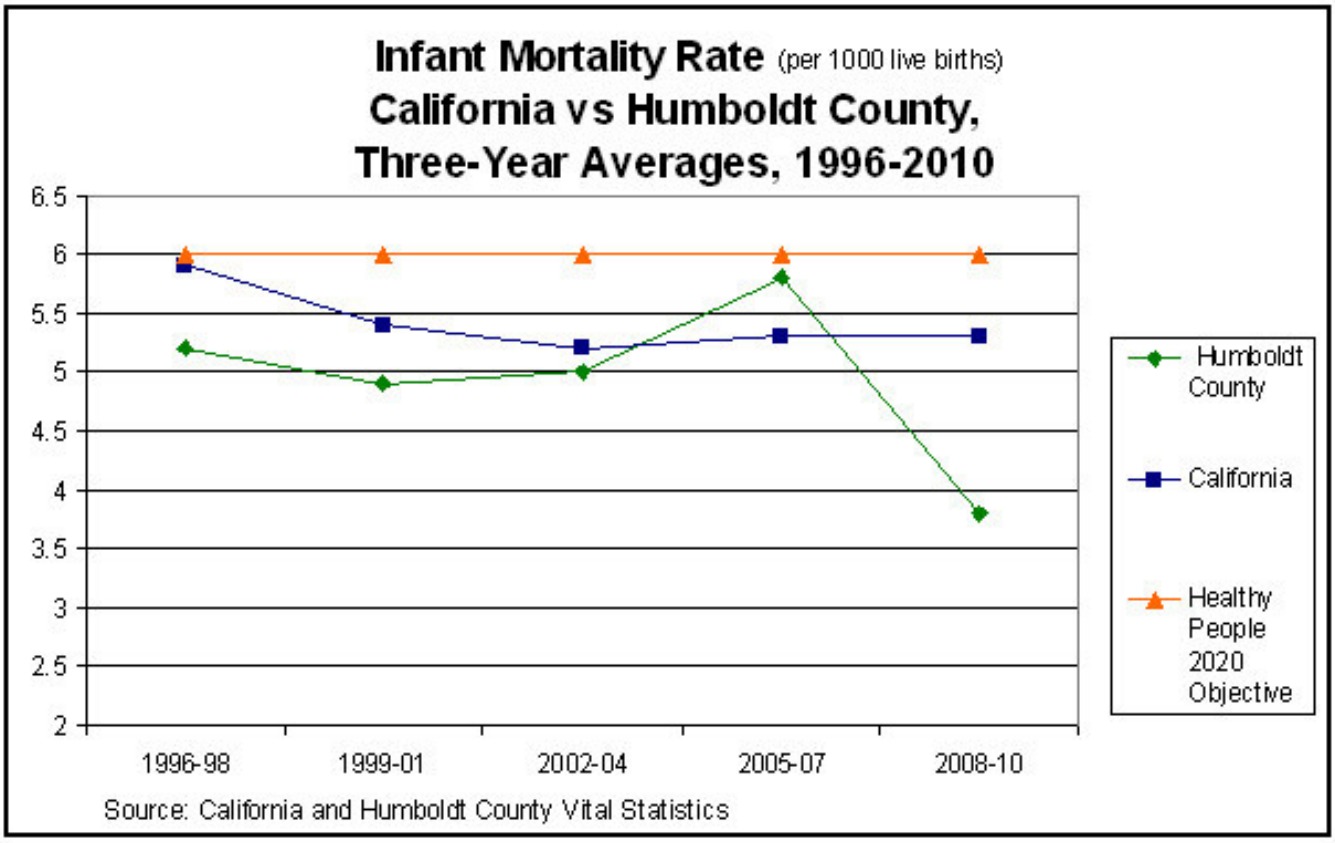
State and Local Data



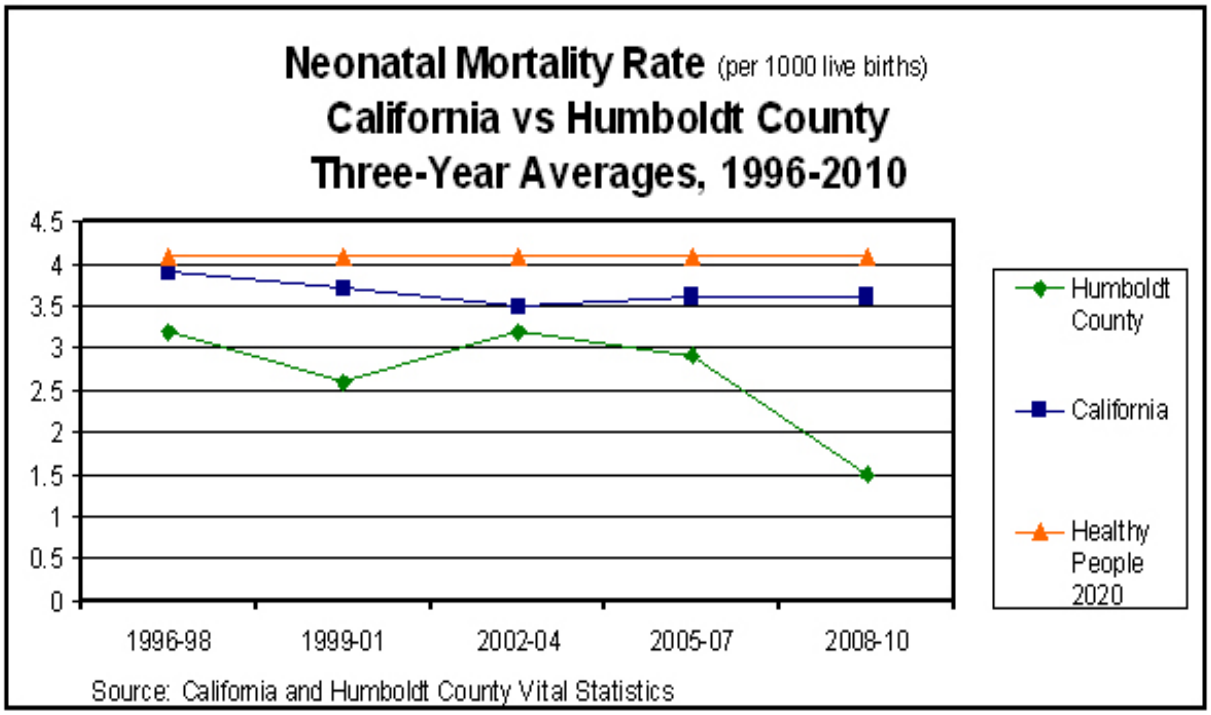
Humboldt County has a lower percentage of women receiving care in their first trimester than the State, but has met the Healthy People 2020 objective. Early entry into prenatal care remains an MCAH focus.



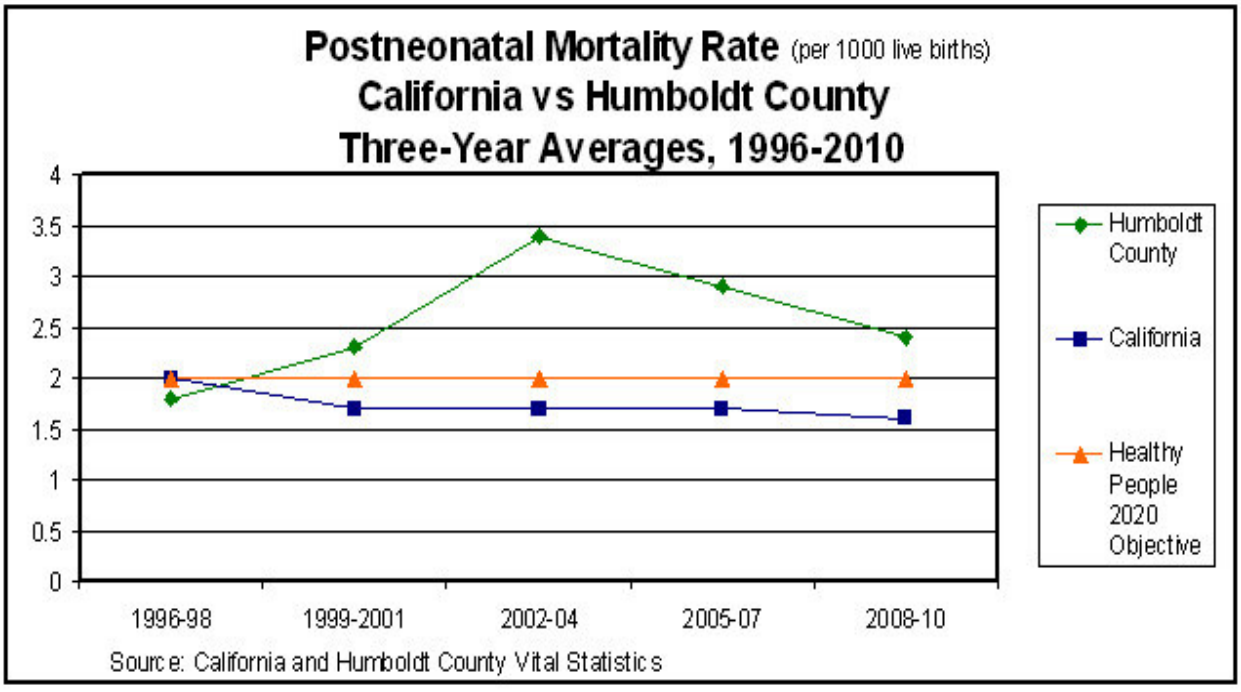
While the County's percentage of low birthweight babies has risen, we still remain lower than the State and meet the Healthy People 2020 objective.



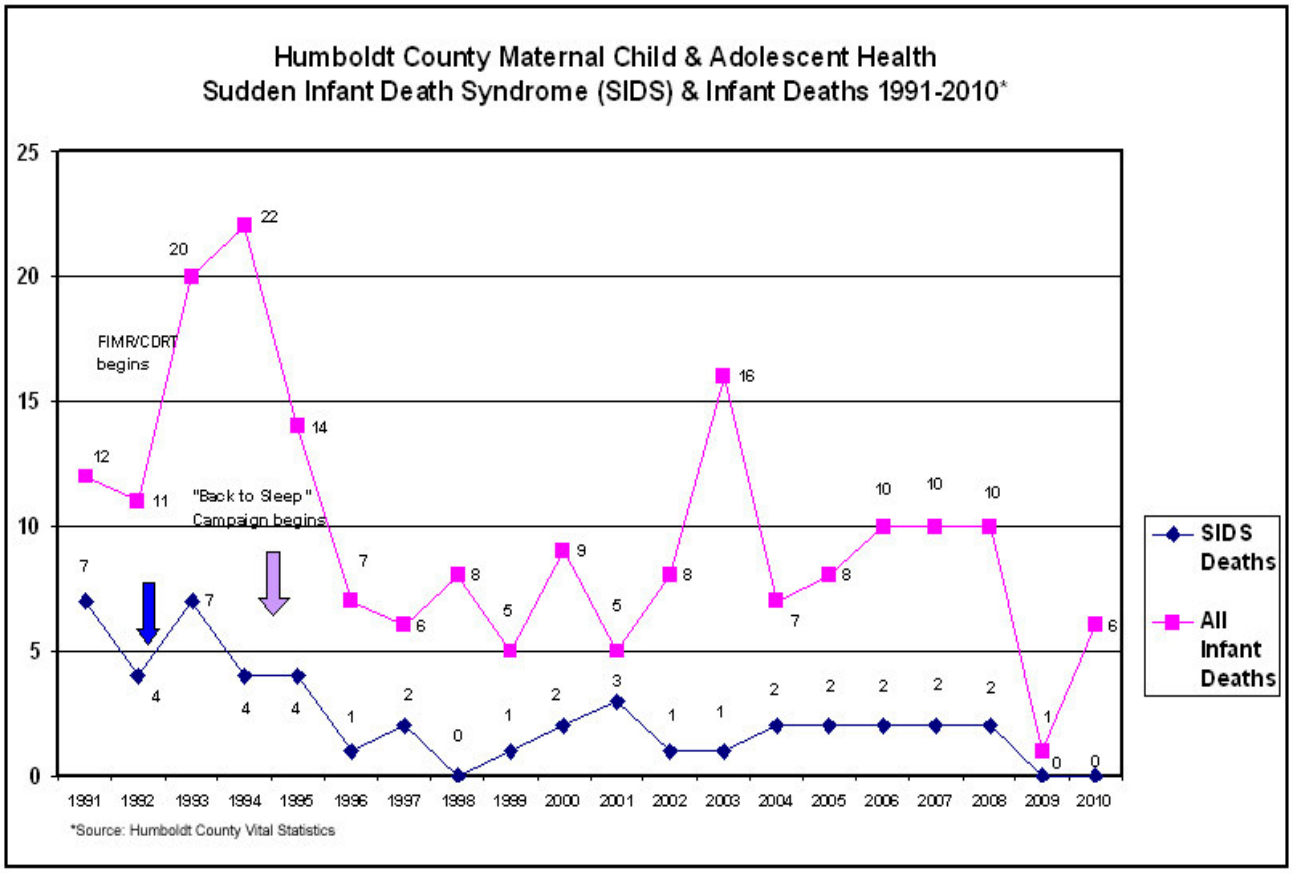
Humboldt County and California have met the Healthy People 2020 objective.



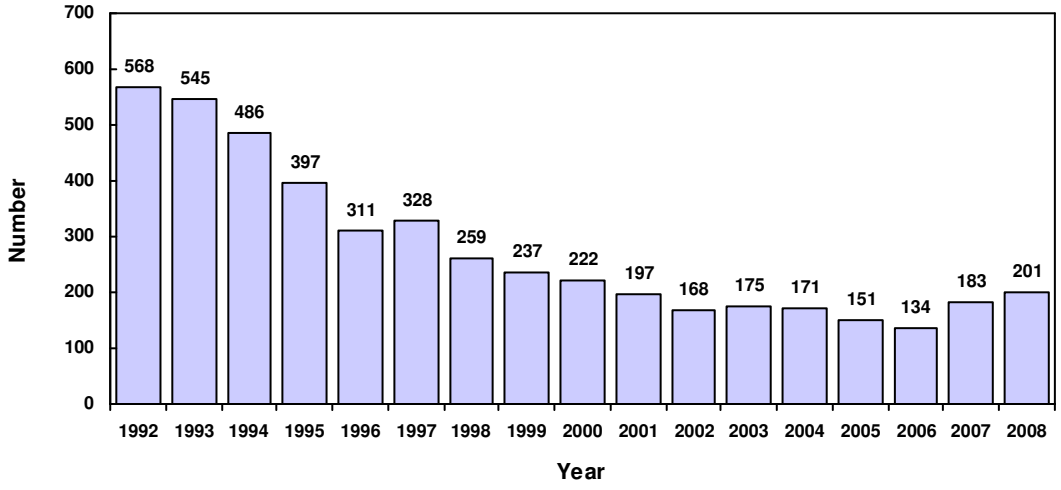
Humboldt County's neonatal mortality rate is consistently lower than the State rate and the Healthy People 2020 objective.



While the County's postneonatal rate is improving, it remains higher than the State and Healthy People 2020 objective.



SIDS Deaths in California 1992-2008



Source: Vital Statistical Report, United States Department of Health and Human Services. California Department of Public Health, Birth Statistical and Death Statistical Master Files, 1992-2008.

Future Focus:

Perinatal/Postpartum Depression

Perinatal depression is the most common complication of childbirth. According to Shoshana Bennett, PhD, author and survivor of postpartum depression, approximately 15-21 percent of women experience depression in pregnancy. Research has shown a postpartum depression incidence as high as 50 percent in women in poverty, 30 percent in Latinas and 50 percent of teens. Ten percent of men can experience some type of postpartum depression and have an even greater risk if the mother experiences it. Some experts believe 50 percent of all cases still go undetected.

Women experiencing depression during pregnancy face increased obstetrical complications, are far more likely to give birth early and have babies that are underweight. Depression compromises a parent's ability to give consistent care in a safe environment, and infants living in poverty with depressed mothers are more likely to have mothers who also struggle with domestic violence and substance abuse. Untreated perinatal depression is also associated with decreased compliance with prenatal care, longer, more costly hospital stays, and increased rates of maternal suicide.

Maternal depression has been linked with attachment problems in infancy, contributing to negative relationships in early childhood and reduced language ability, a key to early school success. Use of health services is also affected. One report found that children exposed to a parent with depression were 20 to 25 percent less likely to receive age appropriate well child services, had 14 to 20 percent more sick visits and 15 to 35 percent more emergency department visits.

The Prenatal/Postpartum Mood Disorder Task Force (PPMDTF) of Humboldt County was called together in 2008 by the Maternal Child and Adolescent Health (MCAH) program director to address the stigma associated with perinatal mood disorders and to improve access to preventive and supportive care for those at risk.

The mission statement of the task force is **"to serve as a catalyst in our community to de-stigmatize and increase awareness about mental health issues related to childbearing through education, outreach and collaboration."** Accomplishments include:

- Creation and distribution of a perinatal/postpartum depression risk assessment and resource list
- Informational bookmarks that includes resources
- Creation of a DVD of local families and professionals discussing perinatal depression and available resources with funding and support from the Union Labor Health Foundation
- Provision of short trainings for medical and human services providers.

Future plans include expanding outreach materials and conducting a local training with presentations by national experts. In addition, the Nurse Family Partnership program targets first time moms which facilitates assessment and referrals.

FIMR/CDRT Findings 2009 – 2010

Child and Adolescent Deaths

The deaths of four children and youth were reviewed during 2009-2010; three of these were from intentional injuries:

- Three youth died as a result of suicide.
- One child died in a motor vehicle crash.

In past reports unintentional injuries were always the leading cause of death for children and young adults. During this reporting period more cases of suicide were reviewed than in the past. The child who died in a motor vehicle crash was properly restrained, and no other child deaths from unintentional injury were reviewed. Because of the slight increase in youth suicide cases, Team recommendations for intentional injury focused on suicide prevention. Please see page 17.

Intentional Injury

Suicide

According to the Centers for Disease Control and Prevention, suicide is the third leading cause of death for youth ages 15-24 nationwide. In addition, the youth suicide rate nearly tripled between 1952 and 1995 nationwide, although the rate has dropped for children ages 10-19 over the last decade. (Centers for Disease Control and Prevention. *Deaths: Preliminary Data for 2009.*) Many believe that youth suicide probably is underreported because of social stigma, shame, and guilt among family and friends. (Kidsdata.org)

In 2009, 407 California children/youth ages 5-24 were known to have committed suicide and 3,120 children and youth ages 5-20 were hospitalized for self-inflicted injuries. Youth ages 16-20 account for the majority of child and youth self-inflicted injury hospitalizations. For that same year in Humboldt County, six individuals ages 5-24 died from suicide and there were 67 self-inflicted injuries*. (Source: CDPH Vital Statistics Death Statistical Master Files. Prepared by: California Department of Public Health, Safe and Active Communities Branch.)*

To learn more from past cases the team conducted an eleven-year retrospective review of eight suicide cases and past recommendations. The Team analyzed local case findings and recommendations in comparison to national suicide risk factors.

Using information developed by The National Center for Child Death Review, a resource center for Child Death Review programs, a matrix was developed that identified five leading risk factors of: Interpersonal conflict or losses without social support; parental separation or divorce; mood disorders and mental illness; bullying; and child maltreatment as evidenced by cases of child welfare services or foster care involvement. The majority of Humboldt cases had the risk factor of interpersonal conflict or losses without social support. It was noted that four of the eight children were unsuccessful in traditional school settings and three of the eight used internet sites to discuss suicide. Promising practices, evidence-based programs (EBP) and possible interventions were also reviewed. Below are the recommendations the Team prioritized from the previous eleven years of reviews.

- Send an informational letter with local data and suicide prevention resources to all Humboldt county schools. This was done twice to ensure wide distribution. (Note: The DHHS Prevention, Early Intervention (PEI) program adopted two EBP and provides training to local schools and the community. These include: Question, Persuade, and Refer (QPR) and Applied Suicide Intervention Skills Training (ASIST). Staff also support local schools in strengthening their suicide prevention activities and developing EBP gatekeeper programs.)
- Send a support letter to the Prevention, Early Intervention (PEI) workgroup regarding the establishment of a Suicide Death Review Team.
- Distribute the list of mental health resources for the community via press release and posters/cards.

All of the above recommendations were carried out.

APPENDICES

Humboldt County Community Profile

Geographic Features: Humboldt County is one of California's most rural locales. Situated in far northern California, it is seven hours by car to the nearest major urban areas, San Francisco and Sacramento. The County encompasses 2.3 million acres, 80 percent of which is forestlands, protected redwoods and recreation areas. It is bound on three sides by similar rural counties and on the west by the Pacific Ocean. In landmass it is one of the State's largest counties, about the size of Rhode Island. Humboldt County is small in population and ranks 35th of 58 counties in the State. The California Department of Finance estimated the 2009 population at 132,713 with 54 percent of residents living in outlying, unincorporated areas. Residents living in these communities regularly drive long distances to access employment, shopping, and health services.

Historically, the lumber and wood products industry, together with the fishing industry, has dominated Humboldt County's resource-based economy. However, there has been a shift toward occupations in education, trade, transportation and utilities, and hospitality industries. In addition, Humboldt County has a higher percentage of government workers than most counties, with government providing 28 percent of all county employment. As of 2005 major employers include the County of Humboldt and City of Eureka, Humboldt State University and College of the Redwoods, The Pacific Lumber Company, St. Joseph Health System and Mad River Hospital, and Eureka City Schools.

Population Demographics: Humboldt County's population continues to become more diverse. According to QuickFacts from the U.S. Census Bureau, the Native American population comprises almost 7 percent of the total population, compared to one percent statewide. Humboldt County's Latino numbers have increased to 8.9 percent of the population, up from 4.2 percent in 1990. The trend in births is even more striking — with 16 percent Latino and 10 percent Native American born in 2010. Humboldt County also has a high poverty rate. The 2009 U.S. Census poverty estimates report shows that 19.8 percent of all residents, and 23.5 percent of related children ages birth to 17 lived in poor households (0-99% FPL) while California's overall poverty rate is lower at 13.3 percent.

Patrick's Point Beach, Trinidad, CA
Photo by Justin Gould

Humboldt County Racial and Ethnic Distribution of Population and Births 2009

	California Births 2009		Humboldt Births 2009	
Race/Ethnicity	Number	Percent	Number	Percent
White	141,193	26.8	1,044	67.7
African American	28,611	5.4	12	.8
Hispanic	269,953	51.2	214	13.9
Asian/PI	65,251	12.4	50	3.2
Am Indian	1,987	0.4	116	7.5
2 or more race groups	9,828	1.9	91	5.9
Unknown/other	9,951	1.9	15	0.1
Total	526,774	100.0	1,542	100.0

Healthy People 2020 Objectives Compared to Humboldt County Rates for 2008-2010

	HEALTHY PEOPLE 2020	HUMBOLDT COUNTY RATE 2008-2010
Infant Mortality Rate	**6.0**	**3.8**
Neonatal Mortality Rate	**4.1**	**1.5**
Postneonatal Mortality Rate	**2.0**	**2.4**
Fetal Death Rate	**5.6**	**3.6**
SIDS	**.50**	*
Early Entry to Prenatal Care	**77.9%**	**78.5**
Early & Adequate Prenatal Care	**77.6%**	**67.1****
Low Birth Weight	**7.8%**	**5.7**
Very Low Birth Weight	**1.4%**	**1.04**
Primary C-Section	**23.9%**	**12.7 (2010)**

Note: Mortality rates are per 1,000 live births with the exception of the SIDS death rate. Humboldt County had five SIDS deaths from 2006-08. *These numbers are too small to provide a stable rate.
** Three-year average 2007-2009