Yolo County Health Department

Review of Child Deaths in Yolo County 1993-1998

CHILD MORTALITY IN YOLO COUNTY

March 2000

This report was prepared as the second in a series on health data for Yolo County. Chronicled in this report are the deaths of Yolo County children age 0 to 18 years during the years 1993 through 1998.

The death of any child is both a family and community tragedy. Every death is also a potential lesson in what we might do to prevent such occurrences in the future. Many members of the community have worked with us in an extensive review of these child deaths with their attention focused always on the goal of the prevention of further avoidable death in our young citizens.

We hope this second report will be useful to those who are attempting to design services for the children of Yolo County as well as those who simply want to learn about their community.

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Yolo County Health Officer

Acknowledgements

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REVIEW OF CHILD DEATHS IN YOLO COUNTY 1993-1998

Executive Summary

REVIEW OF CHILD DEATHS IN YOLO COUNTY 1993-1998

This report provides an overview of the leading causes of death to children ages 0-18 years who were residents of Yolo County during the period from 1993-1998. Approximately 25 children between the ages of 0 and 18 die annually in Yolo County. Over half (56%) of all childhood deaths occur in the first year of life. The number of child deaths decreases among preschool and elementary school age children but increases again during adolescence, primarily due to a rise in deaths due to unintentional or intentional injuries.

Key findings are presented for the major causes of death among children and adolescents. The Review of Child Deaths in Yolo County, 1993-1998 is the product of the collaborative efforts of the staff of the Yolo County Health Department and members of the Yolo County Child Death Review Team and the Fetal and Infant Mortality Review Team.

The health department is the lead agency for monitoring trends and setting government policies to address key issues of child morbidity (illness) and mortality (death). Child Death Review Teams were established throughout the state in the early 1980's to ensure that deaths related to child abuse or neglect were recognized. All deaths to children that are under review by the coroner's office are referred to the Child Death Review Team. Child deaths due to other causes are also reviewed in order to identify problem areas and recommend changes at the agency, community or policy level that may reduce the likelihood of future occurrences. More recently, the local Fetal and Infant Mortality Review Team was implemented in 1998 to conduct a comprehensive review of conditions leading up to a fetal death or infant death in the first year of life.

Key findings about child mortality:

- Infant mortality rates are showing a decline in Yolo County but remain higher than the state average. The fetal death rate in Yolo County is equal to or higher than the state rate.

- The leading causes of death for infants under one year of age were conditions related to the perinatal period (41%), Sudden Infant Death Syndrome (17%), or congenital anomalies (17%).

- Infant mortality was highest among residents in Woodland (8.2 per 1,000 births) and among Black infants (14.6 per 1,000) compared to an average of 6.5 infant deaths per 1,000 births in Yolo County from 1993-1998.

- The leading causes of death for children ages one through 18 from 1993-1998 were injuries sustained in motor vehicle accidents, which resulted in 19 deaths (28%). There were no deaths to infants under one year of age from motor vehicle accidents during this same period.

Key findings (continued):

- Other major causes of death for children ages one through 18 years of age were unintentional injuries, such as drowning or poisoning (13%), and cancer (9%).

- Among children over one year of age through adolescence, mortality rates were highest among youth living in West Sacramento and rural areas of the county.

Homicide and suicide:

- Five adolescents between the ages of 13 and 17 died from suicide between 1993-1998. The youth who died from suicide resided in different areas of Yolo County.

- There were six deaths due to homicide, the majority of whom were female (66%). Three of the children killed were under age three, one was a preteen and two were teenagers.

Recommendations for Program Planning and Policy Changes

Interventions were proposed at the individual, system and policy levels by members of the Yolo County Health Department (YCHD), the Child Death Review Team (CDRT) and the Fetal and Infant Mortality Review Team (FIMR).

Agency planning and coordination:

- Expand Child Death Review to include all fetal, infant and child deaths beyond coroner cases to determine if any deaths need further follow up or investigation (YCHD, CDRT).

- Disposition of infant and child deaths should include referrals to community agencies for additional health or social services for families with multiple problems (CDRT, FIMR).

- Use standardized data for review of all child deaths including criminal history, child abuse/neglect, psychosocial risk factors and history of services provided (YCHD, CDRT).

- Enhance system of communication between providers serving high-risk families to alert team members of changes in risk behaviors or concerns (CDRT).

Mental health and suicide prevention:

- Promote screening for mental health during routine health or sports examinations (CDRT).

- Increase access and availability to mental health counseling services for preteens and adolescents (CDRT)

- Include physical and mental health assessment and referral for juveniles in custody (CDRT).

- Increase public awareness about the dangers of misuse of non-prescriptive medications (CDRT).

Care during pregnancy and the newborn period

- Initiate priority referral by emergency room staff for public health nursing follow-up of pregnant women who come for emergency care and who do not have regular prenatal care (YCHD, FIMR).

- Explore community options for universal home visiting for all new mothers for assessment and linkage to services and community resources (YCHD, FIMR)

Community level education:

- Increase awareness of safe sleeping for infants through multi-language public service announcements and Back-to-Sleep gift packet for newborns in local hospitals. The campaign will also include messages to eliminate or reduce smoking around children (FIMR).

- Increase public awareness and availability in multiple languages for use of the "911" emergency system and the toll-free family health MCAH hotline (FIMR).

Population by Age, Race and Community

In 1998, the population of Yolo County was estimated at 155,500 with the majority of people residing in four major cities: Davis (54,400), West Sacramento (30,200), Woodland (44,450) and Winters (5,225). The remainder of the county population of 21,225 (14%) lives in unincorporated areas spread over a large geographic region.

In 1998, there were approximately 44,000 youth ages 0-18 in Yolo County, representing 28% of the total population. Adolescents over age 17 make up a larger proportion of the county population compared to the state, with a large population of older teens attending the University of California at Davis.

The population of youth in Yolo County is comprised of a diversity of race and ethnic populations. Of the 2,148 births in 1998, 51% of the infants were white, 37% were Hispanic, 9% were Asian or Pacific Islander and less than 3% were Black or American Indian. By ages 15-18, the proportion of youth shifts to a larger majority of White (59%) or Asian (13%) youth and a smaller minority of Hispanic youth (25%). Over 25 different languages are spoken by children in Yolo County schools.

Population Aged 0-18 by Age Group and Race/Ethnicity, Yolo County, 1998

	White	Hispanic	Asian/ Pac Isl	Black	American Indian	TOTAL	%
Infants < 1	1171	853	206	48	27	2305	5%
1-4 years	4743	3359	833	184	122	9241	21%
5-9 years	6650	3781	1064	252	142	11889	27%
10-14 years	6252	3220	967	242	129	10810	25%
15-18 years	5783	2431	1233	293	106	9846	22%
TOTAL	**24,599**	**13,644**	**4,303**	**1,019**	**526**	**44,091**	**100%**
Percent	**56%**	**31%**	**10%**	**2%**	**1%**		

Source: Estimates from the California Department of Finance

Population Aged 0-18 by Age Group and Community, Yolo County, 1998

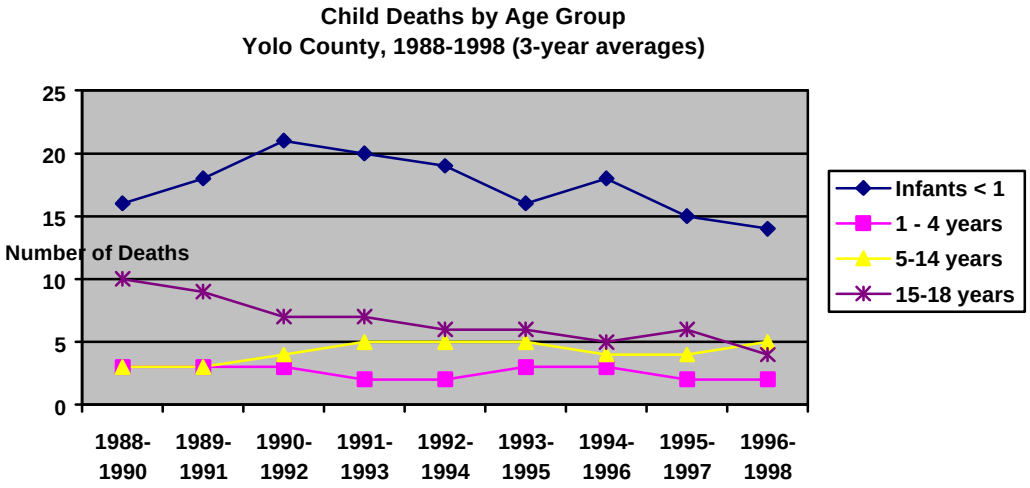
	Davis/ El Macero	West Sacramento	Woodland	Winters	Unincorporated
Infants < 1	521	538	804	162	170
1-4 years	2134	2128	3136	650	693
5-9 years	2865	2652	3926	806	829
10-14 years	2738	2443	3720	715	808
15-18 years	2197	1639	3979	591	570
TOTAL	**10,455**	**9,400**	**15,565**	**2,924**	**3,070**
Percent	**25%**	**23%**	**38%**	**7%**	**7%**

Source: Estimates based on zip code population data prepared by the Family Health Outcomes Project, UCSF

Trends in Child Mortality

This report includes information about deaths to children through age 18 years and fetal deaths (gestation over 20 weeks) that occurred to residents of Yolo County between 1993-1998. Vital statistics data about child deaths is obtained from the death certificates. Information about deaths to Yolo County children who died while in another county is included in this report.

Children are more likely to die in infancy than at any other time in childhood. Over the last two decades, infant mortality rates (infant deaths per 1,000 births) have steadily declined in California, with recent declines occurring in Yolo County. Childhood deaths are lowest during preschool and elementary years with little change in trends over the last ten years. The number of deaths starts to increase as children enter adolescence. Trends in mortality for teens ages 15-18 have improved, primarily due to fewer deaths due to unintentional injuries. *There has been a decline in deaths due to motor vehicle accidents for all ages over the past decade due to improved safety devices in vehicles, safer roads and decreases in alcohol-related accidents.*



Source: California Department of Health Services, Vital Statistics Branch

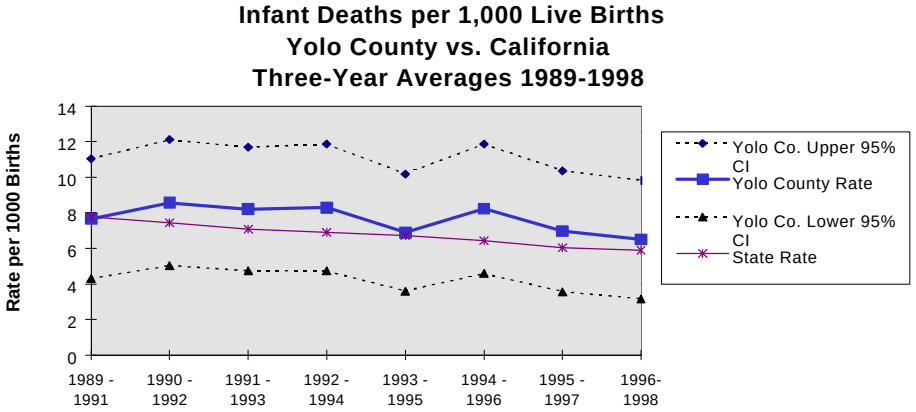
Fetal and Infant Death

Fetal Deaths

Between 12 and 20 fetal deaths are reported each year in Yolo County and include all deaths of 20 weeks or more gestation where the baby was not alive at the time of delivery. Estimates of gestational age are often inaccurate and the incidence of fetal deaths may be under-reported. The fetal mortality rate (fetal deaths per 1,000 births) in Yolo County has been equal to or higher than the state. A review of fetal and infant deaths in Yolo County is conducted by the Child Death Review Team and the newly created Fetal and Infant Mortality Review committee. Many of the same risk factors associated with infant deaths are correlated with fetal deaths. These include maternal and medical complications such as severe maternal infection, pregnancy complications, congenital anomalies, Rh sensitization, maternal diabetes, history of miscarriage and intrauterine cocaine exposure. The average age of mothers with fetal deaths was 31 years old, slightly higher than the average of 27 years for mothers who delivered live infants.

Infant Deaths

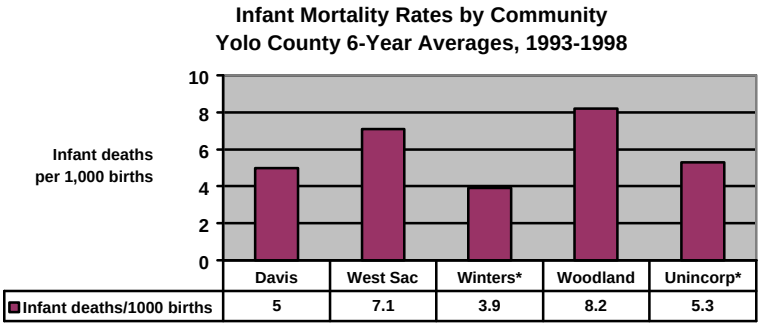
Infant mortality is often viewed as a key health status indicator for the community's health and health care system. Infant mortality rates represent the number of infants who died in the first year of life in a calendar year for every 1,000 live births during that same year. Over half (56%) of all childhood deaths occur in the first year of life, with an average of 15 infant deaths per year in Yolo County. Infant mortality rates vary by race and ethnicity and are associated with low birth weight, preterm birth, low socioeconomic status, inadequate prenatal care, tobacco use and substance abuse. In Yolo County, the number of infant deaths varies widely from 21 deaths in 1996 to a low of 7 deaths in 1998. The three-year average from 1996-1998 was 6.5 infant deaths per 1000 births in Yolo County compared to 5.7 infant deaths per 1000 births in California. *The infant mortality rate has been decreasing in California and more recently in Yolo County.*



CI = 95% confidence that the true value lies between these two intervals

Race/Ethnicity: The majority of births (87%) were to White and Hispanic mothers. The infant death rate was similar for White and Hispanic infants and lowest for Asian infants. Although the number of deaths to Black infants is relatively few, the infant death *rate* for Black babies is higher than other groups. In Yolo County, an estimated 45 babies are born each year to Black women and an average of two Black infants die each year.

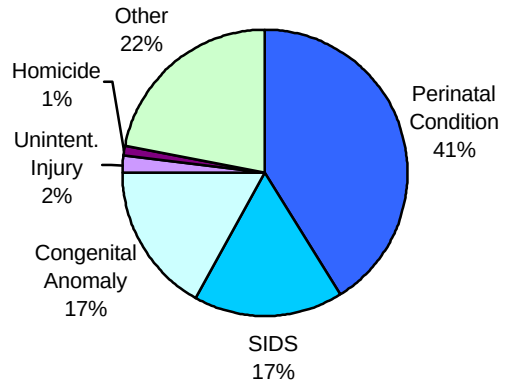
Community of residence: Using combined data from 1993-1998, the highest rate of infant deaths per 1,000 births occurred among residents in Woodland and West Sacramento. Similarly, the highest percent of low birth weight infants were located in areas with high infant death rates.



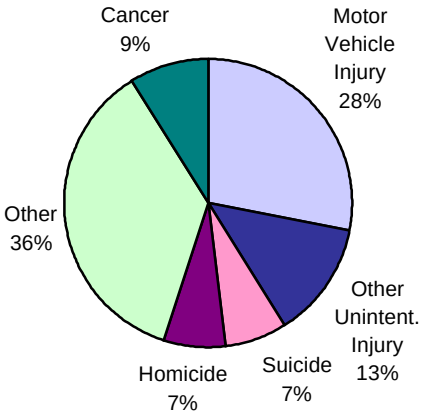
* Rate may be unreliable due to small numbers

Leading Causes of Death for Children in Yolo County

Leading causes for infant deaths: Of the 88 infant deaths that occurred from 1993 through 1998, the majority of deaths (97%) were due to natural causes. Two infants died from unintentional injuries and one infant was killed in a homicide. No infants died due to injuries involving motor vehicle accidents. Almost one out of six infants (average of three infants yearly) died from natural causes of unknown origin or Sudden Infant Death Syndrome (SIDS). The remaining infant deaths were due to perinatal conditions, congenital anomalies or other natural causes.



Causes of Death for Infants < 1 year, 1993-1998

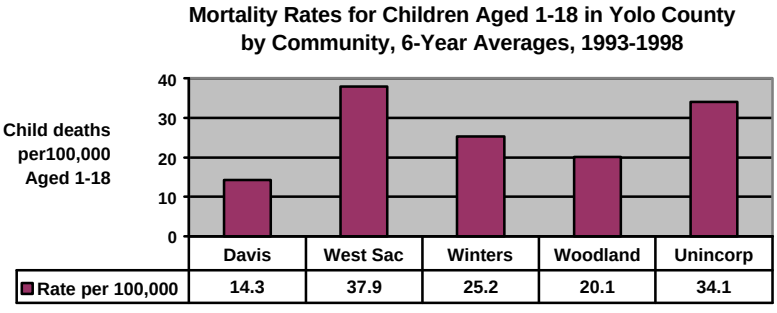


Causes of Death for Children 1-18 years, 1993-1998

Leading causes for child deaths ages 1-18 years: *The leading cause of death from 1993-1998 of children ages one through 18 years of age, was unintentional injury*. Of all child deaths over one year of age, 41% were from unintentional injuries,14% from intentional injuries and 45% from natural causes. Almost twice as many males (65%) died than females (35%). Injuries due to motor vehicle accidents accounted for the majority (52%) of deaths to teens age 15-18 years.

Race/Ethnicity: There were few differences in death rates by race/ethnicity among children over one year of age. From1993-1998, of the 69 deaths to children 1-18 years old, 39 (57%) were White, 22 (32%) were Hispanic, 6 (9%) were Asian or Pacific Islanders and 2 (3%) were Black.

Community of Residence: Child and adolescent death rates are highest among youth from both the most urban and the most rural areas of Yolo County. Deaths among children and adolescents from rural areas were more likely to be caused by motor vehicle or other unintentional injuries.



Leading Causes of Death for Children Ages 0-18 Years Old in Yolo County
Six Year Summary, 1993-1998

	< 1 Year	1-4 yrs	5-14 yrs	15-18 yrs	Total 1993-1998	*Average # per year*
Perinatal Conditions	36	0	0	0	36	***6***
Congenital Anomalies	15	1	0	0	16	***3***
SIDS	15	0	0	0	15	***3***
Motor Vehicle Crashes	0	2	2	15	19	***3***
Heart/Cerebrovas. Dis	3	1	2	1	7	***1***
Homicide	1	2	1	2	6	***1***
Cancer	0	3	3	0	6	***1***
Drowning	1	1	2	1	5	***1***
Suicide	0	0	1	4	5	***1***
Poisoning	0	0	1	1	2	***<1***
Other	17	5	15	5	43	***7***
Total 1993-1998	88	14	26	29	157	-
Average # per year	***15***	***2***	***4***	***5***	-	***26***

Note: Other causes include pulmonary diseases, infections, digestive, immune and endocrine system problems.

Sudden Infant Death Syndrome (SIDS)

SIDS is the sudden and unexpected death of an infant under the age of one that remains unexplained even after medical and coroner investigations. Deaths due to SIDS had started to decline slowly over the past two decades partially due to improved identification of other causes of death. In Yolo County, an average of 4-5 infants a year died from SIDS from1989-1994. After 1994, fewer than two SIDS deaths were reported yearly in Yolo County or a total of five SIDS deaths in four years. Since the Back-To-Sleep campaign began to promote infants sleeping in the prone position on their backs, the death rate due to SIDS in California decreased 39% from 119 deaths per 100,000 births in 1991 to 58 deaths per 100,000 births in 1996. Risk factors associated with SIDS include infant sleeping on his/her stomach, overheating, exposure to tobacco smoke and lack of prenatal care. Black infants died from SIDS at a higher rate than White infants in Yolo County and California.

Natural Deaths

Two-thirds (67%) of the natural deaths among children ages 0-18 years of age, occurred to infants under one year of age. Two-thirds of these infant deaths occur during the first 28 days of life. The majority (77%) of infants in Yolo County died from perinatal conditions, congenital anomalies and other natural causes. Similar to State percentages, about 2% of children in Yolo County are estimated to have been born with medically significant structural birth defects. One third of children who die before their first birthday have birth defects, most commonly heart defects, Down Syndrome or other chromosomal abnormalities and oral clefts. From 1993-1998, 31of the 69 (46%) deaths to children over one year old in Yolo County were from natural causes such as cancer, heart disease and other medical conditions. Six children (9%) died from cancer.

Unintentional Injuries

Motor vehicle accidents: In Yolo County as well as California, the leading causes of death for children between the ages of one and 18 years are injuries due to motor vehicle accidents. Between 1993 and 1998, motor vehicle accidents accounted for 19 deaths (28%) to children over one year of age. *There were no infants who died in Yolo County from motor vehicle accidents over this six year period*. Less than one-third (31%) of the children aged 0-18 who died in motor vehicle collisions in Yolo County (1989-1996) used safety devices such as seat belts or car seats. Fifteen of the 19 (79%) childhood deaths due to motor vehicles accidents in Yolo County were among teenagers. In a nationwide study of motor vehicle fatalities from 1989-1996, alcohol was a factor in 25% of the deaths involving teen drivers.

Other unintentional injuries: Drowning was the second major cause of death among children in Yolo County. Five children drowned, representing all age groups from infancy through adolescence. In the six years from 1993-1998, two children died from poisoning, one died from injuries due to a fall and one died from an accidental gunshot injury. The proportion of children who die from unintentional injuries was higher among those living in the more rural areas of Yolo County.

Child Deaths Aged 0-18 Years from Unintentional Injuries by Rural/Urban Yolo County, 1993-1998

Community Of Residence	Urban/Suburban Rural	All Child Deaths 1993-1998	# Deaths due to Unintentional Injuries	% Child Deaths Due to Unintentional Injuries
Davis/El Macero	Urban/Suburban	29	3	
West Sacramento		47	14	17.4%
Woodland		62	7	
Winters	Rural	8	3	35.3%
Unincorporated		9	3	

Intentional Injuries: Homicide and Suicide

Five youth between the ages of 13 and 18 died from suicide in Yolo County during this six year period. Three were male and two were female. Three were White, one was Hispanic and one was Asian. Three youth died from hanging and one was from a self-inflicted gunshot wound (data was unavailable for youth suicide before 1996). The five youth who died from suicide resided in different areas of Yolo County.

There were six homicides during this period, affecting almost every age group. Three homicides involved young children under age three years old, one was a school age child and two were teens aged 15-18. Four out of the six children killed were female. Four of the children killed were White and two were Hispanic. There were no deaths due to homicide for Black or Asian children in Yolo County.

Child Death Review Team (CDRT), 1996-1998

Local multi-agency child death review teams were developed throughout the state during the 1980's to improve the community's ability to identify and respond to child deaths associated with abuse or neglect. Authorization for the formation of child death review teams was added to the state Penal Codes and Welfare and Institutions Codes in 1988. The Yolo County Child Death Review Team was implemented in 1988, comprised of representatives from the coroner's office, child protective services, local law enforcement agencies, probation, public health, schools, emergency services and other health care providers.

All deaths that are "sudden, unusual or violent" are referred to the coroner for further investigation and reviewed by the Yolo County Child Death Review Team. All fetal deaths over 20 weeks gestation are routinely reported to the coroner. Most deaths due to "natural" causes occur while the child is under medical supervision and would not have been referred to the CDRT committee for review.

In 1999, the Child Death Review Team protocols were amended to include reviews of all child deaths even those due to natural causes. The team's perspective was broadened to be able to identify and reduce the likelihood of child deaths due to both intentional and unintentional injuries and other diseases for which interventions have proven to be effective.

The Mission of the Yolo County Child Death Review Team is:

- To ensure that all child abuse related fatalities and other preventable child deaths are identified.
- To enhance the investigation of child deaths through multi-disciplinary and multi-agency review and cooperation.
- To develop recommendations for reducing the risk of future child abuse related deaths or other preventable child deaths.

Key findings for child and adolescent deaths reviewed by the Child Death Review Team from 1996-1998 are included below. Data before 1996 was not available. Recommendations for program planning and policy changes are presented in the executive summary.

Risk factors for child deaths reviewed by CDRT, 1996-1998:

Between 1996 and 1998, 33 fetal deaths and 23 deaths to infants and children aged birth through 18 years of age were referred to the Child Death Review Team. The cases reviewed by the CDRT during 1996-1998 were not representative of all child deaths in Yolo County. The cases included in this report only reflect child deaths from unknown causes, Sudden Infant Death Syndrome, suicide, homicide and other cases under investigation by the coroner with a history of child maltreatment or criminal activity. Deaths that occurred to children who died outside Yolo County are often referred to child death review teams in the county of death for review of associated risk factors.

Fetal deaths (over 20 weeks gestation) reviewed: The majority of fetal deaths had no evidence to require further investigation. Of the 33 fetal deaths from 1996-1998, four (12%) families were referred to the coroner for investigation; two had a criminal history, two were previously involved with child protection and three had a history of substance use. One had evidence of spousal abuse during pregnancy.

Infant deaths reviewed: Twelve deaths to infants under one year of age were referred to CDRT from 1996-1998. Eight deaths (67%) were due to natural causes, three (25%) were undetermined and one death was determined to be accidental due to drowning. There were no infant deaths due to homicide referred to CDRT during this three year period. Five of the twelve infant deaths occurred in the first 24 hours of life. All of the neonatal deaths in the first 28 days of life were due to natural causes and the coroner investigation was limited.

The seven infants who died during the postneonatal period (one to 11 months of age) were between two and eight months old. All seven infants had normal birth weights and had no history of serious health problems at the time of death. Five of the infants had documentation of preventive health care visits. Almost two-thirds (64%) of the mothers entered prenatal care in the first trimester compared to 71% of all residents of Yolo County who delivered during this same time period. Although not directly linked to the cause of death, the families of infants who died had several of the following risk factors:

- Infant deaths reviewed by CDRT were more likely to be low income and receiving Medi-Cal coverage (64%) compared to all births (46% Medi-Cal) in Yolo County from 1996-1998.
- The child protective service was involved at one time with the families of four infants who died. One child had been at risk for "failure to thrive" syndrome in the first months of life.
- Six of the families had criminal histories including arrests for drugs, theft, and in one case, homicide. Methamphetamine was involved in five cases with one infant testing positive for methamphetamine at the time of death.
- In four (33%) of the 12 infant deaths reviewed by CDRT, the housing was noted as "substandard".

Child deaths (1-18 years old) reviewed: There were a total of 11 deaths to children ages 1-18 years old referred to CDRT from 1996-1998. Ten of the 11 cases reviewed were teenagers who died between the ages of 13 and18 years. The other child death was to a preschool age child who died of natural causes. Of the 11 deaths reviewed during this period, four (36%) were due to accidents, four to suicide (36%), one was a homicide, one was due to natural causes and in one case, the cause of death was undetermined. Of these deaths to children aged 1-18 years:

- Four of the children's families had criminal histories. Two families had a history of child abuse, neglect or molestation.
- There was a family history of alcohol or drug use in 8 of the 11 (73%) child or adolescent deaths reviewed. Alcohol and marijuana were most common but crank, LSD and paint fumes were also reported.
- Three of the four suicides involved hanging and one was a self-inflicted gunshot wound. Three of these youth had a known history of mental health concerns.
- One death was due to injuries sustained in a motor vehicle accident and the other three injuries were due to a fall, asphyxiation or an accidental drug overdose.

Fetal and Infant Mortality Review Team (FIMR), 1998

Infant mortality is viewed as a key indicator of health that serves as a measure of a community's social and economic well-being. To provide a comprehensive review of the conditions leading up to a fetal or infant death, a national Fetal and Infant Mortality Review (FIMR) program was implemented and funded by the Federal Title V block grant through the California Department of Health Services, Maternal and Child Health Branch. The overall goal of FIMR is to enhance the health and well-being of infants and their families by improving community resources and service delivery systems. The FIMR team is comprised of medical and community representatives who review risk factors associated with fetal and infant deaths in order to determine problems with systems of care that require change, and to develop recommendations for improvement.

In 1998, the Fetal and Infant Mortality Review (FIMR) program was implemented in Yolo County. The Yolo County Health Department is the lead agency in the FIMR review. A specially trained public health nurse contacts families to provide grief counseling and to interview the family about their experiences before, during and after delivery of the infant. A summary of events leading up to the fetal or infant death is presented to the FIMR case review and community action team, with all reference to personal identifiers removed. The FIMR program branches out from the investigative function of the Child Death Review Team to focus on identifying gaps in health and social service systems of care which can be improved.

The Mission of the Yolo County Fetal and Infant Mortality Review Team is:

- To identify risk factors related to fetal and infant mortality.
- To recognize gaps in service or improvements needed in existing health and social services that would enhance the health and well-being of infants and their families.
- To make policy recommendations that would reduce the risk of adverse outcomes or improve the health of infants and their families.

Preliminary findings for the first year of the program are included below. Seven fetal deaths and four infant deaths were referred to FIMR for review in the first year. Recommendations from the FIMR team reviews are presented in the executive summary.

Risk factors associated with fetal and infant deaths reviewed by FIMR, 1998-99:

- The two infants who died between one and eleven months old were sleeping in the face-down position or in soft bedding at the time of death.
- Over half of the mothers (55%) of the fetal or infant deaths reviewed had received inadequate prenatal care with either late entry into prenatal care and/or several missed appointments.
- Over one-third (36%) of the families reported multiple stresses including depression, frequent moves, unreliable transportation, financial or relationship problems or a history of alcohol or drug use.
- Only one infant whose case was reviewed by FIMR tested positive for drugs at birth.

APPENDIX

YOLO COUNTY CHILD DEATH REVIEW TEAM PROTOCOL

I. PURPOSE:

The purpose of the Child Death Review Team is to provide a multi-disciplinary, professional review of all deaths of children under eighteen years when the incident resulting in death occurred in Yolo County or the child was a resident of Yolo County even if the death occurred elsewhere.

II. GOALS:

1. Review child deaths for appropriateness of responses.
2. Train staff and county personnel on issues related to child deaths.
3. Increase public awareness of the causes of child deaths and methods for prevention of child deaths.

III. OBJECTIVES:

1. To discuss the facts surrounding the death and the involvement of various agencies.
2. To draw conclusions from these facts to assist responsible bodies to take necessary action.
3. Analyze trends in the causes of mortality of children in Yolo County.
4. Improve identification of deaths caused by child abuse or neglect.
5. Develop communication for responding to child deaths.
6. Increase the thoroughness and effectiveness of the child protection intervention, investigation and legal process.
7. Make recommendations for preventive services including facilitating appropriate protective services for siblings of victims.
8. Maintain data on the causes of child deaths in Yolo County.
9. Submit a written report annually to the Board of Supervisors and Family Violence Prevention Council of Yolo County on the activities, findings and recommendations of the team.
10. Increase public awareness of issues surrounding childhood deaths.

IV. TEAM OPERATION:

The Child Death Review Team will function in an informal manner with minimal structure. All members/Guests must sign a Confidentiality Statement which will be kept on file. The team will meet the third Wednesday of each month (January through November) from 11 a.m.-1 p.m. to review cases, and/or attend Child Death team training. There **will be a Chairperson and a Vice-Chair.** The **Chairperson** will rotate every year among Team Members. The Sheriff/Coroner will be the standing **Vice-Chair** and keeper of records and rosters. Any team member may call an emergency case review by contacting the **Chair.**

All guests must be approved in advance of a meeting and fit the parameters as outlined in the Child Death Review **Confidentiality Guidelines** under **Legal Authorities**. All decisions impacting the team will be done with a vote by members of the team who are present at the time the issue is put on the agenda.

Public Health will provide the data and analysis for mortality among all children under 18 years of age who are residents of Yolo County. All team members will participate in the preparation of an annual report and all members are welcome to coordinate team training and activities.

The Chairperson will send out work sheets to all team members 10 days prior to the meeting. All material is "CONFIDENTIAL" and will be marked as such when mailed to members of the team. Members are to fax any and all findings to the Vice-Chair at least a day before the meeting.

At the conclusion of the meeting, the work sheets, agendas and any other case notes will be turned over to the Vice-Chairperson and they will be promptly shredded

V. CHILD DEATH REVIEW TEAM PARTICIPANTS:

Membership should include a representative from the following agencies/groups. The team may be expanded as needed for individual case discussion.

1. Sheriff/Coroner's Office
2. City Police Departments
3. District Attorney's Office
4. Probation
5. Department of Social Services
6. Health Department
7. Private physicians
8. Forensic pathologist
9. Hospital Emergency Representatives
10. EMS (Emergency Medical System)
11. School Staff
12. Mental Health/Drug Programs
13. Other as needed

VI. CASE IDENTIFICATION:

The Yolo County Coroner's Office will provide death certificates and data for children under 18 years of age whose deaths were referred to the Coroner. Public Health will provide death certificates for all other children under 18 who were residents of Yolo County at the time of

their death. The certificates will be reviewed for cause of death. Priority will be determined at the beginning of each meeting.

1. Homicide/child abuse/neglect
2. Suspicious or non consistent findings
3. Cause of death undetermined after investigation by Coroner
4. Blunt force trauma
5. Head trauma (subdurals, subarachnoid, subgaleal)
6. Suffocation/asphyxia
7. Gunshot wounds
8. Bathtub/other type of drowning
9. Suicide
10. Malnutrition/neglect/failure to thrive
11. Drug ingestion
12. Fractures
13. Burns
14. Stillborn or fetal death
15. SIDS

VII. TEAM AGENCY ROLES:

Each agency representative has the responsibility of checking within their own agency for information relevant to the case under discussion. The verbal exchange of information is informal and CONFIDENTIAL. No case specific minutes will be kept. The Chair will keep a record of team decisions and matters that require follow up. Data on numbers, type of cases and recommendations will be logged as well as notes on protocols and policy issues. Please refer to the attached pages for detailed descriptions of agency "roles" provided by the Attorney General's Office.

FIMR Partners In Yolo County

- *The Yolo County Department of Health, Maternal and Child Health Programs*

  Coordinates the **FIMR** Programs, facilitates access to vital data and provides technical assistance to the **FIMR** case review team. **FIMR** findings influence the development of county wide policies and initiatives.

- *Case Review Teams*

  These groups convened by the **FIMR** Coordinator include physicians, nurses, local health department representatives and medical examiners, social services staff, family planning providers and others who provide care to women and children in the community. They conduct reviews of fetal and infant deaths monthly or bi-monthly.

- *Community Coalitions*

  Grassroots networks consist of health and human service providers and community representatives. **FIMR** recommendations lead to the development of new outreach and education efforts, system changes and policy developments tailored to meet the needs of women and children in the community.

Description Of The FIMR Project

The Yolo County Fetal and Infant Mortality Review (FIMR) process is a collaborative effort to learn more about why babies are dying and to propose recommendations to prevent future deaths.

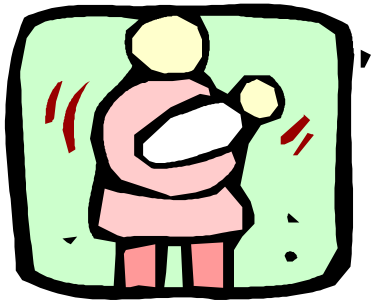
Multi-disciplinary FIMR Case Review Teams examine the individual deaths that have occurred in Yolo County. The anonymous review highlighted factors in the health care system and the community that may have contributed to the fetal or infant death.

A summary of the most common factors found during individual case review sessions is reported to the California Maternal and Child Health Branch and local Coalitions. The FIMR project helps with the development and implementation of specific strategies for change in both the health care system and in the community. The hope is to prevent the tragedy of infant death in our communities.

CALIFORNIA
FIMR
FETAL INFANT MORALITY REVIEW PROGRAM
10 Cottonwood Street, Woodland, CA 95695
530-666-8645 * FAX 530-666-8674

SEARCHING FOR ANSWERS

WHY ARE BABIES



DYING?

A Guide to the Fetal & Infant Mortality Review (FIMR) Process In Yolo County

CALIFORNIA
FIMR
FETAL INFANT MORALITY REVIEW PROGRAM

BETWEEN 1992 AND 1996, despite technical advances in perinatal and neonatal medicine, ***90 babies in Yolo County died before reaching their first birthday.*** Too many babies were born too small to survive, with severe medical complications, or because they may not have received the care they required.

Significant resources have been devoted to high risk populations based on:

- Trends in vital data reveal which populations are most at risk for poor pregnancy outcome and infant death;
- Financial access to prenatal care and Medi-Cal payments have been comprehensive and increased;
- Health support services are available to low income pregnant women and infants;
- Community outreach and education efforts have been increased and better coordinated;
- A team of specialists and community mentors are available to support substance-abusing pregnant women.

These are vital steps toward reducing unnecessary fetal and infant deaths.

Still saving the lives of babies born in a particular community requires a much closer look at the system of care in that community. **The Yolo County FIMR** process provides that look by allowing a FIMR Team to examine what happened during the short lives of babies who have died in order to preventing the deaths of other Yolo infants.

THE FIMR PROCESS

When a fetal or infant death occurs the **FIMR** process of data collection and interpretation begins:

- Information regarding the death is gathered from hospital and public health records, birth and death certificates and home interviews with family members.
- Data is abstracted, personal identifiers are removed (no names), and summarized to assure the confidentiality of patients, providers and health care facilities.

The FIMR Case Review Team reviews the findings and reports to local Coalitions/Community Review Boards who:

- Develop and implement strategies to address barriers to care or causative factors within the community;
- Advocate for local policy changes;
- Educate the community to prevent future fetal and infant deaths.

A report is also made to the California Maternal, Child & Adolescent Health branch who summarizes regional findings and works closely with state and local health departments to effect policy changes and program plans at the federal, state and local level.

FIMR *is a program sponsored by*:
The Yolo County Maternal, Child & Adolescent Health Program
10 Cottonwood Street
Woodland, CA 95695

QUESTIONS ARE THE KEY

The **FIMR** Process uses the answers to basic questions about maternal and child health practices to gather information that will help improve the conditions for women and children:

- Were there early and regular prenatal visits?
- What obstacles did mothers face in seeking that care?
- Were risk factors identified and appropriate steps taken to minimize those risks?
- Were there issues in the mother's lifestyle, culture or economic status that could have been addressed through education or counseling?

The answers to these questions vary in every community and lead us much closer to understanding what factors contribute to fetal and infant death. Although one particular factor may not alter the course for most babies we want to give every baby a chance to survive. Communities can create the best chance for survival by identifying problems and creating solutions together with **FIMR**.

*To find out more information about **FIMR** in Yolo County, contact **FIMR** Coordinator at the Yolo County Department of Health, (530)-666-8645, or the Yolo County Maternal, Child and Adolescent Health Program, toll free 1-800-794-6517.*