

# **Child Abuse and Neglect Community Indicator Data Report**

Submitted to:  
DHHS  
925 Plaza del Paso  
Sacramento, CA 95815

The Family Support Collaborative  
The Child Abuse Prevention Council of Sacramento, Inc.  
4700 Roseville Road  
North Highlands, CA 95660

Submitted by:  
LPC Consulting Associates, Inc.  
PO Box 188529  
Sacramento, CA 95818

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## **SECTION 1 – EXECUTIVE SUMMARY**

Birth & Beyond is a neighborhood-based home visitation program that provides family support services to pregnant women and families with new babies. The goal of the program is to help build strong families, meet the health and safety needs of growing babies, and prepare families and children for the day each child enters school, “ready to learn.” The program has ten (10) outcome objectives, listed below:

1. To reduce the incidence of child abuse and neglect
2. To immunize children prior to school enrollment
3. To encourage and support mothers to breastfeed
4. To insure children received health screenings (vision, hearing, and dental) prior to school enrollment
5. To foster child development (social, emotional, cognitive, and communication skills)
6. To advance parental knowledge of school enrollment and the educational process
7. To improve parenting skills
8. To insure environmental home safety
9. To improve employment readiness for parents
10. To increase access to usage of prenatal care

Because these objectives are universally important for all families, the Birth & Beyond program addresses each objective with families participating in the program. The evaluation of Birth & Beyond addresses all of these outcomes, with the exception of environmental home safety.

In addition to family-specific data, the evaluation examines several indicators each year to determine whether program outcomes parallel county level indicators, and to discern trends that suggest Birth & Beyond’s impact on selected indicators. For example, the annual indicator report compares: (1) county trends and patterns over time; and (2) Birth & Beyond family outcomes with county patterns. Thus, for selected indicators at the county level it will be possible to determine whether Birth & Beyond has begun to impact county rates.

This report presents a variety of county indicators that correspond to many of the ten (10) program objectives, focusing primarily on child abuse prevention, school readiness, and selected health and community well-being outcomes. The indicators reported herein reflect those for which population data is available on an annual basis and rates per population may be calculated. Whenever possible, this report calculated rates by clusters of zip codes aligned with the service areas of each Birth & Beyond program site. All of the indicators relate to some aspect of risk for abuse or neglect, either due to economic status, geographic location, or other social factors. For example, birth rates and related birth-specific data provide the basis for understanding how many families can benefit from Birth & Beyond by regions served.

This report also presents estimated trends for selected indicators, in the absence of population data at the county level. The estimated rate for breastfeeding upon discharge from birthing hospitals is an example of this type of data reported for a Birth & Beyond outcome indicator.

Reviewing annual trends among selected indicators that are associated with risk for child abuse and neglect can be beneficial to interpretation of the continued success of the Birth & Beyond program. Although the zip codes served by Birth & Beyond sites have changed over the program's seven years, this report presents the updated site specific zip codes where applicable.<sup>1</sup> In this way, the report displays representative site-level trend data. This report includes twelve-year statewide, countywide, and site service area-specific (e.g., by zip codes) trends for the following indicators (numbers in parentheses correspond to Birth & Beyond outcome objectives):

- Rate of live births to unmarried women;
- Rate of live births to teen mothers;
- Rate of low birth weight infants by site, county, and state;
- Rate of live births with prenatal care beginning in the first, second, and third trimester of pregnancy (8 year trends) by site, county, and state (10);
- Rate of live births with no prenatal care by site, county, and state (10);
- Number of live births by site and county;
- Number of infant deaths by site and county (1);
- Rate of infant deaths by site, county, and state (1);
- Rate of early childhood deaths (1);
- Number of infant deliveries paid for by Medi-Cal;
- Rate of breastfeeding at discharge from birthing hospital (3);
- Average monthly caseload for CalWORKS program (9);
- Rate of kindergarten students up-to-date for all vaccines (2);
- Number of emergency response calls to Child Protective Services (1);
- Number of children in foster care (1);
- Rate of people aged 25 and older with less than a High School education by zip code (9);
- Number of felony arrests in Sacramento County; and
- Number of arrests for spousal abuse (1).

There is no readily available community level (e.g. zip code) data for the following Birth & Beyond outcome indicators: health screenings (4), child development (5), pre-school enrollment (6), parenting skills (7), or (8) environmental home safety. Similarly, there are some key indicators for which there is no specific Birth & Beyond outcome objective, including:

- Live births;

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<sup>1</sup> From 1999/00 through 2004/05 there were nine Birth & Beyond program sites. Even though the Arden Arcade site ceased operation beginning in 2005/06, this report includes trend data for the community indicators for the zip codes served by that site.

- Births to unmarried women;
- Births to teens;
- Violent crime; and
- Arrests for spousal abuse.

The matrix below presents an overview of the Birth & Beyond outcomes, the related county indicators, and the changes in trends over the last decade, from 1994 through 2005. This timeframe represents six years prior to and six years since the program began.

**Matrix of Program Outcomes and County Indicators**

<b>Birth &amp; Beyond Outcomes</b>	<b>County Indicator</b>	<b>Changes since 1999/00</b>
1. To reduce the incidence of child abuse and neglect	CPS Referrals	Increased
	Substantiated reports of abuse and neglect to CPS	Decreased
	Foster care placements	Decreased
	Child deaths	Decreased
2. To immunize children prior to school enrollment	Immunization for kindergarten entry	Relatively unchanged
3. To encourage and support mothers to breastfeed	Breastfeeding upon discharge from birthing hospital	Increased
4. To ensure children received health screenings (vision, hearing, and dental) prior to school enrollment	Data not available	Unknown
5. To foster child development (social, emotional, cognitive, and communication skills)	Data not available	Unknown
6. To advance parental knowledge of school enrollment and the educational process	Immunization for kindergarten entry	Relatively unchanged
7. To improve parenting skills	Data not available	Unknown
8. To ensure environmental home safety	Data not available	Unknown
9. To improve employment readiness for parents	Medi-Cal deliveries	Decreased
	CalWORKS caseload	Decreased
10. To increase access to usage of prenatal care	Trimester prenatal care commenced	Increased (first trimester); Decreased ("no" care or late care)

The value of examining these trends in the analysis is to: (1) compare changes from year to year; (2) identify high and low years to identify extremes; and (3) observe overall patterns during the past twelve years. For the period prior to and since the implementation of Birth & Beyond, these indicators have provided a context for describing the operational environment of Birth & Beyond, and for examining changes among various outcome targets at the county level. While many factors may account for the fluctuations and changes in rates, for some indicators Birth & Beyond is a likely

contributor to positive change because of its direct work with families most at-risk for child abuse and neglect.

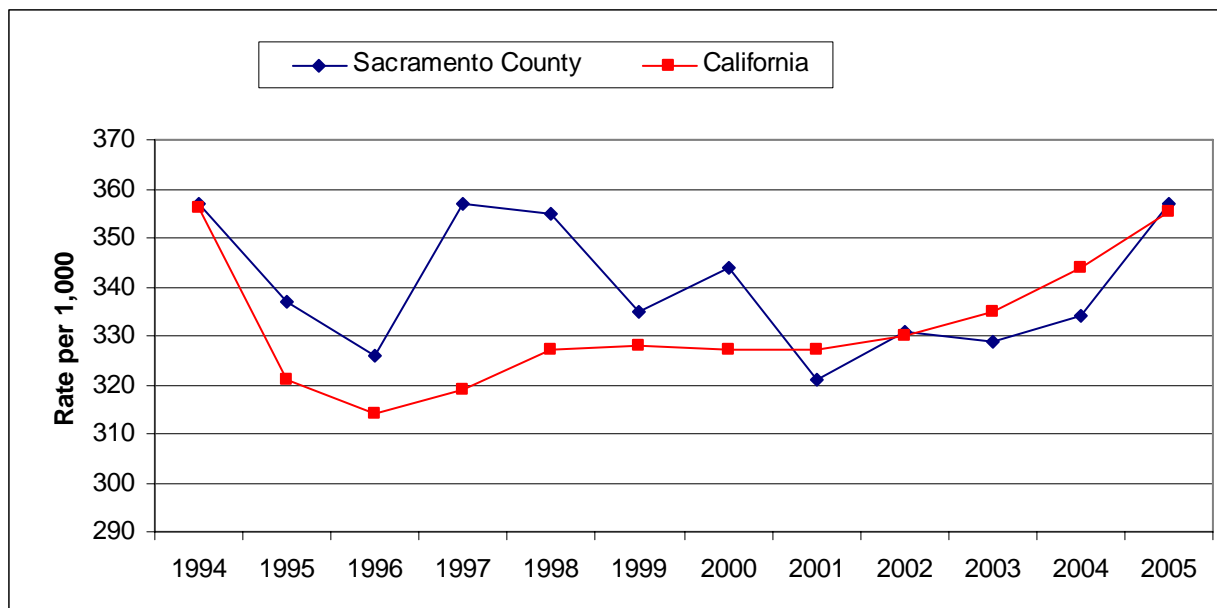
The statewide, countywide, and site specific trends data include selected indicators of risk and both positive and negative outcomes, all of which are associated with child abuse and neglect either directly or indirectly. This report has added indicators not reported heretofore, due to the emergent availability of data in the units of analysis presented. The trends reported herein highlight the need for an effective primary prevention strategy and establish the baseline and annual fluctuations for assessing future effectiveness of the Birth & Beyond Program.

## SECTION 2 – BIRTH TRENDS BY YEAR

Figure 1 presents data on the estimated rate of live births to unmarried women, of all ages, who face parenting without the stable assistance of a partner. Since unmarried women encounter additional challenges due to single parenting and stress associated with dependency on public assistance or limited income, this population is subject to risk for child abuse or neglect.

After a large decline in the mid 1990s, the rate of live births to unmarried women in California has been slowly climbing since 1996. Over the past ten years, the rate of live births to unmarried women in California has increased (from 321 per 1,000 in 1995 to 355 per 1,000 in 2005). The Sacramento County rates have been somewhat more volatile than the state. In addition, while the county rate has exceeded the state rate for most of the past ten years the county rate fell below the state rate in 2001 and did not surpass the state rate again until 2005.

**Figure 1 – Estimated Live Births to Unmarried Women (Rate per 1,000)**

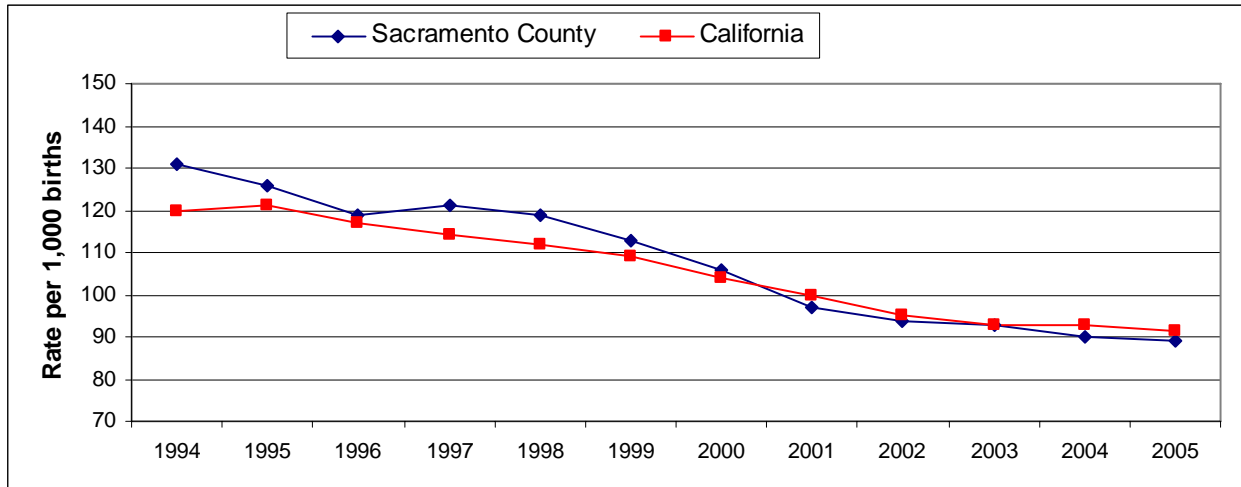


Source: TABLE 2-34. LIVE BIRTHS TO UNMARRIED WOMEN BY RACE/ETHNIC GROUP OF MOTHER, CALIFORNIA COUNTIES AND SELECTED CITY HEALTH DEPARTMENTS, 2005 (By Place of Residence). Retrieved from the California Department of Public Health, Birth Statistics website.  
 URL: <<http://www.cdph.ca.gov/data/statistics/Documents/VSoFCA2005/0234.pdf>>

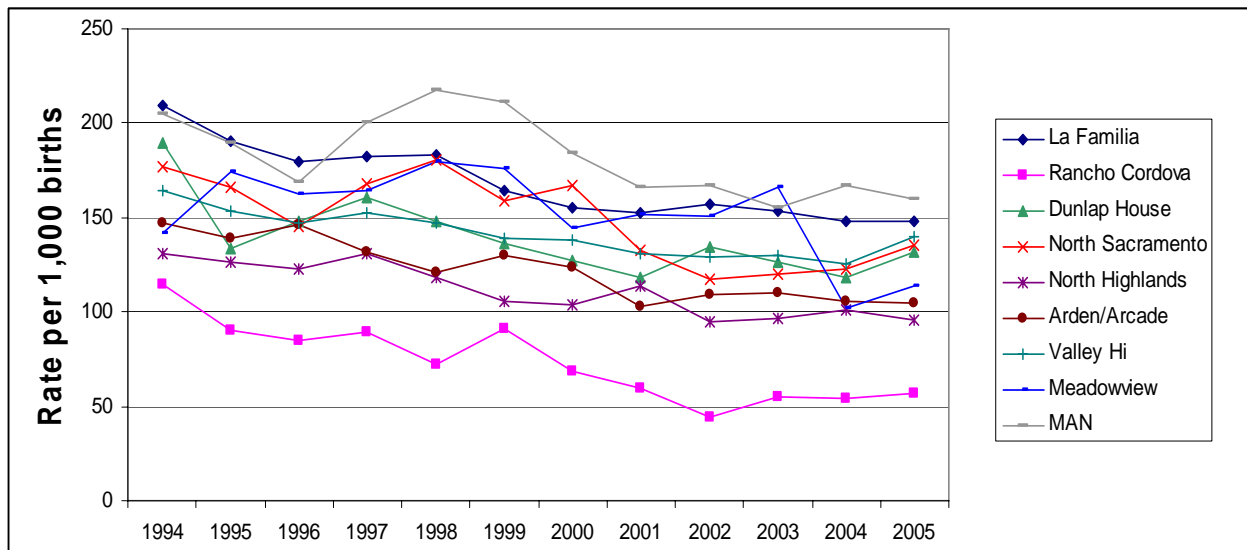
Figures 2 and 3 indicate that the rate of live births to teen mothers is gradually declining. As a whole, the rate of babies born to teen mothers increased between 1997 and 1999, then began a steady decline over the subsequent years. Even though the county and state have a relatively lower rate of babies born to teen moms, the Birth & Beyond sites parallel the downward trends of the county and state. Over the ten year study period, every Birth & Beyond service area exhibit a decline in their rate of teen births. While California's rate of live births to teen mothers declined on average by 2.6 births per

1,000 annually, the Birth & Beyond service areas' average decline was between 2.2 and 5.6 births.

**Figure 2 – Rate of Live Births to Teen Mothers (Sacramento & CA)**



**Figure 3 – Rate of Live Births to Teen Mothers (B&B sites)**



Source: CALIFORNIA BIRTH PROFILES BY ZIP CODE, 2005: Number of Live Births by ZIP Code of Mother's Residence by Race and Age of Mother, Infant Birth Weight, and Mother's Prenatal Care. Retrieved from California Department of Public Health, Center for Health Statistics. URL: <<http://www.cdph.ca.gov/data/statistics/Documents/BirthZips05.pdf>>

## **SECTION 3 – PRENATAL CARE AND LOW BIRTH WEIGHT INFANT PATTERNS BY YEAR, COUNTY, AND SITE**

A second major indicator of potential risk for child abuse or neglect is the onset of prenatal care by trimester. The later in pregnancy prenatal care is introduced, the greater the risk of complications for the baby. Also, there may be reasons for the later care that are in and of themselves indicators of risk. For example, later prenatal care or no prenatal care may coincide with a history of substance abuse and general neglect of the mother's own health care. Conversely, in some cultures prenatal care through the health care delivery system is uncommon and unknown. For women from Mexico or Southeast Asia, midwives are the most accessible forms of birthing care and only form of care upon delivery. Prenatal care may not be accessed in this country due to cultural and traditional norms or preferences. Still, the absence of prenatal care is considered to be an indicator of risk prior to birth and may also transcend added risk for abuse or neglect after delivery. Figures 4 through 11 present data on prenatal trends for women in the Birth & Beyond service areas, as well as the county, and the state since 1994.

Figures 4 and 5 present data on births where prenatal care began in the first trimester, representing the lowest risk category. Approximately 77 percent of all live births in the Birth & Beyond site catchment area and 81 percent of all live births in the county benefited from prenatal care for the full term of their pregnancy. The rates in Birth & Beyond sites, Sacramento County, and California have increased steadily since 1995 reflecting a trend that may be the result of an ambitious statewide campaign to increase access to and use of early prenatal care.

In general, there has been a gradual decline in the rates for late prenatal care since 1995, across the sites, the county, and the state, complementing the data shown for prenatal care in the first trimester (see Figures 6 through 11). In fact, all of the Birth & Beyond sites have experienced declines in births without prenatal care between 1995 and 2005. In 2005 the rate of no prenatal care within the Birth & Beyond service areas ranged between 5 and 20 per 1,000 births compared to 13 and 36 per 1,000 births in 1995. In 2004, the Birth & Beyond sites, the county, and the state experienced a slight upturn in the rate of births with second trimester, third trimester, or no prenatal care. Although these rates increased, 2005 is still one of the lowest years within the last decade.

Given the disproportionately high representation of mothers from Mexican, Hmong, and Ukrainian cultures who are served by Birth & Beyond, the improving rates for prenatal care in the targeted communities may be related to ongoing health care advocacy and access to prenatal care on site for Birth & Beyond's client families, many of whom are relatively recent immigrants. Between 60-70 percent of all families new to Birth & Beyond are pregnant when they enroll. And since the birth rate in these neighborhoods account for the majority of births in Sacramento County, the improvements in prenatal care there likely contribute to the overall improvement at the county level.

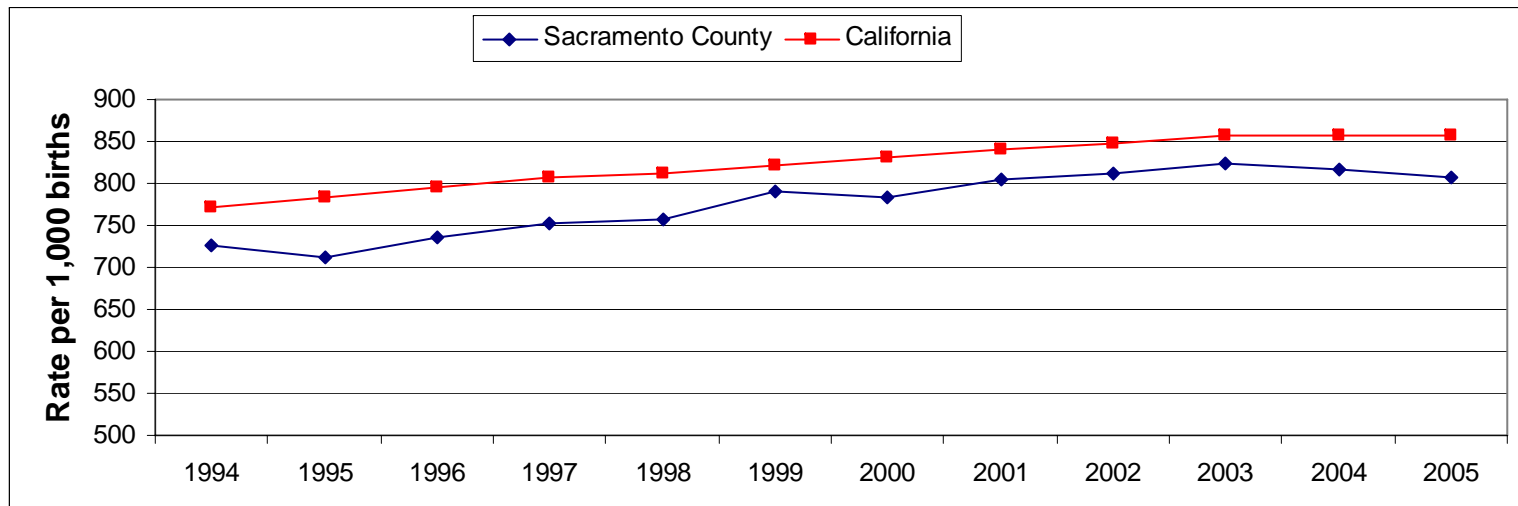
Of the four defined categories of prenatal care (first, second, third, or no care), care beginning in the second trimester has the second highest rate. Figures 6 and 7 show a dramatic decline from 1994 to 2005. In 1994 the Birth & Beyond sites' average rate was 252 per 1,000 live births and in 2005 the rate declined to 176.

A large decline in third trimester prenatal care rates over the past ten years is also evident in Figures 8 and 9, which shows a steady and consistent decline in prenatal care beginning in the third trimester. Whereas the Birth & Beyond service areas had rates ranging from 33 and 82 per 1,000 live births in 1994, by 2005 the rates in these areas ranged between 21 and 38 per 1,000 live births, and were much more similar to the rates for both the county and the state. Prenatal care appears to be starting earlier, having shifted from the second and third to the first trimester.

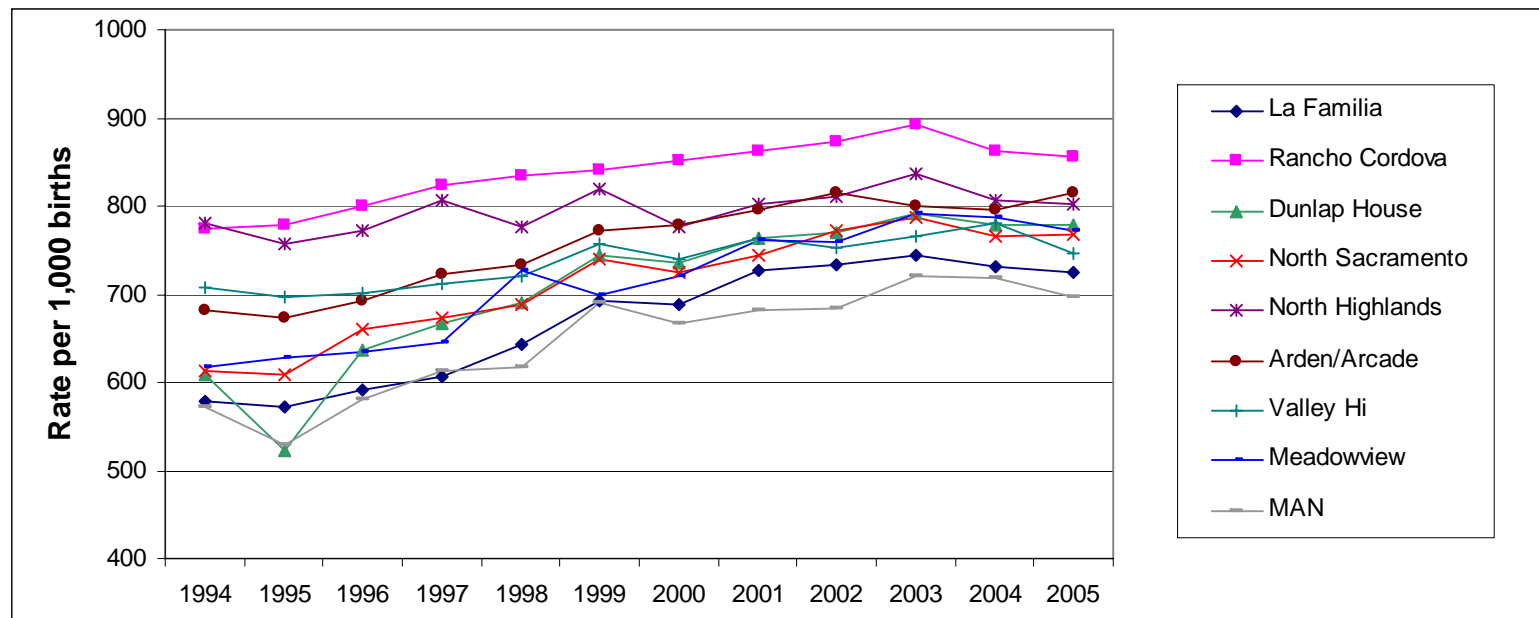
And while there is still room for improvement in the rate for "no prenatal care", it has declined as well. Figure 11 shows that in 1995 the rates for "no prenatal care" in the Birth & Beyond service areas ranged between about 13 and 43 per 1,000 live births. For 2005 the rates in the same service areas range between 7 and 20 per 1,000 live births.

Based on the combined findings from rates of prenatal care, the trend since 1994 has been for fewer mothers to go without prenatal care, and for more to begin care earlier, particularly in the first trimester. While first trimester care is increasing, second trimester care, third trimester care, and no care have been declining most markedly.

**Figure 4 – Prenatal Care Beginning in the 1<sup>st</sup> Trimester (Sacramento & CA)**

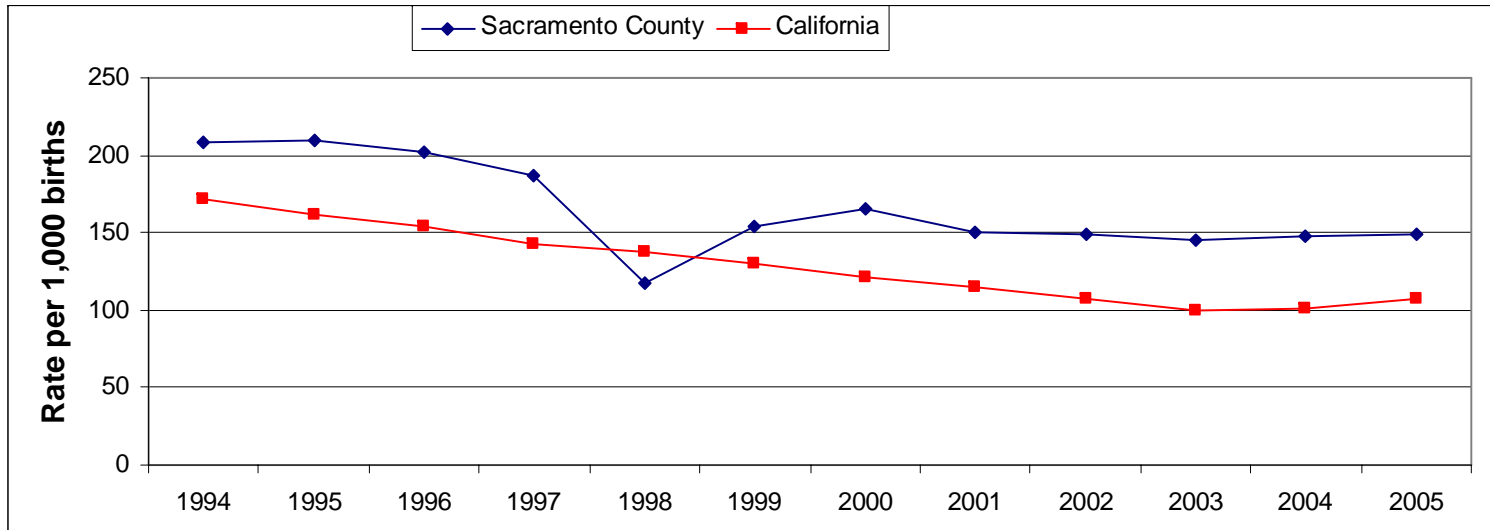


**Figure 5 – Prenatal Care Beginning in the 1<sup>st</sup> Trimester (B&B Sites)**

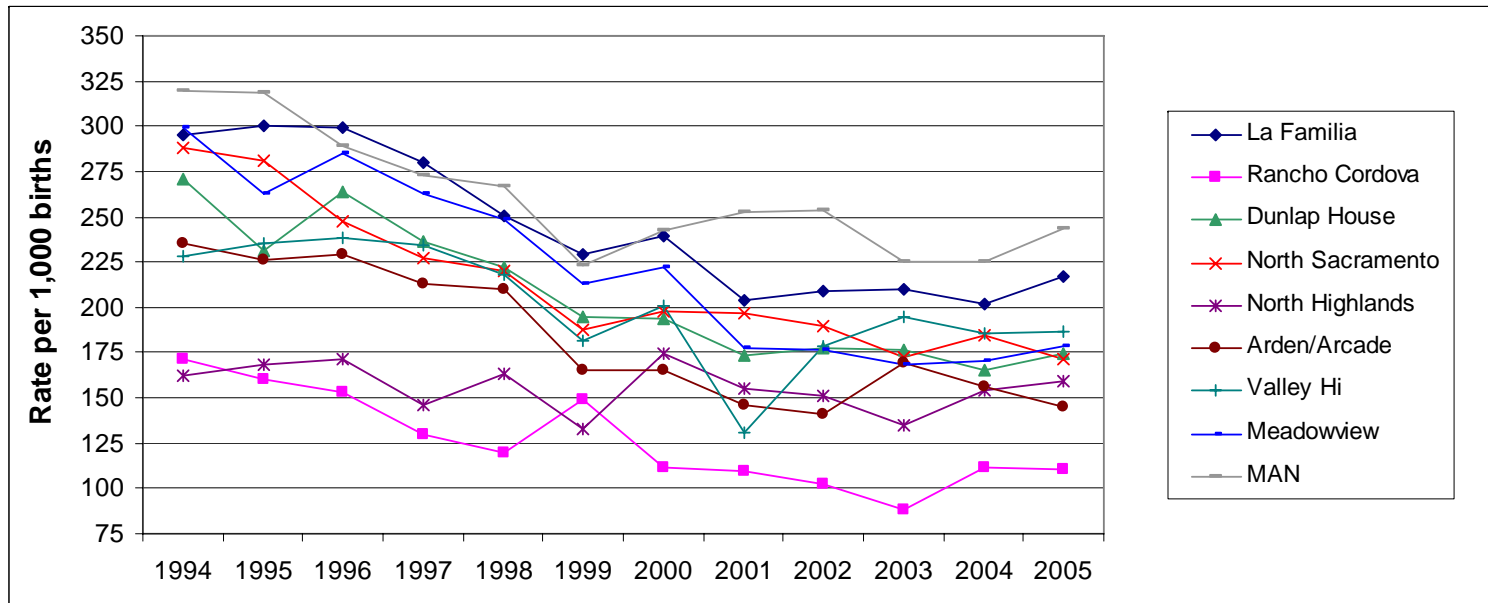


Source: CALIFORNIA BIRTH PROFILES BY ZIP CODE, 2005: Number of Live Births by ZIP Code of Mother's Residence by Race and Age of Mother, Infant Birth Weight, and Mother's Prenatal Care. Retrieved from California Department of Public Health, Center for Health Statistics.  
 URL: <<http://www.cdph.ca.gov/data/statistics/Documents/BirthZips05.pdf>>

**Figure 6 – Prenatal Care Beginning in 2<sup>nd</sup> Trimester (Sacramento & CA)**

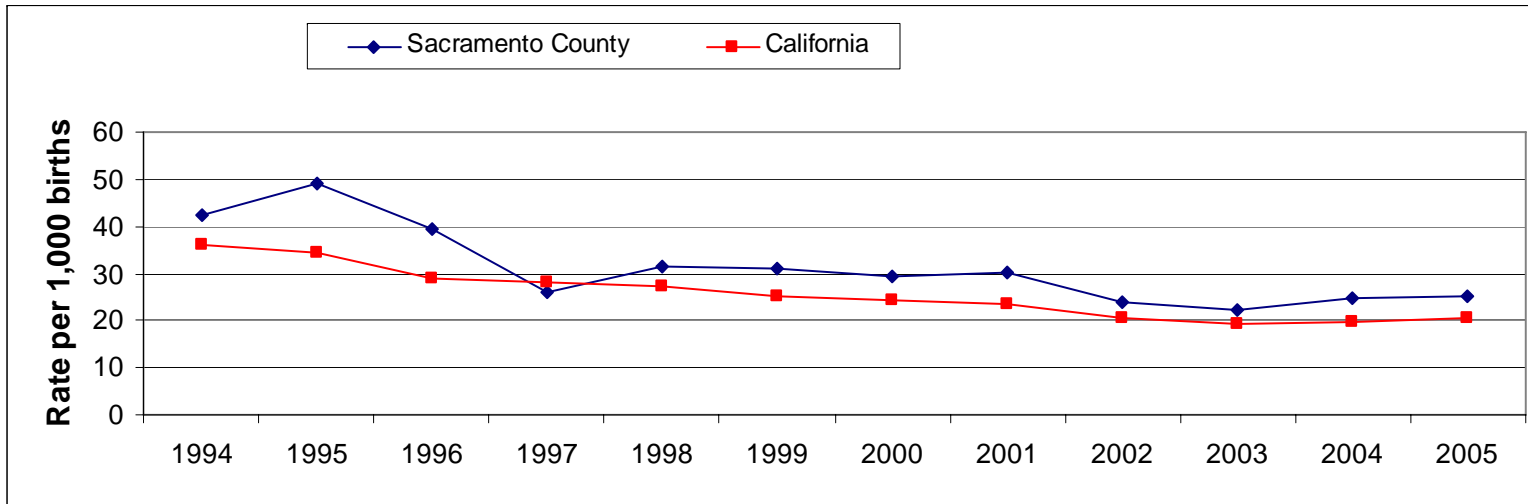


**Figure 7 – Prenatal Care Beginning in 2<sup>nd</sup> (B&B Sites)**

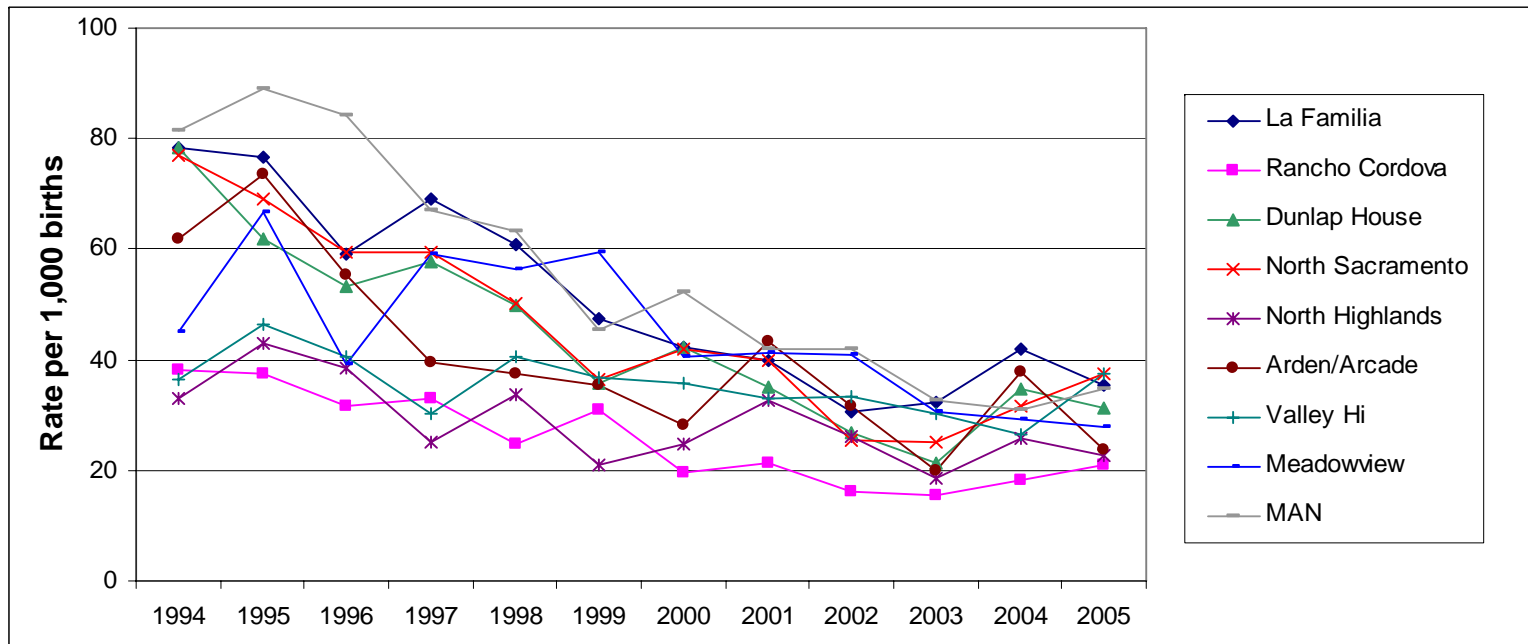


Source: CALIFORNIA BIRTH PROFILES BY ZIP CODE, 2005: Number of Live Births by ZIP Code of Mother's Residence by Race and Age of Mother, Infant Birth Weight, and Mother's Prenatal Care. Retrieved from California Department of Public Health, Center for Health Statistics.  
 URL: <<http://www.cdph.ca.gov/data/statistics/Documents/BirthZips05.pdf>>

**Figure 8 – Prenatal Care Beginning in 3<sup>rd</sup> Trimester (Sacramento & CA)**

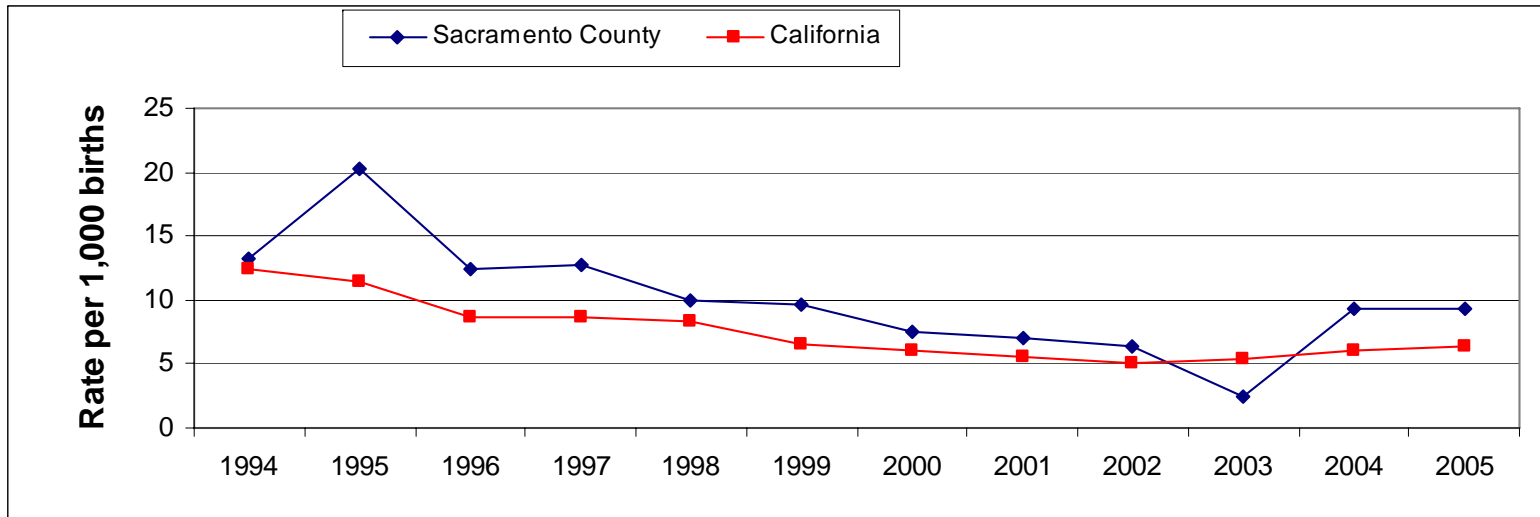


**Figure 9 – Prenatal Care Beginning in 3<sup>rd</sup> Trimester (B&B Sites)**

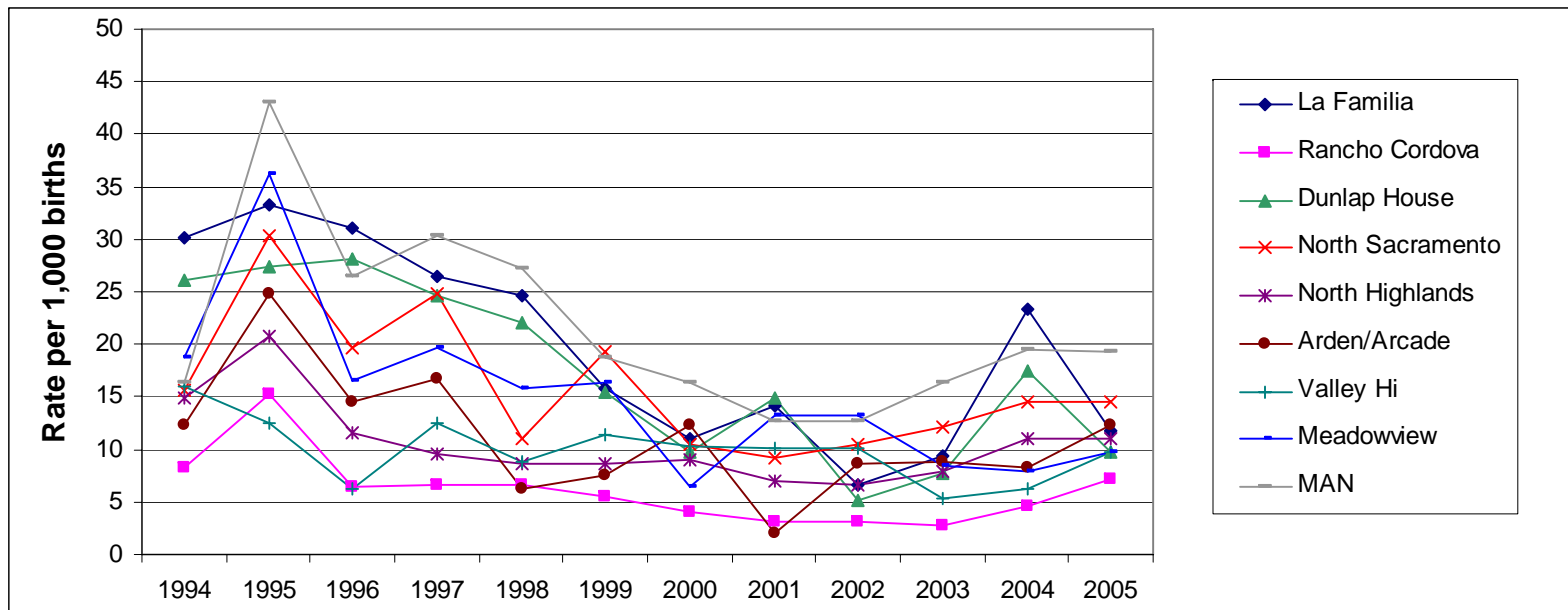


Source: CALIFORNIA BIRTH PROFILES BY ZIP CODE, 2005: Number of Live Births by ZIP Code of Mother's Residence by Race and Age of Mother, Infant Birth Weight, and Mother's Prenatal Care. Retrieved from California Department of Public Health, Center for Health Statistics. URL: <<http://www.cdph.ca.gov/data/statistics/Documents/BirthZips05.pdf>>

**Figure 10 – Live Births with No Prenatal Care per 1,000 (Sacramento & CA)**



**Figure 11 – Live Births with No Prenatal Care per 1,000 (B&B Sites)**



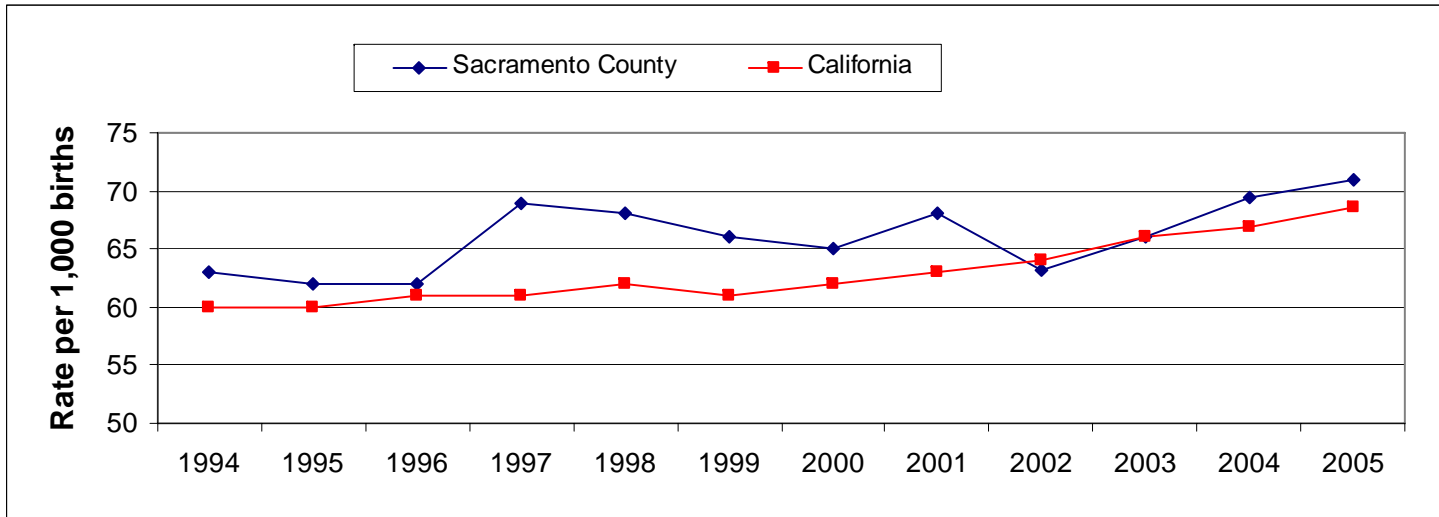
Source: CALIFORNIA BIRTH PROFILES BY ZIP CODE, 2005: Number of Live Births by ZIP Code of Mother's Residence by Race and Age of Mother, Infant Birth Weight, and Mother's Prenatal Care. Retrieved from California Department of Public Health, Center for Health Statistics. URL: <<http://www.cdph.ca.gov/data/statistics/Documents/BirthZips05.pdf>>

One of the by-products of poor or inadequate prenatal care is low birth weight, which puts the baby at higher risk for health problems from the outset. Figures 12 and 13 presents a summary of the patterns of low birth weight infants born since 1994 for each Birth & Beyond program service area, Sacramento County, and California. The percentage of low birth weight infants born in the Birth & Beyond service areas were between 5 and 8 percent in 2005, and between 5 and 9 percent over the last ten year period. As for Sacramento County and California, the percentage of low birth weight infants generally remained between 6 and 7 percent over the 10 year period. While the Birth & Beyond service areas have a slightly higher percentage than the county and state, the percentages for the Birth & Beyond service areas have remained constant while the county and state's percentages continue on a slow upward trend, reaching their highest point in 2005.

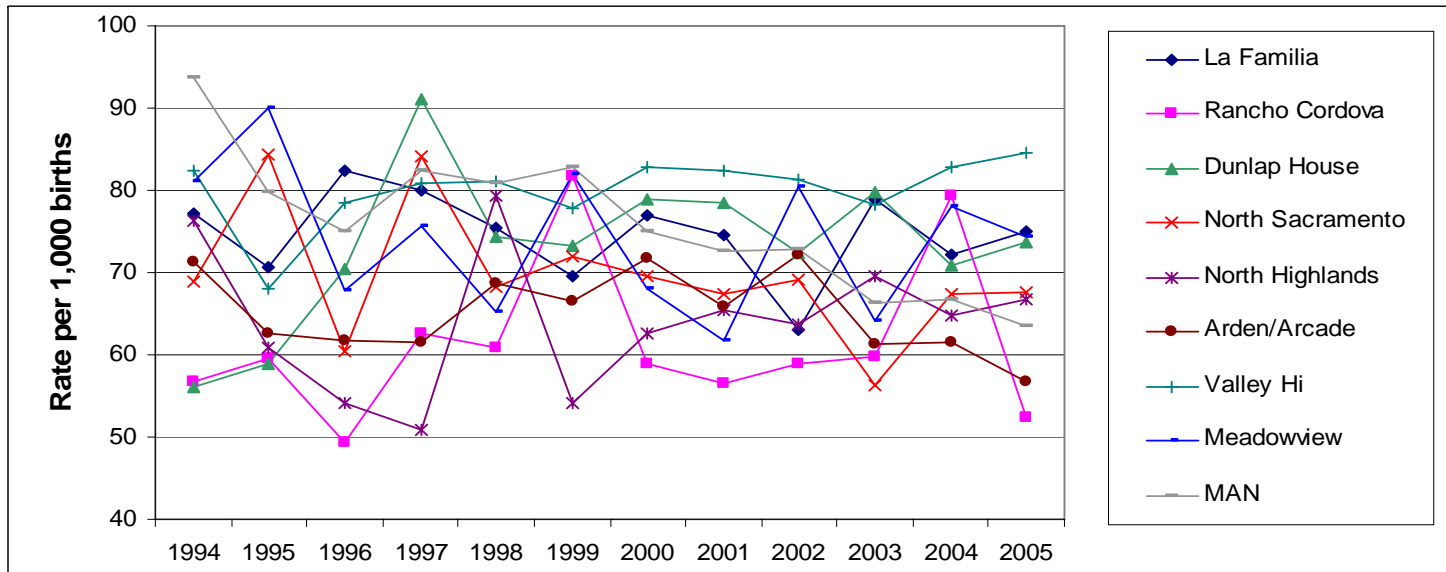
The duration of prenatal care and low-birth weight are both critical indicators of birth complications and infant health that may contribute to risk for child abuse and/or neglect. Some mothers may not seek care because it is not accepted practice in their culture. For others, barriers to prenatal care may include lack of health care, awareness, or motivation. Others may be too young to fully understand how and where to obtain prenatal services or help raising the child after the baby is born.

Birth & Beyond services are designed to mitigate these and other barriers to prenatal care. Birth & Beyond Family Resource Centers host the "Clinic on Wheels" from the UC Davis OB-GYN department, providing prenatal care as often as weekly.

**Figure 12 – Rate of Low Birth Weight Infants (less than 2,500 grams) (Sacramento & CA)**



**Figure 13 – Rate of Low Birth Weight Infants (less than 2,500 grams) (B&B Sites)**



Source: CALIFORNIA BIRTH PROFILES BY ZIP CODE, 2005: Number of Live Births by ZIP Code of Mother's Residence by Race and Age of Mother, Infant Birth Weight, and Mother's Prenatal Care. Retrieved from California Department of Public Health, Center for Health Statistics.  
 URL: <<http://www.cdph.ca.gov/data/statistics/Documents/BirthZips05.pdf>>

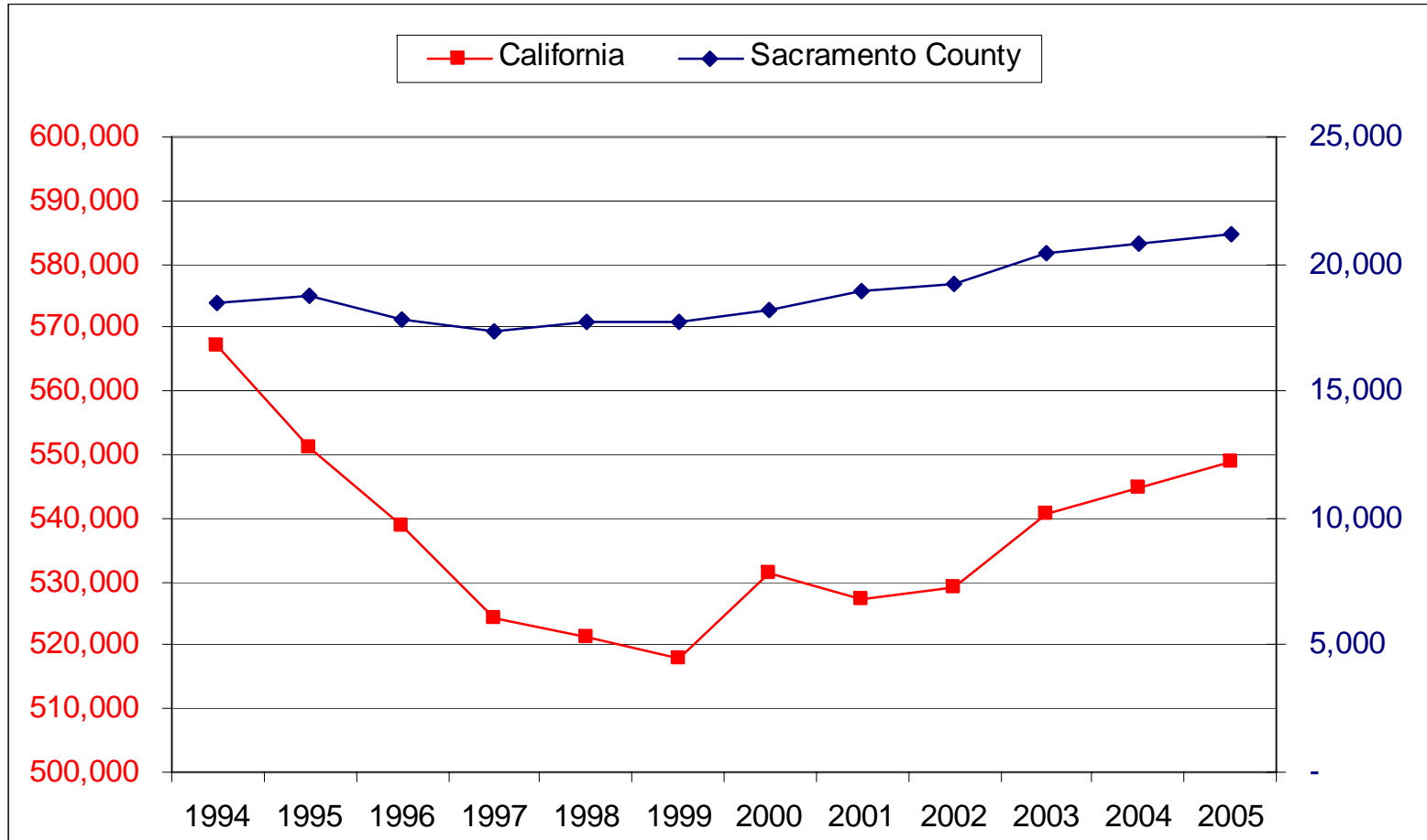
## SECTION 4 – LIVE BIRTHS AND CHILD DEATHS BY YEAR AND SITE

Trends in live births and both child and infant deaths also provide a context for analyzing factors that relate to child abuse and neglect. Figures 14 through 18 present selected findings for live births and both child and infant deaths. Although the cause of death is not reported in detail, a variety of causal factors contribute to infant and early childhood death. For infants the causes may be related to inadequate prenatal care, early neglect or abuse, or congenital problems. For older children the variety of causal factors becomes more complex. Children under the age of six are the most vulnerable and endure far greater risk at the hand of abuse and neglect from their caregivers. The following charts present data between 1994 and 2005, or approximately six years before and six years after Birth & Beyond's inception.

Figure 14 presents the trends of live births in California and Sacramento County from 1994 to 2005. Sacramento County in 1997 and California in 1999 reached their 10 year low for live births. Since then, the number of live births has continued to climb.

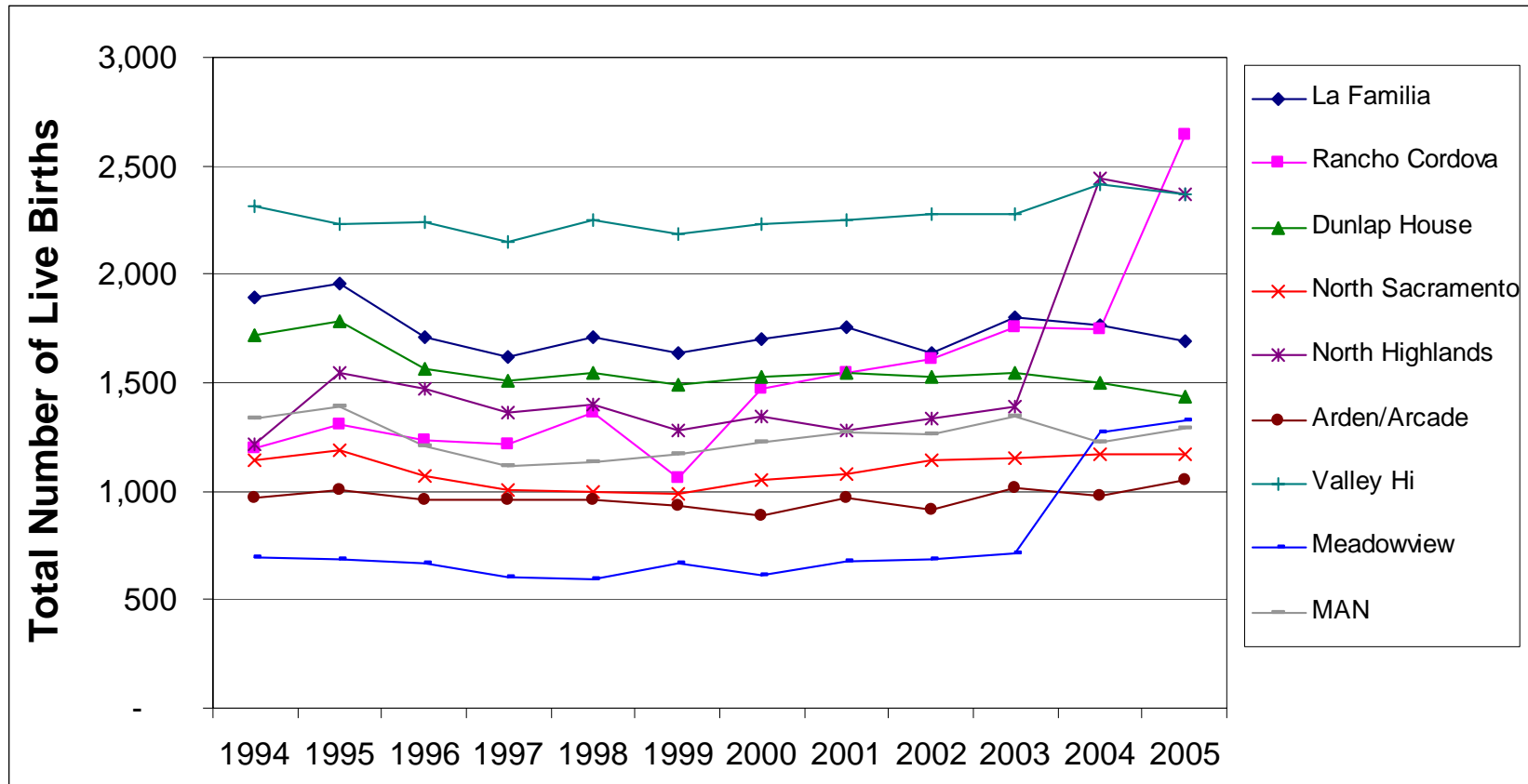
Figure 15 presents the trends for live births in Birth & Beyond program site service areas between 1994 and 2005. Over the ten year period the number of births peaked in 1995 for nearly all the Birth & Beyond site service areas, and in 1999 they experienced their lowest numbers. With a few exceptions, the numbers for each site have remained relatively constant from year to year until 2003, ranging from just over 500 to around 2,500 per service area. In 2004, the North Highlands and Meadowview sites show a jump in the number of live births likely a result of more ZIP codes included in their service areas. Likewise, the Rancho Cordova site experienced a sharp increase in the number of live births in 2005 due to added zip code service areas. Rancho Cordova is one site that has experienced a gradual increase in the number of births over the 10 year period climbing from 1,200 births in 1994 to 2,647 in 2005. Altogether, the Birth & Beyond service areas accounted for 72 percent of the live births in 2005 in Sacramento County.

Figure 14 – Live Births in California and Sacramento County



Source: TABLE 2-18. LIVE BIRTHS, CALIFORNIA COUNTIES, 1996-2005 (By Place of Residence). Retrieved from California Department of Public Health, Birth Statistics website. URL: <<http://www.cdph.ca.gov/data/statistics/Documents/VSoFCA2005/0218.pdf>>

Figure 15 – Live Births in B&B Service Areas



Source: CALIFORNIA BIRTH PROFILES BY ZIP CODE, 2005: Number of Live Births by ZIP Code of Mother's Residence by Race and Age of Mother, Infant Birth Weight, and Mother's Prenatal Care. Retrieved from California Department of Public Health, Center for Health Statistics. URL: <<http://www.cdph.ca.gov/data/statistics/Documents/BirthZips05.pdf>>

Figure 16 presents the six-year aggregate number of infant deaths (under the age of 12 months) in the Birth & Beyond service areas comparing the period six years prior to with the period six years after Birth & Beyond's inception. In half the site service areas, the number of infant deaths remained fairly similar after Birth & Beyond began. The number of infant deaths decreased in Valley Hi by 20 percent and in MAN by 19 percent, while infant deaths in Arden/Arcade (a former site) and Rancho Cordova increased by 24 percent and 17 percent respectively.

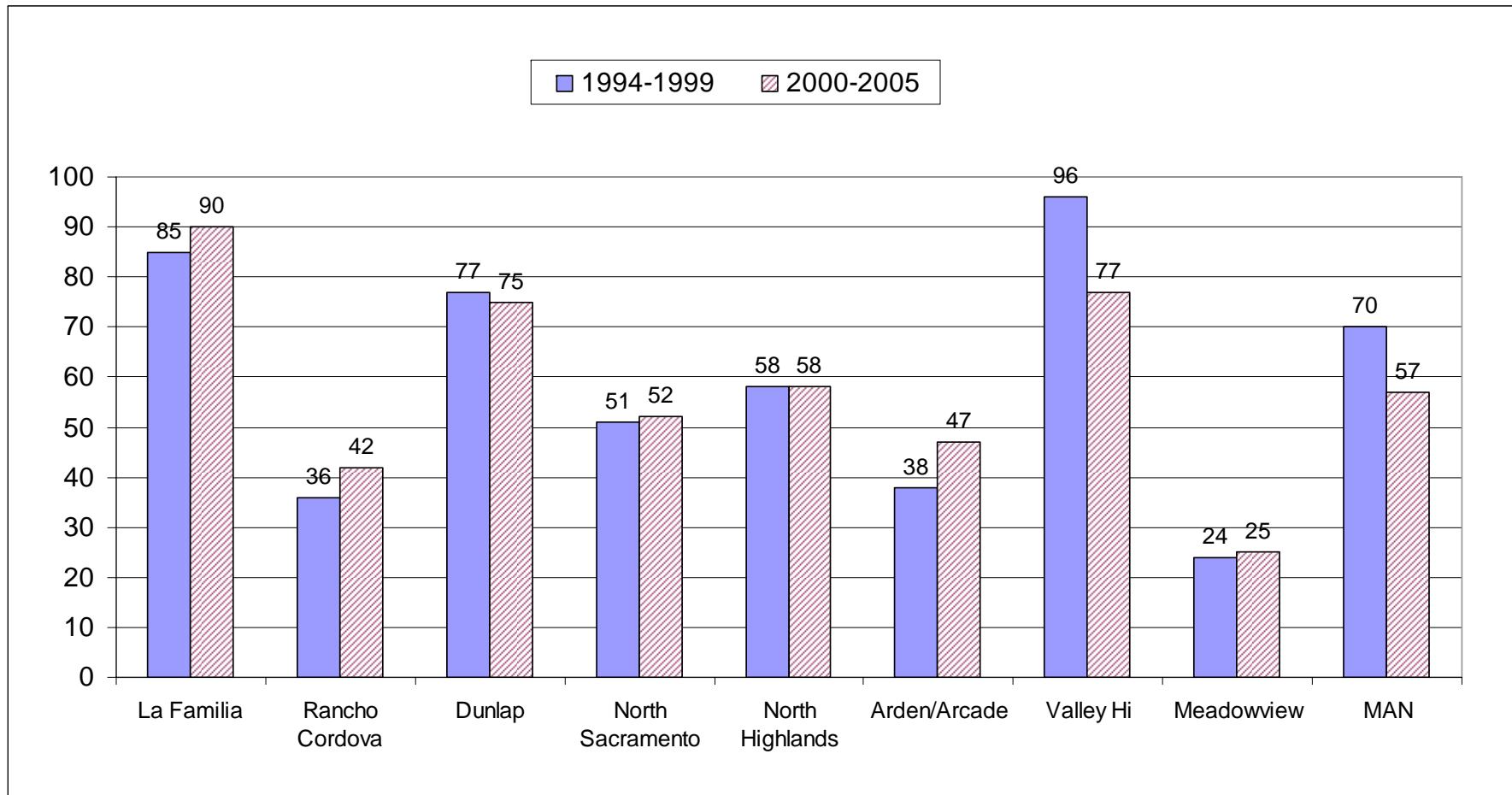
Figure 17 presents the number of early childhood deaths (children between the ages of 1 and 4). For the combined Birth & Beyond service area, early childhood deaths decreased by 30 percent when comparing the six years pre-program to six years post-program. Of all the Birth & Beyond sites, Valley Hi and MAN experienced the largest relative declines in childhood deaths between the pre and post periods. When Birth & Beyond began to provide services in 2000 these two sites also had the highest rates for births and reports of child abuse and neglect. Thus, they have had the most room for improvement and have observed the most dramatic positive change.

Figures 18 and 19 present a summary of the data trends reported by the Sacramento Child Death Review Team (CDRT) between 1998 and 2005.<sup>2</sup> The trend lines are based on secondary data reported in the annual report by the CDRT for 2000 and 2005. In a comparison of the trends for the zip codes represented by Birth & Beyond sites with the remaining zip codes of Sacramento County, child deaths have been on the decline where Birth & Beyond is providing services. Given that nearly three quarters of the births in Sacramento County occur in these same zip codes, it appears that the Birth & Beyond program is having the intended impact on reducing child abuse and neglect, as well as child deaths for infants and children younger than 6 years of age. Areas not served by Birth & Beyond have maintained about the same number of child deaths over this period of time (from 1998 through 2005).

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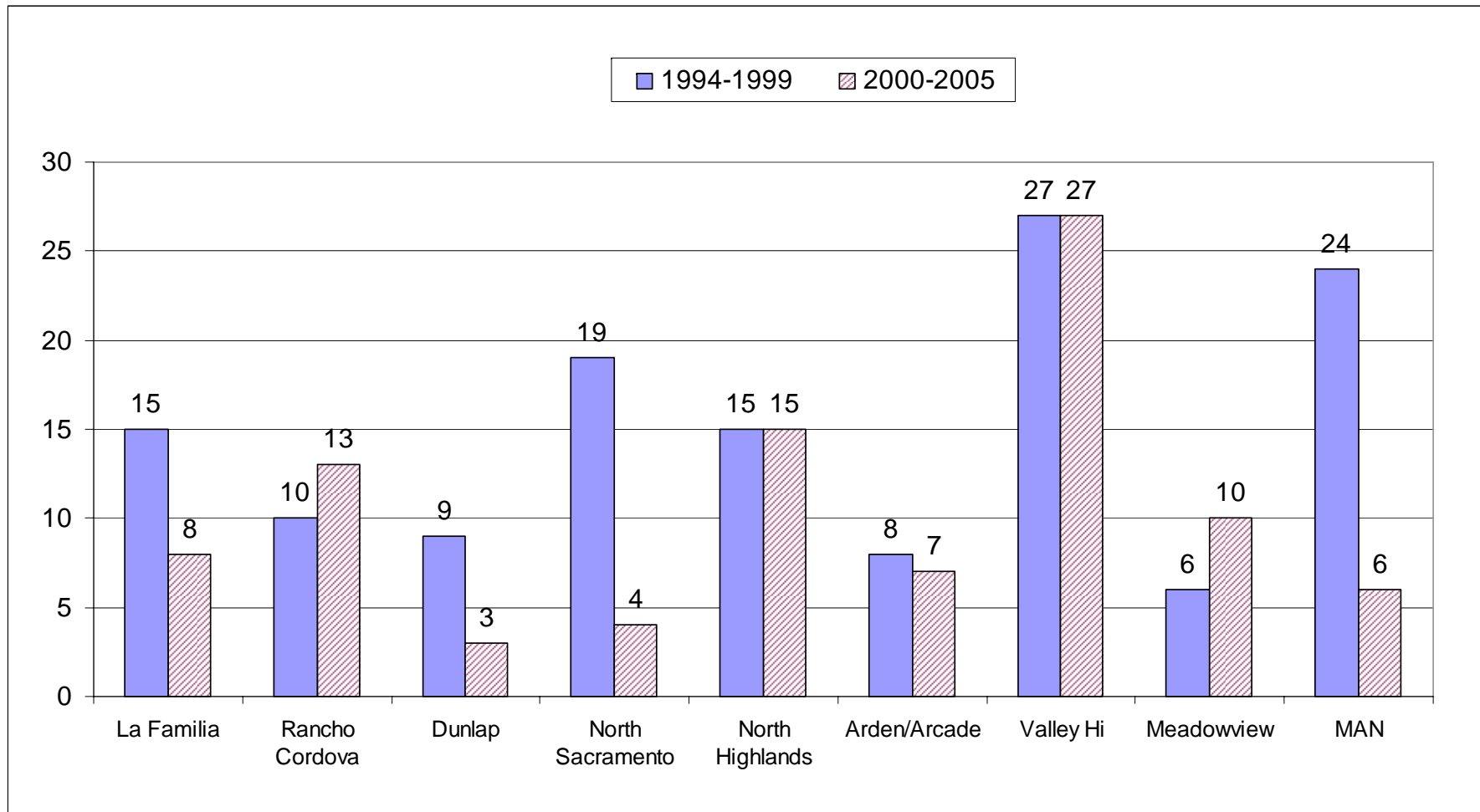
<sup>2</sup> Child Abuse Prevention Council of Sacramento, Inc. *Sacramento County Child Death Review Team. 2000 Annual Report: Child Abuse Fatalities and Other Deaths.* Sacramento, CA: The Child Abuse Prevention Council of Sacramento, Inc., 2001.  
 Child Abuse Prevention Council of Sacramento, Inc. *Sacramento County Child Death Review Team. 2005 Annual Report.* Sacramento, CA: The Child Abuse Prevention Council of Sacramento, Inc., 2006.

**Figure 16 – Number of Infant Deaths (0-12 months of age) (B&B Sites)**



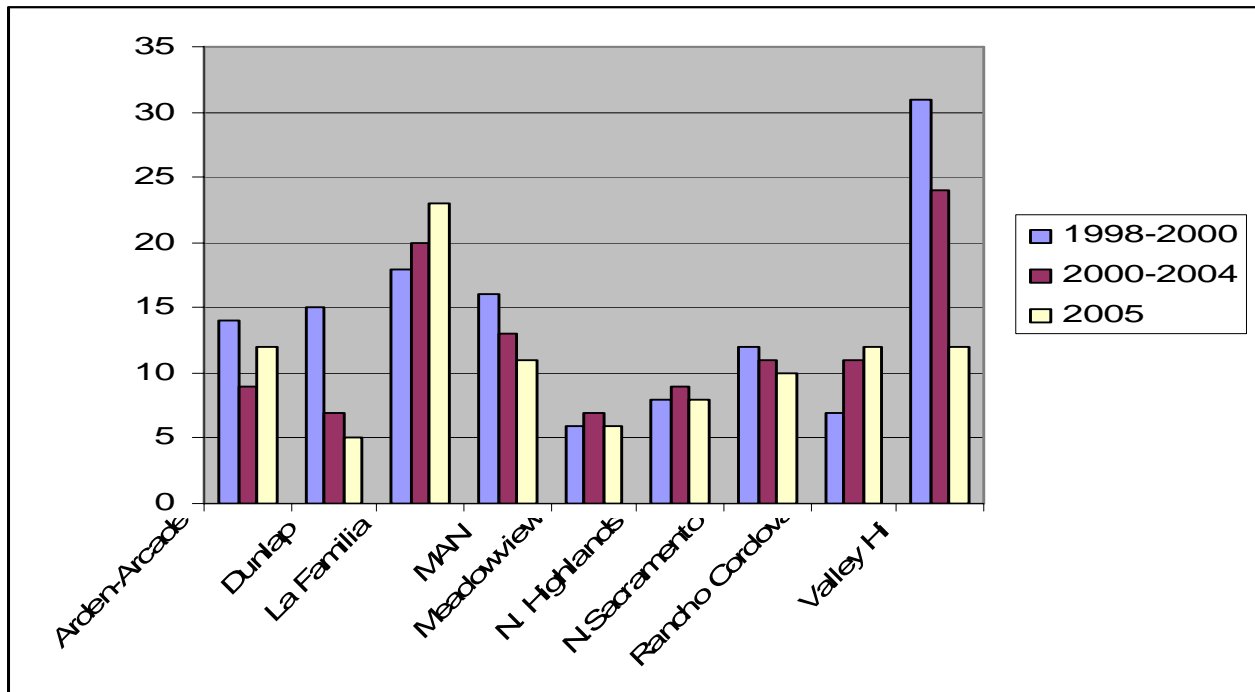
Source: Number of Deaths by ZIP Code of Decedent's Residence by Sex and Age of Decedent and Leading Causes of Death, California, 2005. Retrieved from California Department of Public Health, Center for Health Statistics. URL: <<http://www.cdph.ca.gov/data/statistics/Pages/ZipCodeData.aspx>>

**Figure 17 – Number of Early Childhood Deaths (1-4 years of age) (B&B Sites)**



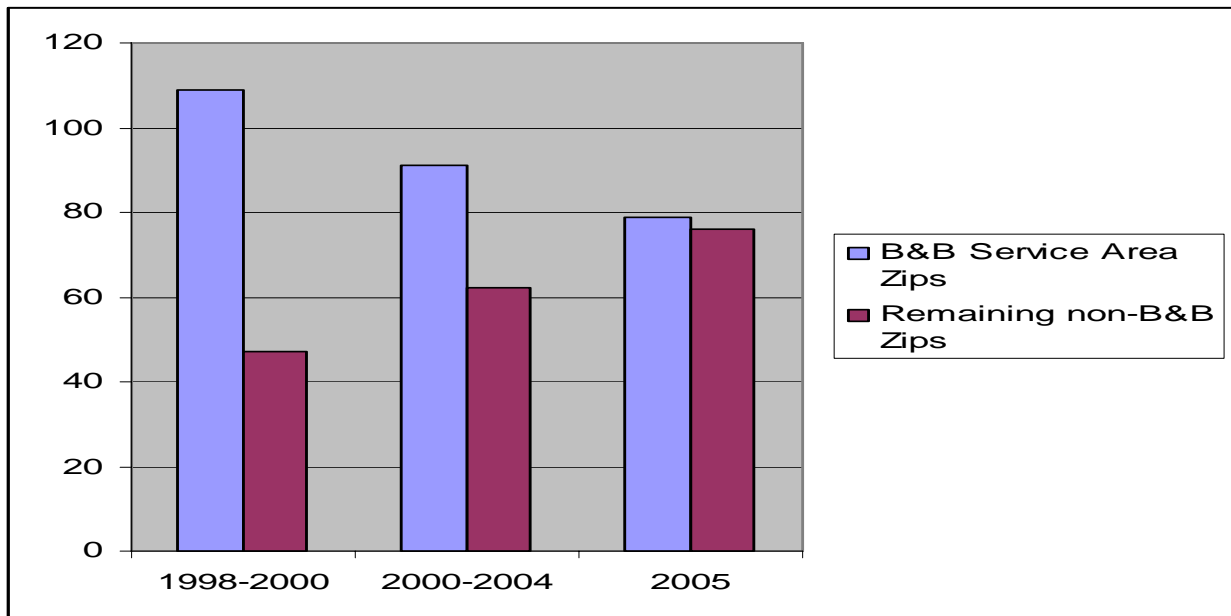
Source: Number of Deaths by ZIP Code of Decedent's Residence by Sex and Age of Decedent and Leading Causes of Death, California, 2005. Retrieved from California Department of Public Health, Center for Health Statistics. URL: <<http://www.cdph.ca.gov/data/statistics/Pages/ZipCodeData.aspx>>

**Figure 18 – Average Number of Child Deaths: Birth & Beyond Sites**



Source: Child Abuse Prevention Council of Sacramento, Inc. Sacramento County Child Death Review Team. 2000 Annual Report: Child Abuse Fatalities and Other Deaths. Sacramento, CA: The Child Abuse Prevention Council of Sacramento, Inc., 2001. Child Abuse Prevention Council of Sacramento, Inc. Sacramento County Child Death Review Team. 2005 Annual Report. Sacramento, CA: The Child Abuse Prevention Council of Sacramento, Inc., 2006.

**Figure 19 – Comparison of Average Annual Number of Child Deaths: Comparison of Birth & Beyond Sites and Remainder of Sacramento County**



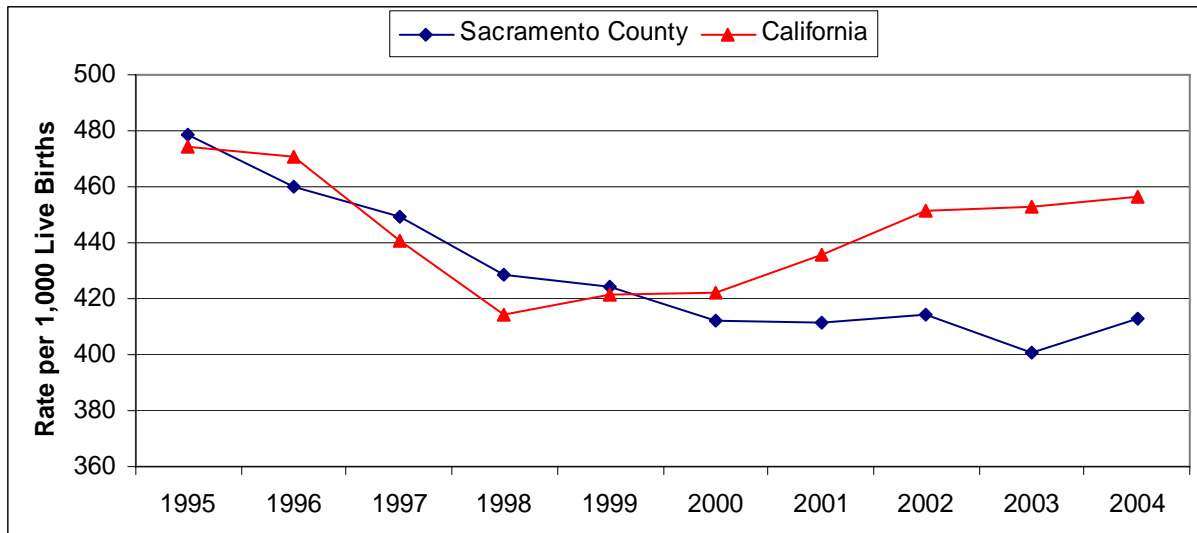
Source: Child Abuse Prevention Council of Sacramento, Inc. Sacramento County Child Death Review Team. 2000 Annual Report: Child Abuse Fatalities and Other Deaths. Sacramento, CA: The Child Abuse Prevention Council of Sacramento, Inc., 2001. Child Abuse Prevention Council of Sacramento, Inc. Sacramento County Child Death Review Team. 2005 Annual Report. Sacramento, CA: The Child Abuse Prevention Council of Sacramento, Inc., 2006.

## SECTION 5 – ECONOMIC AND HEALTH INDICATORS BY YEAR

Economic and health indicators are also related to the potential for child abuse and neglect, representing sources of stress for parents and families. Low income or poverty status, unemployment, and inability to provide for one's family are sources of uncertainty that create considerable stress for either single parents or two-parent families. Many rely on public assistance, in the form of Medi-Cal or CalWORKs (California Work Opportunities and Responsibility to Kids). Figures 18 through 20 provide data on selected indicators of economic and physical health as they relate to potential risk factors associated with child abuse or neglect.

Figure 20 presents data on the rate of infant deliveries paid for by Medi-Cal per 1,000 live births in Sacramento County and California. From 1995 to 2000 the rate of infant deliveries paid for by Medi-Cal was relatively similar in both Sacramento County and California. California ranged from an approximate high of 480 Medi-Cal deliveries in 1995 to a low of 415 Medi-Cal deliveries three years later. Since 1998 though, the state's rate of Medi-Cal deliveries has continued to rise. Unlike the state, Sacramento County continues on its slight downward trend. The county's rate of Medi-Cal deliveries in 1995 was nearly 480 per 1,000 live births and has dropped steadily to approximately 415 in 2004. At the time of this report, 2005 data on infant deliveries paid for by Medi-Cal was not available.

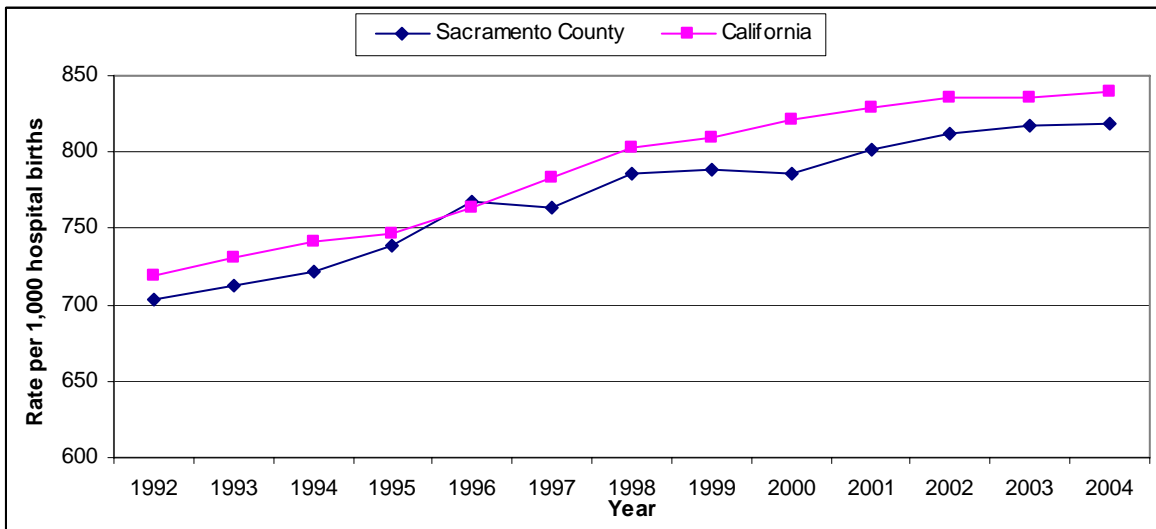
**Figure 20 – Infant Deliveries Paid for by Medi-Cal (Sacramento & CA)**



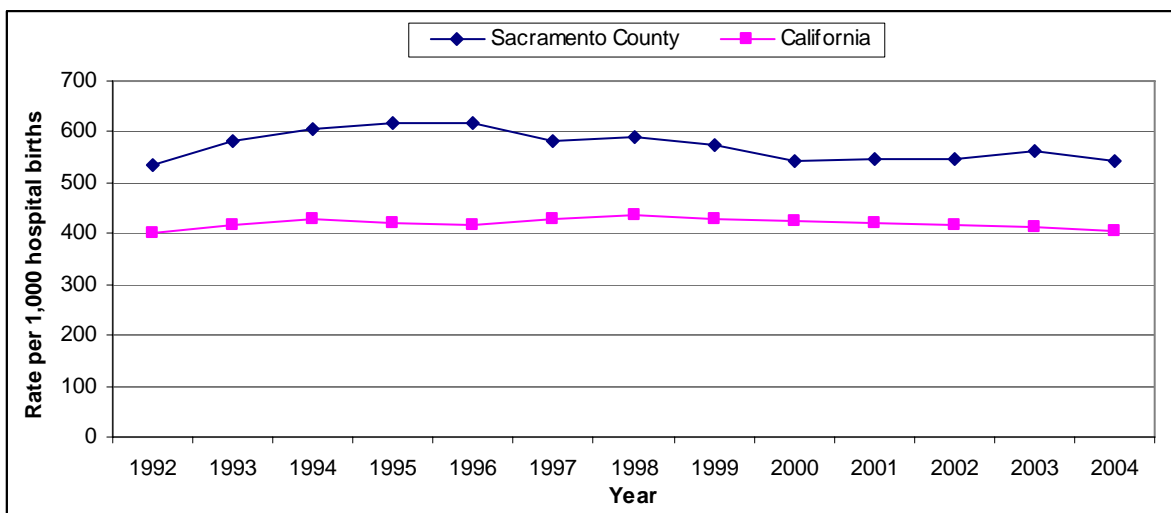
Source: Medi-Cal Funded Deliveries. Retrieved from California Department of Health Services, Fiscal Forecasting & Data Management Branch website. URL: <<http://www.dhs.ca.gov/ffdmb/MCSS/Published%20Reports/Delivery/deliver.htm>>

Figures 21 and 22 show the breastfeeding status at discharge from birthing hospitals for California State and Sacramento County. Figure 19 presents the rate of women exclusively breastfeeding and those supplementing breastfeeding with formula or some other type of feeding. Similar to the State rate, the rate in Sacramento County has continuously climbed from 704 per 1,000 in 1992 to 818 in 2004. The rate of women who were using breastfeeding as the only method of feeding at the time of discharge stayed relatively constant from 1992 to 2004, as shown in Figure 22. However, it can also be noted that the rate of exclusive breastfeeding in Sacramento County was significantly higher than the state rate during each of those 13 years.

**Figure 21 – Any Breastfeeding at Discharge from Birthing Hospital (Sacramento & CA)**



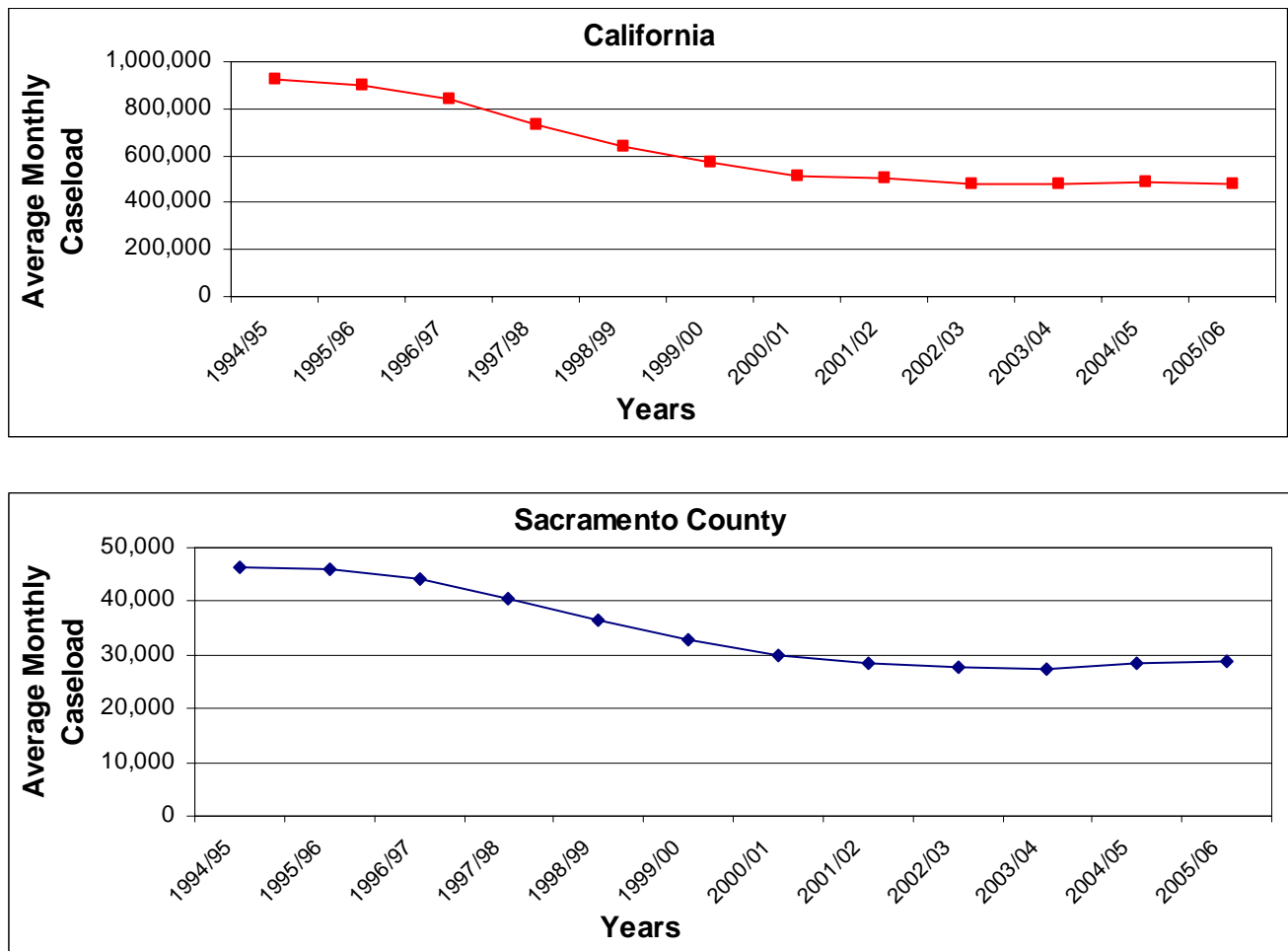
**Figure 22 – Exclusive Breastfeeding at Discharge from Birthing Hospital (Sacramento & CA)**



Source: *In-Hospital Breastfeeding Initiation by Maternal County of Residence*. Retrieved from California Department of Health Services, Maternal, Child and Adolescent Health Branch.  
 URL: <[http://www.mch.dhs.ca.gov/programs/bfp/in\\_hospital\\_breastfeeding\\_initiation.htm](http://www.mch.dhs.ca.gov/programs/bfp/in_hospital_breastfeeding_initiation.htm)>

Figure 23 shows the average monthly caseload for the CalWORKs program. The trend in the average monthly caseload in Sacramento County mirrors that of California. Since the 1994/95 fiscal year, the caseload has steadily decreased. In Sacramento County, the caseload decreased from roughly 46,000 caseloads to 29,000 cases (a 37% decrease). In California, the caseload decreased from roughly 921,000 cases to 475,000 (a 48% decrease). This trend corresponds to the welfare-to-work initiative that has targeted reduced long term reliance on public assistance, which coincided with positive economic and employment indicators for much of this ten-year period. Recent increases in unemployment rates have resulted in flattened rates since about 2000/01, following six years of decline.

**Figure 23 – Average Monthly CalWORKs Program Caseload (Sacramento & CA)**



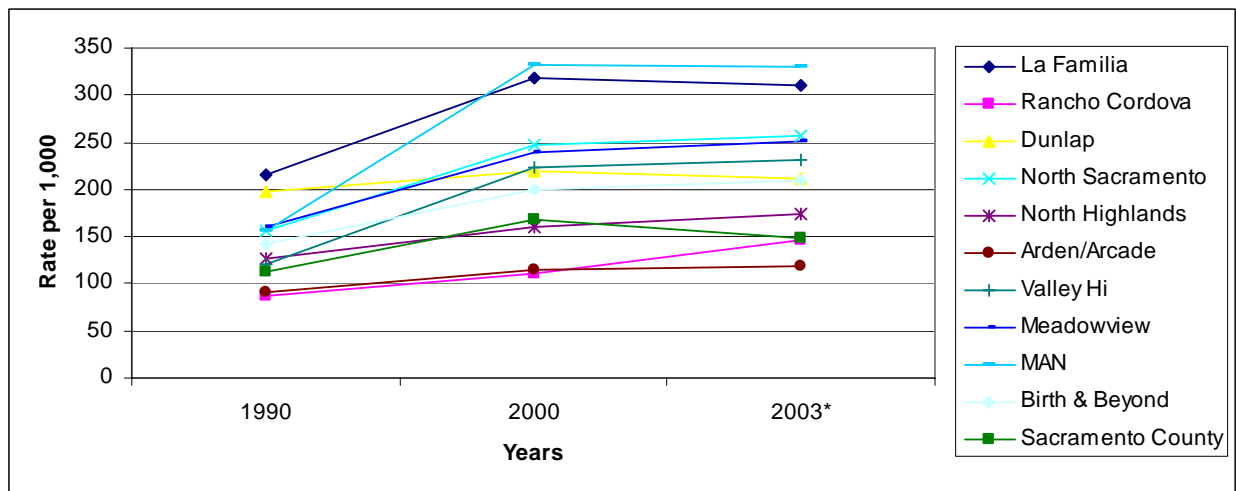
Source: CA 237 CW - CalWORKs Cash Grant Caseload Movement Report. Retrieved from the California Department of Social Services: Research and Data Reports. URL: <[http://www.dss.cahwnet.gov/research/CA237CW-Ca\\_389.htm](http://www.dss.cahwnet.gov/research/CA237CW-Ca_389.htm)>

Similarly, education level is a community level indicator that, taken in combination with employment or unemployment rates, provides an approximation of socio-economic status. Lower education levels usually correspond with fewer job choices and less opportunity for career advancement. This translates to economic instability when

families struggle to make ends meet for simple basic needs. Stress related to financial insecurity may transcend family dynamics and relationships. While educational attainment alone is not an indicator for child abuse and neglect, it represents a contributing factor for economic instability and its attendant difficulties.

Figure 24 presents information on the rate of persons who have less than a high school education per 1,000 persons. Between 1990 and 2000, the rate of persons over 25 who hold less than a high school education increased, but then declined slightly between 2000 and 2003 and stayed relatively consistent through 2005.

**Figure 24 – Rate per 1,000 of Persons 25 Years and Older with Less than a High School Education**



Sources: 1990 Census and 2000 Census. Retrieved from U.S. Census Bureau American FactFinder website. URL: <[http://factfinder.census.gov/home/saff/main.html?\\_lang=en](http://factfinder.census.gov/home/saff/main.html?_lang=en)>.

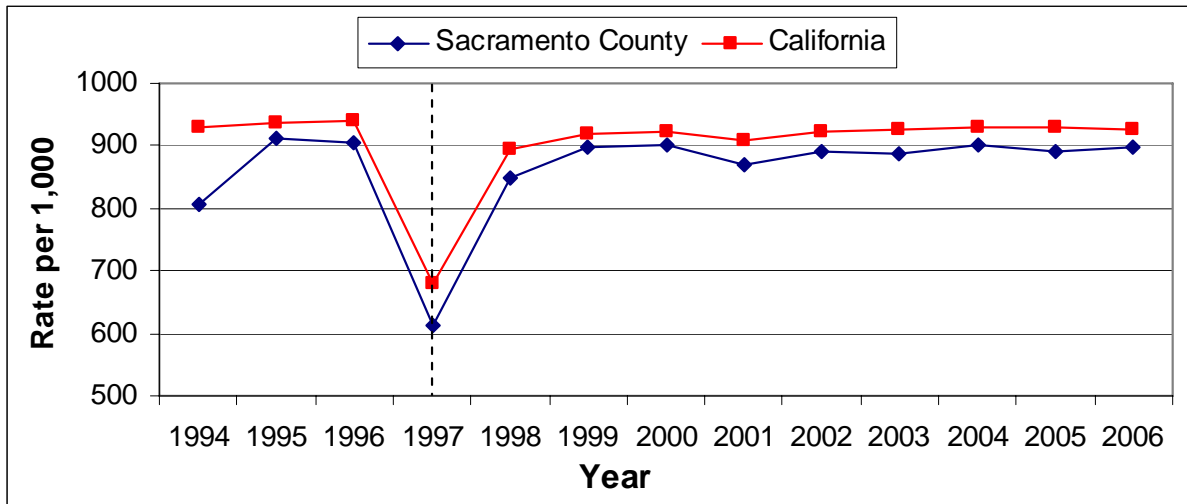
\*Western Economic Research, 2003 (Projections based on 2000 Census). Retrieved from the Community Services Planning Council website. URL: <<http://www.communitycouncil.org/level-3/saccounty.html>> (data has not been updated since 2003).

Figure 25 presents a single positive health indicator, the immunization rates for children 0 to 5. Since immunization is one of the target objectives for Birth & Beyond participants, it is important to assess the trends as determined by measures of children *enrolled* in kindergarten. Children who remain home until they enter first grade may not be as up-to-date with their immunizations due to the absence of an authority to assure compliance.

For the population of children enrolled in kindergarten, the rate of compliance with immunization requirements is relatively high. In Sacramento County over the past 12 years the rate of compliance ranged from 850 to 900 per 1,000 students enrolled. Similarly, the state compliance rate is high with roughly 900 to 950 per 1,000 in compliance. In 1997, there was a large dip in both the county and state (down to 600 to 700 per 1,000). This decline could be attributed to revisions in the immunization requirements by the California Department of Health Services, placed into effect August 1997. This revision required children to receive three additional immunizations as well as required any child care provider to access immunization records to ensure

compliance. This change presumably affected those students enrolling in school in August 1997.

**Figure 25 – Rate of Kindergarten Students Up to Date for All Vaccines**



Source: 2005 KINDERGARTEN ASSESSMENT RESULTS. Retrieved from the California Department of Health Services, Immunization Branch website. URL: <<http://www.dhs.ca.gov/ps/dcdc/izgroup/pdf/CA06.pdf>>

Since Birth & Beyond has been operational (early 2000), families who enrolled during pregnancy or with a newborn and have remained with the program from the beginning are only now enrolling that child in kindergarten. Countywide immunization rates for kindergartners may begin to reflect the impact of improved immunization rates among Birth & Beyond infants and toddlers in the next few years.

## **SECTION 6 – CHILD ABUSE AND NEGLECT INDICATORS BY YEAR**

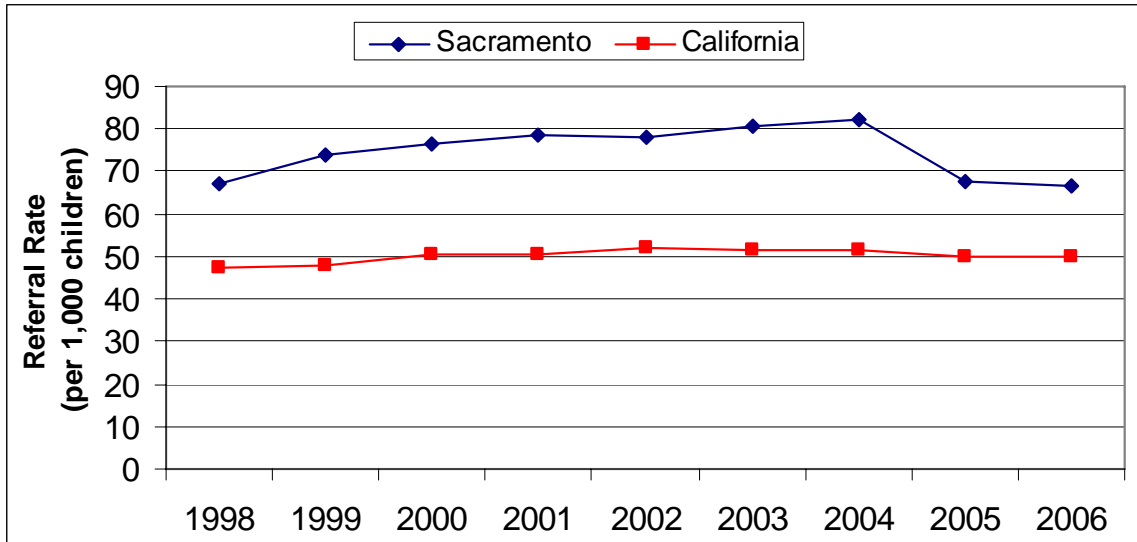
The indicators for child abuse and neglect with the closest approximation to the actual occurrence of abuse and neglect are calls to Child Protective Services (CPS) and foster care placements. Children who are at imminent risk are usually identified by one or both of these service agencies; foster care placement may in fact be the direct result of repeated or severe abuse, based on a decision by the court to remove the child from the custody of his/her parent or other caretaker.

Figure 26 provides the rate of CPS referrals per 1,000 children in Sacramento County and California. The state rate of referrals has stayed relatively consistent at around 50 per 1,000 children from 1998 to 2006. The county CPS referral rate gradually increased from 1998 to 2004, but in 2005, the rate per 1,000 children dropped from 82 to 68, reaching a low of 67 per 1,000 children in 2006. Figure 27 provides the total number of CPS referrals within the Birth & Beyond service areas. From 2000 to 2004 the Birth & Beyond service areas' referrals gradually increased, but in 2005 each site experienced a substantial drop.

Figure 28 provides the rate of CPS substantiations per 1,000 children in Sacramento County and California. The state substantiation rate has remained stable at approximately 11 to 12 per 1,000 children statewide. Although the county rate hovered around 20 substantiations per 1,000 children from 1998 to 2004, the rate sharply declined in 2005 and reached its lowest point (15 per 1,000) in 2006. In 2005, the Birth & Beyond sites also saw a decline in total substantiations, as depicted in Figure 29.

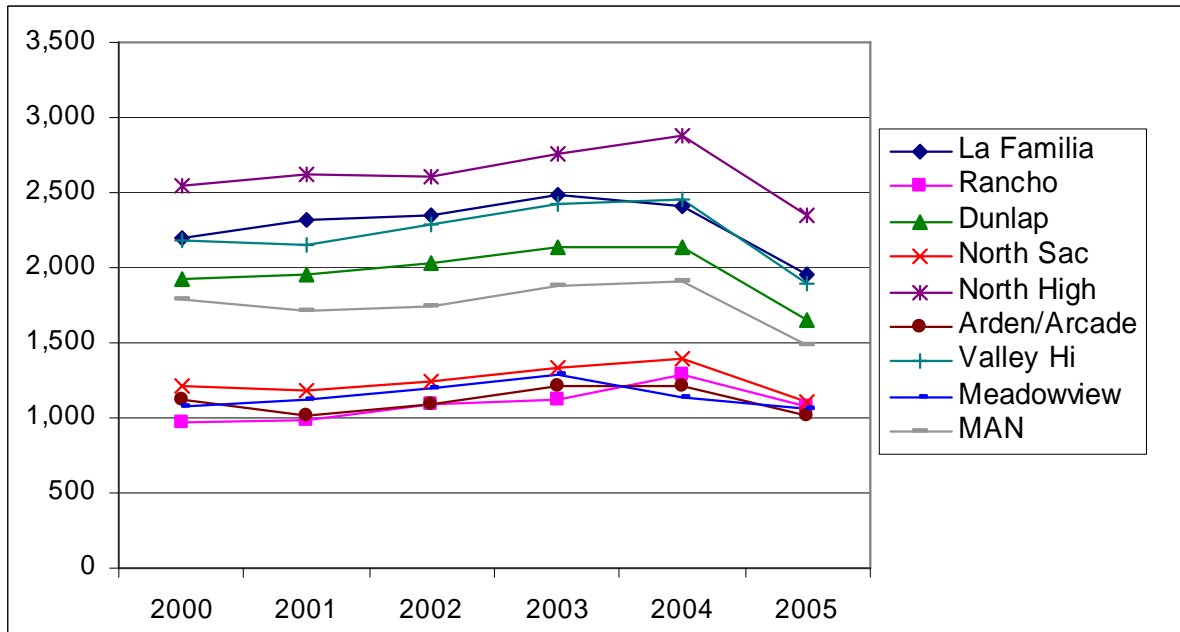
The recent decline in Sacramento County's referral rate and substantiation rate suggests that CPS is finding alternative responses for some families reported for abuse and neglect. In 2005/06 Birth & Beyond began a more formal partnership with CPS as "differential response" expanded the CPS response options. For referrals that do not warrant direct CPS intervention, Birth & Beyond continues to provide support to families to mitigate specific risk areas and build upon family strength and resiliency.

**Figure 26 – Rate of Referrals to Child Protective Services (Sacramento & CA)**



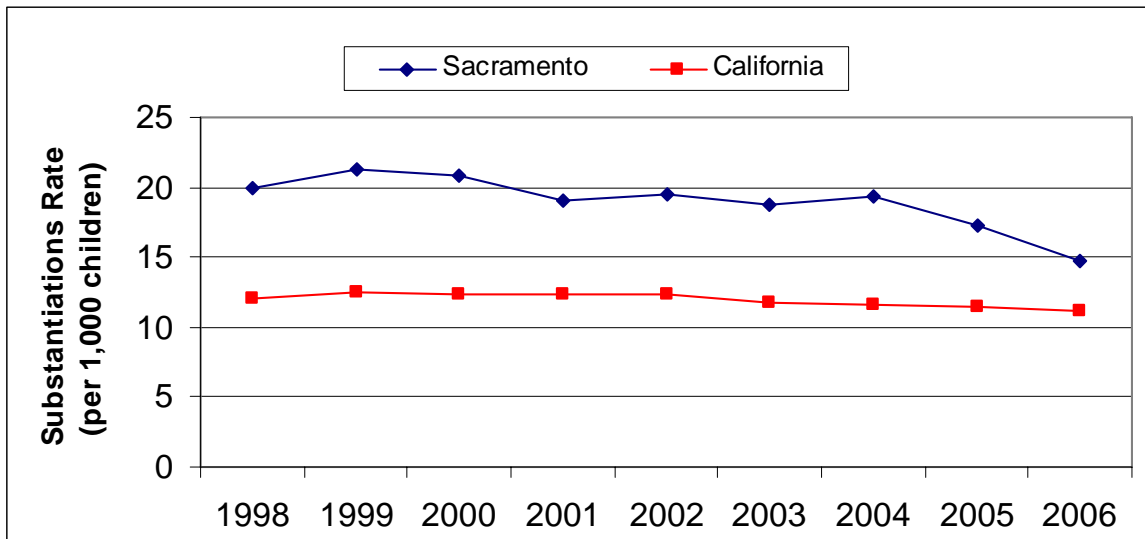
Source: Needell, B., Webster, D., Armijo, M., Lee, S., Cuccaro-Alamin, S., Shaw, T., Dawson, W., Piccus, W., Magruder, J., Exel, M., Smith, J., Dunn, A., Frerer, K., Putnam Hornstein, E., Ataie, Y., Atkinson, L., & Lee, S.H. (2007). Child Welfare Services Reports for California. Retrieved from University of California at Berkeley Center for Social Services Research website. URL: <<http://cssr.berkeley.edu/CWSCMSreports/>>

**Figure 27 – Total Referrals to Child Protective Services (B&B Sites)**



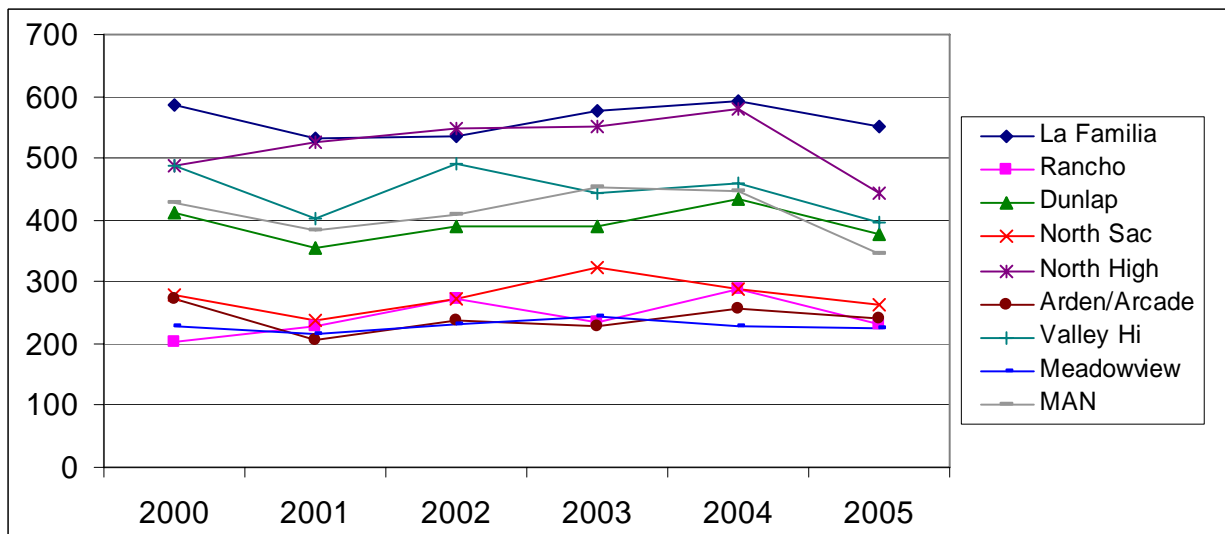
Source: Needell, B., Webster, D., Armijo, M., Lee, S., Cuccaro-Alamin, S., Shaw, T., Dawson, W., Piccus, W., Magruder, J., Exel, M., Conley, A., Smith, J., Dunn, A., Frerer, K., & Putnam Hornstein, E., (2006). Child Welfare Services Reports for California. Retrieved April 26, 2006, from University of California at Berkeley Center for Social Services Research website. URL: <<http://cssr.berkeley.edu/CWSCMSreports/>>

**Figure 28 – Rate of Substantiations (Sacramento & CA)**



Source: Needell, B., Webster, D., Armijo, M., Lee, S., Cuccaro-Alamin, S., Shaw, T., Dawson, W., Piccus, W., Magruder, J., Exel, M., Smith, J., Dunn, A., Frerer, K., Putnam Hornstein, E., Ataie, Y., Atkinson, L., & Lee, S.H. (2007). Child Welfare Services Reports for California. Retrieved from University of California at Berkeley Center for Social Services Research website. URL: <<http://cssr.berkeley.edu/CWSCMSreports/>>

**Figure 29 – Total Substantiations (B&B Sites)**

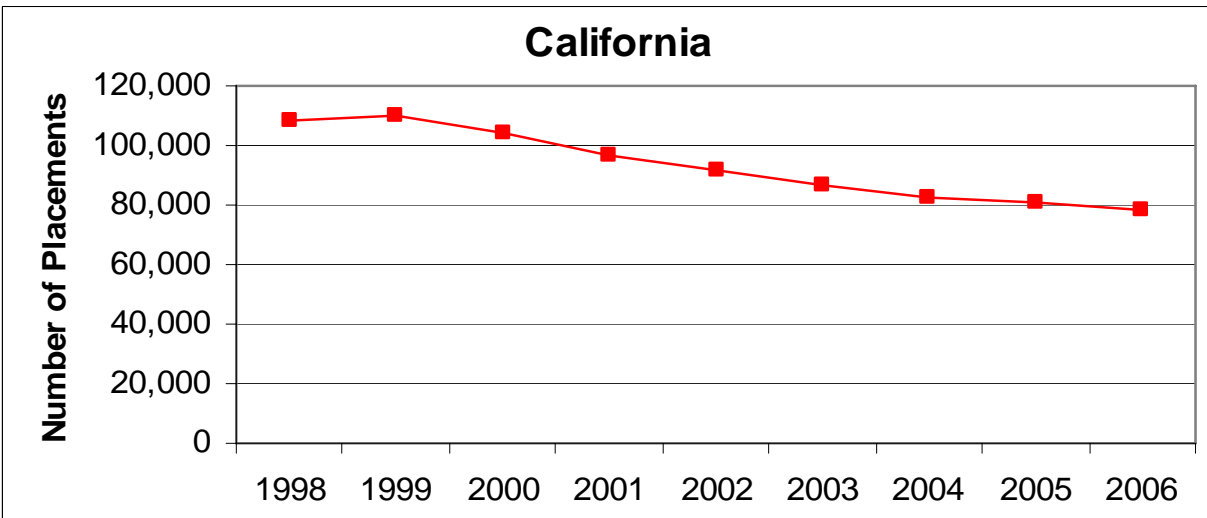
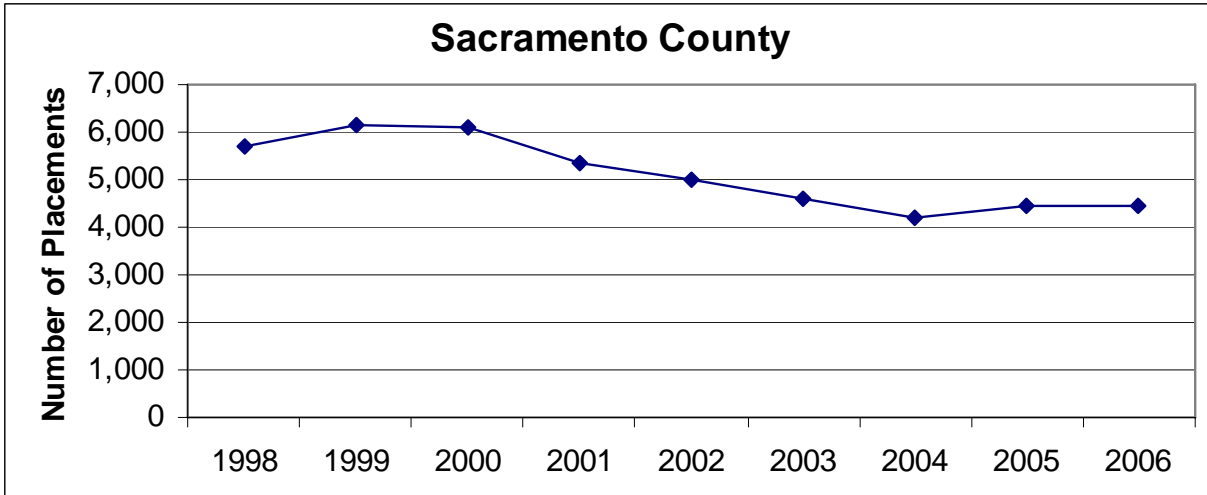


Source: Needell, B., Webster, D., Armijo, M., Lee, S., Cuccaro-Alamin, S., Shaw, T., Dawson, W., Piccus, W., Magruder, J., Exel, M., Conley, A., Smith, J., Dunn, A., Frerer, K., & Putnam Hornstein, E., (2006). Child Welfare Services Reports for California. Retrieved April 26, 2006, from University of California at Berkeley Center for Social Services Research website. URL: <<http://cssr.berkeley.edu/CWSCMSreports/>>

Figure 30 presents a snapshot of the foster care caseload on July 1, 1998 through July 1, 2006. Both Sacramento County and California statistics indicate a downward trend in the number of placements. The number of Sacramento County placements have decreased overall from roughly 5,700 placements in 1998 to just under 4,500 placements in 2006 (a 22% decrease). Similarly, the foster care caseload in California decreased overall from roughly 108,000 to 78,000 (a 28% decrease). It is important to note that the county reduction has been consistent for six of the last eight years; the two

years of increases were in 1999 and in 2005. While Birth & Beyond may have contributed to the decline, there are other factors associated with policy change and shifting resources that account for some of the trend. In addition, the July 1 statistic is a limited snapshot of foster care cases.

**Figure 30 – Foster Care Caseload as of July 1 (Sacramento & CA)**



Source: Needell, B., Webster, D., Armijo, M., Lee, S., Cuccaro-Alamin, S., Shaw, T., Dawson, W., Piccus, W., Magruder, J., Exel, M., Smith, J., Dunn, A., Frerer, K., Putnam Hornstein, E., Ataie, Y., Atkinson, L., & Lee, S.H. (2007). Child Welfare Services Reports for California. Retrieved from University of California at Berkeley Center for Social Services Research website. URL: <<http://cssr.berkeley.edu/CWSCMSreports/>>

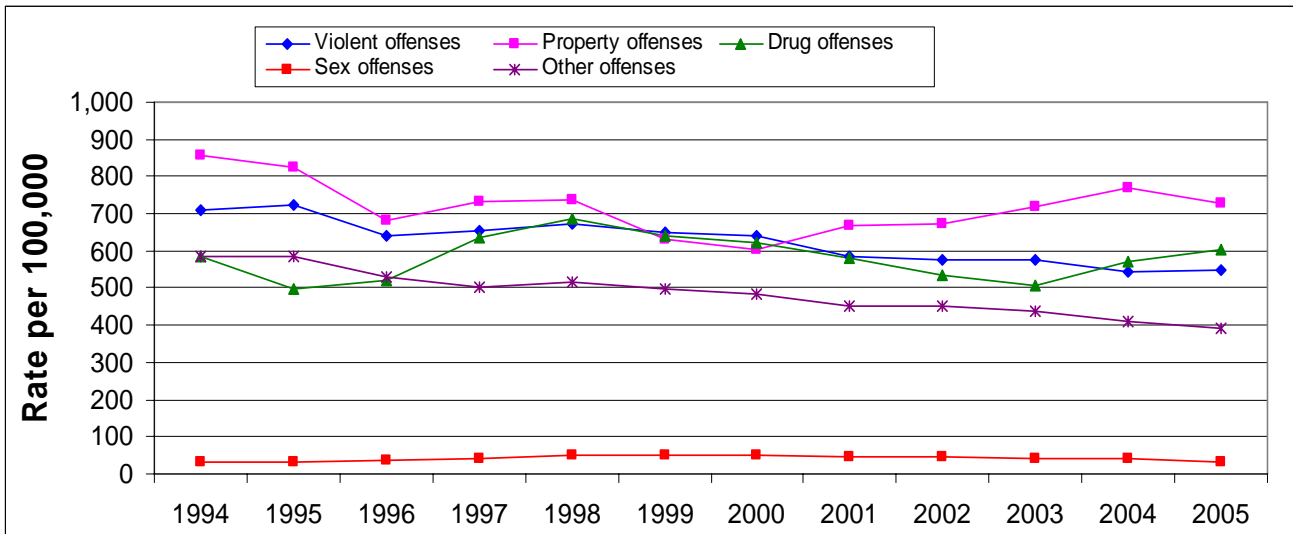
## SECTION 7 – COMMUNITY STABILITY INDICATORS

Aside from the previously mentioned child abuse and neglect indicators, the felony arrest and related crime indicators represent indirect contributing factors related to abuse and neglect. Felony arrests are a proximate measure for crime and safety as well as community stability, which represents the environment in which families function. High crime areas are often the same areas with other problems, such as drug and alcohol abuse, juvenile delinquency, domestic violence, and other violence. Crime rates provide a general sense of overall community instability, which in turn impacts family functioning. Traditionally high crime areas are also subject to blight, low income and substandard housing, high density or proliferation of rental housing, and transience. Figures 31 and 32 present the rate of total and juvenile felony arrests in Sacramento County per 100,000 persons, and Figure 29 shows the number of arrests for spousal abuse in California and Sacramento County. These indicators also contribute to community instability.

Figure 31 shows the rate of total felony arrests per 100,000 for Sacramento County over the past eleven years. Total felony arrest rates for both “violent crimes” and “other offenses” have continued to decline. The rate of violent crimes declined by 165 felonies between 1994 and 2005, and the rate of other offenses declined by 190 during the same period. The rate for property crimes declined to nearly 600 felonies per 100,000 in 2000 but then climbed to nearly 767 in 2004, the second highest point in the ten year period. However, in 2005 the rate of property offenses declined again. The felony rate for drug offenses rose from 496 per 100,000 in 1995 to 686 in 1998 before falling to 507 in 2003. Since 2003, the number of drug offenses has risen to 600 in 2005. The lowest felony arrest rate in Sacramento County is for sex crimes, which has stayed relatively constant during the twelve year period between 1994 and 2005. Even so, it is important to note that in 2005 the sex offense arrest rate reached its lowest point since 1995.

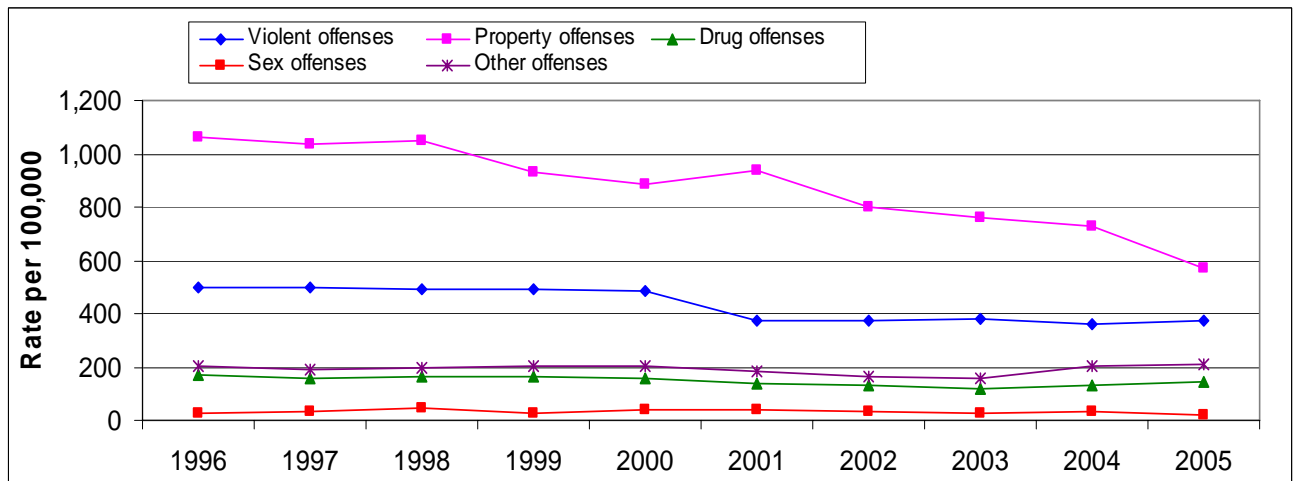
Juvenile felony arrests, detailed in Figure 32, reflect several markedly different trends from the total felony arrest data. While juvenile felony arrest rates for drug, sex, and “other” offenses remained relatively unchanged between 1996 and 2005, the rate of property offenses declined consistently from 1,061 per 100,000 in 1996 to 569 in 2005. The rate of juvenile felony arrests for violent offenses dropped substantially in 2001 (from 487 to 371 per 100,000) and remained stable until 2005.

**Figure 31 – Total Felony Arrests in Sacramento County per 100,000**



Source: Table 3A Total Felony Arrests by Gender, Offense and Arrest Rate, Sacramento County. Retrieved from the Office of the Attorney General, Criminal Justice Statistics Center website. URL: <<http://ag.ca.gov/cjsc/datatabs.php>>

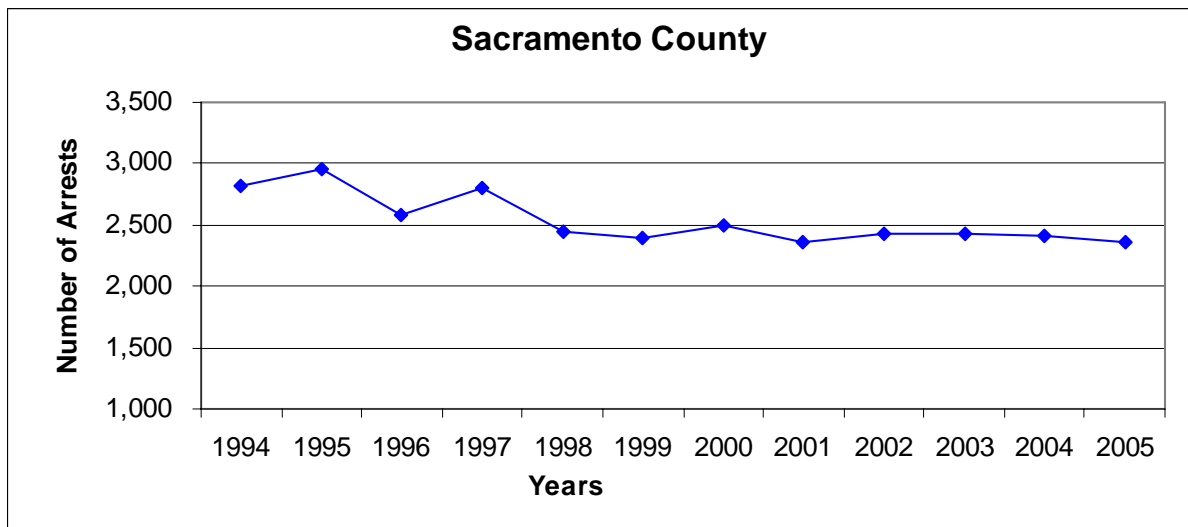
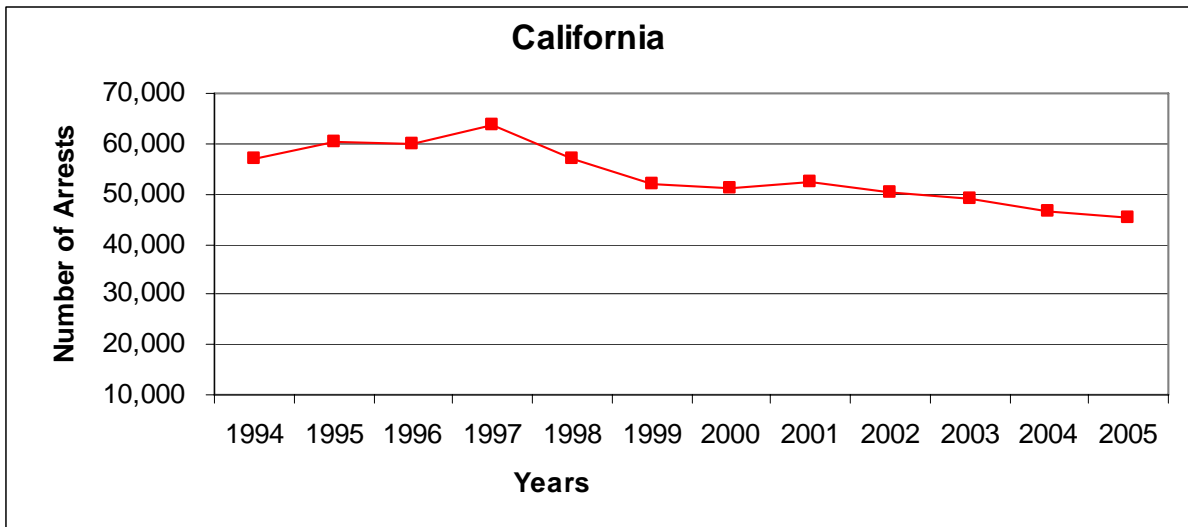
**Figure 32 – Juvenile Arrests in Sacramento County per 100,000**



Source: Table 3C Juvenile Felony Arrests by Gender, Offense and Arrest Rate, Sacramento County. Retrieved from the Office of the Attorney General, Criminal Justice Statistics Center website. URL: <<http://ag.ca.gov/cjsc/datatabs.php>>

Figure 33 presents the number of arrests made due to spousal abuse (273.5 PC) over the past eleven years county and statewide. Overall, the number of arrests has decreased. The number of arrests in Sacramento County decreased 18 percent (from roughly 2,800 arrests in 1994 to 2,300 arrests in 2005) and in California the number of arrests decreased 21 percent (from roughly 57,000 arrests in 1994 to 45,000 arrests in 2005).

**Figure 33 – Number of Arrests for Spousal Abuse (273.5 PC) (Sacramento & CA)**



Source: California Department of Justice, Criminal Justice Statistics Center, Special Requests. Prepared July 25, 2007 by Umash Prasad, Bureau of Criminal Information and Analysis.

## SECTION 8 – SUMMARY AND CONCLUSION

There are several indicators for the past twelve years that provide a context for assessing risk potential for child abuse and neglect. Births to unmarried women place families at risk due to stress associated with raising a family without a partner. Inadequate prenatal care places infants at risk, and low birth weight is a clear indicator of health risks to infants. Economic hardship and limited income places stress on a family in terms of meeting basic needs for food and shelter, compounded by the uncertainties associated with welfare dependency. Calls to CPS present the most compelling indication of the growing risk for neglect and abuse and adult and juvenile arrests for spousal abuse among the children in the Sacramento County.

However, twelve years of data highlights improvement in the neighborhoods served by Birth & Beyond program sites, particularly in terms of infant and early childhood deaths. The number of infant and early childhood deaths in the six years before Birth & Beyond began was higher in most service areas than the number of deaths in the six years since Birth & Beyond began. These and other improvements countywide include:

- Reduced infant and early childhood deaths;
- Reduced births to teen mothers;
- Increased rate of prenatal care in the first trimester, complemented by reduced rates for “no prenatal care” or care that begins late (third or second trimester);
- Declining Medi-Cal deliveries;
- Increased rate of any breastfeeding;
- Declining CalWORKS caseload;
- Declining rate of CPS referrals, as well as declining rates of substantiated reports of child abuse and neglect; and
- Declining rates of foster care placement.

Other indicator trends over the past decade were either more varied (e.g., crime trends), or were relatively unchanged (e.g., immunizations and high school graduates).

Despite the trends that suggest improvements in several selected risk factors, many children remain at considerable risk, the most visible of which come to the attention of the authorities responsible for taking steps to intervene. These and other trends will continue to provide the context of Birth & Beyond program operations and will represent the basis for targeting change at the institutional level as the program continues to mature and have a positive impact on practices and protocols among the gatekeepers who can become more instrumental in the prevention of child abuse and neglect.