

# Low Birth Weight Infants

African American mothers are almost twice as likely to have babies who are underweight.

From 2002 to 2004, there was an average of 13,268 live births per year in the county; of these, 6.5% (2,604) were low birth weight. This means that approximately 868 low birth weight babies are born to residents of Contra Costa each year. Contra Costa's low birth weight percentage (6.5%) is virtually the same as California's (6.6%).

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Infants weighing less than 2,500 grams (5 lbs 8 oz) are considered low birth weight.

- African Americans have the highest rate of low birth weight infants.
- Residents of San Pablo are most likely to have low birth weight infants.
- On average, 868 low birth weight babies are born each year.
- Contra Costa's percentage of low birth weight babies (6.5%) does not meet the Healthy People 2010 objective (5.0%).

## Low Birth Weight by Race/Ethnicity

Table 1. Contra Costa County 2002–2004

	<b>Cases</b>	<b>Percent</b>	<b>Rate</b>
White	954	36.6%	6.0
Latino	639	24.5%	**5.1
Asian/Pacific Islander	416	16.0%	*8.0
African American	413	15.9%	*11.8
Contra Costa <sup>a</sup>	2,604	100.0%	6.5

These are unadjusted crude rates per 100 live births.

<sup>a</sup> Some race/ethnic groups not shown.

\* Significantly higher rate compared to county.

\*\* Significantly lower rate.

In Contra Costa, the greatest numbers of low birth weight infants are White (954), followed by Latino (639).

Even though African American women have a fewer low birth weight infants, African American women have the highest rate of low birth weight infants (11.8 per 100 live births) – higher compared to the county overall (6.5 per 100 live births), and any other race/ethnicity group. The low birth weight rate for Asian/Pacific Islanders is also higher (8.0 per 100 live births) compared to the rates for the county overall, Whites and Latinos. The rate of low birth weight is lowest among Hispanic/Latinos (5.1 per 100 live births).



## Low Birth Weight Births by Selected Communities

Table 2. Contra Costa County 2002–2004

	<b>Cases</b>	<b>Percent</b>	<b>Rate</b>
Richmond	368	14.1%	7.3
Bay Point/Pittsburg	323	12.4%	7.2
Concord	300	11.5%	5.7
Antioch	296	11.4%	6.3
San Pablo	185	7.1%	*7.9
Walnut Creek	113	4.3%	**5.0
Martinez	111	4.3%	7.6
Brentwood	94	3.6%	5.0
Oakley	78	3.0%	6.2
Pinole	35	1.3%	6.0
Contra Costa <sup>a</sup>	2,604	100.0%	6.5

These are unadjusted crude rates per 100 live births.

<sup>a</sup> Some cities not shown.

\* Significantly higher rate compared to county.

\*\* Significantly lower rate.

Communities with the greatest numbers of low birth weight infants include Richmond (368), Pittsburg/Bay Point (323), Concord (300) and Antioch (296).

San Pablo has a rate of low birth weight (7.9 per 100 live births) that is higher than the county rate overall (6.5 per 100 live births). Walnut Creek's low birth weight rate (5.0 per 100 live births) is lower than the county rate overall.

The number of low birth weight infants is highest among African Americans in Richmond (171), representing 41.4% of the county's 413 African American low birth weight infants.

Among African American mothers, Richmond has the greatest number of low birth weight infants (171), followed by Bay Point/Pittsburg (69), Antioch (46) and San Pablo (42).

The low birth weight rate for African Americans in these four cities -- Richmond (12.8 per 100 live births), Bay Point/Pittsburg (12.8 per 100 live births), San Pablo (12.2 per 100 live births) and Antioch (9.5 per 100 live births) -- is higher than the rate for the county overall (6.5 per 100 live births):

The rate of low birth rate among Asian/Pacific Islanders is highest in Martinez (17.6 per 100 live births) – higher than the county overall and any other race/ethnicity group in Martinez. The greatest numbers of low birth weight births to Asian/Pacific Islanders occur in Concord (48) and Antioch (40).

Among White mothers, the greatest number of low birth weight births occurs in Concord (113), followed by Antioch (94) and Martinez (67). White mothers in Walnut Creek (4.7 per 100,000 live births) and Brentwood (4.2 per 100 live births) have lower low birth weight rates compared to the county overall (6.5 per live births). San Pablo (9.8 per 100 live births) and Richmond (8.1 per live births) have the highest rates for White mothers, although neither of these rates is statistically higher than the county's overall rate.

The greatest numbers of low birth weight births among Latinas are in Bay Point/Pittsburg (132), Concord (102), Richmond (102) and San Pablo (92). Even though these numbers are high, Latinas in Concord, Antioch (both 4.9 per 100 live births) and Richmond (4.3 per 100 live births) have lower rates of low birth weight compared to the county overall. The highest low birth weight birth rate for Latinas is in San Pablo (6.5 per 100 live births), which is the same as the county rate overall.

A healthy weight provides the baby's body with the strength it needs for survival. Low birth weight infants are at high risk of illness, death and lasting health problems. For example, low birth weight babies need more intensive hospital care for problems such as respiratory illness or immaturity, often associated with infant death.<sup>1,2</sup>



Babies are more likely to be underweight if the mother:

- has high blood pressure or experiences lots of stress
- is older or very young
- had a short time period between pregnancies, or if the baby is born too early
- is pregnant with twins or triplets, or she has had small infants before
- has not gained enough weight or was underweight before she became pregnant,
- smokes or uses other substances that inhibit the baby's growth

#### Tables

Tables 1, 2: Birth data from the California Department of Health Services (CDHS), Birth Statistical Master Files, 2002-2004. Any analyses, interpretations or conclusions of the data have been reached by CHAPE and are not from the CDHS. Data for the following race/ethnicity groups was excluded due to small numbers: American Indian/Alaska Native, Native Hawaiians, Two or More Races, and Other. Data was not available for all Contra Costa cities. These tables include total low birth weight births to women who are residents of Contra Costa and average crude low birth weight rates for 2002 through 2004.

Crude low birth weight rate = number of infants weighing less than 2,500g divided by the total number of live births multiplied by 100.

#### Population data from:

California Department of Finance (April 2006). *Estimated Race/Ethnic Population with Age and Sex Detail 2000-2004*. Sacramento, CA.

California Department of Finance (May 2006). E-4 Population Estimates for Cities, Counties and the State 2001-2006, with DRU Benchmark. Sacramento, CA. Available online at: <http://www.dof.ca.gov/HTML/DEMOGRAP/Druhpar.htm>

Note: City level denominators were extrapolated from the E-4 file to approximate the mid-year population estimates that are needed to calculate city-level rates. For more information, see our section on statistical methods.

#### Data Sources: Low Birth Weight Infants

##### Text

1. Family, Maternal and Child Health Programs, Contra Costa Health Services (2003). Maternal, Child and Adolescent Health in Contra Costa County 1991-1999. Available online at [http://cchealth.org/groups/fmch/pdf/mcah\\_data\\_report.pdf](http://cchealth.org/groups/fmch/pdf/mcah_data_report.pdf)

2. Centers for Disease Control and Prevention (2001). *Surgeon General's Report—Women and Smoking Tobacco Use and Reproductive Outcomes*. Retrieved May 23, 2007 at: [http://www.cdc.gov/tobacco/data\\_statistics/sgr/sgr\\_2001/highlight\\_outcomes.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/sgr_2001/highlight_outcomes.htm)

For more information, see publications available at Contra Costa Health Services' Family, Maternal & Child Health (FMCH) Programs website at <http://www.cchealth.org/groups/fmch/publications.php>