

Community Health Indicators for Del Norte County



Version 1.2

by The California Center for Rural Policy at Humboldt State University

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The California Center for Rural Policy at Humboldt State University is a research and policy center committed to informing policy, building community, and promoting the health and well-being of people and environments.

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Revisions:

Version 1.1

April 21, 2011

- Poverty data updated to show most recent Census data (2007-2009) (pages 82-83)

Version 1.2

May 17, 2011

- Deaths due to all causes updated to show most recent data (2007-2009) (page 20).
- Teen birth rate update to show most recent data (2007-2009) (page 26).
- Prenatal care updated to show most recent data (2007-2009) (page 36).
- Obesity/Overweight data updated for low-income children to show most recent data (2009) with more racial/ethnic data (pages 45-46)
- BMI for Del Norte County students (K-9) added (page 46)
- Smoking in the household of low-income children updated to most recent data (2009) (page 62).
- Literature review on education expanded (page 74) and Third Grade reading level added (page 76).
- School absence data added (page 80).
- Unemployment data updated to most recent annual data (2010) (page 85).

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Executive Summary

Del Norte County and the adjacent tribal lands (DNATL) is one of fourteen places in California participating in Building Healthy Communities (BHC), an initiative of The California Endowment (TCE). The goal of BHC is to “support the development of communities where kids and youth are healthy, safe and ready to learn.”

This report provides a set of community health indicators intended to give a snapshot of the past and current conditions in Del Norte County and to help guide and assess outcomes resulting from improvement efforts. Community health indicators are measures that act as barometers for underlying community health. Through regular assessments using a common set of indicators, communities can determine if policy and systems changes are making a difference. This report builds upon the Rural Community Vital Signs Project facilitated by the California Center for Rural Policy (CCRP) in 2010. The current report contains additional indicators that are relevant to the BHC initiative.

What we learned

Del Norte demographics are changing

- The racial/ethnic composition is becoming more diverse with an increase in the Hispanic population.
- The elderly population is growing proportionately larger.

Areas in which Del Norte is doing fairly well, but still needs to address

- The total number of hospitalizations due to self harm/suicide attempts has decreased from 2000 to 2006. Similarly, the number of deaths due to suicide have decreased from 2000 to 2007.
- Percent of live births with low birth weight is lower than California (but it has increased slightly).
- Women who are exclusively breastfeeding at hospital discharge is higher than California (but rates are decreasing, and Hispanic women are the least likely to breastfeed).
- Percent of parents reading to their young children is higher than California and Healthy People 2020.
- Routine check-ups among adolescents have increased in Del Norte, and in 2007 were higher than California and the Healthy People 2020 Goal.
- Childhood vaccination rates are similar to California, but slightly below the Healthy People 2020 goal.
- The percent of children who walk, bike or skate to school has increased.
- The number of domestic violence related calls for assistance and arrests for spousal abuse have decreased from 2000 to 2009.
- The percent of children with regular childcare arrangements for at least 10 hours a week has increased from 2003 to 2009.
- Overall, a higher percentage of students in Del Norte score high on school protective factors compared to California (meaningful participation, high expectations, caring relationships at school).
- The percentage of people eligible for food stamps who are utilizing the program is better than California.
- The daily vehicle miles traveled per person is about the same as California and has been stable.
- The acres of land in farms has increased from 2002 to 2007.

Areas in need of improvement

- Deaths due to all causes and premature deaths are higher in than California.
- Students in Del Norte County are more likely to reported depression-related feelings compared to the students in California as a whole.
- 10.5% of adults reported feeling sad or depressed “most” or “all” of the time during the past 6 months, which is higher than the Healthy People 2020 goal of 6.1% of adults experiencing a major depressive episode in the past year.
- Teen birth rate is higher than California (but has decreased some).
- Adults reporting a diagnosis of diabetes has increased.
- The hospitalization rate for nonfatal injuries is higher than California. The 65 and older age group has the highest number of hospitalizations each year due to injuries, the majority of which are due to falls.
- Specialty physicians, as well as dentists, are limited, especially for low-income populations.
- Among children under the age 18 in the county, nearly 50% were relying on public insurance in 2009.
- Percent of pregnant women receiving late or no prenatal care is higher than California and has increased drastically from 2003-2009.
- Less than 40% of 7th graders are in the Healthy Fitness Zone for all 6 Physical Fitness Areas and there are some racial/ethnic disparities with White students doing better than American Indian and Hispanic students in 2008-2009.
- Children have obesity rates higher than the Healthy People 2020 goals.
- 67% of adults are overweight or obese and this increased from 2007 to 2009.
- 52% of adults were meeting the recommendations for physical activity in 2007.
- 66% of 7th grade students report eating breakfast (similar to California), while only approximately half of the 9th and 11th grade students report eating breakfast (slightly lower than California).
- The percent of children and teens consuming 5+ servings of fruits and vegetables a day is decreasing.
- Alcohol and drug use among middle and high school students tends to be higher in Del Norte than California.
- A fairly high percentage of students in Del Norte have been high or drunk on school property and have been offered illegal drugs on school property. Compared to California, Del Norte has a higher expulsion/suspension rate for all causes and for violence/drugs.
- Admissions for drug treatment for which Methamphetamine was the primary drug of abuse are increasing.
- Prescriptions for narcotics and other controlled substances have increased.
- Students are more likely to smoke cigarettes or use smokeless tobacco compared to California students as a whole.
- Low-income children are significantly more likely to have smoking in the household compared to low-income children in California.
- The number of persons killed or injured in alcohol involved collisions has increased.
- Teen drunk driving is fairly common, particularly among non-traditional students (continuation, community day and alternative schools).
- The number and rate of arrests for drug offenses (misdemeanor and felony) have increased from 2000 to 2008.



Continued on next page

Areas in need of improvement (*continued*)

- The percent of students reporting dating violence is higher in Del Norte than in California.
- The percent of 7th grade students reporting current gang membership is higher in Del Norte than California.
- Approximately 1 of every 5 students in 7th and 9th grade does not feel safe at their school.
- Overall, a higher percent of students in Del Norte report carrying a gun or weapon at school, seeing someone with a weapon or being threatened/injured with a weapon on school property compared to California.
- Safety related incidents on school property are most common among 7th grade students.
- The incidence of child maltreatment allegations, substantiations and entries into foster care are considerably higher in Del Norte than California. Native American children have the highest allegations, substantiations and entry into foster care.
- Del Norte County has a higher percent of children re-entering foster care within 12 months of reunification compared to California.
- Participation rates in preschool, nursery school or Head Start is low.
- Third- grade reading levels are lower than California.
- One of every five people 25 years and older has less than a high school diploma.
- Average high school graduation rates have decreased from 2000 to 2009.
- High School graduates with all courses required for UC or CSU entrance is far below California and is lowest for American Indians.
- High School drop-out rates have remained around 20% and are highest for American Indian and Hispanic students.
- A high percent of students miss more than 10% of school (chronic absence).
- Poverty rates are high, especially for single women with children, and a low percentage of jobs pay an hourly wage above the self-sufficiency standard for these families.
- Unemployment rates continue to rise and are the higher in Del Norte than California.
- Percent of renters paying $\geq 30\%$ of household income on rent is high and increasing.
- Percent of households with hunger is high, especially in households with children.
- 41% of students who are eligible for free/reduced price lunch are not participating in the program, which is worse than California as a whole.
- Over 20% of housing units are mobile homes, which is considerably higher than California as a whole.
- 56% of the housing units were built in 1979 or earlier. Children living in these houses are at risk for lead poisoning.
- One in five houses use wood for a heat source, putting these residents at risk for health problems.
- Mold in the home is significantly more likely for low-income families and families with children.
- Residential electricity consumption per capita is higher than California.
- Low-income adults are significantly more likely than non low-income adults to:
 - Lack health insurance
 - Have difficulty obtaining healthcare for themselves and their children
 - Have transportation problems
 - Lack professional oral healthcare
 - Lack internet access in the home
 - Smoke cigarettes

Next Steps

CCRP intends to update this report regularly as new data becomes available. It is our hope that communities, policy makers and advocates will use the indicators to set realistic goals and monitor outcomes resulting from programs and initiatives aimed at improving conditions in DNATL. CCRP will assist with a data collection plan for indicators that are currently lacking a good data source.



The Purpose and Process

Del Norte County and the adjacent tribal lands (DNATL) is one of fourteen places in California participating in Building Healthy Communities (BHC), an initiative of The California Endowment (TCE). The goal of BHC is to “support the development of communities where kids and youth are healthy, safe and ready to learn.”

This report provides a set of community health indicators intended to give a snapshot of the past and current conditions in Del Norte County and to help guide and assess outcomes resulting from improvement efforts. Community health indicators are measures that act as barometers for underlying community health. Through regular assessments using a common set of indicators, communities can determine if policy and systems changes are making a difference.

In 2010, the California Center for Rural Policy (CCRP) facilitated a process to develop a set of community health indicators for the Redwood Coast Region (Del Norte, Trinity, Humboldt, and Mendocino counties) (Rural Community Vital Signs Project). The report, “Rural Community Vital Signs: Community Health Indicators for the Redwood Coast Region”, is available at <http://www.humboldt.edu/ccrp/blog/rural-community-vital-signs>. In order to support the work happening in DNATL, the current report presents the indicators from the Rural Community Vital Signs project as well as additional indicators that are relevant to the BHC initiative.

Routine “check-ups” are essential for maintaining the health of individuals as they allow for both primary prevention (preventing problems) and secondary prevention (catching problems in the early stages). Routine community “check-ups” are similarly important as they provide an evidence base that is essential for strategically coordinating improvement efforts and determining if improvement efforts are making a difference. The indicators presented in this report link to numerous issues in various arenas (social, health, environment, and economy) and are intended to track trends and inspire action initiatives aimed at improving community health.

Rural areas are consistently challenged with a lack of data or small sample sizes. The data used for the indicators presented in this report come from a wide range of sources. The data presented are as accurate as the sources from which they were drawn. The most recent available data was used, but often data availability lags a few years from the time of collection. Standards for presenting small numbers vary by organization and these are noted throughout the report. Tests of statistical significance were only conducted for raw data (i.e., the data collected for CCRP’s Rural Health Information Survey).

The indicators presented in this report are intended to give a snapshot of the past and current conditions in Del Norte County. Indicators were selected that were directly or remotely related to the BHC 10 outcomes and 4 big results (Page 12). There are many different ways to organize and visualize the relationships between the indicators, outcomes, and results. Pages 13, 14, and 15 provide several different frameworks to conceptualize and illustrate these relationships. Throughout the report, comparisons are made between Del Norte County and California as a whole. This is done to provide a reference point; however, California averages are not necessarily good. Whenever possible, Healthy People 2020 targets are presented as national benchmarks to strive for.¹

Throughout the BHC planning process and Rural Community Vital Signs project it was clear that there were many indicators that would be useful for measuring community health, but currently lack a good or readily accessible data source. To capture these data gaps, a “wish list” was created and is presented in Appendix A. The “wish list” can be added to and prioritized to ensure data collection efforts and resulting indicators are aligned with the outcomes and results of the BHC initiative.

CCRP intends to update this report regularly as new data becomes available. It is our hope that communities, policy makers and advocates will use the indicators to set realistic goals and monitor outcomes resulting from programs and initiatives aimed at improving conditions in DNATL. CCRP will assist with a data collection plan for indicators that are currently lacking a good data source, but are determined to be critical for measuring progress towards achieving the BHC objectives and results.

Del Norte and Adjacent Tribal Lands Building Healthy Communities Outcomes and Results

Outcome 1: All children have health coverage.

Outcome 2: Families have improved access to a health home that supports healthy behaviors.

Outcome 3*: Our children grow up to be healthy, productive and successful adults in a community that promotes their well-being – through prevention, education and positive direction from their earliest days.

Outcome 4: Residents live in communities with health-promoting land-use, transportation and community development.

Outcome 5*: Our children grow up to be safe and secure in a community that values their lives and teaches and demonstrates respect for one another. Children and families are safe from violence in their homes and neighborhoods.

Outcome 6: Communities support healthy youth development.

Outcome 7*: Neighborhood and school environments support improved health and healthy behaviors.

Outcome 8*: Our community believes that health is intrinsically tied to a strong economy. Our local economy is strengthened because of our focus on locally determined strategies that reduce poverty, promote hard-work, risk-taking, creativity and enjoyment of work.

Outcome 9: Health gaps for boys and young men of color are narrowed.

Outcome 10: California has a shared vision of community health.



The Four Big Results

Reduce Youth
Violence

Reverse the
Childhood
Obesity Epidemic

Provide a Health
Home for All
Children

Increase School
Attendance

*Outcomes selected by Del Norte and Adjacent Tribal Lands (DNATL) for initial focus.

For more information about the BHC Outcomes and Results visit <http://www.calendow.org/healthycommunities/resources.html>

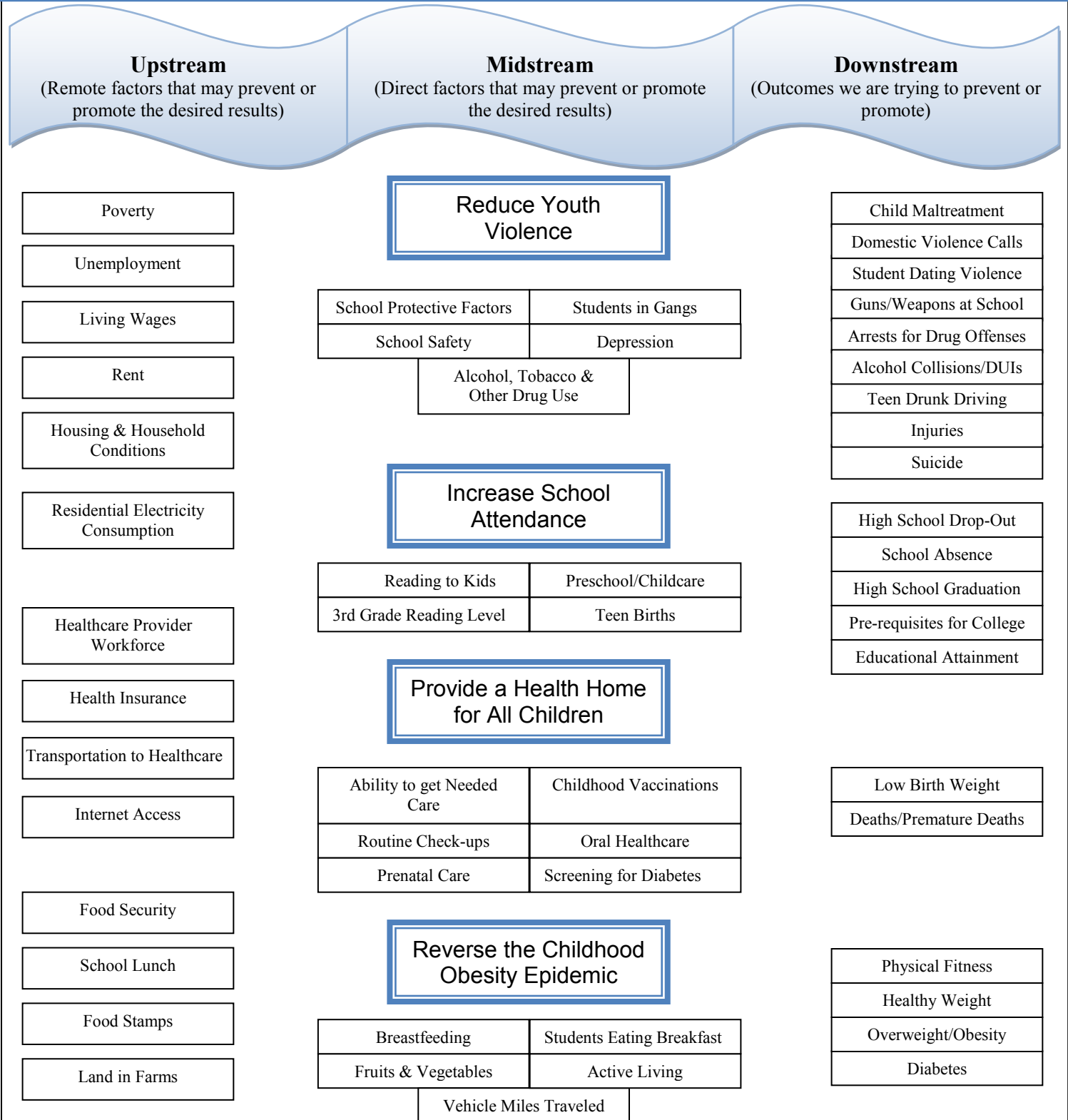
To see the DNATL Logic Model visit <http://www.mycalconnect.org/delnorte/announcementdetail.aspx?id=14850>

Community Health Indicator Categories

Morbidity (quality of life) & Mortality (length of life)	Deaths/Premature Deaths	Low Birth Weight	Injuries
	Suicide	Teen Births	Overweight/Obesity
	Depression	Diabetes	Physical Fitness
Clinical Care & Human Services (physical, mental & oral health)	Healthcare Provider Workforce	Routine Check-ups	Oral Healthcare
	Ability to get Needed Care	Screening for Diabetes	Transportation to Healthcare
	Health Insurance	Prenatal Care	
		Childhood Vaccinations	
Health Behaviors	Breastfeeding	Fruits & Vegetables	Alcohol, Tobacco & Other Drug Use
	Active Living	Students Eating Breakfast	
	Healthy Weight		
Social & Economic Factors	Alcohol Collisions & DUIs	Preschool/Childcare	Poverty
	Teen Drunk Driving	Reading to Kids	Living Wages
	Arrests for Drug Offenses	3 rd Grade Reading Level	Unemployment
	Domestic Violence Calls	Educational Attainment	Rent
	Student Dating Violence	High School Graduation	Internet Access
	Students in Gangs	Pre-requisites for College	Food Security
	School Safety	High School Drop-Out	Food Stamps
	Guns/Weapons at School	School Absence	School Lunch
	Child Maltreatment	School Protective Factors	
Physical Environment	Housing & Household Conditions		
	Residential Electricity Consumption		
	Vehicle Miles Traveled		
	Land in Farms		

Framework adapted from University of Wisconsin County Health Rankings Model

Relationships Between the Community Health Indicators and 4 Big Results

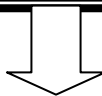


Notes: This is one way to visualize and organize the community health indicators and their relationships with the four big results. There are many complex interactions between the indicators and four big results, which are not shown here.

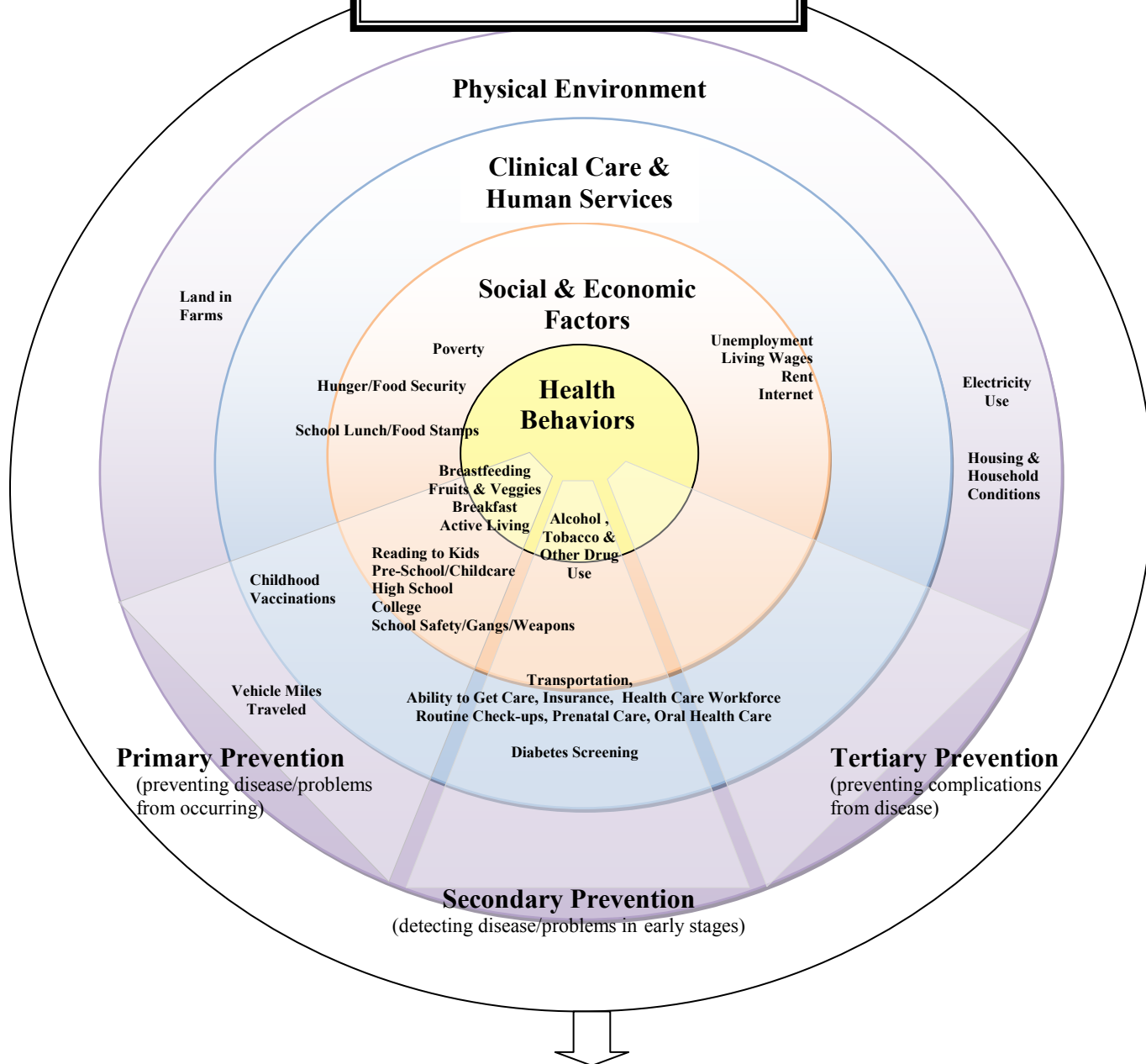
Are there additional indicators that could help measure progress towards achieving the four big results?

Community Health Indicator Framework Categories & Relationships

Programs & Policies



Health Determinants



Outcomes

Deaths/Premature Deaths
Suicide
Depression
Low Birth Weight
Teen Births

Child Maltreatment
Domestic Violence
Student Dating Violence
Guns/Weapons at School

Arrest for Drug Offenses
Alcohol Collisions/DUIs
Teen Drunk Driving
Injuries

Diabetes
Physical Fitness
Healthy Weight
Overweight/Obesity

The Place

This report is about community health in Del Norte County. Located in the most northwest corner of California, the county encompasses 1,008 square miles of land.¹ The area is known for its beautiful and diverse topography including redwood forests, rugged coast-lines, mountain ranges, and numerous rivers and tributaries.

Previously, the major economic activities in the region were natural resource extractive industries, such as timber, fishing and mining. Today, jobs in these industries are severely diminished, and the economy has shifted towards more service-based industries. Over the years there has been an increase in the production and manufacturing of illegal substances, such as marijuana and methamphetamines.

In 2010 the total population in Del Norte County was estimated to be 29,673. The county is designated as rural with an average population density of 27.3 people per square mile.^{1,3} The county is designated as medically underserved area and a health professional shortage area for primary care, mental health, and dental care.³

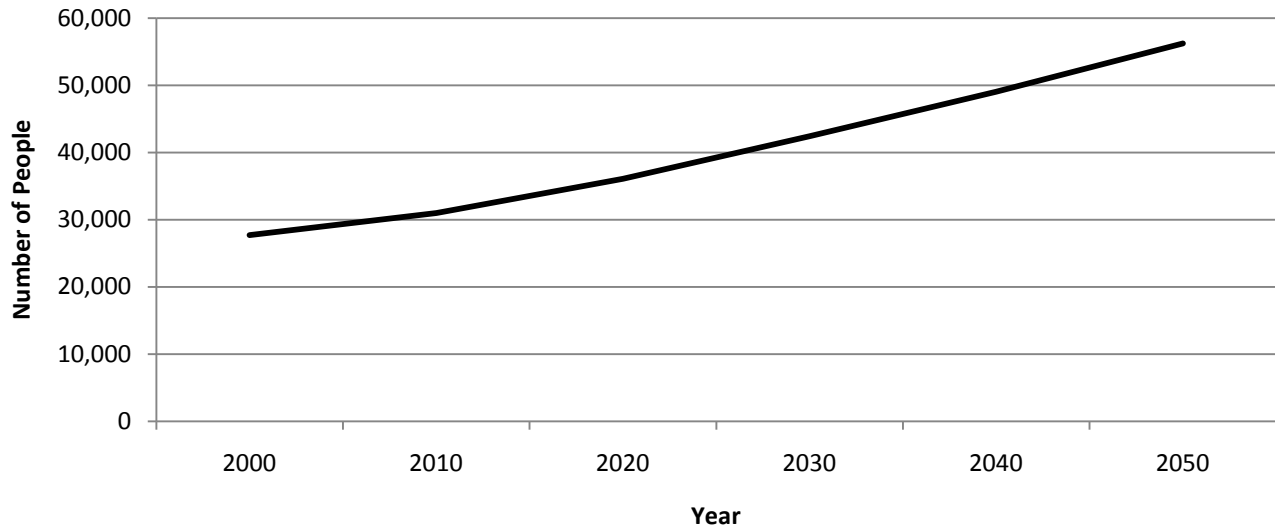


Map from Healthy City <http://www.healthycity.org/> and <http://www.mycalconnect.org/delnorte/Default.aspx>

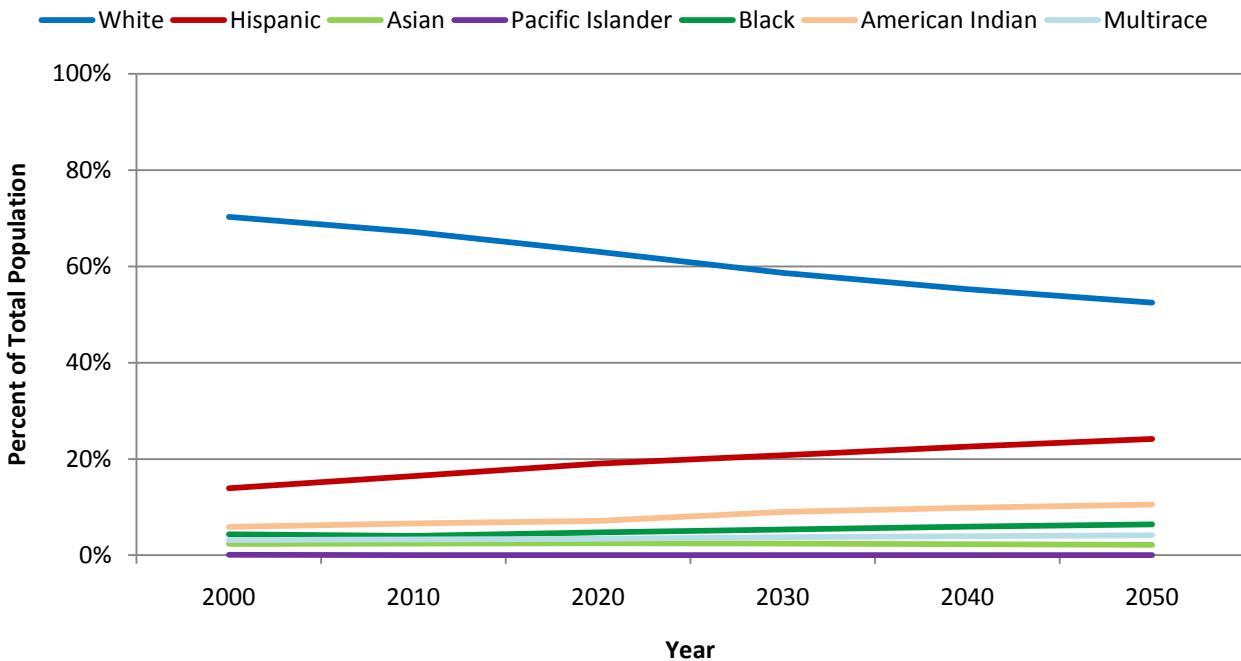
Note: This report contains data specific to Del Norte County. Data for the adjacent tribal lands are not as readily available/accessible. CCRP has data specific to Klamath and will be creating a report with this data. In addition, CCRP will assist with a data collection plan for the adjacent tribal lands.

The People

Del Norte County: Past, Current, and Projected Changes in Population Size



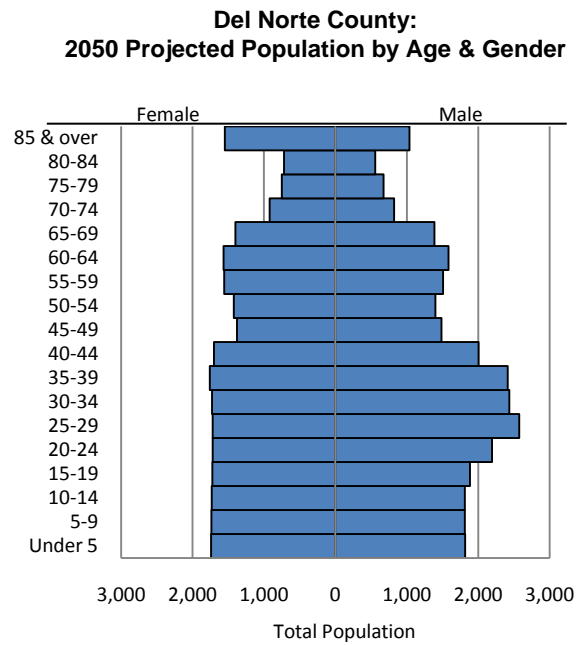
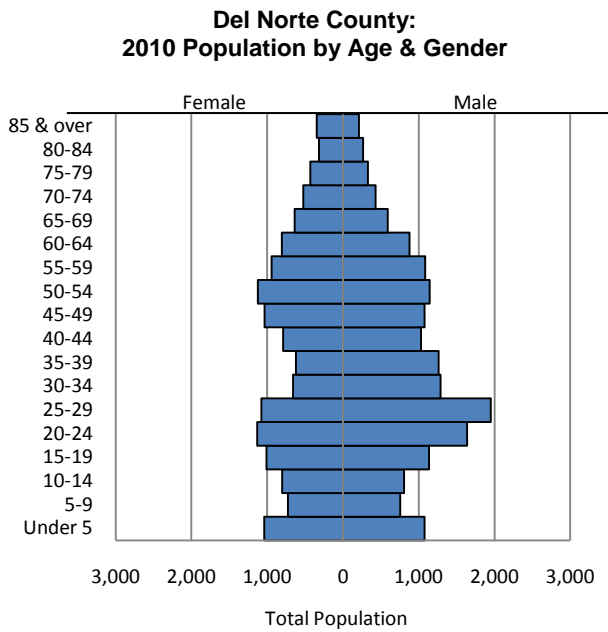
Del Norte County: Past, Current, and Projected Changes in Population Race/Ethnicity



Data Source: State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000–2050. Sacramento, CA, July 2007.

<http://www.dof.ca.gov/research/demographic/data/race-ethnic/2000-50/>

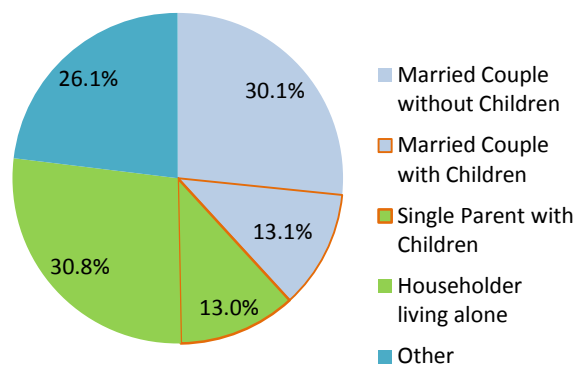
Del Norte County: Past and Projected Changes in Population Age



Data Source: State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000–2050. Sacramento, CA, July 2007.

<http://www.dof.ca.gov/research/demographic/data/race-ethnic/2000-50/>

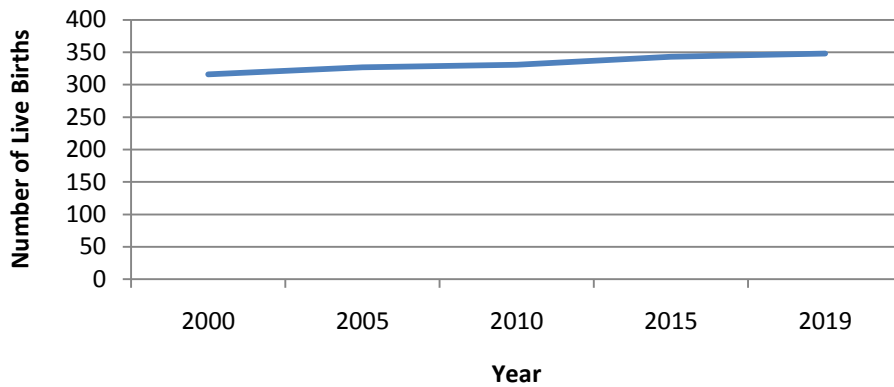
Del Norte County: Household Composition, 2006-2008



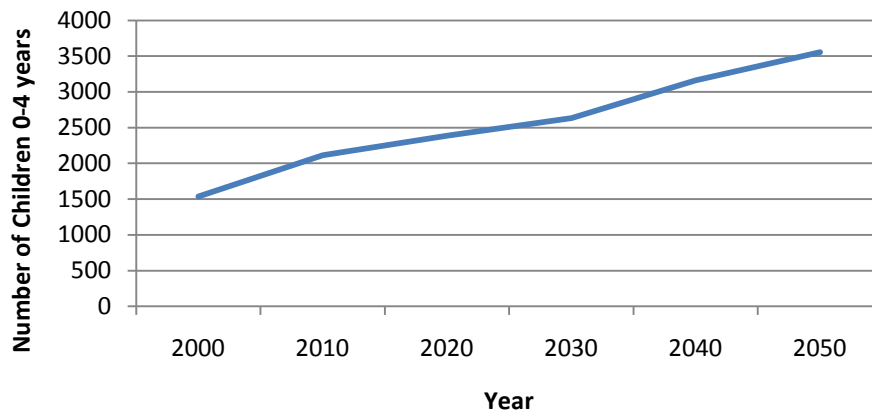
Data Source: U.S. Census <http://factfinder.census.gov>

Notes: Data from the U.S. Census American Community Survey and are 3-year estimates based on data collected between January 2006 and December 2008.

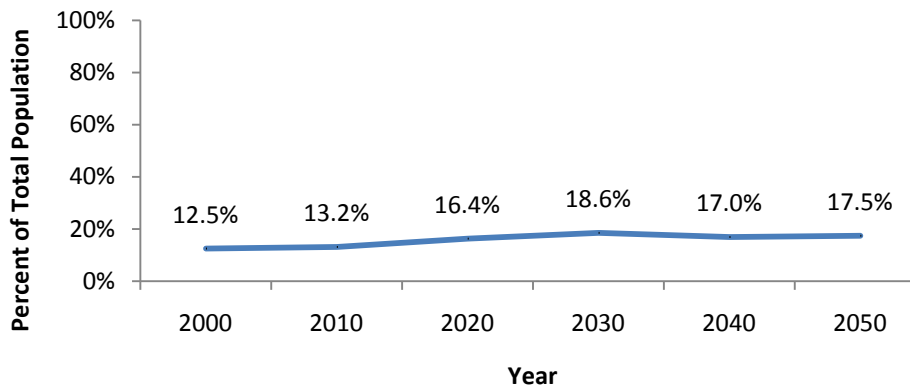
Del Norte County: Past, Current, and Projected Number of Live Births per Year



Del Norte County: Past, Current, and Projected Number of Children Age 0-4 Years



Del Norte County: Past, Current, and Projected Percent of Population Age 65 Years and Over



Data Source: State of California, Department of Finance,
<http://www.dof.ca.gov/research/demographic/reports/projections/births/>
<http://www.dof.ca.gov/research/demographic/data/race-ethnic/2000-50/>

Health Outcomes (Morbidity & Mortality)

Deaths Due to All causes
Premature Deaths
Ten Leading Causes of Death
Depression
Suicide Attempts & Deaths

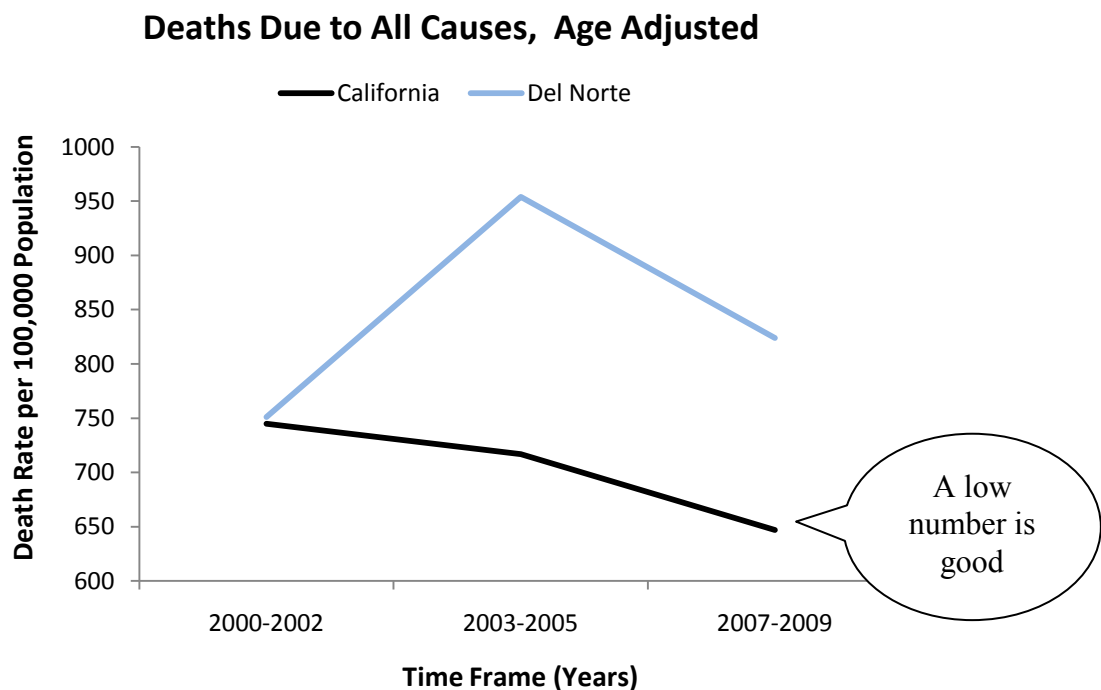
Low Birth Weight
Teen Birth Rate
Diabetes
Injuries

1. Deaths Due to All Causes

Tracking overall death rate (mortality) is important because it tells us about the overall health of our communities. Age adjustment accounts for the age differences that may exist in different communities.

In Del Norte County:

- **The death rate due to all causes has consistently been higher than for the state of California as a whole.** From 2000 to 2009 there has been an overall increase in the death rate in Del Norte County, with a spike in 2003-2005 and subsequent decline.



Data Source: California Department of Public Health, County Health Status Profiles (2004, 2007, 2011)
<http://www.cdph.ca.gov/programs/ohir/Pages/CHSP.aspx>

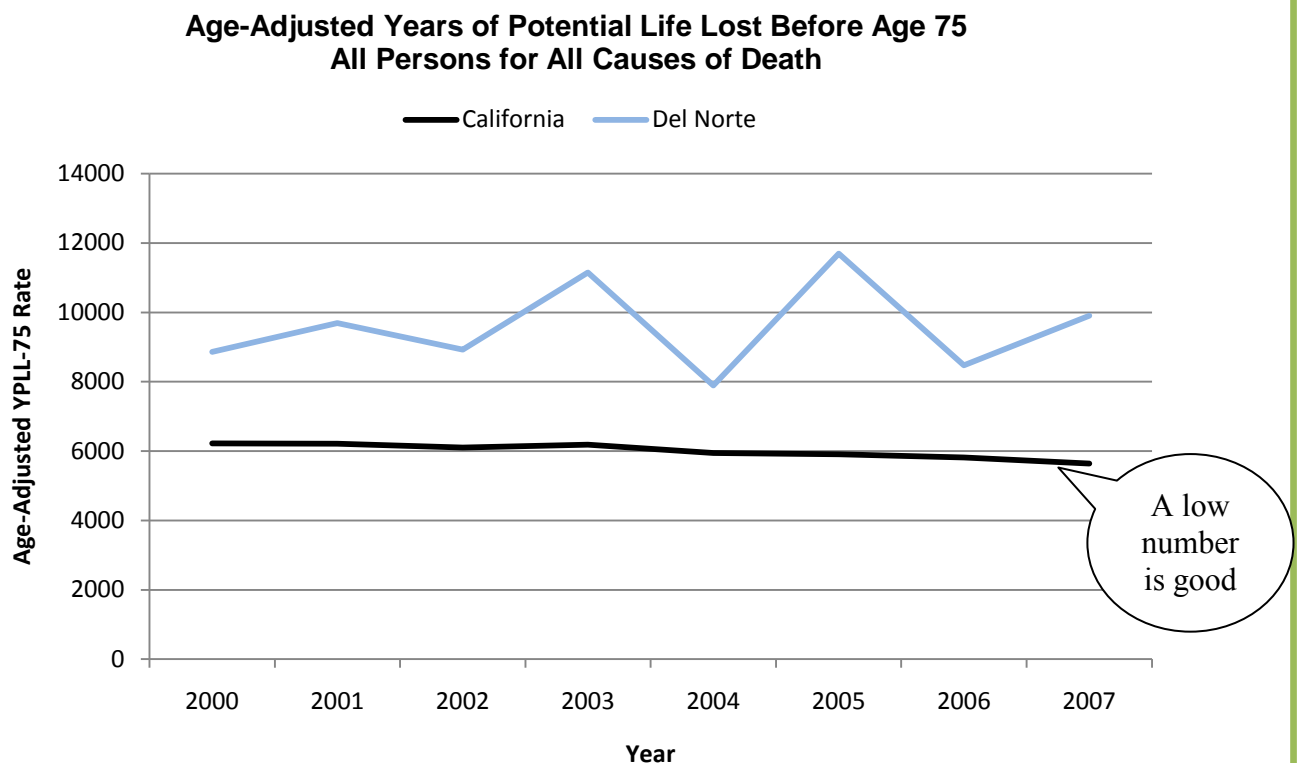
2. Premature Deaths- Years of Potential Life Lost

Years of potential life lost before age 75 (YPLL-75) is a measure of premature mortality in a population. Most deaths occur in older people and reflect disease processes of the elderly. Since deaths among younger people are likely to be preventable, it is important to monitor mortality trends among younger people.¹

The younger the person is when they die, the more they contribute to the years of potential life lost. For example, if a 25 year old woman dies in a car crash, the event will be counted as 50 years of potential life lost. A 71 year old man who dies of cancer will be counted as 4 years of potential life lost.

In Del Norte County:

- The premature death rate has increased and is consistently higher than California as a whole.



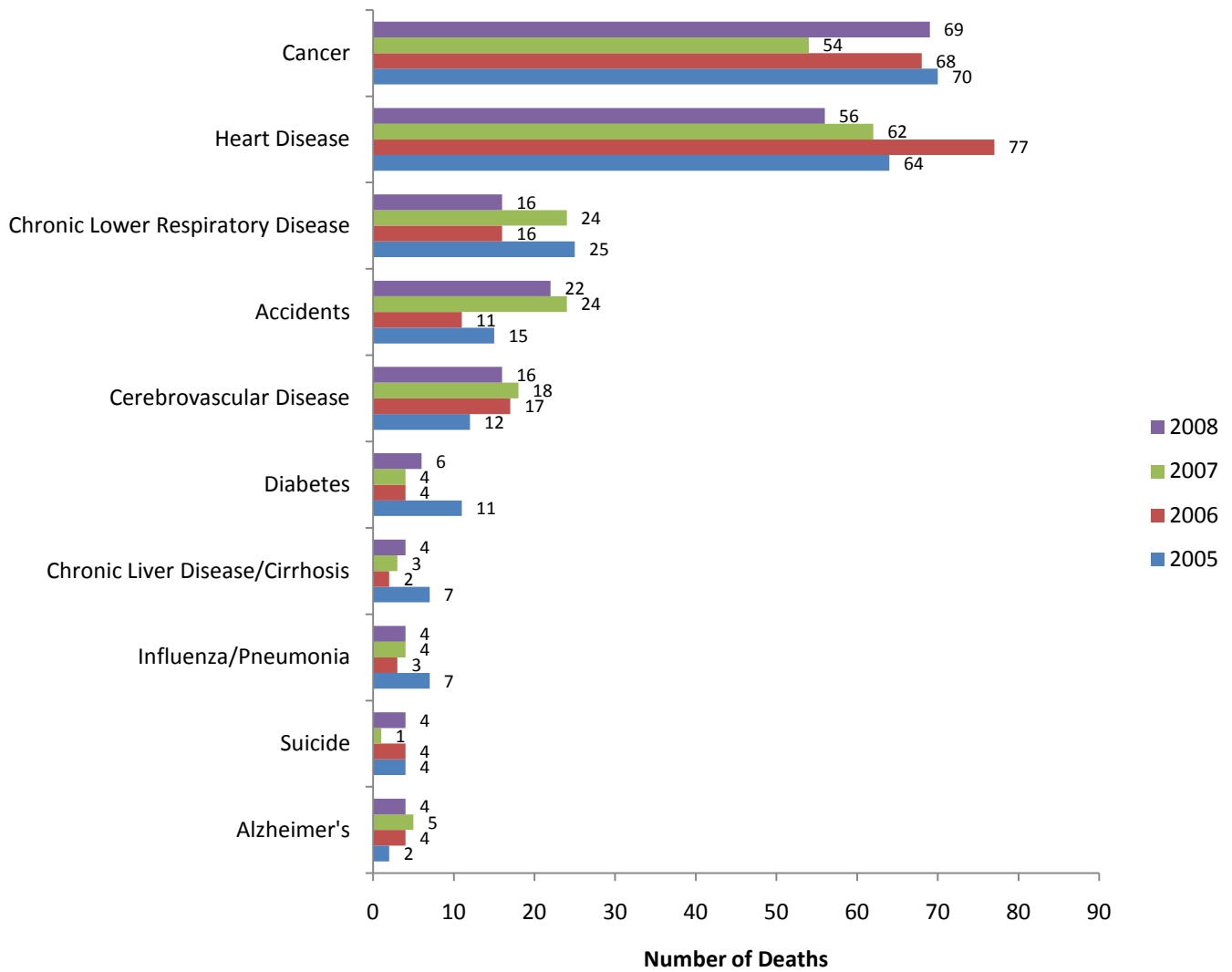
Data Source: Center for Health Statistics <http://www.cdph.ca.gov/programs/ohir/Pages/OHIRreports.aspx#p>

Notes: Rates are rounded to the nearest whole number.

3. Ten Leading Causes of Death

The ten leading causes of death in Del Norte County (in decreasing order) are cancer, heart disease, chronic lower respiratory disease, accidents, cerebrovascular disease (stroke), diabetes, chronic liver disease/cirrhosis, influenza/pneumonia, suicide, and Alzheimer's. The total number of deaths due to each cause fluctuates from year to year, but the top two causes are consistently cancer and heart disease, which is consistent with the rest of California.

**Del Norte County:
Ten Leading Causes of Death, 2005-2008**



Data Source: California Department of Public Health
<http://www.cdph.ca.gov/data/statistics/Pages/DeathStatisticalDataTables.aspx>

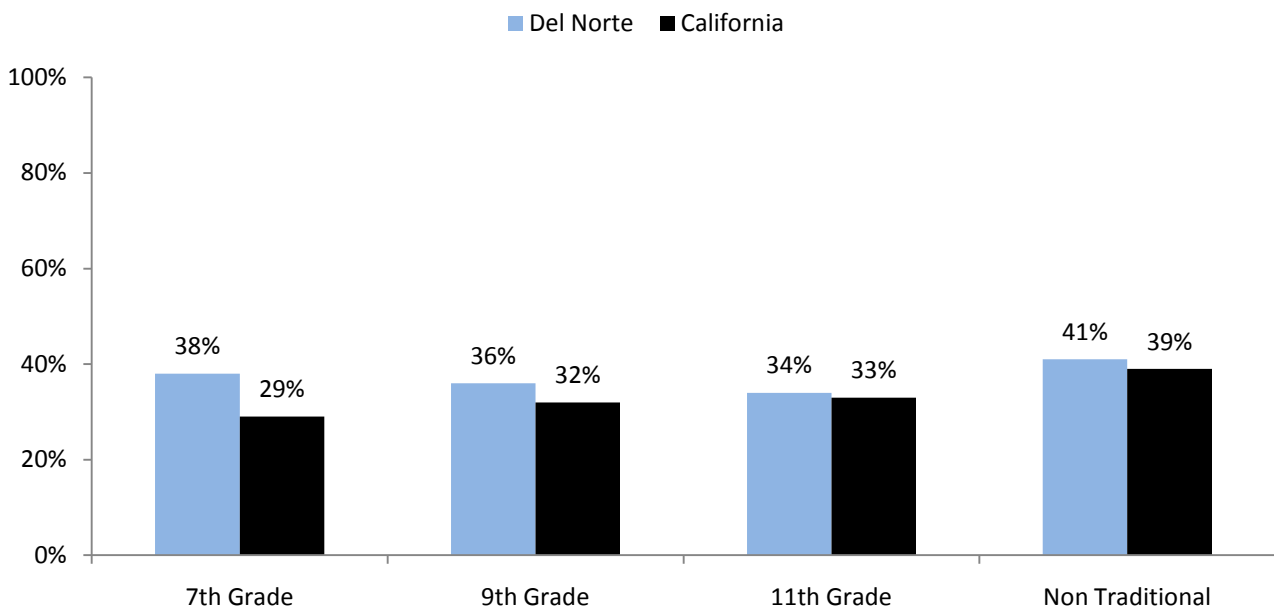
4. Depression, Suicide Attempts & Deaths

Studies have shown a connection between depression and poor health. For instance, middle-aged men and women with depression were more likely to report having poor health in comparison to adults without depression.^{1,2} Researchers have also found that older adults who had a past diagnosis of depression still rated poorer health than adults without depression.² The World Health Survey found that depression had the greatest association with perceived poor health among adults than any of the other chronic illness.³ Not only is depression associated with lower quality of health, it is also associated with less productivity and financial loss. That is, adults diagnosed with depression have more sick days from work when compared with adults without depression.⁴ Additionally, depression and hopelessness are risk factors for suicide attempts and deaths due to suicide, with hopelessness being the stronger predictor of eventual suicide.⁵

In Del Norte County:

- Students in Del Norte County are **more likely to reported depression-related feelings compared to the students in California as a whole.**
- 10.5% of adults reported feeling sad or depressed “most” or “all” of the time during the past 6 months, which is **higher than the Healthy People 2020** goal of 6.1% of adults experiencing a major depressive episode in the past year.
- The total number of hospitalizations due to self harm/suicide attempts has decreased from 2000 to 2006. Similarly, the number of deaths due to suicide has decreased from 2000 to 2007.

4a. Percent of Students Reporting Depression Related Feelings, 2007-2009

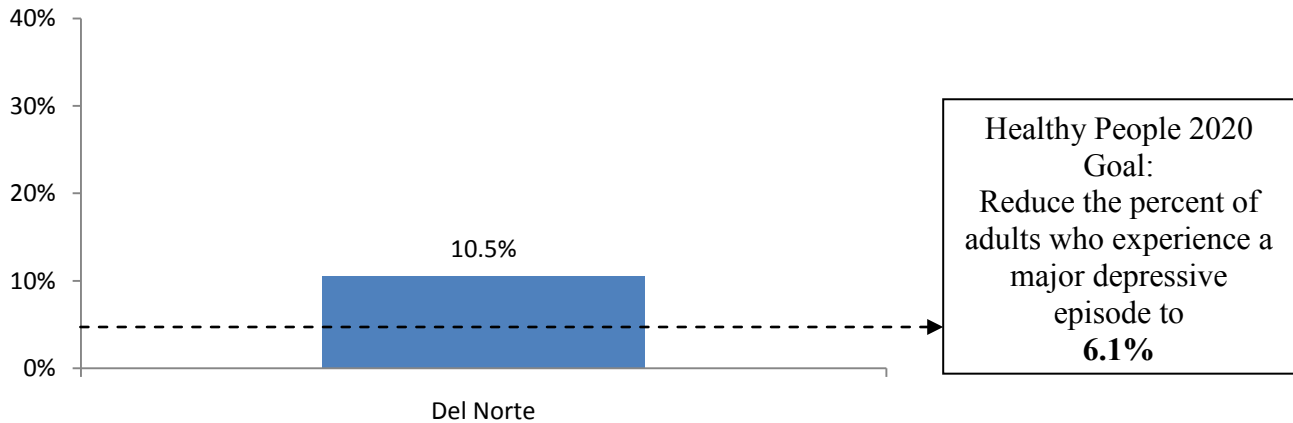


Data Source: California Healthy Kids Survey, 2007-09 County Results: Main Report and Statewide Results: Main Report. San Francisco: WestEd Health and Human Development Program for the California Department of Education. <http://dq.cde.ca.gov/dataquest/>

Notes: Depression related feelings defined as percentage of students reporting whether in the past 12 months, they had felt so sad and hopeless every day for two weeks or more that they stopped doing some usual activities.

Non-Traditional schools include continuation, community day and alternative schools. Charter schools are included with the Traditional schools.

4b. Percent of Adults Reporting Feeling Sad or Depressed “Most” or “All” of the Time During the Past 6 Months, 2006



Data Source: Rural Health Information Survey, 2006, California Center for Rural Policy

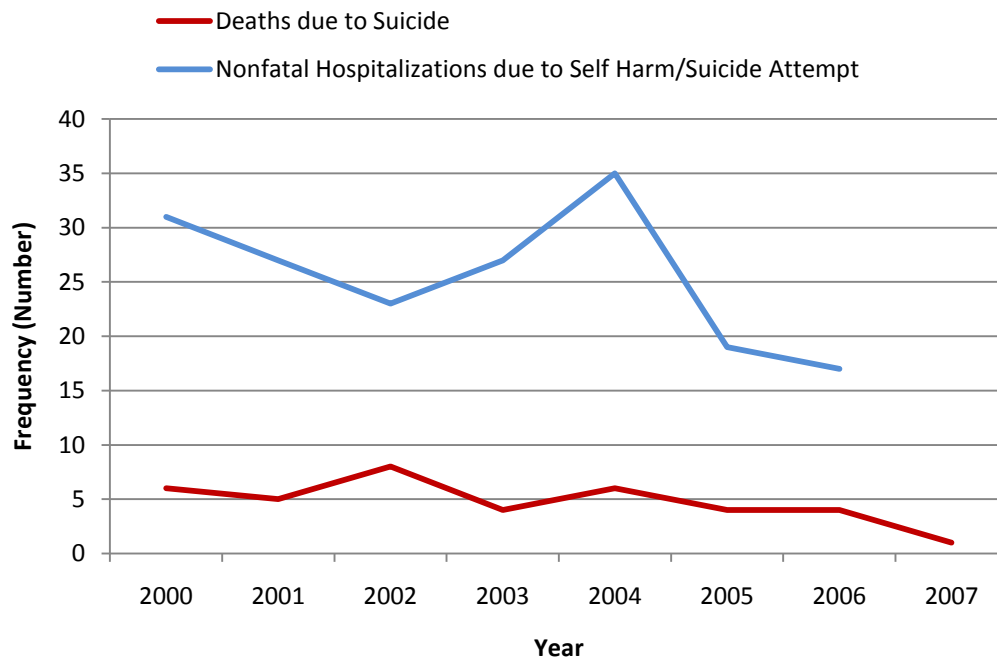
<http://www.humboldt.edu/ccrp/rural-health-information-survey>

Notes: The Healthy People 2020 goal is for percent of adults who experienced a major depressive episode in the past year. While the percent of adults reporting feeling sad or depressed “most” or “all” of the time in the past 6 months is not a diagnosis of a major depressive episode, it does suggest the person is at risk for major depression.

Healthy People 2020 identifies the most significant preventable threats to our health and establishes national goals to reduce those threats. *Healthy People 2020* was launched in late 2010.

<http://www.healthypeople.gov/2020/topicsobjectives2020/default.aspx>

4c. Suicide Attempts and Deaths, Del Norte County



Data Source:

Number of deaths due to suicide obtained from: California Department of Public Health

<http://www.cdph.ca.gov/data/statistics/Pages/DeathStatisticalDataTables.aspx>

Number of hospitalizations due to self harm/suicide attempt obtained from: California EPI Center

http://www.apps.cdph.ca.gov/epidata/content/sum_causebyage.htm

5. Percent of Live Births with Low Birth Weight

Birth weight and gestational age at delivery are the two most important predictors of an infant's subsequent health and survival. Infants born too soon and/or too small have a much greater risk of death and disability than those born full term (37–41 weeks of gestation) or with birth weights of 2,500 grams or more.¹

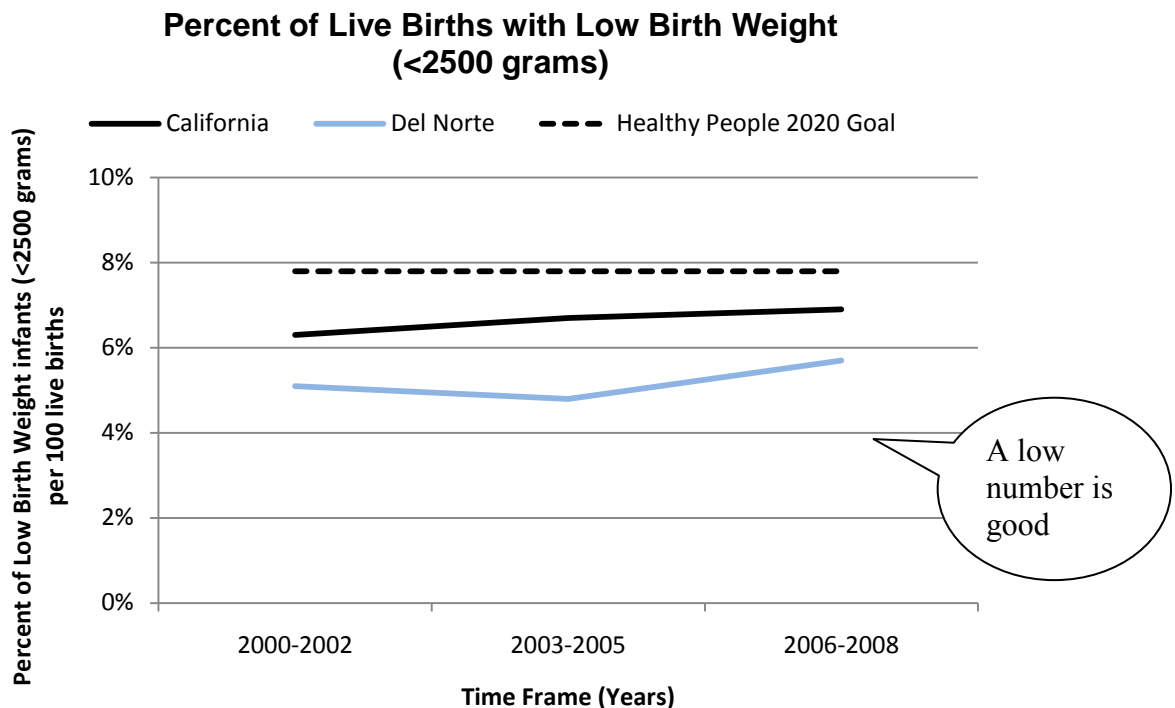
Disorders associated with low birth weight are the second cause of infant death in the United States.¹ Babies born with low birth weights are more likely to have underdeveloped lungs, anemia, and heart and liver problems. They also tend to have difficulty maintaining a normal body temperature due to their lack of body fat. Bleeding of the brain is another serious problem associated with very low birth weight, which can lead to behavioral and learning problems later in life.²

Maternal medical conditions such as chronic asthma or hypertension can lead to low birth weight, as can smoking, alcohol consumption, and use of illicit drugs. Maternal malnutrition and/or under-consumption of food are also risk factors for low birth weight and other fetal problems.³

Nationally, the low birth weight rate was found to be 8.3 percent of all births in 2006, the highest level reported in the U.S. in four decades.⁴ According to research done in 1988, children born with low birth weights were estimated to cost the United States government and taxpayers an additional \$5.5 to \$6 billion annually for health, educational, and care costs compared to full term infants.⁵

In Del Norte County:

- The percent of live births with low birth weight is lower than California and is better than the Healthy People 2020 goal, but has shown a slight increase from 2000 to 2008.



Data Source: County Health Status Profiles (2004, 2007, 2010) <http://www.cdph.ca.gov/programs/ohir/Pages/CHSP.aspx>

Notes: The percent of births with low birth weight in Del Norte County in 2007-2009 was 5.5%, but this number is not statistically stable, and thus is not presented in the graph.

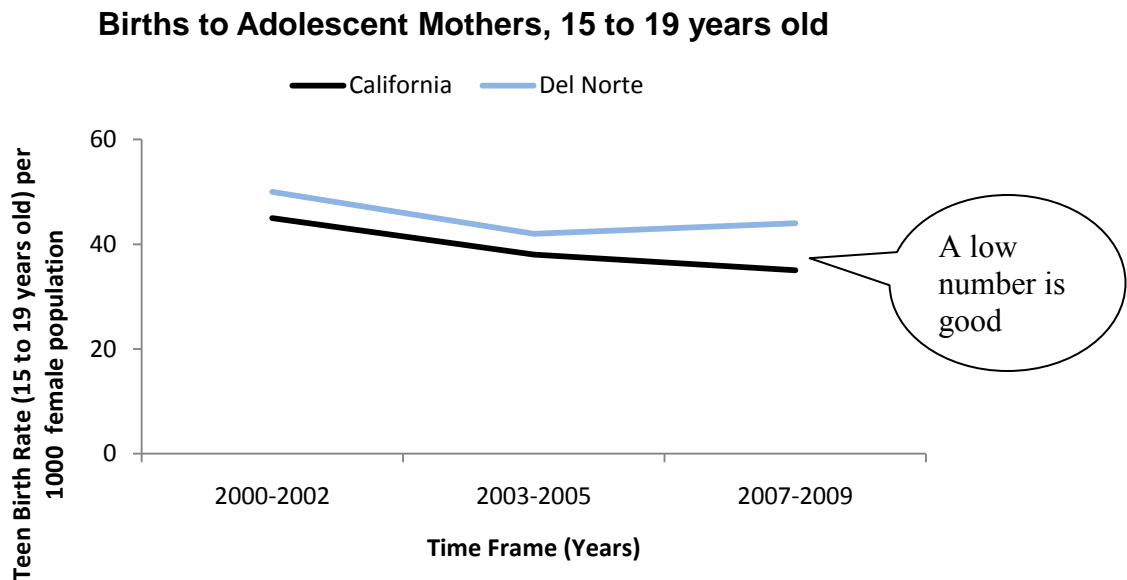
6. Teen Birth Rate



Infants born to teen mothers have been shown to have higher rates of low birth weight, preterm births, death in infancy, and abuse/ neglect. They are also more likely to be placed in foster care than children of older mothers.^{1,2} Teens who give birth are more likely to be single parents, drop out of high school, live in poverty, and rely on public financial and/or food assistance programs.² One in five teen births is to a teen who has already had a baby, which can exacerbate the problems mentioned above.³ The United States has the highest rate of teen births compared to any other industrialized country in the world and the rate has been increasing.¹ It has been reported that teen childbearing costs the United States government and taxpayers \$9.1 billion annually.⁴

In Del Norte County:

- **The teen birth rate is higher than California,** but has decreased from 2000 to 2009. The Healthy People 2020 goal is 36.2 pregnancies per 1,000 females aged 15 to 17 years, and 105.9 pregnancies per 1,000 females aged 18 to 19 years. The average teen birth rate in Del Norte from 2007-2009 was 44 pregnancies per 1,000 females aged 15 to 19 years.



Data Source: County Health Status Profiles (2004, 2007, 2011) <http://www.cdph.ca.gov/programs/ohir/Pages/CHSP.aspx>

7. Percent of Adults with a Diagnosis of Diabetes

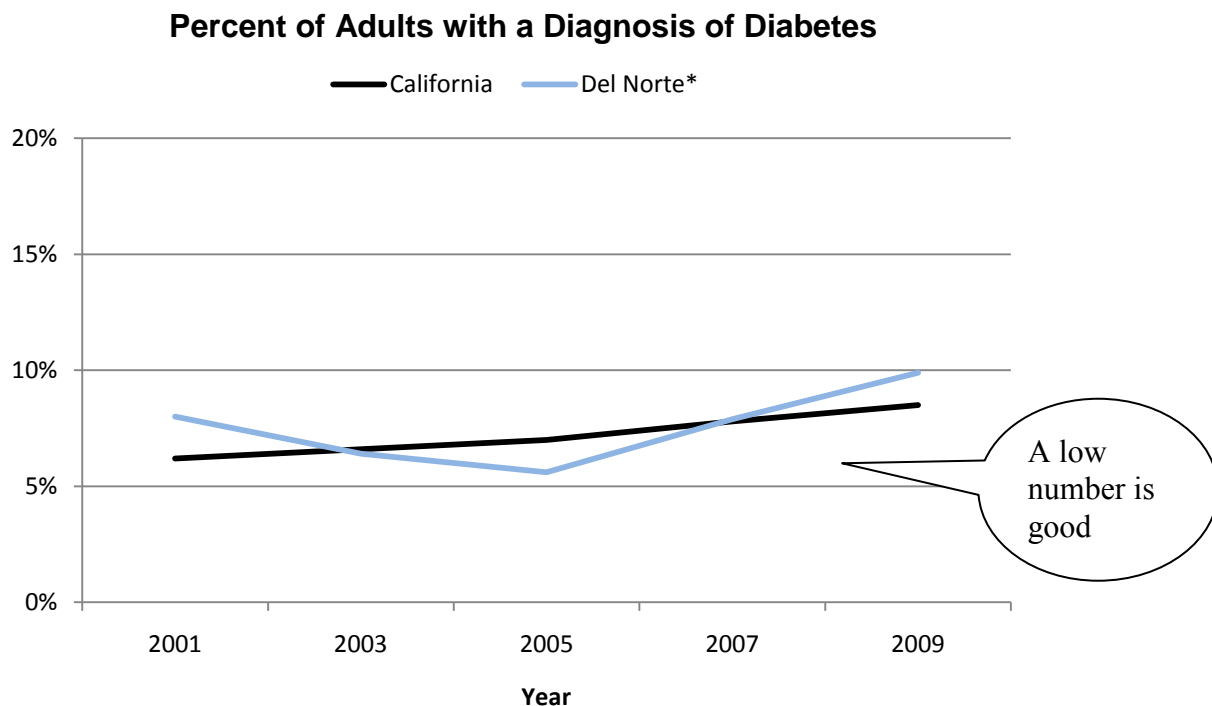
Diabetes is a metabolic disease in which the body does not produce enough insulin or cells do not respond to the insulin, resulting in high blood sugar levels. A wide range of complications can occur in people with diabetes, particularly if the disease is not managed appropriately. Complications from diabetes include eye disease or blindness, kidney disease, nerve damage, heart disease, high blood pressure, stroke, pregnancy complications, dental disease, and many others.¹

The prevalence of diabetes in the U.S. has been continually increasing over the last three decades and as of 2007, 23.6 million people or 7.8% of the population was believed to be plagued by the disease.^{2,3} It is estimated that 25% of people with diabetes are not aware that they have it as the onset occurs an average of 4-7 years before diagnosis.^{1,2} Pre-diabetes is a condition where blood sugar levels are elevated, but not high enough to be diagnosed with diabetes. Approximately 40% of U.S. adults aged 40-74 years are estimated to have pre-diabetes. If diagnosed early, this condition can be reversed and progression to diabetes can be prevented.²

Disparities exist among ethnic groups in the U.S., with the highest rates of diabetes among American Indian/Alaska Natives, followed by Blacks and Hispanics. Whites have the lowest rates of diabetes.² In 2007, diabetes was listed as the 7th leading cause of death in the U.S., and it has been shown to lower a person's life expectancy up to 15 years.⁴ In 2007, the total estimated cost of diabetes in the U.S. was \$174 billion, including \$116 billion for direct medical costs with the remaining \$58 billion related to disability, work loss, and premature mortality.²

In Del Norte County:

- Adults reporting a diagnosis of diabetes has **increased slightly and is higher than California** as a whole. It is important to keep in mind that access to health care can impact the number of people with a diagnosis of diabetes. If people have limited access to health care they may not be receiving screening tests and may be unaware that they have diabetes.



Data Source: California Health Interview Survey <http://www.chis.ucla.edu>

Notes: *Del Norte data is aggregated with 6 other counties

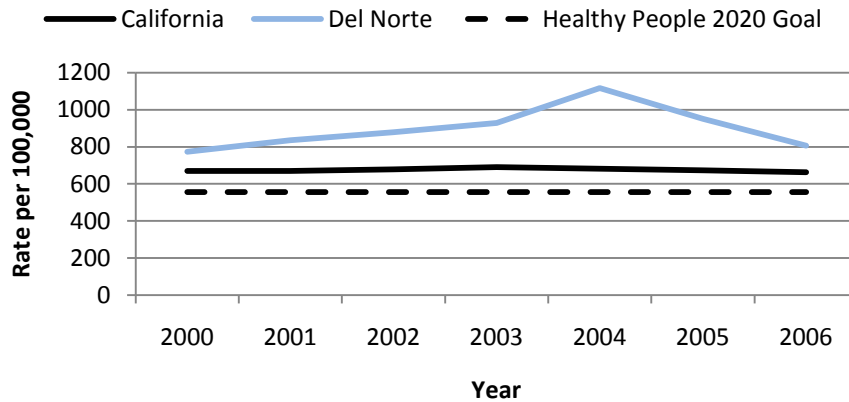
8. Non-Fatal Hospitalizations due to Injuries

Injuries are the leading cause of death for Americans ages 1 to 44 and are a leading cause of disability for all ages.^{1,2} In addition to direct medical costs, injuries can lead to disability, chronic pain, stress, and loss of income.¹ Most events resulting in injury, disability or death are preventable.²

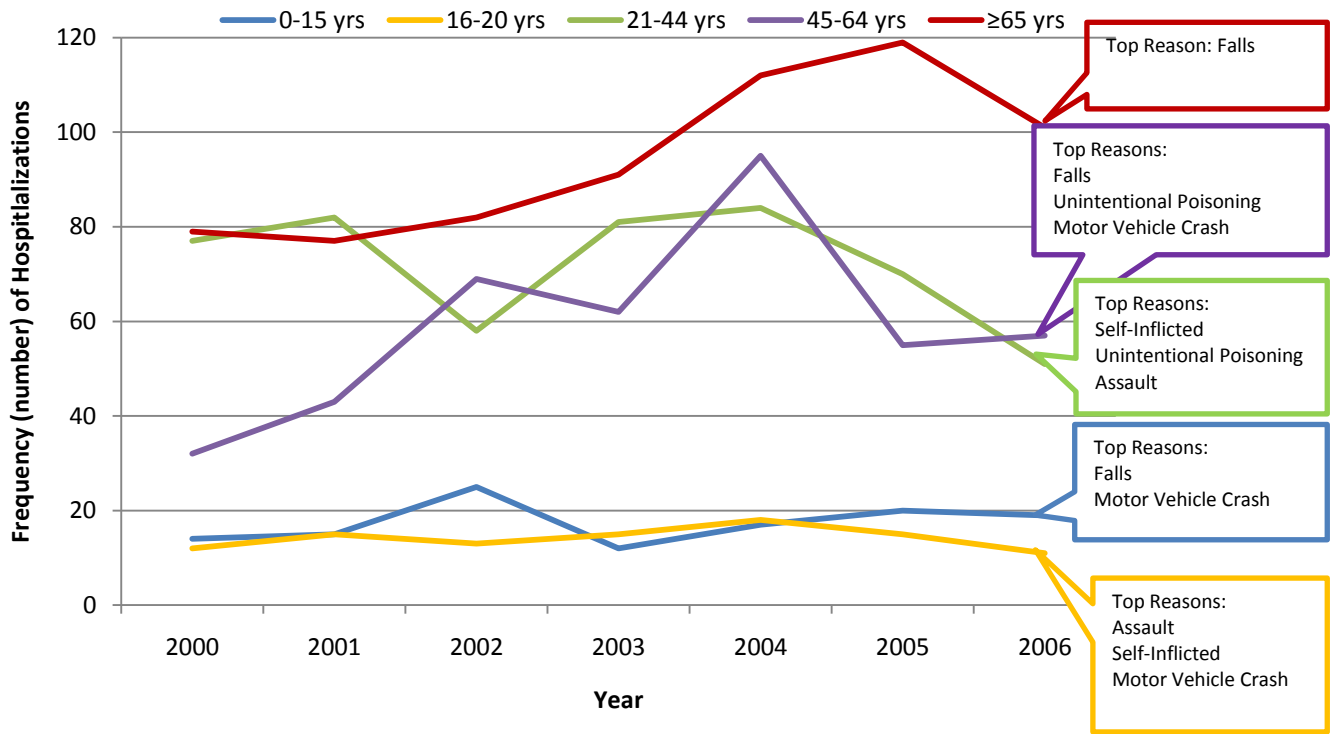
In Del Norte County:

- The hospitalization rate for nonfatal injuries is **higher than for the state and higher than the Healthy People 2020 goal**. It peaked in 2004, but otherwise has been fairly stable from 2000 to 2006. The 65 and older age group has the highest number of hospitalizations each year due to injuries, the majority of which are due to falls.

Nonfatal Injury Hospitalization Rates



Nonfatal Injury Hospitalization Numbers by Age Group, Del Norte County



Data Source: California EPI Center <http://www.applications.dhs.ca.gov/epidata/default.htm#topics>

Clinical Care & Human Services (Physical, Mental & Oral Health)

Health Care Provider Workforce
Ability to get Needed Healthcare
Health Insurance
Routine Check-ups
Screening for Diabetes

Prenatal Care
Childhood Vaccinations
Oral Healthcare
Transportation to Healthcare

Access to care and services and quality of care and services can be impacted by many factors including availability of the health care workforce, insurance, and transportation. Having sufficient numbers of health care providers plays an important role in whether or not people can access health care. Rural areas tend to have limited numbers of health care professionals and less specialty care, thus making access to health care more difficult.¹

Numerous studies have shown that lack of health insurance or inadequate health insurance are significant barriers to receiving health care services, particularly preventive health services.^{2,3} Lack of health insurance is associated with a lower likelihood of having a “medical home” or usual source of care, which translates to less preventive care, inadequate management of chronic conditions, over-burdening hospital emergency departments, and increased costs of health care.^{3,4}

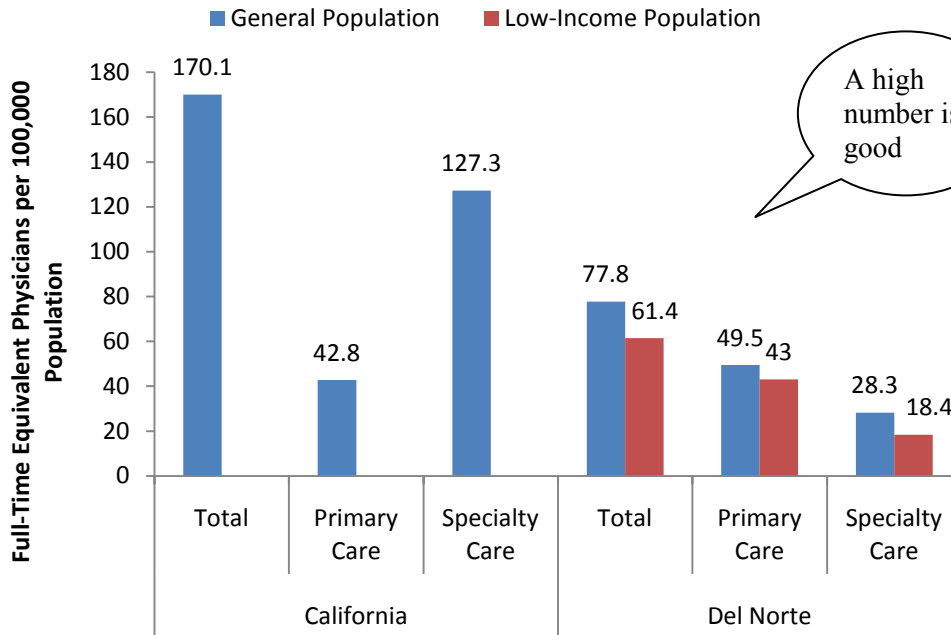
Preventive or periodic health examinations (PHEs) are important for health promotion, as well as screening, early detection and treatment of many health conditions.⁵⁻⁷ Early detection through screening has been demonstrated to reduce mortality from breast, cervical and colorectal cancer.⁵ PHEs provide opportunities to screen for diseases such as diabetes, high blood pressure and high cholesterol, which often have no symptoms in the early stages, but are critical to detect early in order to prevent complications.

In Del Norte County:

- **There are fewer physicians working full-time** (or full-time equivalent) per 100,000 population compared to the physician availability in the state. The county has less specialty care physicians and slightly more primary care physicians per 100,000 population. The low-income population has less specialty and primary care physicians who care for them compared to the general population.
- **There is a severe shortage of dentists.** In 2000, California had 81.4 dentists per 100,000 population and the national rate was 63.6. This number is considerably lower in Del Norte County (25.1 FTE per 100,000 for the general population) and the low-income population has very few dentists available to them (14.9 FTE per 100,000).
- **47.2% of the low-income adults were not able to obtain needed healthcare in 2006.**
- **24.4% of low-income children were not able to obtain needed healthcare in 2006.**
- **29% of low-income adults had no health insurance in 2006.**
- **Among children under the age 18 in the county, nearly 50% were relying on public insurance in 2009.**
- Low-income adults and non low-income adults are equally likely to receive routine check-ups (preventive health exams) and screenings for diabetes. In other surrounding counties, the low-income adults were less likely to receive these services.
- Routine check-ups among adolescents have increased in Del Norte, and in 2007 were higher than California and the Healthy People 2020 Goal.

9. Health Care Provider Workforce- Physicians & Dentists

9a. Full-Time Equivalent Physicians per 100,000 Population (General & Low-Income), 2010

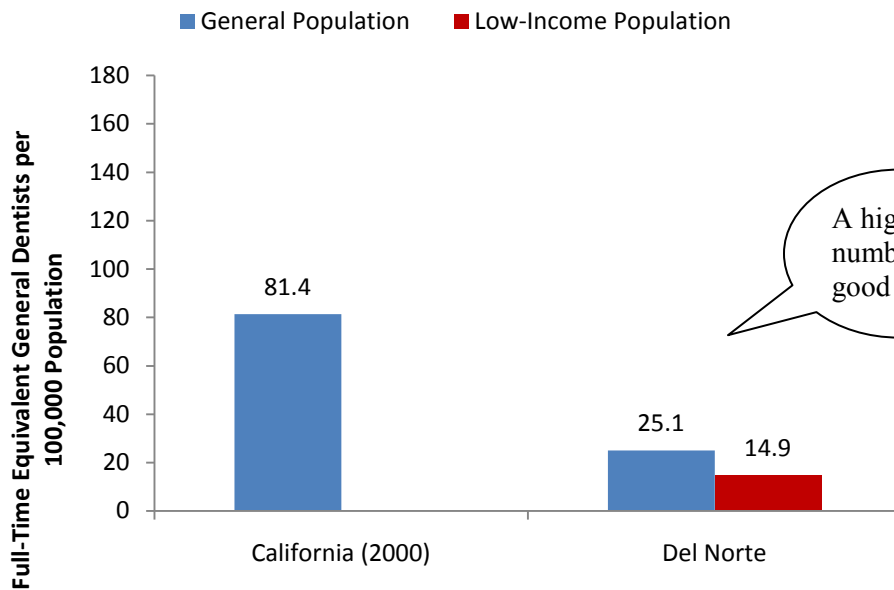


A high number is good

Del Norte has fewer physicians working full-time compared to the physician availability in the state.

There is less specialty care and the low-income population tends to have proportionally less physicians who care for them.

9b. Full-Time Equivalent Dentists per 100,000 Population (General & Low-Income), 2010



A high number is good

Del Norte has a severe shortage of dentists and the low-income population has very few dentists available to them.

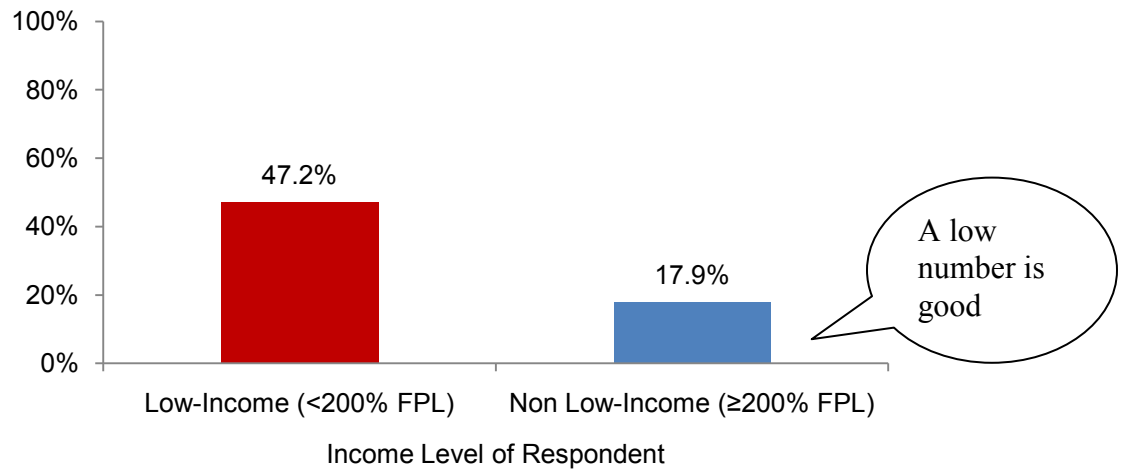
Data Sources: Bonser-Bishop H. *Specialty Access on the North Coast: Mental, Dental and Medical Access in Humboldt, Del Norte, Trinity and Mendocino Counties*. July, 2010.

Dentist data for California obtained from Health Resources and Services Administration. State Health Workforce Profiles.

<http://bhpr.hrsa.gov/healthworkforce/reports/statesummaries/california.htm>

10. Percent of People Not Able to Get Needed Healthcare in Past 12 Months

10a. Percent of Adults Not Able to Get Needed Healthcare in Past 12 Months, 2006, Del Norte County

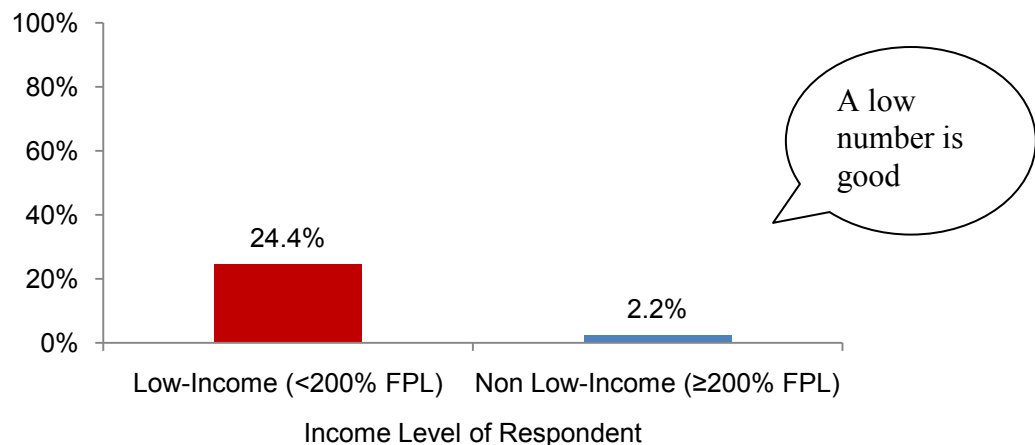


Data Source: Rural Health Information Survey, 2006, California Center for Rural Policy

<http://www.humboldt.edu/ccrp/rural-health-information-survey>

Notes: The difference between income levels is statistically significant. The Federal Poverty Level (FPL) varies by household size. For a family of four (two adults, two children) the 2006 Federal Poverty Level (100% FPL) was \$20,444, 200% FPL was \$40,888 and 300% FPL was \$61,332

10b. Percent of Children Not Able to Get Needed Healthcare in Past 12 Months, 2006, Del Norte County



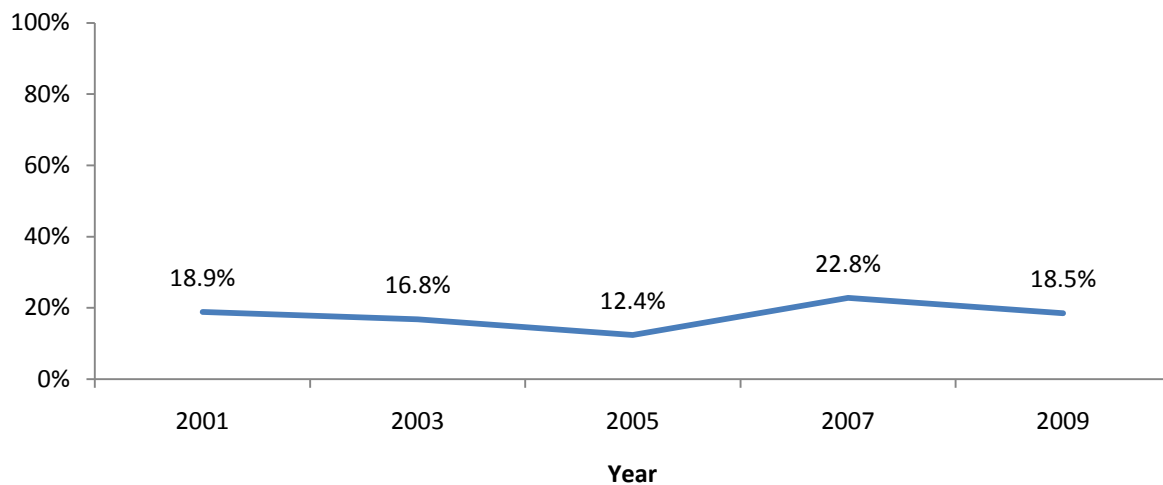
Data Source: Rural Health Information Survey, 2006, California Center for Rural Policy

<http://www.humboldt.edu/ccrp/rural-health-information-survey>

Notes: Analysis was restricted to respondents with children under the age of 18. The difference between income levels is statistically significant.

11. Health Insurance

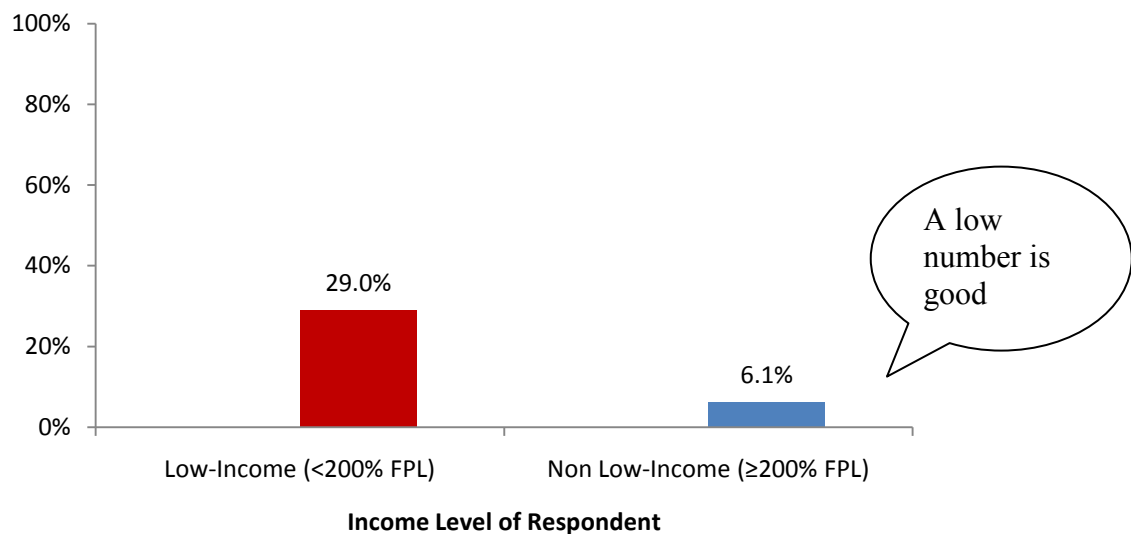
11a. Percent of Adults without Health Insurance (age 18-64), Del Norte County*



Data Source: California Health Interview Survey <http://www.chis.ucla.edu>

Notes: *Del Norte data aggregated with 6 other counties.

11b. Percent of Adults without Health Insurance by Income Level (age 18-64), 2006, Del Norte County

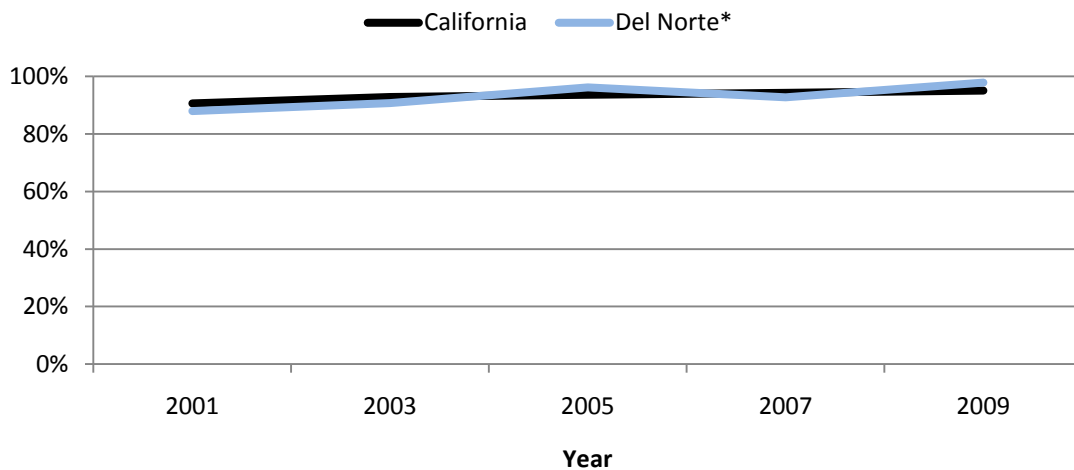


Data Source: Rural Health Information Survey, 2006, California Center for Rural Policy

<http://www.humboldt.edu/ccrp/rural-health-information-survey>

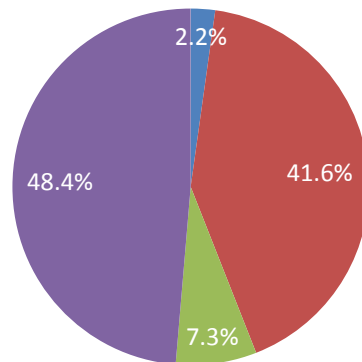
Notes: The difference between income levels is statistically significant.

11c. Percent of Children (0-17 yrs) with Health Insurance

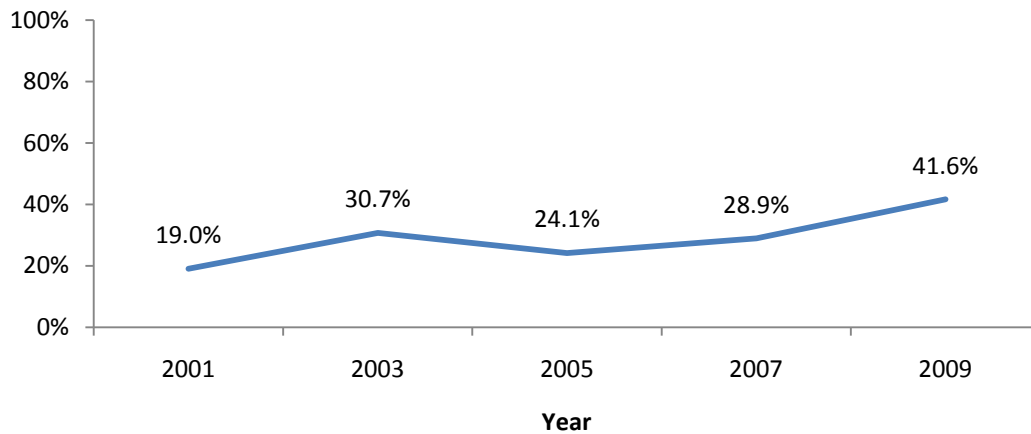


11d. Type of Health Insurance for Children (0-17 yrs), 2009, Del Norte County*

■ Uninsured** ■ Medicaid ■ Healthy Families/CHIP** ■ Employment-based



11e. Percent of Children with Medi-Cal (0-17yrs), Del Norte County*



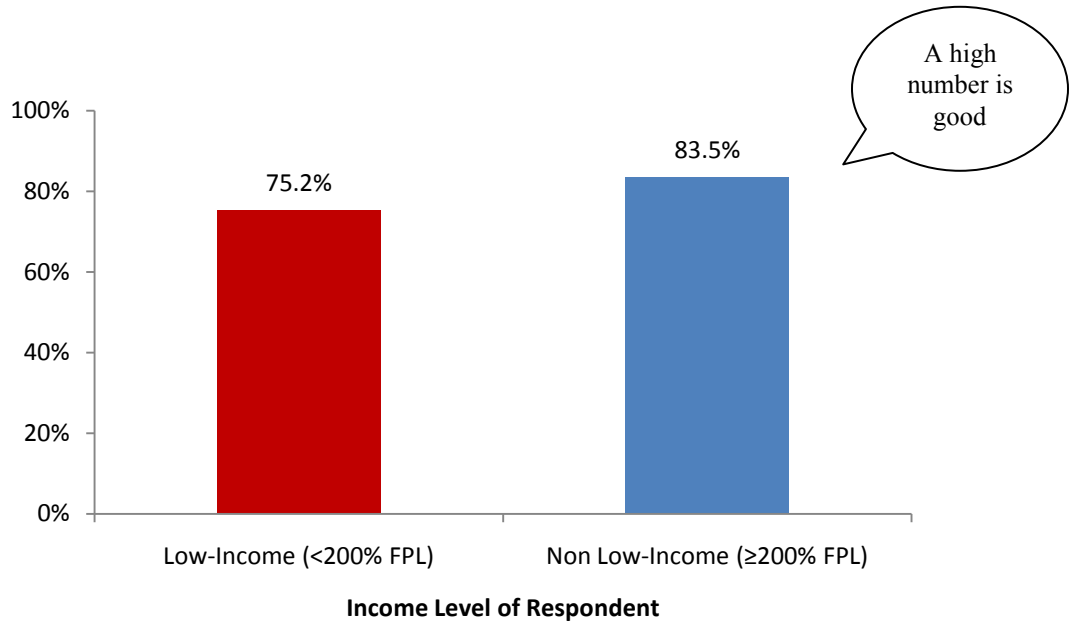
Data Source: California Health Interview Survey <http://www.chis.ucla.edu>

Notes: *Del Norte data aggregated with 6 other counties.

** unreliable/statistically unstable meaning cell has not met the criteria for a minimum number of respondents needed and/or has exceeded an acceptable value for coefficient of variance.

12. Routine Check-ups

12a. Percent of Adults with a Routine Check-up in the Past 2 Years, 2006, Del Norte County

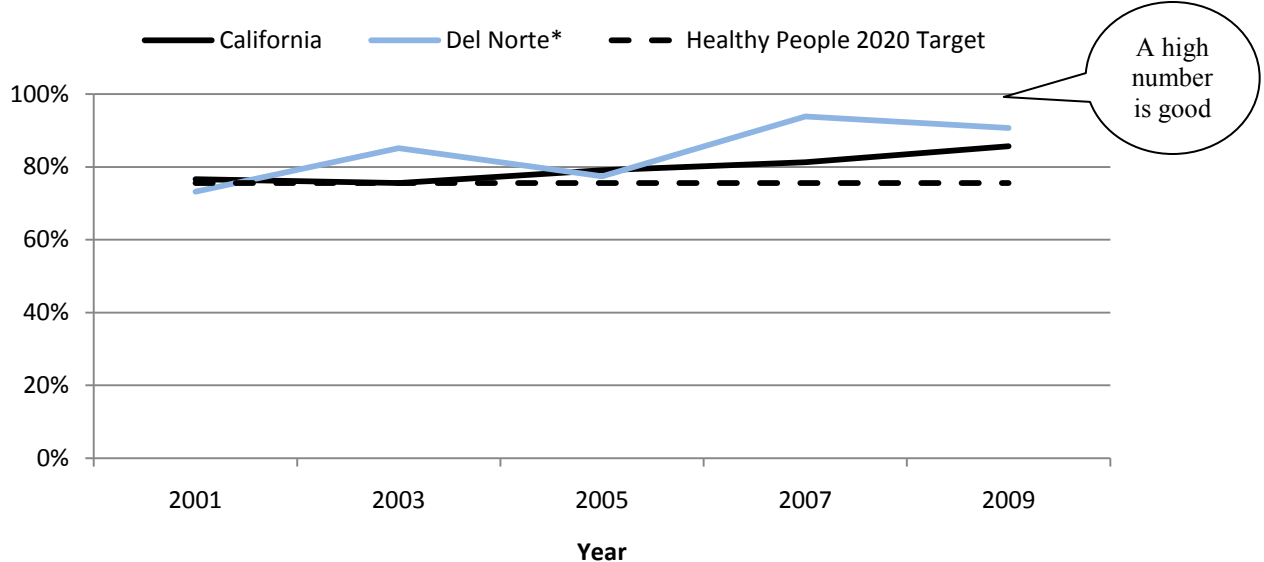


Data Source: Rural Health Information Survey, 2006, California Center for Rural Policy

<http://www.humboldt.edu/ccrp/rural-health-information-survey>

Notes: The difference between income levels is Not statistically significant in Del Norte.

12b. Percent of Adolescents (12-17 yrs) with a Routine Check-up in the Past Year

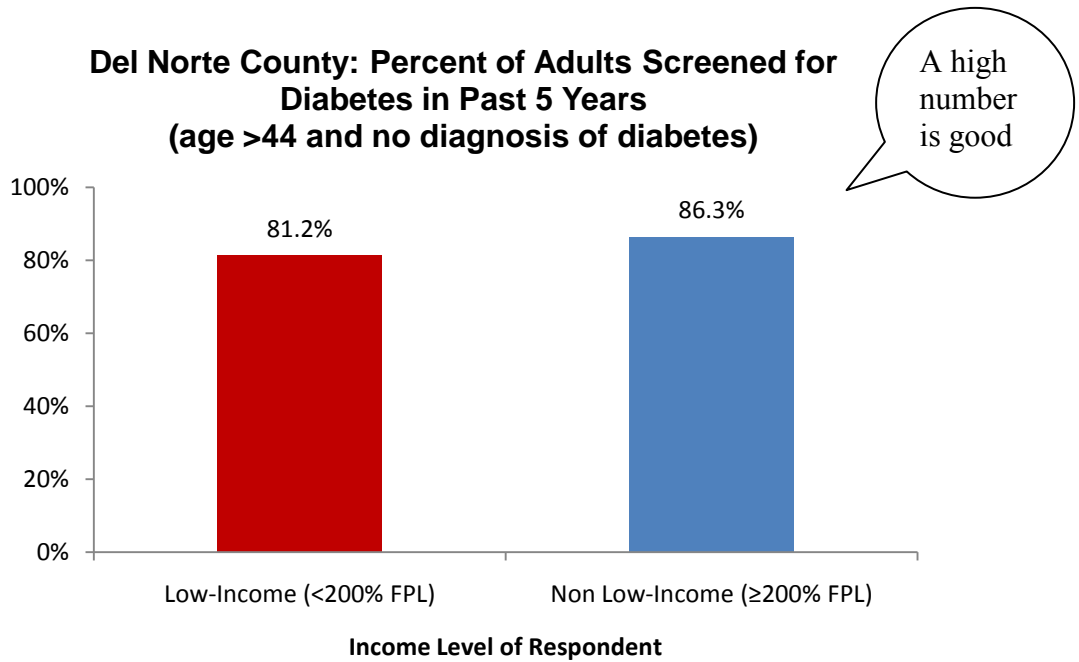


Data Source: California Health Interview Survey <http://www.chis.ucla.edu>

Notes: This question was not asked of adults or children.

* Del Norte data aggregated with 6 other counties.

13. Percent of Adults Screened for Diabetes in Past 5 Years



Data Source: Rural Health Information Survey, 2006, California Center for Rural Policy

<http://www.humboldt.edu/ccrp/rural-health-information-survey>

Notes: This analysis includes adults who did not report a diagnosis of diabetes and were over age 44. The difference between income levels is Not statistically significant for Del Norte.

14. Prenatal Care



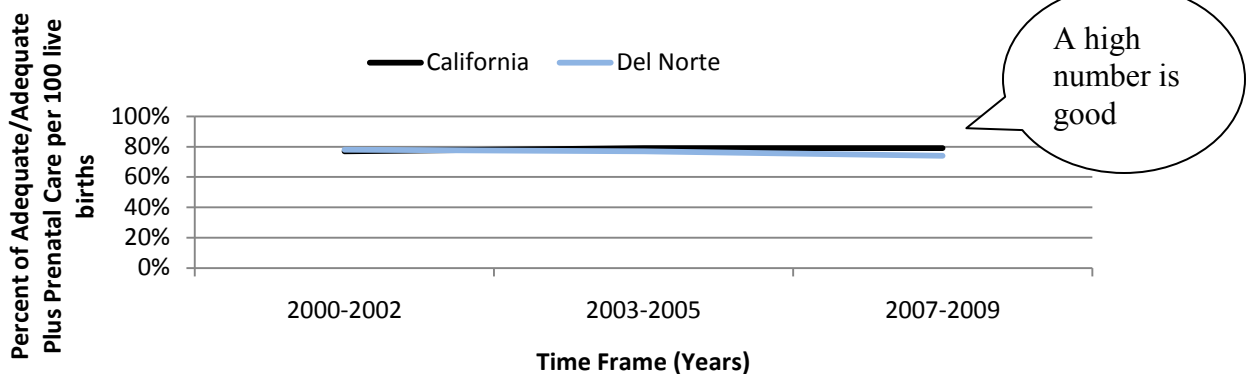
Prenatal care is designed to promote healthy development of the mother and baby through the provision of preventive, diagnostic, and therapeutic services. Prenatal visits consist of a thorough account of the woman's health history, screening for pregnancy complications, fetal monitoring and testing, childbirth education, as well as information about healthy nutrition, weight gain, and activities.¹ Prenatal care visits are important for diagnosing pregnancy-related problems, such as gestational diabetes, which can lead to negative health outcomes for the mother and child if not diagnosed and treated appropriately.² Some of the most common risks associated with inadequate or infrequent prenatal care is preterm delivery and low birth weight, although the risks for other complications also increase if problems are not detected early.²⁻⁴ The risk of infant and mother mortality has also been shown to increase when prenatal care is limited.²

It has been shown that women living in rural areas tend to use prenatal care less frequently than their urban and suburban peers. Some of the barriers to prenatal care for women living in rural communities include a decreasing number of health care providers providing prenatal and obstetrical services, less health insurance coverage, further distances to travel, transportation problems, and child care problems for larger families.³

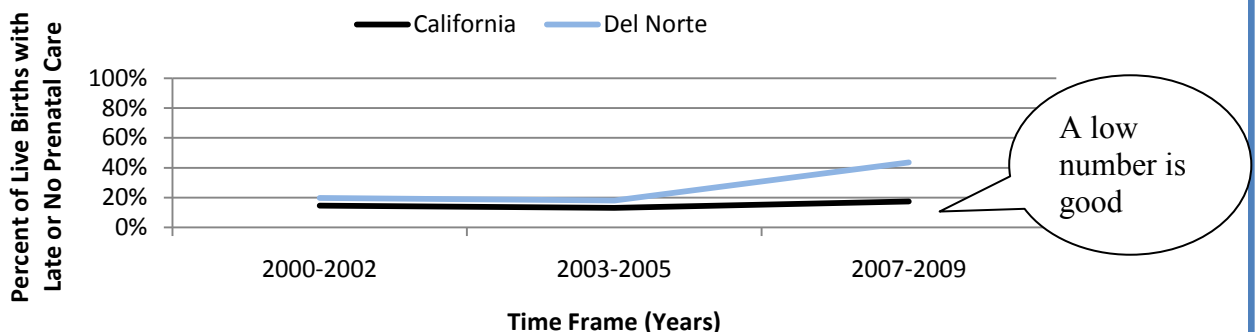
In Del Norte County:

- The percent of women receiving adequate/adequate plus prenatal care has decreased from 2000 to 2009 and is slightly lower than California.
- From 2003 to 2009 the percent of women with late or no prenatal care increased from 18% to 43.5%.

14a. Percent of Women with "Adequate/Adequate Plus" Prenatal Care



14b. Percent of Women with Late or No Prenatal Care



Data Source: County Health Status Profiles (2004, 2007, 2011) <http://www.cdph.ca.gov/programs/ohir/Pages/CHSP.aspx>

Notes: Adequate/Adequate Plus prenatal care is based on the Kotelchuck Index. Women are considered to have received Adequate/Adequate Plus prenatal care if prenatal care began by 4th month and $\geq 80\%$ of recommended visits were received. Women were considered to have late or no prenatal care if they started care after the first trimester or did not receive care.

15. Percent of Kindergarten/1st Grade Students with all Required Vaccinations

Childhood immunization is one of the most cost effective forms of disease prevention worldwide.¹ There are three primary reasons for immunizing children: the protection of the individual child from infection and related symptoms, prevention of an outbreak of infectious disease in the child's immediate population, and worldwide eradication of the disease.¹

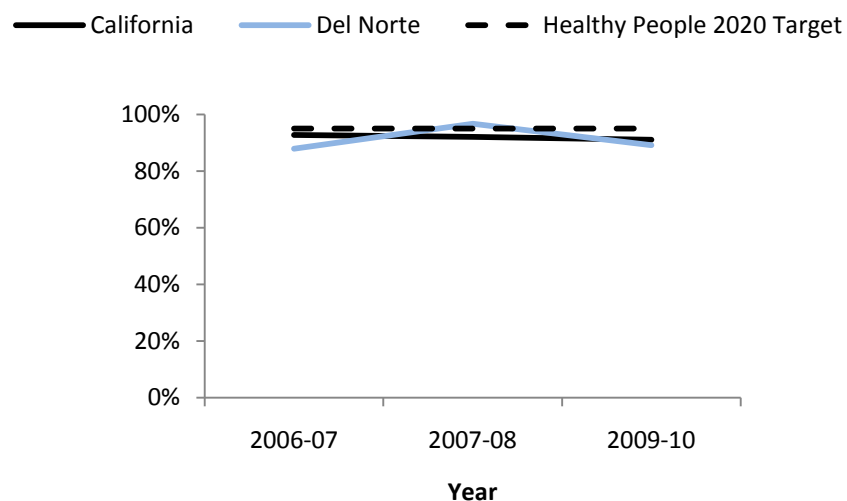
In the U.S., there are no federal laws that require parents to immunize their children, however each state has specific laws that require children to have some vaccinations prior to entering public school systems, most commonly including diphtheria, pertussis, tetanus, measles, mumps, rubella, polio, and hepatitis B.² The number of children vaccinated in a population greatly reflects the health of the community because it represents the defense taken to protect against potentially fatal diseases, not only for the immunized children but also for the adults that interact with them. This is particularly important for pregnant women as many of the diseases that are preventable by vaccination can cause severe birth defects and death to the unborn child.

In recent years, there has been a lot of speculation about the safety of vaccinations, particularly in relation to autism spectrum disorders and the administration of combination vaccines. The study that initiated the controversy was recently removed by the *Lancet* journal that published it in 1998, after finding some of its claims to be false.³ Multiple other studies, including a recent one published in the journal *Pediatrics*, have shown no correlation between vaccination and development of autism spectrum disorders.⁴ Although for many people the debate is ongoing, research has convinced the medical community of the safety of vaccinations and their benefits, which heavily outweigh any evidence against vaccinating children.

In Del Norte County:

- The childhood vaccination rate in 2009-10 was 89.1%, which was similar to the state (91.1%), but slightly below the Healthy People 2020 Goal of 95%.

Percent of Kindergarten/1st Grade Children with all Required Vaccinations (age 4-6 yrs)



Data Source: CA Dept of Health Services, Immunization Branch

<http://www.cdph.ca.gov/programs/immunize/Pages/ImmunizationLevels.aspx>

Notes: Percentage rounded to nearest 10th.



16. Percent of Adults with Professional Teeth Cleaning

There is a growing body of literature showing that oral health is integral to the overall health of the individual.¹⁻³ Dental diseases are common and widespread making them a major public health problem worldwide.^{2,3} Dental caries (tooth decay) is the single most common chronic childhood disease-5 times more common than asthma.¹ Research has shown an association between poor oral health and numerous adverse health outcomes including diabetes,^{4,5} cancer,⁶⁻⁸ cardiovascular disease,⁹⁻¹³ and pregnancy complications.^{2,14,15}

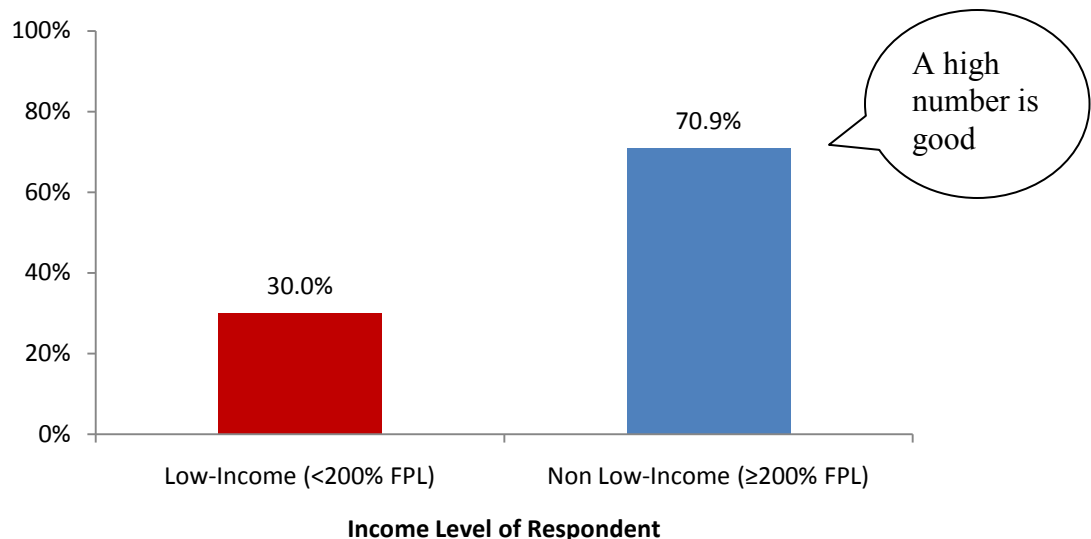
The social impact of oral diseases is substantial. Untreated dental diseases can cause significant pain and suffering and interfere with essential functions such as eating, swallowing, speaking, and other activities of daily living such as work, school, and family interactions. In the U.S. each year, children lose more than 51 million school hours and employed adults lose more than 164 million hours of work due to dental-related illness.¹

Periodontal disease is a chronic bacterial infection in the mouth causing inflammation of the gums (gingivitis), which can lead to the gradual destruction of the surrounding tissue and bones (periodontitis).^{2,7} Periodontal disease is a preventable and treatable condition. Experts recommend that individuals have a professional dental check-up at least every year starting as young as 12 months.^{16,17} Good personal oral hygiene and routine professional care are necessary to maintain optimal oral health. Regular dental check-ups are important as they provide opportunities for the early diagnosis, prevention, and treatment of oral diseases. Improving adult access to oral health care can improve children's oral health in several ways. The bacteria that cause dental disease are often passed from parents and other caretakers to their children. Studies have shown that when parents do not have at least one dental visit per year, their children are 13 times less likely to visit a dentist that same year.¹⁸

In Del Norte County:

- Only 30% of low-income adults have had their teeth professionally cleaned in the past 12 months, which is significantly lower than the non low-income adults (70.9%).

Percent of Adults with Professional Teeth Cleaning in the Past 12 Months, 2006



Data Source: Rural Health Information Survey, 2006, California Center for Rural Policy

<http://www.humboldt.edu/ccrp/rural-health-information-survey>

Notes: Differences between low-income and non low-income are statistically significant. Analysis includes adults 18 years and older.

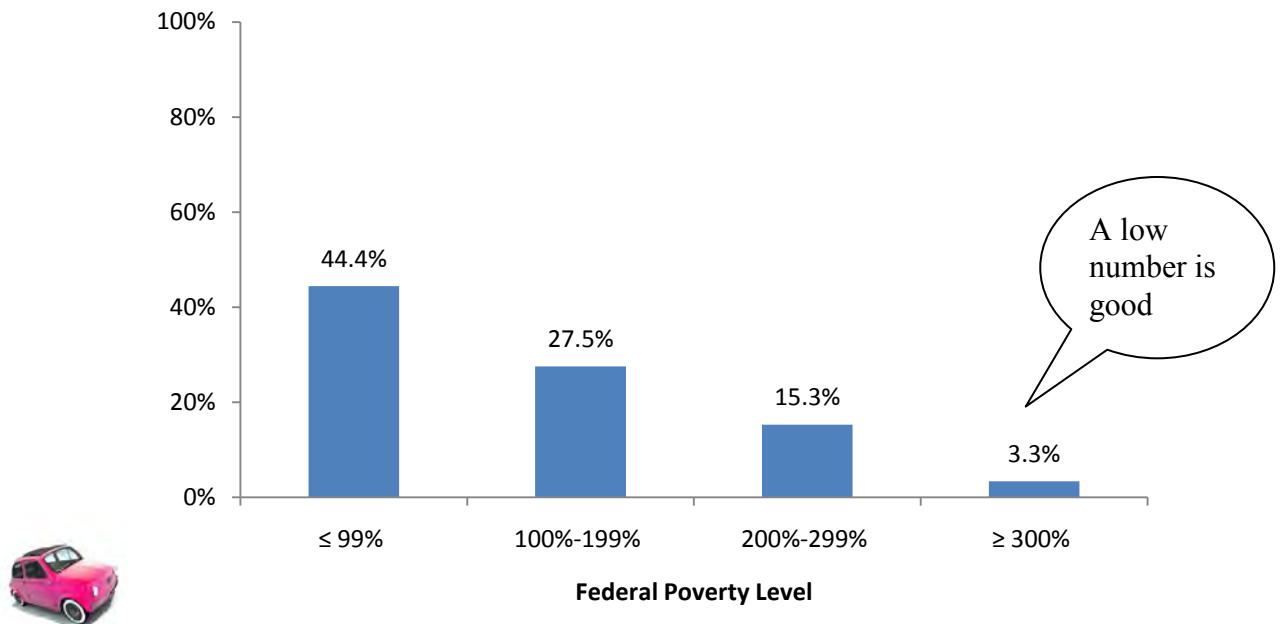
17. Percent of Adults Reporting Transportation as a Problem in Meeting Health Needs

Transportation is an important determinant of health, and rural areas are particularly challenged when it comes to transportation.^{1,2} Research has shown that rural residents have greater transportation difficulties and have to travel longer distances to receive health care compared to urban residents.³ Transportation is frequently reported as one of the major barriers to accessing health care and health programs among rural residents and this is particularly true among the elderly and lower income individuals in rural communities.⁴ Limited or no public transportation, needing to travel far distances for specialty care, inhospitable terrain, and weather have all been identified as barriers to accessing health care among rural populations.³

In Del Norte County:

- Transportation is a common problem affecting a high percentage of adults living in poverty (<100% federal poverty level) or low-income (≤200% federal poverty level).

Percent of Adults Reporting Transportation as a Problem in Meeting Health Needs, 2006, Del Norte County



Data Source: Rural Health Information Survey, 2006, California Center for Rural Policy
<http://www.humboldt.edu/ccrp/rural-health-information-survey>

Health Behaviors

Breastfeeding
Active Living
Healthy Weight

Students Eating Breakfast
Fruits & Vegetables
Alcohol, Tobacco and Other Drug Use

18. Breastfeeding

A great deal of research in recent years has shown that breastfeeding provides important health benefits to infants, mothers, and the surrounding community. In regard to infants, breastfeeding has been associated with lower rates of gastroenteritis, otitis media, severe lower respiratory tract infections, atopic dermatitis, asthma, obesity, diabetes (type 1 and 2), leukemia, and sudden infant death syndrome.¹ With the obesity epidemic in the U.S., breast feeding is an important public health approach to obesity prevention.²

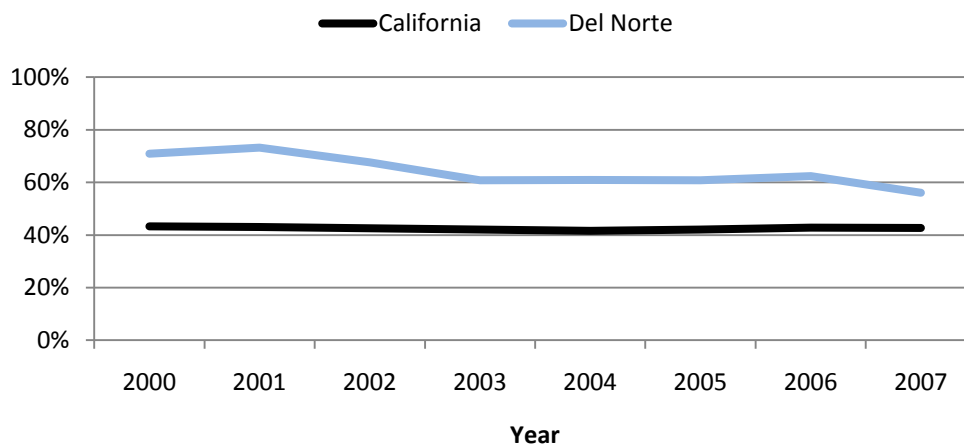
For mothers, breastfeeding results in less postpartum bleeding, an earlier return to pre-pregnancy weight, reduced risk of type 2 diabetes as well as decreased risk of breast and ovarian cancer.^{1,2} Lack of breast feeding or early cessation of breast feeding has been associated with an increased risk of postpartum depression.¹ These lowered risks for health problems also provide benefits to the community, lowering the frequency of illness and decreasing health care costs overall.³

Numerous medical organizations recommend exclusive breastfeeding for the first 6 months of life since increased duration of breast feeding provides increased health benefits to the mother and child.² Mothers residing in rural areas have been noted to be less likely to initiate and continue breast feeding compared to mothers residing in urban areas.⁴

In Del Norte County:

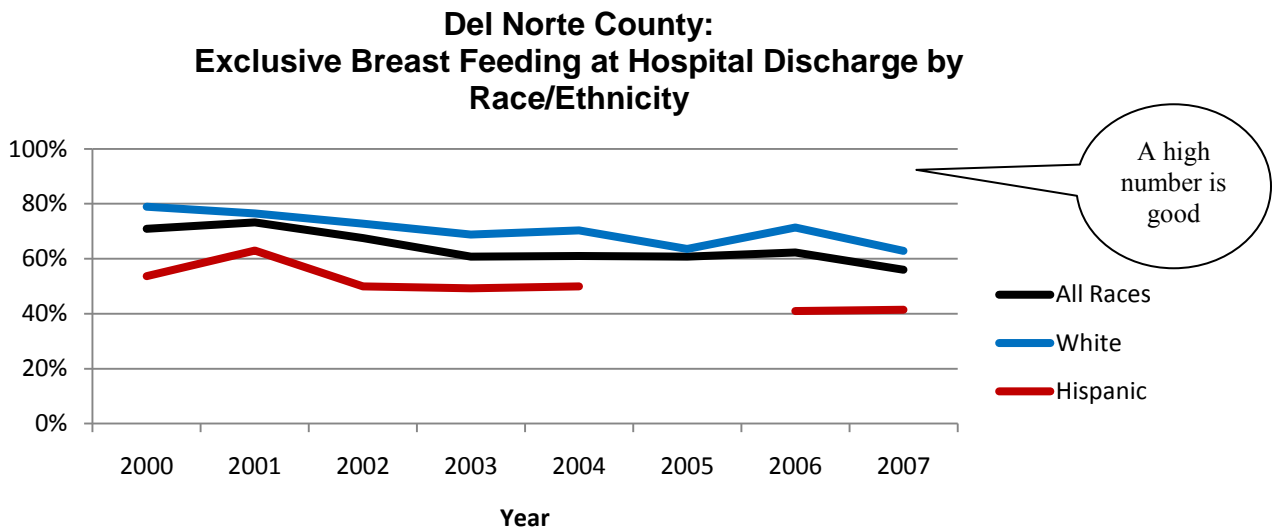
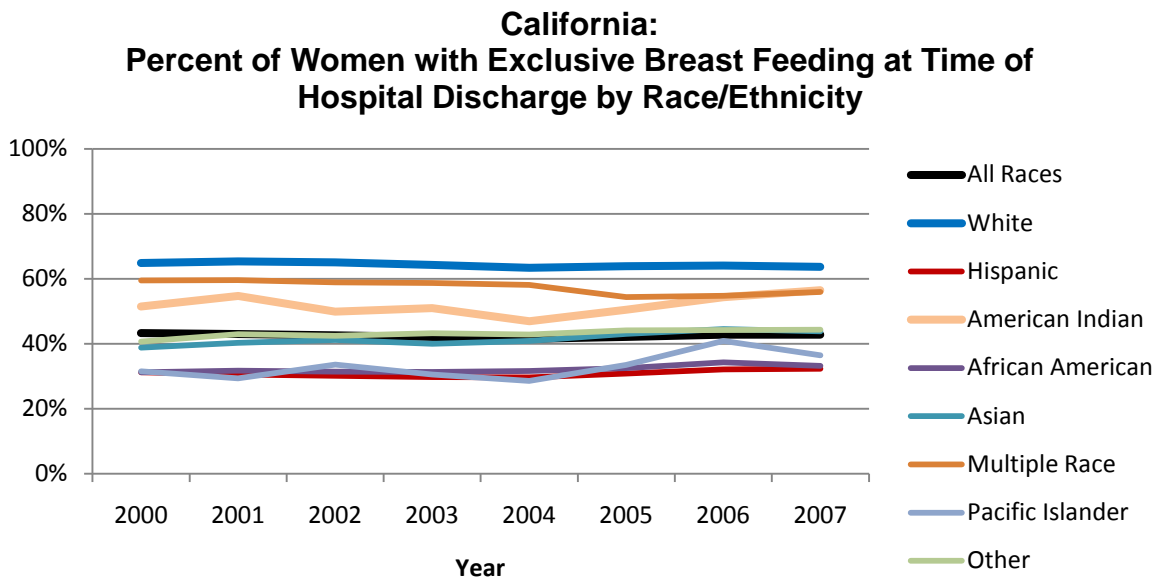
- **Mothers are more likely to breastfeed exclusively at the time of hospital discharge compared to California as a whole.** However, from 2000 to 2007, exclusive breastfeeding at hospital discharge **decreased from 70.9% to 56.1%**. This downward trend was seen for all races/ethnicities and Hispanic women were much less likely to exclusively breast feed than White women. Healthy People 2020 has several targets related to breastfeeding, such as proportion of infants who are breastfed ever (73.9%), at 6 months (60.5%), at 1 year (34.1%), exclusively through 3 months (44.3%), and exclusively through 6 months (23.7%).

Percent of Women with Exclusive Breastfeeding at Hospital Discharge



Data Source: California Department of Public Health, Center for Family Health, Genetic Disease Screening Program, Newborn Screening Data, 2000 <http://www.cdph.ca.gov/data/statistics/Pages/BreastfeedingStatistics.aspx>

Percent of Women with Exclusive Breastfeeding at Hospital Discharge by Race/Ethnicity



Data Source: California Department of Public Health, Center for Family Health, Genetic Disease Screening Program, Newborn Screening Data, 2000

<http://www.cdph.ca.gov/data/statistics/Pages/BreastfeedingStatistics.aspx>

Notes: Only showing race/ethnicities that have sufficient numbers in Del Norte County.

Active Living & Healthy Weight

Engaging in regular physical exercise is a key factor in the maintenance of physical and mental health throughout the lifespan.¹⁻⁵ According to an extensive and continually growing body of research, exercising regularly lowers the risk for cardiovascular disease, coronary artery disease, hypertension, obesity, non-insulin dependent diabetes, osteoporosis, arthritis, falls, cancers of the colon and breast, and overall mortality.²⁻⁵ Additionally, physical activity helps to relieve symptoms of depression and anxiety, improve mood and overall quality of life.²⁻⁵ It has been estimated that relatively small increases in physical activity could avert 30,000-35,000 deaths per year.⁶ A report by the California Center for Public Health Advocacy estimated that the economic cost (health care & lost productivity) of physical inactivity in 2006 was \$20.2 billion in California.⁷

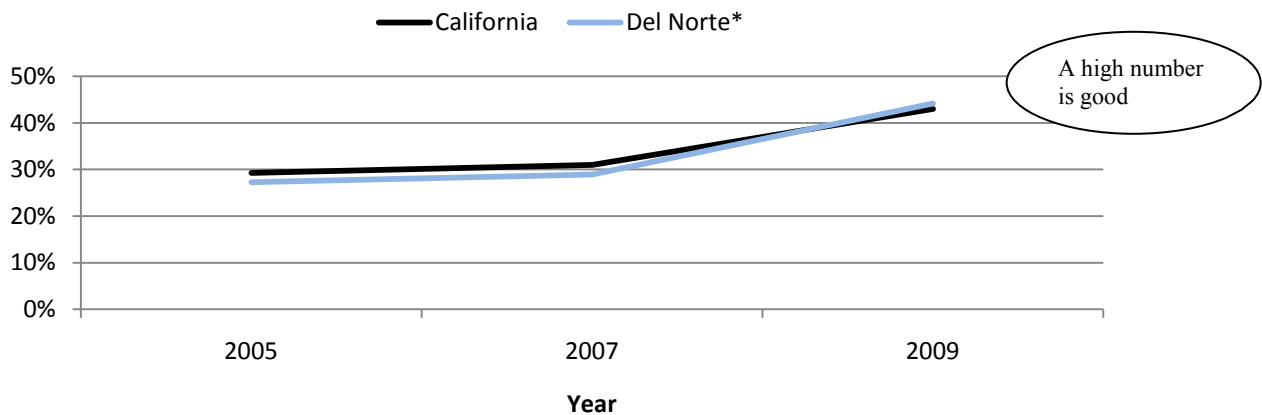
An extensive body of research shows that being overweight or obese is associated with multiple diseases and high health care costs.^{1,8-11} As the seventh leading cause of death in the US, being overweight or obese increases the risk for coronary heart disease, gallbladder disease, type 2 diabetes, high blood pressure, stroke, osteoarthritis, respiratory problems, and some types of cancer.^{1,8,10} The total economic cost of overweight and obesity in 2006 was estimated to be \$21.0 billion in California.⁷

In Del Norte County:

- The percent of children who walk, bike or skate to school has increased.
- **Less than 40% of 7th graders are in the Healthy Fitness Zone for all 6 Physical Fitness Areas** and there are some racial/ethnic disparities with White students doing better than American Indian and Hispanic students in 2008-2009.
- **Children have obesity rates higher than the Healthy People 2020 goals.**
- 67% of adults are overweight or obese and this **increased** from 2007 to 2009.
- 52% of adults were meeting the recommendations for physical activity in 2007.



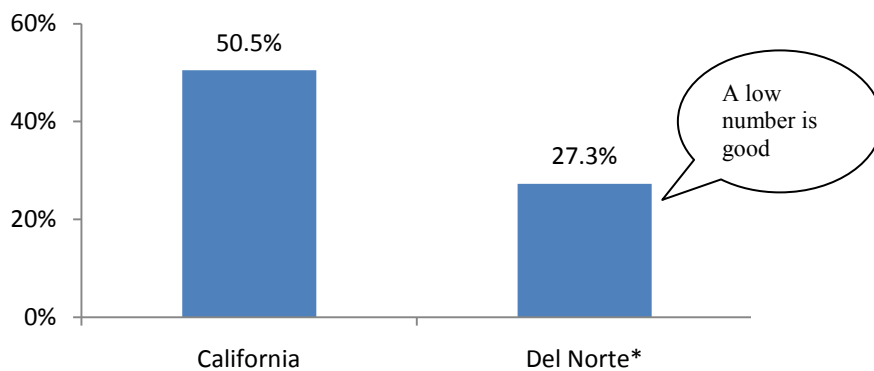
19. Percent of Children/Teens who Walked, Biked, or Skated to or from School in the Past Week (age 5-17yrs)



Problem with this indicator:

In rural areas it is often not possible for many children/teens to walk, bike or skate to school due to large geographic distances.

Percent of Children/Teens who Did Not Walk, Bike or Skate to School in Past Week and are within 30 minutes from School, 2007 (age 5-17)**



In 2009, CHIS asked those children/teens who *did not* walk, bike, or skate to school if they could have in 30 minutes or less.

Data Source: California Health Interview Survey

<http://www.chis.ucla.edu>

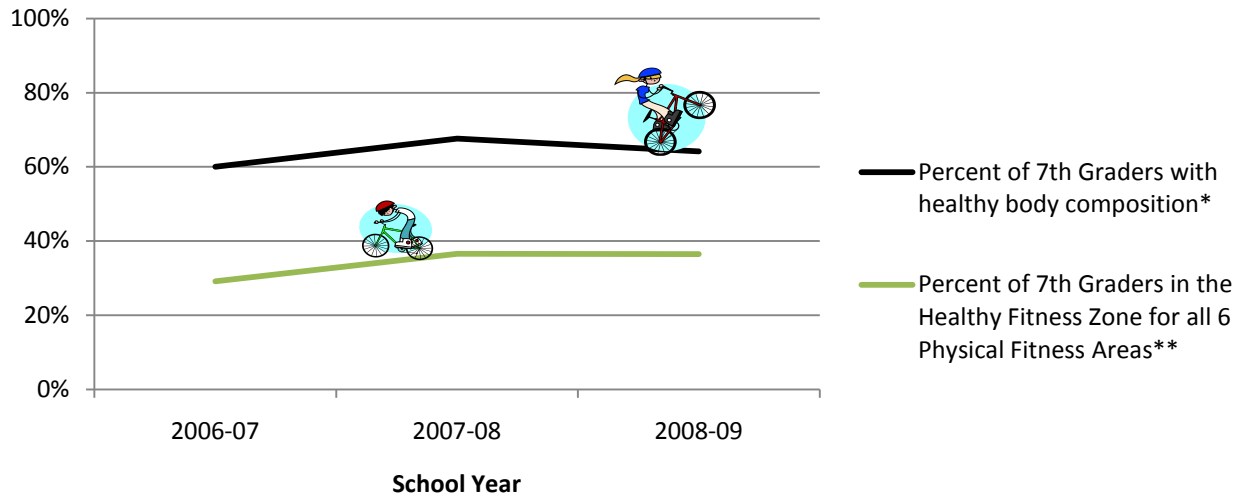
Notes:

*Del Norte data aggregated with 6 other counties.

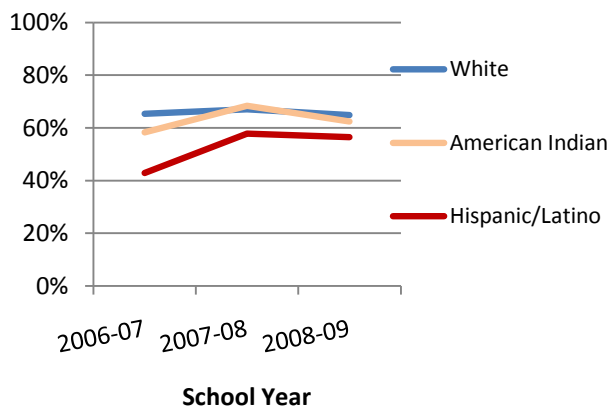
**This question was asked of all children and adolescents who attended school last week or the last school year AND did not walk/bike/skate from school at least once a week. Responses were categorized as could walk/bike/skate to or from school in half hour or could not walk/bike/skate to or from school in half hour. This question was only asked in 2007.

20. Percent of 7th Graders with Healthy Body Composition and in Healthy Fitness Zone for all 6 Physical Fitness Areas

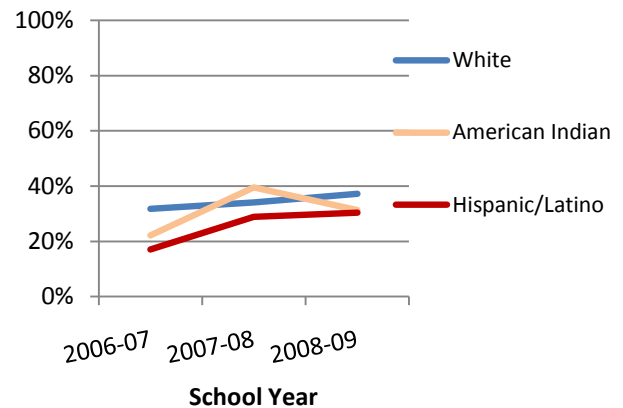
Physical Fitness of 7th Graders, Del Norte County



Percent of 7th Graders with Body Composition in the Healthy Fitness Zone* by Race/Ethnicity, Del Norte County



Percent of 7th Graders Achieving the Healthy Fitness Zone in all 6 Physical Fitness Areas by Race/Ethnicity, Del Norte County



Data Source: California Department of Education, California Physical Fitness Test
<http://data1.cde.ca.gov/dataquest/page2.asp?Level=County&submit1=Submit&Subject=FitTest>

Notes:

*Body Composition is a combination of body fat measured by skin fold testing and Body Mass Index. Body composition in the Healthy Fitness Zone is based on standards established by the Cooper Institute and account for age and gender.

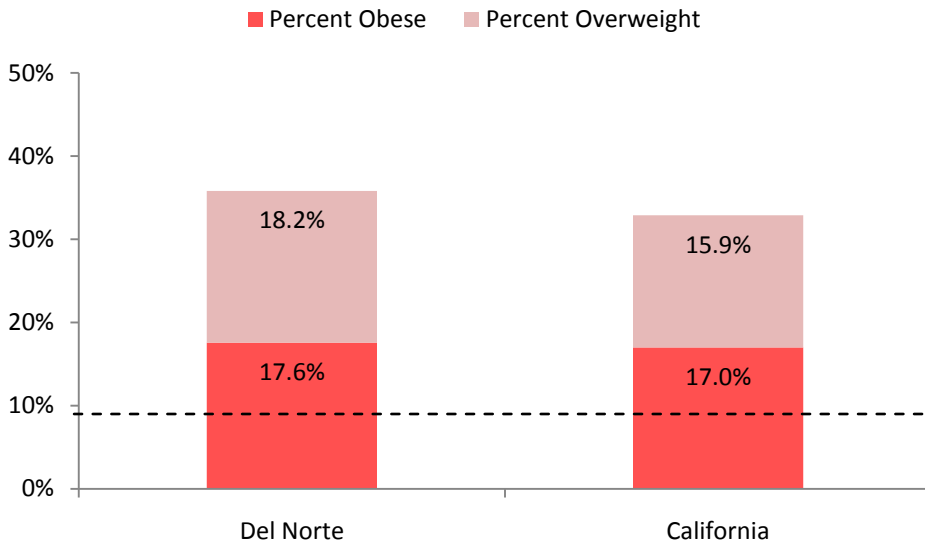
** The 6 Physical Fitness Areas tested include Aerobic Capacity, Body Composition, Abdominal Strength, Trunk Extensor Strength, Upper Body Strength, and Flexibility. The Healthy Fitness Zone is based on standards established by the Cooper Institute and account for age and gender.

Data reported only for ethnic groups with more than 20 students tested each year.

21. Percent of People who are Overweight or Obese

21a. Percent of Low-Income Children who are Overweight or Obese (age 2-4 and 5-19)

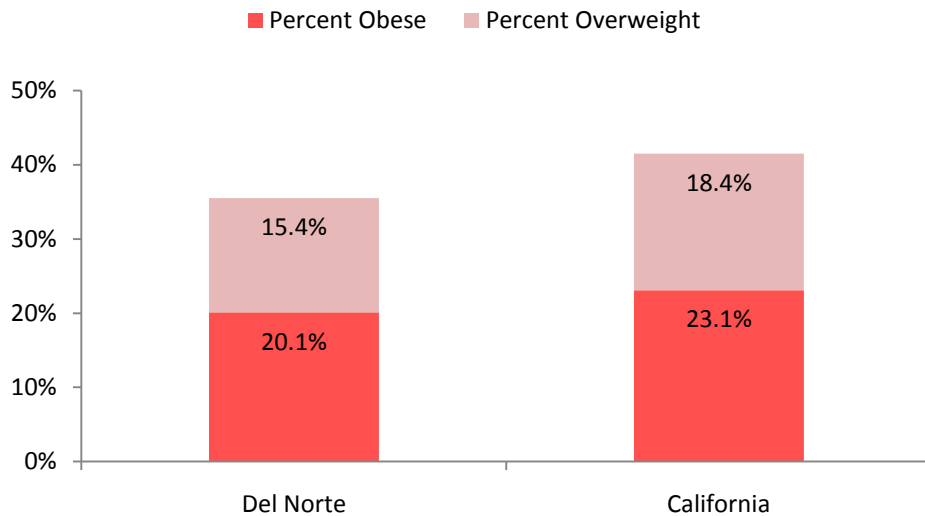
Prevalence of Obesity* and Overweight among Low-Income Children Aged 2-4 Years, 2009**



Del Norte Ranking
 Compared to other California counties/places (1=best; 62 = worst)
 Overweight 2-4 yr olds= **57**
 Obese 2-4 yr olds= **47**
 Overweight 5-19 yr olds=**14**
 Obese 5-19 yr olds= **3**

Healthy People 2020 Goal:
 Reduce the proportion of children aged 2-5 years who are considered obese to **9.6%**

Prevalence of Obesity* and Overweight among Low-Income Children Aged 5-19 Years, 2009**



Healthy People 2020 Goal:
 Reduce the proportion of children who are considered obese:
 aged 6 to 11 years to **15.7%**
 aged 12-19 years to **16.1%**

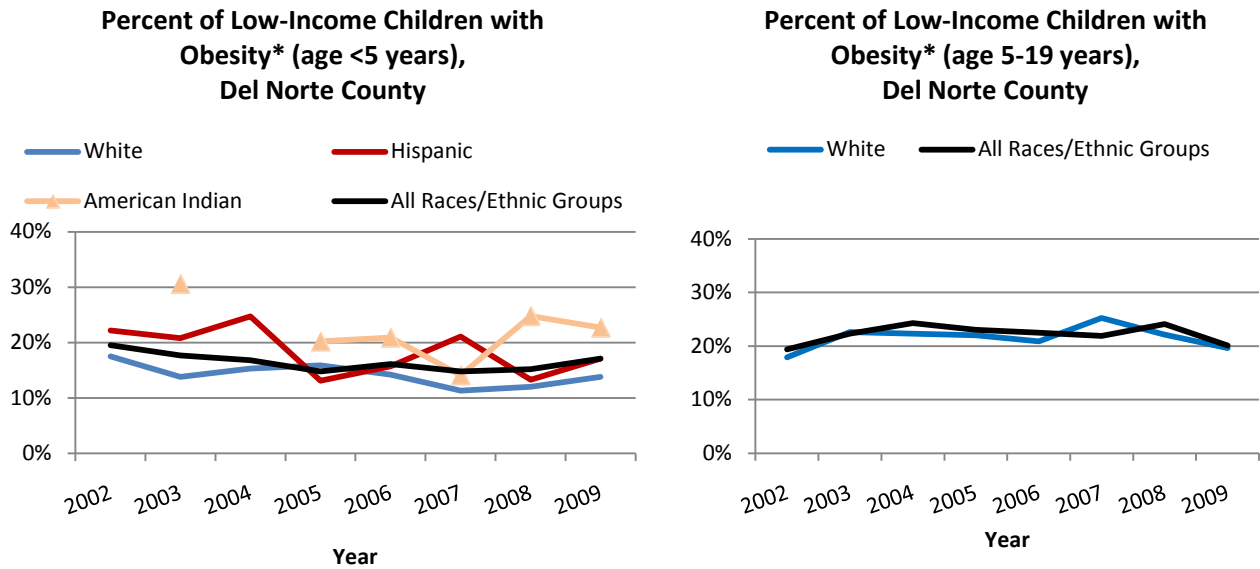
Data Source: Pediatric Nutrition Surveillance System
<http://www.dhcs.ca.gov/services/chdp/Pages/PedNSS2008.aspx>

Notes: This is a national surveillance system. In California data comes from clinic data of individuals who participate in the Child Health and Disability Prevention (CHDP) Program. The target population is low-income children birth through 19 years of age. Prevalence reports are produced by the Centers for Disease Control and Prevention.

*Obesity is defined as a BMI-for-age at or above the 95th percentile.

**Overweight is defined as a BMI-for-age between the 85th and 95th percentiles.

21b. Percent of Low-Income Children who are Obese by Race/Ethnicity (age <5 and 5-19)



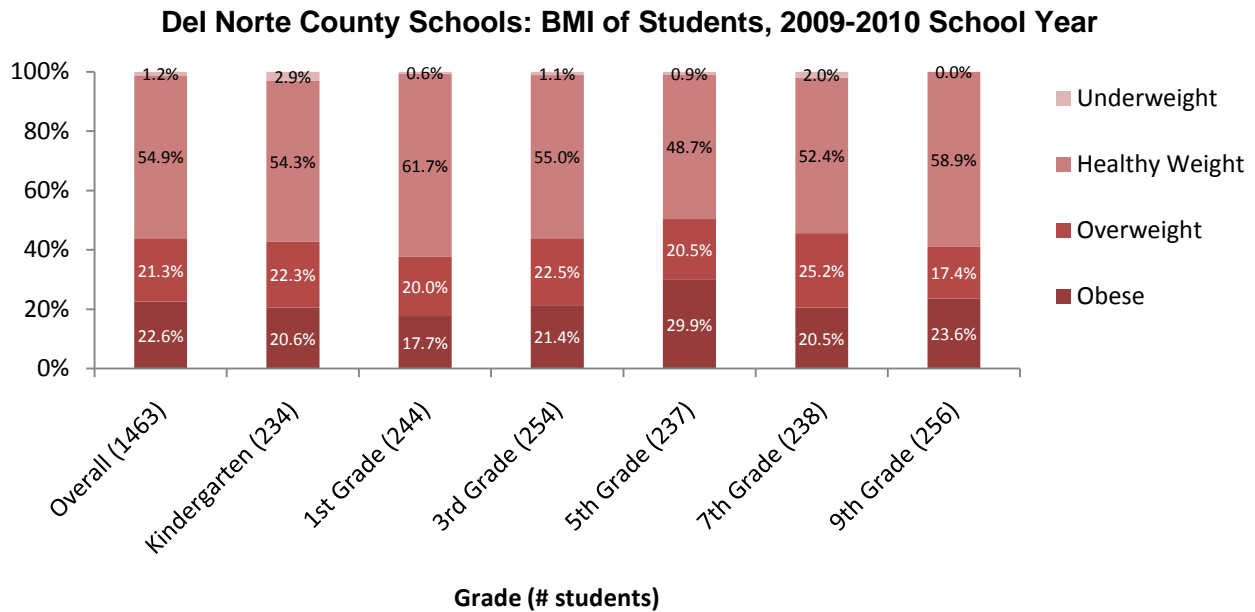
Data Source: Pediatric Nutrition Surveillance System <http://www.dhcs.ca.gov/services/chdp/Pages/PedNSS2008.aspx>

Notes: This is a national surveillance system. In California data comes from clinic data of individuals who participate in the Child Health and Disability Prevention (CHDP) Program. The target population is low-income children birth through 19 years of age. Prevalence reports are produced by the Centers for Disease Control and Prevention.

County data reported for ethnic groups with more than 100 children.

*Obesity is defined as a BMI-for-age at or above the 95th percentile.

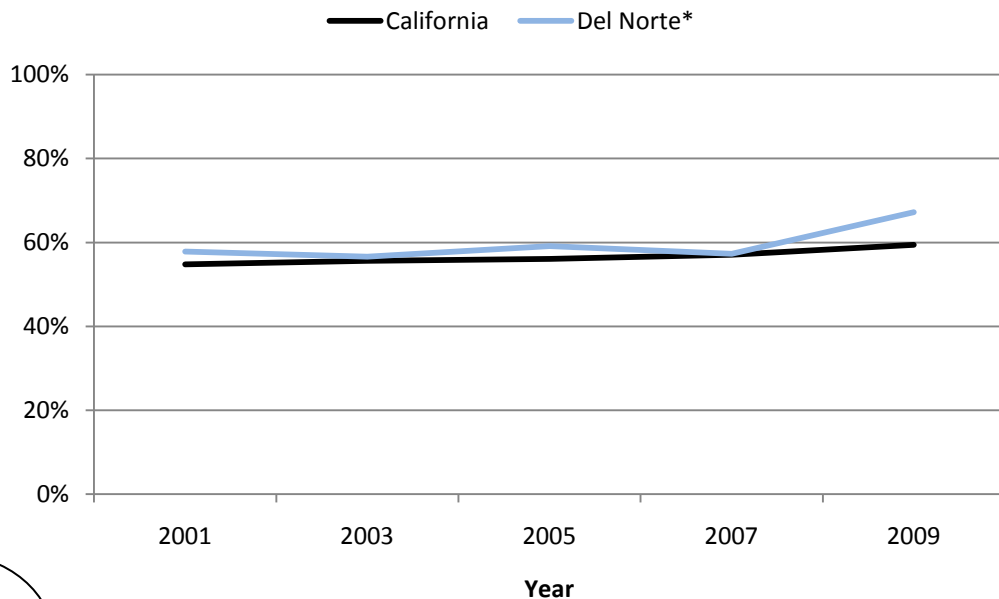
21c. Body Mass Index (BMI) of Students



Data Source: Del Norte County School district.

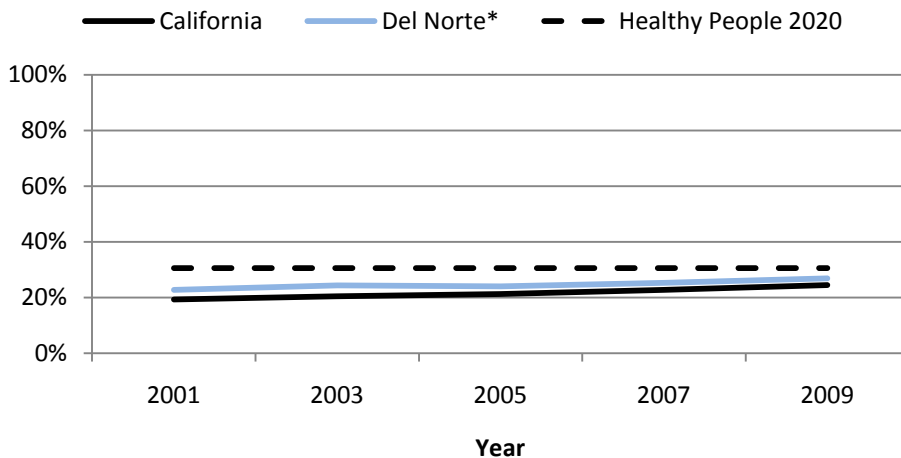
21d. Percent of Adults who are Overweight or Obese

Percent of Adults who are Overweight** or Obese***



A low number is good

Percent of Adults who are Obese***



Data Source: California Health Interview Survey <http://www.chis.ucla.edu>

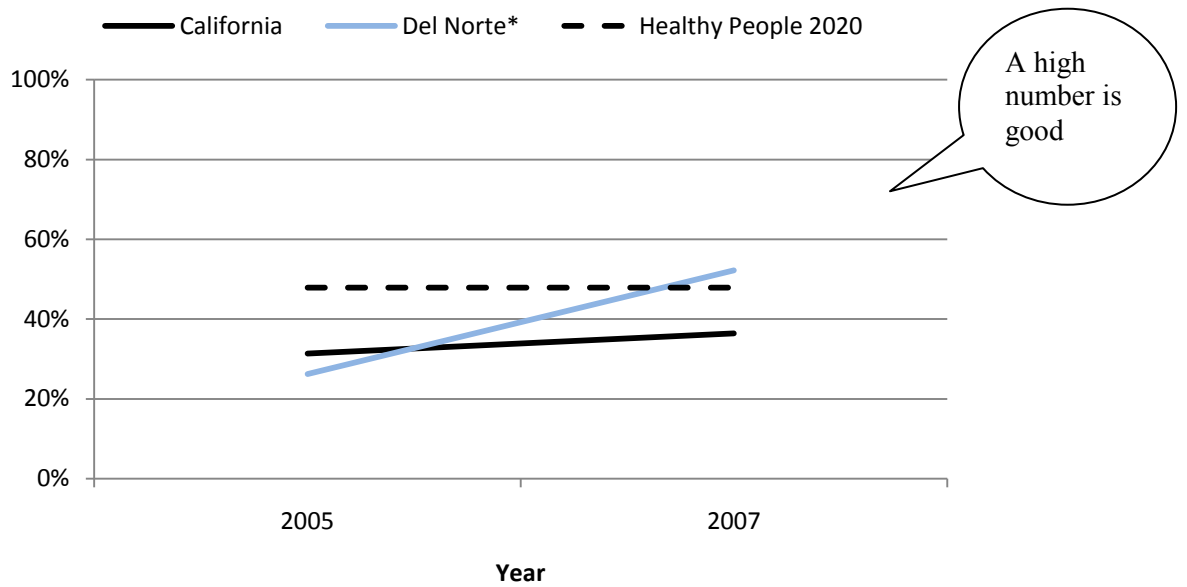
Notes:

*Del Norte data aggregated with 6 other counties

**Overweight is defined as a Body Mass Index of 25.0 - 29.99

***Obesity is defined as a Body Mass Index of 30 or higher

22. Percent of Adults Meeting Recommendations for Moderate** or Vigorous ***Physical Activity



Data Source: California Health Interview Survey <http://www.chis.ucla.edu>

Notes:

*Del Norte data aggregated with 6 other counties.

**Moderate physical activity defined as moderate physical effort (walking, bicycling, etc) at least 5 days per week and at least 30 minutes per day.

***Vigorous physical activity defined as hard physical effort (aerobics, running, etc) at least 3 days per week and at least 20 minutes per day.

This question was not asked in 2009.



Breakfast and Fruit & Vegetable Consumption



When you eat and what you eat can have dramatic effects on your health. Breakfast has long been regarded as the most important meal of the day and recent research confirms the importance of eating breakfast.^{1,2} Skipping breakfast is associated with many health risks, including obesity, reduced intake of essential nutrients, higher cholesterol levels, and higher fasting insulin.^{1,2} Additionally, breakfast consumption has positive effects on cognitive performance among children.³

Fruit and vegetable consumption is also important for optimal child development.⁴ Fruits and vegetables contain important vitamins, minerals, antioxidants, and fiber and a diet high in fruits and vegetables has been associated with numerous health benefits.⁴⁻⁷ Compared with people who eat a minimal amount of fruits and vegetables, those who include them as a large portion of their daily food intake are less prone to chronic health problems such as diabetes, obesity, cardiovascular disease, stroke, and multiple types of cancer.⁵⁻⁷ There is also recent evidence suggesting that eating an adequate amount of fruits and vegetables decreases the risk of hypertension, cataracts, diverticulosis, and chronic obstructive pulmonary disease.⁶

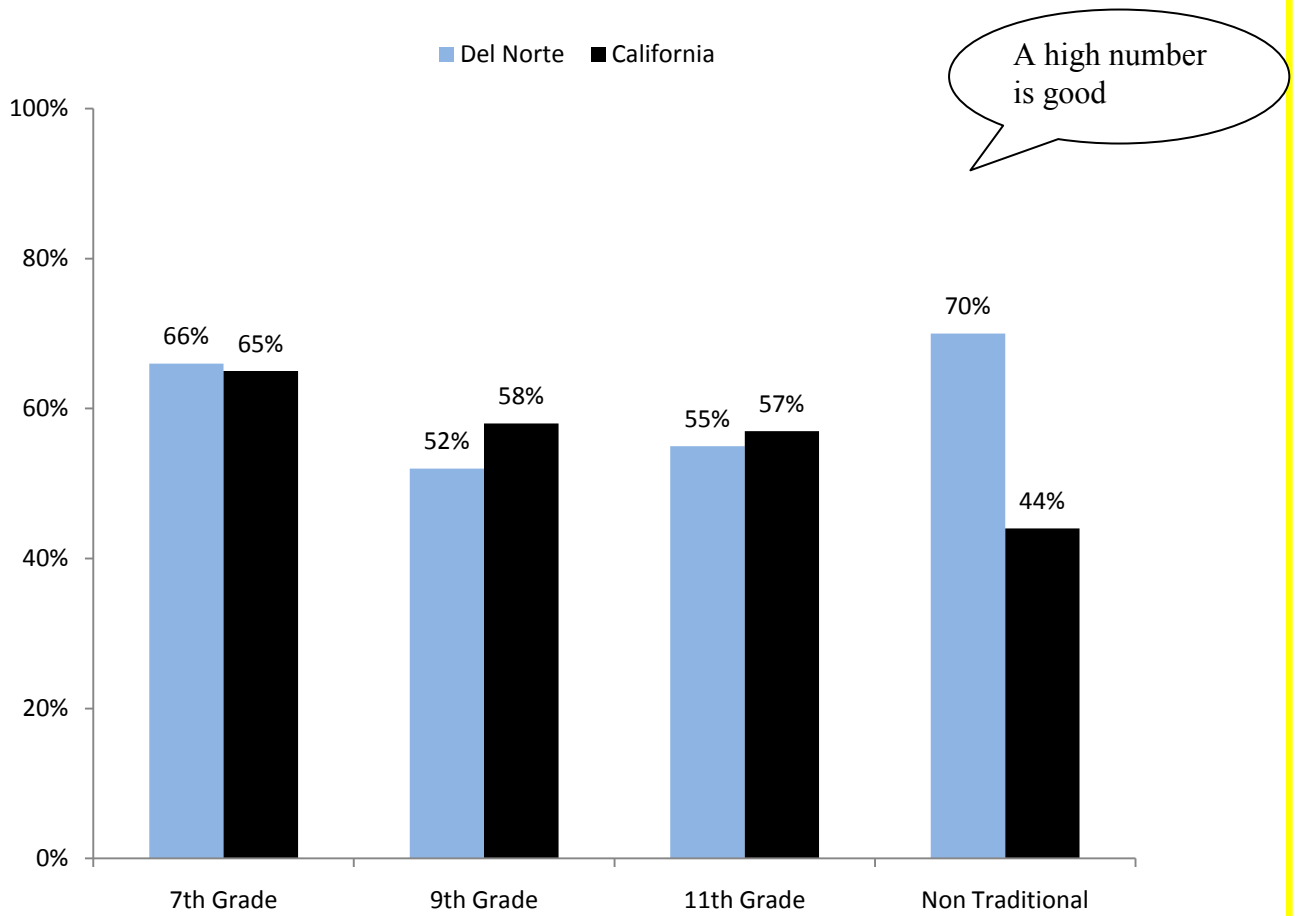
In Del Norte County:

- 66% of 7th grade students report eating breakfast (similar to California), while only **approximately half of the 9th and 11th grade students report eating breakfast** (slightly lower than California). Non-traditional students (continuation, community day and alternative schools) have the highest percent of students in Del Norte who eat breakfast (70%).
- The percent of children and adults consuming 5 or more servings of fruits and vegetables a day is similar to California as a whole. Teens consume the least amount of fruits and vegetables, but in Del Norte this is slightly higher than California as a whole. **For children under the age of 12 years, reported consumption of fruits and vegetables decreased from 62% in 2003 and 47% in 2009.**



Nearly all schools in Del Norte County have a vegetable garden.

23. Percent of Students Eating Breakfast, 2007-2009



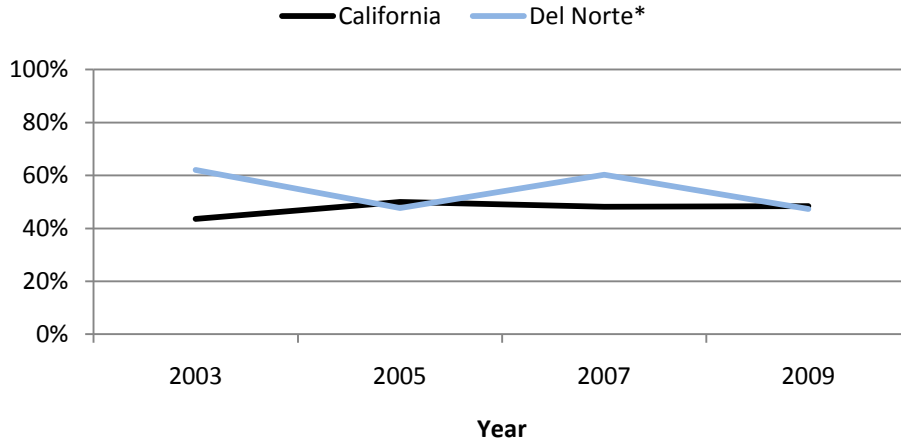
Data Source: California Healthy Kids Survey, 2007-09 County Results: Main Report. San Francisco: WestEd Health and Human Development Program for the California Department of Education.

<http://www.wested.org/chks>

Notes: This represents the percentage of public school students reporting they did or did not eat breakfast that day. Non-Traditional schools include continuation, community day and alternative schools. Charter schools are included with the Traditional schools.

24. Percent of Children, Teens, and Adults Eating 5+ Servings of Fruits & Vegetables Daily

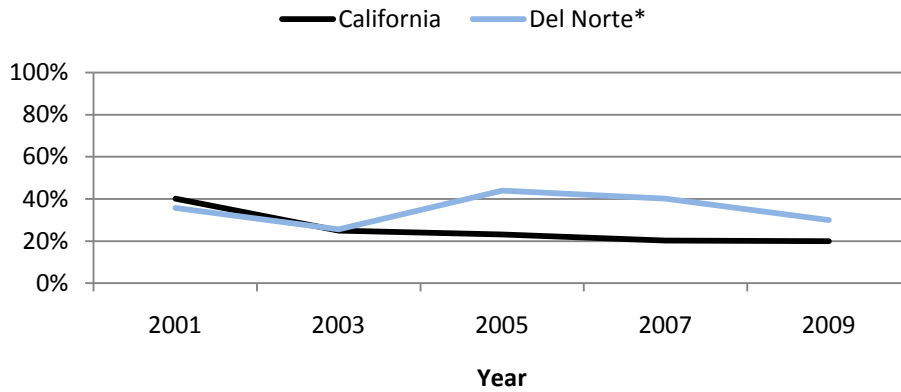
Percent of Children Eating 5+ Servings of Fruits & Vegetables Daily



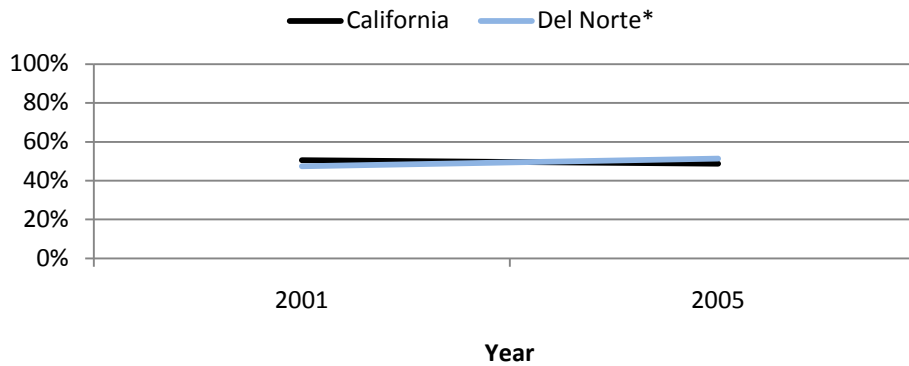
A high number is good



Percent of Teens Eating 5+ Servings of Fruits and Vegetables Daily



Percent of Adults Eating 5+ Servings of Fruits or Vegetables Daily



Data Source: California Health Interview Survey <http://www.chis.ucla.edu>

Notes: *Del Norte data aggregated with 6 other counties

No data available for children in 2001, and adults in 2003, 2007, 2009.

Alcohol and Other Drug Use

Drug and alcohol use has been shown to be an important indicator of community health due to the immense effects it can have on both social interactions and mental and physical well-being. People who are directly and indirectly involved in drug and alcohol abuse pose an economic burden because the local, state and federal governments must support those who are incarcerated, hospitalized, or unable to support themselves. The cost for drug and alcohol abuse for rural communities nationwide is believed to be in the tens of billions of dollars per year.¹ Drug and alcohol abuse among teenagers has many of the same consequences it does with adults, however they are more likely to engage in risky behaviors. For example, teens are more likely to use alcohol and drugs while driving than adults, and car accidents are the leading cause of death among people ages 15-24 years.^{2,3} This trend increases for teenagers in rural communities, where half of the teens interviewed reported drinking while driving compared to only a quarter of their urban peers.^{1,4} Teens who live in rural areas are also more likely to binge drink than their urban and suburban peers.⁵

Alcohol abuse is associated with chronic maladies such as liver disease, diabetes, and brain damage as well as dangerous behaviors such as driving under the influence, spousal and child abuse, and risky sexual choices.^{1,6} Alcohol (and drug use) has been shown to have a high co-morbidity with other mental disorders such as bipolar disorder and schizophrenia.⁷

Marijuana is the most commonly used and abused illicit drug in the United States, which is most likely due to the controversial and varying opinions surrounding its legal status.⁸ The negative health effects of smoking marijuana include a decrease in lung function with symptoms such as coughing, wheezing, and shortness of breath.⁸ THC, the primary psychoactive ingredient in marijuana, has been shown to have negative cardiovascular effects such as increased heart rate, low blood pressure and decreased platelet aggregation.¹⁰ Some studies have found that heavy marijuana use can cause impairments in learning, attention, and working memory even after use is discontinued.^{11,12} This effect has been found to last longer in adolescents with impairment found up to six weeks after cessation, however it is believed that in adults and adolescents the effects will wear off if abstinence is maintained.¹² Smoking and oral consumption of marijuana has also been shown to produce a “moderate degree of impairment” in operating motor vehicles.¹⁰

The abuse of stimulants such as amphetamines and cocaine can have various effects on physical and cognitive capabilities depending on the quantity used and the method of administration. The negative health effects of methamphetamine use, particularly for chronic users, include extreme weight loss, severe dental problems, insomnia, as well as permanent alterations in the brain’s structure and memory and emotion processing systems.¹³ Some health effects of cocaine use include exhaustion, anorexia, sleep problems (insomnia while “high” and over-sleeping post binge), nasal sores/bleeding, headaches, persistent cough and/or sore throat, nausea, and seizures.^{14,15} Mood disturbances such as paranoia, anxiety, and depression are also common side effects of amphetamine and cocaine abuse.¹³⁻¹⁵

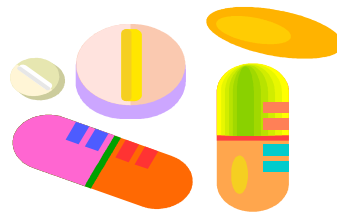
The health effects of inhalants depend on which type of substance is being used, the most common of which are glues, paints, and aerosol propellants. The effects of abuse can be severe or mild depending on the amount used as well as other variables, and can include coma, dementia, temporary or permanent tinnitus, hypotension, renal failure, loss of consciousness, and sudden death. Inhalants are used as a method of intoxication by adolescents much more frequently than older populations, probably because they are easily accessible (at supermarkets and hardware stores), inexpensive, and the short duration of the “high” allows them to be done frequently without parents or teachers noticing. Birth defects such as oral clefts, microcephaly, and developmental delays are also common when inhalants are used by pregnant women.¹⁶

Alcohol and Other Drug Use (*continued*)

Use of drugs such as ecstasy, LSD, and other psychedelics has not been shown to have as many devastating health problems as other illicit drugs; however some potential effects are severe.¹⁷ For instance, neurotoxicity and hyperthermia are both potential effects of ecstasy use, which can lead to significant brain damage or death.¹⁸ Common acute effects of LSD include an increase heart rate and blood pressure, insomnia, tremors, inability to formulate coherent speech, and decreased acuity to pain, which can result in self-inflicted injuries. Convulsions, coma, brain damage, and death are potential risks when high doses of LSD are taken.¹⁹ Changes in personality, attitudes, and creativity have been reported by people who regularly ingest psychedelic drugs, although the degree to which this is true is controversial.¹⁸ As with most other drugs of abuse, the health effects of psychedelic drugs depends greatly on the quantity used, the method of intoxication, as well the individual who is taking them.

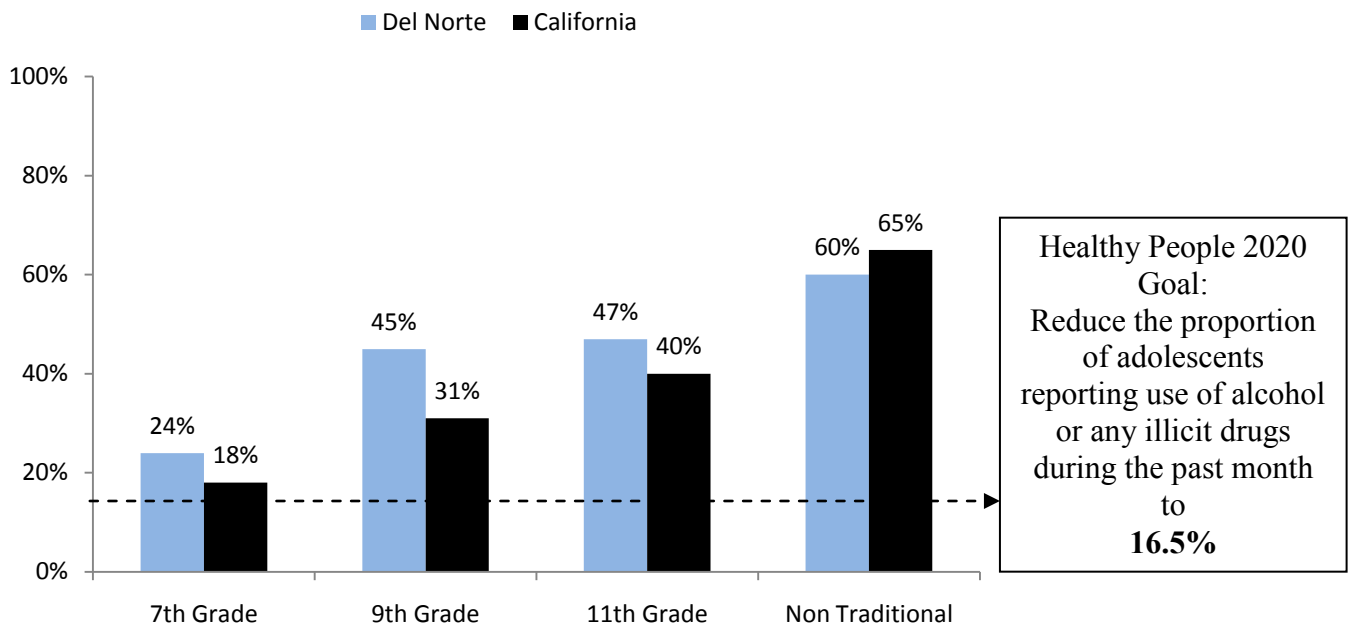
In Del Norte County:

- **Any alcohol or drug use in the past 30 days is higher among 7th, 9th and 11th grade students in Del Norte than California.** Non-traditional students (continuation, community day, and alternative schools) have the highest percent reporting any alcohol or drug use in the past 30 days, but it is slightly lower in Del Norte than among non-traditional students in California as a whole. As with national and state-wide trends, drug and other alcohol use is on the rise, and the percentage of youth using increases between the 7th to 11th grades.
- **Marijuana use in the past 30 days is higher among 7th and 9th grade students in Del Norte** than California. Non-traditional students have the highest reported use of marijuana.
- **Any alcohol use in the past 30 days is higher among students in Del Norte** than California and is highest among non-traditional students.
- **Binge drinking in the past 30 days is higher in Del Norte than California** among 7th, 9th and 11th grade students and is highest among non-traditional students.
- **Use of inhalants is reported by about 1 of every 20 students in Del Norte** (similar to California).
- **Cocaine and methamphetamine/amphetamine** use reported by 9th, 11th, and non-traditional students in Del Norte is fairly low, but still present.
- **Ecstasy, LSD or other psychedelic use** in the past 30 days is reported by about 1 of every 25 students in Del Norte.
- **Other illegal drugs or pills used in the past 30 days is higher among 9th grade** students in Del Norte compared to California.
- **A fairly high percentage of students in Del Norte have been high or drunk on school property and have been offered illegal drugs on school property. Compared to California, Del Norte has a higher expulsion/suspension rate for all causes and for violence/drugs.**
- Admissions to alcohol and other drug treatment services for which methamphetamine was the primary drug of abuse have **increased** in Del Norte.
- Prescriptions for narcotics and other controlled substances (Schedule II) dispensed have **increased**.

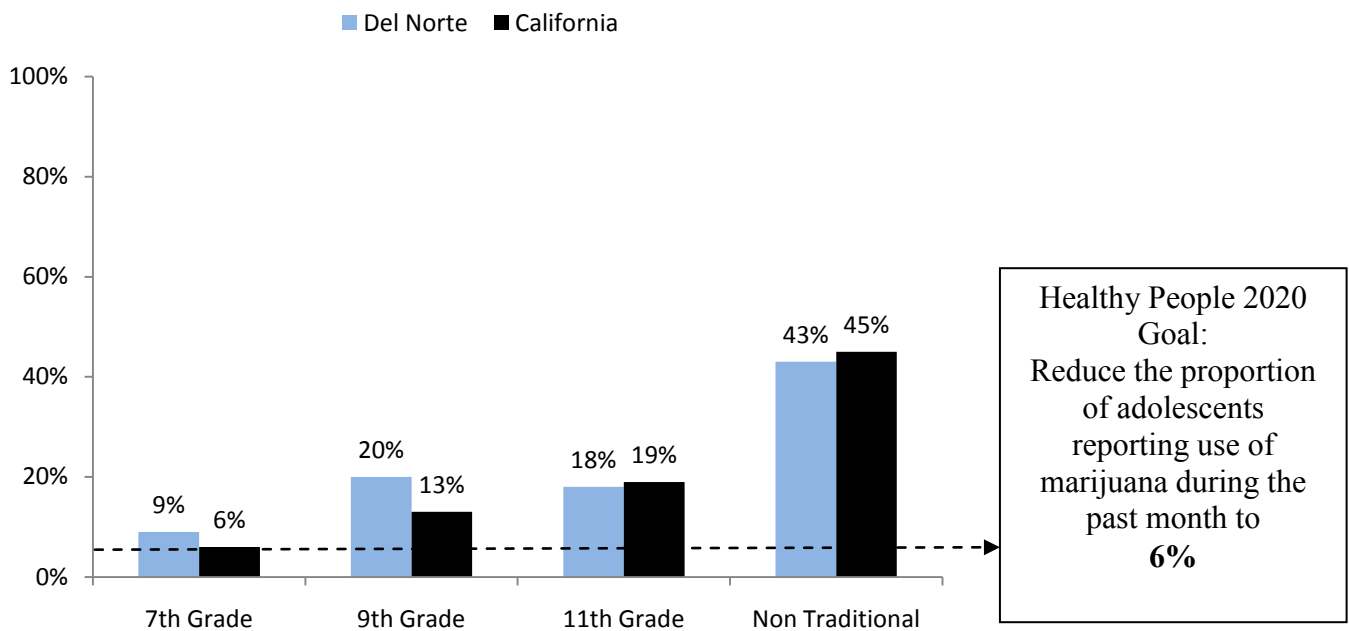


25. Drug Use among Middle and High School Students

25a. Percent of Students Reporting Any Alcohol or Drug Use in Past 30 Days, 2007-2009



25b. Percent of Students Reporting Marijuana Use in Past 30 Days, 2007-2009

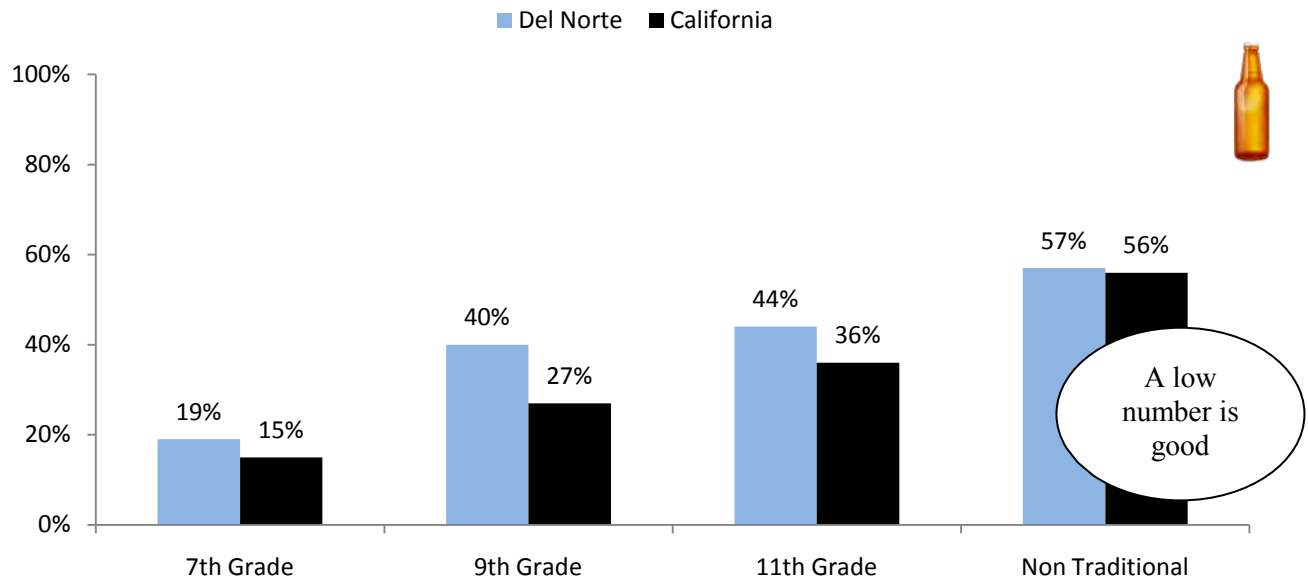


Data Source: California Healthy Kids Survey, 2007-09 County Results: Main Report and Statewide Results: Main Report. San Francisco: WestEd Health and Human Development Program for the California Department of Education.

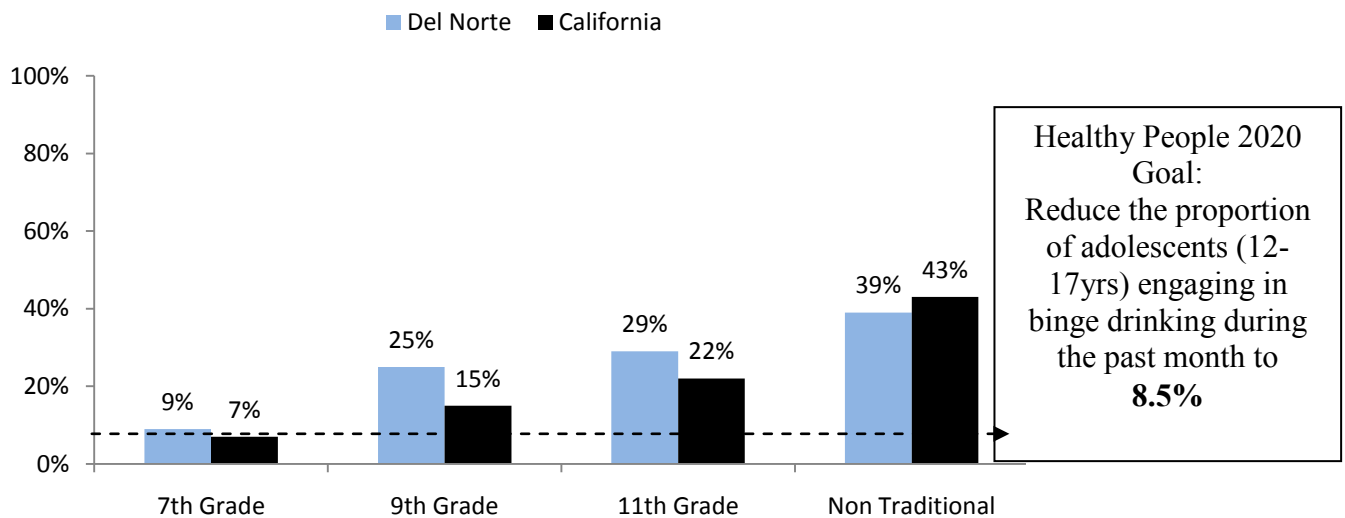
<http://www.wested.org/chks>

Notes: Any Alcohol or Other Drug Use in Past 30 days is defined as at least 1 alcoholic beverage, marijuana, inhalants, cocaine, meth or other amphetamines, ecstasy, LSD or other psychedelic, other illegal drug or pill. Non-Traditional schools include continuation, community day and alternative schools. Charter schools are included with the Traditional schools.

25c. Percent of Students Reporting Any Alcohol Use in Past 30 Days, 2007-2009



25d. Percent of Students Reporting Binge Drinking in Past 30 Days, 2007-2009

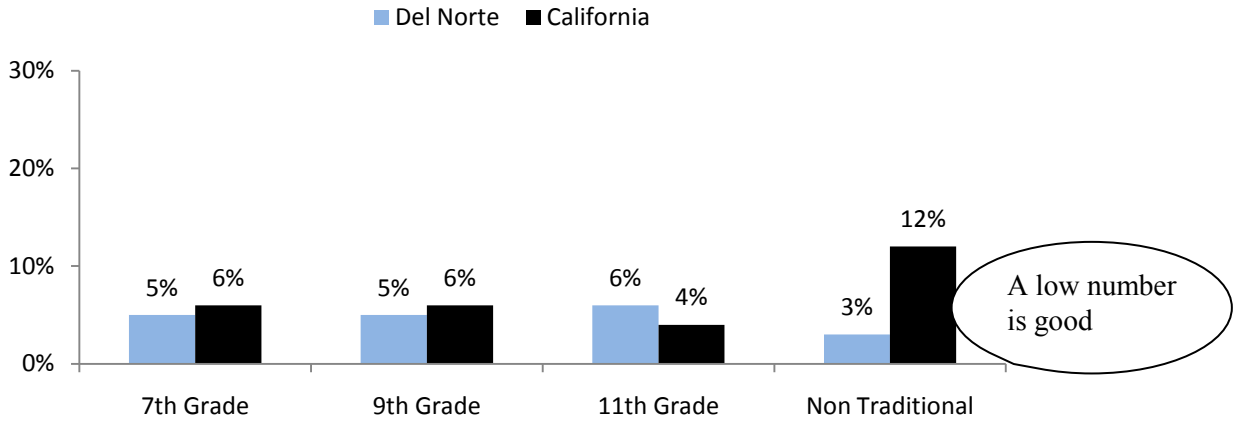


Data Source: California Healthy Kids Survey, 2007-09 County Results: Main Report and Statewide Results: Main Report. San Francisco: WestEd Health and Human Development Program for the California Department of Education.

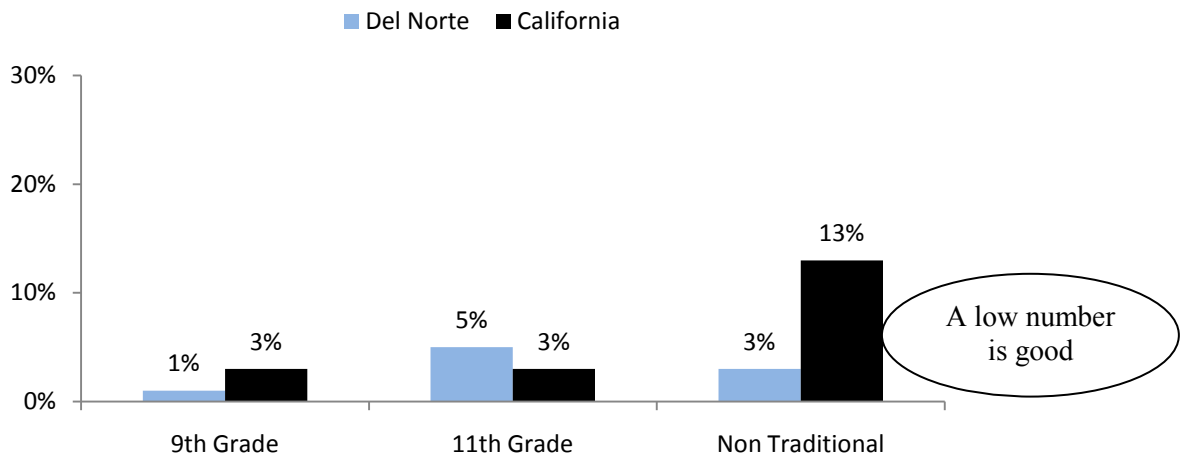
<http://www.wested.org/chks>

Notes: Any alcohol use is at least 1 full drink. "Binge Drinking" is defined as 5 or more drinks within a couple of hours on 1 or more days. Non-Traditional schools include continuation, community day and alternative schools. Charter schools are included with the Traditional schools.

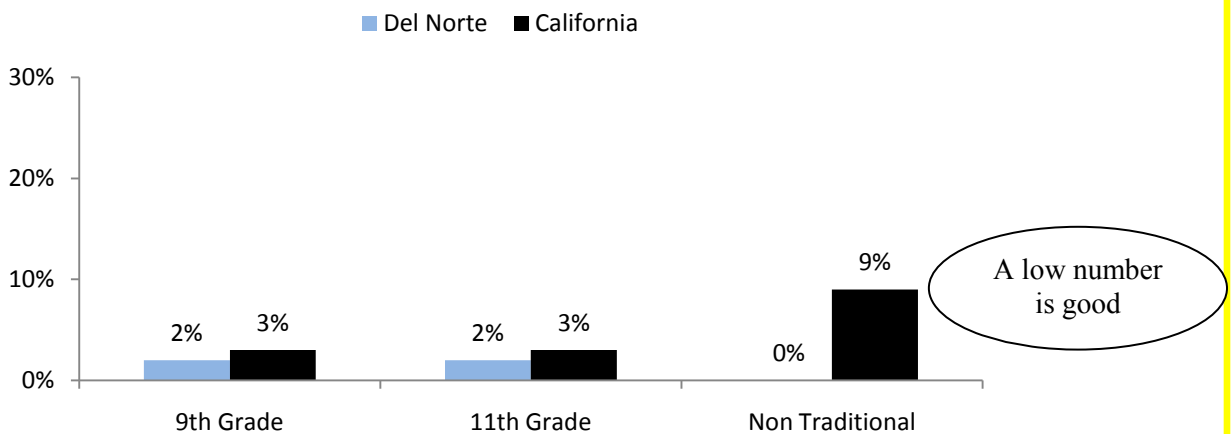
25e. Percent of Students Reporting Use of Inhalants in Past 30 Days, 2007-2009



25f. Percent of Students Reporting Use of Cocaine in Past 30 Days, 2007-2009



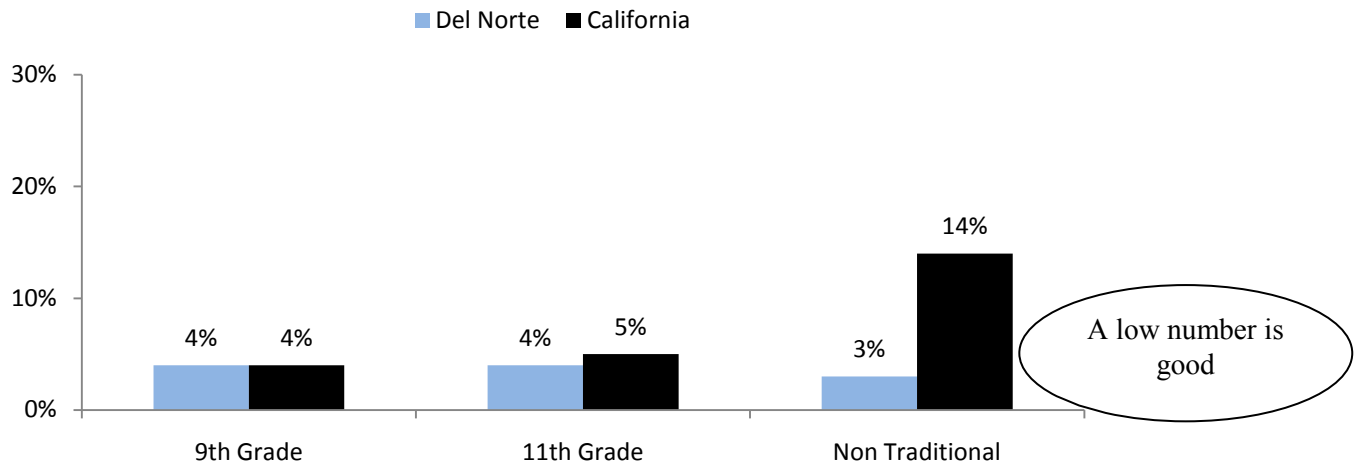
25g. Percent of Students Reporting Use of Meth/Amphetamines in Past 30 Days, 2007-2009



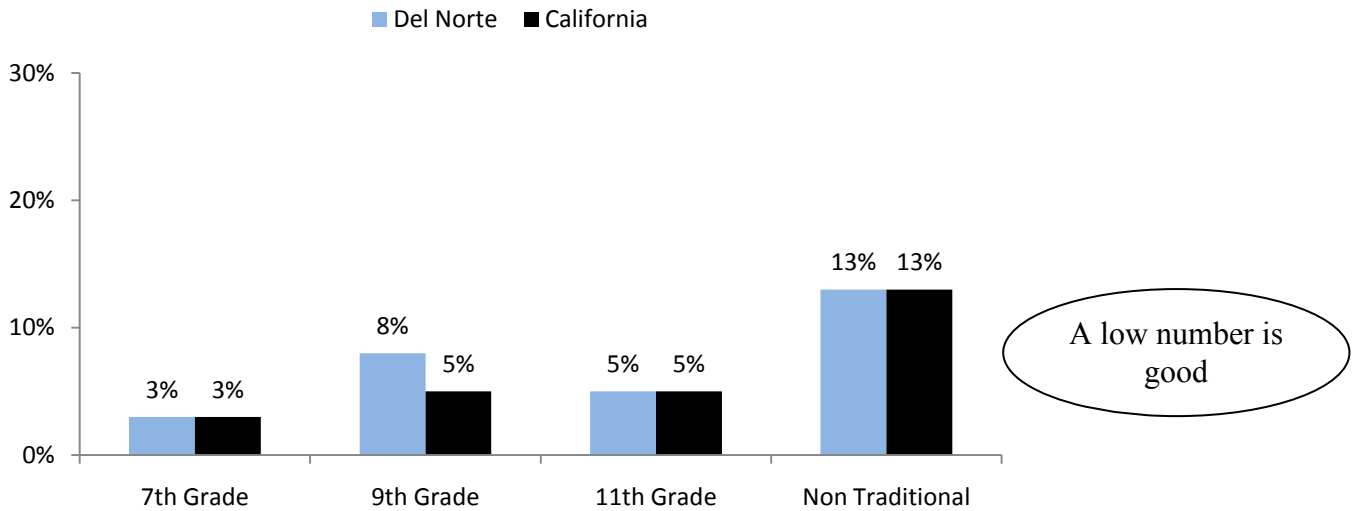
Data Source: California Healthy Kids Survey, 2007-09 County Results: Main Report and Statewide Results: Main Report. San Francisco: WestEd Health and Human Development Program for the California Department of Education. <http://www.wested.org/chks>

Notes: Non-Traditional schools include continuation, community day and alternative schools. Charter schools are included with the Traditional schools. 7th grade students are not asked about cocaine or meth/amphetamines.

25h. Percent of Students Reporting Use of Ecstasy, LSD or Other Psychedelics in Past 30 Days, 2007-2009



25i. Percent of Students Reporting Use Other Illegal Drugs/Pills in Past 30 Days, 2007-2009

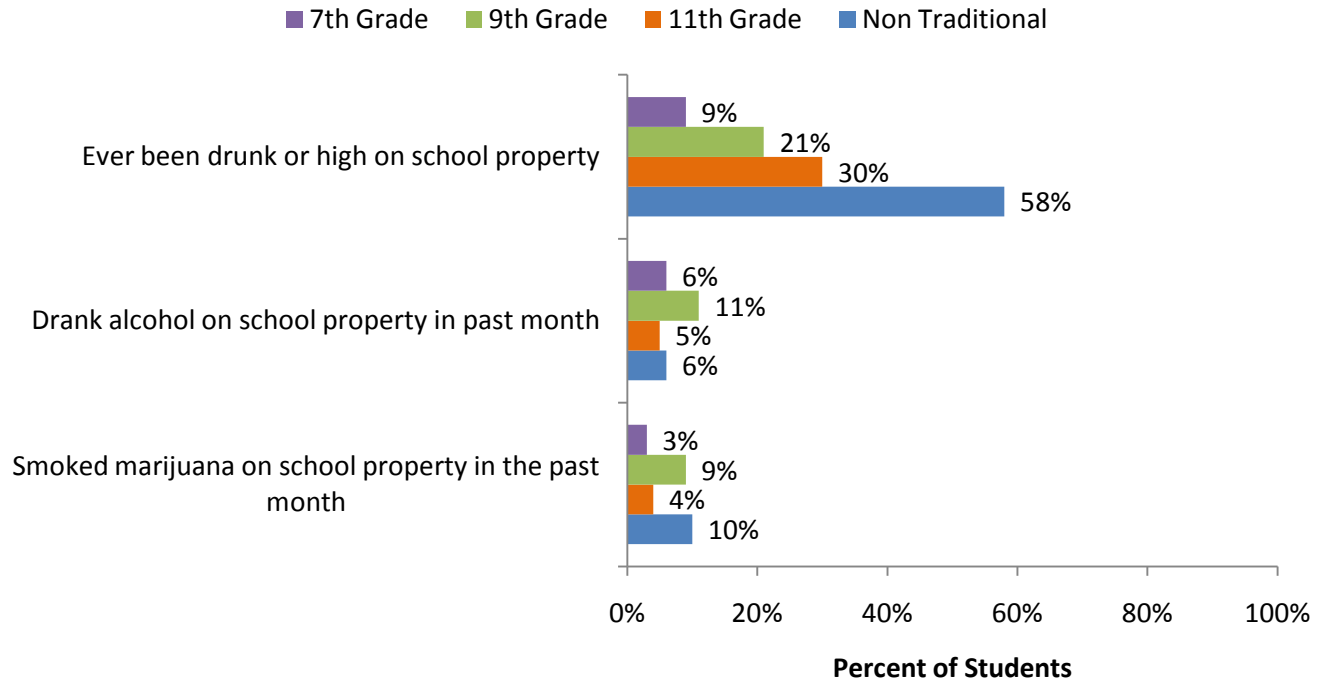


Data Source: California Healthy Kids Survey, 2007-09 County Results: Main Report and Statewide Results: Main Report. San Francisco: WestEd Health and Human Development Program for the California Department of Education.

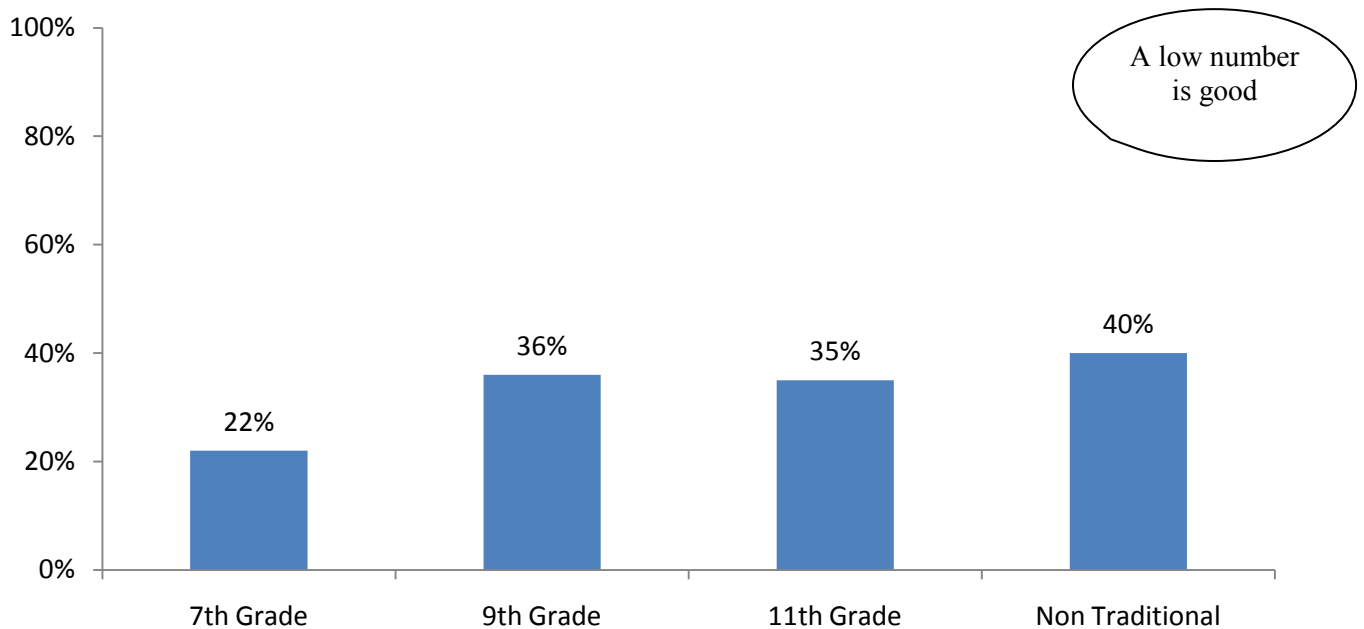
<http://www.wested.org/chks>

Notes: Non-Traditional schools include continuation, community day and alternative schools. Charter schools are included with the Traditional schools.

25j. Del Norte County: Alcohol and Drug Use on School Property, 2007-2009



25k. Del Norte County: Percent of Students Offered Illegal Drugs on School Property in Past 12 Months, 2007-2009

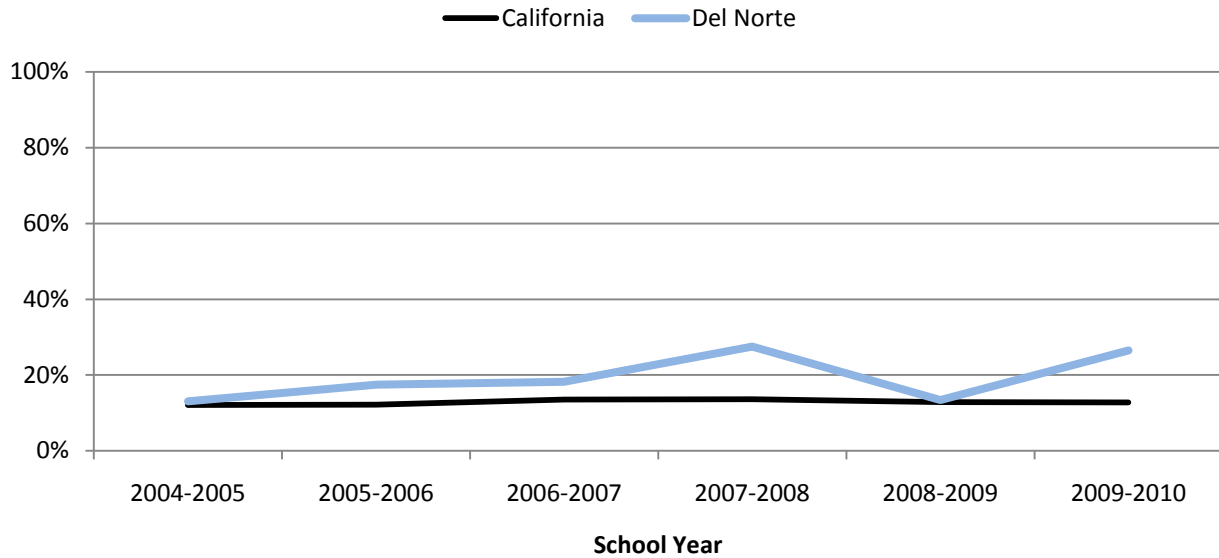


Data Source: California Healthy Kids Survey, 2007-09 County Results: Main Report. San Francisco: WestEd Health and Human Development Program for the California Department of Education.

<http://www.wested.org/chks>

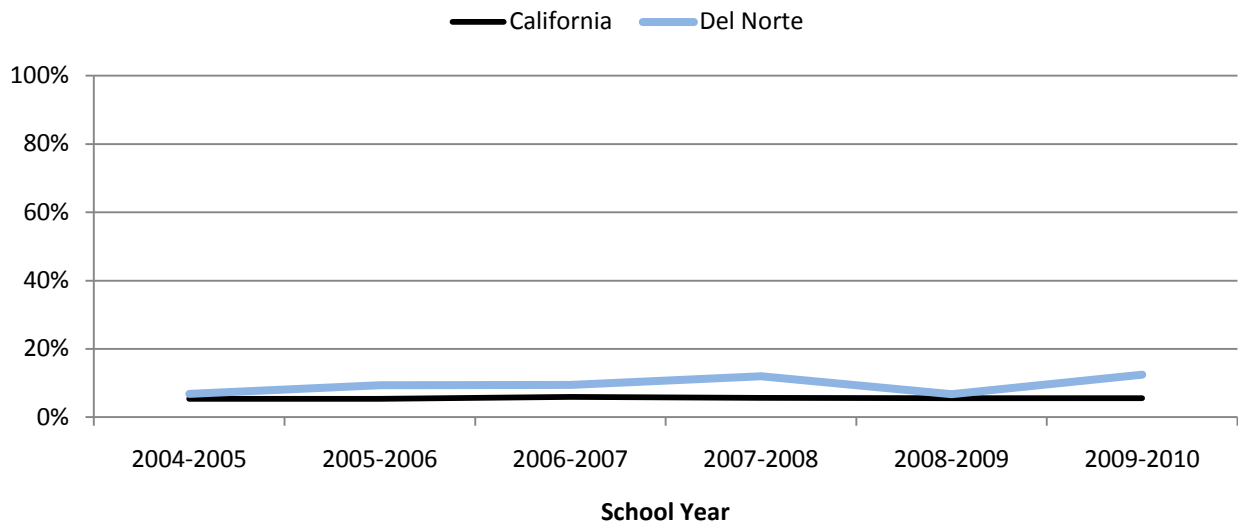
Notes: Non-Traditional schools include continuation, community day and alternative schools. Charter schools are included with the Traditional schools.

26. Del Norte County: Expulsion/Suspension Rates*



Data Source: California Department of Education, Educational Demographics Office <http://dq.cde.ca.gov/dataquest>
 Notes: * the total expulsion/suspension rate was calculated as [(number of expulsions + number of suspensions)/(total enrollment)]*100.

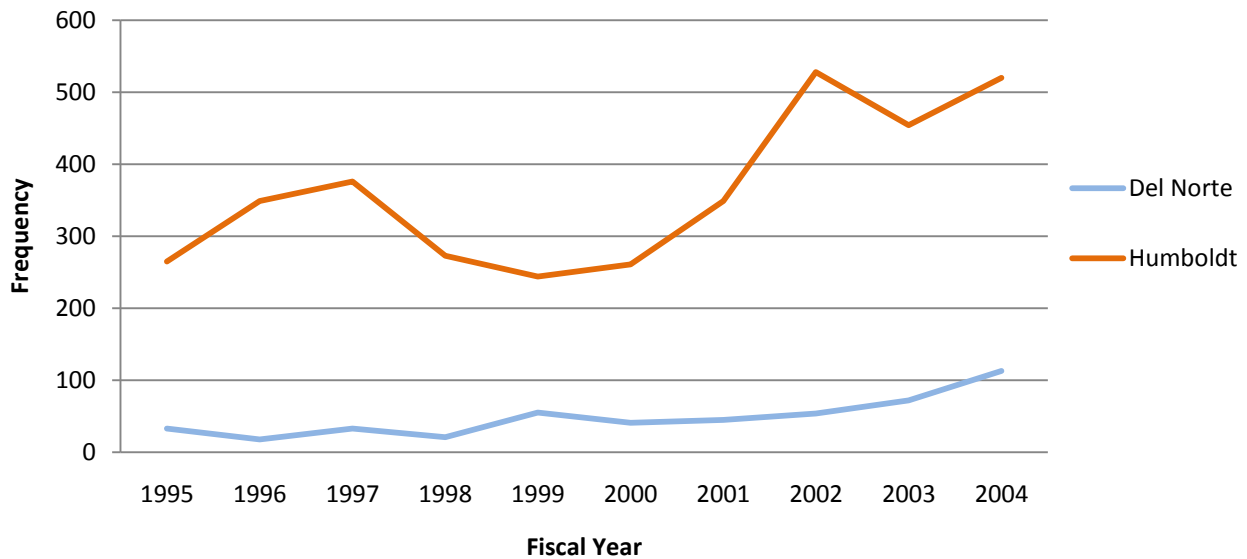
27. Del Norte County: Expulsion/Suspension Rates due to Violence/Drugs*



Data Source: California Department of Education, Educational Demographics Office <http://dq.cde.ca.gov/dataquest>
 Notes: *the expulsion/suspension rate due to violence/drugs was calculated as [(number of expulsions and suspensions due to violence and/or drugs)/(total enrollment)]*100

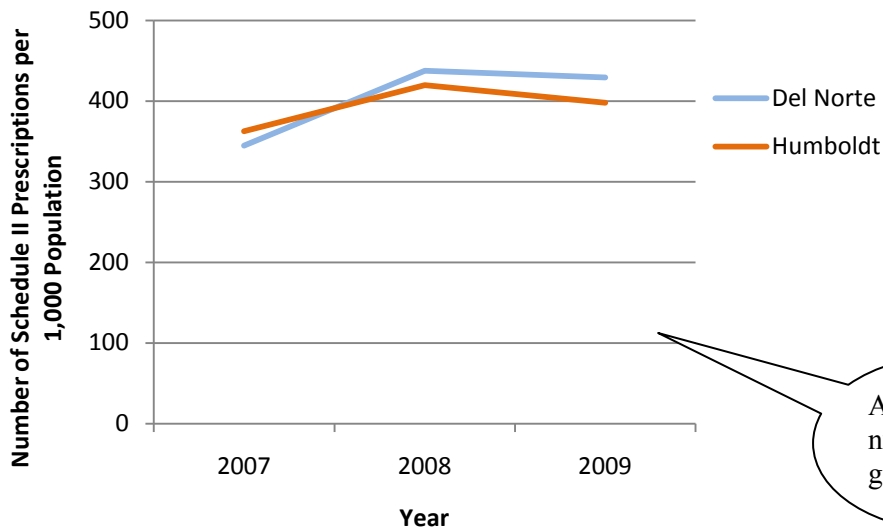
Drug Use Among the General Population

28. Annual Number of Admissions to Alcohol & Other Drug Treatment Services for Which Methamphetamine was the Primary Drug of Abuse



Data Source: Department of Alcohol and Drug Programs <http://www.adp.ca.gov/oara/index.shtml>

29. Prescriptions for Narcotics & Other Controlled Substances Dispensed per 1,000 Population



A low number is good

Data Source: California Department of Justice- Bureau of Narcotic Enforcement

Population data is from the Ca Dept of Finance <http://www.dof.ca.gov/research/demographic/data/race-ethnic/2000-50/>

Notes: This represents Schedule II prescriptions, which includes narcotic pain medications (i.e. Codeine, Hydrocodone, Morphine, Methadone, etc.) and stimulants (Ritalin, Adderall, Dexedrine, etc.). County is determined by patient's address. Number of schedule II prescriptions represents the number of prescriptions dispensed- not the number of pills. Mail order prescriptions are included in these numbers.

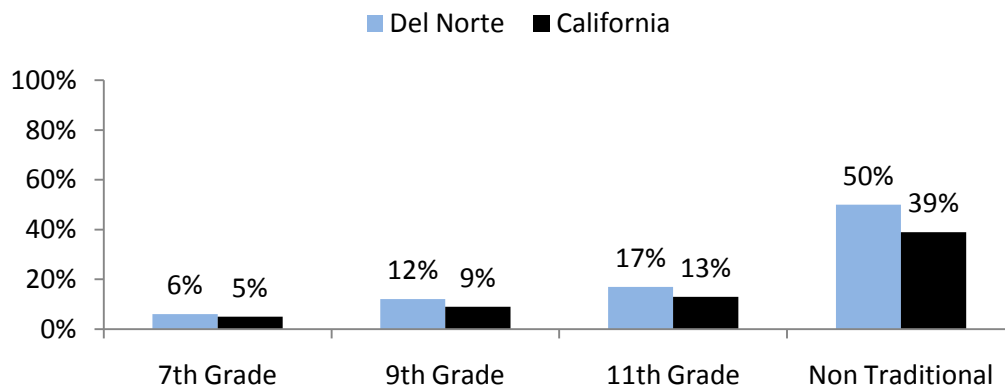
30. Tobacco Use

Tobacco smoking is the single largest preventable cause of death and disease in the United States. A large body of research shows that tobacco smoking and second hand smoke exposure causes cancer, cardiovascular disease (blood clots, stroke, heart attacks, etc.), pulmonary disease, and many adverse reproductive outcomes (infertility, miscarriage, preterm birth, low birth weight, and neurologic, behavioral and cognitive problems).^{1,2} Children who are exposed to tobacco smoke in the home have an increased incidence of middle ear infections, asthma, wheeze, cough, phlegm production, bronchitis, bronchiolitis, pneumonia, and impaired pulmonary function. Additionally, children in households with smoking have a greater risk of requiring hospitalization for respiratory illness. There also appears to be a causal relationship between maternal smoking and sudden infant death syndrome (SIDS).² There is increasing awareness that thirdhand smoke is also problematic. Thirdhand smoke is the residual tobacco smoke contamination that remains after the cigarette is extinguished. High levels of tobacco toxins can remain in the home and on the smoker’s clothing well beyond the period of active smoking, which can be a source of exposure to children.³

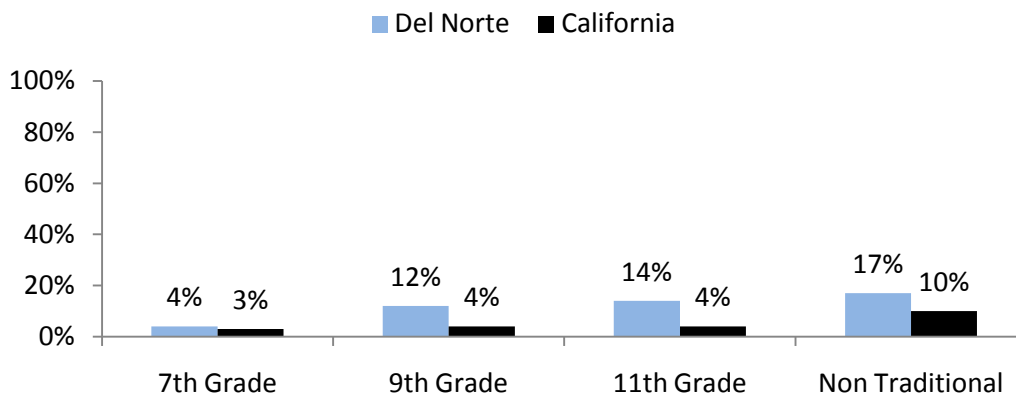
In Del Norte County:

- **Students are more likely to smoke cigarettes or use smokeless tobacco compared to California students as a whole.**
- **Low-income adults are significantly more likely to smoke cigarettes daily** compared to non low-income adults in the county.
- **Low-income children are significantly more likely to have smoking in the household** compared to low-income children in California.

30a. Percent of Students Reporting Use of Cigarettes in Past 30 Days, 2007-2009



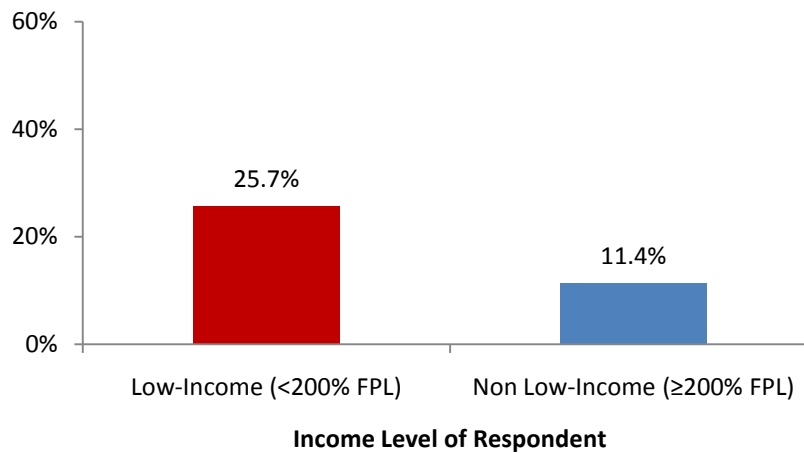
30b. Percent of Students Reporting Use of Smokeless Tobacco in Past 30 Days, 2007-2009



Data Source: California Healthy Kids Survey, 2007-09 County Results: Main Report. San Francisco: WestEd Health and Human Development Program for the California Department of Education. <http://www.wested.org/chks>

Notes: Non-Traditional schools include continuation, community day and alternative schools. Charter schools are included with the Traditional schools.

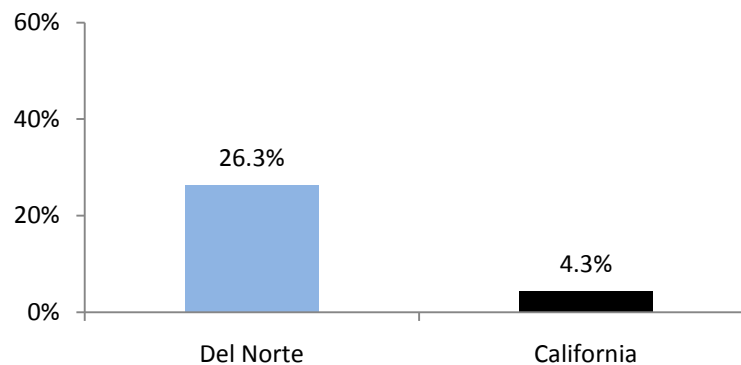
30c. Percent of Adults Smoking Cigarettes Daily, 2006, Del Norte County



Indicator Data Source: Rural Health Information Survey, 2006, California Center for Rural Policy
<http://www.humboldt.edu/ccrp/rural-health-information-survey>

Notes: Differences between low-income and non low-income are statistically significant. Analysis includes adults 18 years and older.

30d. Percent of Low-Income Children with Smoking in the Household (age<5 yrs), 2009



Data Source: Pediatric Nutrition Surveillance System <http://www.dhcs.ca.gov/services/chdp/Pages/PedNSS2008.aspx>

Notes: This is a national surveillance system. In California data comes from clinic data of individuals who participate in the Child Health and Disability Prevention (CHDP) Program. The target population is low-income children birth through 19 years of age. Prevalence reports are produced by the Centers for Disease Control and Prevention.

Social and Economic Factors

Community Safety
Early Care
Education

Workforce/Economic Development
Family Economic Success
Internet Access
Food Security

Community Safety

Community safety can be defined and measured in many ways. Indicators that help us understand community safety range from traffic accidents and DUIs to safety related incidents on school property, domestic violence related calls, and child maltreatment.

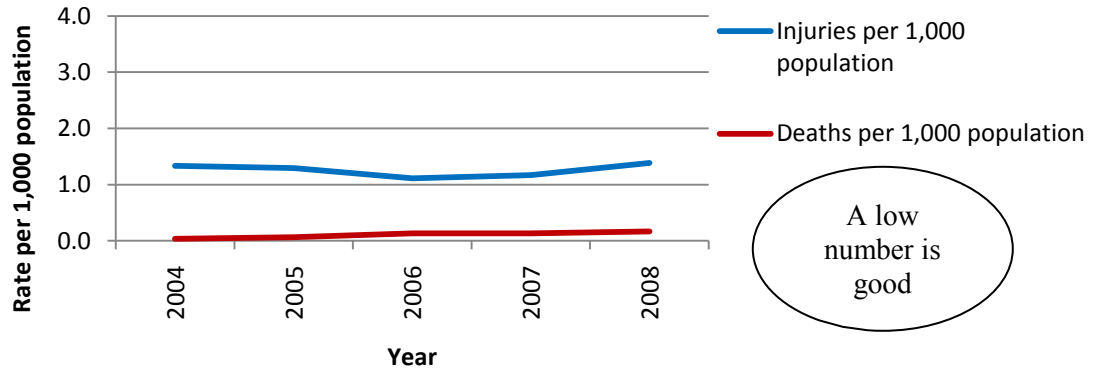
Rural populations face unique challenges around community safety, particularly when it comes to rural roadways. More people die each year in rural roadway crashes than in urban settings. While only 23% of the U.S. population lived in a rural area in 2008, 56% of all traffic fatalities occurred in a rural area.¹ A combination of environmental and behavioral factors contribute to this concerning trend. Rural roads tend to be narrower, with more curves and obstacles. People driving on rural roads are less likely to wear seat belts and more likely to speed and drive while under the influence of alcohol or other drugs compared to people driving in urban areas. The remoteness of rural roads leads to longer response times for Emergency Medical Services to arrive at the scene of a crash, which can delay care and increase the chance of death.²

Limited research shows that intimate partner violence and child abuse rates are similar across rural and urban areas of the U.S.³ However, California specific research has shown that rural counties have higher rates of child abuse and neglect than urban and suburban counties.⁴ In the U.S., rural children who are reported for abuse or neglect are more likely than urban children to be from a single-parent home with high family stress and trouble meeting basic financial needs. Caregiver drug abuse tends to be less common in the homes of rural children than urban children reported to Child Protective Services.⁵ Out-of-home placement rates tend to be higher for rural children compared to urban children.⁶

In Del Norte County:

- The **number of persons killed or injured in alcohol involved collisions has increased** from 2004 to 2008, however the rate per 1,000 population has remained fairly stable over this time period.
- The annual number of DUI arrests has been fairly stable from 2006 to 2008. While the absolute number of DUI arrests in Del Norte County is considerably lower than in Humboldt County, the DUI arrest rate per 100 licensed drivers in Del Norte County has been similar to or higher than Humboldt County.
- Approximately **¼ of 9th grade students and ½ of non-traditional students** (continuation, community day and alternative schools) have **driven a car after drinking or been driven by a friend who had been drinking**.
- The number and rate of arrests for drug offenses (misdemeanor and felony) have **increased** from 2000 to 2008.
- The number of domestic violence related calls for assistance and arrests for spousal abuse have decreased from 2000 to 2009.
- The percent of students reporting **dating violence is higher in Del Norte** than in California.
- The percent of **7th grade students reporting current gang membership is higher in Del Norte** than California.
- Approximately **1 of every 5 students in 7th and 9th grade does not feel safe at their school**.
- Overall, a **higher percent of students in Del Norte report carrying a gun or weapon at school, seeing someone with a weapon or being threatened/injured with a weapon on school property compared to California**.
- Safety related incidents on school property are most common among 7th grade students.
- **The incidence of child maltreatment allegations, substantiations and entries into foster care are considerably higher in Del Norte than California. Native American children have the highest allegations, substantiations and entry into foster care.**
- **Del Norte County has a higher percent of children re-entering foster care within 12 months of reunification compared to California.**

31. Persons Killed or Injured in Alcohol Involved Collisions, Del Norte County



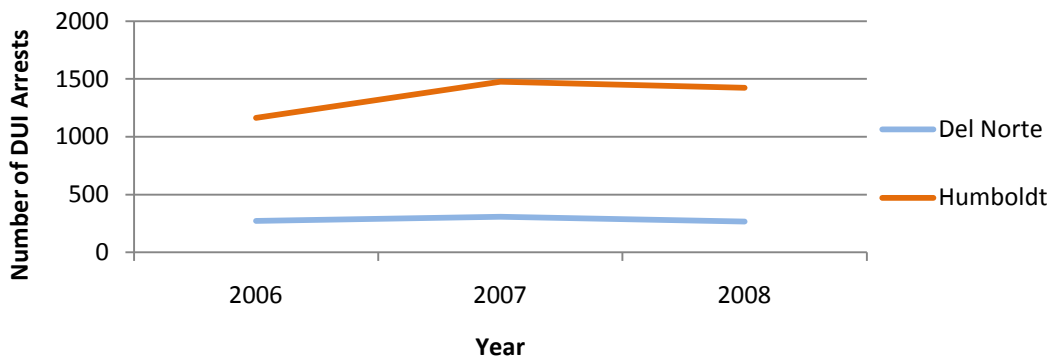
County	2004		2005		2006		2007		2008	
	Injuries	Deaths	Injuries	Deaths	Injuries	Deaths	Injuries	Deaths	Injuries	Deaths
Del Norte	39	1	38	2	33	4	35	4	42	5

Data Source: California Highway Patrol <http://www.chp.ca.gov/switrs/index.html>

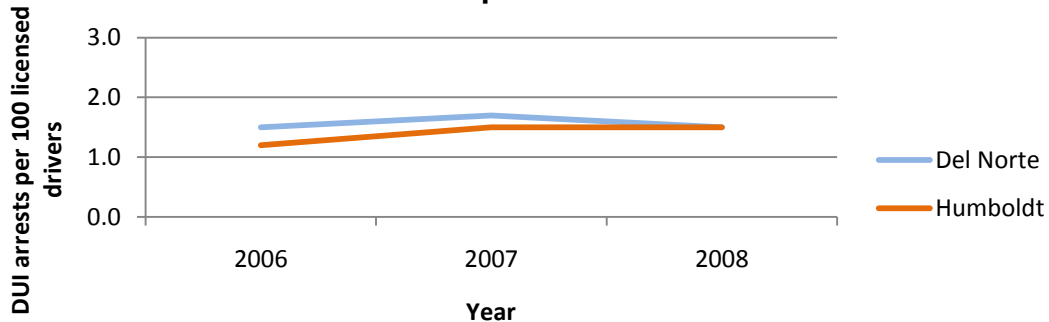
Notes: Alcohol involved collision is any motor vehicle traffic collision where a driver, pedestrian, or bicyclist had been drinking. County is defined as where the collision occurred.

32. DUI Arrests

Annual Number of DUI Arrests



Annual DUI Arrests per 100 Licensed Drivers

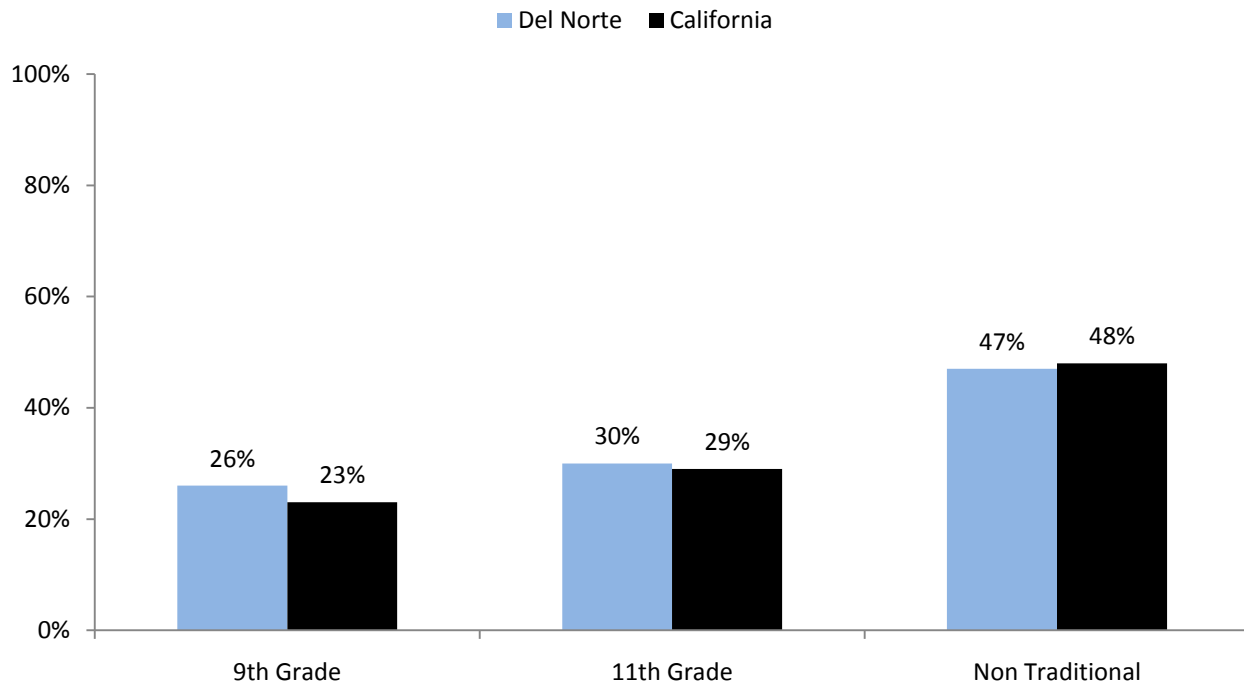


Data Source: Department of Motor Vehicles, Research and Development Branch
Annual Report of the California DUI Management Information System, 2010, 2009, 2008
<http://www.dmv.ca.gov/about/profile/rd/toc.htm>

Notes: County is defined as the county where the arrest occurred.

33. Teen Drunk Driving, 2007-2009

Percent of Students Reporting Driving in a Car After Drinking Alcohol, 2007-2009



Data Source: California Healthy Kids Survey, 2007-09 County Results: Main Report and Statewide Results: Main Report. San Francisco: WestEd Health and Human Development Program for the California Department of Education.

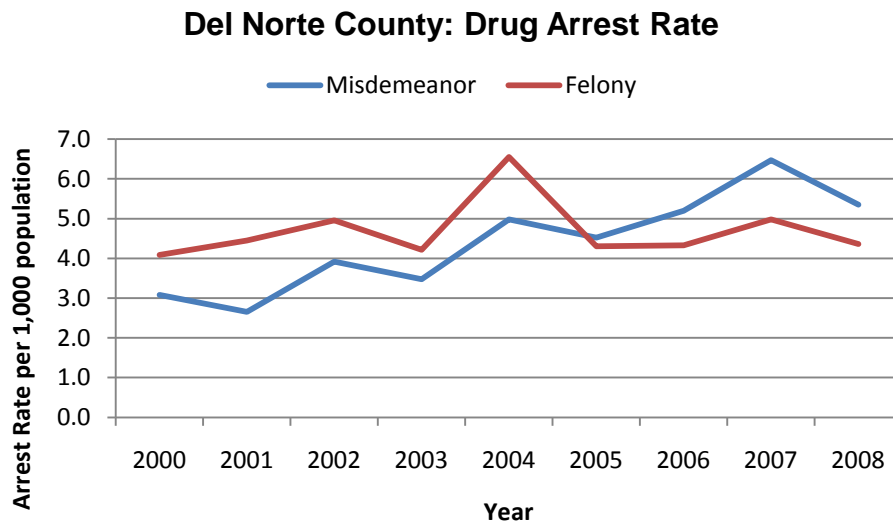
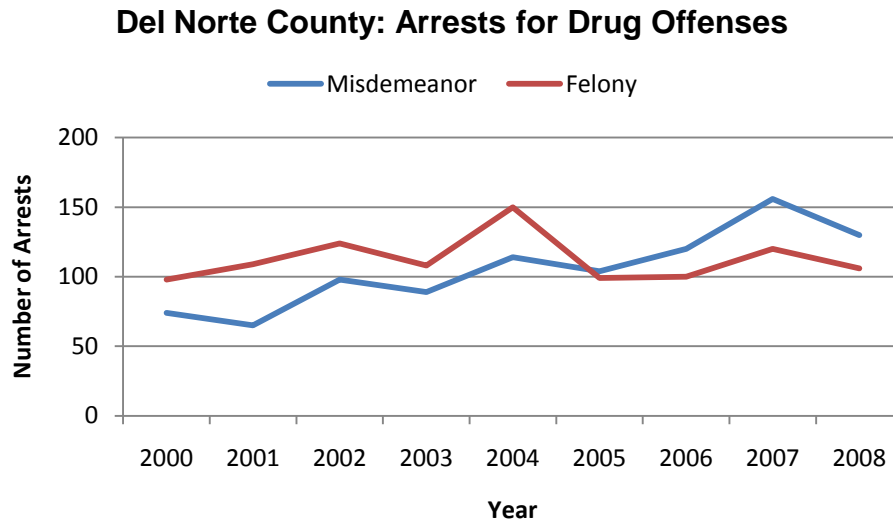
<http://dq.cde.ca.gov/dataquest/>

Notes: Non-Traditional schools include continuation, community day and alternative schools. Charter schools are included with the Traditional schools.

This shows percent of students who reported driving a car after drinking alcohol or being in a car driven by a friend who had been drinking alcohol.



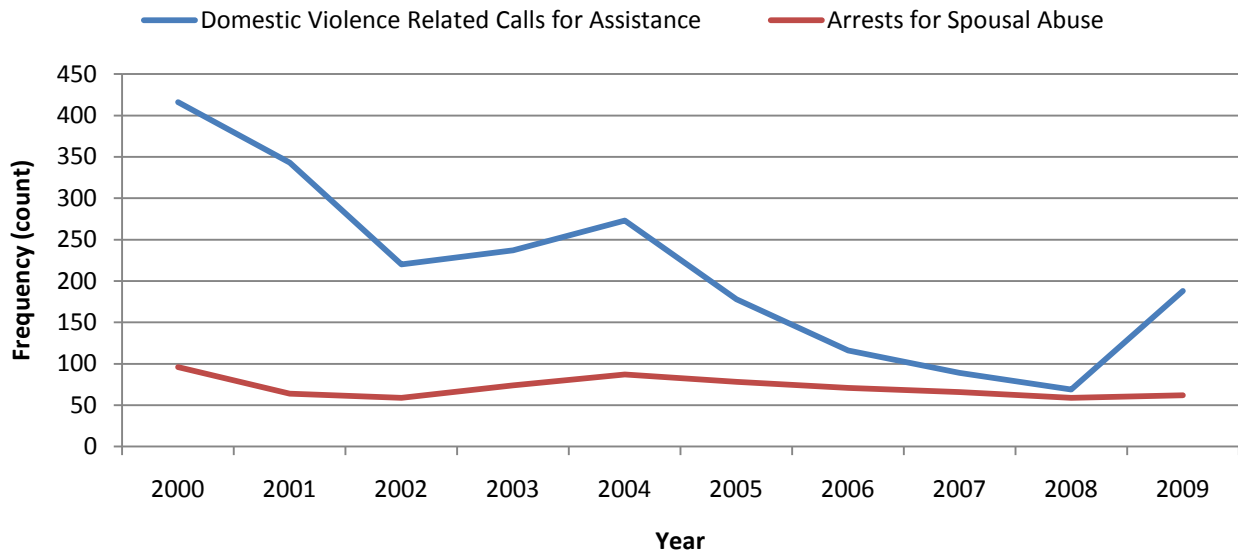
34. Arrests for Drug Offenses



Data Source: California Department of Justice <http://ag.ca.gov/cjsc/datatabs.php>

Notes: Arrests for drug offenses includes marijuana and other drugs. The arrest rate is per 1,000 population age 10 through 69 years.

35. Number of Domestic Violence Related Calls and Arrests for Spousal Abuse

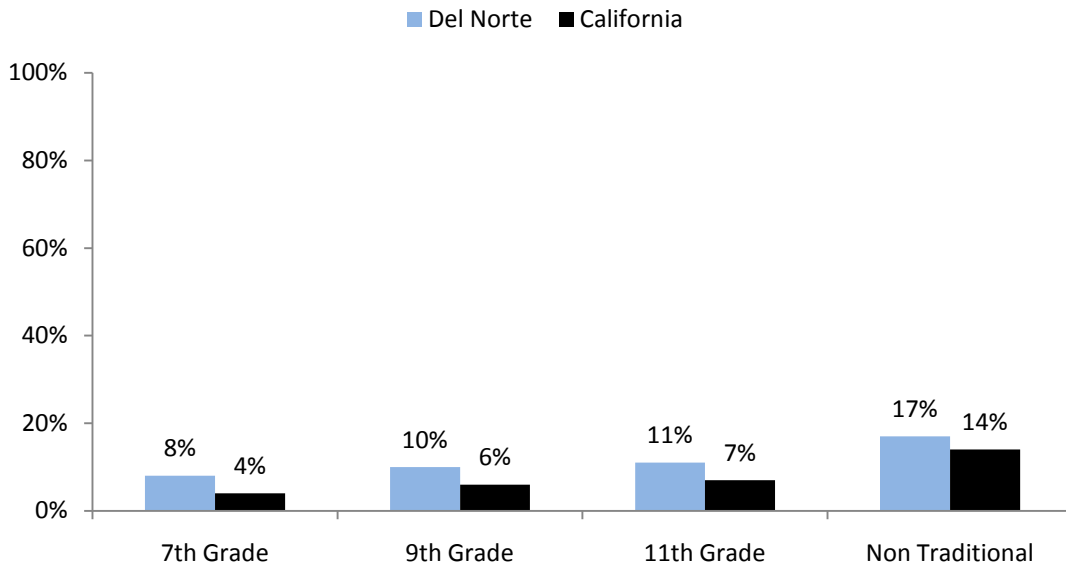


Data Source: California Department of Justice, Criminal Justice Statistics Center

http://stats.doj.ca.gov/cjsc_stats/prof07/index.htm

Notes: Domestic violence related calls for assistance are calls to the Sheriff's Department or Highway Patrol.

36. Percent of Students Reporting Dating Violence in the Past Year, 2007-2009



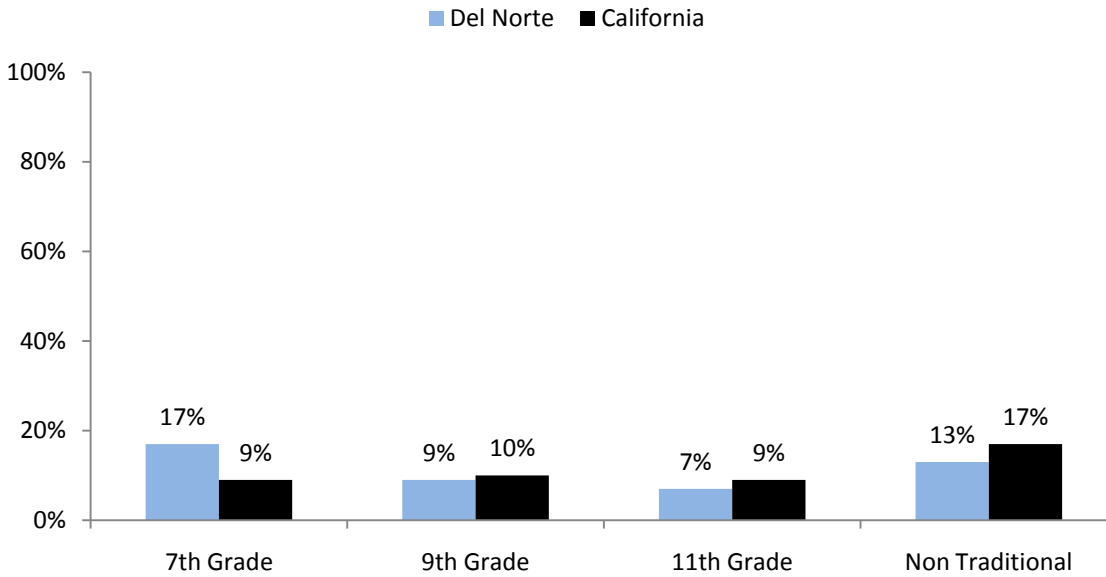
Data Source: California Healthy Kids Survey, 2007-09 County Results: Main Report and Statewide Results: Main Report.

San Francisco: WestEd Health and Human Development Program for the California Department of Education.

<http://www.wested.org/chks>

Notes: This represents the percentage of students reporting that they have been hit, slapped, punched, or otherwise hurt by a boyfriend/girlfriend in the past year. Non-Traditional schools include continuation, community day and alternative schools. Charter schools are included with the Traditional schools.

37. Percent of Students Reporting Current Gang Membership, 2007-2009

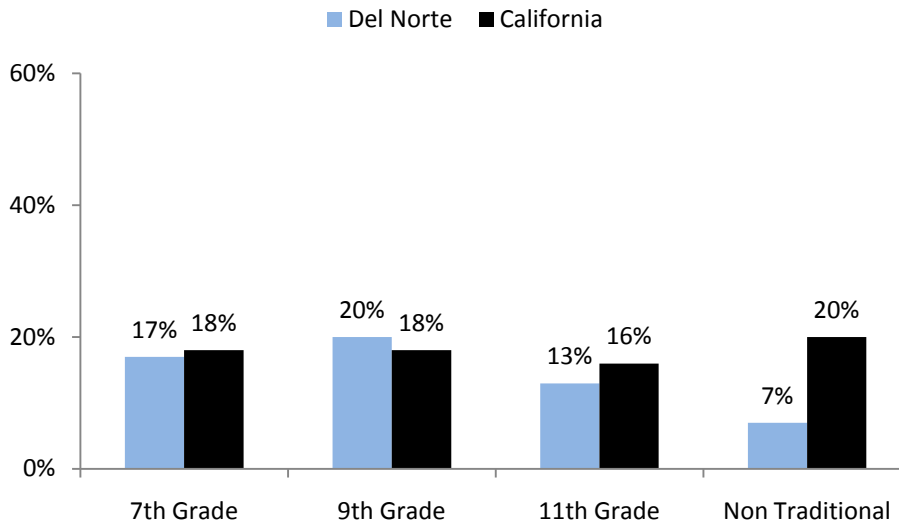


Data Source: California Healthy Kids Survey, 2007-09 County Results: Main Report and Statewide Results: Main Report. San Francisco: WestEd Health and Human Development Program for the California Department of Education.

<http://www.wested.org/chks>

Notes: Non-Traditional schools include continuation, community day and alternative schools. Charter schools are included with the Traditional schools.

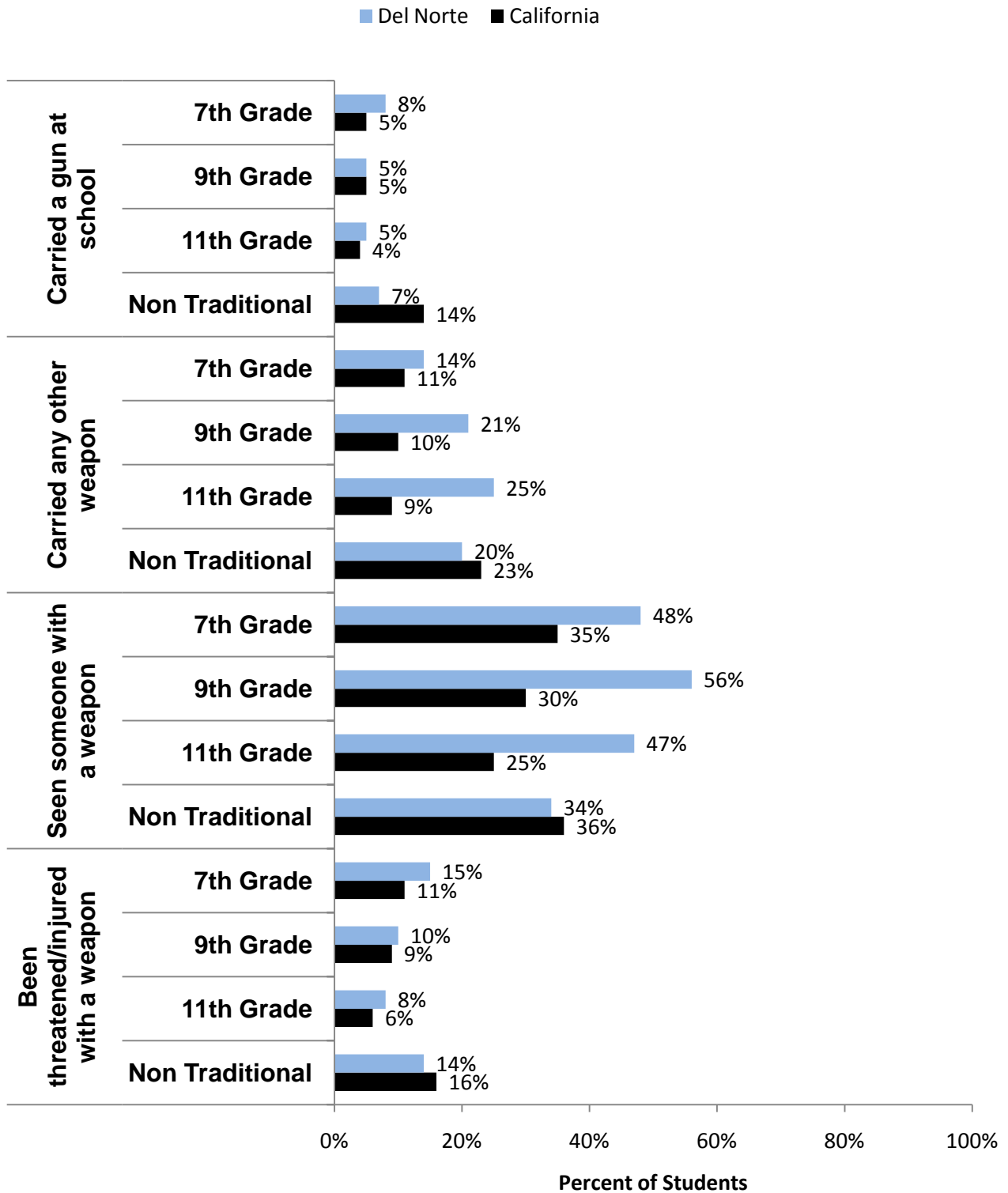
38. Percent of Students Who Do Not Feel Safe at Their School, 2007-2009



Data Source: California Healthy Kids Survey, 2007-09 County Results: Main Report and Statewide Results. San Francisco: WestEd Health and Human Development Program for the California Department of Education. <http://www.wested.org/chks>

Notes: This represents the percentage of students who disagree or strongly disagree with the statement, "I feel safe in my school". Non-Traditional schools include continuation, community day and alternative schools. Charter schools are included with the Traditional schools.

39. Percent of Students Reporting Weapons on School Property in Past 12 Months, 2007-2009

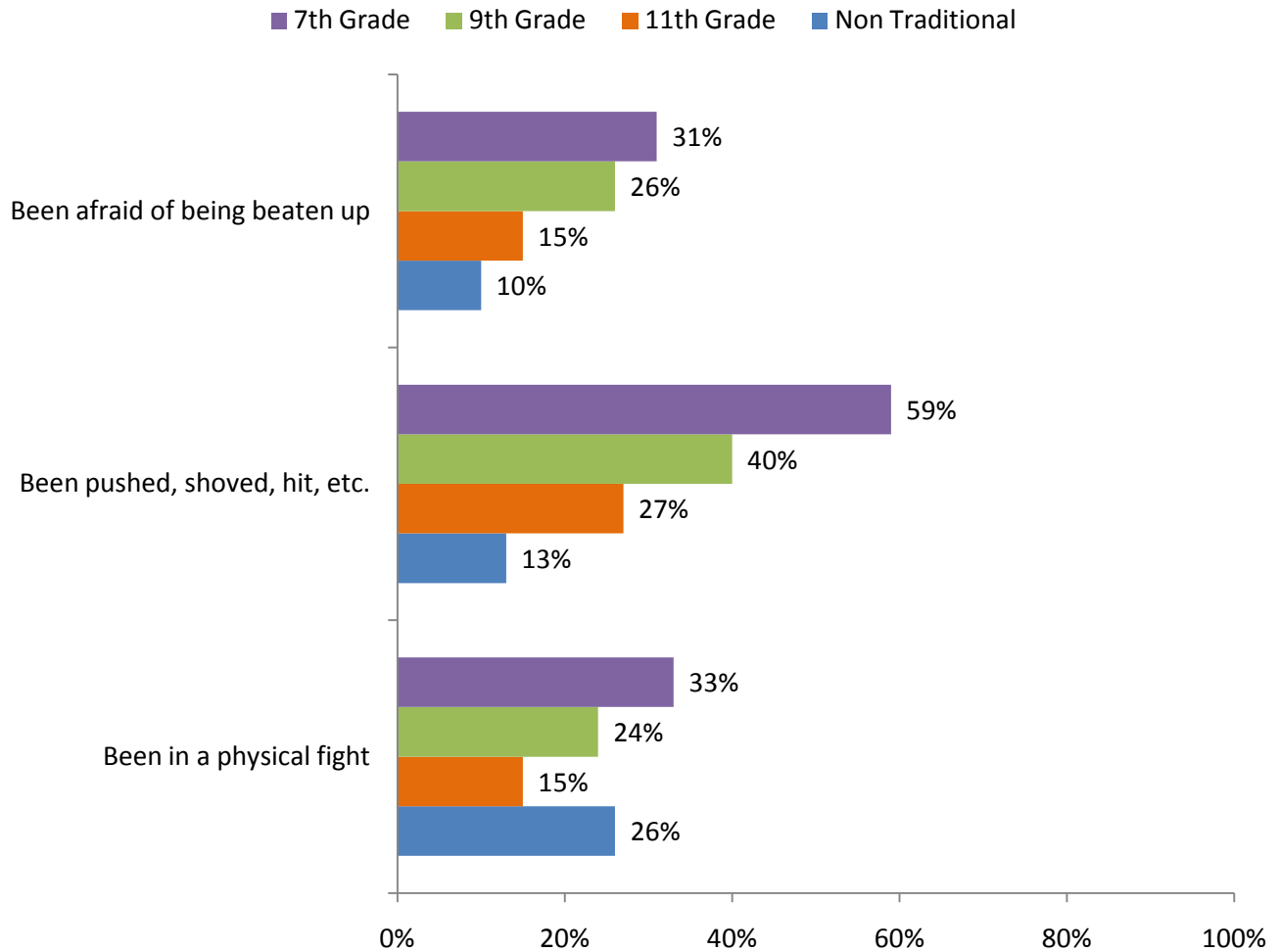


Data Source: California Healthy Kids Survey, 2007-09 County Results: Main Report and Statewide Results: Main Report. San Francisco: WestEd Health and Human Development Program for the California Department of Education.

<http://www.wested.org/chks>

Notes: Non-Traditional schools include continuation, community day and alternative schools. Charter schools are included with the Traditional schools.

40. Percent of Students who Experienced Safety-Related Incidents on School Property in Past 12 Months, 2007-2009



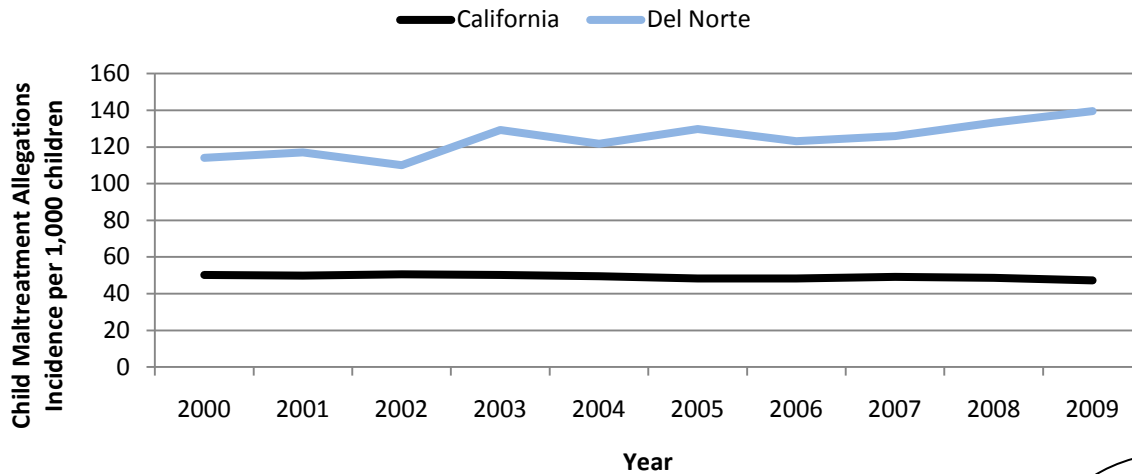
Data Source: California Healthy Kids Survey, 2007-09 County Results: Main Report and Statewide Results: Main Report. San Francisco: WestEd Health and Human Development Program for the California Department of Education.

<http://www.wested.org/chks>

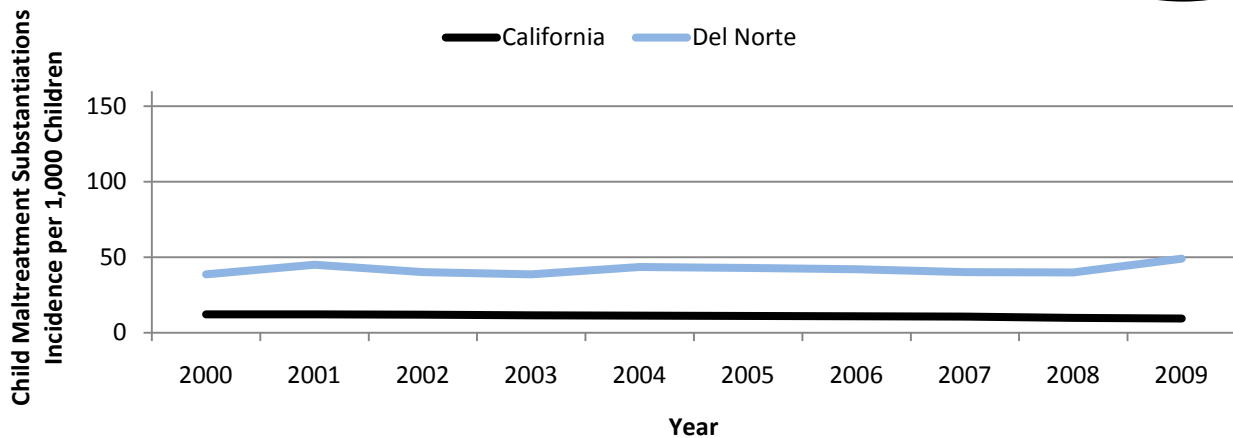
Notes: Non-Traditional schools include continuation, community day and alternative schools. Charter schools are included with the Traditional schools.

41. Child Maltreatment

41a. Child Maltreatment Allegations: Incidence per 1,000 Children



41b. Child Maltreatment Substantiations: Incidence per 1,000 Children



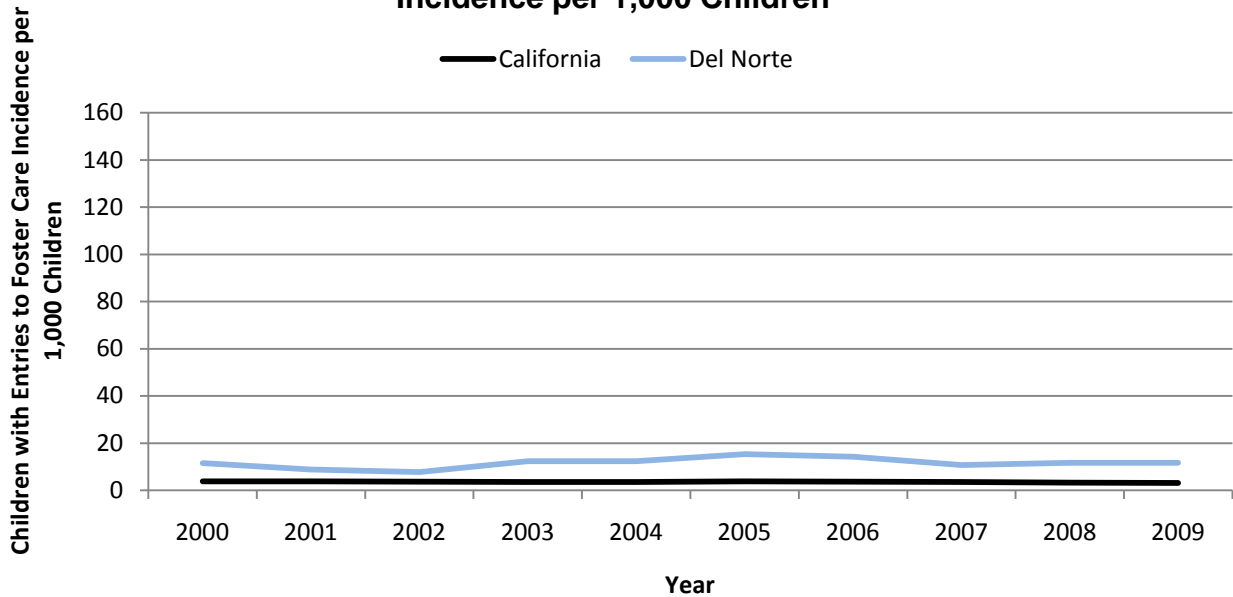
A low number is good

Del Norte County: Number of Child Maltreatment Allegations and Substantiations										
	Year									
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Allegations	786	785	723	831	789	821	777	792	840	883
Substantiations	267	302	264	248	282	271	265	252	251	311

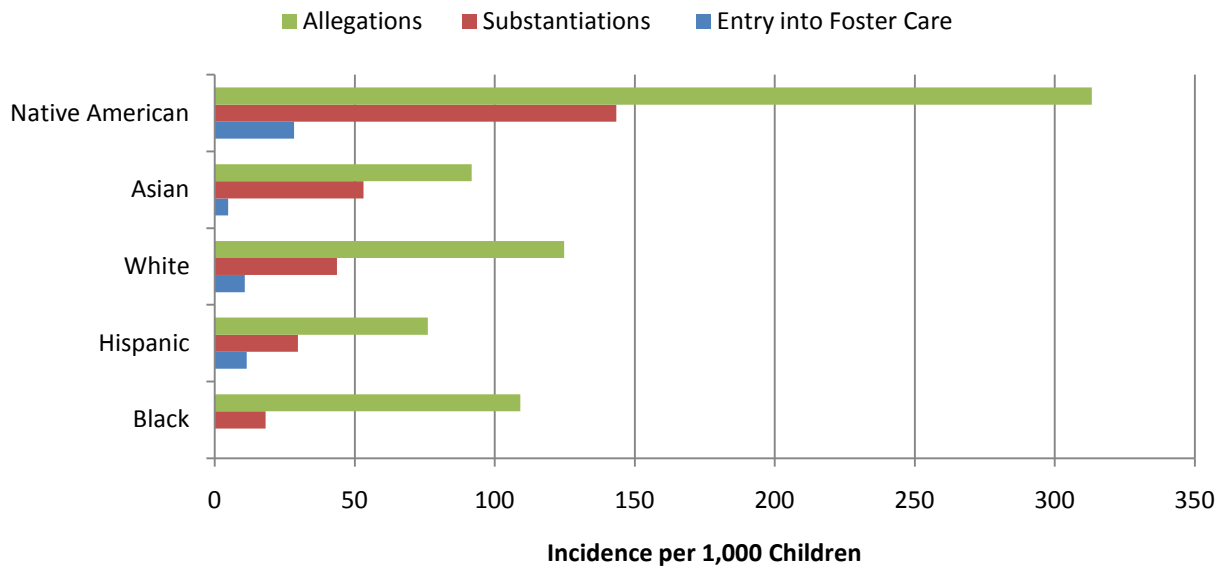
Data Source: University of California, Berkeley, Center for Social Services Research
 Needell, B., Webster, D., Armijo, M., Lee, S., Dawson, W., Magruder, J., Exel, M., Cuccaro-Alamin, S., Williams, D., Zimmerman, K., Simon, V., Hamilton, D., Putnam-Hornstein, E., Frerer, K., Lou, C., Peng, C., Moore, M., King, B., Ashly, L. & Clark, E. (2011). Child Welfare Services Reports for California. Retrieved 1/3/2011, from University of California at Berkeley Center for Social Services Research website. http://cssr.berkeley.edu/ucb_childwelfare

Notes: Rates are based on unduplicated counts of children.

41c. Entries into Foster Care: Incidence per 1,000 Children

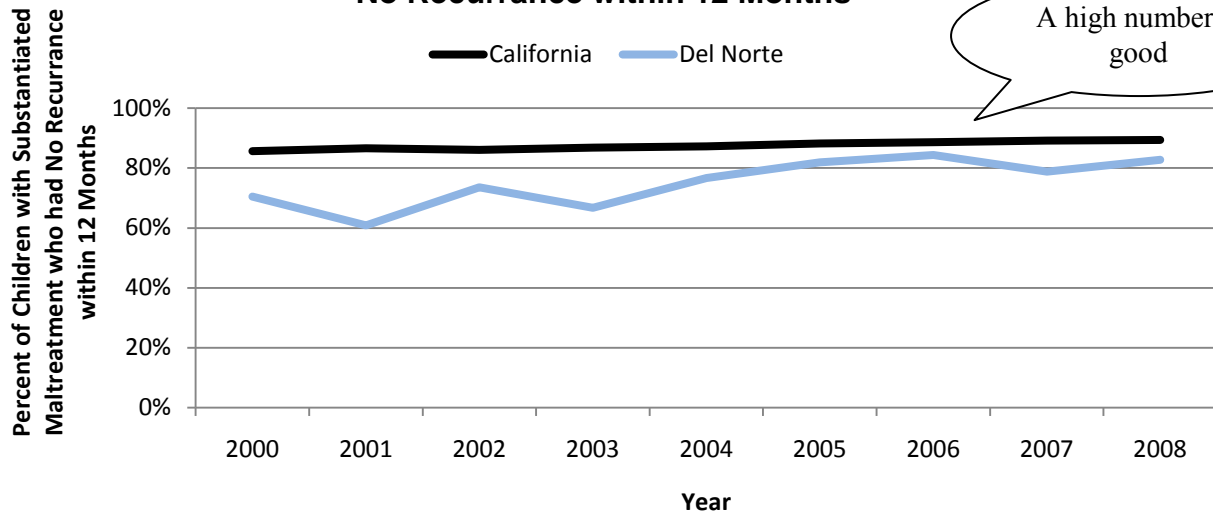


41d. Del Norte County: Child Maltreatment Allegations, Substantiations and Entry into Foster Care by Race/Ethnicity, 2009

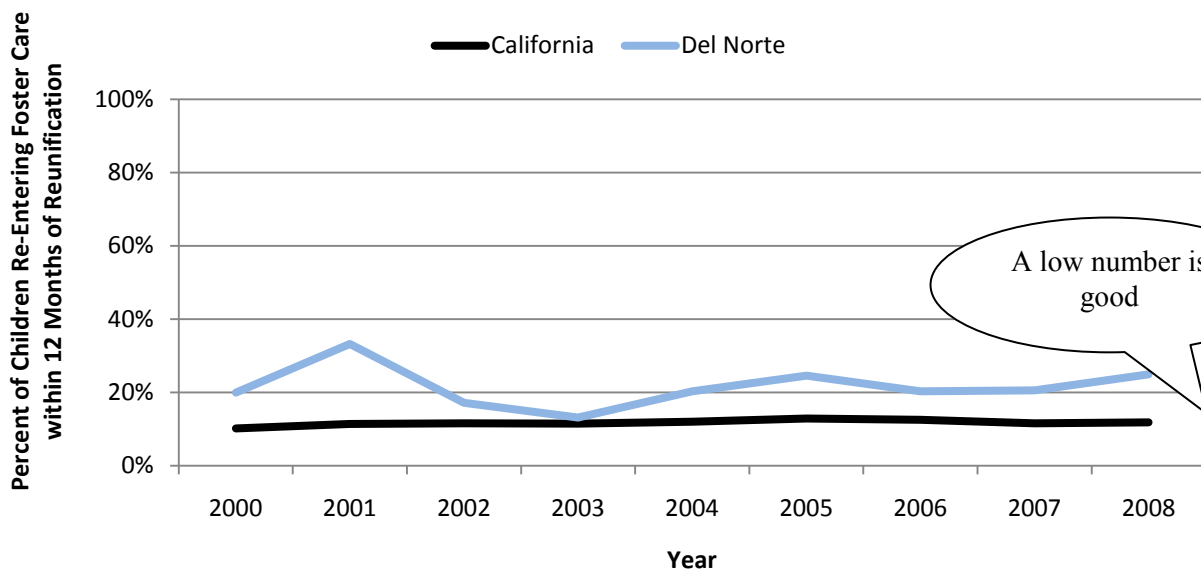


Data Source: University of California, Berkeley, Center for Social Services Research
 Needell, B., Webster, D., Armijo, M., Lee, S., Dawson, W., Magruder, J., Exel, M., Cuccaro-Alamin, S., Williams, D.,
 Zimmerman, K., Simon, V., Hamilton, D., Putnam-Hornstein, E., Frerer, K., Lou, C., Peng, C., Moore, M., King, B., Ashly, L. &
 Clark, E. (2011). Child Welfare Services Reports for California. Retrieved 1/3/2011, from University of California at Berkeley
 Center for Social Services Research website. http://cssr.berkeley.edu/ucb_childwelfare

41e. Percent of Children with Substantiated Maltreatment who had No Recurrence within 12 Months



41f. Percent of Children Re-Entering Foster Care within 12 Months of Reunification



Data Source: University of California, Berkeley, Center for Social Services Research
 Needell, B., Webster, D., Armijo, M., Lee, S., Dawson, W., Magruder, J., Exel, M., Cuccaro-Alamin, S., Williams, D., Zimmerman, K., Simon, V., Hamilton, D., Putnam-Hornstein, E., Frerer, K., Lou, C., Peng, C., Moore, M., King, B., Ashly, L. & Clark, E. (2011). Child Welfare Services Reports for California. Retrieved 1/3/2011, from University of California at Berkeley Center for Social Services Research website http://cssr.berkeley.edu/ucb_childwelfare

Early Care and Education

Studies have shown a positive association between education level and overall health.¹⁻³ Indeed, education level may be the strongest and most consistent predictor of good health, rather than income or occupation.¹ Lower levels of education have been associated with high blood pressure, smoking, high cholesterol, and shorter life expectancy.^{1,4} Compared to less educated individuals, those with more education are less likely to report fair/poor health and more likely to engage in healthy behaviors such as exercise, healthy eating, maintaining a healthy body weight, and abstaining from tobacco use.^{3,5}

There is an increasing body of literature showing that early childhood is an important period for influencing future health and development.⁶ Reading to young children is important for cognitive development.^{7,8} Children who are read to tend to have higher scores in vocabulary and listening comprehension. Researchers found that mothers from low and middle-class households who read to their infants or toddlers resulted in literacy skills above the national average at three years of age.⁸ Students who don't read proficiently by third grade are four times more likely to not graduate from high school compared to proficient readers.⁹ Adolescents with low literacy skills are more likely to be a victim or perpetrator of violence than adolescents with age appropriate reading levels.¹⁰

Attendance in preschool has been associated with positive health outcomes including, less risk of overweight/obesity, improved mental health and social competence, and decreased crime later in life.^{6,11} Children who attend Head Start or preschool are more likely to complete high school and less likely to require special education classes. Attendance in Head Start has been shown to improve cognitive, verbal and social ability among socially disadvantaged children.¹² Children who attend preschool are better able to develop a sense of autonomy. Being around other children, allows them to differentiate themselves from their peers and become aware of their own likes and dislikes.¹³ Additionally, children in preschool learn to express emotion and suppress emotion at socially acceptable times, which promotes successful social interactions between peers and authority figures.¹¹

Poor performance in school has dramatic impacts on health, economics, and society.^{14,15,16} Mental health issues in childhood predict school failure during adolescence, which in turn predicts clinical depression later in life.¹⁴ Students attending alternative high schools have been found to be more likely to engage in unhealthy behaviors (smoking, unprotected sex, lack of physical activity, etc.) compared to students attending traditional high schools.¹⁵ Male high school dropouts are 47 times more likely than college graduates to be incarcerated. It has been estimated that the average high school dropout will cost taxpayers over \$292,000 due to lower tax revenues, higher cash and in-kind transfer costs, and imposed incarceration costs.¹⁶

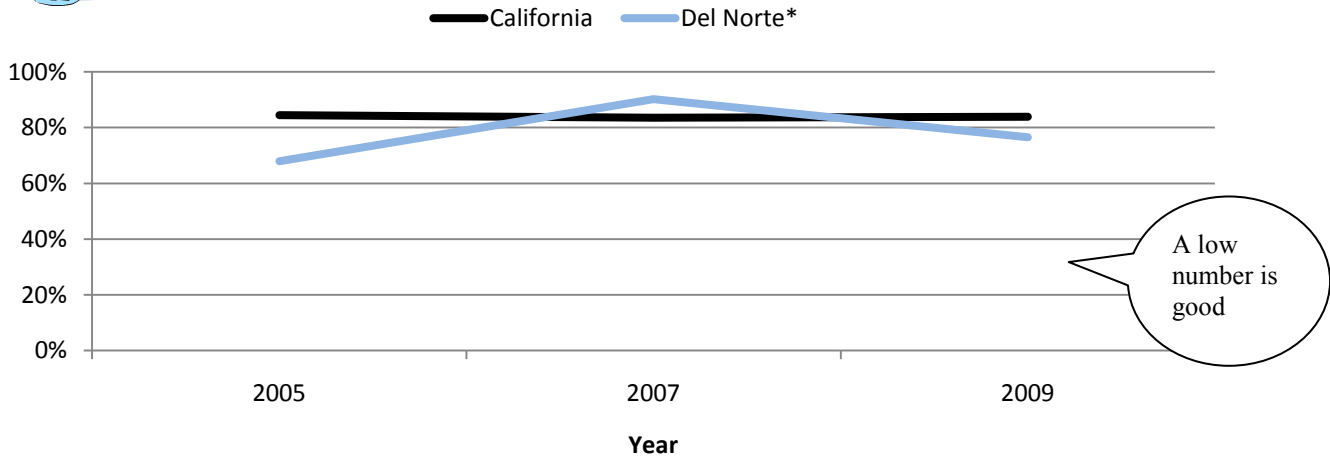
In Del Norte County:

- **Participation rates in preschool, nursery school or Head Start is low** with a high percent of children *not* attending preschool, nursery school or head start for at least 10 hours a week.
- The percent of children with regular childcare arrangements for at least 10 hours a week has increased from 2003 to 2009.
- The percent of parents reading to their young children is higher than California and Healthy People 2020.
- **Third grade reading level is lower than California.**
- **One of every five people 25 years and older has less than a high school diploma.**
- Average **high school graduation rates have decreased** from 2000 to 2009.
- **High School graduates with all courses required for UC or CSU entrance is far below California and is lowest for American Indians.**
- High School drop-out rates have remained around 20% and are **highest for American Indian and Hispanic students.**
- Overall, a higher percentage of students in Del Norte score high on school protective factors compared to California (meaningful participation, high expectations, caring relationships at school).

For a more detailed report on educational achievement in Del Norte County please visit:
<http://www.humboldt.edu/ccrp/blog/del-norte-county-look-educational-achievement>

Early Care

42. Percent of Children (0-6yrs) *Not* Attending Preschool, Nursery School or Head Start at Least 10 Hours per Week

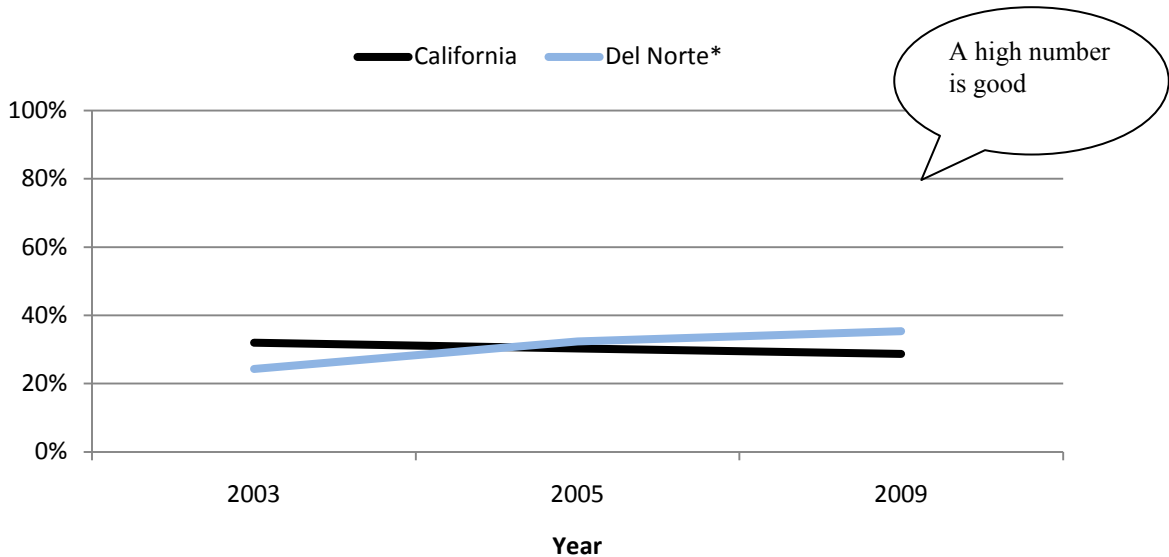


Data Source: California Health Interview Survey <http://www.chis.ucla.edu>

Notes:*Del Norte data aggregated with 6 other counties

Data not presented as “Percent of Children Attending Preschool, Nursery School or Head Start at least 10 hours per week” as small numbers caused unstable/unreliable data.

43. Percent of Children (0-11yrs) with Regular Childcare Arrangements for at Least 10 Hours per Week

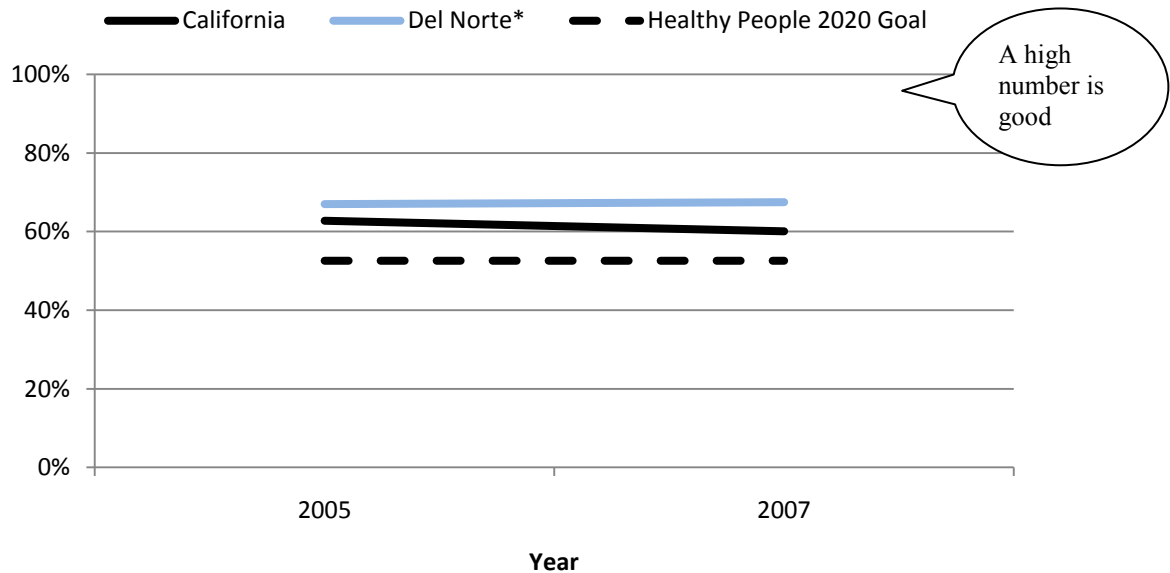


Data Source: California Health Interview Survey <http://www.chis.ucla.edu>

Notes:*Del Norte data aggregated with 6 other counties.

Regular childcare arrangement refers to childcare by someone other than the parents, legal guardians, or stepparents. May include preschool and nursery school, but not kindergarten.

44. Percent of Parents Reading to their Children (0-5) Daily



Data Source: California Health Interview Survey <http://www.chis.ucla.edu>

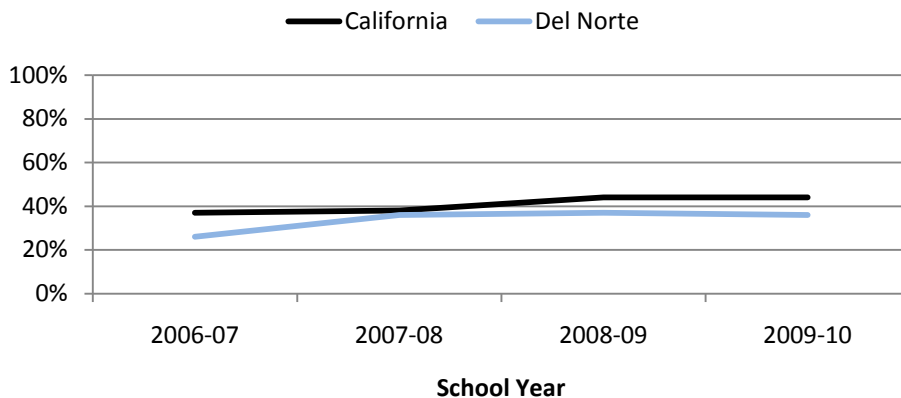
Notes: *Del Norte data aggregated with 6 other counties. This question was not asked in 2009.

Education

45. Reading Level of 3rd Grade Students



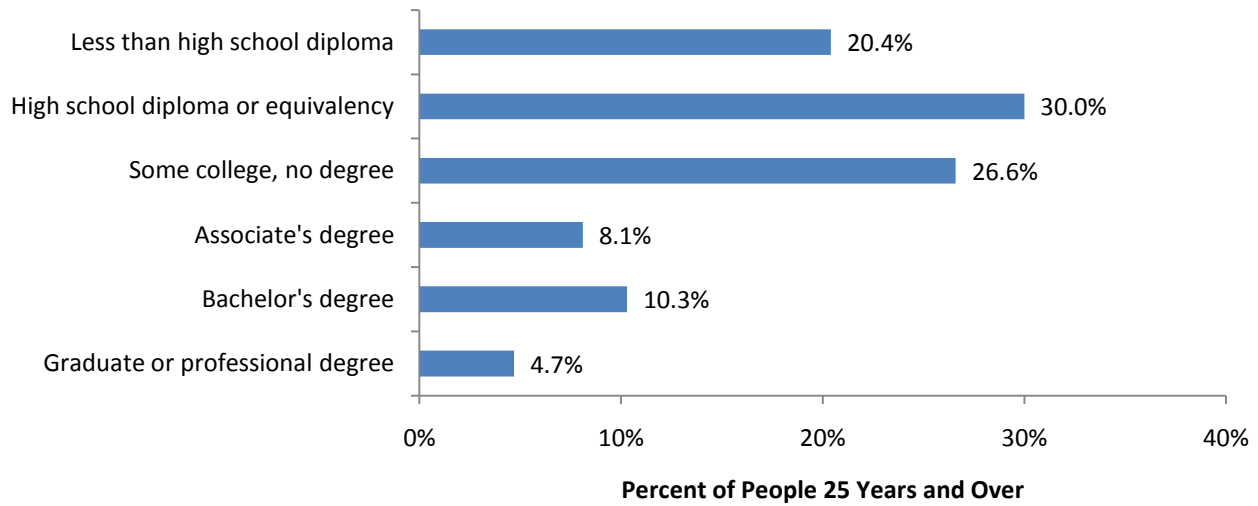
Percent of 3rd Grade Students with Proficient or Advanced Scores on the English-Language Arts Section of the STAR Test



Students who don't read proficiently by third grade are four times more likely to not graduate from high school compared to proficient readers.⁹

Data Source: California Department of Education, Educational Demographics Office <http://dq.cde.ca.gov/dataquest>

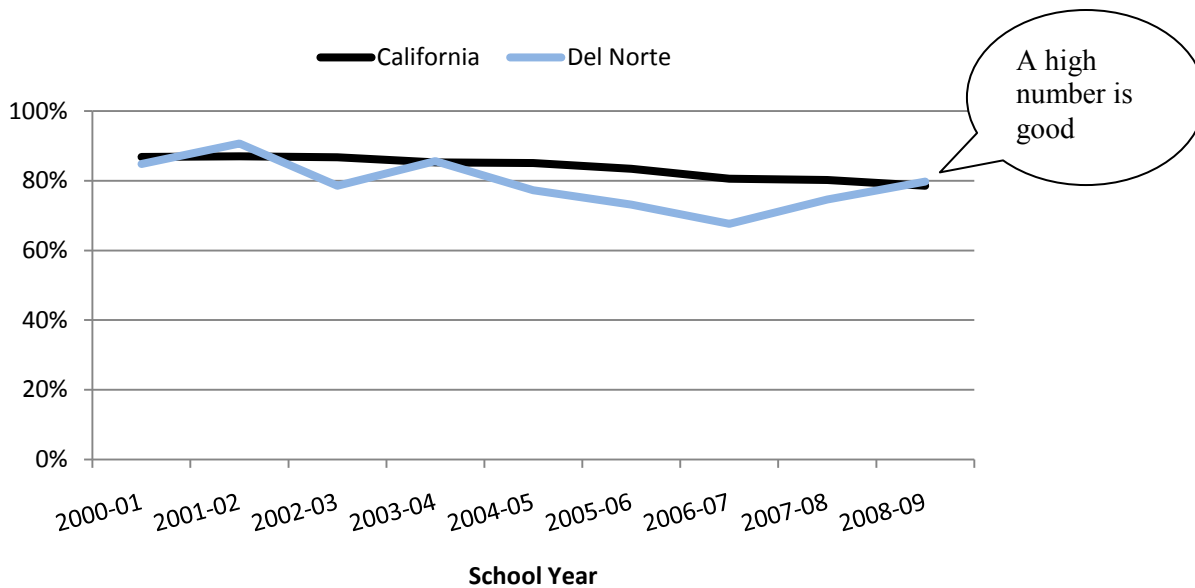
46. Highest Level of Educational Attainment, Del Norte County, 2005-2009



Data Source: U.S. Census <http://factfinder.census.gov>

Notes: Data from the U.S. Census American Community Survey and are 3-year estimates based on data collected between January 2006 and December 2008.

47. Average High School Graduation Rates

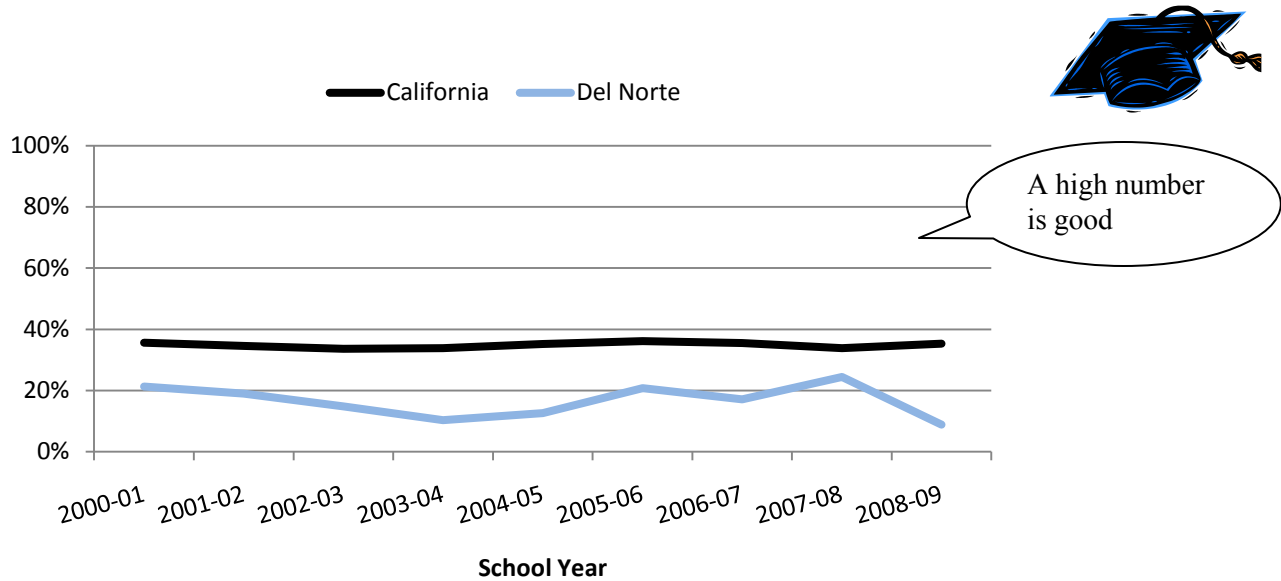


Data Source: California Department of Education, Educational Demographics Office

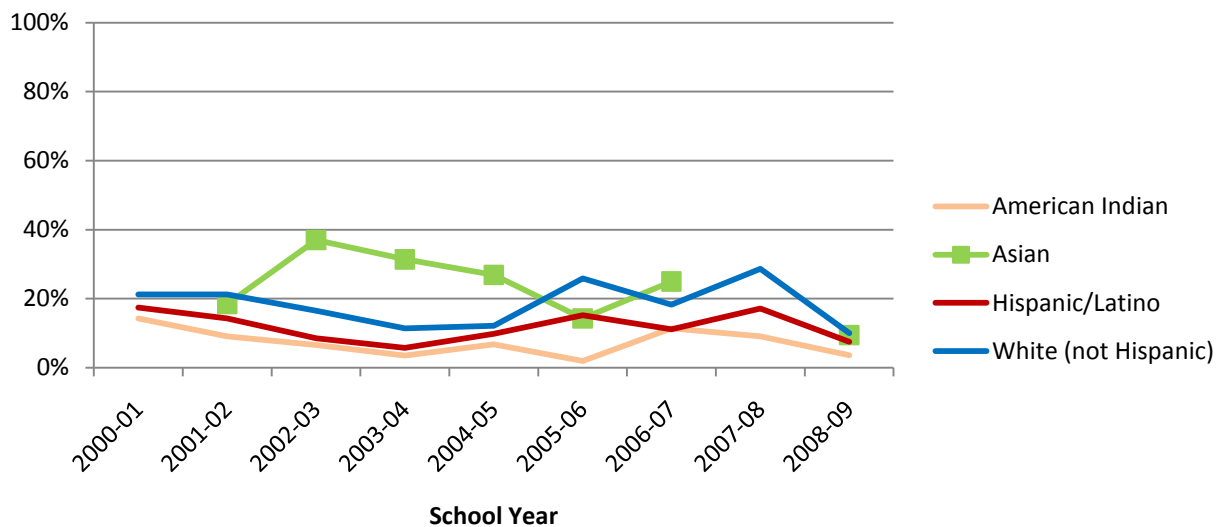
<http://dq.cde.ca.gov/dataquest>

Notes: NCES definition of graduation rate was used: # of graduates (year 4) / [# of graduates (year 4) + grade 9 dropouts (year 1) + grade 10 dropouts (year 2) + grade 11 dropouts (year 3) + grade 12 dropouts (Year 4)]

48. Percent of High School Graduates with all Courses Required for UC or CSU Entrance



Percent of High School Graduates with all Courses Required for UC or CSU Entrance by Race/Ethnicity

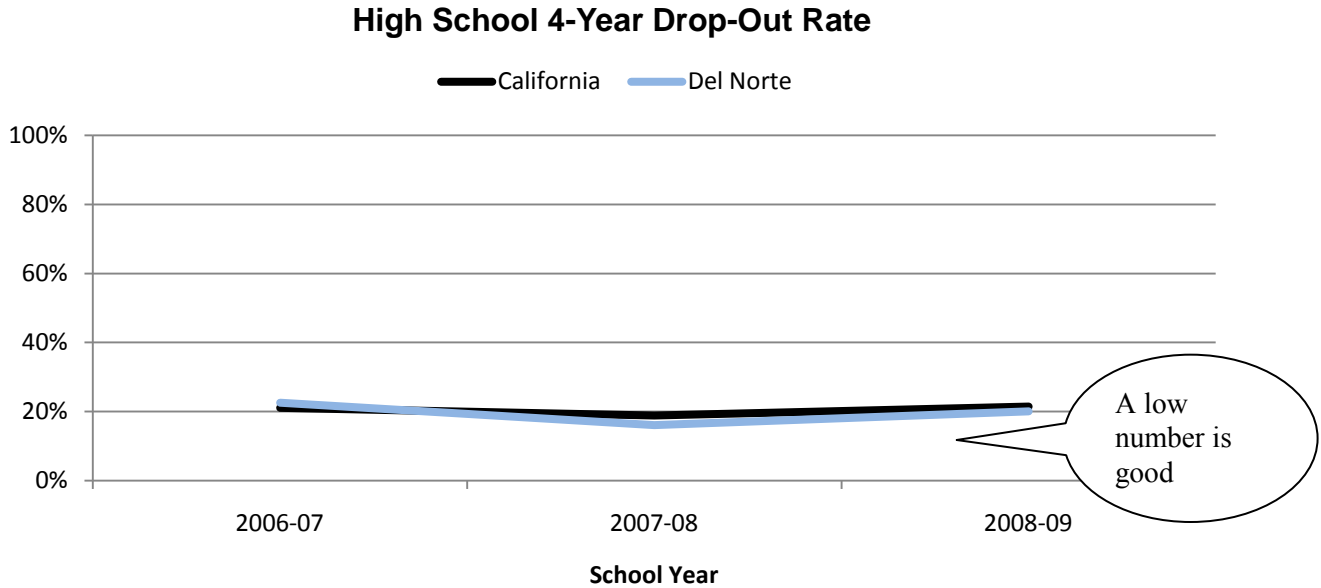


Data Source: California Department of Education Educational Demographics Office <http://dq.cde.ca.gov/dataquest>

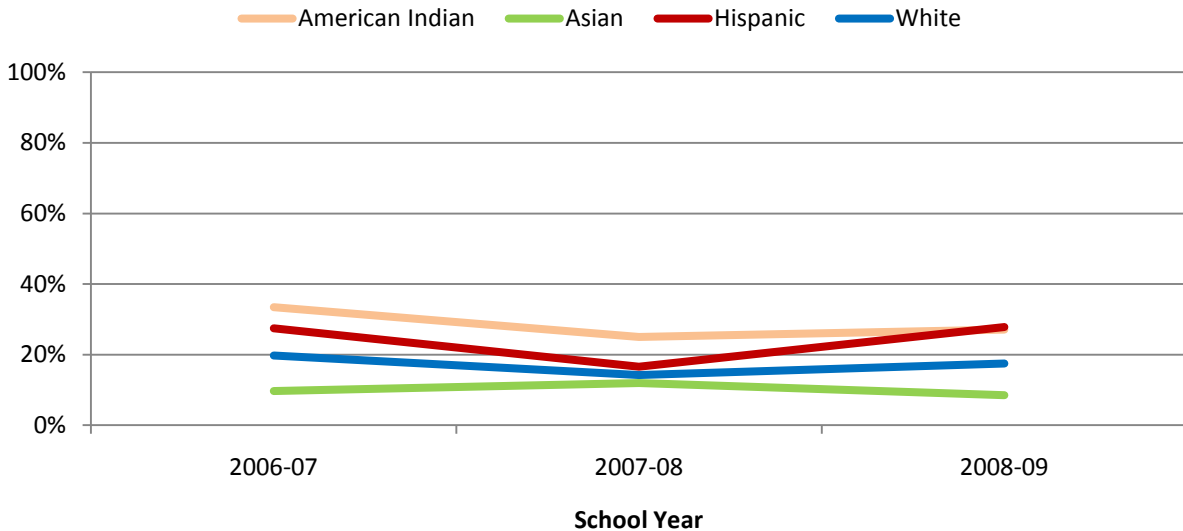
Notes: This is a measure of 12th Grade graduates completing all courses required for U.C. &/or CSU Entrance.

Data reported only for ethnic groups with 20 or more students per year.

49. High School Drop-Out Rate



Del Norte County: High School 4-Year Drop-Out Rate by Race/Ethnicity



Data Source: California Department of Education Educational Demographics Office <http://dq.cde.ca.gov/dataquest>

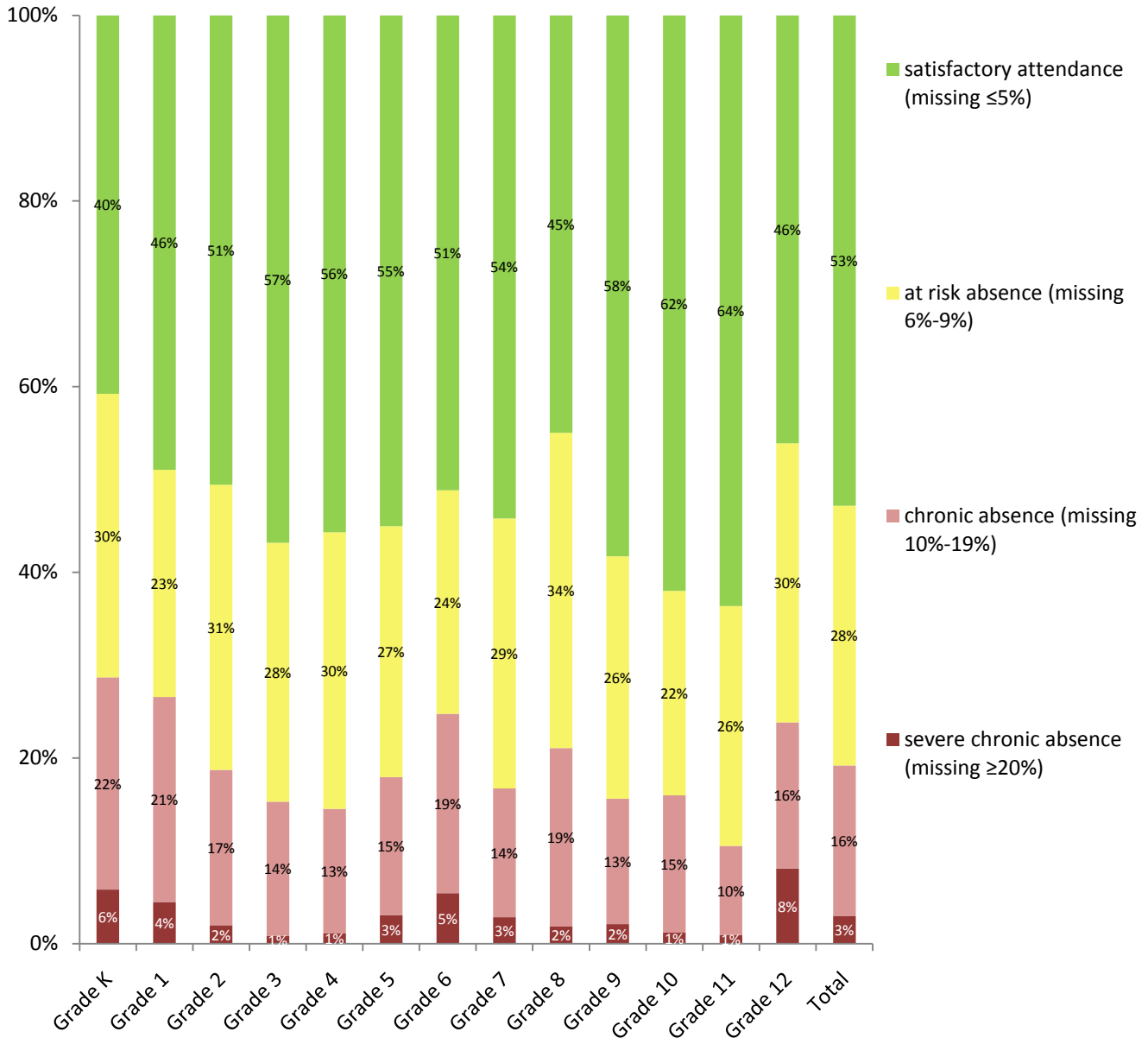
Notes: These graphs display the adjusted grade 9-12, 4-year derived drop-out rates. Drop-out counts are derived from student-level data starting in 2006-07, so earlier years are not shown. The 4-year derived drop-out rate is an estimate of the percent of students who would drop-out in a four year period based on data collected for a single year. Data only shown for ethnicities when more than 20 students enrolled in grades 9-12.

4-year Derived Rate Formula: $(1 - ((1 - (\text{Reported or Adjusted Gr. 9 Dropouts} / \text{Gr. 9 Enrollment})) * (1 - (\text{Reported or Adjusted Gr. 10 Dropouts} / \text{Gr. 10 Enrollment}))) * (1 - (\text{Reported or Adjusted Gr. 11 Dropouts} / \text{Gr. 11 Enrollment})) * (1 - (\text{Reported or Adjusted Gr. 12 Dropouts} / \text{Gr. 12 Enrollment})))) * 100$.

Adjusted Dropouts = Reported Grade 9-12 Dropout Total minus Reenrolled Grade 9-12 Dropouts plus Grade 9-12 Lost Transfers.

50. School Absence Rates

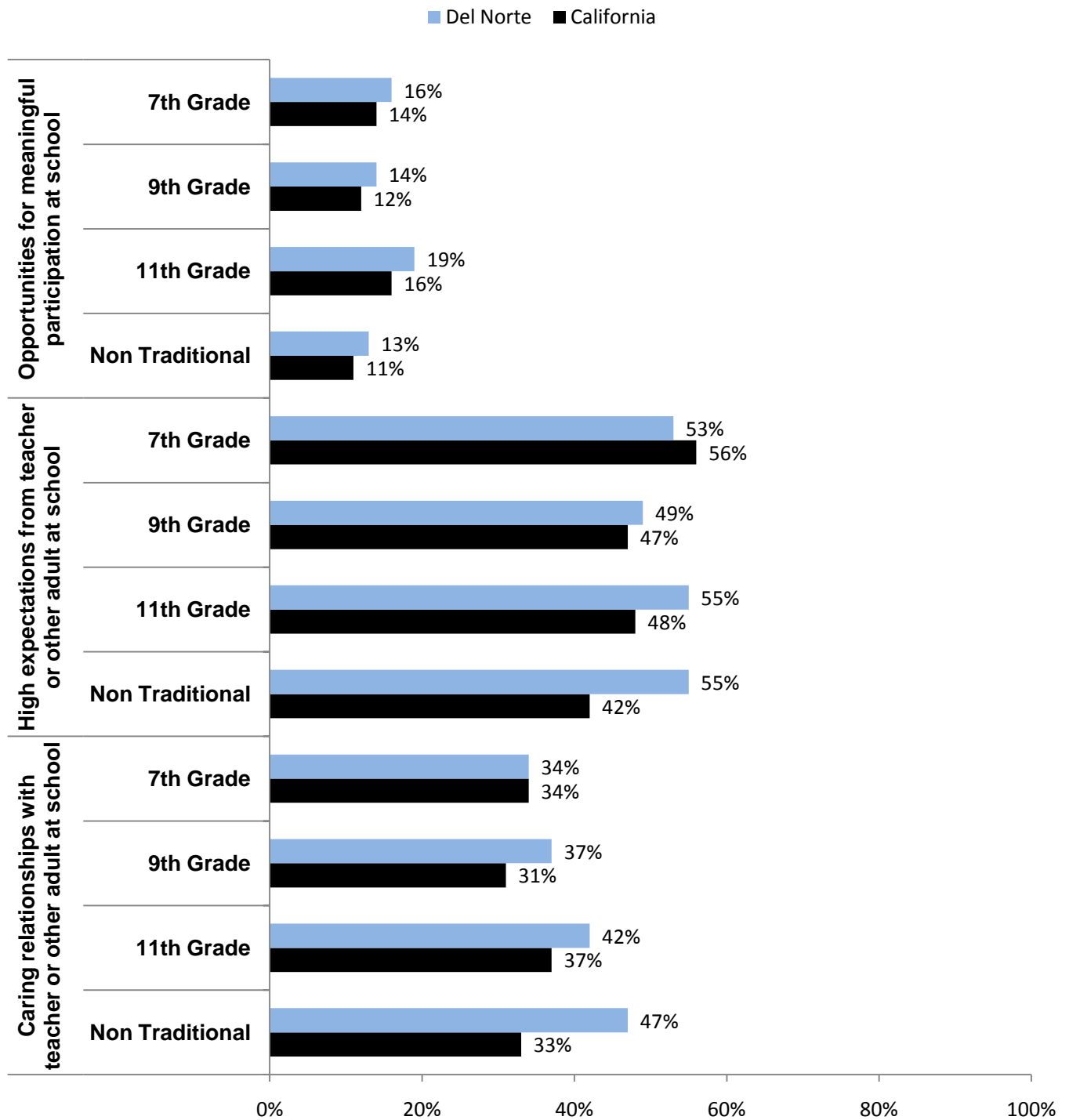
**Del Norte County School District:
School Absence by Grade, 2009-2010**



Data Source: Del Norte County School District. Analysis conducted under the direction of Hedy Chang, Director, Attendance Works.

Notes: Absences include both excused and unexcused absences. This graph includes the following schools: Bess Maxwell, Joe Hamilton, Margaret Keating, Mary Peacock, Mountain, Pine Grove, Redwood, Smith River, Crescent Elk, and Del Norte High School.

51. School Protective Factors: Percentage of Students Scoring High



Data Source: California Healthy Kids Survey, 2007-09 County Results: Main Report and Statewide Results: Main Report. San Francisco: WestEd Health and Human Development Program for the California Department of Education.

<http://www.wested.org/chks>

Notes: Non-Traditional schools include continuation, community day and alternative schools. Charter schools are included with the Traditional schools.

Workforce/Economic Development & Family Economic Success

Poverty and low socioeconomic status (often defined by income level, employment status, and highest level of education) have increasingly been shown to be associated with poor health. It has been suggested that the relationship between poverty and health is on a gradient; that is, people living at or below the poverty level are suffering from the poorest health, and as one's socioeconomic status (SES) improves their health also improves.¹ Poverty has been associated with a variety of adverse health outcomes including, but not limited to, heart disease, occupation related health ailments, disability, and psychological distress.²⁻⁵ Living in poverty has also been associated with increased risk for dental disease.⁶

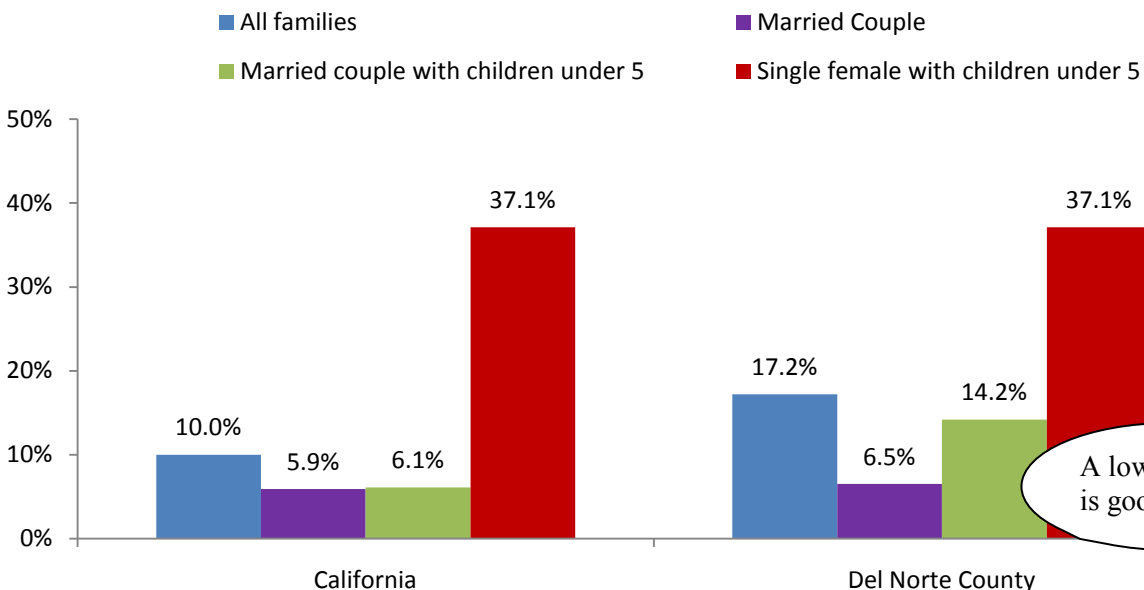
Children tend to be at higher risk for poverty-related poor health outcomes than adults, with preschool and early school age children experiencing the highest risk.⁷ Comprehensive reviews of the effects of poverty on the health and development of children provide evidence for a relationship between poverty and low birth weight, increased neonatal and postnatal mortality rates, higher risk of accidental injury, physical abuse or neglect, increased risk for asthma, lower cognitive development, more behavioral problems, and elevated blood lead levels.^{7,8}

In Del Norte County:

- **Poverty rates are higher than in California** as a whole and are **highest among single women with young children**. From 2000 to 2007-09 poverty rates have remained fairly stable overall, except for a slight increase in Del Norte among children under age 18.
- The proportion of jobs paying a wage sufficient for meeting minimal basic needs is known as the Self-Sufficiency Standard. For single adults with children, jobs paying wages above the Self-Sufficiency Standard are limited.
- **Unemployment rates continue to rise** and are the higher in Del Norte than California.
- The percent of renters paying more than 30% of their household income has **increased**.

52. Percent of Population in Poverty

52a. Percent of Population in Poverty- by Family Type, 2007-2009



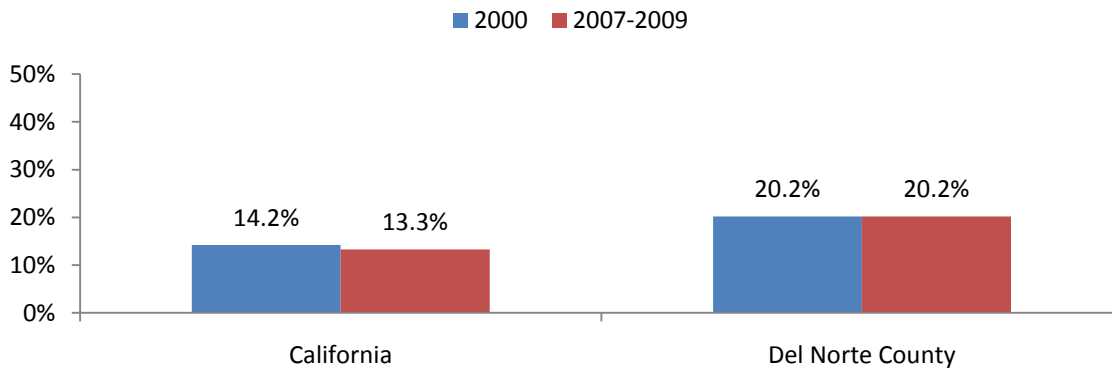
Data Source: U.S. Census, American Community Survey http://factfinder.census.gov/home/saff/main.html?_lang=en

Notes: Estimates for 2007-2009 are from the American Community Survey and represent a 3 year average.

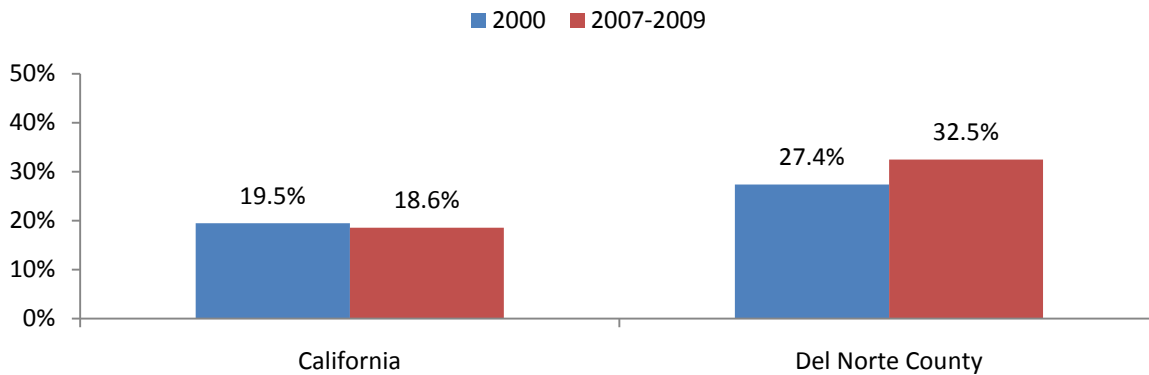
The margin of error for single females with children under 5 is large (+/- 41.2) and thus can vary significantly from year to year.

52b. Percent of Population in Poverty (Total, Under 18, Under 5)

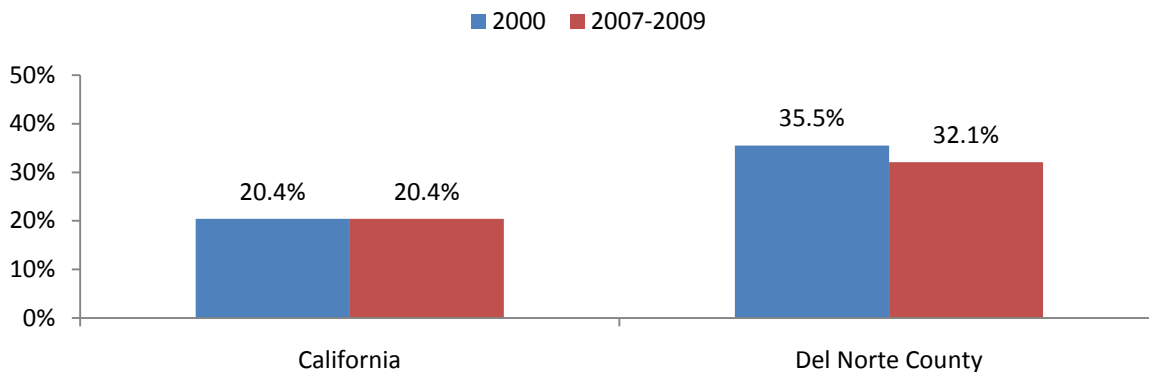
Percent of Total Population in Poverty



Percent of Children Under Age 18 in Poverty



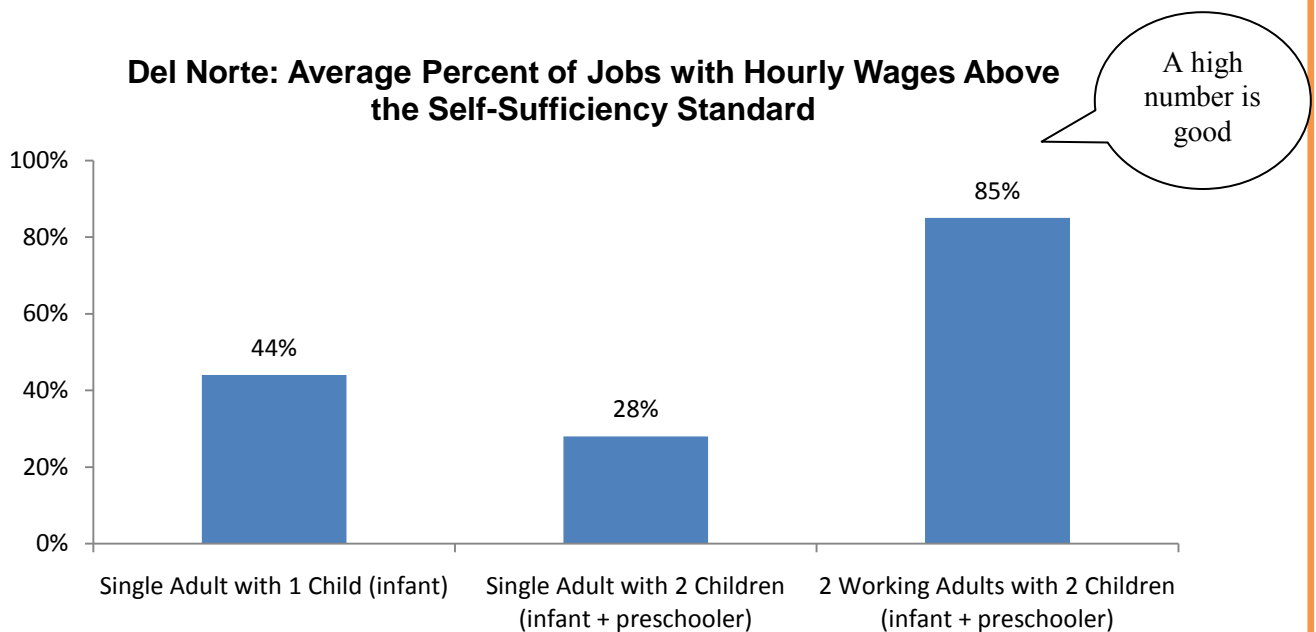
Percent of children Under Age 5 in Poverty



Data Source: U.S. Census http://factfinder.census.gov/home/saff/main.html?_lang=en

Notes: Poverty estimates for 2000 are from the Decennial Census. Estimates for 2007-2009 are from the American Community Survey and represent a 3 year average.

53. Proportion of Jobs Paying a Wage above the Self-Sufficiency Standard



Del Norte County: Hourly Wage Needed for Self-Sufficiency by Household Type

	Household 1: Single Adult with 1 Child (infant)	Household 2: Single Adult with 2 Children (infant + preschooler)	Household 3: 2 Adults, both working with 2 children (infant + preschooler)
Self-Sufficiency Hourly Wage	\$16.00	\$21.02	\$12.26 each
Percentage of all jobs in Del Norte paying this wage	44%	28%	85%

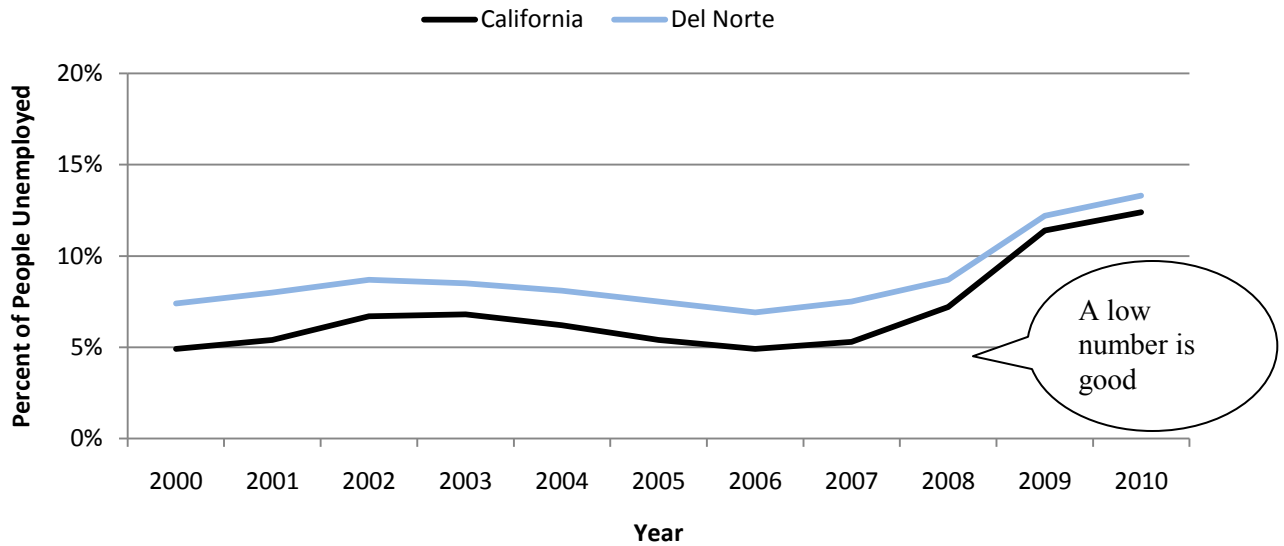
Data Sources: California Department of Labor <http://www.labormarketinfo.edd.ca.gov>.

Insight Center for Community Economic Development <http://www.insightcced.org/index.php?page=ca-sss>

Notes: The Self-Sufficiency Standard (SSS) measures how much income is needed for a family of a certain composition living in a particular county to adequately meet its minimal basic needs.

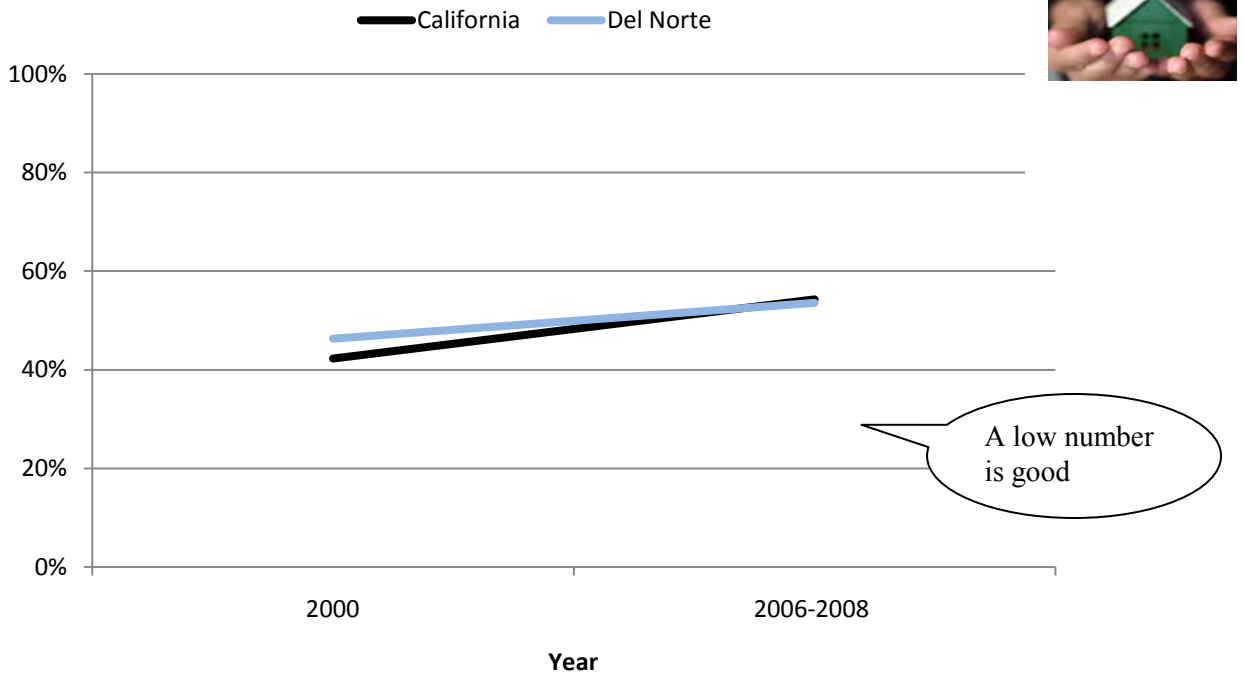
Calculations of average percent of all jobs with hourly wage above the SSS used survey data from the 2007 Occupational Employment Statistics (OES) survey with wages updated to the first quarter of 2008. The SSS for 2008 was used.

54. Unemployment Rates



Data Source: Employment Development Department
<http://www.labormarketinfo.edd.ca.gov>

55. Percent of Renters Paying 30% or More of Household Income on Rent



Data Source: U.S. Census Bureau, 2000 Census and American Community Survey 2006-2008
http://factfinder.census.gov/home/saff/main.html?_lang=en

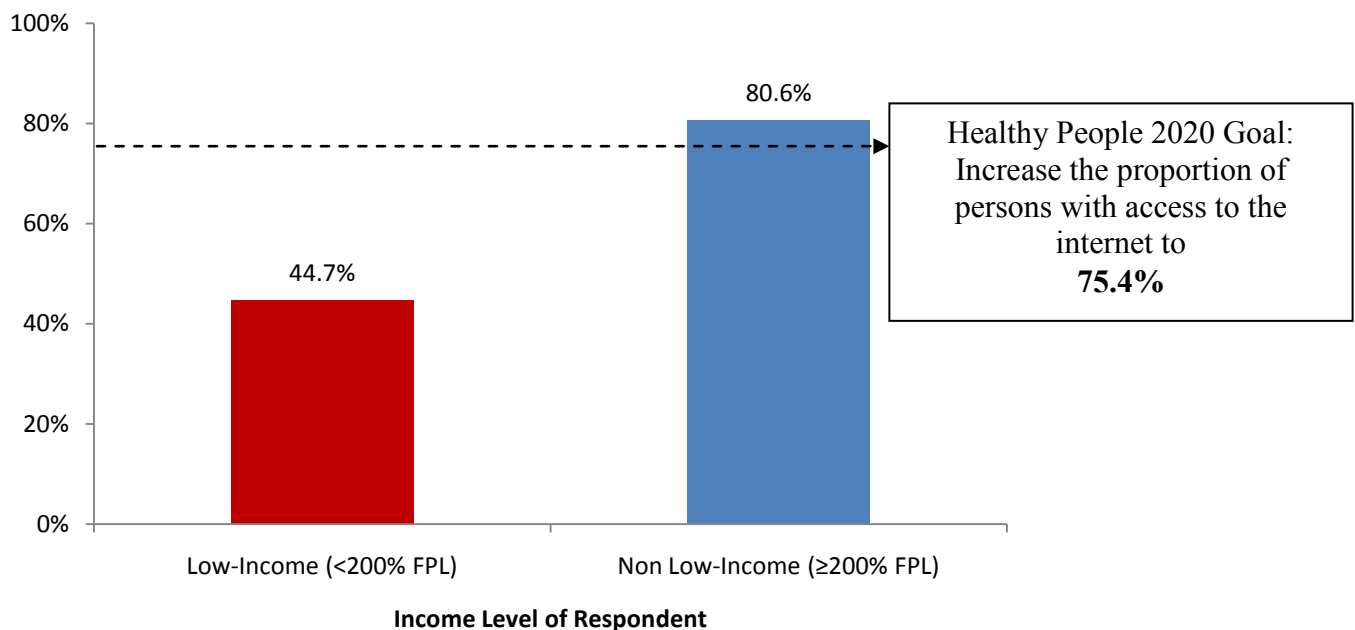
56. Percent of Households with Internet Access

Computers and the Internet are becoming increasingly important health-related tools. Studies have estimated that 40 to 80% of adults in the United States use the Internet to obtain advice or information about health, health care, and medical insurance.^{1,2} The Internet can be an important tool for rural people by providing access to health information, connecting to others with similar health problems, and sharing strategies for self-management of chronic disease.³ The Internet has been shown to be an effective tool in improving knowledge, attitudes and symptoms of depression, helping people quit smoking, increasing physical activity, improving diet, lowering cholesterol levels, improving outcomes for prevention and management of diabetes, osteoarthritis and other conditions as well as providing support for women with breast cancer and patients with AIDS.^{4,5} Broadband Internet access at home also has the potential to improve health care delivery by connecting patients to their providers and allowing for exchange of information such as blood pressure and blood sugar measurements that can be transmitted electronically, providing chronic disease management that may otherwise be difficult for some due to transportation problems.

In Del Norte County:

- **Less than half of the low-income homes have internet access**, which is significantly lower than the non low-income homes (80.6%).

Del Norte County: Percent of Households with Internet Access, 2006



Data Source: Rural Health Information Survey, 2006, California Center for Rural Policy

<http://www.humboldt.edu/ccrp/rural-health-information-survey>

Notes: Respondents were asked if they had internet access in their home, but did not differentiate between broadband or dial-up.

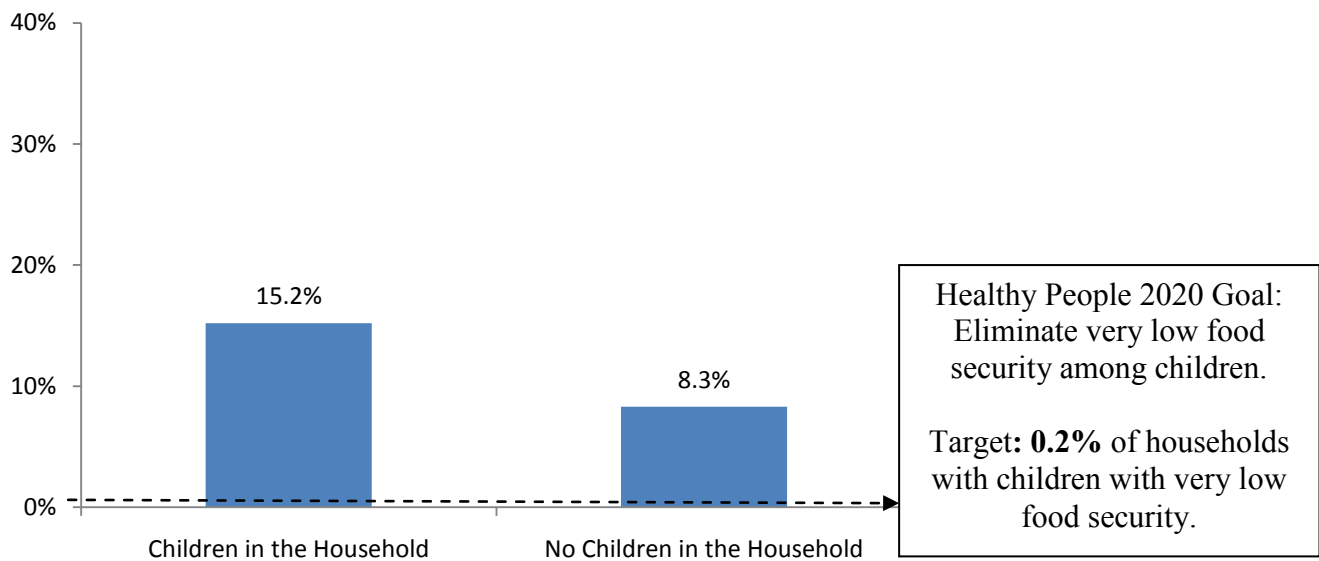
Food Security

Food security refers to access by all people at all times to enough food for an active, healthy life. If an individual or household has limited or uncertain access to adequate food they are considered to be food insecure. Very low food security is a measure of severe food insecurity resulting in reduced food intake, disrupted eating patterns or hunger.¹ A consistent relationship between food insecurity and poor health status has been demonstrated across a wide range of literature. Numerous studies have shown that individuals living in food insecure households are more likely to report poor physical and mental health than those living in food secure households.² Research suggests that food insecurity is related to increased risk for health problems such as overweight/obesity, diabetes, heart disease, and high blood pressure.²⁻⁵ Children appear to be particularly vulnerable to the negative effects of food insecurity. Children living in food insecure households tend to have poor cognitive, academic and psychosocial outcomes.⁶ Food insecure children are more likely to have “fair or poor” health and are more likely to require hospitalization early in life compared to food-secure children.⁷

In Del Norte County:

- **Households with children are significantly more likely to report episodes of hunger (15.2%)** compared to households without children (8.3%).
- The Program Access Index (PAI) is better than California as a whole. The PAI estimates Food Stamp Program (FSP) utilization among low-income individuals. A PAI that is close to 1.0 indicates a high percentage of those who are eligible are utilizing the program. Increasing utilization of public assistance programs among those who are eligible is an important component of increasing access to food.
- **41% of students who are eligible for free/reduced price lunch are not participating in the program, which is worse than California as a whole.**

57. Percent of Households with Hunger (Very Low Food Security), Del Norte County, 2006

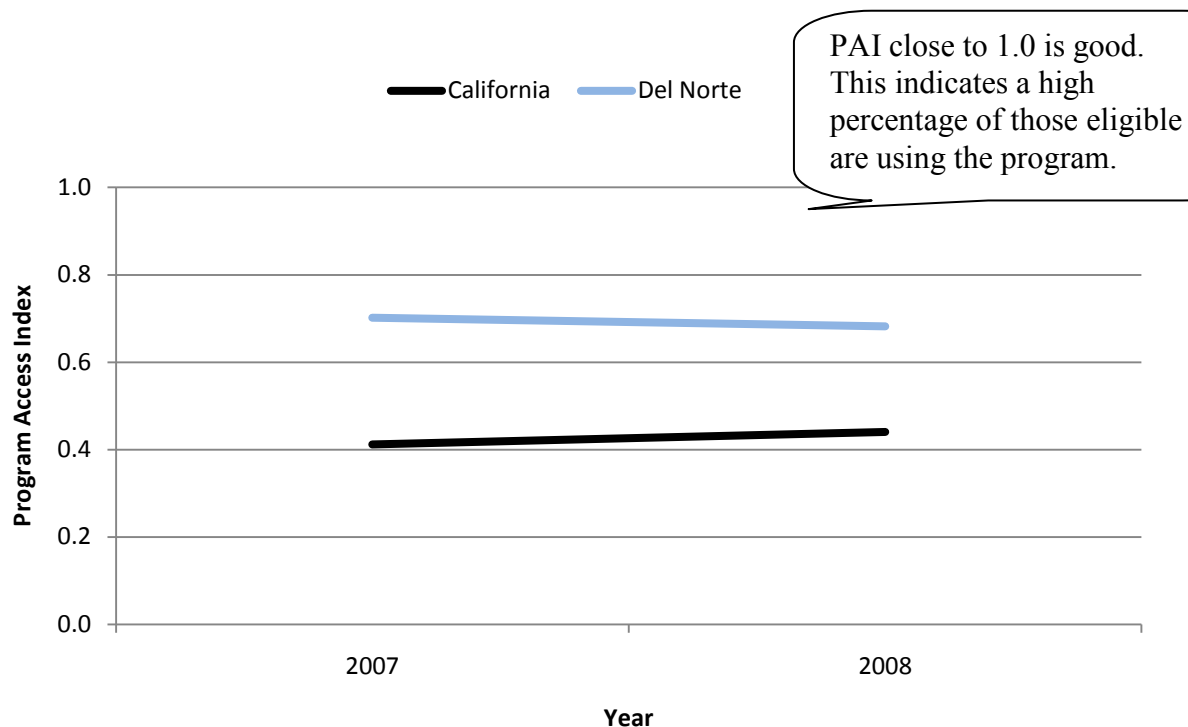


Data Source: Rural Health Information Survey, 2006, California Center for Rural Policy

<http://www.humboldt.edu/ccrp/rural-health-information-survey>

Notes: This analysis was for the question, “In the last 12 months were you or people living in your household ever hungry because you couldn’t afford enough food?” Analysis was restricted to respondents who answered yes or no to the question and provided information on children living in the household.

58. Food Stamp Program Access Index (PAI)*



Del Norte County: Eligibility and Participation in Food Stamp Program, 2008

# Income Eligible Individuals	# Income Eligible Non-Participants	County Rank (1=best; 58= worst)	Loss of Federal \$ due to Underutilization
6,022	1,912	6	\$4,244,399

Data Source: California Food Policy Advocates <http://www.cfpa.net/2010CountyProfiles/Main.html>

Notes:

*The Program Access Index (PAI) estimates Food Stamp Program (FSP) utilization among low-income individuals.

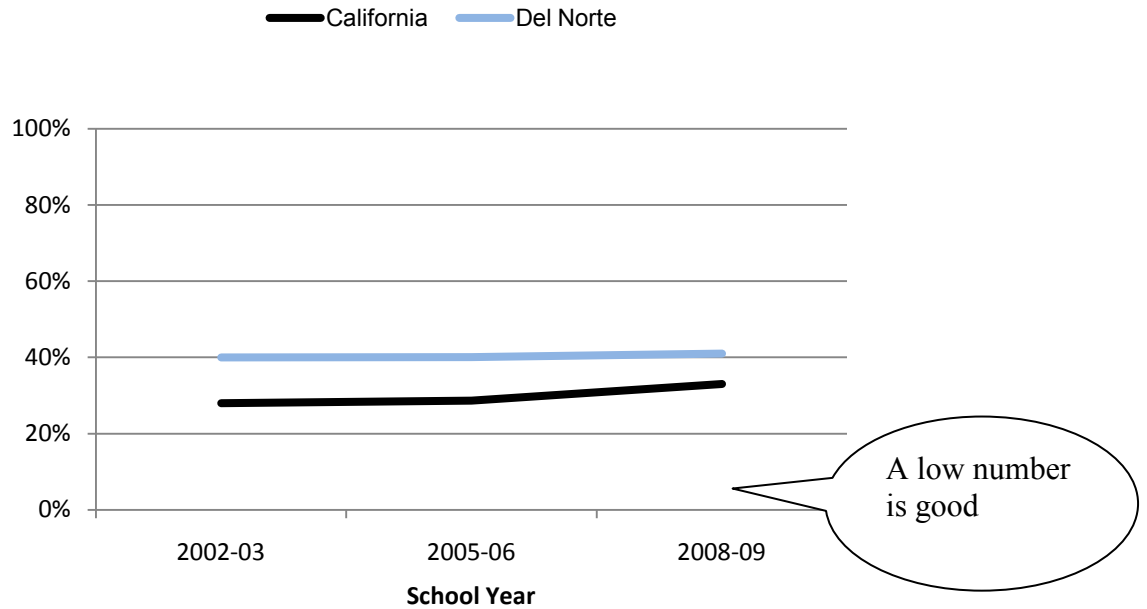
PAI= (FSP Participants- Emergency Food Stamp recipients)/ [(individuals with income <125% Federal Poverty Guidelines)- (Food Distribution Program on Indian Reservations participants)-(SSI recipients)]

The USDA produces annual state-level PAI as well as food stamp program participation rates. The participation rates involve multiple criteria, whereas the PAI involves 3 criteria.

The PAI produced by the California Food Policy Advocates is a county-level indicator of food stamp utilization and administration and is comparable between counties and between counties and the state.

According to the USDA, every federal dollar spent on FSP expenditures generates \$1.84 in economic activity by “shifting cash income previously spent on food to nonfood spending.” California Food Policy Advocates have used this to estimate additional economic activity if there were full participation in food stamp programs.

59. Percent of Students Eligible for Free/Reduced Price Lunch, but *Not* Participating in the Program



Del Norte County: Eligibility and Participation in National School Lunch Program, 2008-09

# Students Eligible but Not Participating	% Eligible but Not Participating	County Rank (1=best; 58= worst)	Loss of Federal \$ due to Underutilization
954	41%	55	\$434,477

Data Source: California Food Policy Advocates
<http://www.cfpa.net/2010CountyProfiles/Main.html>

Notes: The data includes students in grades K-12. Data not available for 2007-08 school year.

Physical Environment

Housing & Household Conditions
Residential Electricity Consumption

Vehicle Miles Traveled
Acres of Land in Farms

Housing & Household Conditions

There is increasing evidence showing that the quality of our indoor environments affects health and well-being.¹ Housing is an important determinant of health and poor housing conditions are associated with numerous health conditions, including asthma, respiratory infections, lead poisoning, injuries and poor mental health.² The type of housing unit, the age of the house, and type of heating used can all impact the health of the occupants. Exposure to substandard housing tends to disproportionately affect people of color and people with low income.²

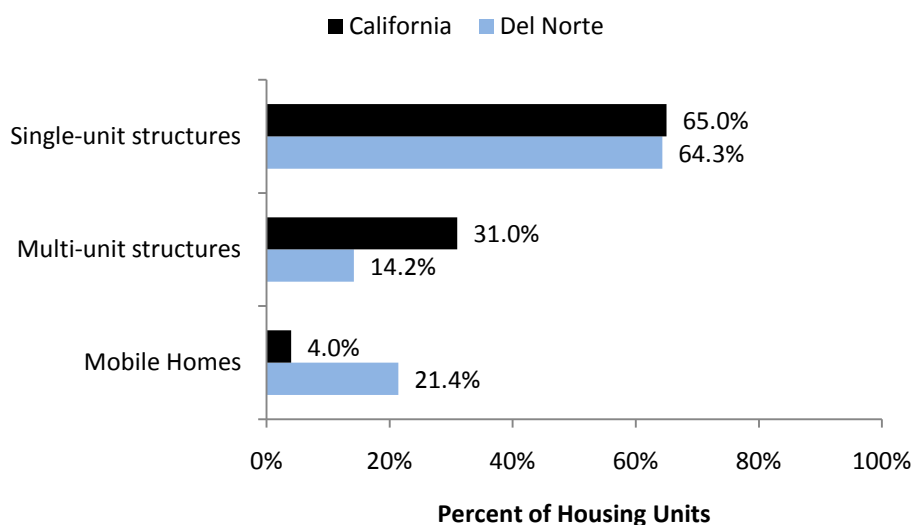
Children are particularly susceptible to exposures within the home. Research has shown that children living in lower-quality housing have greater symptoms of psychological distress.³ Children who live in older homes are at risk for exposure to lead based paint, either through eating paint chips or through ingesting lead-contaminated dust or soil. Lead in new residential paint was banned in the U.S. in 1978, so homes built prior to this are likely to contain lead-based paint.⁴ Childhood lead poisoning can cause significant problems with health and development, including a lowered IQ.⁴

Damp, cold, and moldy housing is associated with health problems such as asthma, wheezing, cough and irritation of the eyes, nose and throat.^{5,6} Research has also shown a link between dampness and mold and depression.⁷ Indoor heating with wood stoves has been shown to increase the risk of asthma and respiratory illness in children and adults.^{8,9}

In Del Norte County:

- **Over 20% of housing units are mobile homes**, which is considerably higher than California as a whole.
- **56% of the housing units were built in 1979 or earlier. Children living in these houses are at risk for lead poisoning.**
- One in five houses use wood for a heat source.
- **Mold in the home is significantly more likely for low-income families and families with children.**

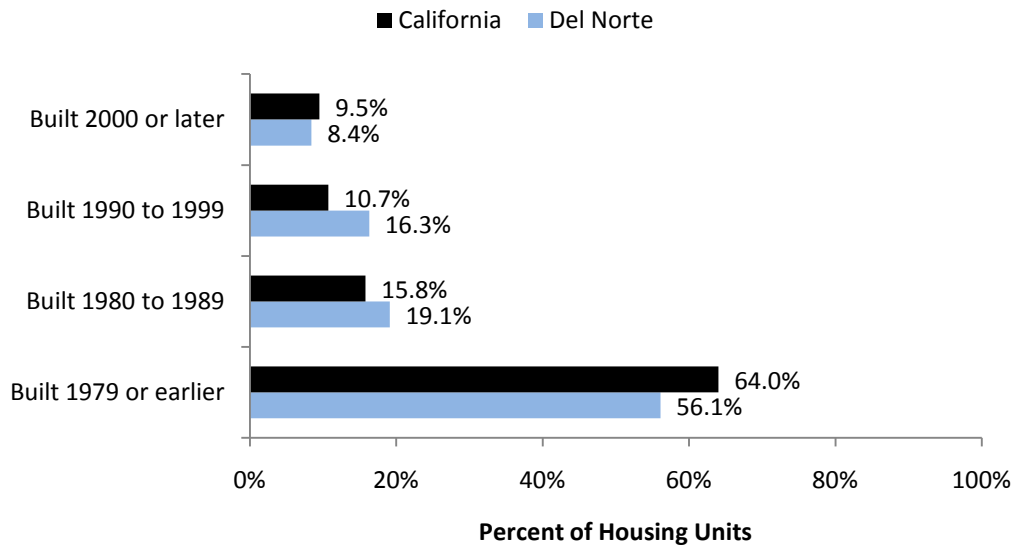
60. Types of Housing Units, 2005-2009



Data Source: U.S. Census <http://factfinder.census.gov>

Notes: Data from the U.S. Census American Community Survey and are 5-year estimates based on data collected from 2005 to 2009.

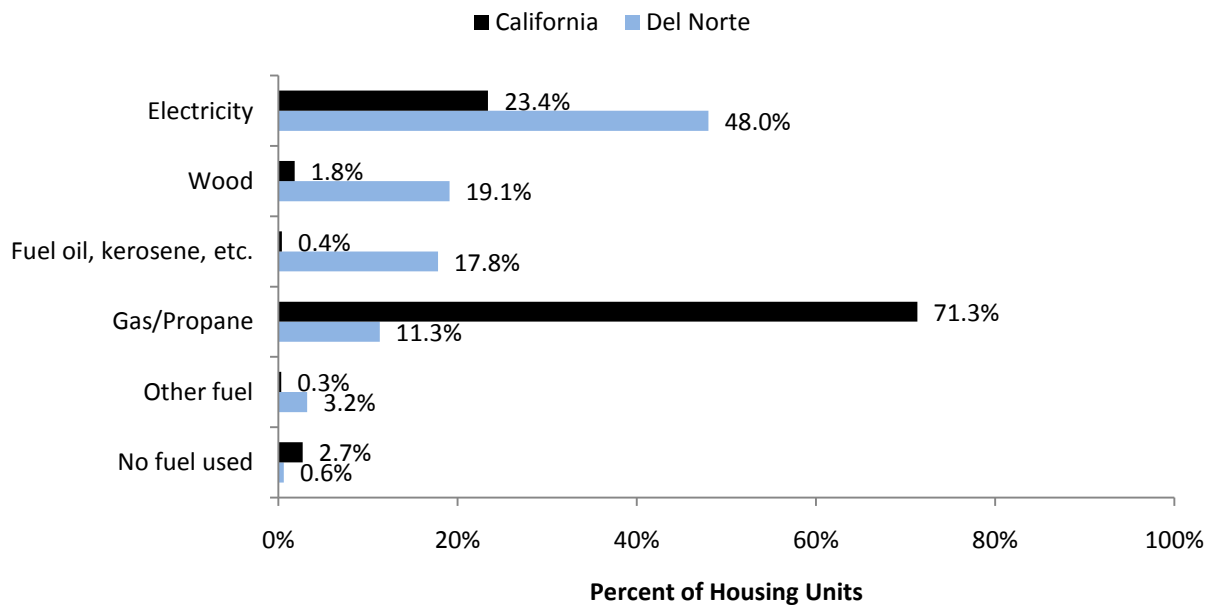
61. Age of Housing Units, 2005-2009



Data Source: U.S. Census <http://factfinder.census.gov>

Notes: Data from the U.S. Census American Community Survey and are 5-year estimates based on data collected from 2005 to 2009.

62. Heating Fuel of Housing Units, 2005-2009

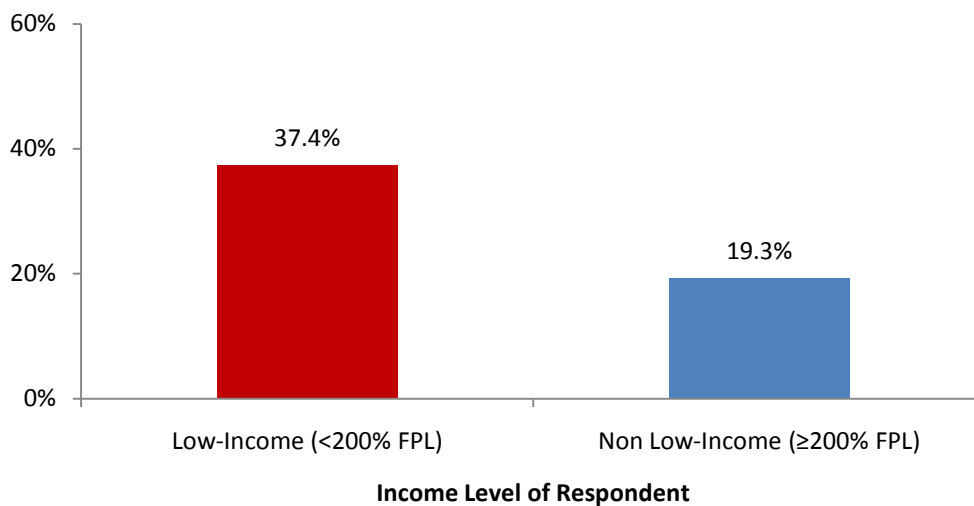


Data Source: U.S. Census <http://factfinder.census.gov>

Notes: Data from the U.S. Census American Community Survey and are 5-year estimates based on data collected from 2005 to 2009.

63. Mold in the Home

Percent of Homes with Mold by Income Level, Del Norte County, 2006

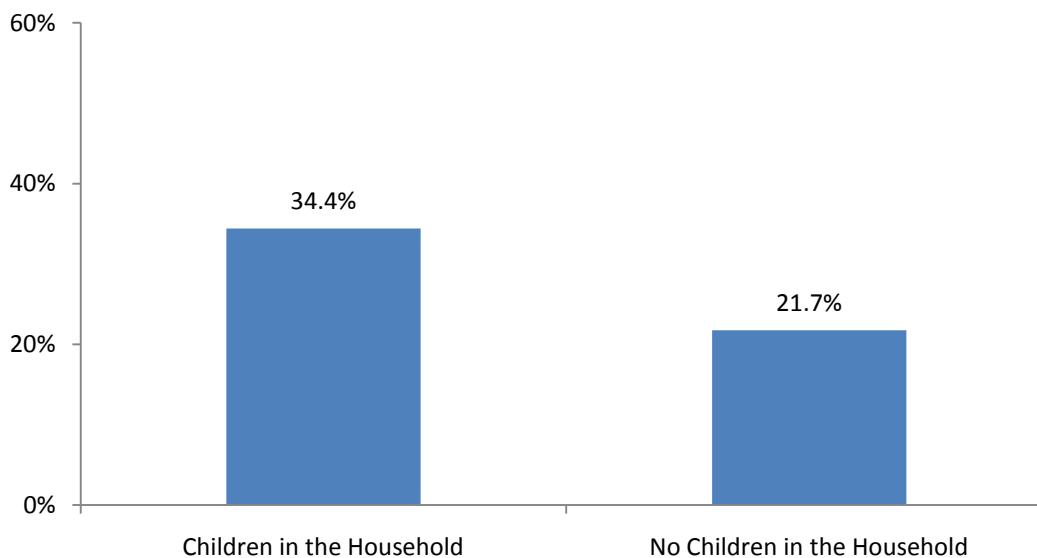


Data Source: Rural Health Information Survey, 2006, California Center for Rural Policy

<http://www.humboldt.edu/ccrp/rural-health-information-survey>

Notes: This represents the percent of respondents who reported currently having mold in their home on an area greater than the size of a dollar bill. The difference between income levels is statistically significant.

Percent of Homes with Mold by Presence of Children, Del Norte County, 2006



Data Source: Rural Health Information Survey, 2006, California Center for Rural Policy

<http://www.humboldt.edu/ccrp/rural-health-information-survey>

Notes: This represents the percent of respondents who reported currently having mold in their home on an area greater than the size of a dollar bill. The difference between households with and without children is statistically significant.

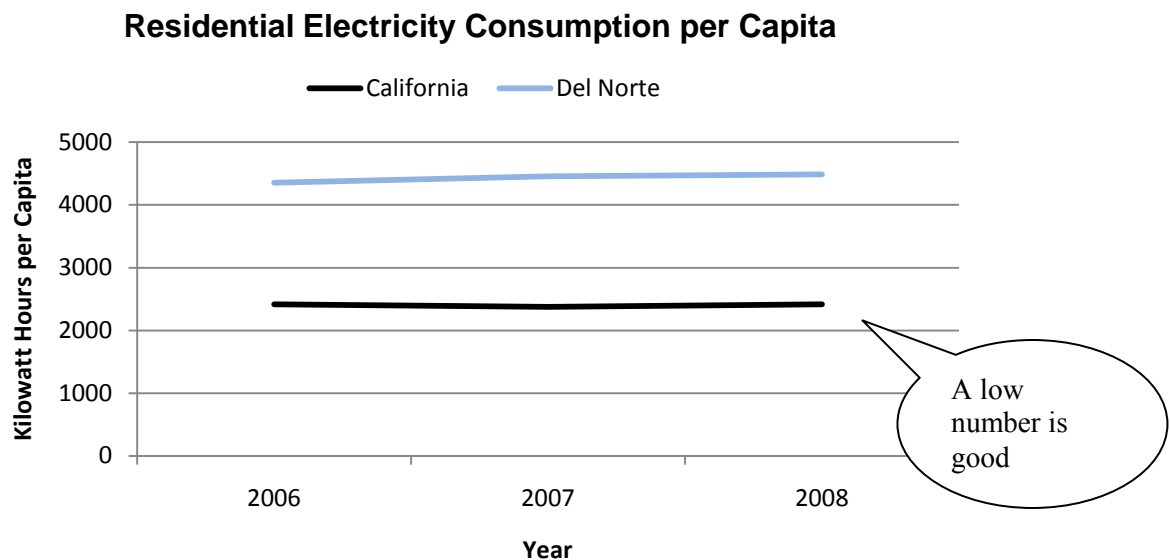
64. Residential Electricity Consumption

Global warming from the increase in greenhouse gases, toxic air pollutants and ground-level ozone can impact public health and the environment.¹⁻³ The United States is the largest emitter of greenhouse gases in the world, accounting for approximately a quarter of global CO₂ emissions.⁴ Electricity generation, which is mainly from combustion of coal, accounts for the largest portion of U.S. greenhouse gas emissions. Residential consumption of fossil fuels accounts for 20% of the CO₂ emissions, the majority of which is due to electricity consumption.⁵

Electricity produced from fossil fuels produces significant air pollution that can cause health problems such as respiratory problems, chronic bronchitis, asthma, lung cancer, cardiovascular disease, and premature deaths.¹ Trees and crops can be damaged and lakes and other bodies of water have shown to absorb some of the pollutants, causing harm to wildlife and making the water less safe for human use.^{2,3} Additionally, coal fired power plants are the largest sources of mercury emissions in the country. The mercury released into the atmosphere ends up in bodies of water where it can be transformed into methylmercury and build up in the tissue of fish. Human consumption of methylmercury can have numerous toxic effects.⁶

In Del Norte County:

- **Residential electricity consumption per capita is considerably higher than in California.** Some data has shown that residential electricity consumption in the region mirrored the trends seen in California, until shortly after the medical marijuana 215 proposition passed in 1996. In the last decade, electricity consumption has spiked at a much faster rate than the rest of California, which has been attributed to the increase in residential marijuana grow rooms.⁷



Data Sources:

The California Energy Commission <http://www.ecdms.energy.ca.gov/elecbycounty.aspx>

Population Data is from the California Department of Finance <http://www.dof.ca.gov/research/demographic/data/race-ethnic/2000-50/>

Notes: To obtain per capita residential electricity consumption the total residential kWh per county was divided by the total population per county.

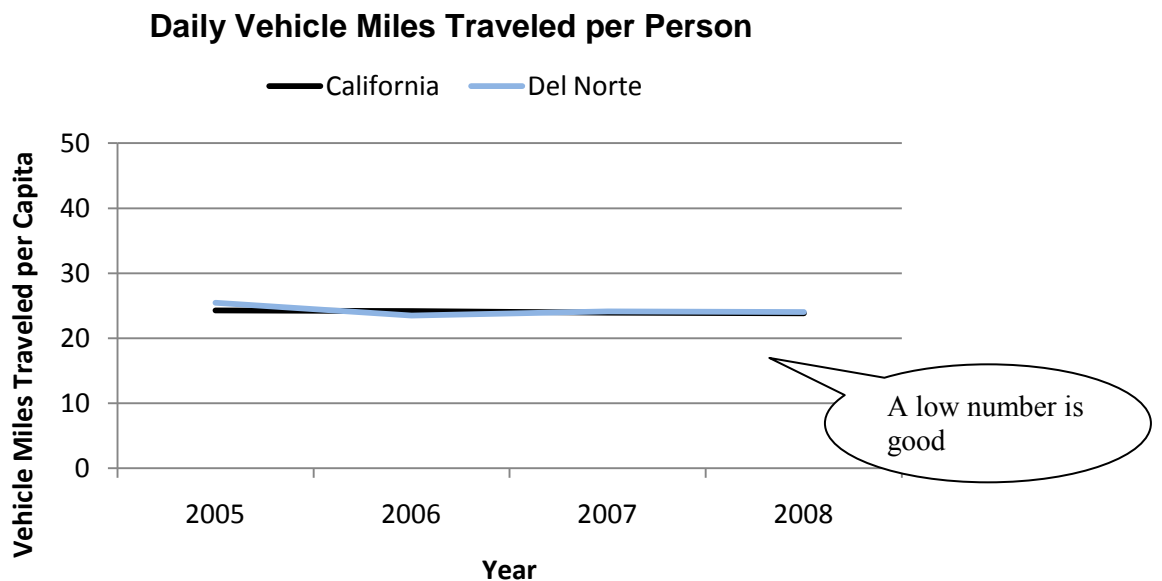
65. Vehicle Miles Traveled

Vehicle miles traveled (VMT) is an estimated measure of the average number of miles people drive each day. A high average VMT can adversely affect the health of a community through many mechanisms. Driving further and spending more time driving increases the risk of being killed or injured in a vehicle accident.¹ Increased VMT is associated with increased inactivity and obesity, which in turn increases risk of developing chronic diseases such as hypertension, heart disease, diabetes, and cancer.² One study found that each additional hour spent driving or riding in a car was associated with a 6% increase in the likelihood of being obese.³

Air pollution is increased as more vehicles populate the roadways, which can negatively affect environmental and personal health.⁴ Exposure to air pollutants can cause cardiovascular and respiratory diseases, heart attacks, changes in lung function, and in some cases premature death.⁵ In California, it has been reported that transportation contributes 50% of the greenhouse gas emissions.^{5,6} For people living in rural areas of California, their average VMT is 2.7 times higher than those living in urban areas.⁷

In Del Norte County:

- The daily vehicle miles traveled per person is about the same as California and has been stable.



Data Source: Caltrans <http://www.dot.ca.gov/hq/tsip/smb/documents/mvstaff/mvstaff08.pdf>

Population data from California Dept. of Finance <http://www.dof.ca.gov/research/demographic/data/race-ethnic/2000-50/>

Notes: Total vehicle miles traveled for each county is estimated by Caltrans using on-road fuel consumption estimates from the Board of Equalization's sales data and on-road vehicle fleet fuel economy data. Per capita daily vehicles miles traveled was calculated by dividing the daily miles by the county population.

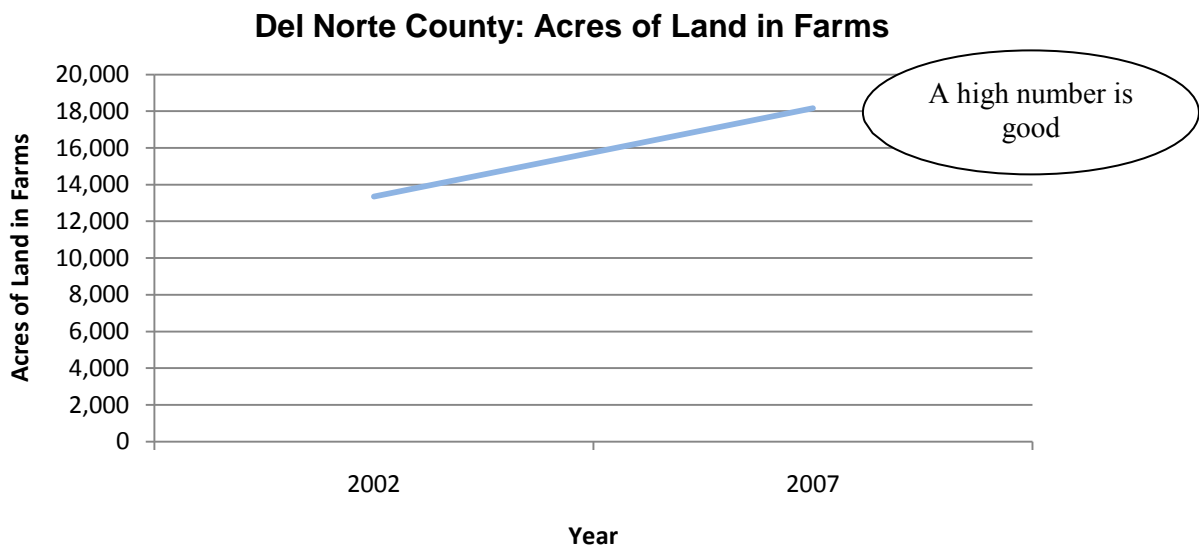
66. Acres of Land in Farms



Land use is important for community planning and community health. The amount of farmland in the United States has decreased as cities and suburban areas have grown.¹ However, there has been a resurgence of interest in locally produced food items. The presence of farms can help indicate the sustainability and vitality of a community due to the impact on local economies.^{2,3} Because the environmental impact of food production is so widespread (from the chemicals used to grow crops, energy used to refrigerate and keep food fresh, and the vehicles used to transport food around the world) locally produced foods are appealing due to the reduction of such effects.⁴ Monitoring the amount of land used for farming may help communities assess their capacity to produce food locally. A decrease in farm land may reflect an increase in development.

In Del Norte County:

- The acres of land in farms has increased from 2002 to 2007.



Del Norte County	2002	2007
Acres of land in farms	13,356	18,168
Acres of land in county	644,998.4	644,998.4
Percent of land used for farming	2.1%	2.8%

Data Source: U.S. Department of Agriculture

http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/index.asp

Notes: The USDA conducts the Census of Agriculture every five years by a mail survey to farmers and ranchers. Land in farms consists primarily of agricultural land used for crops, pasture, or grazing. It also includes woodland (natural or planted woodlots or timber tracts, cutover and deforested land with young growth which has or will have value for wood products, and woodland pastured).

References

The references listed here are for the literature reviews presented in each section. The data sources for the indicators are referenced with each indicator within the report.

The Purpose and Process

1. Healthy People 2020 <http://www.healthypeople.gov/2020/topicsobjectives2020/default.aspx>

The Place

1. U.S. Census, 2000. http://factfinder.census.gov/home/saff/main.html?_lang=en. Accessed July, 2010.
2. State of California, Department of Finance, E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change — January 1, 2009 and 2010. Sacramento, California, May 2010.
3. Office of Statewide Health Planning and Development. <http://www.oshpd.ca.gov/>. Accessed August, 2010.

Premature Death- Years of Potential Life Lost

1. Center for Health Statistics. <http://www.cdph.ca.gov/programs/ohir/Pages/OHIRreports.aspx#p>. Accessed July, 2010.

Depression, Suicide Attempts and Deaths

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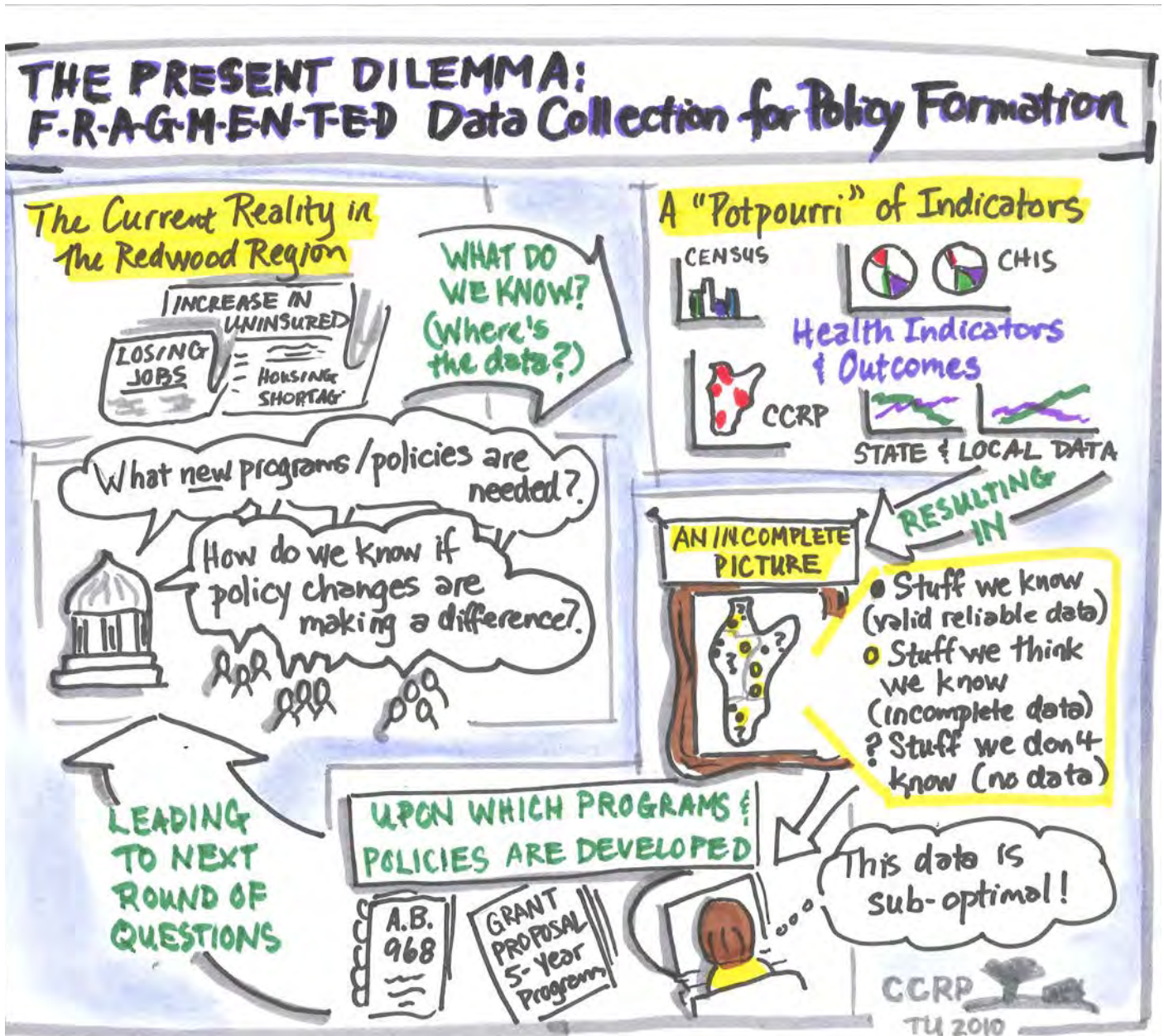
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Appendix A

Graphic Representation of Using Community Health Indicators as a Strategy towards Effective Policy Formation:
 The Present Dilemma, Map for a Healthy Redwood Region, and Vision for the Future
 by Terry Uyeki



MAP FOR A HEALTHY REDWOOD REGION



Using Policy Scanning Lens for Strategic Data Collection

1. Vision of Community Health of Region

2. Prioritize issues/policies for which data is needed

3. Determine key Vital Signs indicators

Measured & Communicated "Data Lens"

B1 - ATOD use
B2 - Education
B3 - Community Safety
B4 - Family & Social Support

The "Street View"

B1: Health Behaviors (TV, Kool, Beer)

B2: Access to Quality Care (DOC IS IN CLINIC in-VID, BRIDGE OUT, CLINIC 50 mi)

B3: Family & Community Economic Well-Being (MEM'S BAR CLOSED, MAIN ST., FOR SALE)

B4: The Physical Environment (METH LAB, Can't ride bike to school...)

The Marriage between RESEARCH & POLICY



VISION FOR THE FUTURE: Strategic Data Collection to Address Targeted Community Health Issues

METH USE
DOWN 50%
ADULT HEALTH
STATUS HIGHEST
SINCE 2010

Envisioning The Health of The Region



Use Policy Scan
Binoculars
to Ask:



What are the
important
policy questions
to have answers to?

What
kinds of data are
critical to collect
systematically?

- * Facilitates decision-making
- * Provides knowledge
- * Helps persuade/advocate

EVIDENCE

Improving
community
health!

Upon which
programs &
policies
are
developed



The data
is just
what I
need!

The Picture Is Complete!



TOP 20
Vital Signs

1. ---	11. ---
2. ---	12. ---
3. ---	13. ---

Relevant Trend Data

A More Meaningful
Data Lens

CCRP
TU 2010

Appendix B



Wish List Indicators

The indicators listed here have been identified as potentially important indicators for measuring community health, but they are currently lacking a good data source or data is not readily available.

This list was compiled from two separate processes: (1) The Building Healthy Communities planning processes that took place in Del Norte in 2010, and (2) The Rural Community Vital Signs process that took place in 2010 involving community members from Del Norte, Humboldt, Trinity, and Mendocino counties (indicated in blue font).

The indicators are organized into the outcomes that are the initial focus of the Building Healthy Communities in Del Norte and Adjacent Tribal Lands. Many of the indicators can fit with more than one outcome, but they are arranged with the outcome that they are most closely related to.

Outcome 3:

Our children grow up to be healthy, productive and successful adults in a community that promotes their well-being – through prevention, education and positive direction from their earliest days.

- Average length of time to get an appointment with a primary care provider.
- Number of individuals without insurance accessing care through the Emergency Dept.
- Number of visits to urgent/emergency care for all causes
- Percent of pregnant women that receive dental care during pregnancy.
- The percent of women who breastfeed for at least 6 months.
- True rate of postpartum depression.
- Number of parents completing prenatal classes.
- How many people do well baby checks? Beyond the 2 week mark?
- Percent of adults/teens who have participated in a health education prevention class in the past 2 years.
- Number of health classes offered
- Percent of adults with access to culturally appropriate health services.
- Number of health care practices that are linguistically competent.
- The level of health literacy in the community.
- Number of clinics assessing health literacy of their clients.
- More information about health professionals: average retention as a measure of turnover; rate of pay vs. cost of living, etc.
- Proximity of services per neighborhood (miles to churches, schools, garage halls)
- The stages at which cancer diagnoses are made.
- Body Mass Index for all licensed drivers.
- Height and weight of entering preschool kids.
- BMI of children.
- Percent of healthy meals served (where?)
- Something to measure percent of kids that are kinder ready.

- Child care slots available for parents in the work-force (both licensed and unlicensed child care).
- How many kids in which kind of childcare facility.
- Percent of schools that offer before/after school child care.
- How many kids 0-5 living in each community have a playgroup
- School absences (preschool, elementary, HS), attendance rates?
- Percent of students (including those who drop out) who attend any college or post graduate training.
- Amount of money spent per student per school district.
- Electives being offered at public schools.
- Percent of students paired with mentors.
- Percent of children who say their life was impacted by a mentor
- Number of students in high school doing community service.
- Number of students visiting school counselor.

Outcome 5:

Our children grow up to be safe and secure in a community that values their lives and teaches and demonstrates respect for one another.

Children and families are safe from violence in their homes and neighborhoods.

- Number of adult/child protective service referrals from X to Y per year.
- Number of CPS calls by neighborhood (*can get allegations by Zip Code*).
- Numbers of referrals in neglect in each neighborhood.
- Number of hospital visits due to abuse and neglect.
- Schools reporting abuse.
- The percent of people experiencing domestic violence.
- Percent of teens & adults who feel safe in their neighborhood by zip code.
- Availability of behavioral health prevention services for suicide and domestic violence.
- Number of families attending community events.
- Percent of people participating in cultural activities that increase their sense of well-being.
- Number of organizations providing cultural/spiritual services in the community.
- Percent of children who can identify at least one healthy adult in their life for emotional support.
- Percent of teens and adults with social/emotional support (someone who loves them, makes them feel wanted and understands their problems).
- The percent of adults/teens that use illicit drugs and prescription pain medication for non-medical reasons.
- Meth or other drug related ER/Urgent care visits.
- Annual number of alcohol-related hospitalizations.

Outcome 7:

Neighborhood and school environments support improved health and healthy behaviors.

- Number of illnesses related to environmental and health hazards.
- Number, duration, and repeated instances of lice breakouts, lead poisoning, asthma.
- Number of community gathering centers and amount of people frequenting them, amount of guest visits?
- Rate of juvenile delinquency.
- Amount of vandalism acts occurring at schools.
- Number of HS students attending training or vocational school.
- Number of different sport/recreational activities at school.
- Amount of healthy items sold at schools (High schools?)
- Percent of people/families that are homeless or living in substandard housing.
- Proportion of housing available to housing need by income category.
- Single parent families living in motels due to lack of affordable housing.
- Percent of households with broadband.
- Of the kids who live within a reasonable and safe walking, biking, or skating distance to school, how many are doing it? If they are not doing it, what are the barriers? Are they physically active in other ways in their daily routines?
- Miles of bike lanes and safe pedestrian routes.
- Walkability Index that is appropriate for rural communities.
- Acres of food producing land in each county- currently being used for this purpose and potential for use.

Outcome 8:

Our community believes that health is intrinsically tied to a strong economy. Our local economy is strengthened because of our focus on locally determined strategies that reduce poverty, promote hard-work, risk-taking, creativity and enjoyment of work.

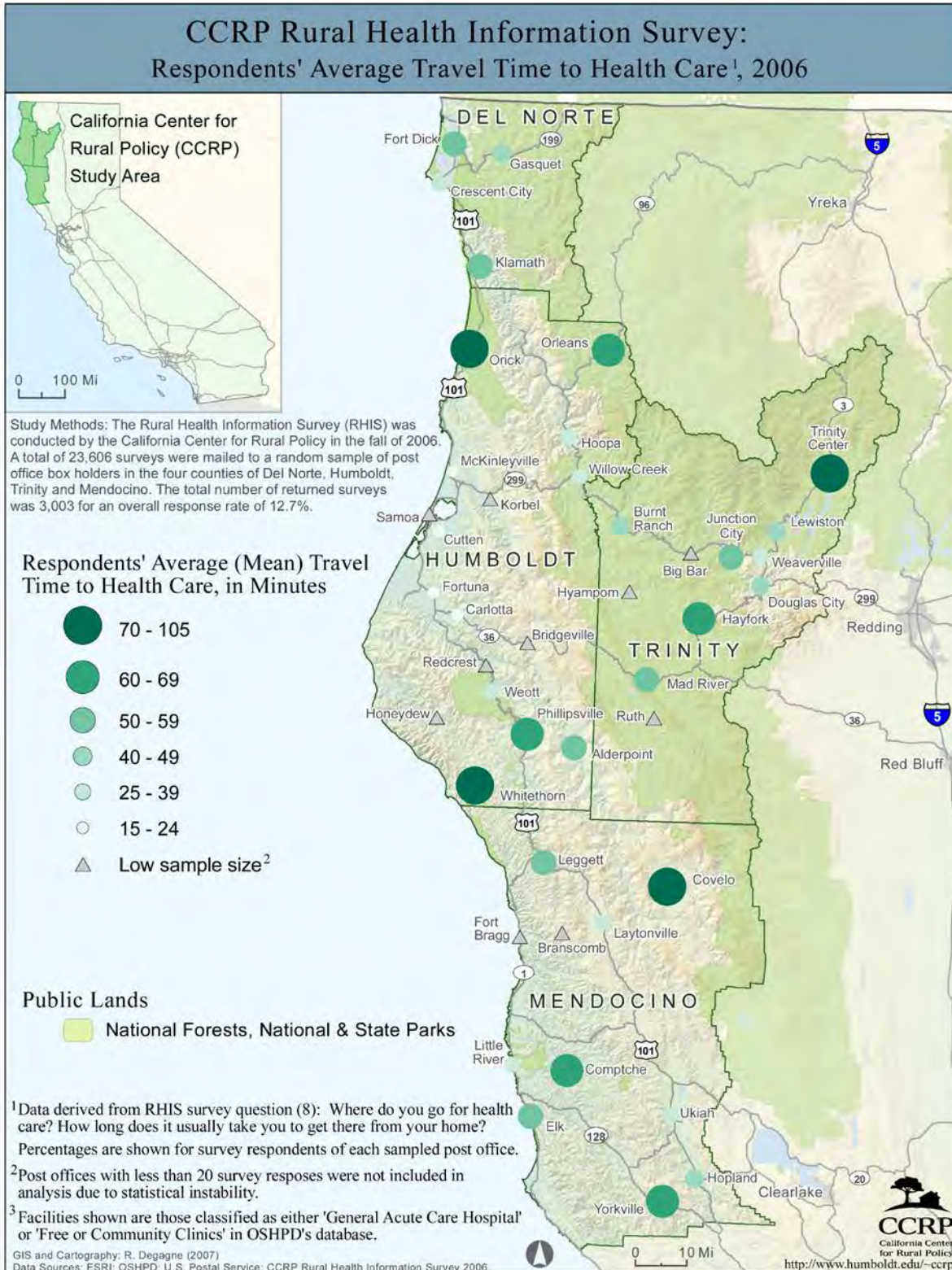
- Number of employment opportunities.
- Number of young families that are economically stable.
- Sales tax revenue (current?).
- Number of families/individuals receiving public assistance.
- Sales in local businesses (% of successful locally owned businesses).
- “True” unemployment rates that take into account the marijuana industry.
- “True” median family income that takes into account the marijuana industry.
- The health of the salmon.
- Number of returning salmon.
- Salmon allocation (length of fishing season & number of fish allowed to be caught in streams and ocean).

Notes: These are not presented in any particular order of importance.

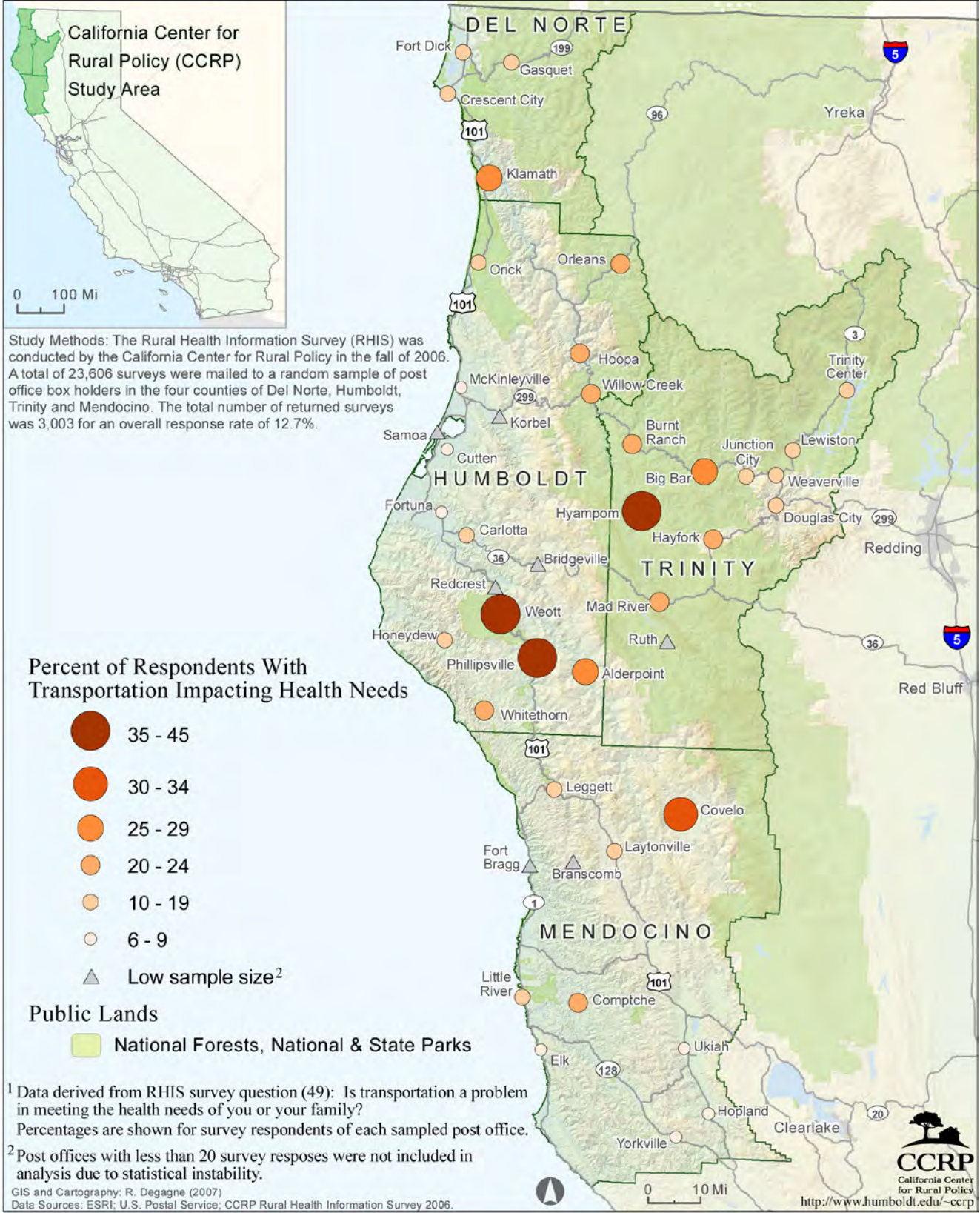
The Rural Community Vital Signs Project has additional indicators focused on seniors, which did not seem relevant to the BHC Outcomes and are not presented here.

Appendix C

GIS Maps Related to Indicators

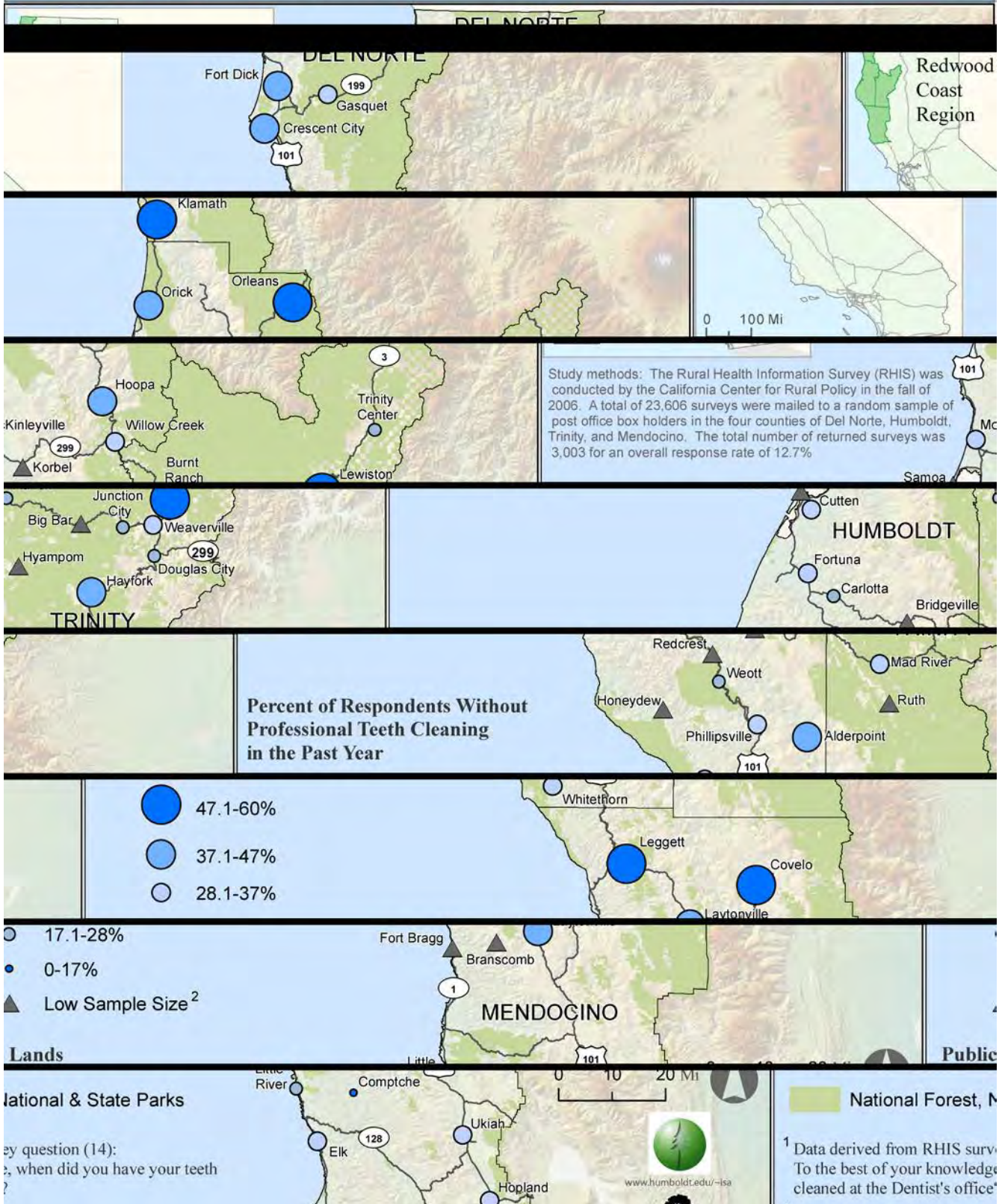


CCRP Rural Health Information Survey: Percent of Respondents With Transportation Impacting Health Needs¹, 2006

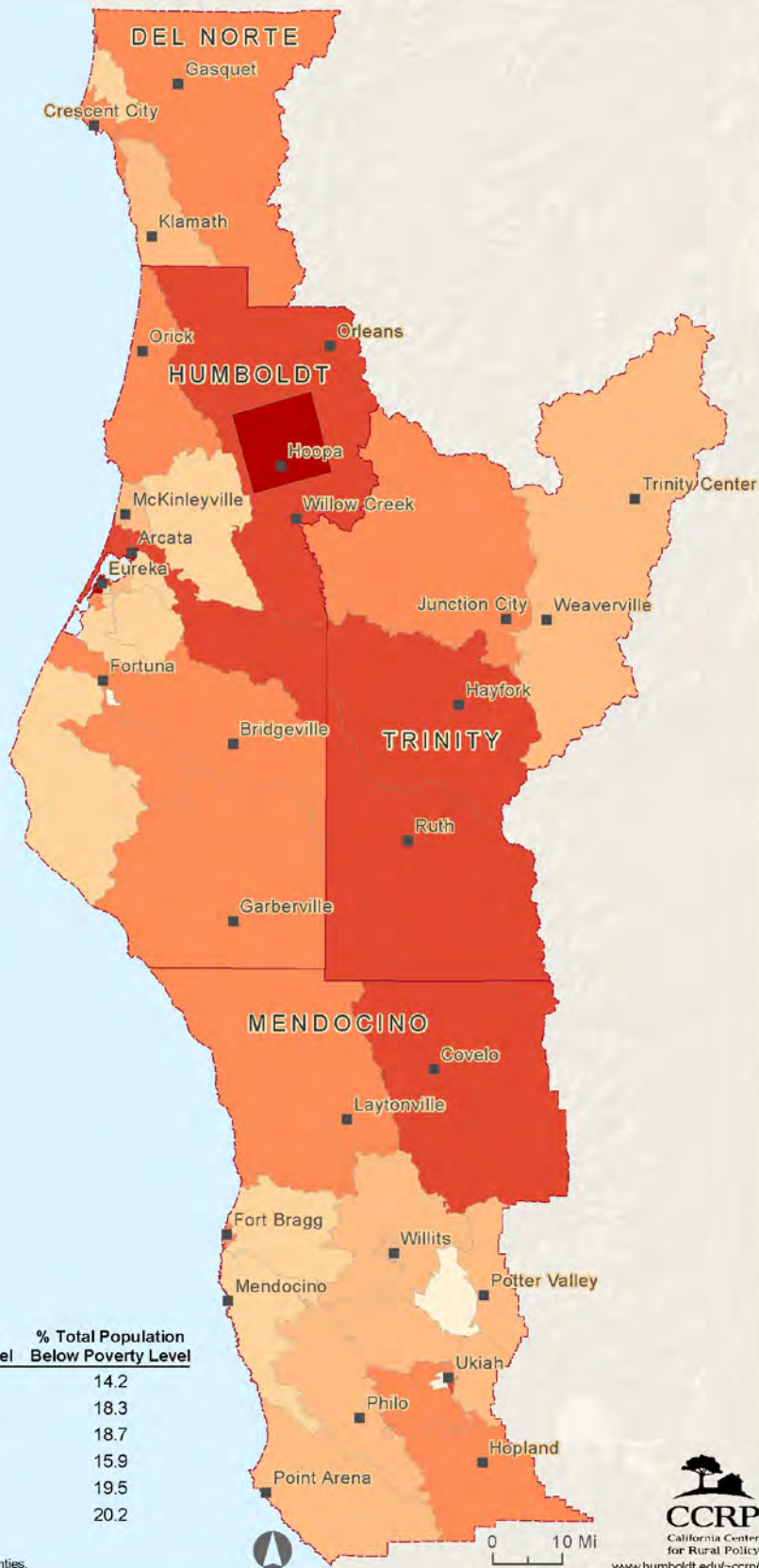


CCRP Rural Health Information Survey:

Percent of Respondents Without Professional Teeth Cleaning in Past Year ¹, 2006

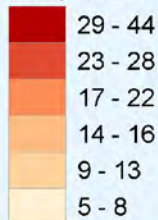


Total Population in Poverty, 2000: Redwood Coast Region



Total Population Below Poverty Level

Percent by Census Tract



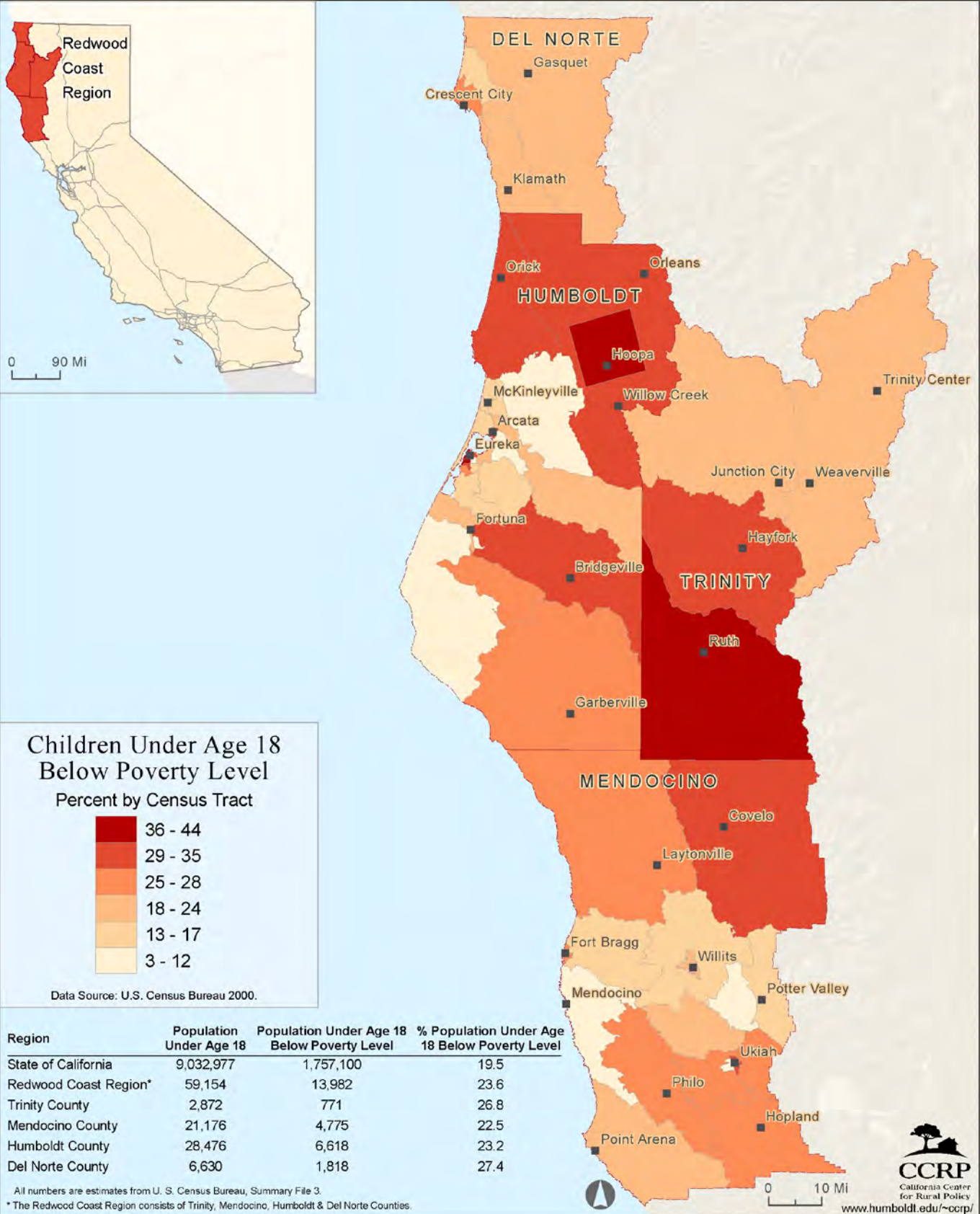
Data Source: U.S. Census Bureau 2000.

Region	Total Population	Total Population Below Poverty Level	% Total Population Below Poverty Level
State of California	33,100,044	4,706,130	14.2
Redwood Coast Region*	244,236	44,701	18.3
Trinity County	12,716	2,372	18.7
Mendocino County	84,736	13,505	15.9
Humboldt County	123,167	24,059	19.5
Del Norte County	23,626	4,765	20.2

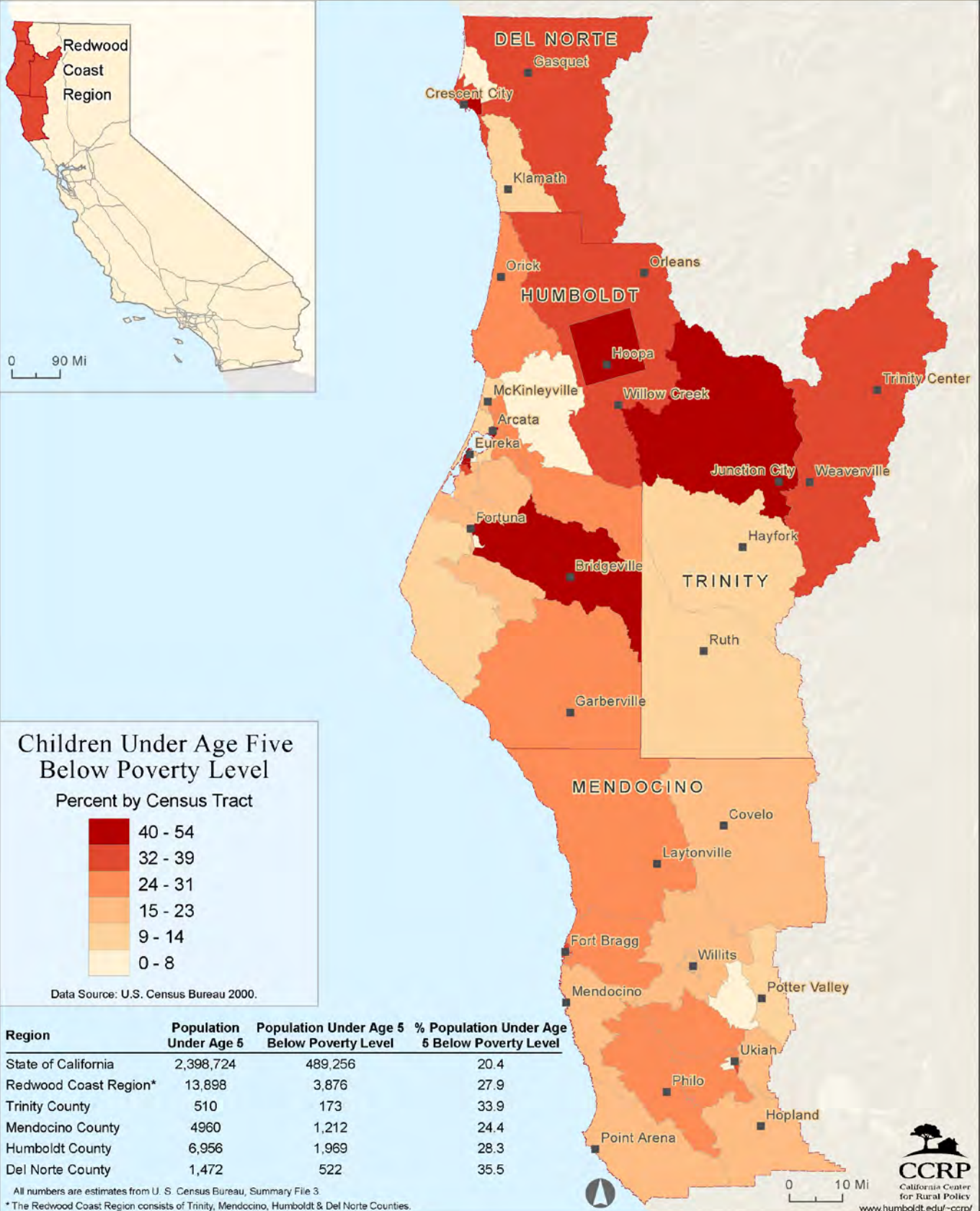
All numbers are estimates from U. S. Census Bureau, Summary File 3.

* The Redwood Coast Region consists of Trinity, Mendocino, Humboldt & Del Norte Counties.

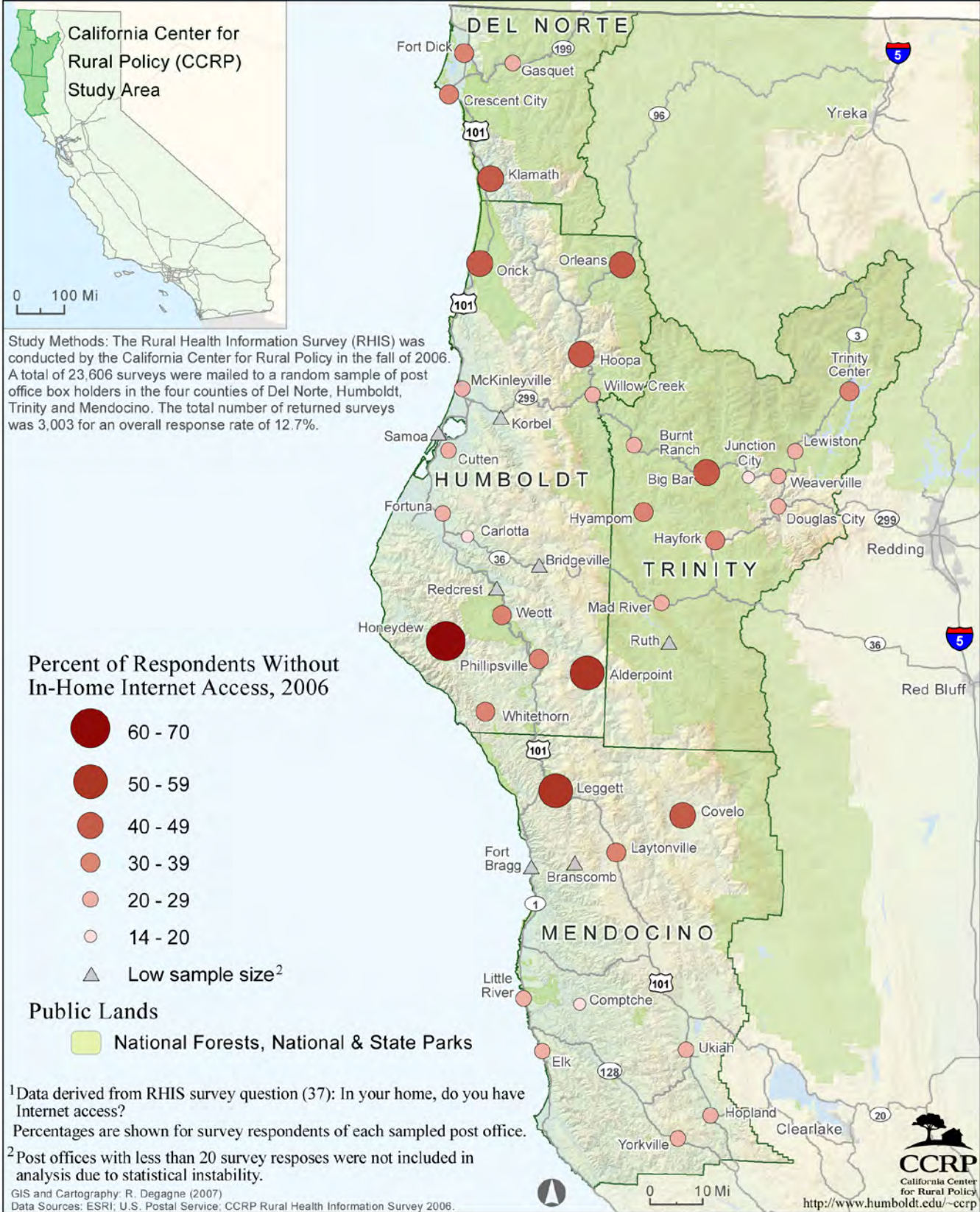
Children Under Age 18 in Poverty, 2000: Redwood Coast Region



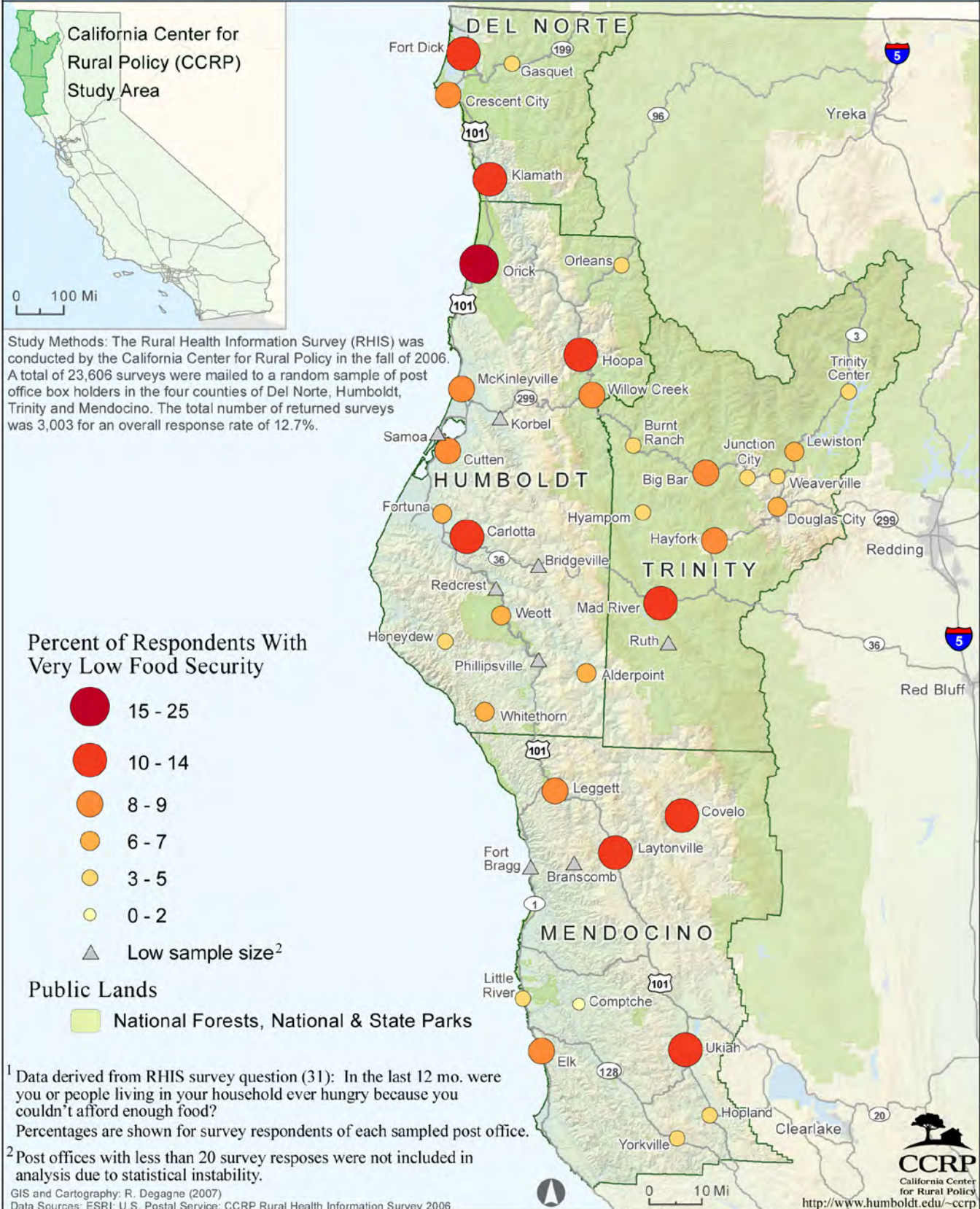
Children Under Age 5 in Poverty, 2000: Redwood Coast Region



CCRP Rural Health Information Survey: Percent of Respondents Without In-Home Internet Access¹, 2006



CCRP Rural Health Information Survey: Percent of Respondents With Very Low Food Security¹, 2006





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The California Center for Rural Policy at Humboldt State University is a research and policy center committed to informing policy, building community, and promoting the health and well-being of people and environments.