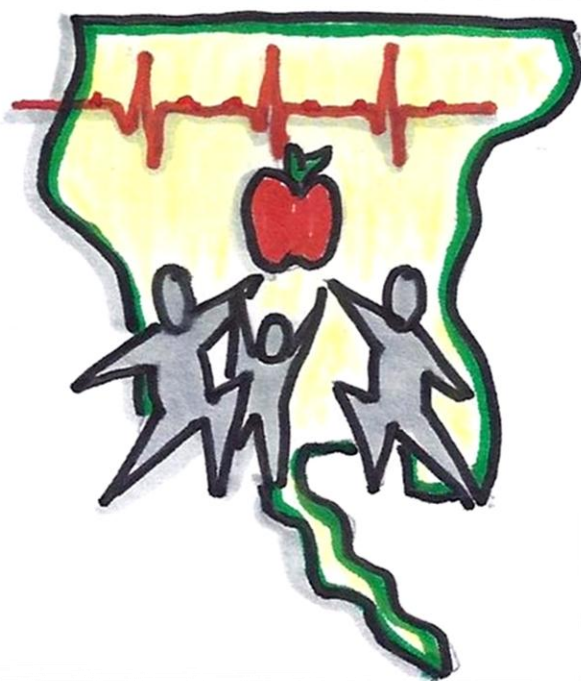


# Community Wellness Vital Signs:

## Core Community Wellness Indicators for Del Norte and Adjacent Tribal Lands



The California Center for Rural Policy  
at Humboldt State University  
&  
The Del Norte and  
Adjacent Tribal Lands  
Building Healthy Communities  
Learning and Evaluation Advisory  
Committee



## **Community Wellness Vital Signs:**

### **Core Community Wellness Indicators for Del Norte County and Adjacent Tribal Lands**

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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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# Executive Summary

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Del Norte County and the adjacent tribal lands (DNATL) is one of fourteen places in California participating in Building Healthy Communities (BHC), a ten-year 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 presents a recommended set of 20 core community wellness indicators developed through a community based process. These core community wellness indicators are 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 or wellness 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.

The process to select core community wellness indicators to measure progress made in community health in Del Norte County was based initially upon groundwork completed in the Rural Community Vital Signs Project facilitated by the California Center for Rural Policy (CCRP) in 2010 (<http://www.humboldt.edu/ccrp/blog/rural-community-vital-signs>). In that project, 50 community stakeholders from the counties of Del Norte, Humboldt, Mendocino, and Trinity selected a set of 48 community health indicators for the four-county region. In order to adapt the focus of that initial indicator set on the ten BHC community health outcomes and four Big Results, additional indicators relevant to children and families were researched and compiled, resulting in an expanded set of 66 potential indicators (<http://www.humboldt.edu/ccrp/blog/community-health-indicators-del-norte-county>). A Learning and Evaluation Advisory Committee recruited from the BHC Hub (Coordinating Committee) in Del Norte County then reviewed each of the 66 potential indicators and participated in a thorough process based on predetermined criteria to narrow down the initial list of 66 indicators to a final set of 20 core indicators.

We acknowledge that there are numerous indicators that can be used to assess community health; however, having a limited number of indicators that capture a wide range of issues is useful for focusing improvement efforts and determining if change is happening on a meaningful level. We recommend utilizing these 20 core indicators over time to both focus improvement work and determine if the work is making a difference. Availability of regularly measured valid data was one of the criteria used for selecting indicators, so most of the 20 core indicators have an existing data source; only a few will require new or repeat data collection.

It is important to keep in mind that the community wellness indicators only tell part of the story. They help us to see what outcomes occur related to the work and most importantly, they help us know if we are making a difference in *population level health*. However, we are also interested in telling the story behind the indicators- the story about community transformation, **what** work is happening, **where** the work is happening and **how** the work is happening. As such, a framework is being developed by the committee to capture these concepts.

In addition to the recommended 20 core community wellness indicators, this report also contains demographics and contextual indicators. These contextual indicators are those that are unlikely to change much in the next 10 years, yet they provide a context for the core indicators and present the challenges in which we are working.



## ***What the Community Wellness Vital Signs Tell Us.....***

### ***About Reducing Youth Violence in Del Norte & Adjacent Tribal Lands***

- Approximately ¾ of parents report that neighbors look out for children.
- Approximately 50% of students at the average Del Norte High School strongly agree they feel safe in their neighborhood and at school, however **only 26%** of Del Norte High students strongly agree they feel safe from harm at school.
- Incidence rates of child maltreatment allegations, substantiations, and entry into foster care are much **higher** than California as a whole.
- By race/ethnicity, American Indian children have the highest rates of allegations, substantiations, and entry into foster care, followed by White, Hispanic, and Asian children respectively.
- Self reported teen dating violence is **higher** than California as a whole and is highest in the non-traditional schools.
- The percent of 7<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students reporting use of any alcohol or drug use in the past 30 days is **higher** in Del Norte County than California and is much **higher** than the Healthy People 2020 goal.

### ***About Improving School Attendance in Del Norte & Adjacent Tribal Lands***

- The overall kindergarten school readiness score is **2.95, which is just below the “In progress” level.** This is based on a scale of 1.0 (not yet) to 4.0 (proficient).
- **23%** of students entering kindergarten showed **high skill levels in both *Kindergarten Academics* and *Self-Regulation***, whereas **50%** of students showed **low skill levels** in both of these domains. This is predictive of academic performance in third grade.
- School absence rates are high overall with **over 1 in 4 kindergarten students missing more than 10% of school.**
- **Less than 75% of high school students graduate within 4 years** (slightly worse than California). American Indian students have the lowest 4-Year graduation rates (59.3%), followed by Hispanic (60%), White (80.2%), and Asian students (82.4%).
- The dropout rate is 17.3% (similar to California), which means about **1 out of every 6 high school students drops out between 9<sup>th</sup> and 12 grade.** Hispanic students have the highest dropout rate (27.3%), followed by American Indian (22%), White (14.8%), and Asian students (11.8%).
- **A slightly higher percent of students are still enrolled in High School after 4 years** (7.4% in Del Norte vs. 6.4% in California). American Indian students are the most likely to still be enrolled after 4 years (16.9%), followed by Hispanic (12.7%), Asian (5.9%), White (3.8%).
- The proportion of students who want to go to college at the average Del Norte school is 64% and the proportion of students who want to go to college at the average YouthTruth school (nationally) is 89%.
- An average of **64% of High School students want to attend college, whereas only 36% expect that they will attend college.**
- The **teen birth rate is higher than California.** The average teen birth rate in Del Norte from 2007-2009 was 44 pregnancies per 1,000 females aged 15 to 19 years. This is equivalent to **one birth for every 23 adolescent females.**

*“Each indicator tells a story of triumphs and challenges at a personal, family, and community level.”*

Gary Blatnick, Director, Health and Human Services, County of Del Norte

### ***About Providing a Health Home for all Children in Del Norte & Adjacent Tribal Lands***

- **Transportation is a common problem** affecting a high percentage of adults living in poverty or low-income.
- 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%.**
- **One out of three (33%) of children and teens visited the Emergency Department** in the past year, which is significantly higher than California (18%).
- **Low-income children are significantly more likely to have smoking in the household** compared to other low-income children in California.

### ***About Reversing the Childhood Obesity Epidemic in Del Norte & Adjacent Tribal Lands***

- **Nearly half (46%) of the students are overweight or obese and this trend is increasing.**
- A high percentage of low-income children are overweight or obese with **American Indian children being disproportionately affected.**
- **45% of youth are consuming soda or sugar sweetened beverages on a regular basis.**
- **Only a third of children and teens are eating the recommended amount of fruits and vegetables.** A similarly low percentage of adults (28%) are consuming adequate amounts of fruits and vegetables.
- **Only 30% of youth are physically active at least 60 minutes per day** (excluding physical education class).
- One out of three youth walk, bike, or skate board to or from school.
- **Rates of food insecurity among low-income families are significantly higher than California.** In 2009, approximately a quarter of low-income families experienced food insecurity in Del Norte compared to 16% in California.
- **Households with children are significantly more likely to report episodes of hunger** (15.2%) compared to households without children (8.3%).

### ***Next Steps***

In order for the indicators to really be useful, they must be linked to policy and action. The indicators can be used to raise awareness and engage local citizens, communities, advocates, agencies, local and tribal governments in informed discussions about upstream contributors to both the positive and negative indicators. Specific goals for each indicator can be set. Policies can then be developed that are evidence-based and promote what is working locally and in similar communities.

CCRP intends to update this report regularly as new data become 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, policies, 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. A framework is being developed by the committee to capture the story behind the indicators- **what** work is happening, **where** the work is happening and **how** the work is happening.

*“Indicators can compel us to act.”*

Patti Vernelson, Executive Director, First 5 Del Norte

## ***The Recommended 20 Core Community Wellness Indicators***

Each of the four BHC Big Results has 5 recommended core community wellness indicators, resulting in a total of 20 indicators. Each indicator may fit with more than one Big Result, but for simplicity, they are presented here with the Big Result they relate most closely to. Throughout the report, additional relationships among the indicators, Big Results, and Objectives are noted.

### ***BIG RESULT: REDUCE YOUTH VIOLENCE***

- % of Parents who Report Neighbors Look out for Children
- % of High School Students who Feel Safe in their Neighborhood, at School, and at Home
- Child Maltreatment Rates
- Teen Dating Violence
- % of Students with Any Alcohol or Drug use in the Past 30 Days

### ***BIG RESULT: INCREASE SCHOOL ATTENDANCE***

- % of Entering Kindergarten Students that are Kinder Ready
- School Absence Rates
- High School Graduation & Drop-out Rates
- % of High School Students who Want to and Expect to Attend College
- Teen Birth Rate

### ***BIG RESULT: PROVIDE A HEALTH HOME FOR ALL CHILDREN***

- % of People that Report Having a Health Home and Dental Home
- % of Adults that Report Transportation as a Problem Meeting Health Needs for their Families
- % of Women with Adequate/Adequate Plus Prenatal Care or Late/No Prenatal Care
- % of Children/Teens who Visited the Emergency Department in the Last Year
- % of Low-Income Young Children with Smoking in the Household

### ***BIG RESULT: REVERSE THE CHILDHOOD OBESITY EPIDEMIC***

- Body Mass Index (BMI) of Children/Teens
- % of Children/Teens who Drank Soda Yesterday
- % of Children, Teens, Adults Eating Adequate Servings Fruits & Vegetables Daily
- Activity Levels of Youth: Physical Activity & Screen Time
- Food Insecurity



# The Purpose and Process

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Del Norte County and the adjacent tribal lands (DNATL) is one of fourteen places in California participating in Building Healthy Communities (BHC), a ten-year 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 presents a set of 20 core community wellness indicators developed through a community based process. These core community wellness indicators are 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 or wellness 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.

*“Indicators provide us with a way to communicate across communities about what is important to all of us.”*

Gary Blatnick, Director, Health and Human Services, County of Del Norte

## How the Core Community Wellness Indicators were Developed

The process to select core community wellness indicators to measure progress made in community health in Del Norte County was based initially upon groundwork completed in the Rural Community Vital Signs Project facilitated by the California Center for Rural Policy (CCRP) in 2010 (<http://www.humboldt.edu/ccrp/blog/rural-community-vital-signs>). In that project, 50 community stakeholders from the counties of Del Norte, Humboldt, Mendocino, and Trinity selected a set of 48 community health indicators for the four-county region. In order to adapt the focus of that initial indicator set on the ten BHC community health outcomes and four Big Results, additional indicators relevant to children and families were researched and compiled, resulting in an expanded set of 66 potential indicators (<http://www.humboldt.edu/ccrp/blog/community-health-indicators-del-norte-county>). In the spring, summer, and fall of 2011, the California Center for Rural Policy (CCRP) facilitated a process to develop a core set of community wellness indicators for DNATL. A Learning and Evaluation Advisory Committee recruited from the BHC Hub (Coordinating Committee) in Del Norte County then reviewed each of the 66 potential indicators and participated in a thorough process based on predetermined criteria to narrow down the initial list of 66 indicators to a final set of 20 core indicators. The criteria included data power, communication power, policy power, and prevention power (see page 16 for the process flow sheet and page 17 for the criteria used). Throughout this report the terms core community wellness indicators and community wellness vital signs will be used interchangeably.

## Vital Signs vs. Review of Systems

There are hundreds of indicators that can be used to assess community health; however, having a limited number of indicators that capture a wide range of issues is useful for focusing improvement efforts and determining if change is happening on a meaningful level. A broad set of indicators can provide an overview of many different issues and systems; however, too many indicators can become overwhelming and make it difficult to focus. Using principles from the practice of medicine can help us

approach community health in a systematic way. A health care provider will check a patient's vital signs at every single visit (temperature, blood pressure, heart rate, respiratory rate, weight, etc.) because these are indicators for general health and will typically be a sign for an underlying problem. Each vital sign is generally an indicator for the health of a particular body system, but often there is overlap, making the vital signs particularly important as they give a quick assessment of overall health. To gain additional, more detailed information about each body system, a review of systems is conducted. This may be done periodically and not necessarily at every visit.

We recommend using a similar framework for assessing community health and wellness. The 20 core indicators can function as the DNATL vital signs. This routine targeted assessment can be conducted frequently to both focus improvement work and determine if the work is making a difference. A review of systems, based on the broad set of community wellness indicators developed in the Rural Community Vital Signs project can be conducted with less frequency. This will provide a general overview of many different issues and systems.

*“Many indicators were not chosen, not because they were unimportant but we found those that had the largest potential impact and by their very nature, would encompass many issues, such as teen birth rates. We know many factors must be addressed to reduce the prevalence of teen births.”*

Gary Blatnick, Director, Health and Human Services,

## Data Limitations and Challenges

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 were 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). Availability of data was one of the selection criteria, so most of the 20 core indicators have an existing data source; however, a few will require new or repeat data collection. Whenever possible, indicators were selected that have data available on a level allowing for identification of inequities and disparities. Unfortunately, most data are not available in this level of detail.

We recognize that data are limited for the Adjacent Tribal Lands. Most of the data presented in this report are available on a county level and occasionally on a sub-county level. However, it is generally difficult to obtain the data on a level that allows the adjacent tribal lands to be clearly identified.

Throughout the report, whenever possible, 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.<sup>1</sup>

Throughout the BHC planning process and initial Rural Community Vital Signs project it was clear that there were many indicators that could 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 D. 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.

## Contextual Indicators

In addition to the 20 core community wellness indicators, this report also contains demographics and contextual indicators. These contextual indicators are those that are unlikely to change much in the next 10 years, yet they provide the context for the core indicators and present the challenges in which we are working.

## Linking the Indicators to Policy and Action

In order for the indicators to really be useful, they must be linked to policy and action. The indicators can be used to raise awareness and engage local citizens, communities, advocates, agencies, local and tribal governments in informed discussions about upstream contributors to both the positive and negative indicators. Specific goals for each indicator can be set. Policies can then be developed that are evidence-based and promote what is working locally and in other similar communities.

CCRP intends to update this report regularly as new data become available. CCRP will assist with a research plan to collect necessary data to track the indicators.



**It is important to keep in mind that community wellness indicators only tell part of the story.**

Indicators help us to see what outcomes occur related to the work and most importantly, they help us know if we are making a difference in *population level health*.

We are also interested in telling the story behind the indicators- **the story about community transformation:**

- **What** work is happening,
- **Where** the work is happening, and
- **How** the work is happening.

A framework is being developed by the committee to capture these concepts.

## Suggested Uses of the Community Wellness Indicators

This set of indicators is intended as a starting point for communities and local governments engaging in improvement efforts.

We recommend the indicators be used in the following ways:

- Use the 20 core community wellness indicators as the **Community Wellness Vital Signs for DNATL**. This will provide a routine targeted assessment that gives insight into the health and wellness of the community with a critical look at the health and wellbeing of the youth in our community.
- **Collect and present** data as frequently as feasible. Every one to two years would be ideal to establish trend data. Negative trends can be caught early and corrected. Positive trends can be celebrated and expanded.
- Continue to use the **broad set of community wellness indicators** developed in the Rural Community Vital Signs project and update it every three to four years. This will provide a general overview of many different issues and systems (review of systems).
- Use the Vital Signs to **raise awareness and engage** local citizens, communities, advocates, agencies, local and tribal governments in informed discussions about upstream contributors to both the positive and negative indicators. Discuss shared goals and priorities and set specific goals for each indicator.
- **Link** the Indicators to Policy. Develop a policy resource with evidence-based planning and action to address the main factors identified as upstream contributors to the positive and negative indicators. Policies should promote what works locally and in similar communities.
- **Share** new data as it becomes available. Make it accessible to a wide-range of stakeholders. Show trends and communicate progress towards goals and outcomes. Use the data to celebrate successes and identify areas that need additional attention.
- **Adapt** as needed. If new data become available, priorities change, or a compelling case can be made there is flexibility to change/add/remove indicators. Communities are also welcome to develop additional indicators if they want a closer look at issues impacting community health and wellness.
- **Develop** a research plan to collect necessary data to track the indicators. The plan should address how to obtain robust sample sizes to ensure adequate representation of diverse groups (by geography, socio-economics, and culture/race/ethnicity).

# 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>

# The Process for Developing the Community Wellness Vital Signs

## Rural Community Vital Signs Project

In 2009-2010 a wide range of stakeholders from Del Norte, Humboldt, Trinity, and Mendocino counties participated in a process to develop core indicators to measure community health. This resulted in a set of 48 indicators.  
(Report available at <http://www.humboldt.edu/ccrp/blog/rural-community-vital-signs>)

## Focusing Indicators on Building Healthy Communities Outcomes & Big Results

Additional indicators relevant to children and families were researched and compiled resulting in 66 potential indicators  
(Report available at <http://www.humboldt.edu/ccrp/blog/community-health-indicators-del-norte-county>)

## Committee Formed to Develop Core Set of Indicators for Del Norte & Adjacent Tribal Lands

Representation from Health & Human Services, First 5, Violence Prevention, Youth, Schools, and Health Care  
Set goal of 20-30 core community health indicators

## Indicator Selection Criteria Developed

Indicator selection criteria developed during the Rural Community Vital Signs Project was adapted to be relevant to BHC Initiative.  
This was used as a rough guide while reviewing indicators.

## First Cut of Indicators

Committee reviewed the 66 potential indicators and removed indicators that did not meet criteria. Additional potential indicators were researched and reviewed as needed.

## Second Cut of Indicators

To ensure there were indicators to address each BHC Outcome & Big Result the committee mapped each indicator to the Outcomes & Big Results and picked top indicators for each. This resulted in 50 potential indicators.

## Third Cut of Indicators

Indicators were arranged by the 4 Big Results. Committee members individually picked their top 3 indicators for each Big Result.  
Indicators with 2 or more votes were kept and through discussion the committee agreed upon 5 indicators for each Big Result.

## 20 Core Indicators

Most have existing regularly collected data sources. Data collection is in process for one indicator (kinder ready). New data will need to be collected for two indicators (Health Home/Dental Home & youth screen time) and repeat data will need to be collected for 2 indicators (transportation & food insecurity in homes with children)

# Community Wellness Indicator Selection Criteria

The following criteria were used as a general guide by the committee to select the top indicators.

## Data Power

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**Availability-** Does the data currently exist and is it readily available?

**Timeliness, Stability & Reliability-** Is the data consistently collected, compiled & calculated in same way?

**Measurable-** Is the indicator framed in a way that it can be measured (numbers, percentage, proportions)?

**Comparable-** Are there similar indicators in other communities?

**Valid-** Does the indicator measure what it is intended to measure?

**Herd-** Does the indicator bring along the data herd?

(if one indicator is going in the right direction often others are as well)

## Communication Power

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**Important/Relevant-** Does it measure an aspect of the community's quality of life which a diverse group of people in the community would agree is important? Does it get to the heart of the matter?

**Understandable-** Is it simple enough to be understood by the general public?

**Compelling, Interesting, Exciting-** Does it resonates with diverse audiences (e.g. policy makers, funders, general public)? Is it attractive to local media?

**Raise the Profile-** Does it help to raise the profile/awareness of the issue? Can it be used to make the issue more visible in the community?

## Policy Power

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**Policy Relevance-** Can the indicator be used to achieve positive change through policies? Is there a champion who will take leadership in linking research to policy change?

**Moving the Needle/ Turning the Curve-** Is it likely to change over time? Can periodic measurements capture change?

**Relevance to BHC Big Results-** Does it measure one of the 4 Big Results (childhood obesity, school attendance, health home, and violence)?

**Relevance to BHC Outcomes-** Does it measure one or more of the 10 BHC outcomes?

## Prevention Power

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**Focus on Causes, not Symptoms-** Does it give advance notice of a problem? A "leading" indicator (e.g. cigarettes sold) is more useful than a "lagging" indicator (e.g. lung cancer deaths).

**Reveal Linkages and Systematic Relationships-** Does it link to numerous issues? (e.g. social, environmental, economic)

**Asset Orientation-** Is the indicator framed in a positive way? (e.g. high school graduation rate vs. high school drop-out rate). Does it identify strengths that can contribute to prevention solutions?

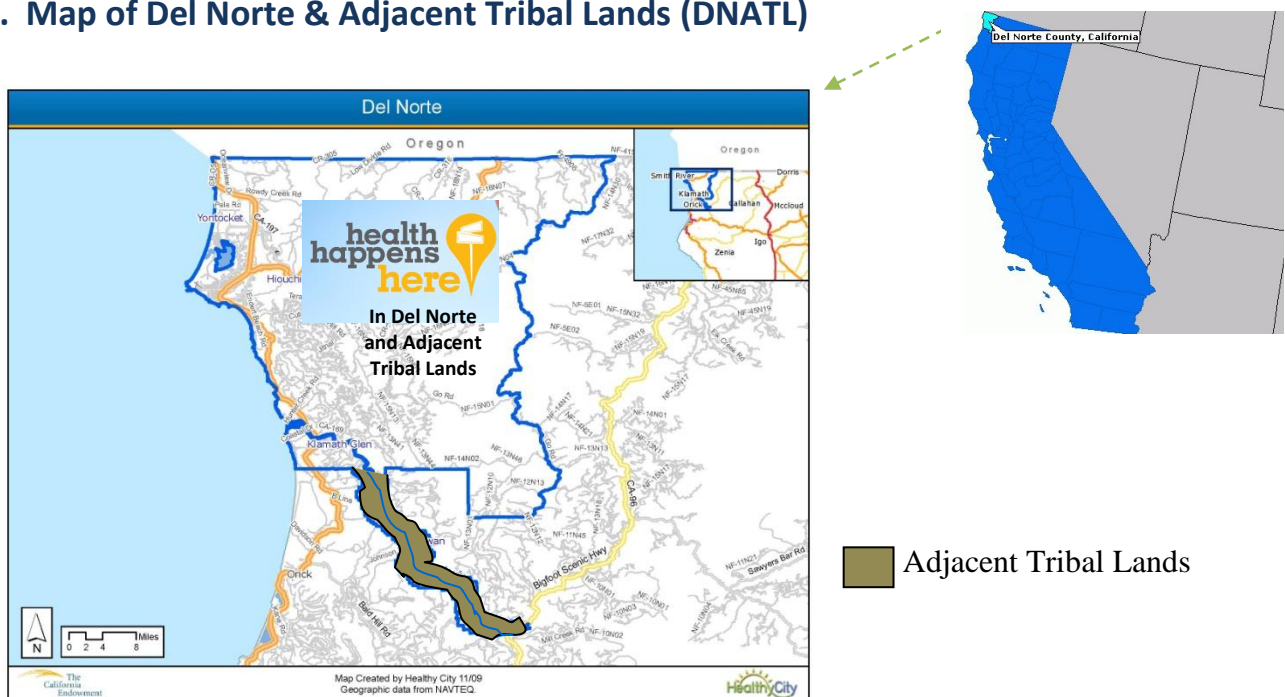
**Identify Disparities-** Does it have the ability to identify disparities (i.e. by race/ethnicity, geography, income level)?

# The Place

This report is about community health in Del Norte County and the adjacent tribal lands (DNATL). Located in the most northwest corner of California, the county encompasses 1,008 square miles of land.<sup>1</sup> The adjacent tribal lands includes the Yurok reservation, which extends from Klamath to Weitchpec and covers an area of 60 square miles<sup>1</sup> (Exhibit 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, which poses a unique challenge to community health and wellness.

**Exhibit 1. Map of Del Norte & Adjacent Tribal Lands (DNATL)**



Map adapted from Healthy City <http://www.healthycity.org/> and <http://www.mycalconnect.org/delnorte/Default.aspx>  
Notes: This report contains data specific to Del Norte County. Data for the adjacent tribal lands are not as readily available/accessible. CCRP can assist with a data collection plan for the adjacent tribal lands as needed.

“Health Happens Here” is a campaign being led by The California Endowment, which disseminates the message, “Health happens where we live, learn, and play; in our communities, in our schools, and with prevention.” <http://www.calendow.org/>

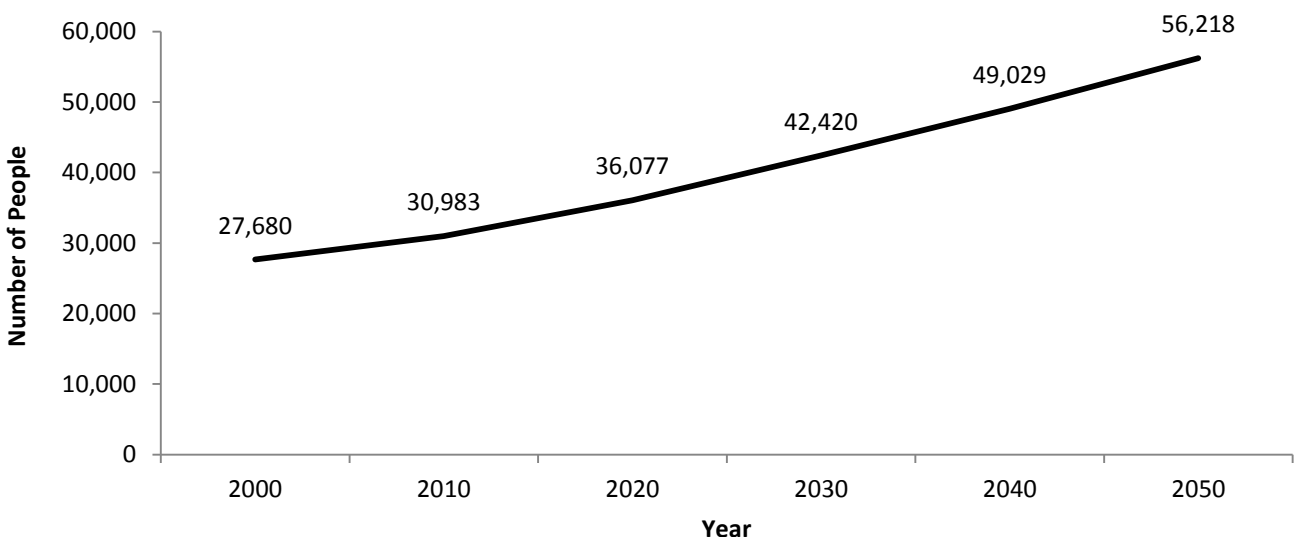
# The People

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In 2010 the total population in DNATL was estimated to be 29,067 (28,610 in Del Norte County and 457 in the adjacent tribal lands). The population is growing and the racial/ethnic composition is becoming more diverse with a proportionately larger increase in the Hispanic Population (Exhibits 2 & 3). The tribes in the area include the Yurok (5,705 enrolled), Smith River (1,453 enrolled), Elk Valley (90 enrolled), Resigini, and Tolowa. While many tribal members live on reservations or rancherias, many also live outside of these boundaries within the county. The Hmong population has nearly doubled over the past 10 years (341 in the 2000 Census and 616 in the 2010 Census). The elderly population is growing proportionately larger (Exhibit 5). Approximately 26% of households have children in them (13.1% married couples with children and 13% single parents with children) (Exhibit 6). The number of live births per year was 331 in 2010 and this is projected to increase slightly in the coming years (Exhibit 7). The number of children aged 0-4 was 2,115 in 2010 and this is expected to increase (Exhibit 8).

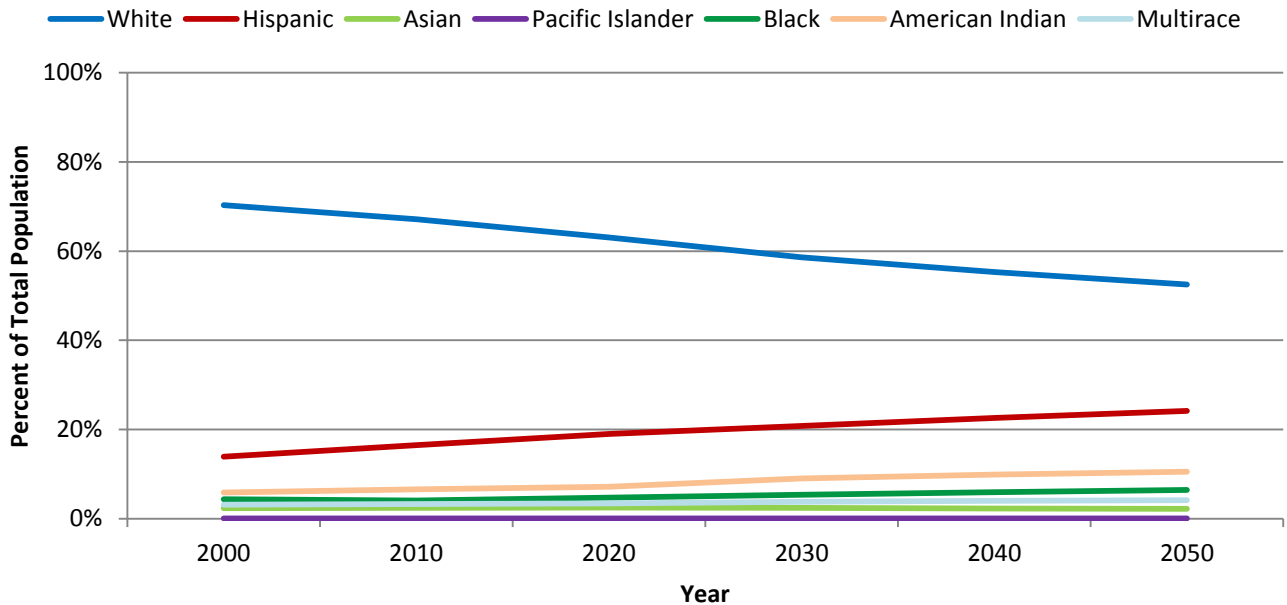
The area is also designated as rural with an average population density of 28.4 people per square mile in Del Norte County and 7.7 people per square mile in the adjacent tribal lands.<sup>1,3</sup> The area is designated as medically underserved and a health professional shortage area for primary care, mental health, and dental care.<sup>3</sup>

## Exhibit 2. Del Norte County: Past, Current, and Projected Changes in Population Size



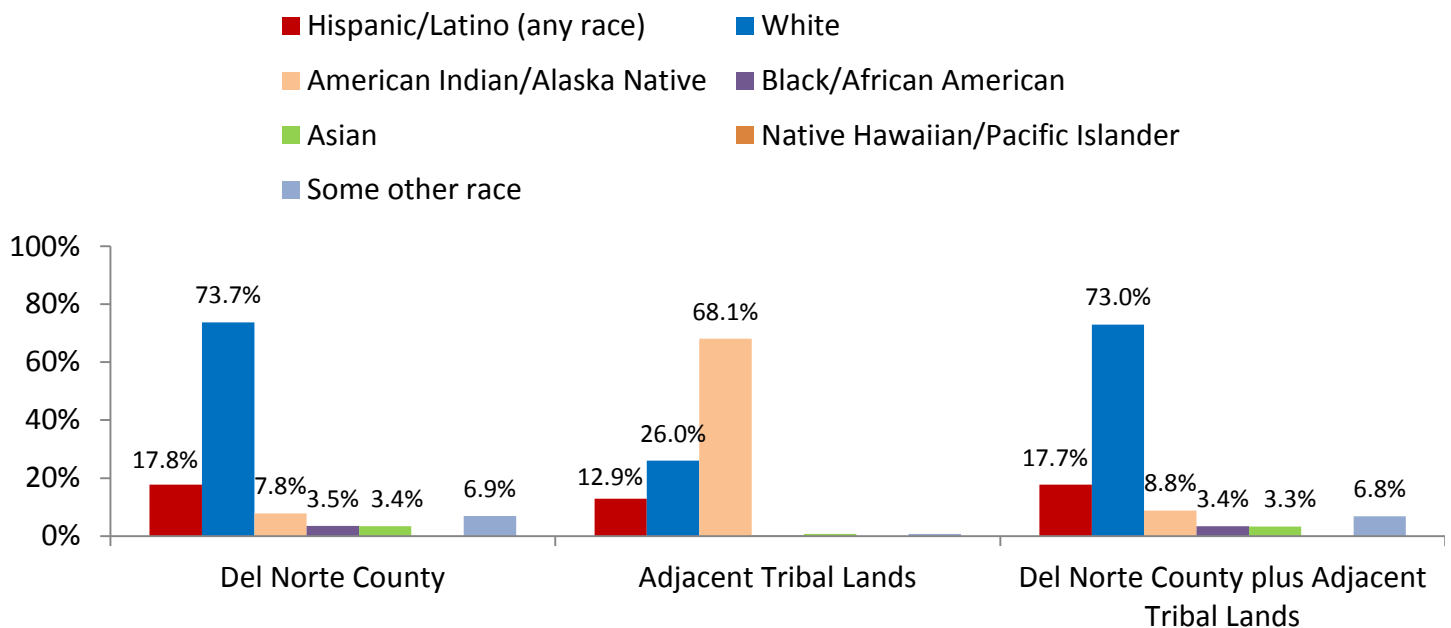
Data Source: State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000–2050. Sacramento, CA, July 2007 <http://www.dof.ca.gov/research/demographic/data/race-ethnic/2000-50/>

### Exhibit 3. 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/>

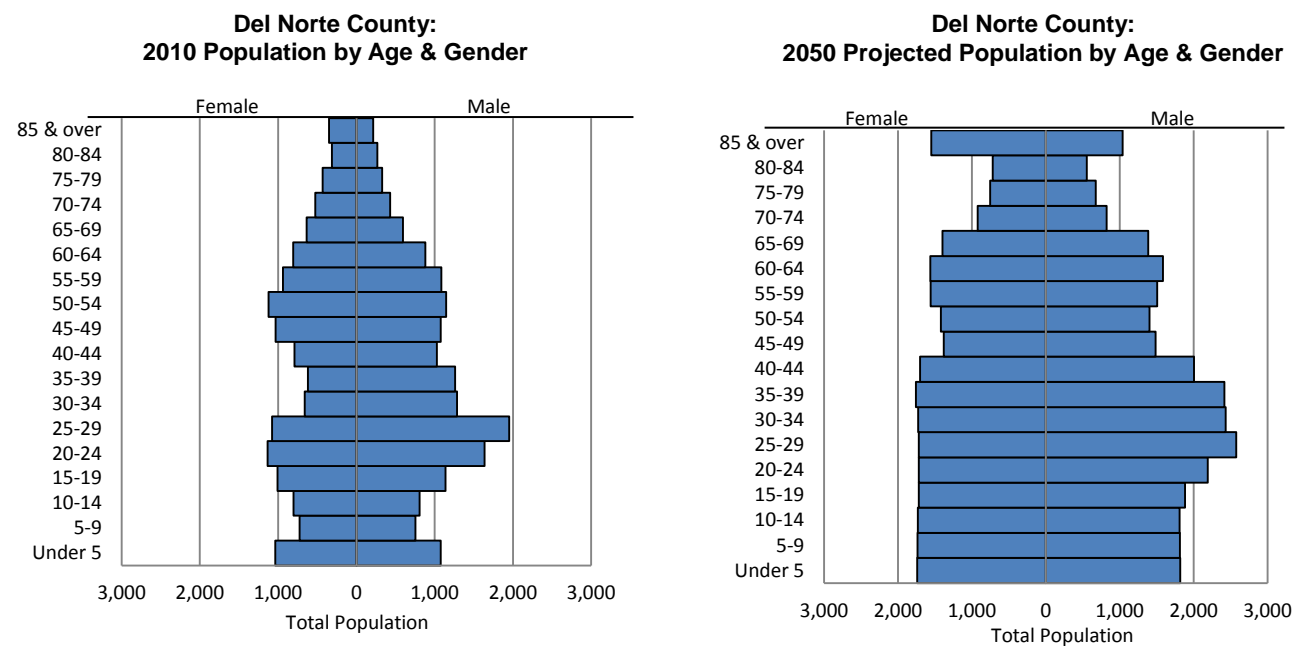
### Exhibit 4. Race/Ethnicity of the Population, 2010



Data Source: U.S. Census 2010. <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

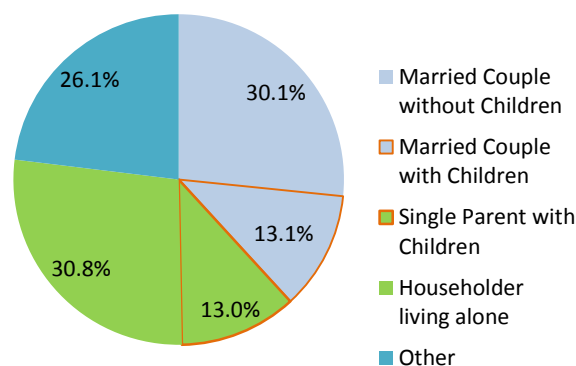
Notes: Hispanic/Latino origin may be of any race. Ethnic origin is considered to be a separate concept from race. This graph shows the percent of the population reporting Hispanic/Latino origin (of any race) and the percent of the population reporting one race. Percentages less than 1% are not labeled on the graph.

Exhibit 5. Del Norte County: Past and Projected Changes in Population Age



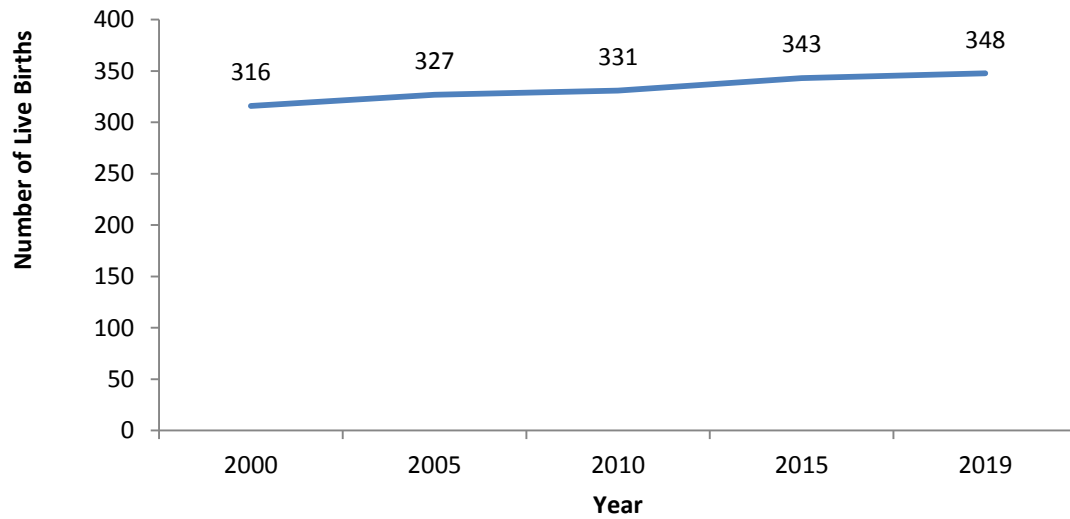
Data Source: State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000–2050. Sacramento, CA, July 2007. <http://www.dof.ca.gov/research/demographic/data/race-ethnic/2000-50/>

Exhibit 6. Del Norte County: Household Composition, 2006-2008

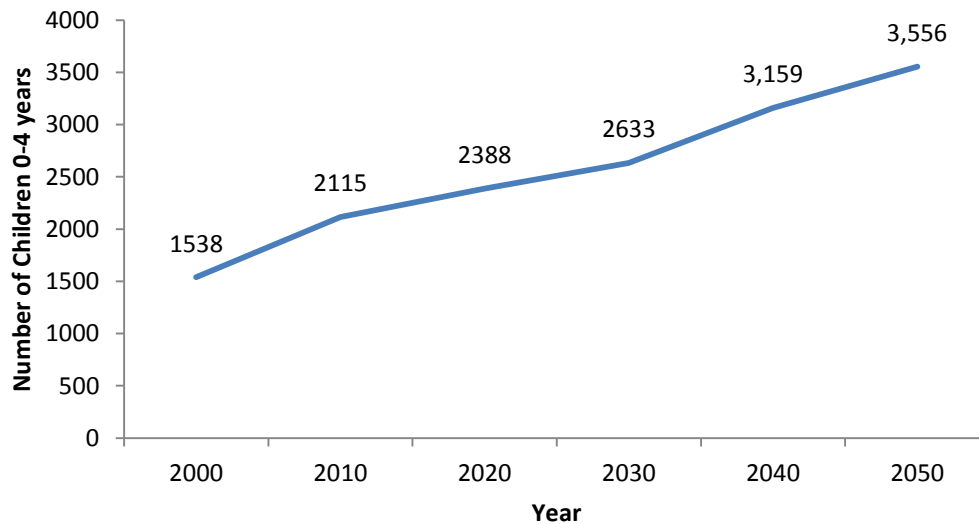


Data Source: U.S. Census, American Community Survey <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>  
Notes: These are 3-year estimates based on data collected between January 2006 and December 2008.

**Exhibit 7. Del Norte County: Past, Current, and Projected Number of Live Births per Year**



**Exhibit 8. Del Norte County: Past, Current, and Projected Number of Children Aged 0-4 Years**



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/>

# The Indicators

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In this section we present the 20 core community wellness indicators.

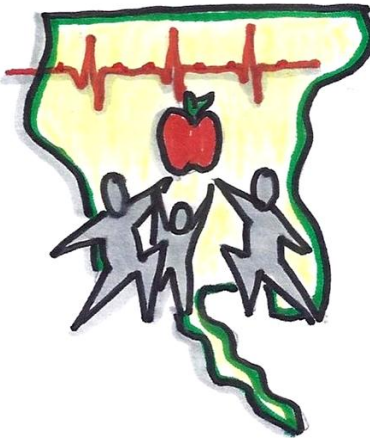
The indicators are presented with one of the 4 Big Results in the following order:

- 1) Indicators related to reducing youth violence
  - 2) Indicators related to increasing school attendance
  - 3) Indicators related to providing a health home for all children
  - 4) Indicators related to reversing the childhood obesity epidemic
- (No particular significance to the order in which they are presented)

There are 5 indicators for each Big Result.

Each indicator does not necessarily fit with only one Big Result. In fact, we purposely selected indicators that would link to numerous issues and reveal linkages and systematic relationships. As The California Endowment says, “health happens in our neighborhoods, in our schools, and with prevention.” These critical ideas are intended to be captured by the indicators.

With each set of indicators there is a literature review summarizing the current knowledge about the indicator, how it links to health and community wellness, and why it is significant and worth looking at. Every attempt was made to use the most up-to-date evidence base for the cited literature. The references for these reviews are located at the end of the report. If you are aware of additional evidence related to these indicators please let CCRP know.



*“If we improve in any of these indicators, we know with confidence our community is healthier.”*

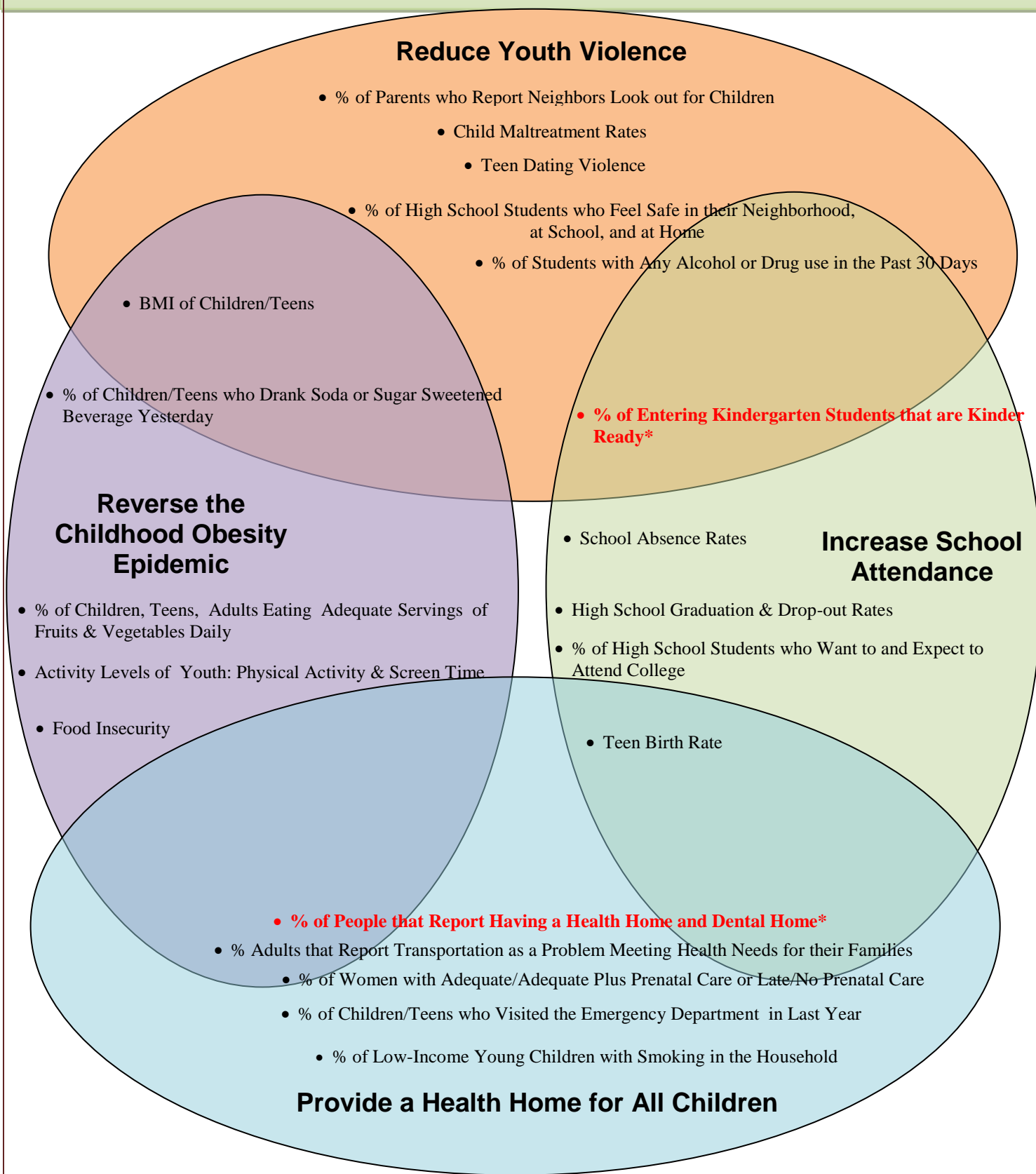
Gary Blatnick, Director, Health and Human Services, County of Del Norte

*“Indicators can compel us to act. Young children whose language development, physical abilities and social skills are far behind other kinders entering our school system are at a serious disadvantage from the beginning - making it very difficult for them to catch up.*

*If we know this is a problem, what can we do to change this trend?”*

Patti Vernelson, Executive Director, First 5 Del Norte

# The Four Big Results and Related Core Community Wellness Indicators



\*Indicators in red font are developmental “wish list indicators” that are currently without an existing data source. The percent of entering kindergarten students that are kinder ready is currently being collected.

# Indicators Related to Reducing Youth Violence



We would like to acknowledge that indicators related to violence are the most challenging to develop for several reasons. Data sources related to violence are limited and often rely on reports to law enforcement, making directional interpretation difficult. For example, if there is an increase in the number of domestic violence related calls for help, it is not clear what that measure may indicate. It could indicate more people reaching out for help, and thus be interpreted as a positive change, or it could indicate an increase in the incidence of domestic violence, and be interpreted as a negative change. The five indicators selected to capture issues of youth violence have reliable data sources and directional changes are easy to interpret.

## Safety and Collective Efficacy

Perceptions of safety can depend on many factors and can have a significant impact on health and well-being. Safety in the home, neighborhood, and school can be influenced by crime, physical or verbal violence, neglect, weapons, drug and alcohol use, the strength of social ties and social cohesion, as well as the design and maintenance of the built environment. Neighborhoods which are perceived as safe foster community participation, encourage physical activity, community connectedness and add to the health and well-being of local residents and visitors.<sup>1-10</sup>

Why do we care if neighbors look out for children? This is a measure of collective efficacy, which is a combination of informal social control and social cohesion and “reflects the willingness of community members to look out for each other and intervene when trouble arises, especially on behalf of the community’s youth.”<sup>1</sup> Low levels of collective efficacy have been found to be associated with higher neighborhood crime, violent crime, partner violence, risky sexual behavior, poor overall health of individuals, as well as increased overweight status of adolescents.<sup>1-4</sup> Research has found that adolescents living in neighborhoods with low collective efficacy are 52% more likely to be overweight than those in average neighborhoods.<sup>1</sup>

Perceptions of neighborhood safety are associated with activity levels and risk of overweight. Research has found that parents who perceive their neighborhood as less safe have an increased risk of their children being overweight at the age of 7 years.<sup>5</sup> Preschool children who live in neighborhoods perceived as less safe by their mothers spend more time watching television.<sup>6</sup> School-age children have been found to be less likely to walk or bicycle as a mode of transportation if their parents have concerns about neighborhood safety.<sup>7</sup> Minority adolescent girls have been found to be less active if they worry about neighborhood safety.<sup>8</sup>

Neighborhood safety is closely related to school safety. Research has shown that neighborhood conditions such as crime, poverty, and high population turnover are strong predictors of school violence.

### Collective Efficacy

- The norms and networks that enable collective action.
- The willingness of people to intervene for the good of the community.
- The linkage of mutual trust within a community.

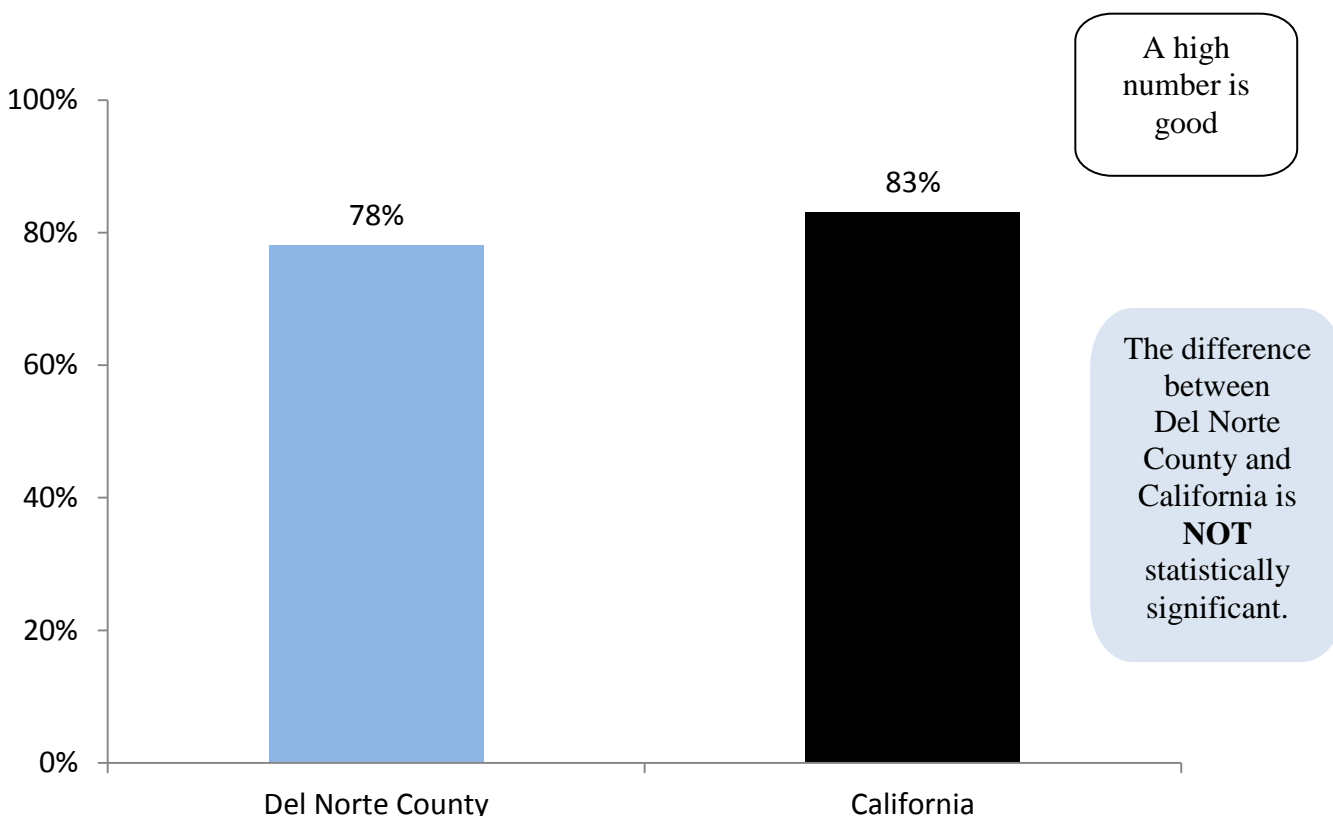
Source: References 1-4

Safety in the community can directly affect adolescents' perceptions of their school environment as well as school engagement, thus a safe community is a prerequisite for a safe school.<sup>9</sup> Students who don't feel safe at school, due to bullying or other violent behavior, can experience a wide range of problems including absenteeism, depression, anxiety, suicide, and medical conditions.<sup>10</sup>

#### In Del Norte County:

- Approximately  $\frac{3}{4}$  of parents report that neighbors look out for children (Exhibit 10).
- Approximately 50% of students at the average Del Norte high school strongly agree they feel safe in their neighborhood and at school, however only 26% of Del Norte High students strongly agree they feel safe from harm at school (Exhibit 11).
- High school students are more likely to feel safe from harm at home than at school or in their neighborhood. Approximately  $\frac{3}{4}$  of high school students strongly agree they feel safe from harm at home (Exhibit 11).

**Exhibit 10. Percent of Parents who Report Neighbors look out for Children, 2009**

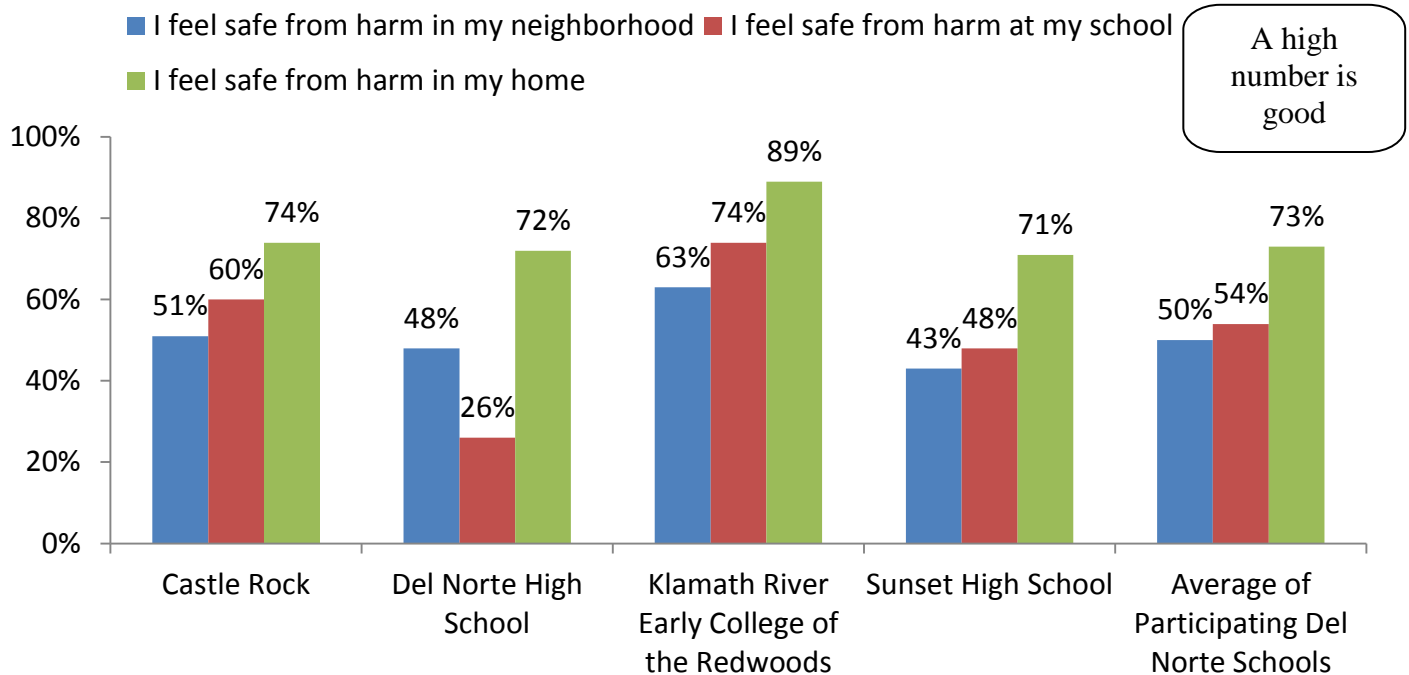


Data Source: California Health Interview Survey <http://www.chis.ucla.edu>

Notes: In 2009 Del Norte County was oversampled as part of the Building Healthy Communities Initiative. Households in each BHC site were randomly selected to participate through random digit dial telephone sampling. Given the focus of BHC efforts on children and families, adult eligibility included being a parent of a child under age 18 or an adult age 18 to 40. Children age 0 to 11 and teens age 12 to 17 were also eligible. For children, interviews were administered with the adult most knowledgeable about that child; for teens, interviews were administered with the teen after obtaining parent's permission. County and state estimates come from CHIS 2009 and maintain the same eligibility criteria as the BHC site.

In Del Norte County, 373 interviews were conducted with eligible adults and 290 with children and teens. Data presented in this graph only includes parents of children under age 18 who answered the question, "You can count on adults in this neighborhood to watch out that children are safe and don't get in trouble."

## Exhibit 11. Percent of High School Students who Strongly Agree they Feel Safe in their Neighborhood, School, and Home, 2011



Data Source: Youth Truth Survey conducted by The Center for Effective Philanthropy. <http://www.effectivephilanthropy.org/index.php>

Notes: In January 2011, 4 schools from Del Norte County participated in the Youth Truth project (Castle Rock n=233; Del Norte High School n=1,066; Klamath River Early College of the Redwoods n=30; Sunset High School n=86). When possible, student perceptions from schools in Del Norte are compared to students' perceptions from all other schools that have participated in Youth Truth (164 schools across the US).

## Child Maltreatment Rates

Child maltreatment includes physical, sexual, and emotional abuse, as well as neglect of a child under the age of 18 by a parent, caregiver, or person in a custodial role.<sup>1</sup> Neglect, the most common form of child maltreatment, is the failure to meet a child's basic needs (housing, food, clothing, education, and access to medical care) and can also include lack of supervision or caretaker incapacity.<sup>1,2</sup> Exposure to the chronic stress of abuse and neglect leads to the release of stress hormones, which can disrupt early brain development and normal body functions.<sup>3</sup> Child maltreatment can cause severe immediate and long-term negative effects on health as well as social, emotional, behavioral, and cognitive development.<sup>1-5</sup> Abuse or neglect in childhood increases the risk of health problems in adulthood, including smoking, alcoholism, drug abuse, eating disorders, high-risk sexual behaviors, obesity, physical inactivity, depression, suicide, heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease.<sup>1-5</sup>

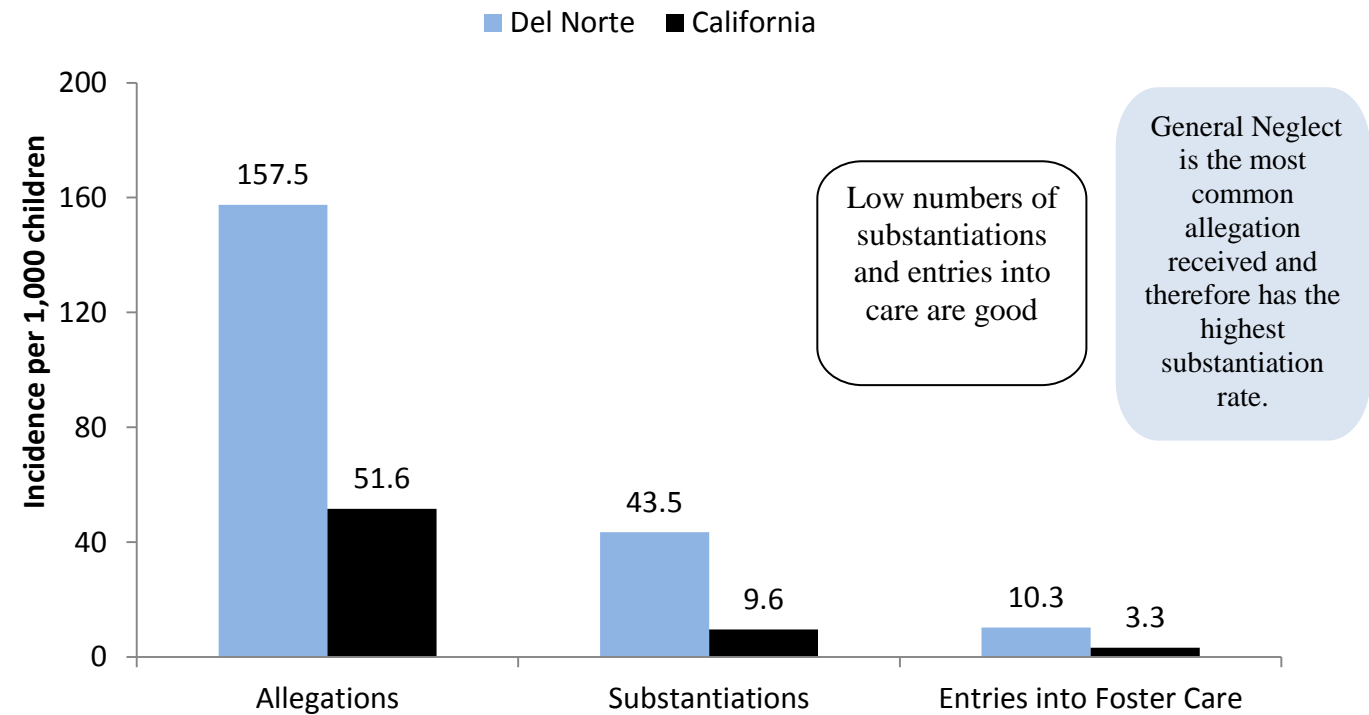
California specific research has shown that rural counties have higher rates of child abuse and neglect than urban and suburban counties.<sup>6</sup> In the U.S., rural children who are reported for abuse or neglect are more likely than urban children to be from a single-parent home with high family stress and trouble

meeting basic financial needs.<sup>7</sup> Out-of-home placement rates tend to be higher for rural children compared to urban children.<sup>8</sup>

**In Del Norte County:**

- Incidence rates of child maltreatment allegations, substantiations, and entry into foster care are much **higher** than California as a whole (Exhibit 12).
- By race/ethnicity, American Indian children have the highest rates of allegations, substantiations, and entry into foster care, followed by White, Hispanic, and Asian children respectively. However, White children have the highest total number of allegations, substantiations, and entry into care (Exhibit 13).

**Exhibit 12. Incidence of Child Maltreatment Allegations, Substantiations, and Entry into Foster Care, 2010**



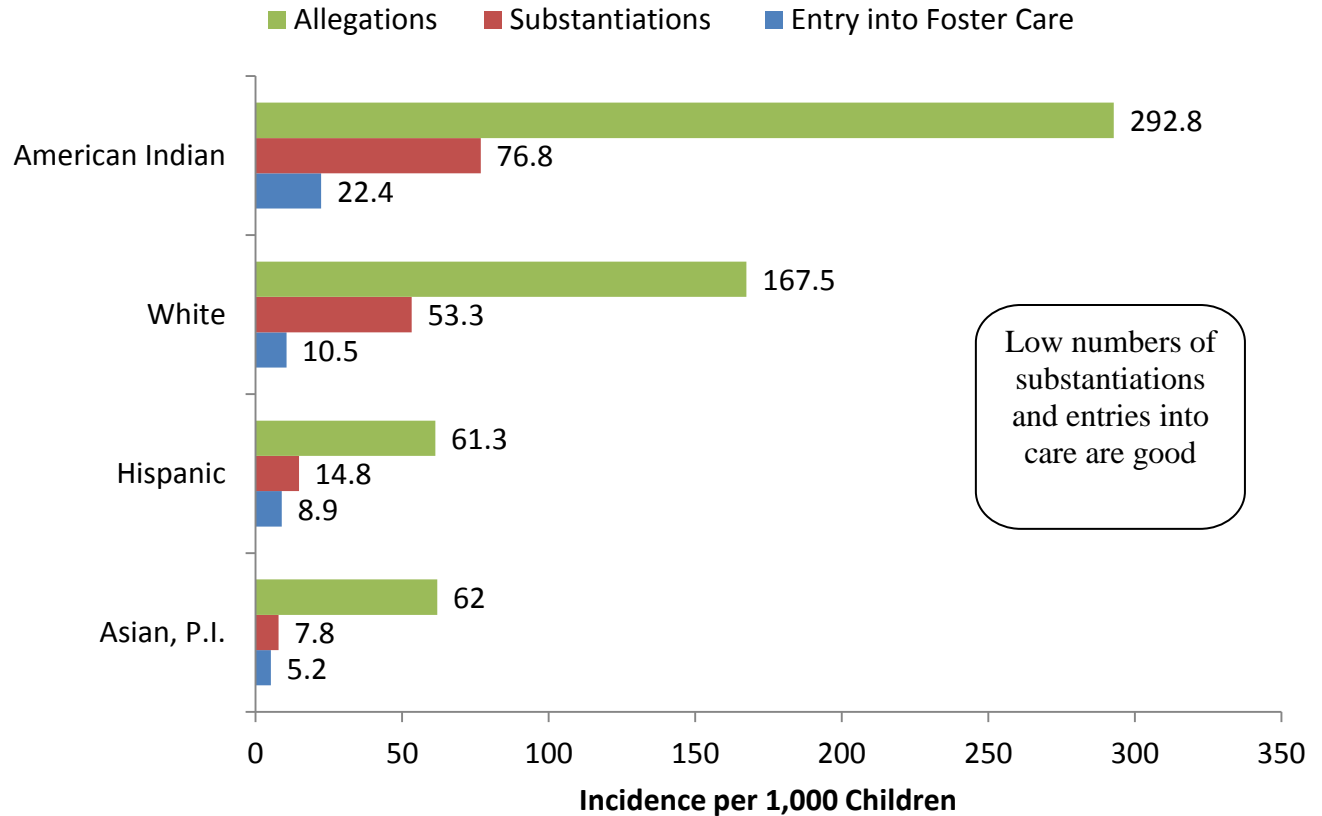
**Number of Children Involved, 2010**

	Total Child Population (0-17 yrs)	Allegations	Substantiations	Entries into Foster Care
Del Norte County	6,138	967	267	63

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 1/24/2012, from University of California at Berkeley Center for Social Services Research website.  
[http://cssr.berkeley.edu/ucb\\_childwelfare](http://cssr.berkeley.edu/ucb_childwelfare)

Notes: An allegation is a perceived incident of abuse or neglect that may be putting a child at risk. Substantiations are when allegations are valid because the evidence supports the definition of abuse or neglect. Rates are based on unduplicated counts of children. A child with multiple allegations or substantiations is only counted once. Trend data is not shown as analysis of trends that span 2009/10 is not recommended due to different data sources used for population numbers.

**Exhibit 13.**  
**Del Norte County:**  
**Incidence of Child Maltreatment Allegations, Substantiations, and**  
**Entry into Foster Care by Race/Ethnicity, 2010**



**Number of Children Involved, Del Norte County, 2010**

	Total Child Population (0-17 yrs)	Allegations	Substantiations	Entries into Foster Care
American Indian	625	183	48	14
White	3,337	559	178	35
Hispanic	1,355	83	20	12
Asian	387	24	3	2

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](http://cssr.berkeley.edu/ucb_childwelfare)

Notes: An allegation is a perceived incident of abuse or neglect that may be putting a child at risk. Substantiations are when allegations are valid because the evidence supports the definition of abuse or neglect. Rates are based on unduplicated counts of children. A child with multiple allegations or substantiations is only counted once. Incidence rates for Black children are not shown due to small numbers.

## Teen Dating Violence

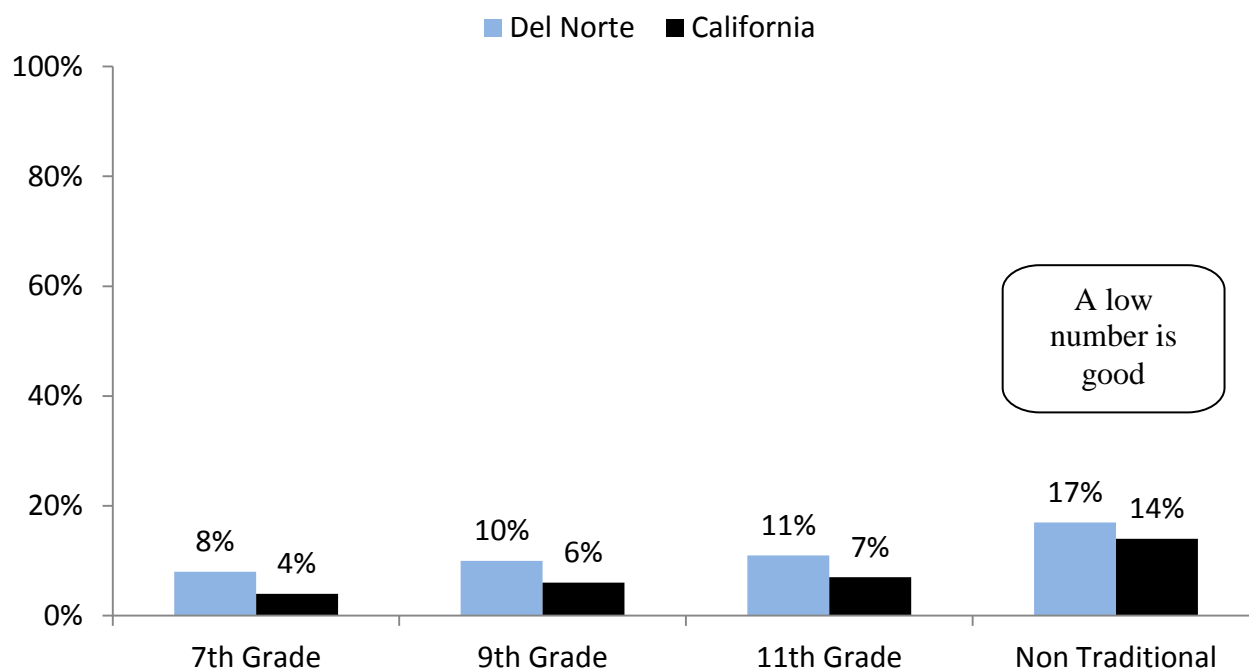
Teen dating violence is a prevalent form of youth violence that can have significant consequences. Research has shown that being the victim of teen dating violence can increase the risk of substance abuse problems, unhealthy weight control, risky sexual behaviors, teen pregnancy, mental health problems, physical fighting, suicidal ideation/attempts, and ongoing problems with intimate relationships.<sup>1-5</sup> Being a victim of teen dating violence can lead to intimate partner violence victimization as an adult.<sup>6</sup>

Risk factors for teen dating violence victimization include poverty, child maltreatment, and childhood exposures to parental intimate partner violence.<sup>1</sup>

### In Del Norte County:

- Self reported teen dating violence is **higher** than California as a whole and is highest in the non-traditional schools (Exhibit 14).

**Exhibit 14.**  
**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.

## Alcohol and Other Drug Use Among Youth

Alcohol and other drug (AOD) use have been shown to be an important indicator of community health due to the effects it can have on social interactions and mental and physical well-being. AOD abuse among teenagers has many of the same consequences it does in adults; however teens 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.<sup>1,2</sup> This trend increases for teenagers in rural communities, where half of the teens interviewed in a study reported drinking while driving compared to only a quarter of their urban peers.<sup>3,4</sup> Teens who live in rural areas are also more likely to binge drink than their urban and suburban peers.<sup>5</sup>

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.<sup>4,6</sup> AOD use has been shown to have a high co-morbidity with other mental disorders such as bipolar disorder and schizophrenia.<sup>7</sup>

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.<sup>8</sup> The negative health effects of smoking marijuana include a decrease in lung function with symptoms such as coughing, wheezing, and shortness of breath.<sup>9</sup> 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.<sup>10</sup> Some studies have found that heavy marijuana use can cause impairments in learning, attention, and working memory even after use is discontinued.<sup>11,12</sup> 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.<sup>12</sup> Smoking and oral consumption of marijuana has also been shown to produce a “moderate degree of impairment” in operating motor vehicles.<sup>10</sup>

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.<sup>13</sup> 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.<sup>14,15</sup> Mood disturbances such as paranoia, anxiety, and depression are also common side effects of amphetamine and cocaine abuse.<sup>13-15</sup>

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. 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. Birth defects

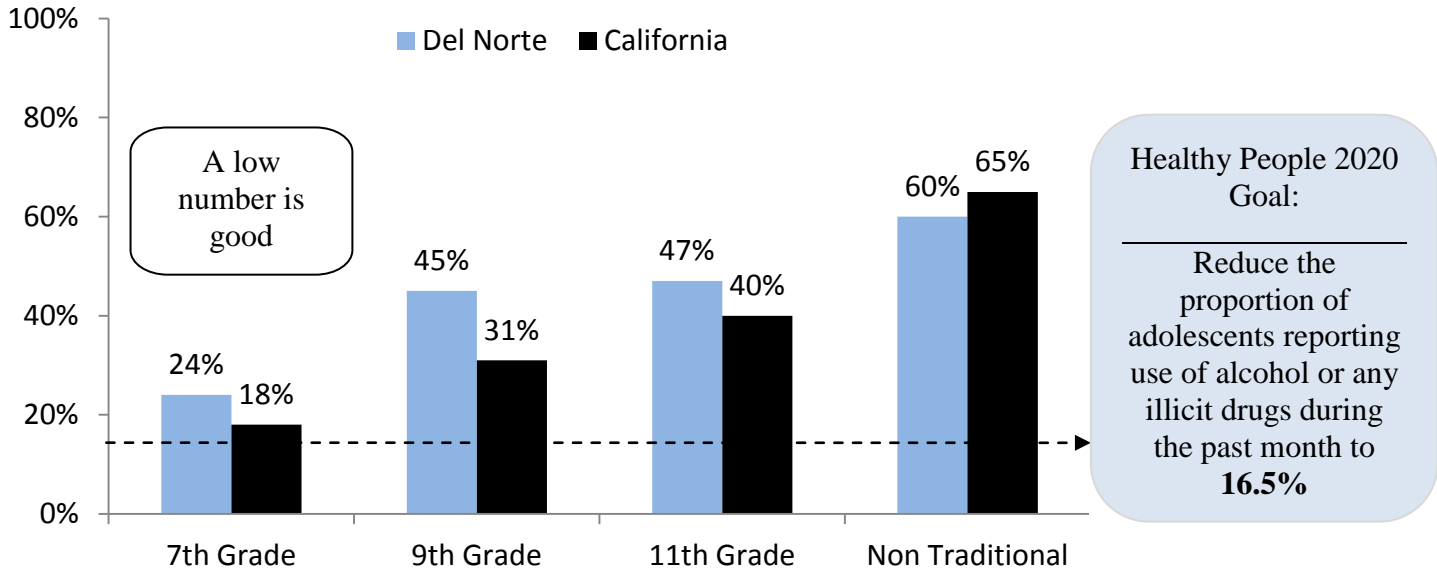
such as oral clefts, microcephaly, and developmental delays are also common when inhalants are used by pregnant women.<sup>16</sup>

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.<sup>17</sup> For instance, neurotoxicity and hyperthermia are both potential effects of ecstasy use, which can lead to significant brain damage or death.<sup>18</sup> 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.<sup>19</sup> 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.<sup>18</sup> 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:**

- The percent of 7<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students reporting use of any alcohol or drug use in the past 30 days is **higher** in Del Norte County than California. Non-traditional students have the highest use, which is similar to other non-traditional students in California (Exhibit 15).
- The Healthy People 2020 goal is for 16.5% of adolescents to report use of alcohol or drugs in the past 30 days. Del Norte County is much **higher** than this.

**Exhibit 15. Percent of Students Reporting Any Alcohol or Drug Use in the 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.

# Indicators Related to Increasing School Attendance



Studies have shown a positive association between education level and overall health.<sup>1-3</sup> Indeed, education level may be the strongest and most consistent predictor of good health, rather than income or occupation.<sup>1</sup> Lower levels of education have been associated with high blood pressure, smoking, high cholesterol, and shorter life expectancy.<sup>1,4</sup> 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.<sup>3,5</sup> New evidence shows that early childhood education for children from low-income families results in significantly more years of education at a 30-year follow-up.<sup>6</sup>

The five indicators related to school attendance span from kindergarten to college and help gauge future educational attainment.

## School Readiness

*Children who are physically, emotionally, cognitively, and socially prepared to learn, are more likely to succeed in school, attain a higher level of education, and be healthier.*

Research strongly suggests that reducing health disparities across the lifespan requires addressing child development and achievement.<sup>1</sup> Children's school readiness has been found to be an important indicator of long-term outcomes. Inequalities between children at the start of school contribute to inequalities in adulthood.<sup>2</sup> Patterns of academic performance are established early in life and are greatly influenced by the social interactions in the family and classroom.<sup>3</sup>

The National Education Goals Panel<sup>4</sup> defined school readiness as: (1) readiness of children for the social and academic institution of school; (2) readiness of families and communities to prepare children for school; and (3) readiness of schools to meet the diverse needs of incoming students and their families. The first component- children's readiness for school- includes physical well-being and motor development, social and emotional development, approaches toward learning, communication and language usage, and cognitive and general knowledge. There has been a move towards measuring and documenting the levels of proficiency across these dimensions when children are entering kindergarten. This information can be used to target early interventions and to determine if community-wide efforts are making an impact on community-wide school readiness.

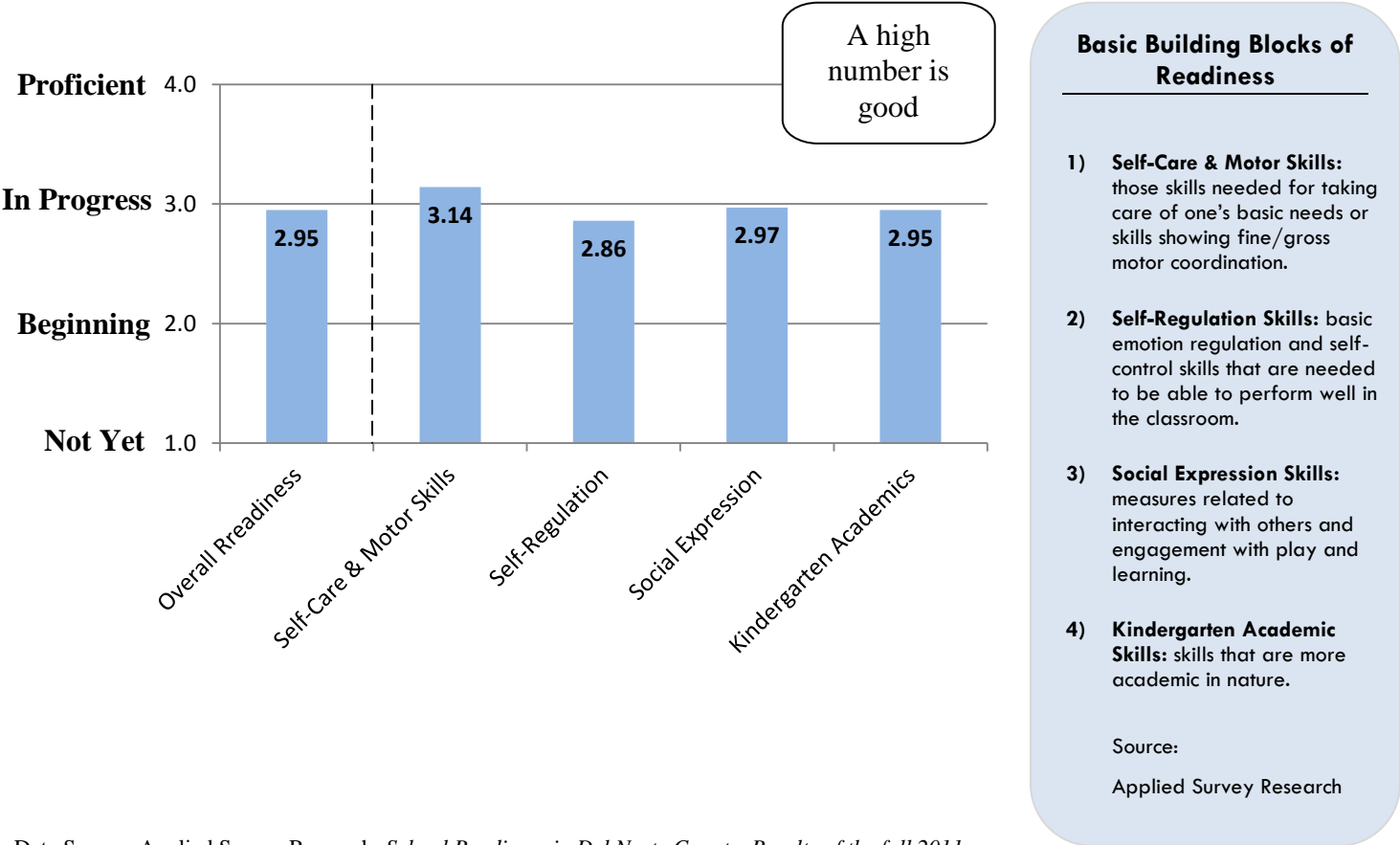
In the fall of 2011, school readiness data was collected for the first time in Del Norte County with entering kindergarten students. The comprehensive assessment conducted by Applied Survey Research included four measurement instruments completed by parents and teachers of entering kindergarten students. Teachers indicated their students' proficiency levels on 24 readiness skills as well as how smoothly the students transitioned into kindergarten. Teachers also completed a survey about their beliefs about skills children need for school. Parents completed a survey about children's early care and family environments as well as basic demographics. Detailed results are presented in the report, *School Readiness in Del Norte County, Results of the fall 2011 Assessment* by Applied Survey Research.

Two measures from the report are included here, which show....

**In Del Norte County:**

- The overall school readiness score is **2.95**, which is just below the “In progress” level. This is based on a scale of 1.0 (not yet) to 4.0 (proficient). Scores were **lowest in Self-Regulation** and **highest in Self-Care & Motor Skills** (Exhibit 16).
- **23%** of students showed **high skill levels in both Kindergarten Academics and Self-Regulation**, whereas **50%** of students showed **low skill levels** in both of these domains (Exhibit 17). Research has shown that the *Kindergarten Academics* and *Self-Regulation* skills that students have at the start of kindergarten strongly predict their academic performance in third grade. Students with high skills in both domains were more than 3 times as likely as those with low scores to perform at grade level on their standardized third-grade English-Language Arts and Math tests.<sup>5</sup>

**Exhibit 16. Del Norte County: Kindergarten Student Scores on the Basic Building Blocks of School Readiness, 2011**

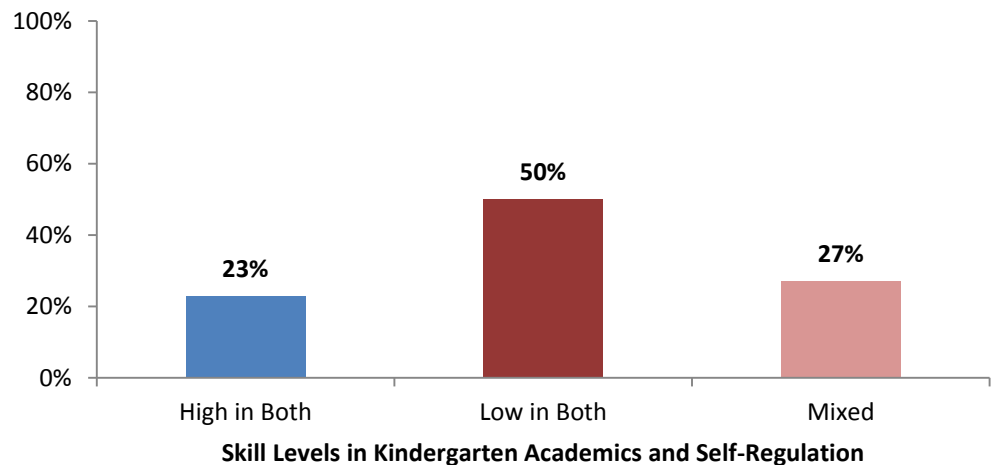


Data Source: Applied Survey Research. *School Readiness in Del Norte County. Results of the fall 2011 Assessment. Comprehensive Report.*

Notes: In 2011, First 5 Del Norte commissioned Applied Survey Research to conduct an assessment of the school readiness levels of entering kindergarten students in Del Norte County. The assessment was conducted in the fall of 2011, three to five weeks into the school year. Participating schools included Joe Hamilton Elementary, Margaret Keating Elementary, Mary Peacock Elementary, Mountain Elementary, Pine Grove Elementary, Redwood Elementary, and Smith River Elementary. Assessments included four measurement instruments. Results shown here are from the *Kindergarten Observation Form*, which was completed by teachers trained to conduct the assessment. A total of 280 students were assessed with the *Kindergarten Observation Form*.

## Exhibit 17. Del Norte County: Proportion of Kindergarten Students with Readiness Skills Most Predictive of Third Grade Success, 2011

Research has shown that kindergarten students with High skill levels in *Kindergarten Academics and Self-Regulation* are more than 3 times as likely as those with low skill levels to perform at grade level in third grade.<sup>5</sup>



Data Source: Applied Survey Research. *School Readiness in Del Norte County. Results of the fall 2011 Assessment. Comprehensive Report.*  
Notes: In 2011, First 5 Del Norte commissioned Applied Survey Research to conduct an assessment of the school readiness levels of entering kindergarten students in Del Norte County. The assessment was conducted in the fall of 2011, three to five weeks into the school year. Participating schools included Joe Hamilton Elementary, Margaret Keating Elementary, Mary Peacock Elementary, Mountain Elementary, Pine Grove Elementary, Redwood Elementary, and Smith River Elementary. Assessments included four measurement instruments. Results shown here are from the *Kindergarten Observation Form*, which was completed by teachers trained to conduct the assessment. A total of 280 students were assessed with the *Kindergarten Observation Form*.

## School Absence Rates

School attendance during the early years can have profound effects on health and future academic success. 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.<sup>1,2</sup> 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.<sup>3</sup>

National studies have shown that students who are chronically absent in kindergarten (missing 10% or more of school days) have lower academic performance in first grade. This relationship is true for all children regardless of gender, ethnicity or socioeconomic status, but it is particularly strong for Latino children and poor children. When poor children are chronically absent in kindergarten they have the lowest levels of educational achievement at the end of fifth grade.<sup>4</sup> Additionally, Kindergarten and first grade students who are chronically absent are much less likely to have proficient English and Math skills in third grade.<sup>5</sup> This is important, because students who don't read proficiently by third grade are four times more likely to not graduate from high school compared to proficient readers.<sup>6</sup> Studies have also shown that chronically absent 6<sup>th</sup> and 9<sup>th</sup> graders have lower graduation rates.<sup>7,8</sup>

Chronic absence is costly in many ways. Students with lower attendance and lower levels of education have reduced earning potential, school districts lose a significant amount of money when students are absent, and lower levels of education are associated with higher rates of crime and violence.<sup>14,15</sup>

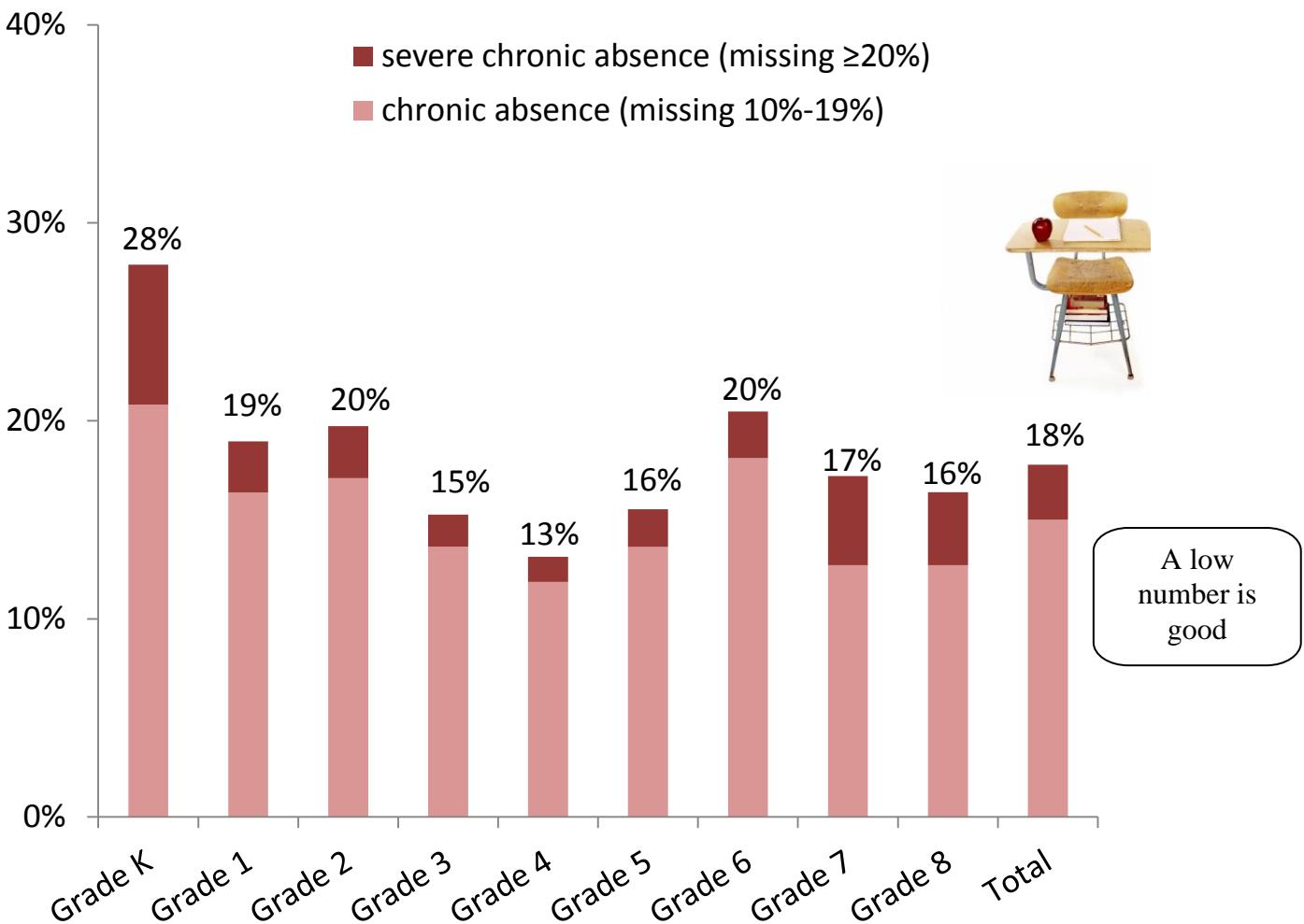
Adolescents with low literacy skills are more likely to be a victim or perpetrator of violence than adolescents with age appropriate reading levels.<sup>9</sup> Male high school dropouts are 47 times more likely than college graduates to be incarcerated. It has been estimated that the average high school dropout will cost taxpayers over \$292,000 due to lower tax revenues, higher cash and in-kind transfer costs, and imposed incarceration costs.<sup>10</sup>

The evidence is clear- Increasing school attendance can benefit individual health, strengthen the local economy, and reduce crime and violence in society.<sup>9-13</sup>

**In Del Norte County:**

- School absence rates are high overall with **over 1 in 4 kindergarten students (28%) missing more than 10% of school** (Exhibit 18).

**Exhibit 18. Del Norte County Unified School District: Percent of Students with Chronic and Severe Chronic Absence from School by Grade, 2010-2011**



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, and Crescent Elk. High school and county schools are not included here as protocols for accurate data collection are being developed.

## Educational Attainment:

### High School Graduation, Dropouts, and College

High school graduation, dropout rates, and attainment of higher education are important barometers of health, social justice, and the economy.<sup>1-4</sup>

Educational attainment leads to good health in several ways. An individual's level of education is a major predictor of his or her ability to secure steady employment. Not only do higher educational attainment levels lead to greater general employability, they also lead to higher wages and lower rates of poverty. Even greater economic returns and employment prospects are linked to further education and training beyond high school.<sup>3</sup> Having a higher education and income level allows people to live in better housing, eat healthier food, obtain better medical care, have a sense of prestige and power, become better informed about healthier behavior choices, and acquire strong social supports and networks, all of which are associated with better health.<sup>1</sup> Estimates suggest that improvements in educational achievement can save more lives than medical advancements can.<sup>4</sup>

Not only is educational level one of the strongest predictors of health, it is also critical for the economy. The strength of the local and regional economy depends greatly on the educational foundations of its population. A well-educated workforce can attract businesses and industry to an area and lead to economic vitality.<sup>3</sup>

While a high school diploma is considered critical for social mobility, in today's world, it is a bare-minimum prerequisite for achieving financial security and career advancement. In fact, "a high school diploma may offer its greatest benefit by opening doors to further education and training, which in turn afford additional opportunities."<sup>3</sup>

Dropping out of high school is problematic for both the individual and society. High School dropouts have lower earning potential and higher unemployment rates compared to high school graduates. There are many factors that can influence why young people leave school, ranging from individual level to school and community level factors. Health can have direct and indirect effects on school dropout rates. Student health issues associated with dropping out include substance use, psychological, emotional, and behavioral problems, and pregnancy- the leading cause of adolescent women dropping out.<sup>1</sup>

#### In Del Norte County:

- **Less than 75% of high school students graduate within 4 years** (slightly worse than California). American Indian students have the lowest 4-Year graduation rates (59.3%), followed by Hispanic (60%), White (80.2%), and Asian students (82.4%) (Exhibits 19 & 20).
- The dropout rate is 17.3% (similar to California), which means about **1 out of every 6 high school students drops out between 9<sup>th</sup> and 12 grade**. Hispanic students have the highest dropout rate (27.3%), followed by American Indian (22%), White (14.8%), and Asian students (11.8%) (Exhibits 19 & 20).

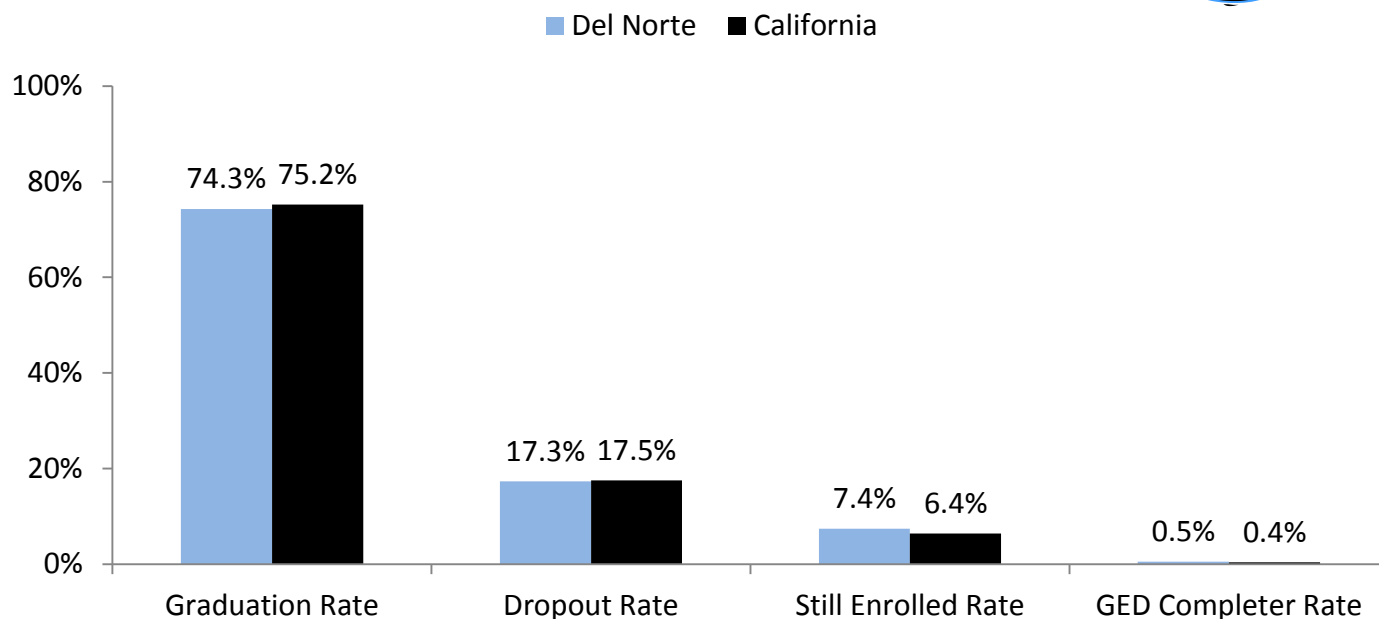
**Del Norte County:  
Median Annual Income by  
Highest Level of Educational Attainment, 2005-2009**



Source: American Community Survey 2005-2009

- **A slightly higher percent of students are still enrolled in High School after 4 years** (7.4% in Del Norte vs. 6.4% in California). American Indian students are the most likely to still be enrolled after 4 years (16.9%), followed by Hispanic (12.7%), Asian (5.9%), White (3.8%) (Exhibits 19 & 20).
- The proportion of students who want to go to college at the average Del Norte school is 64% and the proportion of students who want to go to college at the average YouthTruth school (national sample) is 89% (Exhibit 21).
- An average of **64% of High School students want to attend college, whereas only 36% expect that they will attend college** (Exhibit 21).

### Exhibit 19. 4-Year High School Graduation and Dropout Rates: Cohort for the Class of 2009-10



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

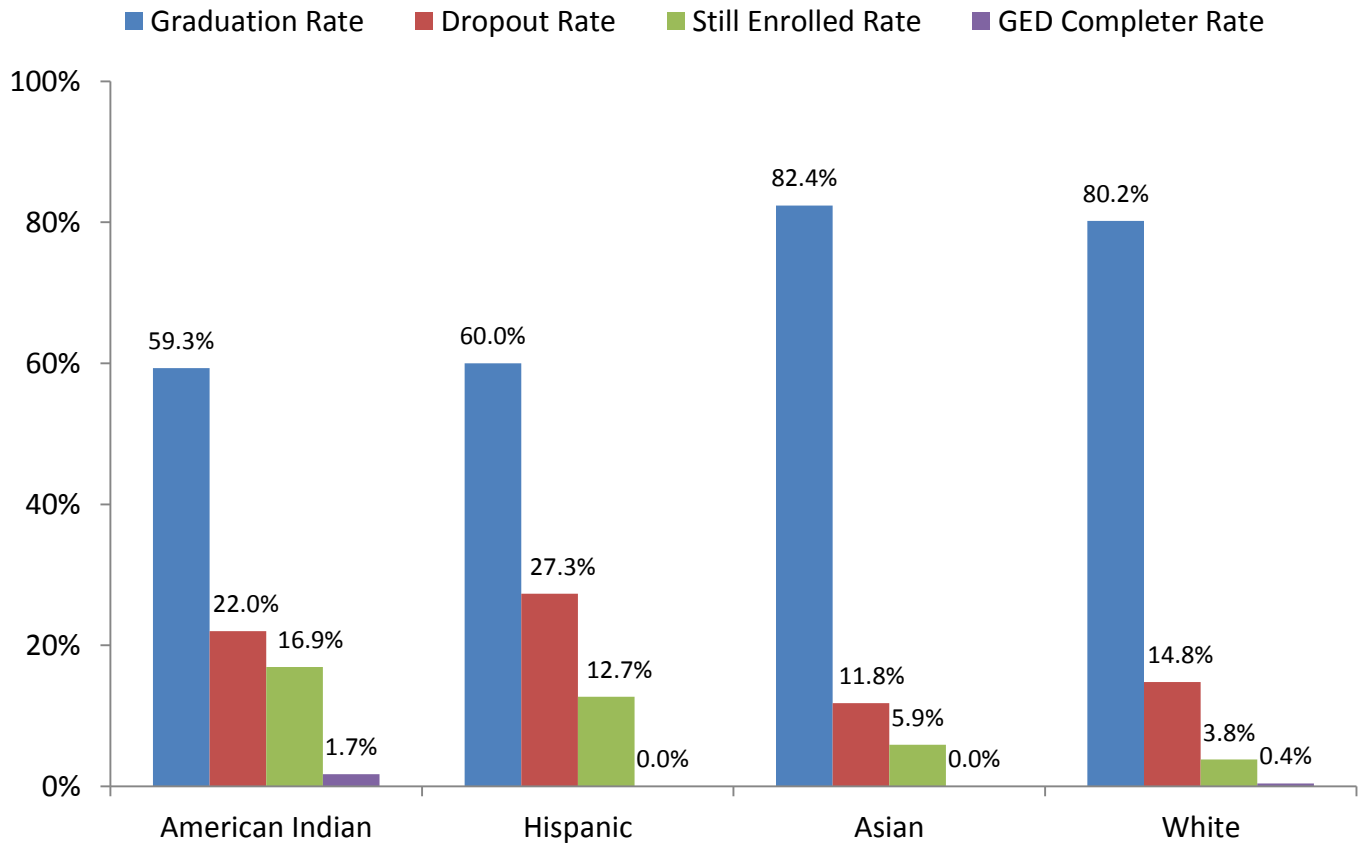
Notes: The 4-year Adjusted Cohort forms the basis for calculating graduation rates, dropout rates, and other related rates. The cohort is the group of students that could potentially graduate during a 4-year time period (grade 9 through grade 12). The 4-year Adjusted Cohort includes students who enter 9<sup>th</sup> grade for the first time in the initial year of the 4-years used for the cohort. This cohort is then adjusted by:

- Adding students who later transfer into the cohort during grade nine (year 1), grade 10 (year 2), grade 11 (year 3), and grade 12 (year 4); and
- Subtracting students who transfer out, emigrate to another county, or die during the 4-year period.

Students who drop out during the 4-year period remain in the cohort, as well as students that complete 12<sup>th</sup> grade and exit the educational system without graduating. Students that take longer than four years to graduate or remain enrolled after four years are also included as part of the cohort.

This level of data is only available starting in 2009-10. Prior years do not have cohort data and do not have graduation rates by ethnicity.

**Exhibit 20.**  
**4-Year High School Graduation and Dropout Rates by Race/Ethnicity:**  
**Del Norte County Cohort for the Class of 2009-10**



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

Notes: The 4-year Adjusted Cohort forms the basis for calculating graduation rates, dropout rates, and other related rates. The cohort is the group of students that could potentially graduate during a 4-year time period (grade 9 through grade 12). The 4-year Adjusted Cohort includes students who enter 9<sup>th</sup> grade for the first time in the initial year of the 4-years used for the cohort. This cohort is then adjusted by:

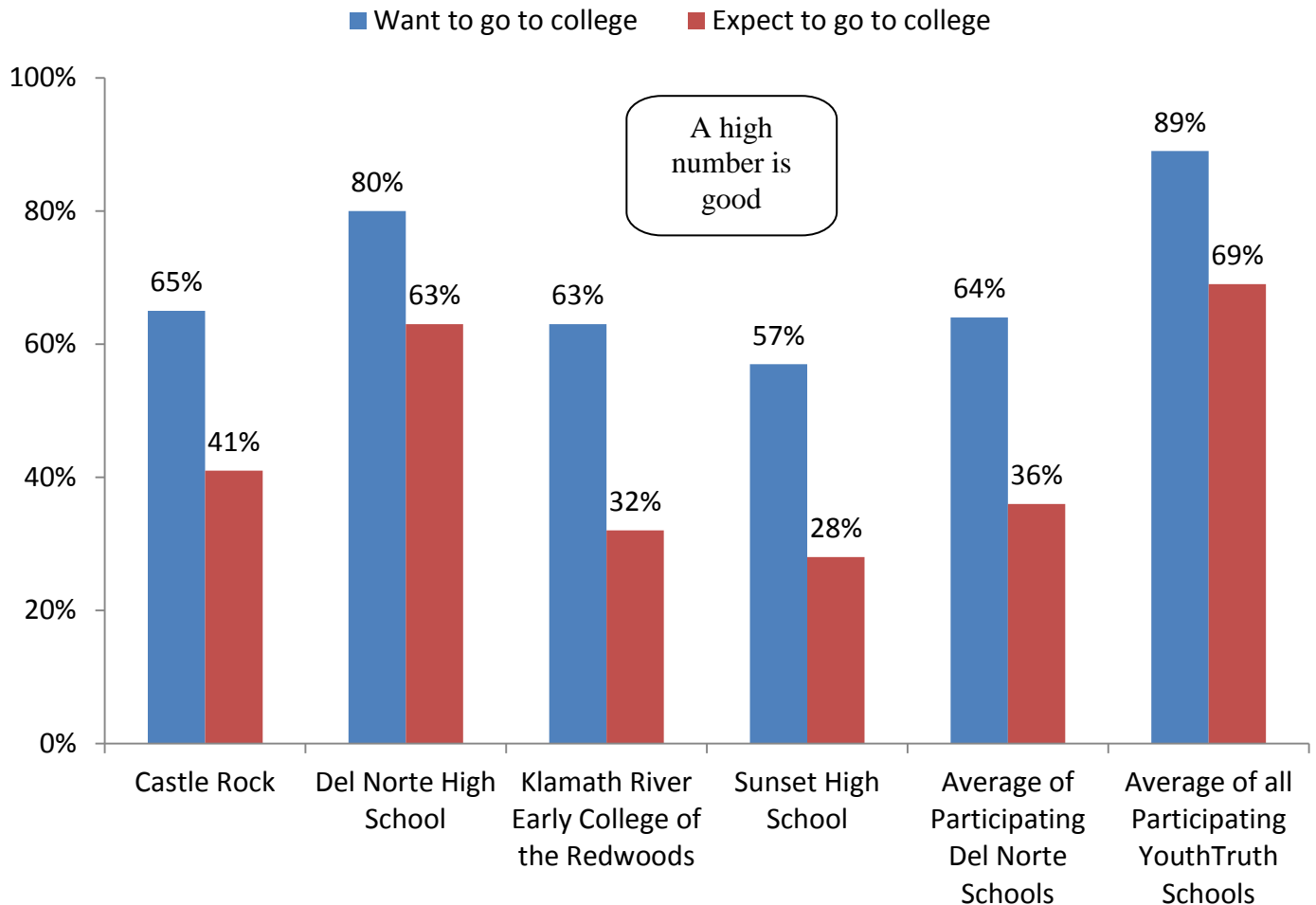
- Adding students who later transfer into the cohort during grade nine (year 1), grade 10 (year 2), grade 11 (year 3), and grade 12 (year 4); and
- Subtracting students who transfer out, emigrate to another county, or die during the 4-year period.

Students who drop out during the 4-year period remain in the cohort, as well as students that complete 12<sup>th</sup> grade and exit the educational system without graduating. Students that take longer than four years to graduate or remain enrolled after four years are also included as part of the cohort.

This level of data is only available starting in 2009-10. Prior years do not have cohort data and do not have graduation rates by ethnicity.

Racial/ethnic groups with low numbers are not included due to statistical instability.

**Exhibit 21.**  
**Percent of High School Students who Want to Attend College and**  
**Expect to Attend College, 2011**



Data Source: Youth Truth Survey conducted by The Center for Effective Philanthropy. <http://www.effectivephilanthropy.org/index.php>

Notes: In January 2011, 4 schools from Del Norte County participated in the Youth Truth project (Castle Rock n=233; Del Norte High School n=1,066; Klamath River Early College of the Redwoods n=30; Sunset High School n=86). When possible, student perceptions from schools in Del Norte are compared to students' perceptions from all other schools that have participated in Youth Truth (164 schools across the US).

## Teen Birth Rate

Teen births are associated with negative impacts on health, educational, and economic outcomes for both mothers and children.<sup>1-5</sup> 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.<sup>6,7</sup>

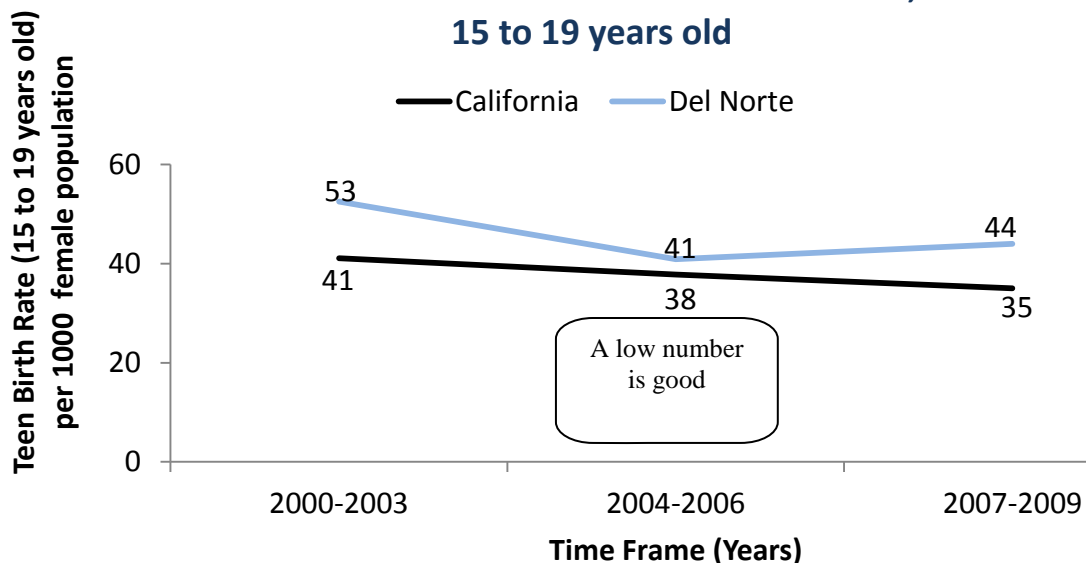
Teens who give birth are more likely to be single parents, not complete high school or college, live in poverty, and rely on public financial and/or food assistance programs.<sup>7</sup> One in five teen births is to a teen who has already had a baby, which can exacerbate the issues mentioned above.<sup>8</sup> The problem is often perpetuated as daughters born to teen mothers are 66% more likely to become teen mothers themselves. This intergenerational cycle of teenage motherhood contributes to persistent poverty.<sup>9</sup>

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.<sup>6</sup> It has been reported that teen childbearing costs the United States government and taxpayers \$9.1 billion annually.<sup>10</sup>

### In Del Norte County:

- **The teen birth rate is higher than California**, but has decreased from 2000 to 2009. The average teen birth rate in Del Norte from 2007-2009 was 44 pregnancies per 1,000 females aged 15 to 19 years. This is equivalent to **one birth for every 23 adolescent females** (Exhibit 22).

**Exhibit 22. Births to Adolescent Mothers,  
15 to 19 years old**



Healthy People  
2020 Goal:

Reduce the Teen  
Birth Rate to 36.2  
pregnancies per  
1,000 females aged  
15 to 17 years

Del Norte County:	2000-2003	2004-2006	2007-2009
Female Population (15-19 yrs old)	1,066	1,093	1,076
Average Number of Births to Teen Mothers	56	45	48

Data Source: County Health Status Profiles (2005, 2008, 2011) <http://www.cdph.ca.gov/programs/ohir/Pages/CHSP.aspx>

# Indicators Related to Providing a Health Home for all Children



## Percent of People with a Health Home and Dental Home

There is a growing body of evidence illustrating the importance of a usual source of primary care for health and dental needs.<sup>1-5</sup> Different names have been used for these concepts including “medical home”, “patient centered medical home”, “health home”, “dental home”, and “patient-centered medical-dental home”, but they all have common principles including: a personal healthcare provider, a team-directed practice, whole-person orientation, and coordinated care with a focus on quality, safety, and accountability.<sup>1-4</sup> The American Academy of Pediatric Dentistry defines a dental home as “the ongoing relationship between the dentist and the patient, inclusive of all aspects of oral health care delivered in a comprehensive, continuously accessible, coordinated, and family-centered way.”<sup>3</sup>

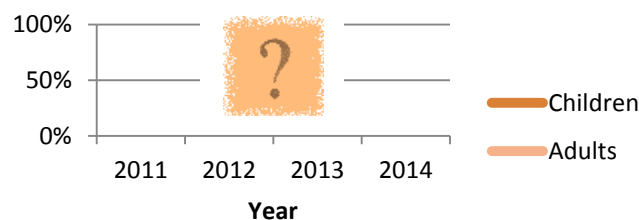
Having a “health home” is associated with better health (for individuals and populations), lower overall costs of care, and reductions in health disparities.<sup>1</sup> There is evidence that a “health home” results in fewer emergency department visits, less hospitalization, fewer unmet needs, better preventive care, better problem/needs recognition, more accurate/early diagnosis, better appointment keeping, lower costs, better monitoring, fewer drug prescriptions, better quality, reduced errors, and increased satisfaction.<sup>1-2</sup>

Dental caries is the most common preventable disease of childhood, which can contribute to numerous health problems if left untreated, including diabetes, cancer, cardiovascular disease, and pregnancy complications.<sup>5-18</sup> Children with dental homes are more likely to receive preventive and routine oral health care, which reduces the risk of developing oral health disease.<sup>4</sup>

While insurance is an important facilitator of using health services, it does not guarantee access to or use of care. There are many other factors that can impact access to care and rural areas are particularly challenged with two of these: providing a sufficient health care workforce to meet the needs of the community and providing access to adequate transportation.

Having a health and dental home clearly has significant impacts on individual and population health and wellness; however, we currently do not know what percent of the population (adults and children) in Del Norte County and Adjacent Tribal Lands has a health home and/or dental home. This is a critical question to ask. We recommend developing a research plan that will allow for the collection of this data with robust sample sizes to ensure adequate representation of diverse groups (by geography, socio-economics, and culture/race/ethnicity). This will allow for identification of health access inequities, which can inform improvement efforts.

### % OF PEOPLE THAT REPORT HAVING A HEALTH HOME AND DENTAL HOME



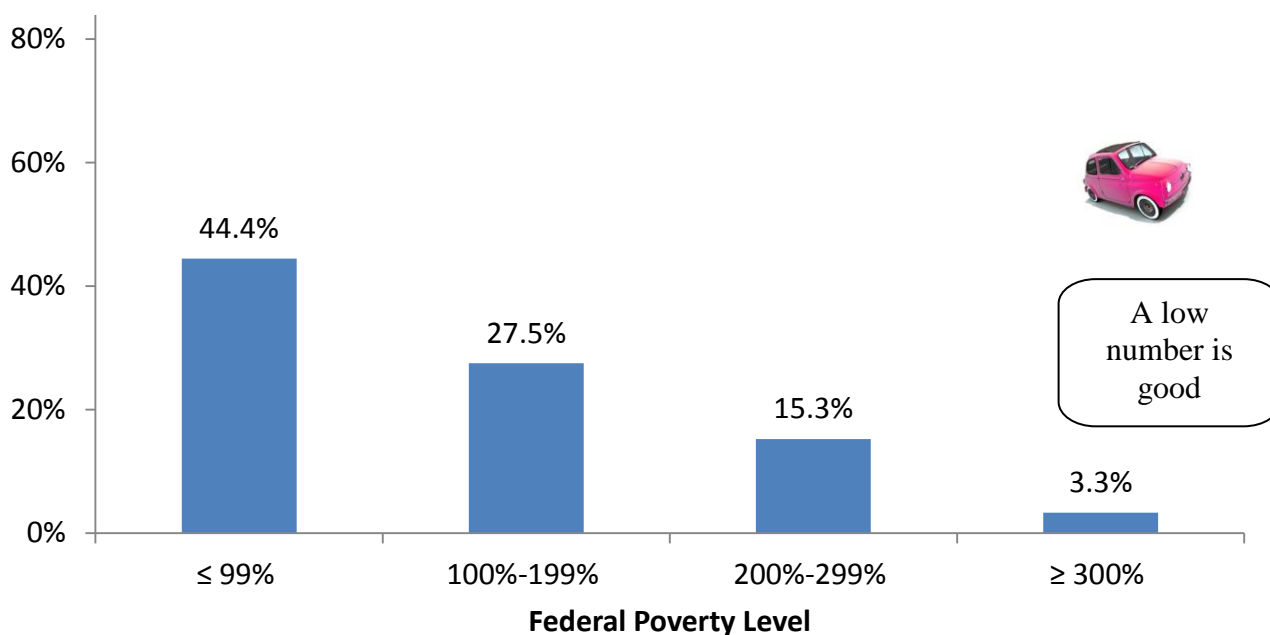
## Percent of Adults Reporting Transportation as a Problem Meeting Health Needs for their Families

Transportation is an important determinant of health, and rural areas are particularly challenged when it comes to transportation.<sup>1,2</sup> Research has shown that rural residents have greater transportation difficulties and have to travel longer distances to receive health care compared to urban residents.<sup>3</sup> 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.<sup>4</sup> 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.<sup>3</sup>

### 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 ( $\leq 200\%$  federal poverty level) (Exhibit 23).
- Geography impacts transportation problems. Of the sampled towns, Klamath has the highest transportation problems (26.3%), followed by Crescent City (17.4%), Gasquet (14.3%), and Fort Dick (10.5%) (Exhibit 24).

### Exhibit 23. Percent of Adults Reporting Transportation as a Problem Meeting Health Needs of their Families, Del Norte County, 2006

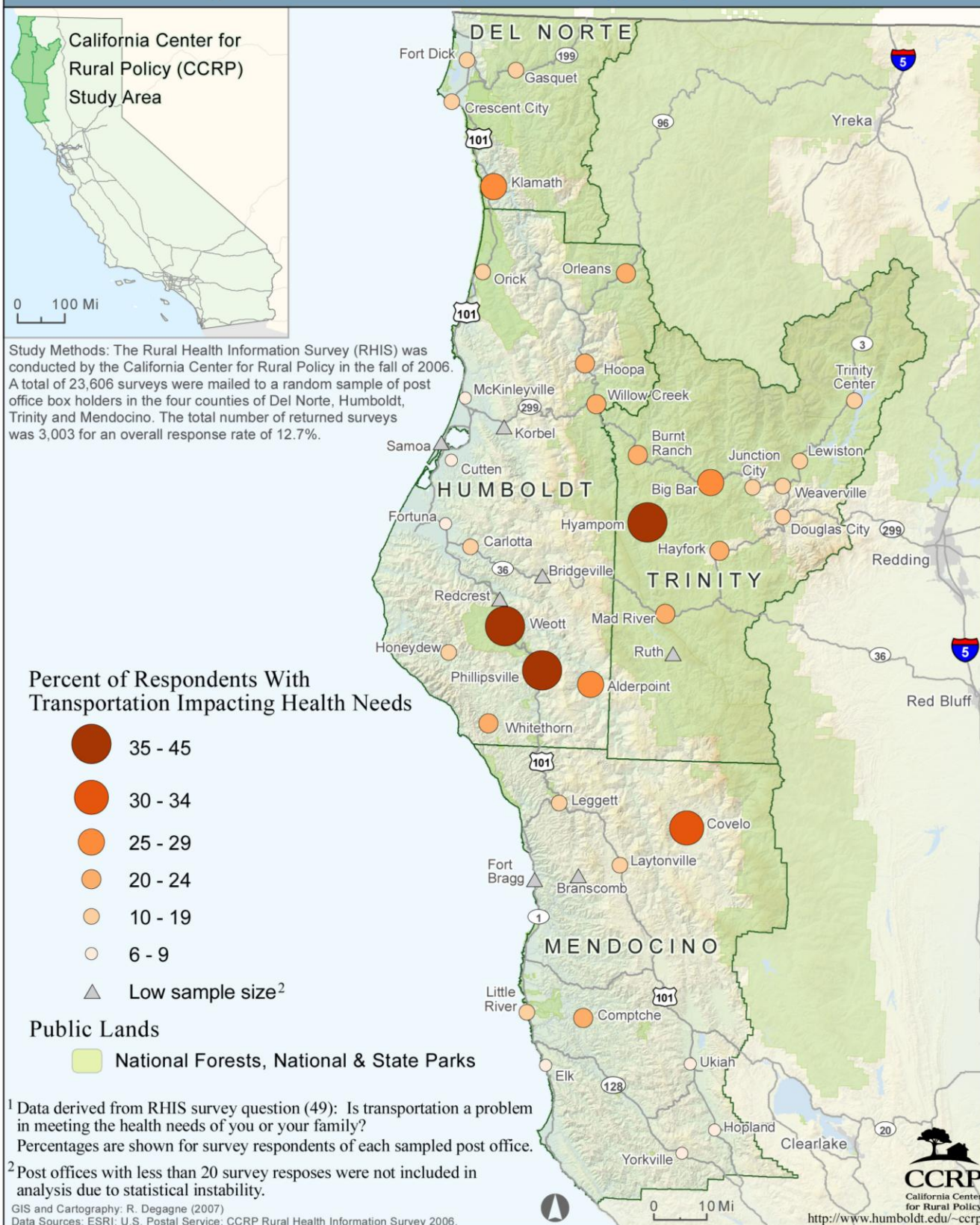


Data Source: Rural Health Information Survey, 2006, California Center for Rural Policy <http://www.humboldt.edu/ccrp/rural-health-information-survey>

This was a mail survey conducted by the California Center of Rural Policy (CCRP) in the 4 counties of Del Norte, Humboldt, Trinity and Mendocino in 2006. CCRP developed a four page survey containing questions about general health, mental health, preventive health, access and utilization of healthcare, transportation, food security, sources of health information and access to phones, electricity, and internet. Surveys were mailed to a random sample of post office box holders in each county and adults 18 or older were asked to participate. The sample size for Del Norte County was 421.

## Exhibit 24.

# CCRP Rural Health Information Survey: Percent of Respondents With Transportation Impacting Health Needs<sup>1</sup>, 2006



## Prenatal Care



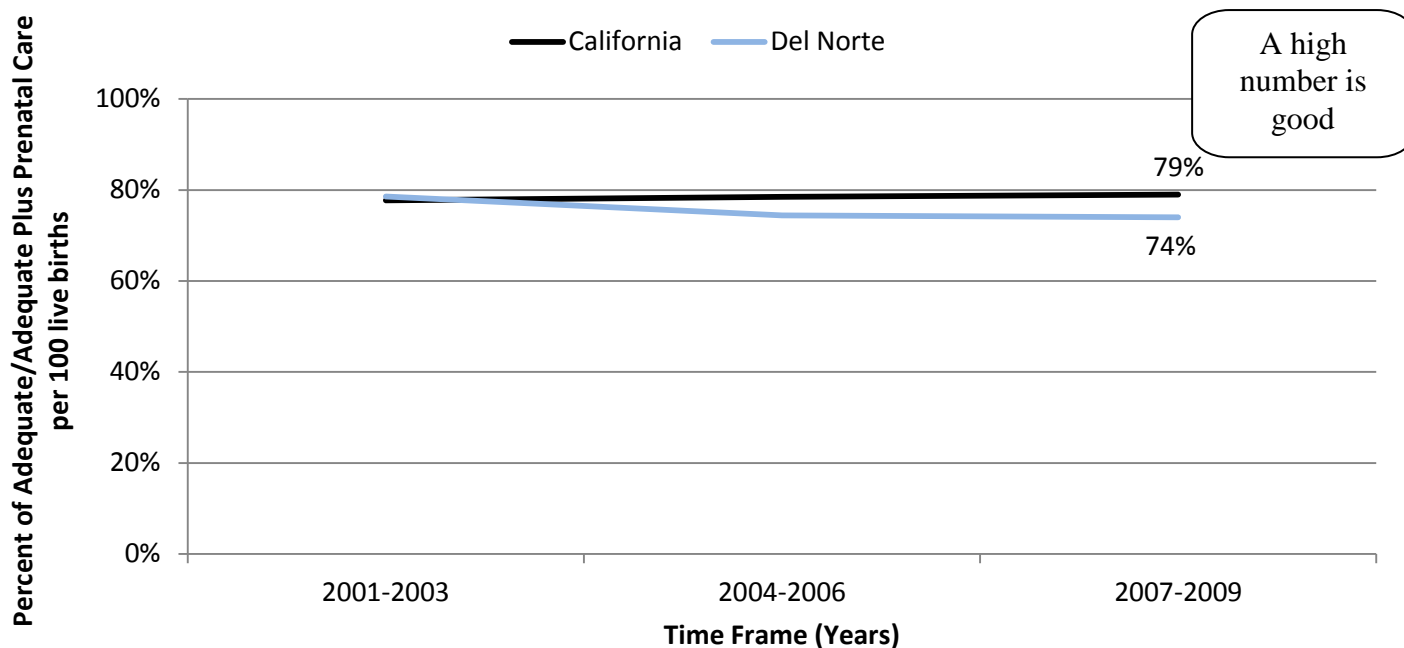
Prenatal care is designed to promote healthy development of the mother and baby through the provision of preventive, diagnostic, and therapeutic services. Prenatal visits consist of a thorough account of the woman's health history, screening for pregnancy complications, fetal monitoring and testing, childbirth education, as well as information about healthy nutrition, weight gain, and activities.<sup>1</sup> 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.<sup>2</sup> 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.<sup>2-4</sup> The risk of infant and mother mortality has also been shown to increase when prenatal care is limited.<sup>2</sup>

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.<sup>3</sup>

### 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 (Exhibit 25).
- From 2003 to 2009 the percent of women with **late or no prenatal care increased** from 18% to 43.5% (Exhibit 26).

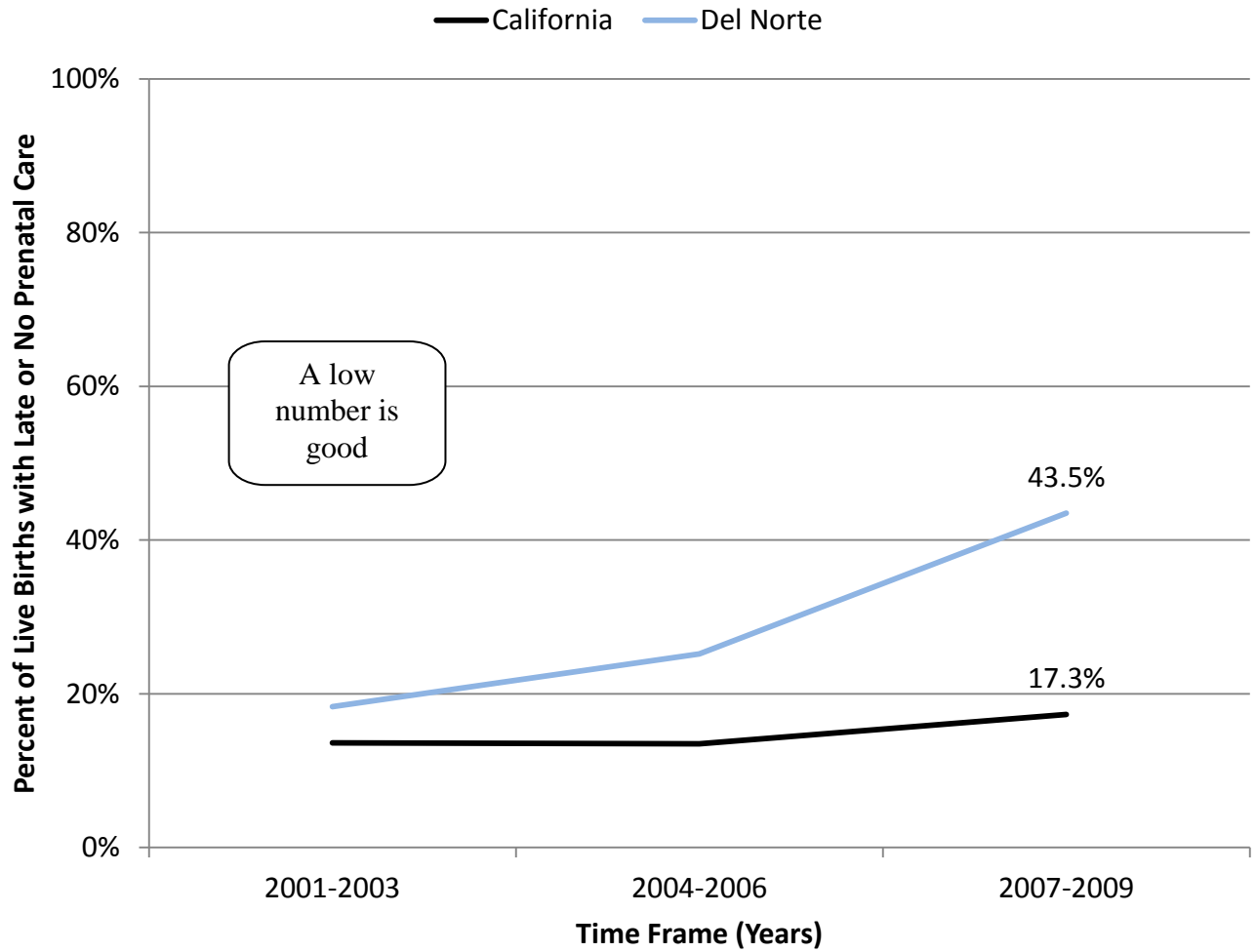
**Exhibit 25. Percent of Women with "Adequate/Adequate Plus" Prenatal Care**



Data Source: County Health Status Profiles (2005, 2008, 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 4<sup>th</sup> month and  $\geq 80\%$  of recommended visits were received.

## Exhibit 26. Percent of Women with Late or No Prenatal Care



Data Source: County Health Status Profiles (2005, 2008, 2011) <http://www.cdph.ca.gov/programs/ohir/Pages/CHSP.aspx>

Notes: Women were considered to have late or no prenatal care if they started care after the first trimester or did not receive care.

## Use of the Emergency Department

Use of the emergency department (ED) is sometimes necessary; however, a high percent of ED visits tend to be for preventable non-urgent conditions.<sup>1</sup> ED use is more costly than primary care and often less effective, particularly for chronic conditions.<sup>2</sup> Among patients with insurance in California, Medi-Cal recipients are more than twice as likely to have visited the ED in the past year as those with private insurance. Often cited reasons for visiting the ED among insured patients who are not critically ill include: 1) lack of access to medical care outside the ED-such as same-day/evening/weekend appointments with a primary care physician; 2) lack of advice on how to handle sudden medical problems; 3) lack of alternatives to the ED -nurse advice lines or urgent care clinics; and 4) Positive attitudes about the ED as a site of care.<sup>1</sup>

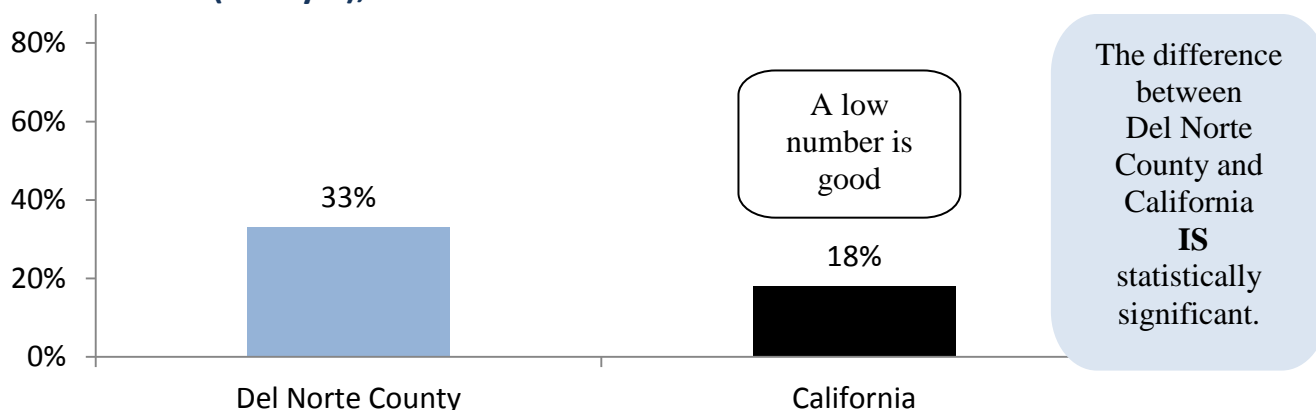
There are many conditions, which are preventable with regular routine care; however, these ambulatory care sensitive (ACS) conditions are often seen in the ED. Visiting an ED for these ACS conditions generally indicates poor prevention and inadequate access to outpatient services.<sup>3</sup> ACS dental conditions are being seen in EDs with increasing numbers, which is an expensive and inefficient way to treat these problems.<sup>3</sup> According to numbers from 2007, Del Norte County had 514 per 100,000 ED visits that were for preventable dental conditions. This is higher than ED visits in the county for asthma and diabetes combined. Del Norte County's rate of ED visits for preventable dental conditions is much higher than California's (222 per 100,000).<sup>4</sup>

While reasons for visiting an ED are complex, research supports the idea that access to a medical and dental home will decrease inappropriate use of the ED. Receiving primary care in a medical home is associated with reduced utilization of ED services among children with asthma and among uninsured, low-income populations.<sup>5,6</sup> Decreased ED use is an important indicator of access to a medical and dental home.<sup>7</sup>

### In Del Norte County:

- One out of three (33%) of children and teens visited the ED in the past year, which is **significantly higher** than California (18%) (Exhibit 27).

**Exhibit 27. Percent of Children/Teens who Visited the Emergency Department in the Past Year (0-17 yrs), 2009**



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

Notes: In 2009 Del Norte County was oversampled as part of the Building Healthy Communities Initiative. Households in each BHC site were randomly selected to participate through random digit dial telephone sampling. Given the focus of BHC efforts on children and families, adult eligibility included being a parent of a child under age 18 or an adult age 18 to 40. Children age 0 to 11 and teens age 12 to 17 were also eligible. For children, interviews were administered with the adult most knowledgeable about that child; for teens, interviews were administered with the teen after obtaining parent's permission. County and state estimates come from CHIS 2009 and maintain the same eligibility criteria as the BHC site. In Del Norte County, 373 interviews were conducted with eligible adults and 290 with children and teens.

## Smoking in the Household

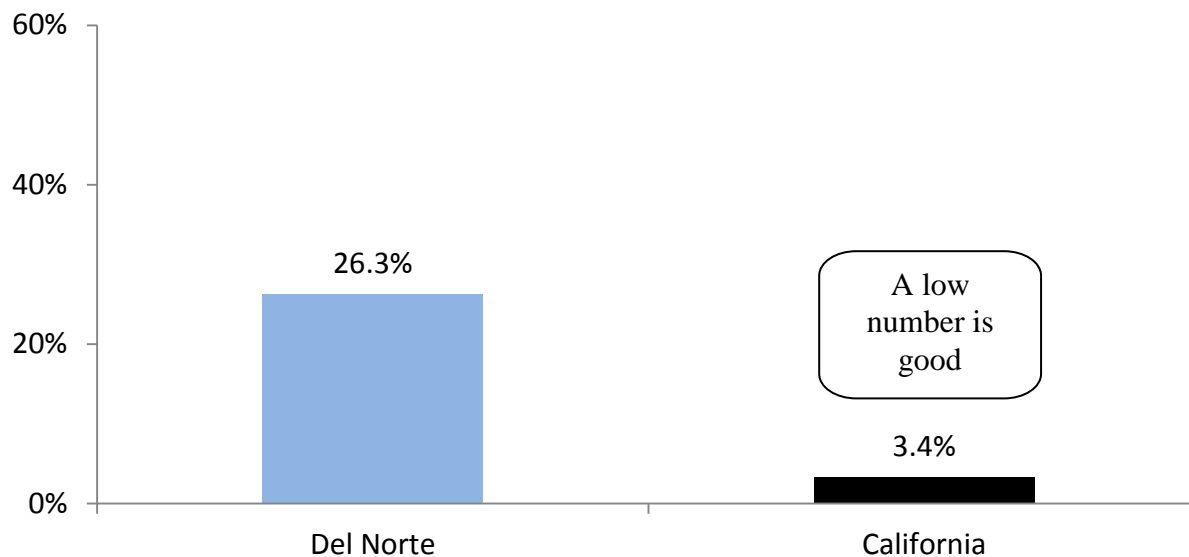
Tobacco smoking is the single largest preventable cause of death and disease in the United States. A large body of research shows that tobacco smoking and second hand smoke exposure causes cancer, cardiovascular disease (blood clots, stroke, heart attacks, etc.), pulmonary disease, and many adverse reproductive outcomes (infertility, miscarriage, preterm birth, low birth weight, and neurologic, behavioral and cognitive problems).<sup>1,2</sup>

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.<sup>2</sup> 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.<sup>3</sup> This indicator is included in this section as families with a health home that supports healthy behaviors will hopefully be less likely to expose their young children to smoking in the household.

### In Del Norte County:

- **Low-income children are significantly more likely to have smoking in the household** compared to other low-income children in California (Exhibit 28). While we would like to know what percent of *all* children are exposed to smoke in the home, data are only available for low-income children.

**Exhibit 28. Percent of Low-Income Children (age <5 yrs) with Smoking in the Household, 2009**



Data Source: Pediatric Nutrition Surveillance System, 2009. Table 7B. <http://www.dhcs.ca.gov/services/chdp/Pages/PedNSS2009.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.

# Indicators Related to Reducing Childhood Obesity



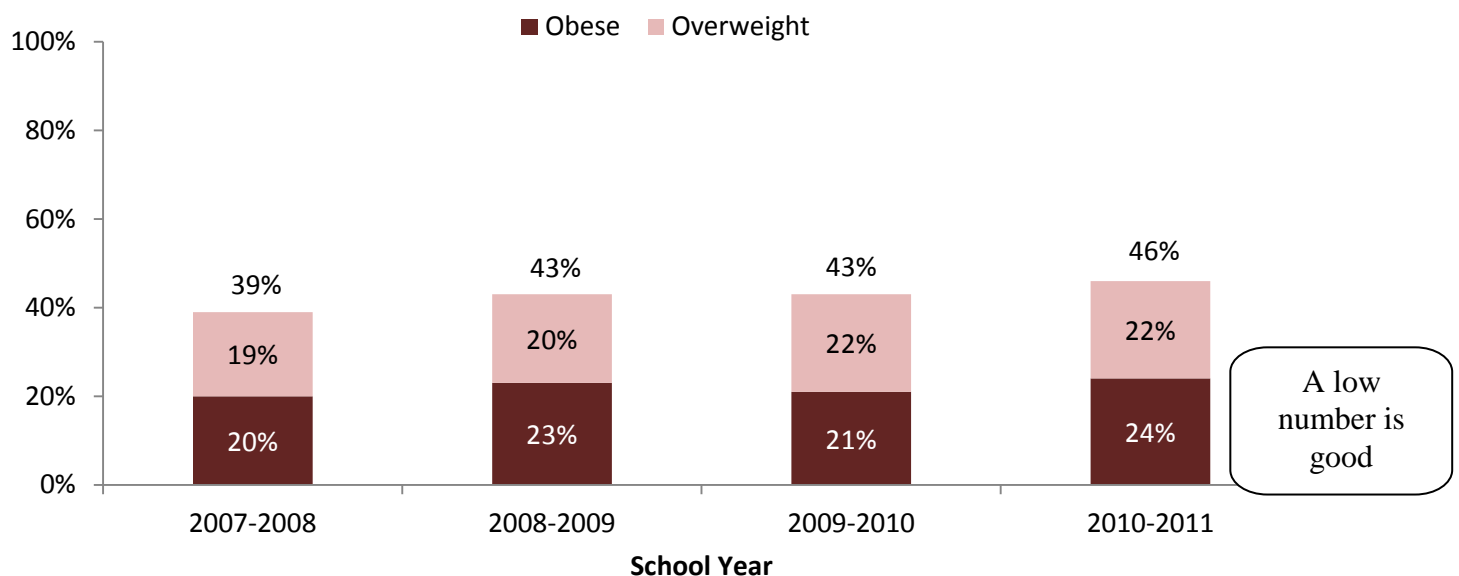
## Body Mass Index of Children/Teens

Body mass index (BMI) is a proxy for body fat and is calculated based on an individual's weight and height. Taking into account age and sex, BMI is categorized as underweight, normal weight, overweight or obese. An extensive body of research shows that being overweight or obese is associated with multiple diseases and high health care costs.<sup>1-4</sup> 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.<sup>1-3</sup> The total economic cost of overweight and obesity in 2006 was estimated to be \$21.0 billion in California.<sup>5</sup> In addition to health problems, overweight and obesity are also associated with many negative social and psychological ramifications. Overweight and obese school-aged children are more likely to be victims and perpetrators of bullying compared to their normal-weight peers.<sup>6</sup>

### In Del Norte County:

- **Nearly half (46%) of the students are overweight or obese and this trend is increasing** (Exhibit 29).
- A **high percentage** of low-income children are overweight or obese with American Indian children being disproportionately affected (Exhibits 30, 31, & 32).
- There is room for improvement in meeting the Healthy People 2020 goals.

### Exhibit 29. Percent of Students who are Overweight\* or Obese\*\* (Grades K, 1, 3, 5, 7, 9)

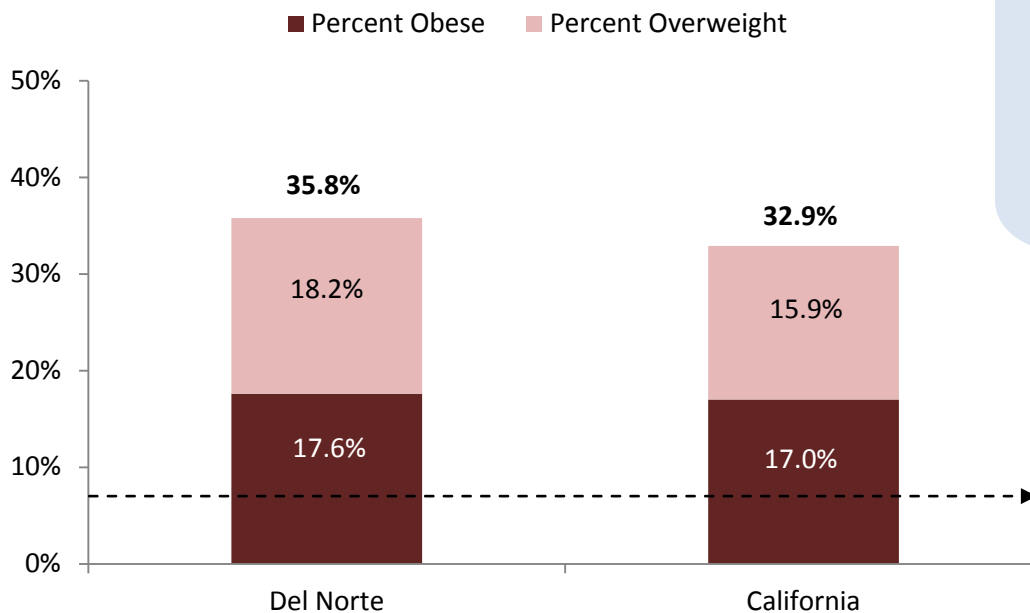


Data Source: Del Norte County School District.

Notes: \*Overweight is defined as a BMI-for-age between the 85<sup>th</sup> and 95<sup>th</sup> percentiles.

\*\*Obese is defined as a BMI-for-age at or above the 95<sup>th</sup> percentile.

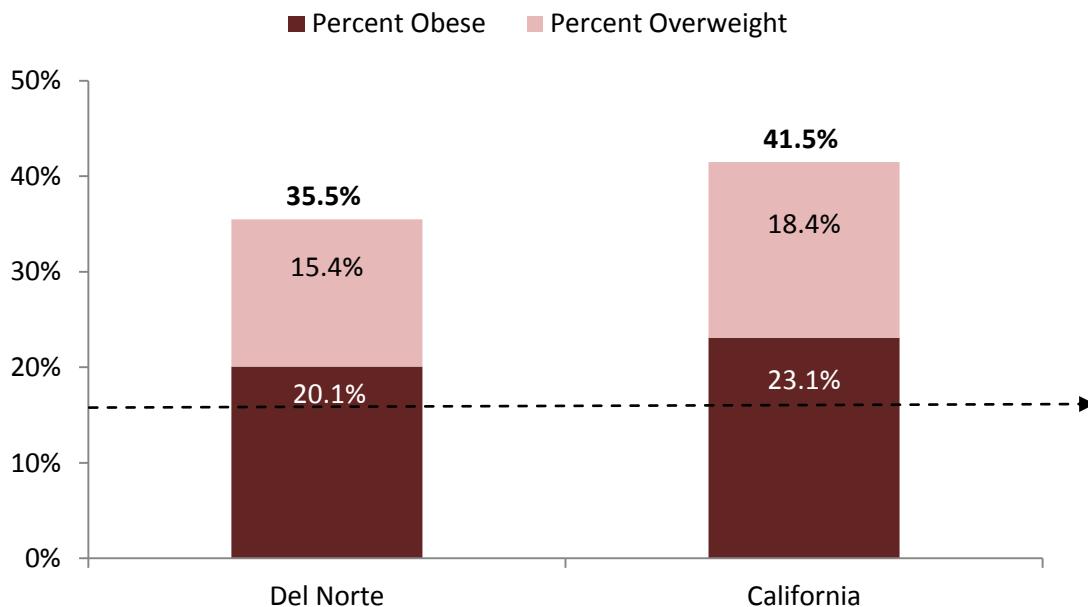
### Exhibit 30. Prevalence of Overweight\* and Obesity\*\* Among Low-Income Children Aged 2-4 Years, 2009



**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%**

### Exhibit 31. Prevalence of Overweight\* and Obesity\*\* Among Low-Income Children Aged 5-19 Years, 2009



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

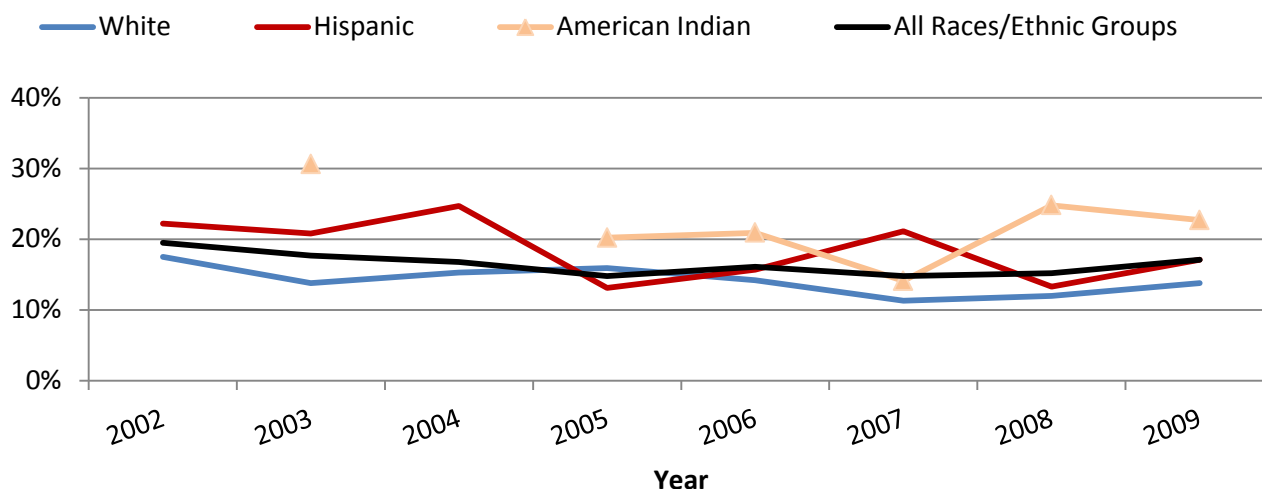
Data Source: Pediatric Nutrition Surveillance System <http://www.dhcs.ca.gov/services/chdp/Pages/PedNSS2009.aspx>

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.

\*Overweight is defined as a BMI-for-age between the 85<sup>th</sup> and 95<sup>th</sup> percentiles.

\*\*Obesity is defined as a BMI-for-age at or above the 95<sup>th</sup> percentile.

**Exhibit 32.**  
**Percent of Low-Income Children with Obesity\*\* by Race/Ethnicity**  
**(age <5 years)**  
**Del Norte County**



Data Source: Pediatric Nutrition Surveillance System <http://www.dhcs.ca.gov/services/chdp/Pages/PedNSS2009.aspx>

Notes: \*\*Obesity is defined as a BMI-for-age at or above the 95<sup>th</sup> percentile.

Data not shown for American Indian's in 2004 due to small numbers.

*“Does anyone believe it is acceptable that Del Norte is now reported to have the highest percentage of child obesity rates in the state? No, but we can change how we do business and reverse this.”*

Patti Vernelson, Executive Director, First 5 Del Norte

## Soda and Sugar Sweetened Beverage Consumption

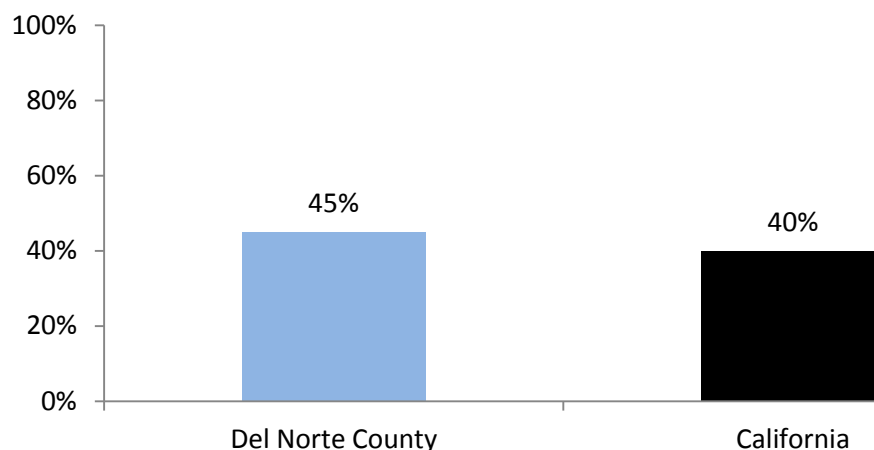
Consumption of soda and sugar-sweetened beverages is associated with negative health consequences in children, such as obesity, increased risk of diabetes, and dental caries.<sup>1-4</sup> Each additional 12 oz soda consumed per day by children increases the odds of becoming obese by 60%.<sup>1</sup> Diet soft drinks also increase obesity in children.<sup>2</sup> Additionally, a recent study found a strong association between soda consumption and aggressive behavior. Teenagers who drank more than five 12-ounce cans of carbonated soft drinks each week were more likely to carry a weapon and commit violence against friends, dates, and siblings.<sup>5</sup>

### In Del Norte County:

- **45% of youth** are consuming soda or sugar sweetened beverages on a regular basis (Exhibit 33).

**Exhibit 33. Percent of Children/Teens who Drank Soda or Sugar Sweetened Beverage Yesterday (age 2-17 yrs), 2009**

The difference between Del Norte County and California is **NOT** statistically significant.



A low number is good

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

Notes: In 2009 Del Norte County was oversampled as part of the Building Healthy Communities Initiative. Households in each BHC site were randomly selected to participate through random digit dial telephone sampling. Given the focus of BHC efforts on children and families, adult eligibility included being a parent of a child under age 18 or an adult age 18 to 40. Children age 0 to 11 and teens age 12 to 17 were also eligible. For children, interviews were administered with the adult most knowledgeable about that child; for teens, interviews were administered with the teen after obtaining parent's permission. County and state estimates come from CHIS 2009 and maintain the same eligibility criteria as the BHC site. In Del Norte County, 373 interviews were conducted with eligible adults and 290 with children and teens.

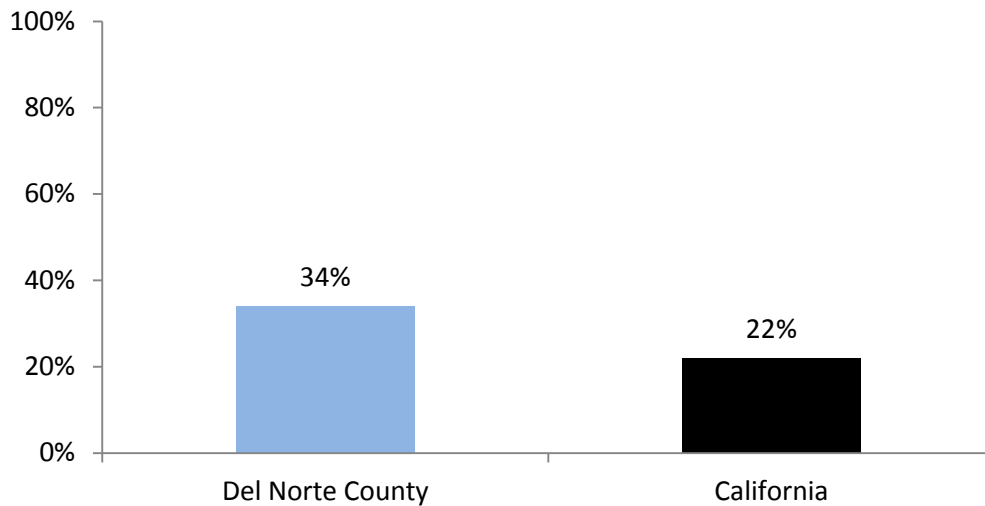
## Fruit and Vegetable Consumption

Fruit and vegetable consumption is important for optimal child development.<sup>1</sup> 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.<sup>1-4</sup> 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.<sup>2-4</sup> 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.<sup>3</sup>

### In Del Norte County:

- **Only a third** of children and teens are eating the recommended amount of fruits and vegetables.
- A similarly **low percentage of adults** (28%) are consuming adequate amounts of fruits and vegetables (Exhibits 34 & 35).

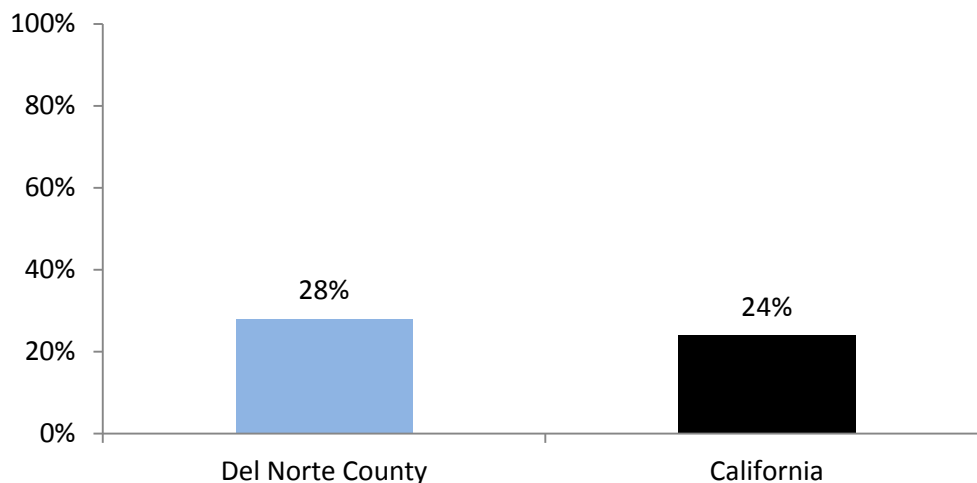
**Exhibit 34. Percent of Children/Teens who Ate 5+ Servings of Fruits and/or Vegetables Yesterday (age 2-17 yrs), 2009**



The difference between Del Norte County and California is **NOT** statistically significant.

A high number is good

**Exhibit 35. Percent of Adults who ate Fruits and/or Vegetables 3 or more times per day in the Last Week, 2009**



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

Notes: In 2009 Del Norte County was oversampled as part of the Building Healthy Communities Initiative. Households in each BHC site were randomly selected to participate through random digit dial telephone sampling. Given the focus of BHC efforts on children and families, adult eligibility included being a parent of a child under age 18 or an adult age 18 to 40. Children age 0 to 11 and teens age 12 to 17 were also eligible. For children, interviews were administered with the adult most knowledgeable about that child; for teens, interviews were administered with the teen after obtaining parent's permission. County and state estimates come from CHIS 2009 and maintain the same eligibility criteria as the BHC site. In Del Norte County, 373 interviews were conducted with eligible adults and 290 with children and teens. Fruit and vegetable consumption does not include fruit juices or fried potatoes. Measurement may not be comparable to previous CHIS questionnaires.

## Activity Levels of Youth

Engaging in regular physical exercise is a key factor in the maintenance of physical and mental health throughout the lifespan.<sup>1-5</sup> 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.<sup>2-5</sup> Additionally, physical activity helps to relieve symptoms of depression and anxiety, improve mood and overall quality of life.<sup>2-5</sup> It has been estimated that relatively small increases in physical activity could avert 30,000-35,000 deaths per year in the U.S.<sup>6</sup> 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.<sup>7</sup>

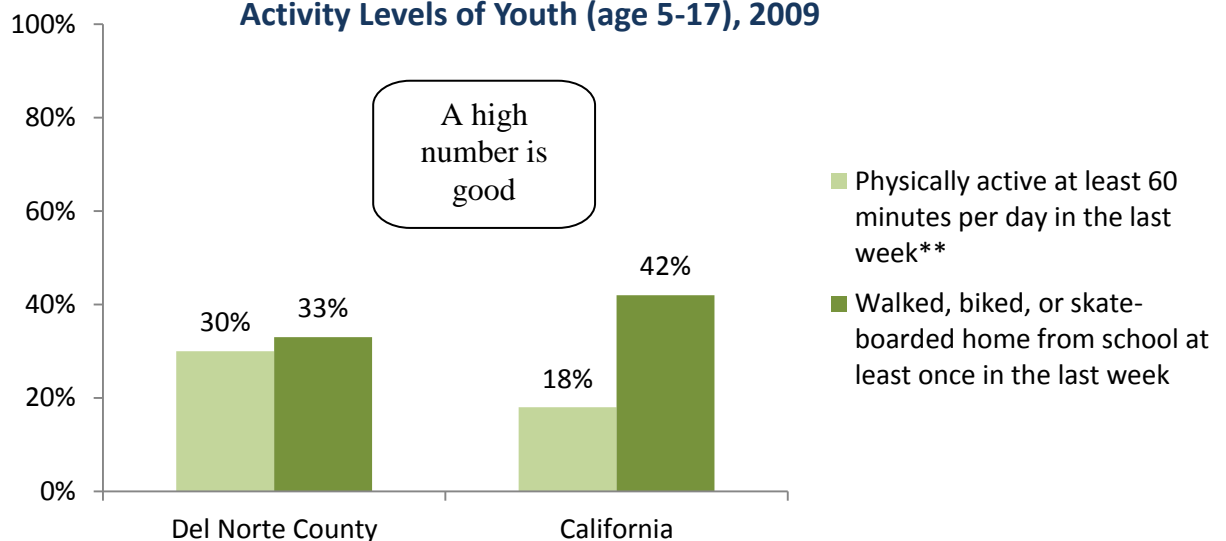
Physical activity levels and amount of screen time (i.e. television watching and video game playing) are 2 key risk factors for childhood overweight and obesity. Research has shown that children not meeting the physical activity or screen time recommendations\* are 3 to 4 times more likely to be overweight than those complying with both recommendations.<sup>8</sup>

### In Del Norte County:

- Only **30%** of youth are physically active at least 60 minutes per day (excluding physical education class) (Exhibit 36).
- One out of three youth walk, bike, or skate board to or from school (Exhibit 36).
- Screen time data are not available at this time, but should be available within the next year.

**Exhibit 36.**  
**Activity Levels of Youth (age 5-17), 2009**

The difference between Del Norte County and California is **NOT** statistically significant.



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

Notes: In 2009 Del Norte County was oversampled as part of the Building Healthy Communities Initiative. Households in each BHC site were randomly selected to participate through random digit dial telephone sampling. Given the focus of BHC efforts on children and families, adult eligibility included being a parent of a child under age 18 or an adult age 18 to 40. Children age 0 to 11 and teens age 12 to 17 were also eligible. For children, interviews were administered with the adult most knowledgeable about that child; for teens, interviews were administered with the teen after obtaining parent's permission. County and state estimates come from CHIS 2009 and maintain the same eligibility criteria as the BHC site. In Del Norte County, 373 interviews were conducted with eligible adults and 290 with children and teens.

\*Recommendations used in the study were 13,000 steps/day for boys and 11,000 steps/day for girls and no more than 2 hours/day of total media time.

\*\*Physical activity among children and teens who attended school last week, excluding physical education (PE).

## Food Insecurity

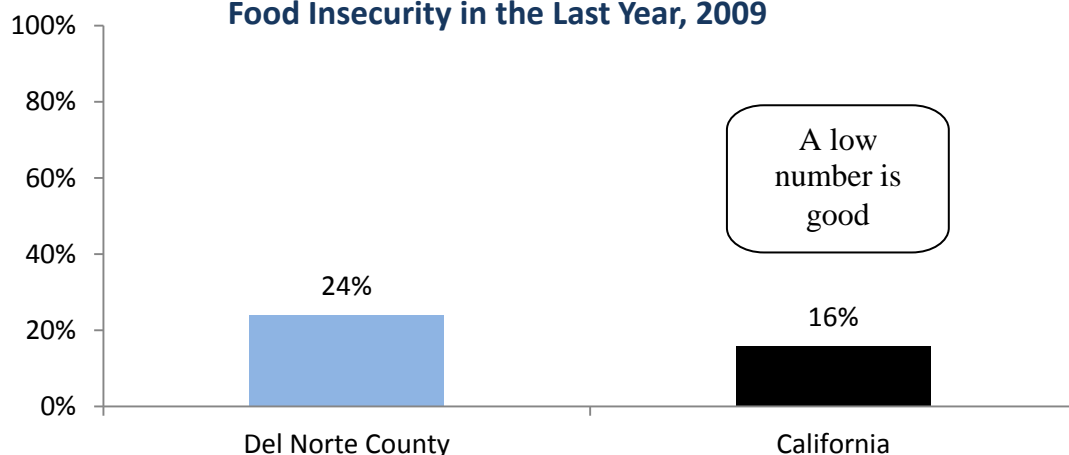
Food security refers to access by all people at all times to enough food for an active, healthy life. If an individual or household has limited or uncertain access to adequate food they are considered to be food insecure. Very low food security is a measure of severe food insecurity resulting in reduced food intake, disrupted eating patterns or hunger.<sup>1</sup> 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.<sup>2</sup> Research suggests that food insecurity is related to increased risk for health problems such as overweight/obesity, diabetes, heart disease, and high blood pressure.<sup>2-5</sup> 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.<sup>6</sup> 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.<sup>7</sup>

### In Del Norte County:

- Rates of food insecurity among low-income families are **significantly higher** than California. In 2009, approximately a quarter of low-income families experienced food insecurity in Del Norte compared to 16% in California (Exhibit 37).
- **Households with children are significantly more likely to report episodes of hunger (very low food security)** (15.2%) compared to households without children (8.3%) (Exhibit 38).
- Hunger (very low food security) varies by geography. Of the sampled towns, it is highest in Klamath (15.2%), followed by Fort Dick (13.2%), Crescent City (9.9%), and Gasquet (3.1%) (Exhibit 39).

**Exhibit 37.**  
**Food Insecurity in the Last Year, 2009**

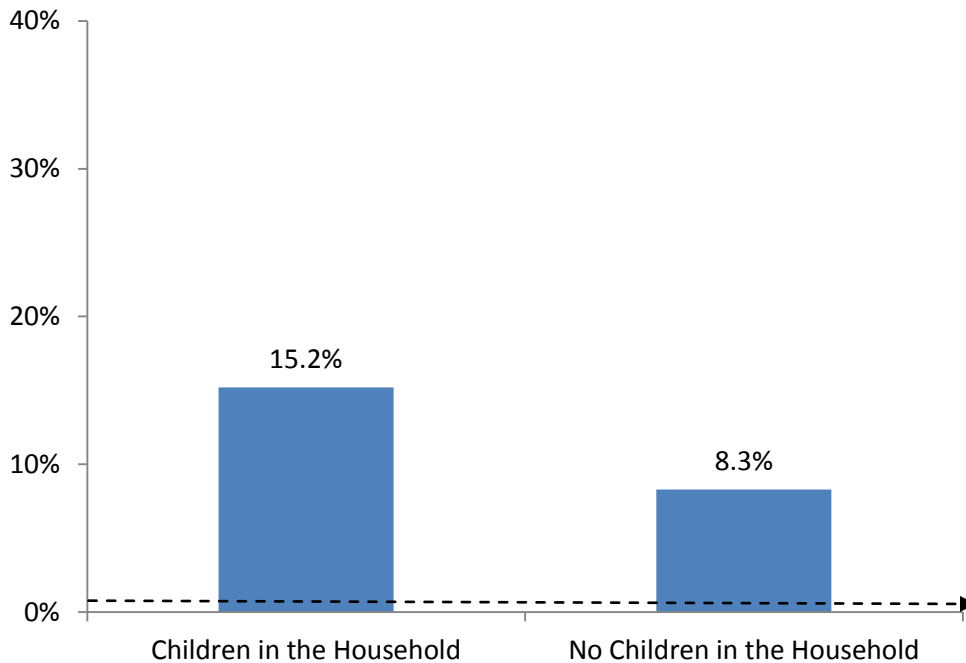
The difference between Del Norte County and California **IS** statistically significant.



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

Notes: In 2009 Del Norte County was oversampled as part of the Building Healthy Communities Initiative. Households in each BHC site were randomly selected to participate through random digit dial telephone sampling. Given the focus of BHC efforts on children and families, adult eligibility included being a parent of a child under age 18 or an adult age 18 to 40. Children age 0 to 11 and teens age 12 to 17 were also eligible. For children, interviews were administered with the adult most knowledgeable about that child; for teens, interviews were administered with the teen after obtaining parent's permission. County and state estimates come from CHIS 2009 and maintain the same eligibility criteria as the BHC site. In Del Norte County, 373 interviews were conducted with eligible adults and 290 with children and teens. This graph represents the proportion of adults below the 200% federal poverty line who reported some type of food deprivation in the last year.

### Exhibit 38. Percent of Households with Hunger (Very Low Food Security), Del Norte County, 2006



The difference between households with and without children **IS** statistically significant.

Healthy People 2020 Goal: Eliminate very low food security among children.

Target: **0.2%** of households with children with very low food security.

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

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

This was a mail survey conducted by the California Center for Rural Policy (CCRP) in the 4 counties of Del Norte, Humboldt, Trinity and Mendocino in 2006. CCRP developed a four page survey containing questions about general health, mental health, preventive health, access and utilization of healthcare, transportation, food security, sources of health information and access to phones, electricity, and internet. Surveys were mailed to a random sample of post office box holders in each county and adults 18 or older were asked to participate. The sample size for Del Norte County was 421.

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.

### Del Norte County is #1 at Enrolling Eligible Individuals in CalFresh\*

In 2010 Del Norte County Ranked # 1 out of all California counties for having the highest CalFresh utilization relative to the total number of income-eligible individuals.\*\*

Essentially 87% of eligible individuals were enrolled.



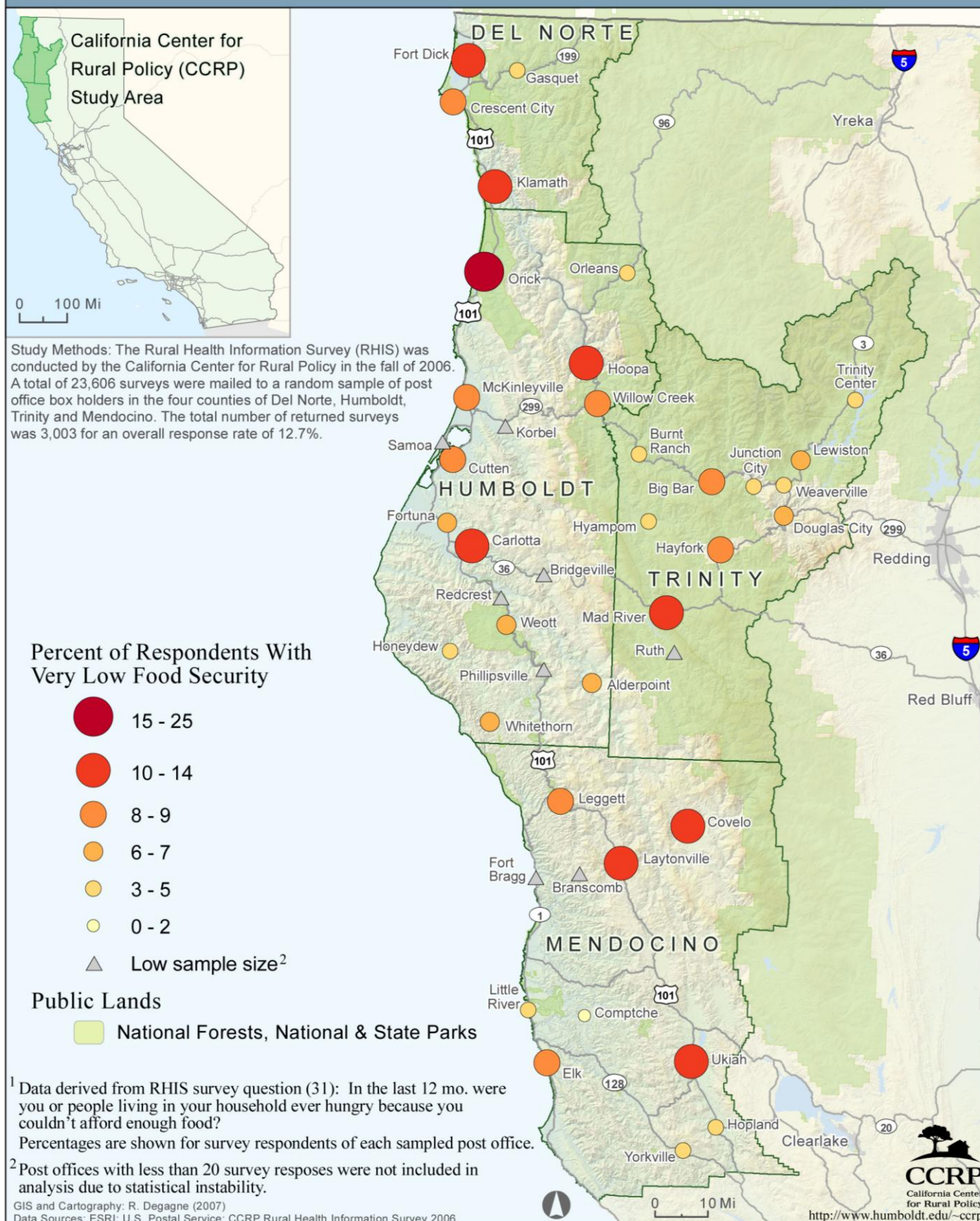
Data Source: California Food Policy Advocates <http://cfpa.net/pai-2012>

\*CalFresh is California's version of the U.S. Department of Agriculture's Supplemental Nutrition Assistance Program.

\*\*Excluding individuals who participate in the Food Distribution Program on Indian Reservations (FDPIR) and those who receive Supplemental Security Income (SSI) as these individuals are not eligible to receive CalFresh benefits.

# Exhibit 39.

## CCRP Rural Health Information Survey: Percent of Respondents With Very Low Food Security<sup>1</sup>, 2006



# Contextual Indicators

In order to provide a more complete look at community health in Del Norte and Adjacent Tribal Lands it is important to look at contextual indicators. These are indicators that are unlikely to change much in the next 10 years, yet they provide a context for the primary indicators and present the challenges in which we are working. The contextual indicators include the socioeconomic and living environments.

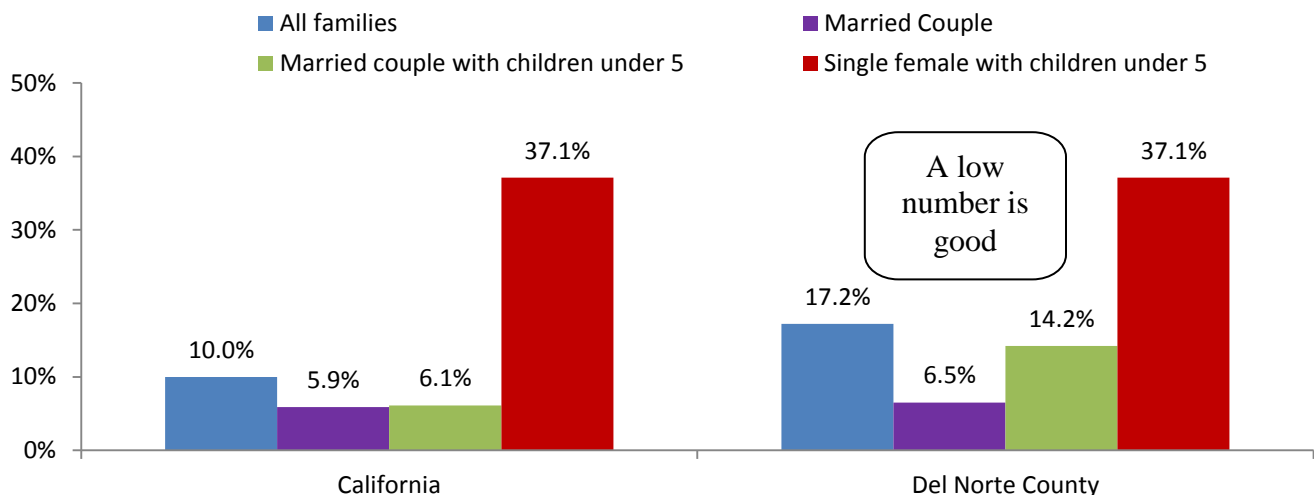
## Socioeconomic Environment

Poverty and low socioeconomic status have increasingly been shown to be associated with poor health.<sup>1-8</sup> 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.<sup>7</sup> 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.<sup>7,8</sup>

### 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 (Exhibits 34-43).
- **Unemployment rates continue to rise** and are the higher in Del Norte than California (Exhibit 44).
- The percent of renters paying more than 30% of their household income has **increased** (Exhibit 45).
- 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 (Exhibit 46).
- **One of every five people 25 years and older has less than a high school diploma** (Exhibit 47).

### Exhibit 40. Percent of Population in Poverty- by Family Type, 2007-2009

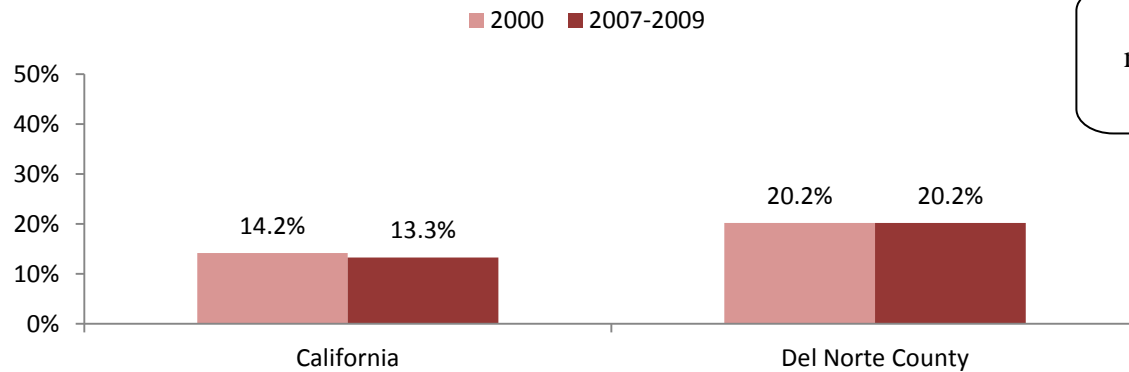


Data Source: U.S. Census, American Community Survey <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

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

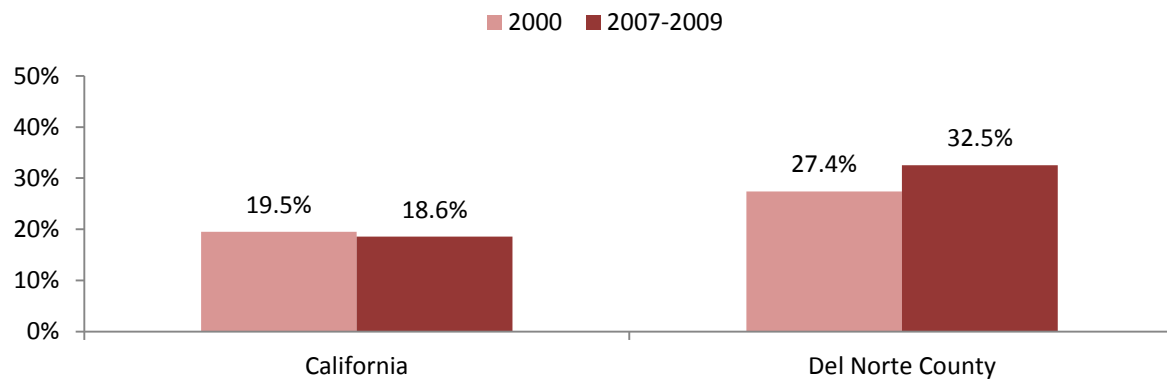
The margin of error for single females with children under 5 is large (+/- 41.2) and thus can vary significantly from year to year.

### Exhibit 41. Percent of Total Population in Poverty

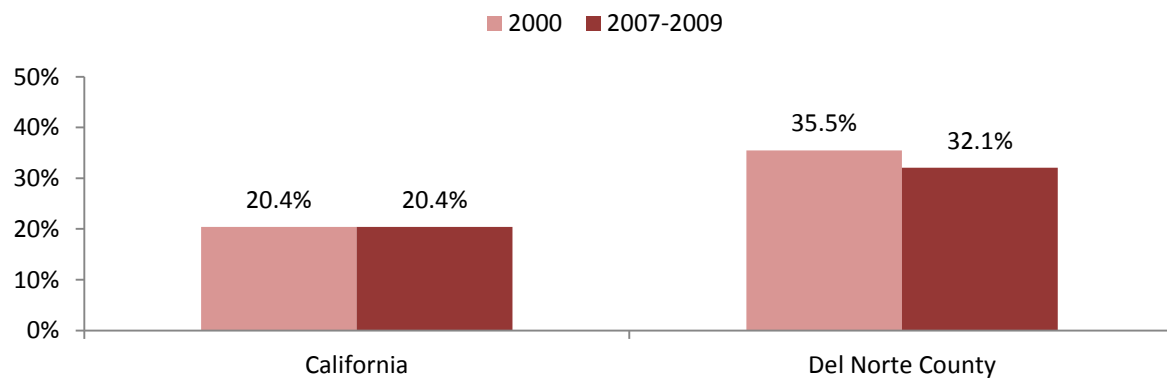


A low  
number is  
good

### Exhibit 42. Percent of Children Under Age 18 in Poverty



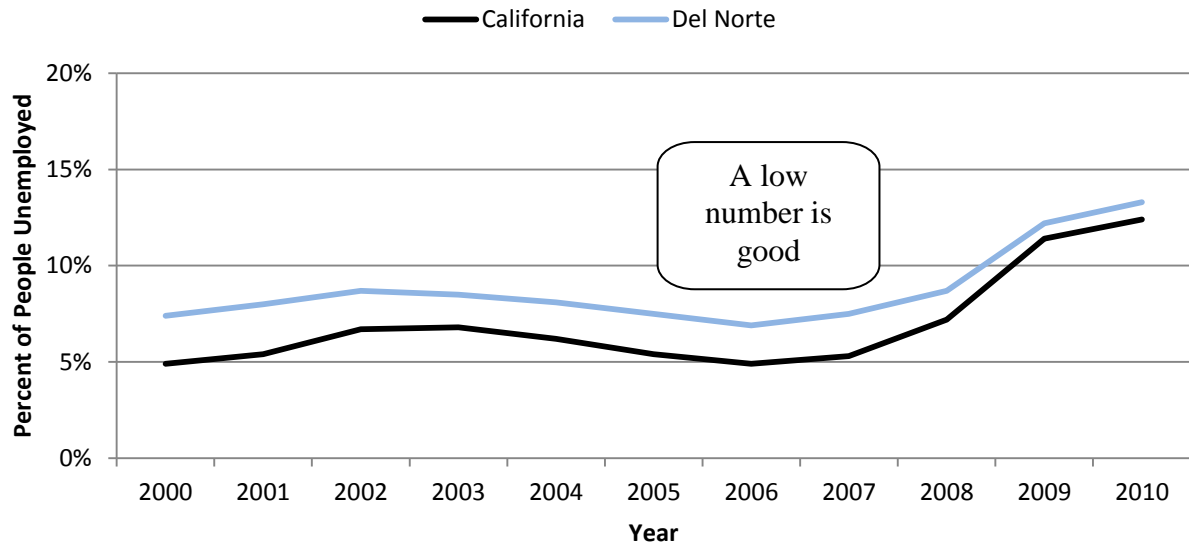
### Exhibit 43. Percent of children Under Age 5 in Poverty



Data Source: U.S. Census <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

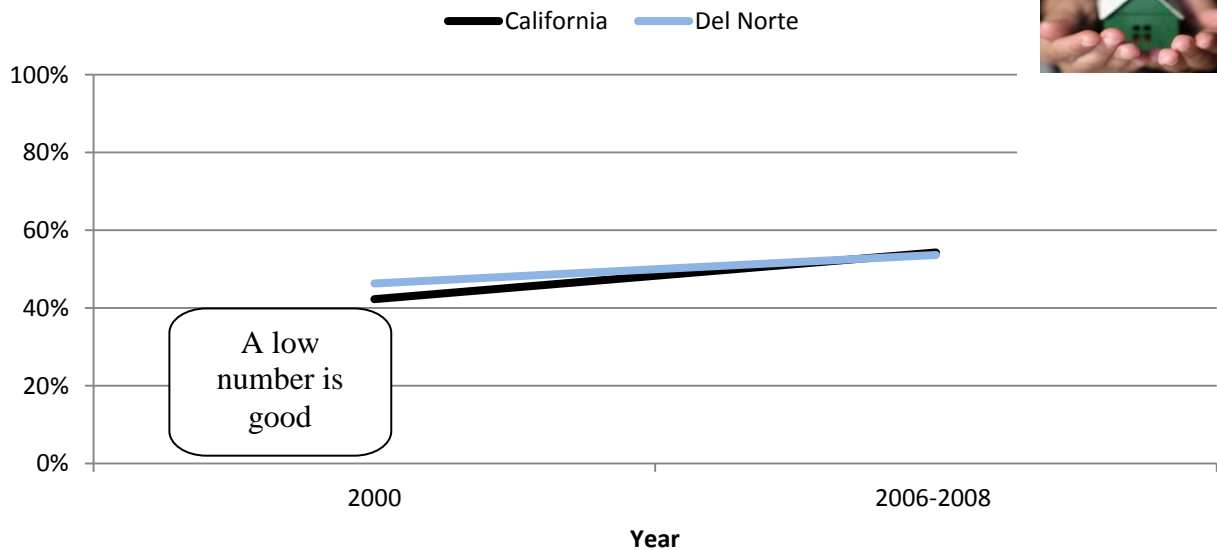
Notes: Poverty estimates for 2000 are from the Decennial Census. Estimates for 2007-2009 are from the American Community Survey and represent a 3 year average.

## Exhibit 44. Unemployment Rates



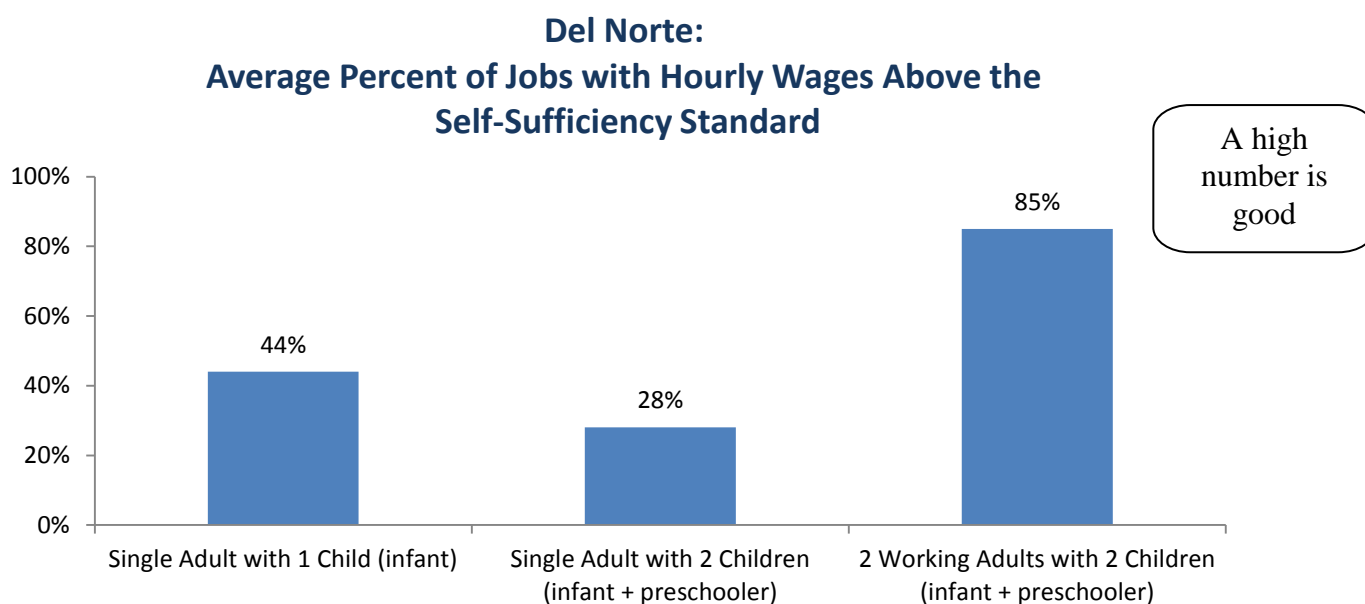
Data Source: Employment Development Department  
<http://www.labormarketinfo.edd.ca.gov>

## Exhibit 45. 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://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

## Exhibit 46. 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%

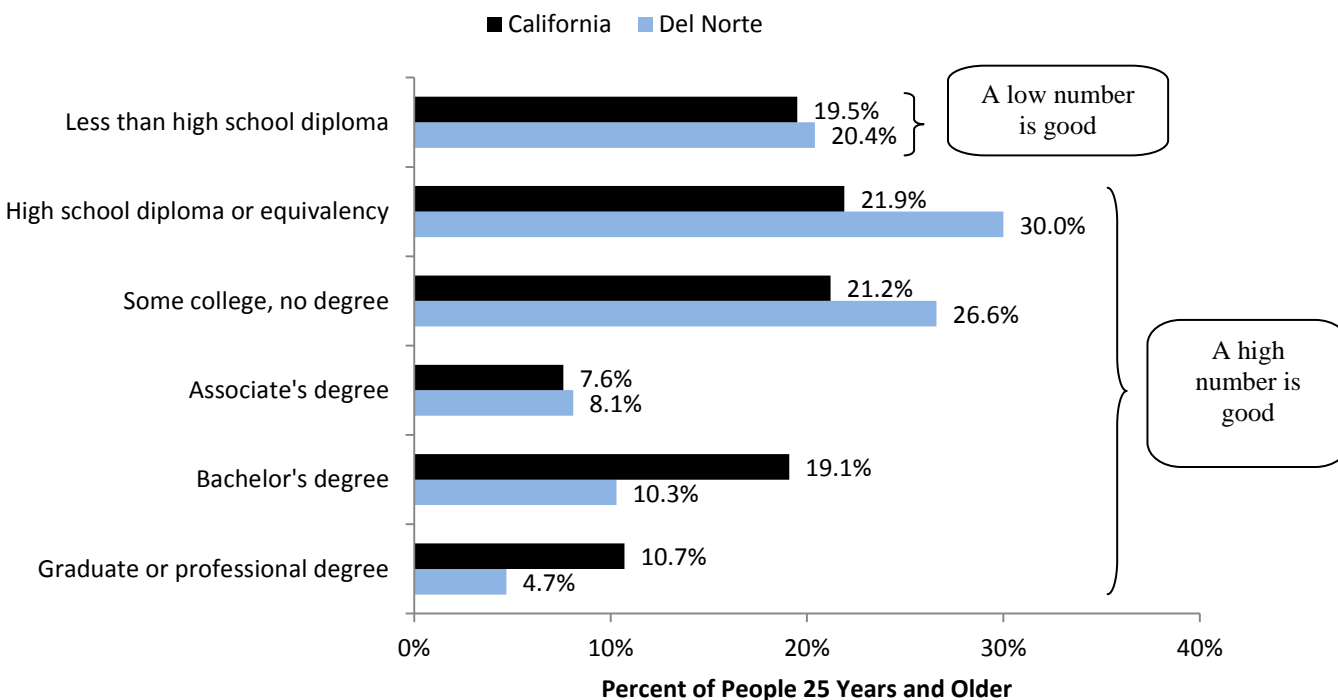
Data Sources: California Department of Labor <http://www.labormarketinfo.edd.ca.gov>.

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.

## Exhibit 47. Highest Level of Educational Attainment, 2005-2009



Data Source: U.S. Census <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

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.

## Living Environment

There is increasing evidence showing that the quality of our indoor environments affects health and well-being.<sup>1</sup> Housing is an important determinant of health and poor housing conditions are association with numerous health conditions, including asthma, respiratory infections, lead poisoning, injuries and poor mental health.<sup>2</sup> 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.<sup>2</sup>

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.<sup>3</sup> 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.<sup>4</sup> Childhood lead poisoning can cause significant problems with health and development, including a lowered IQ.<sup>4</sup>

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

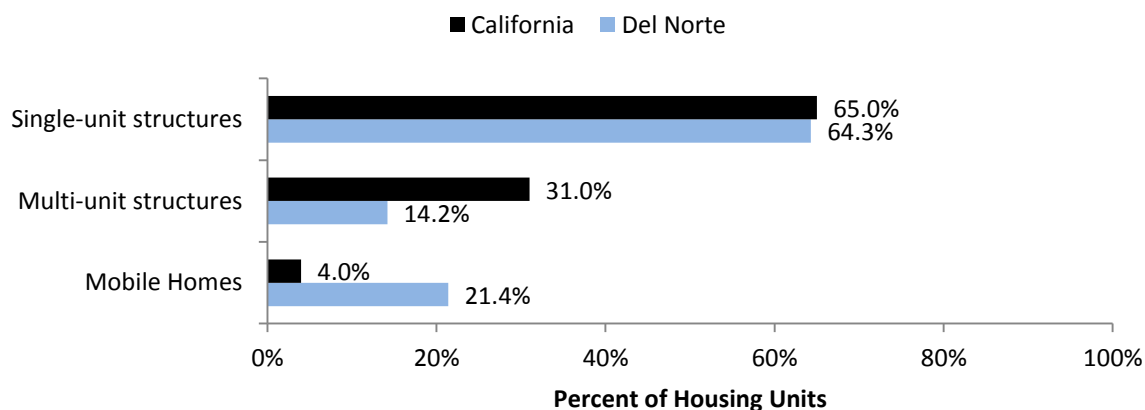
Additional conditions, such as internet access in the home can have an impact on health and wellness. Computers and the Internet are becoming increasingly important health-related tools. Studies have estimated that 40 to 80% of adults in the United States use the Internet to obtain advice or information about health, health care, and medical insurance.<sup>10,11</sup> 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.<sup>12</sup> 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.<sup>13,14</sup> 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.

It is clear that adequate and habitable housing is essential to health and wellness; however, indicators in this area are lacking. We would like to develop at least 2 additional indicators that capture the concept of adequate habitable housing.

#### In Del Norte County:

- Over 20% of housing units are mobile homes, which is considerably higher than California as a whole (Exhibit 48).
- 56% of the housing units were built in 1979 or earlier. Children living in these houses are at risk for lead poisoning (Exhibit 49).
- One in five houses use wood for a heat source (Exhibit 50).
- Mold in the home is significantly more likely for low-income families and families with children (Exhibit 51).
- Less than half of the low-income homes have internet access, which is significantly lower than the non low-income homes (80.6%) (Exhibit 52).

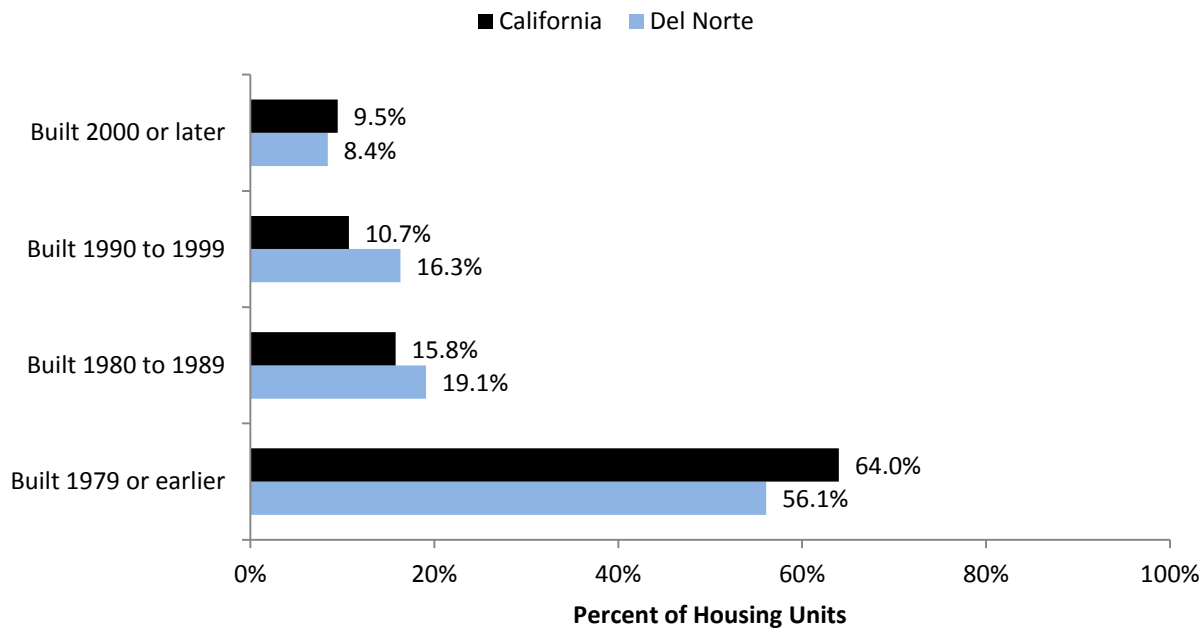
#### Exhibit 48. Types of Housing Units, 2005-2009



Data Source: U.S. Census <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

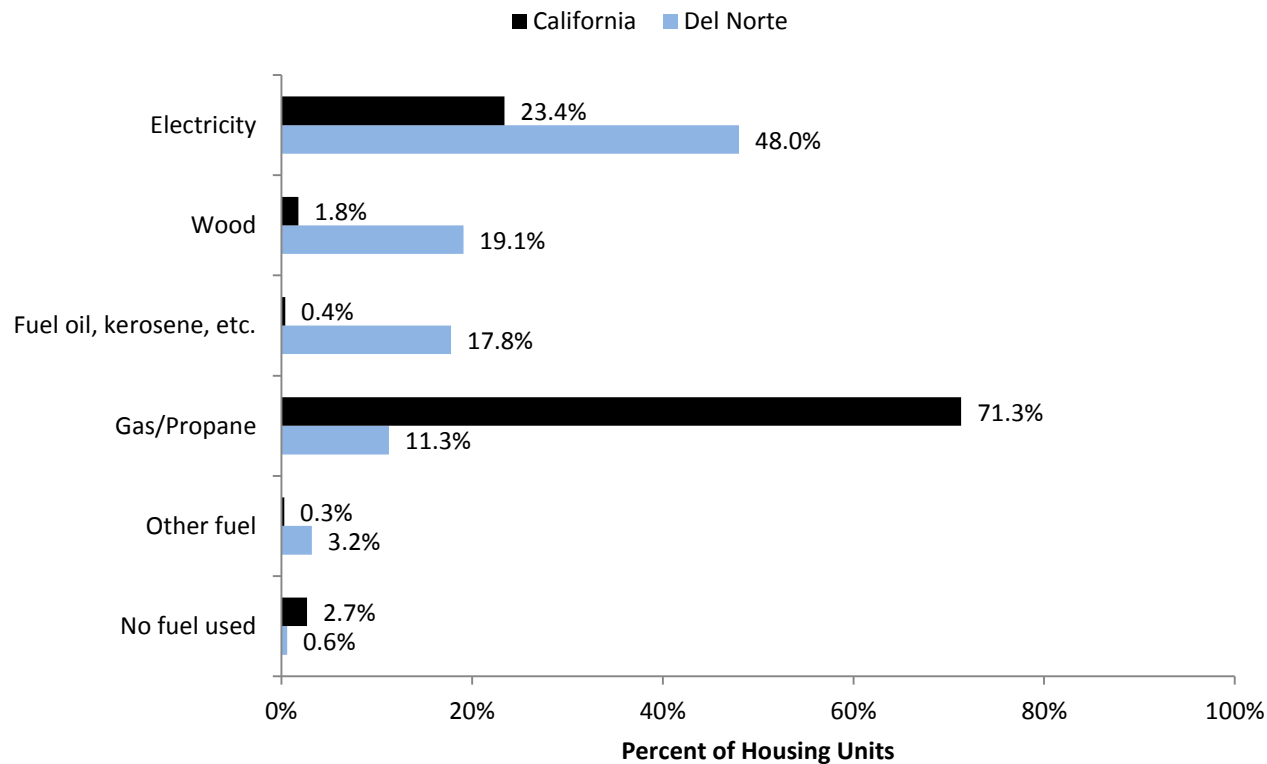
Notes: Data from the U.S. Census American Community Survey and are 5-year estimates based on data collected from 2005 to 2009.

### Exhibit 49. Age of Housing Units, 2005-2009



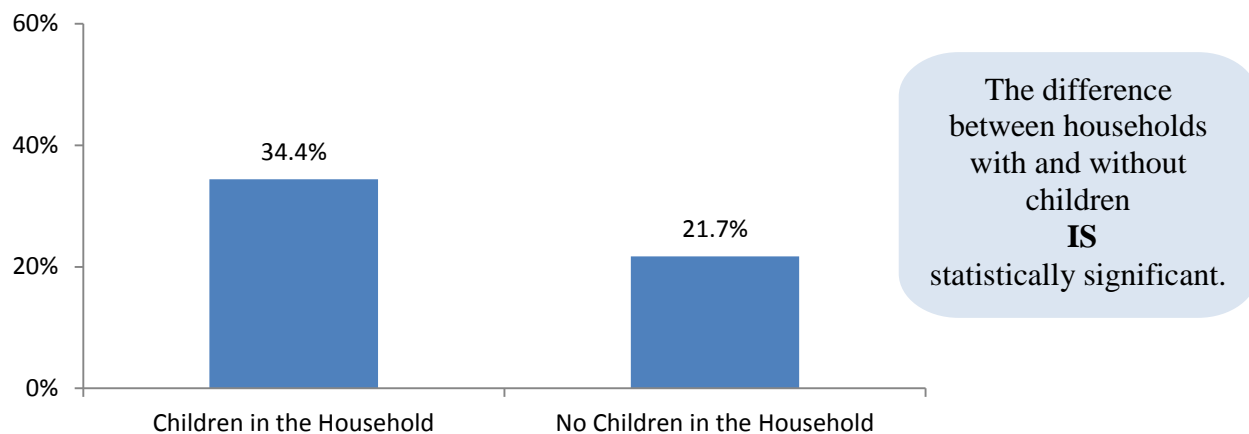
Data Source: U.S. Census <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>  
Notes: Data from the U.S. Census American Community Survey and are 5-year estimates based on data collected from 2005 to 2009.

### Exhibit 50. Heating Fuel of Housing Units, 2005-2009



Data Source: U.S. Census <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>  
Notes: Data from the U.S. Census American Community Survey and are 5-year estimates based on data collected from 2005 to 2009.

**Exhibit 51.**  
**Percent of Households with Visible Mold, 2006**

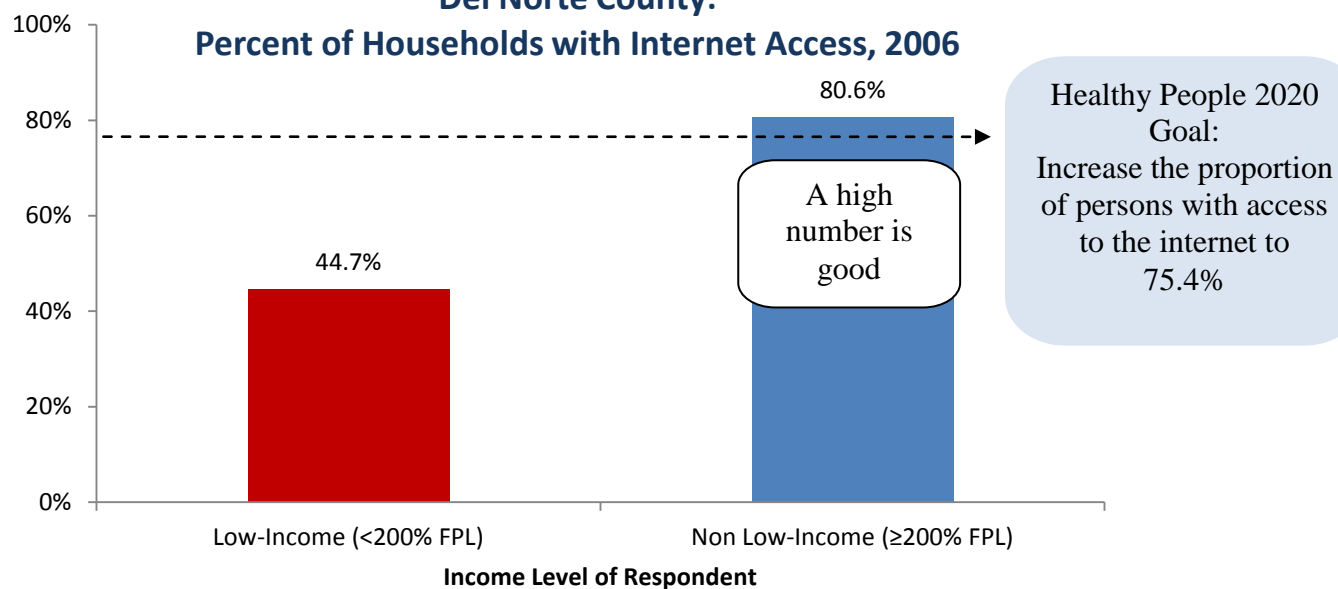


Data Source: Rural Health Information Survey, 2006, California Center for Rural Policy

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

Notes: This represents the percent if respondents who reported currently having mold in their home on an area greater than the size of a dollar bill.

**Exhibit 52.**  
**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.

# Conclusions and Closing Comments

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It is clear from what the community wellness indicators are showing us today, that Del Norte County and Adjacent Tribal Lands have many challenges, if we want it to be a healthier place for children, youth, and families, starting now into the future. The point of these indicators is not only to mark 'where we are today', but to point to where we would like to be, and thus, to inspire action towards measurable and attainable goals. Our hope is that everyone will come together to discuss these indicators with a focus on the upstream contributors that impact the current state of wellness in our communities.

The discussion may be about the story behind these indicators. Why are we seeing these trends? What can we do to improve the upstream factors so that we can see an improvement in these community wellness indicators? What policies and programs will address these factors? And last, but certainly not least, how do we develop and implement these policies and programs?

Del Norte and the Adjacent Tribal Lands are well positioned to meet these challenges. In fact, many people, groups, organizations/agencies, institutions, foundations, and initiatives are involved in work and activities aimed at improving conditions in Del Norte and Adjacent Tribal Lands. If you would like to learn more and/or get involved, please contact Wild Rivers Foundation at (707) 465-1238. General information about the Building Healthy Communities Initiative is available at <http://www.calendow.org/healthycommunities/index.html>

*“If we improve in any of these indicators, we know with confidence our community is healthier. All of us benefit from a healthier community. What it takes to ‘move the indicator needles’ really involves all of us and we all benefit. For example, when children have access to preventive healthcare, not only are the benefits far reaching for that child, the child and family are happier, they will do better at school and work respectively. We all benefit by having healthy children growing and blossoming around us. DHHS appreciates the BHCI-DNATL focus on outcomes and indicators. Accountability and continuous improvement have been fixtures in our organization for some time. Seeing some alignment in indicators hopefully means alignment in efforts to improve the health of our community.”*

Gary Blatnick, Director, Health and Human Services, County of Del Norte

*“It is our hope that choosing key indicators will help us to collect information about the current well-being of our children, youth and families. By tracking these indicators over time, we can identify ‘trends’ and areas of concern that need our attention as parents, community members and policymakers and understand where our work is making a positive difference. Together, we can work to set community goals, make more effective decisions about how to spend limited, precious resources, and to create a shared sense of accountability for improving conditions that will make Del Norte a healthier place to live.”*

Patti Vernelson, Executive Director, First 5 Del Norte



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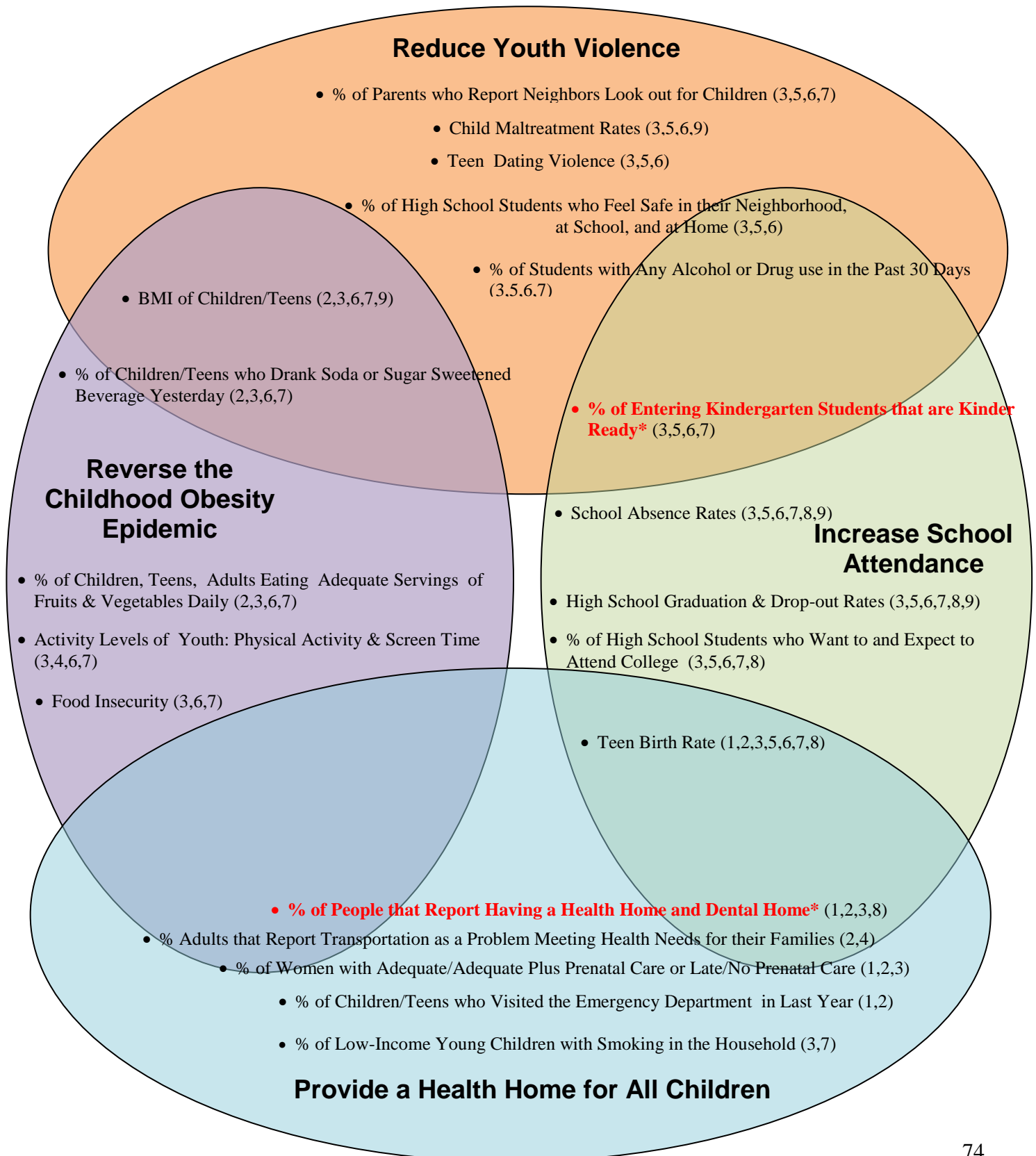
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# Appendix A:

## The Four Big Results and Related Indicators Mapped to BHC Outcomes

The outcome number that directly or indirectly relates to each indicator is listed after the indicator. See page 15 for the numbered list of outcomes.



\*Indicators in red font are developmental "wish list indicators" that are currently without an existing data source. The percent of entering kindergarten students that are kinder ready is currently being collected.

# Appendix B: Indicator Data Sources and Data Needs

Red font indicates the need for a data collection plan

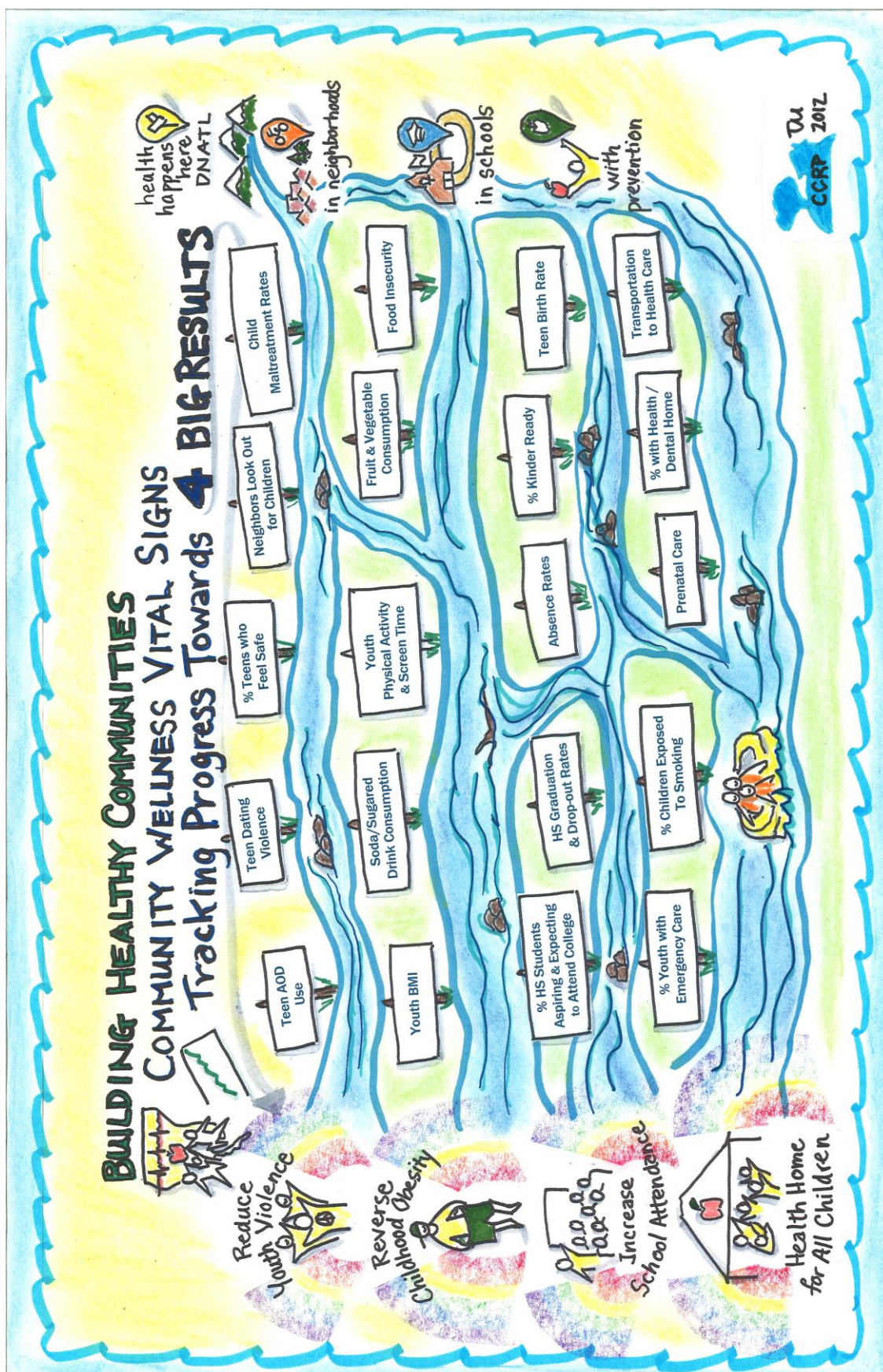
Indicator	Data Source	Notes
Percent of parents who report neighbors look out for children.	California Health Interview Survey <a href="http://www.chis.ucla.edu">http://www.chis.ucla.edu</a>	In 2009 Del Norte County was oversampled as part of the BHC Initiative. This data will be collected every 2 years.
Percent of High School students who feel safe in their neighborhood, at school, at home.	Youth Truth Survey conducted by The Center for Effective Philanthropy. <a href="http://www.effectivephilanthropy.org/index.php">http://www.effectivephilanthropy.org/index.php</a>	In 2011, 4 schools from Del Norte County participated in the Youth Truth project. Plans to repeat every two years.
Child Maltreatment Rates	University of California, Berkeley, Center for Social Services Research <a href="http://cssr.berkeley.edu/ucb_childwelfare">http://cssr.berkeley.edu/ucb_childwelfare</a>	Available on a regular basis
Teen dating violence	California Healthy Kids Survey <a href="http://www.wested.org/chks">http://www.wested.org/chks</a>	Data collected every 2 years. Del Norte will have supplemental survey in 2012.
Percent of students with any drug use in the past 30 days.	California Healthy Kids Survey <a href="http://www.wested.org/chks">http://www.wested.org/chks</a>	Data collected every 2 years. Del Norte will have supplemental survey in 2012.
Percent of entering kindergarten students that are kinder ready.	Data collected for the first time in 2011/12 by Applied Survey Research	Data being collected for the first time in 2011/12.
School Absence rates	Del Norte County School District	Protocols are being developed for accurate data collection for High Schools and county schools.
HS graduation & drop-out rates	California Department of Education <a href="http://dq.cde.ca.gov/dataquest">http://dq.cde.ca.gov/dataquest</a>	Available every year, but lags a few years.
Percent of High School students who want to and expect to attend college.	Youth Truth Survey conducted by The Center for Effective Philanthropy. <a href="http://www.effectivephilanthropy.org/index.php">http://www.effectivephilanthropy.org/index.php</a>	In 2011, 4 schools from Del Norte County participated in the Youth Truth project. Plans to repeat every two years.
Teen birth rate	County Health Status Profiles <a href="http://www.cdph.ca.gov/programs/ohir/Pages/CHSP.aspx">http://www.cdph.ca.gov/programs/ohir/Pages/CHSP.aspx</a>	Available every year, but lags a few years
Percent of people that report having a health home and dental home.	This data does not currently exist	Recommend developing a plan to collect this data.
Percent of adults reporting transportation as a problem meeting health needs for their families.	Rural Health Information Survey, 2006, California Center for Rural Policy <a href="http://www.humboldt.edu/ccrp/rural-health-information-survey">http://www.humboldt.edu/ccrp/rural-health-information-survey</a>	This was collected one time in 2006. Recommend developing a plan to repeat collection.
Percent of women with adequate/adequate plus prenatal care or late/no prenatal care.	County Health Status Profiles <a href="http://www.cdph.ca.gov/programs/ohir/Pages/CHSP.aspx">http://www.cdph.ca.gov/programs/ohir/Pages/CHSP.aspx</a>	Available every year, but lags a few years.
Percent of children/teens who visited the Emergency Dept. in the last year.	California Health Interview Survey <a href="http://www.chis.ucla.edu">http://www.chis.ucla.edu</a>	In 2009 Del Norte County was oversampled as part of the BHC Initiative. This data will be collected every 2 years

Indicator	Data Source	Notes
Percent of low-income children with smoking in the household.	Pediatric Nutrition Surveillance System, <a href="http://www.dhcs.ca.gov/services/chdp/Pages/PedNSS2009.aspx">http://www.dhcs.ca.gov/services/chdp/Pages/PedNSS2009.aspx</a>	Available every year, but lags a few years.
BMI of children/teens	Del Norte County School District	Data being collected yearly for K,1,3,5,7,9
	Pediatric Nutrition Surveillance System (specific to low-income children) <a href="http://www.dhcs.ca.gov/services/chdp/Pages/PedNSS2009.aspx">http://www.dhcs.ca.gov/services/chdp/Pages/PedNSS2009.aspx</a>	Available every year, but lags a few years.
Percent of children/teens who drank soda or sugar sweetened beverage yesterday	California Health Interview Survey <a href="http://www.chis.ucla.edu">http://www.chis.ucla.edu</a>	In 2009 Del Norte County was oversampled as part of the BHC Initiative. This data will be collected every 2 years
Percent of Children, Teens, and Adults Eating Adequate Servings of Fruit & Vegetables	California Health Interview Survey <a href="http://www.chis.ucla.edu">http://www.chis.ucla.edu</a>	In 2009 Del Norte County was oversampled as part of the BHC Initiative. This data will be collected every 2 years
Activity levels of youth: physical activity & screen time	California Health Interview Survey <a href="http://www.chis.ucla.edu">http://www.chis.ucla.edu</a>	In 2009 Del Norte County was oversampled as part of the BHC Initiative. This data will be collected every 2 years
	California Healthy Kids Survey <a href="http://www.wested.org/chks">http://www.wested.org/chks</a>	Data collected every 2 years. Del Norte will have supplemental survey in 2012 with screen time.
Food Insecurity	California Health Interview Survey <a href="http://www.chis.ucla.edu">http://www.chis.ucla.edu</a>	Overall food security for low-income respondents. This data will be collected every 2 years.
	Rural Health Information Survey, 2006, California Center for Rural Policy <a href="http://www.humboldt.edu/ccrp/rural-health-information-survey">http://www.humboldt.edu/ccrp/rural-health-information-survey</a>	Data collected in 2006 asked about very low food security with analysis by households with & without children. <b>Recommend developing a plan to repeat collection.</b>
<b>CONTEXTUAL INDICATORS</b>		
<b>Adequate Habitable Housing</b>	We would like to identify data sources and develop at least 2 additional indicators that capture the concept of adequate habitable housing.	We plan to involve community/stakeholders in the process of developing these indicators.

Red font indicates the need for a data collection plan

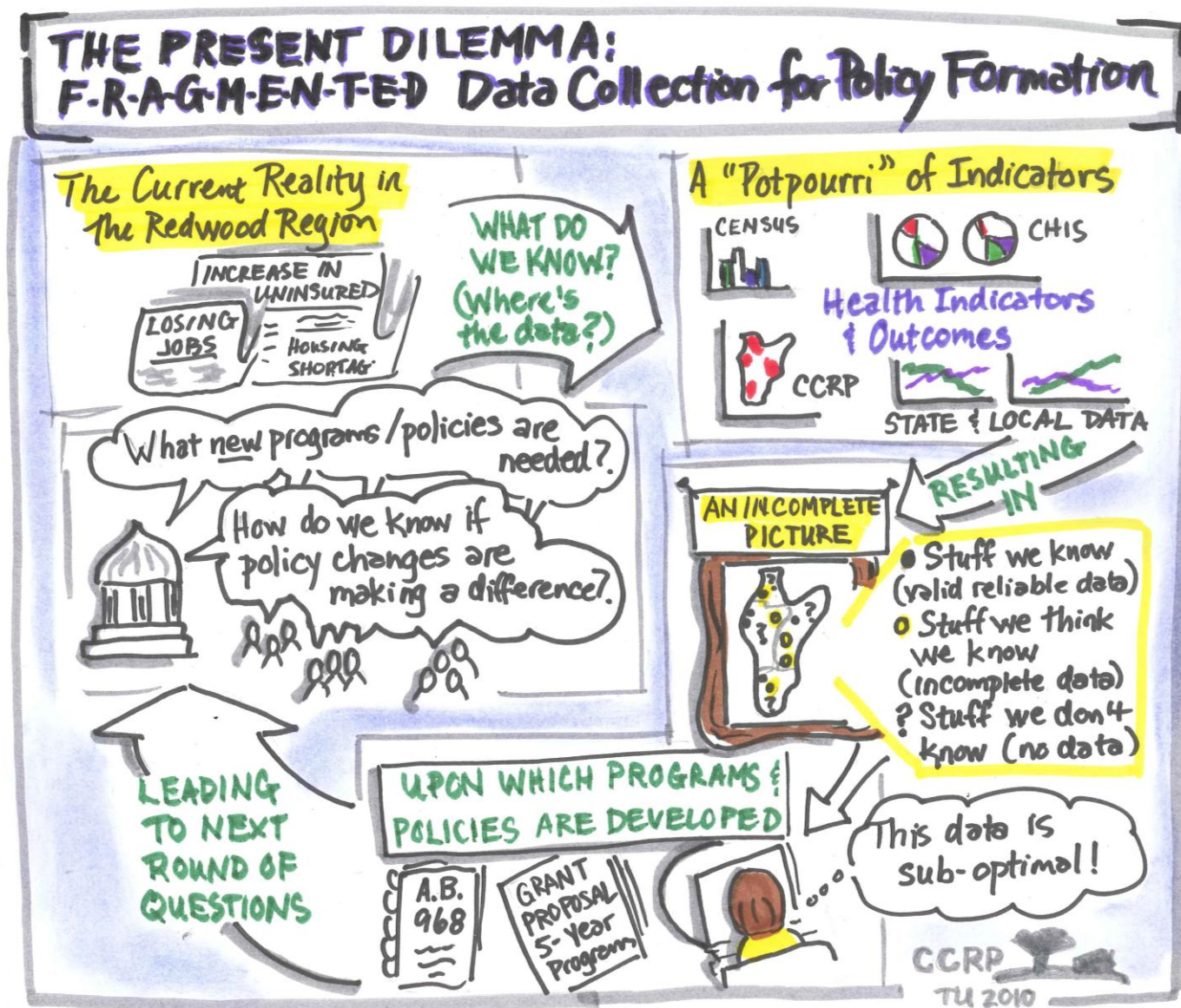
# Appendix C: Graphic Representation of the Community Wellness Vital Signs

by Terry Uyeki

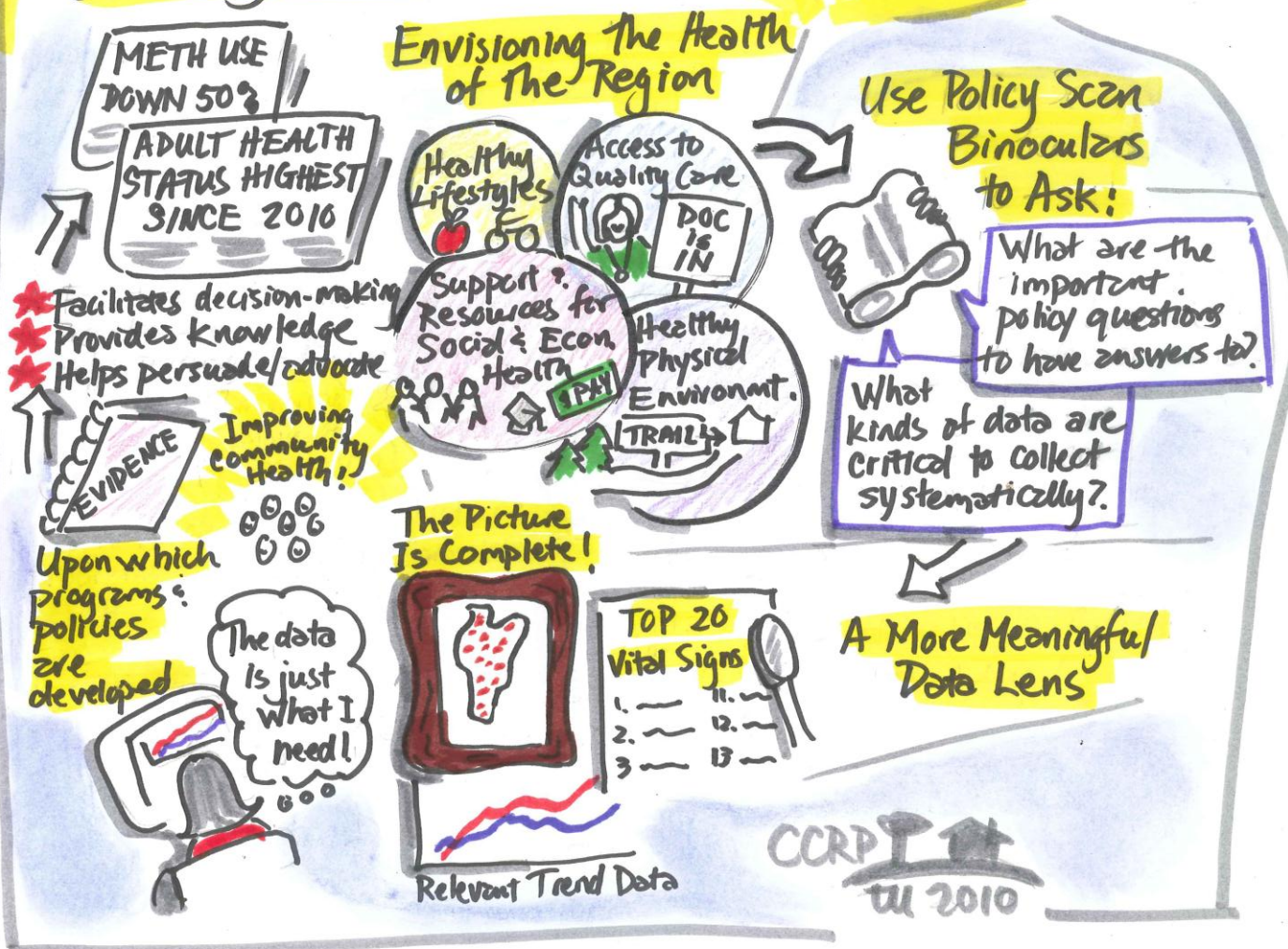


# Appendix D: Graphic Representation of Using Community Health Indicators as a Strategy towards Effective Policy Formation: The Present Dilemma and Vision for the Future

Created by Terry Uyeki for the Rural Community Vital Signs Project in 2010



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



# Appendix E: Wish List Indicators



Throughout the BHC planning process and Rural Community Vital Signs project it was clear that there were many indicators that could be useful for measuring community health, but currently lack a good or readily accessible data source. To capture these data gaps, this “wish list” was created .

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 (in blue font). Indicators in red font are those that have been selected to be included in the 20 core community wellness indicators. The 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.

The “wish list” indicators are organized into the outcomes that are the initial focus of the Building Healthy Communities in Del Norte and Adjacent Tribal Lands (outcomes 3,5,7, and 8). 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.

- Percent of people that have a Health Home and Dental Home
- 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.
- Percent of healthy meals served (where?)
- **The percent of children 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? (data are now available for Del Norte County Unified School District kindergarten, elementary, and middle schools- as presented in this report. Accurate data collection for High School and for the county schools is being developed).
- 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.

### **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.

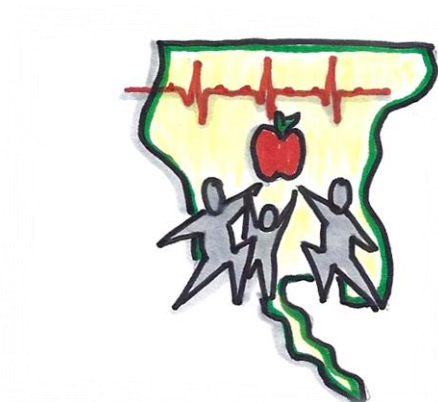
### **Outcome 8:**

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.
- A measure for 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



Building Healthy Communities  
Community Wellness Vital Signs  
for Del Norte and Adjacent Tribal Lands



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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.