County of Del Norte
Community Health Assessment

Prepared by:
Resource Development Associates
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Community Health Assessment

Amalia Egri Freedman
Sarah Garmisa-Calinsky, MBA/MPP
Jacqueline Chan, MPH
Valerie Lua
Nneoma Nwobilar, MSc

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Resource Development Associates, 2019

About Resource Development Associates

Resource Development Associates (RDA) is a consulting firm based in Oakland, California, that serves government and nonprofit organizations throughout California as well as other states. Our mission is to strengthen public and non-profit efforts to promote social and economic justice for vulnerable populations. RDA supports its clients through an integrated approach to planning, grant-writing, organizational development, and evaluation.
Acknowledgements

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4. Access to Care

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Finding 38. In Del Norte County, more than half of teen youth are overweight or obese and physical activity rates among youth are lower than the statewide rate.

Finding 39. Chronic respiratory diseases are the third leading cause of death in Del Norte County.

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Finding 52. Del Norte has experienced a disproportionately higher rate of domestic violence compared to the rest of the state, and there has been an increase in recent years.

Finding 53. Del Norte County has experienced a consistently high rate of child abuse cases.

6. Next Steps

7. Appendices
1. Introduction

1.a. Background

The Del Norte County Health and Human Services Department (HHS) promotes the health, safety, and well-being of community members by providing quality services and health promotion programs. HHS prioritizes community-driven and accessible programs and services that improve health outcomes throughout the entire County.

HHS is engaged in a community health improvement process with the ultimate goal of achieving public health accreditation to increase access to public health resources and funding. The Department is leveraging the Mobilizing for Action through Planning and Partnerships (MAPP) approach for program planning and improvement, which involves a community-driven strategic planning process for prioritizing public health issues and identifying resources to address them. HHS is currently in Phase 3 of the MAPP planning process (Figure 1).

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This **Community Health Assessment** (CHA) is one of the key assessments in Phase 3 of the MAPP process. This CHA report assesses Del Norte County health resources, challenges, and needs, while also identifying community assets and areas for improvement. The CHA process engages community members and residents for their input and ideas on community health issues within the County, and all community input is used to inform a comprehensive analysis of overall health status of Del Norte County.

This report presents health assessment findings and lays the foundation for the **Community Health Improvement Plan** (CHIP) and MAPP phases four through six. Findings from this report will help HHS identify priority issues, develop strategies for action, and establish accountability to ensure measurable health improvement.

### 1.b. Methodology

To develop the CHA, HHS contracted Resource Development Associates (RDA) to help design and facilitate the data collection, analysis, and assessment. HHS and RDA engaged a stakeholder advisory committee to provide collaboration, guidance, and assistance to this process. HHS, in collaboration with RDA, developed a series of data collection tools and stakeholder outreach and engagement strategies to inform a community-based understanding of the County’s health, assets, needs, and gaps.

**Mixed Methods Study Design**

In order to develop a comprehensive understanding of the drivers, barriers, and opportunities for healthy and thriving communities in Del Norte County, a mixed methods approach was used to synthesize qualitative data (i.e., community input from multiple venues) and quantitative data (i.e., health and epidemiological data from a wide range of sources). This approach allows RDA to understand community health needs and trends within the context of local history, values, and community assets.²

**Qualitative Community Research**

The HHS team and stakeholder advisory committee collaborated with RDA to develop the community outreach engagement process—including input for the methodological approach, data collection tools, and outreach strategies—to ensure the CHA process reflected voices from vulnerable and under-

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represented communities. HHS and RDA discussed outreach strategies with the stakeholder advisory committee to develop a set of research questions and community outreach plan to engage residents and community members from all geographic areas of the County (i.e., Crescent City and its outlying areas, Klamath, Gasquet, Smith River, Fort Dick, Hiouchi/South Fork, and Big Flat) and key populations (i.e., Latino/a/X and Hmong populations, seniors, veterans, youth, pregnant women, children with special needs, and tribal groups including Elk Valley Rancheria, Resighini Rancheria, Smith River Rancheria, and the Yurok Tribe). Participants also included representatives from local government agencies and local health care providers.

RDA analyzed qualitative information from multiple sources in order to provide in-depth knowledge and insight into assets and needs of local communities. Data collection methods included 1) one-on-one key informant interviews, 2) community forum meetings, 3) focus groups with key populations, 4) open comment boards, 5) a community-wide survey, 6) Building Health Communities Resiliency interview transcripts, and 7) conversation with the Del Norte County Oral Health Program (OHP) Advisory Committee. Significant input from community members and residents are presented throughout this report in purple text boxes labeled “Community Voices”. The following list provides detailed description of each qualitative method used for the CHA.

Community Outreach Activities

1. **Key Informant Interviews** were conducted with key experts and community stakeholders to conduct in-depth exploration of health issues impacting Del Norte County.

2. **Four Community Forums** were facilitated by the HHS team in three of the outlying areas in the County: one in Gasquet, two in Klamath, and one in Smith River. One community forum was facilitated by RDA in Crescent City. The residents of Klamath are mostly tribal community members and the residents of Smith River are mostly Latino/a/X.

3. **A Focus Group** was conducted in the more rural Northeast region of Del Norte County.

4. **Comment Boards** were set up in 31 frequented locations across the County (specifically in Crescent City, Klamath, Gasquet, Hiouchi, Fort Dick, and Smith River). These comment boards asked residents in both English and Spanish, “Would you say that Del Norte County is a healthy

Figure 2. Community Forums
with two columns that said, “Yes! What are some things that make it healthy?” and “No! What are some things that keep it from being healthy?” and provided community members an opportunity to write their answers anonymously on a post-it note and attach it to the appropriate column on the comment board. A version of this comment board was also posted on social media websites, allowing participants to share their feedback online. This unique and low-barrier method of data collection enabled input from community members in more remote areas of the County, and enabled input from residents who face greater barriers (i.e. time, distance, trauma) to attending public meetings. (See Figure 3.)

5. **Surveys** were administered in both paper and online versions, and they were translated in English, Spanish, and Hmong. Paper surveys were placed at all 31 comment board sites throughout the community. The online survey was advertised alongside online comment boards, on the County website, and on the County’s Facebook page. A total of 355 surveys were completed.

6. **Building Healthy Communities Interview Transcripts** were also reviewed to identify community assets and resiliency strategies. These interviews were conducted in Del Norte County by the Resilient Del Norte and Tribal Lands Team, which is made up of representatives from different county agencies, community-based programs, and healthcare providers, as a part of the California Endowment’s Building Healthy Communities Initiative for Del Norte County and Tribal Lands.

**Figure 3. Community Comment Boards**
7. **Feedback Session with OHP Advisory Committee** was conducted to gather input regarding community attitudes around oral health, gaps in oral health needs in the County, and potential solutions to oral health challenges.

These data collection activities were designed to engage community residents and community members in welcoming, low-barrier activities and invite a range of input from as many individuals as possible. Integrating input through these multiple sources allows for a deeper understanding of how community members in Del Norte County experience and perceive the drivers and barriers to healthy communities.

**Quantitative Epidemiological Health Data**

This CHA uses statewide trends and benchmarks set by the Healthy People 2020 (HP2020) initiative, which are national standard measures to measure progress over time and measure the impact of health promotion and prevention activities within the County. In addition to HP2020 indicators, the CHA incorporates key findings and data trends from a diverse range of documents and sources to comprehensively describe health trends, service utilization rates, and disease prevalence within the County. Data were also gathered from public-use datasets and published reports from government agencies and research institutions. See Appendix A for a description of the sources and limitations.

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3 The Healthy People 2020 is a multi-year collaboration of leading health agencies which establishes achievable health goals in 10-year increments and establishes effective comparison data for the evaluation to determine the County's progress towards improved health outcomes.
2. Del Norte County Profile

2.a. Demography

Del Norte County is located at the northwest corner of the state of California and is adjacent to the state of Oregon along the coast of the Pacific Ocean. This rural County has a population of 27,828 and only one incorporated city, Crescent City. Other towns, smaller cities, and tribal areas in the County include Fort Dick, Gasquet, Hiouchi, Klamath, Yurok, Smith River, Elk Valley, and Resighini.

Overall, the majority of Del Norte County residents identify as Non-Hispanic White individuals (63%), and a smaller proportion of the population represent Hispanic or Latino/a/X (19%), American Indian (9%), and other ethnic groups. The County is home to the Elk Valley Rancheria, Resighini Rancheria, Tolowa Dee-ni Nation, and the Yurok Tribe of California. The Del Norte County Community Health Indicators report, published in 2011 by the California Center for Rural Policy at Humboldt State University, predicts that the County’s ethnic composition will increase in diversity, particularly for the Latino/a/X population.4

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4 California Center for Rural Policy. Community Health Indicators for Del Norte County. Retrieved June 20, 2019 from https://ccrp.humboldt.edu/sites/default/files/community-health-indicators-del-norte-1.2-reduced_1.pdf
Over half the population are male (54%) and a slightly smaller proportion of the population are female (46%). Most people were between the ages of 25 and 54 (41%), and the overall median age of the Del Norte County population is 39 years old (Figure 5). The California Center for Rural Policy predicts that the proportion of older adults will grow in Del Norte County.

Finding 1. Del Norte County generally has strong civic participation, and communities demonstrate social cohesion and resilience.

Del Norte County generally has strong civic participation and communities demonstrate strong social cohesion. In comparison to the state, more County residents voted in the 2016 general election, indicating increased social capital and cohesion which can greatly impact individual and community health outcomes. Although communities are dispersed across urban and rural settings in a wide geographic area, community members frequently highlighted the value of having close-knit relationships with other community members during community input sessions.

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Community Voices
Across community forums and key informant interviews, participants cited Del Norte’s culture of self-preservation, self-sufficiency, and community cohesion as key assets for overcoming challenges and barriers. For example, community members often check on their neighbors and going the extra mile to care for each other. Participants noted the importance of leveraging community as part of any strategy to improve community wellness.

“It is really important to look at this from an asset standpoint; it’s about the importance of interdependence and collaboration in trying to get anything done.”

“We are dedicated to people, families, and agencies; and to building up resilience.”

2.b. Major Healthcare Service Centers

There are nine major healthcare service centers in Del Norte County, clustered along the coastline.

1. Sutter Coast Hospital (SCH) is a community-based, not-for-profit hospital in Crescent City that serves the residents of Del Norte County and offers an acute rehabilitation center, community clinic, emergency department, infusion center, birth center, and walk-in clinic. Residents can access urgent care services, same-day walk-in appointments, and 24-hour emergency care. The hospital has 49 beds, and features the following services: cancer treatment, emergency care, gastroenterology, gynecology and women’s health, heart and vascular services, home health and hospice care, imaging, lab and pathology, neuroscience, orthopedic services, palliative care and advanced illness management, pediatric services, physical therapy and rehabilitation, pregnancy and childbirth services, primary care, pulmonary care, senior services and geriatric care, surgical services, and urgent care.

   a. Sutter Coast Birthing Center is the area’s only delivery hospital.

   b. Sutter Coast Acute Rehabilitation is the area’s only medical rehab facility.

   c. Sutter Coast Community Clinic offers medicine, pediatrics, and obstetrical and gynecology services. They are the highest volume obstetrical provider in the County and have a staff that includes specialist physicians and mid-level providers.

   d. Sutter Coast Walk-in Clinic provides urgent care services to County residents.

2. Del Norte Community Health Clinic (DNCHC) is an Open Door clinic in Crescent City that provides family practice services for the community’s primary health needs ranging from diagnosis, treatment, and referral to more advanced care when appropriate. The clinic also provides treatment for acute illness, chronic conditions, routine health screenings, immunizations, and lab tests. Additional services include: Pediatrics, Behavioral Health Counseling, Diabetes Education, Nutritional Counseling, Teen Clinic, HIV/AIDS testing and treatment, Hepatitis C treatment, Nutritional Counseling, and Women’s
Health. Patients established at the DNCHC can be referred to other Open Door clinics, including the Telehealth & Visiting Specialist Center, for additional and specialty services. The clinic has 20 exam rooms and, in the past, up to eight physician providers serving at the same time. At the time of writing, the clinic is understaffed with three physicians and three mid-level providers, frequently relying on temporary providers to maintain services. There is a full-time behavioral health specialist and the clinic offers tele-health services to provide additional mental health care.

Figure 6. Del Norte Community Health Center

a. **The Dental Center at DNCHC** provides primary dental care for children and adults, including routine and preventive dental examinations and care. They also provide services for restorative care (e.g., fillings, root canals, partial and full dentures, treatment of gum disease) and acute care (e.g., toothache, other oral pain, and infection). When fully-staffed, there are two dentists and a one dental hygienist. However, due to provider shortage there is only one part-time dentist on staff at this clinic at this time.

b. **The Open Door Teen Clinic at DNCHC** provides free confidential sexual health care for those under 20 years of age, including: abstinence support, birth control, pregnancy testing, counseling, and diagnosis and treatment of sexually transmitted infections. They also provide sexual health resources and education. They are located across the way from Del Norte High School. Their front desk is staffed by teenagers to further maintain an environment of confidence.

3. **United Indian Health Services (UIHS)** has been caring for the tribal communities of Del Norte County since 1970. UIHS has clinics located in Crescent City, Smith River, and Klamath. The center offers services ranging from dental, medical, pharmacy, behavioral health, and vision care services. Residents can also access community health care services, community nutrition, and health promotion education resources and programs.
   
a. **Elk Valley Office** and **Taa-‘at-dvn** are in Crescent City

   b. **Hop’-ew Puel** is in Klamath

   c. **Xaa-wan’-k’wvt** is in Smith River
4. **Redwood Urgent Care** in Crescent City opened in the Fall of 2018 and provides an alternative option to the Sutter Coast Health Clinic or Emergency Department. Services include: ear lavage, coughs, cold, flu, headaches, migraines, work/school physicals, non-severe allergic reactions, bronchitis, pneumonia, joint pain and gout, skin infections, broken bones, sprains and strains, urinary tract infections, abnormal vaginal bleeding, laceration repair, fracture splinting, and STI infections. They can also provide on-site x-rays and laboratory testing.

5. **Pacific Vision Medical Center** offers comprehensive ophthalmology services in Crescent City. The Center has two ophthalmologists and one optometrist that specialize in many areas, including: cataracts, glaucoma, diabetic retinopathy, contact lenses, and more.

6. **Del Norte County Behavioral Health Branch (BHB)** provides specialty mental health services to the residents of Del Norte County. Located in Crescent City, BHB provides the following services in both English and Spanish for seniors, adults, and youth: crisis intervention, psychiatric evaluation, medication evaluation, school services, acute hospitalization, mental health services, information and referral, and therapeutic behavioral services. They also provide additional programs and services, such as treatment for dual-diagnosis, co-occurring disorders.

7. The County has several **Skilled Nursing Facilities** in Crescent City that provide options for individuals requiring respite care. These facilities also accept Medi-Cal.

8. **Redwood Medical Offices** is a private group practice located in Crescent City and does not accept Medi-Cal insurance. The clinic has the distinction of being the longest continuously operating private medical office in Del Norte County. These offices currently specialize in family medicine and usually have two physicians and at least one mid-level provider on staff. They are also only open from Monday to Friday, 8:00 am to 6:00 pm, and closed during the weekends.

9. **Crescent City Internal Medicine** is the second longest continuously operating private medical office in Del Norte County, and it formerly was the largest private primary care provider in the county with up to five internists and up to three mid-level providers at its peak of operations. It is currently staffed by one internist and 3-4 mid-level providers. Similar to Redwood Medical, it normally does not accept new Medi-Cal patients.
Figure 7. Del Norte County's major healthcare service centers clustered along the coastline.
3. Determinants of Health

Many factors impact the health of individuals and communities. To a large extent, social, environmental, and economic circumstances have significant impact on health outcomes and well-being, whereas the more commonly considered factors—such as use of health care services or genetic risk factors—often have a lesser impact. By looking at trends in these socioeconomic determinants of health, Del Norte County’s policy and program planning efforts can develop strategies to address upstream causes of diseases and systematic contributors of health inequities throughout the population.

Perceptions and attitudes toward health can indicate resiliency, a community asset that supports health and promotes overall wellbeing. As one resident shared, “there’s always going to be unhealthy aspects in all communities, but overall our community is a healthy place.” Despite this belief, which was shared frequently throughout the community engagement process, the data reflect that Del Norte County is less healthy than other counties throughout the State of California (Figure 8). Specifically, Del Norte County ranks in the 13th percentile when considering community characteristics including housing, education, economic, and other social factors.

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Figure 8: California Healthy Places Index for Del Norte County Status, 2018

### Policy Action Areas

- Economic
- Education
- Transportation
- Social
- Neighborhood
- Housing
- Clean Environment
- Healthcare Access

Source: California Healthy Places Index, 2018

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3.a. Socioeconomic Status

Economic opportunity is one of the most powerful predictors of good health and quality of life, and socioeconomic status is a significant driver of health outcomes. It greatly influences a person's ability to access critical resources, such as healthcare, safe and affordable housing, healthy food, and opportunities to thrive and be healthy.

3.a.i. Household Income

**Finding 2.** Household income is considerably lower in Del Norte than households throughout the rest of the state.

The median household income in Del Norte County is considerably lower than the California and the United Status as a whole (Figure 9. Median household income, 2013-2017). Per capita income is quite low, at $20,809 per person per year, and recent data indicate that the median household income may be declining. Of note, male residents earn 1.3 times more than female residents.8,9

**Figure 9. Median household income, 2013-2017**

<table>
<thead>
<tr>
<th>Year</th>
<th>United States</th>
<th>California</th>
<th>Del Norte County</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-17</td>
<td>$61,372</td>
<td>$67,169</td>
<td>$41,287</td>
</tr>
</tbody>
</table>

*Source: U.S. Census Bureau, American Community Survey 5-Year Estimates*

3.a.ii. Employment

**Finding 3.** Unemployment is higher in Del Norte County than the statewide rate.

Over the past eight years, both Del Norte County and the state of California experienced a decline in levels of unemployment (Figure 5). In 2018, only a small proportion (6%) of the labor force in Del Norte County was unemployed.10

**Figure 10. Percentage of labor force unemployed, 2018**

<table>
<thead>
<tr>
<th>Year</th>
<th>Del Norte</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>2012</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>2013</td>
<td>12%</td>
<td>9%</td>
</tr>
<tr>
<td>2014</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>2015</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>2016</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>2017</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>2018</td>
<td>6%</td>
<td>4%</td>
</tr>
</tbody>
</table>

*Source: Rhode Island Department of Labor and Training*

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9 Data USA. Del Norte County, CA. Retrieved June 20, 2019, from https://datausa.io/profile/geo/del-norte-county-ca/

3.a.iii. Poverty

Finding 4. Nearly a quarter of the population lives below the poverty level, with the highest rates among children, ethnic communities, and individuals with less than a high school education.

Between 2013-2017, one in four people in Del Norte County (23%, n=5,571) were living below the poverty level. Slightly more women (25%) live in poverty than men (22%), and racial and ethnic minority groups including Hispanic or Latino/a/X, Asian, and American Indian and Alaska Native population groups experience disproportionately higher rates as well. Hispanic or Latino/a/X persons experience poverty at nearly twice the rate (32%) of non-Hispanic individuals (18%).

Table 1. Poverty rates by race and ethnicity, Del Norte County, 2013-2017

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>%</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>18%</td>
<td>18,341</td>
</tr>
<tr>
<td>American Indian and Alaska Native</td>
<td>36%</td>
<td>1,988</td>
</tr>
<tr>
<td>Asian</td>
<td>48%</td>
<td>673</td>
</tr>
<tr>
<td>Black or African American</td>
<td>56%</td>
<td>73</td>
</tr>
<tr>
<td>Native Hawaiian and Other Pacific Islander</td>
<td>&lt;1%</td>
<td>21</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, American Community Survey

Education level also plays a major role in socioeconomic status, and the data reflect that residents with less than a high school diploma face the highest rate of poverty, whereas those with a Bachelor’s degree or higher face the lowest (Table 2).

Table 2. Poverty rates by education level, Del Norte County, 2013-2017

<table>
<thead>
<tr>
<th>Education Level</th>
<th>%</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school graduate</td>
<td>34%</td>
<td>728</td>
</tr>
<tr>
<td>High school graduate (includes equivalency)</td>
<td>22%</td>
<td>1,146</td>
</tr>
<tr>
<td>Some college, associate’s degree</td>
<td>17%</td>
<td>1,092</td>
</tr>
<tr>
<td>Bachelor’s degree or higher</td>
<td>8%</td>
<td>211</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, American Community Survey

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11 The U.S. Census Bureau definition of poverty takes into account varying family sizes and composition. The official poverty definition uses money income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and food stamps). (Source: U.S. Census Bureau. How the Census Bureau Measures Poverty. Retrieved June 20, 2019, from https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html)

Finding 5. Del Norte County has disproportionately high rates of children in poverty and children in foster care.

According to U.S. Census Bureau estimates, one third (31%) of Del Norte County children under the age of 18 live below the federal poverty level. At 10% above the statewide rate for children, Del Norte’s youngest residents are the most likely to live in poverty among all age groups.

The rate of children in foster care is also six times higher in Del Norte County (18 in every 1,000 children) than the state average (3 in every 1,000 children). Despite this high rate, the median placement length is five months shorter (31%) than the statewide median of 16 months. Nearly half of children in placement are babies under one year old (46%) and nearly one third (29%) are between the ages of 1-5 (29%). As is true throughout the state of California and the entire County, Del Norte County’s American Indian children are dramatically more likely to be placed into foster care (49 of 1,000) than white children (15 of 1,000).13,14

3.a.iv. Educational Attainment

Finding 6. Residents attain high levels of high school diplomas or GED certificates, but comparatively fewer continue on to post-secondary education.

Across the board, educational attainment trends in Del Norte County are similar to statewide trends (Figure 11), although more residents have high school diplomas or GEDs and fewer continue on to graduate from college or other post-secondary education. The majority of Del Norte residents (82%) have at least a high school degree, but a lower proportion of residents have a bachelor’s degree or higher (15%).15

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14 Data for other race groups was suppressed due to small numbers.
Finding 7. **High school students are dropping out at higher rates than students across the state.**

In Del Norte County, K-12 students have lower rates of absenteeism (9 per 100) compared to the rest of the state (31 per 100). However, the rate of students dropping out of high school dropout has recently increased and is now higher than the statewide average (Figure 12).\(^\text{16}\)

\[\text{Figure 11. Educational attainment in population aged 25 and older, 2018} \]

\[\text{Source: Kidsdata. Lucille Packard Foundation for Children’s Health.} \]

\[\text{Figure 12. High school dropout rates, 2012-2015} \]

\[\text{Source: Kidsdata. Lucille Packard Foundation for Children’s Health.} \]

3.b. Environmental Health

Environmental health is a branch of public health that plays an important role in supporting healthy communities by focusing on the relationships between people and their environment; promoting human health and well-being; and fostering healthy and safe communities.

Finding 8. Overall, potential environmental hazards have generally met safety standards and the County continues to monitor environmental health threats.

The following section summarizes highlights of environmental health trends in Del Norte County.

Water Quality. According to Crescent City’s Annual Water Quality Report of 2018, the tap water meets all EPA and State drinking water health standards. The city analyzed hundreds of samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. Crescent City has never violated a water quality standard, as all pollutants have been shown to be below the California Department of Public Health’s Maximum Contaminant Levels.¹⁷

In 2013 and 2015, the Regional Water Board implemented a monitoring program to assess the impacts of agricultural herbicides and pesticides in the Smith River estuaries and tributaries. The results of this study found low level concentrations of the chemical and metals used in pesticides in the surface waters of the Smith River Plain.¹⁸ According to the Del Norte Triplicate, community residents are also concerned about cattle wandering into the area and polluting the waters further with their manure. These conditions may be affecting the sensitive aquatic life in the area.¹⁹ A petition was released in November of 2018 calling for increased regulation of pesticides and herbicides near the Smith River estuary, claiming that the Regional Water Board has failed to follow its own laws and policies by failing to regulate pesticide use by farms in this area for the past 30 years. Residents and federal agencies have complained about impacts to aquatic

¹⁷ The city has taken hundreds of samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. Crescent City has never violated a water quality standard, as all pollutants have been shown to be below the California Department of Public Health’s Maximum Contaminant Levels (MCL).
life, specifically salmon, health impacts, and drinking water contamination due to unregulated pesticides polluting these waters.\textsuperscript{20}

In 2019, the State Water Resources Control Board cited the Klamath C.S.D. Public Water System for violation of the Department of Public Health’s Maximum Contaminant Level for total coliform bacteria.\textsuperscript{21} Internal erosion of household plumbing systems can cause substances like lead and copper to leach into the water. In Del Norte County, very low levels of lead and copper were detected and they did not reach levels that would warrant environmental health enforcement.\textsuperscript{22, 23}

**Lead Exposure.** Since the majority (56\%) of housing units in Del Norte County were built in 1979 or earlier (the year after lead in paint was banned), children living in these homes are at risk for lead poisoning. The Child Lead Poisoning and Prevention Program continues to monitor the status of lead levels for children in Del Norte County and conducts outreach and education about the effects of lead and how to prevent exposure to lead. When necessary, nurses also provide case management in the event of a lead poisoned child.\textsuperscript{24, 25}

**Water Fluoridation.** Community water fluoridation is one of the most effective ways to deliver the right amount of fluoride to all members of a community and is recommended by nearly all public health, medical, and dental organizations. Studies have shown that drinking fluoridated water reduces cavities by about 25\% in children and adults, but after a voter initiative in 2012 (Measure A), Crescent City stopped water fluoridation practices.\textsuperscript{26, 27}

**Chemical Contamination.** The Del Norte County Pesticide Storage Site, located in Crescent City, is an area with a history of improper disposal of wastes and rinse water contaminated the soil and groundwater. The site has been excavated and treated and has been removed from the Superfund program’s National Priorities List in 2002. The ground water in this area is regularly monitored and is evaluated every five years by the EPA to ensure that cleanup of remaining contamination is going as planned. The most recent


review of the Del Norte County Pesticide Storage hazard site concluded that chemical contamination levels are in accordance with EPA standards, and that remediation actions continue to be protective of the community’s health and environment. 28

**Outdoor Air Quality.** The North Coast unified air quality district operates the four air monitoring stations within its tri-county jurisdictions, one of which includes the Crescent City station in Del Norte County. The station reports to the EPA for determining compliance with the Federal Ambient Air Quality Standard. From 1999-2009, the air quality index in Del Norte County has been consistently below 50, which is considered good, and the air quality has improved in recent years. 29 The air quality index is calculated for four major air pollutants that pose potential health hazards: ozone, particle pollution, carbon monoxide, and sulfur dioxide.

![Figure 13. Air Quality Index (AQI), 1999-2009](image)

*Source: USA.com*

3.c. Food Access

Access to a healthy diet plays an important role in preventing a variety of chronic health conditions, such as obesity, diabetes, and heart disease. Food access is measured by the proximity and affordability of food retailers, relative to transportation access and socioeconomic resources of residents. Food insecurity refers to a lack of access to enough food for a healthy lifestyle or a limited or uncertain amount of access to nutritionally adequate foods.

Finding 9. The overall food insecurity rate is high, disproportionately affecting children.

According to Feeding America’s Map the Meal Gap report, the overall rate of food insecurity is higher in Del Norte County (16%) than California (11%). Furthermore, food insecurity rates are disproportionately higher among children under 18 years old (24%) than the overall County rate (16%). Results from the California School Staff Survey indicate an increase in healthy food options for the students, however, fewer school staff believe schools provide sufficient nutritional instruction to students.

Although supplemental food assistance (CalFresh) is highly utilized Countywide, many food insecure individuals and households cannot participate because they exceed income eligibility limits. Participation in Supplemental Nutrition Assistance Program (SNAP), also known as CalFresh in

Figure 14. School staff perceptions of healthy food access and education, 9th & 11th grade, 2011-18

Community Voices
Across community forums, participants highlighted the scarcity of healthy and affordable food. Due to the lack of local grocery stores, residents often face the choice of obtaining healthy food from local food marts (which have increased prices targeted to tourists) or traveling to Crescent City in order to get fresh fruits and vegetables.

30 Feeding America. Map the Meal Gap. Retrieved June 20, 2019, from 
https://map.feedingamerica.org/county/2015/overall/california/county/del-norte
California, is disproportionately higher in Del Norte County compared to the rest of the state. Del Norte County has the highest Program Access Index (PAI) in the state, with a PAI of 93%, which indicates a high utilization of the local CalFresh program among those eligible to receive CalFresh benefits (Table 3).  

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Del Norte County</td>
<td>5,387</td>
<td>93%</td>
</tr>
<tr>
<td>California</td>
<td>4,354,475</td>
<td>63%</td>
</tr>
</tbody>
</table>

Table 3. CalFresh program utilization among income-eligible individuals, 2015

Even though the utilization of SNAP services are high, not all food insecure individuals are able to access supplemental food programs. In Del Norte County, approximately one quarter (24%) of residents experiencing food insecurity are not income-eligible for federal nutrition assistance (Figure 15). In addition, the California Center for Rural Policy’s (CCRP) Community Food Assessment Report found that food assistance programs in Del Norte County cannot always meet the needs of the food insecure.

Finding 10. Residents have experienced decreasing access to healthy foods and fewer people live close to a grocery store.

Del Norte County residents have experienced decreased access to healthy foods and fewer people are living close to a grocery store. In Del Norte County, the percent of residents with low access to a grocery store increase from 27% in 2010 to 32% in 2015. Low-access is determined by distances of more than 1 mile (urban) or more than 10 miles (rural) to a full service grocery store. According to the County Health Rankings measure of the food environment, 14% of the low-income population does not live close to a grocery store.

Food deserts are urban neighborhoods and rural communities without ready access to fresh, healthy, and affordable food. Most of Del Norte County and the adjacent tribal lands have been designated as food deserts by the USDA (Figure 16). The USDA defines food deserts as low-income census tracts where a substantial number or share of residents has low access to a supermarket or large grocery store.\textsuperscript{36}

**Figure 16. Designated food deserts in Del Norte County and Adjacent Tribal Lands, 2010**

All larger grocery stores in Del Norte County (e.g., Grocery Outlet, Safeway, and the Walmart Supercenter) are located in Crescent City. There used to be two Ray’s Food Places in Crescent City and Smith River, but both closed in 2016 due to competition from the opening of the Walmart Supercenter. The news was received poorly from community members in Smith River as they lost the only large grocer in the area. The large grocers provide shoppers with greater selection and regularity, but the smaller grocery stores provide rural communities with increased food security. A CCRP report described how Del Norte County residents experience significant access issues due to transportation and distance: “Not all community members have access to vehicles, and those that do face some difficult drives. Shoppers in Gasquet and Klamath need to travel 21 miles on steep and winding highways to reach the larger stores in Crescent City. Fort Dick and Hiouchi are each roughly 10 miles from Crescent City.”\textsuperscript{37}


3.d. Housing and Transportation

Both the quality of housing and access to transportation have major implications for community health. Raising housing and transportation standards is a key pathway for providing the conditions that underlie individual and community-wide resiliency.

According to the California Department of Housing and Community Development, Del Norte County has the highest housing cost burden and transportation cost burden in the state. Throughout California, housing supply is not keeping pace with demand and home production is lowest for lower-income households. These trends further exacerbate the local housing and transportation challenges that Del Norte County residents experience.38

Finding 11. Many households in Del Norte County experience high housing cost burden.

Del Norte County has one of the lowest median single-family home sale prices in the state, however, more than one-third (37%) of households have a high housing cost burden where they spend at least 30% of their household income on rent or mortgage payments and related housing costs.39 Although Del Norte County has a lower rate of homelessness compared to the rest of the state (<1.5%), community members expressed concern about the need to address homelessness in the County.

Finding 12. Transportation options in Del Norte County are limited, and residents frequently drive long distances for work, school, shopping, and healthcare.

Most residents commute by driving alone and the average household has two cars per household. The average commute time to work is 14 minutes.40 Commute times in Del Norte County recently decreased, counter to statewide increasing trends.41 However, these commute times do not reflect residents’ experiences of long drive times to get anywhere, including healthcare providers.

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40 Data USA. Del Norte County, CA. Retrieved June 20, 2019, from https://datausa.io/profile/geo/del-norte-county-ca/
4. Access to Care

Access to affordable, quality health care is important for the health and well-being of Del Norte County residents. The major components of healthcare access are health insurance coverage, local health care options, and having a usual source of care.\textsuperscript{42} Del Norte County residents experience a number of barriers to accessing health care services. Below is a summary of the main barriers identified by local data trends and community input:

- Lack of health care providers
- Lack of affordable health care services
- Long appointment waiting times
- Difficulty finding a trusted provider
- Lack of nearby health care centers

The following section outlines the research and community input supporting these findings.

4.a. Access to Primary and Specialty Care

Access to comprehensive, quality health care providers and services is important for promoting and maintaining health, preventing and managing disease, reducing unnecessary disability and premature death, and achieving health equity. Healthcare access requires entry to the healthcare system, geographically accessible providers, and trusting relationships with providers.

Finding 13. There are not sufficient health care providers to meet the needs of the community, especially for mental health and dental care services.

Del Norte County is designated as Healthcare Professional Shortage Areas (HPSA) for all health care disciplines, including mental health, dental health, and primary care (Table 4). The most severe shortage occur among mental health providers with a HPSA Score of 20 (on a scale of 0-26, with 26 being most severe), followed by shortages in dental health providers (Score = 11) and primary care providers (Score = 9). In addition, there are no full-time equivalent (FTE) mental health providers and limited full-time equivalent providers for dental health and primary health care (Table 4).43,44

<table>
<thead>
<tr>
<th>Discipline</th>
<th>HPSA FTE45</th>
<th>HPSA Score46</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>Dental Health</td>
<td>2.6</td>
<td>11</td>
</tr>
<tr>
<td>Primary Care</td>
<td>8.3</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: U.S. Health Resources & Services Administration

Sutter Coast and the Del Norte Community Health Clinic (DNCHC) have implemented strategies to increase access to preventative care and health education in the community. For example, DNCHC introduced the Dental Van to serve youth at the schools, and Sutter Coast conducts their own annual community needs assessments. DNCHC also partnered with Building Healthy Communities to increase preventative dental care access to children by funding a Dental Van to travel to the schools twice a year (when fully-staffed) to provide routine check-ups and cleanings to as many children that are in need. However, there still remains a shortage of providers, imposing barriers to accessing care.

45 HPSE FTE represents the number of practitioners providing ambulatory patient care expressed as full-time equivalents (FTE).
46 HPSA Score represents the score developed by the National Health Service Corps (NHSC) in determining priorities for assignment of clinicians. The scores range from 0 to 26 where the higher the score, the greater the priority.
**Primary Care Providers.** Clinics have difficulty retaining providers, citing lack of incentive to remain in this area and the high cost of living. Lack of primary care providers can have significant negative impacts on population health, since preventative care is critical for preventing certain diseases, especially among the aging population. Community health care providers shared that at least six primary care offices in continuous operation for over ten years have recently closed without replacement.

**Mental Health Providers.** The greatest gap in the health care workforce is among mental health providers where there are no full-time mental health providers in Del Norte County.\(^47\),\(^48\) In response to this shortage, the hospital and health care district passed a resolution stating the need for a psychiatrist. In particular, community members noted the need for more inpatient services for acute crises. The addition of technology assisted care, specifically tele-psychiatry, is helping the community access mental and behavioral health services. Many residents applauded this newer service as adding a much-needed resource to the community.

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**Finding 14.** Del Norte County residents experience long appointment waiting times and frequently struggle to find a doctor they trust.

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Survey respondents highlighted the following as challenges for them and their households: waiting time for an available appointment (59%), finding a doctor they can trust (56%), getting free or reduced-cost medical or dental services (47%), and challenges related to transportation or commute times (32%).

**Finding 15.** People located in remote or rural regions of Del Norte County have greater difficulty accessing health care services.

Most services are located in Crescent City, with the exception of UIHS in Smith River and Klamath, which primarily serve the surrounding tribal communities. Overall, most of the community members in Gasquet, Smith River and Klamath have to travel to Crescent City to receive some medical services due to lack of medical services in their own cities, which are about 13-20 miles away from where they live. Persons seeking to access healthcare services must either travel to Crescent City or travel out of the County. People often face transportation barriers and long travel times, which often inhibits people from being able to access timely care.

**Community Voices**

Residents and community members noted the efforts from the County and offered additional input for increasing access to services and resources. Community suggestions include: expand clinics and offer more services, train all providers in trauma informed care practices, increase access to specialty care, especially for cancer treatment, increase communication from UIHS about the services that are available, improve emergency services such 24/7 ambulances and paramedics in Klamath, and increase awareness of existing services.

Additionally, community members highlighted the benefits of culturally responsive and culturally inclusive health fairs to increase health education and awareness of services and resources available. In particular, community members applauded Open Door for its focus on reaching the Latino and Hmong communities.

**Finding 16.** Specialist providers are among the most difficult to find within the County.

The majority (64%) of survey respondents stated that finding a specialist (e.g., diabetes, pain management, cancer) is a challenge, a finding also corroborated by participants in community forums and focus groups. Members of tribal communities seeking services at UIHS in Klamath may have even fewer options than residents seeking care at other area clinics. Community meeting participants across all forums discussed how they often travel far or outside the County for specialist care. Retention challenges generally impact the availability of specialists, and one provider shared that the County has never supported more than two general surgeons at a time. “The longest serving general surgeon, who served in Del Norte County for over 20 years, left the area two years ago to continue practicing at a clinic in Sacramento. Within the last four years, the only urologist, who had also served for over 20 years in Del Norte County, closed his office and moved away. He has since returned to the area, but is now only seeing patients in Oregon. There is only one other private surgical office (other than the ophthalmology office which is both surgical and primary care) and it is staffed by a single orthopedic surgeon who is also nearing retirement age.” Sutter Hospital has provided surgical services, through both temporary and permanent employees, although retention and recruitment for these positions has been a challenge.
4.b. Access to Oral Health Care

The health of the teeth, mouth, and surrounding area is important to a person’s overall health and wellbeing. Most oral disorders and diseases are preventable through regular visits to an oral hygienist or dentist. Oral health impacts physical health and chronic conditions including diabetes, heart disease, stroke, and cancer. Individuals with diabetes, for example, face greater risks for oral diseases. Oral health can also affect one’s psychological wellbeing.

Finding 17. A scarcity among dental care providers results in poor preventive dental care access among Del Norte County residents.

DNCHC is the only clinic that accepts Denti-Cal insurance for all County residents and currently staffs only one dentist to treat patients. UIHS also accepts Denti-Cal insurance but only serves tribal members and their households. DNCHC offers same-day appointments and walk-in opportunities, but community members shared that, in fact, it can take four to six months to receive services. In addition, it has been difficult to retain new dental care providers. The provider shortage has resulted in limited availability of dental care providers and long wait times. As a result of long wait times, many folks end up going out of town for dental care services and often paying out-of-pocket in order to access care sooner. Residents often access care outside of Del Norte County due to the lack of dental care providers, traveling as far as Humboldt County or State of Oregon. Accessing dental care services at UIHS is also difficult for the residents of Klamath because dentists only visit this clinic once a month to provide care.

Community Voices

Across key informant interviews and community forums, participants expressed the lack of available dental providers and highlighted the long wait times for dental services in the County. One community member expressed, “[DNCHC] is so impacted, you could sit in there for several days and not be seen.”

Finding 18. Del Norte County has one of the highest rates of emergency department visits for preventable dental conditions in the state.

Due to negative experiences when trying to access dental care, many residents do not prioritize preventative dental care. Community members and residents shared that people frequently will wait until they are in pain before they seek oral healthcare services. The emergency room will see people coming in for dental pain and will need to offer them painkillers or antibiotics to treat any infections before they are can receive a referral to a dental provider.

As shown in Figure 17, Del Norte County has one of the highest rates of emergency department (ED) visits for preventable dental conditions in the state. Among survey respondents, more than one-third (37%) identified dental health and oral hygiene as one of the most important health challenges in Del Norte

More than half (56%) of survey respondents said they last visited the dentist for a routine check-up or cleaning and about a quarter (27%) said they went for a specific problem. One one-third (37%) of survey respondents felt their oral health was in good condition.

Figure 17. Age-adjusted rate of ED visits for preventable dental conditions, 2012
4.c. Healthcare and Public Benefits Coverage

Having health care coverage is extremely important for individual and community health. Uninsured people receive less healthcare, and when they do receive medical care, they wait for longer periods. Importantly, uninsured people have worse health outcomes frequently experience higher financial burdens for health care emergencies. Increasing access to coverage protects residents from financial burdens and poor health outcomes. Enrollment in public benefits also provides residents with financial supports that can improve family health, wellness, and cohesion.

Finding 19. Despite the high rate of health insurance coverage, residents still experience difficulty paying for healthcare services and finding affordable services.

In Del Norte County, the majority (92%) of the population has health care coverage, but this percentage is still lower than the Healthy People 2020 objective of having all persons insured. Del Norte County residents currently obtain coverage through a variety of sources including through employee plans (33%), Medi-Cal (32%), Medicare (12%), non-group plans (13%), and military or veterans’ plans (2%). In 2017, Del Norte County had 5,746 Medicare beneficiaries, 5,237 fee-for-service beneficiaries, and 509 Medicare Advantage beneficiaries. Based on the Medi-Cal Managed Care Enrollment Report from December 2018, 11,250 residents are enrolled with Partnership Health Plan.

Finding 20. Due to the lack of services and providers, residents over-utilize emergency department services.

Community Voices

Although insurance coverage rates are generally high, community members expressed concern about how most people take on secondary health insurance in order to cover the full cost of services provided. Those with private health insurance coverage have more care options to choose from, while those with public insurance coverage can only choose between the Open Door Community Health Clinic or Sutter Coast Clinic. Community members have highlighted strides that the County has made towards improving health care services in the community, but still perceive a great need for improving service options.

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50 Data USA. Del Norte County, CA. Retrieved June 20, 2019 from https://datausa.io/profile/geo/del-norte-county-ca/
Due to the lack of medical doctors and oral healthcare providers, many people shared that they end up using urgent care or emergency department services. The following figure illustrates responses to the question asking residents where they seek healthcare services (Error! Reference source not found.). For all four centers, reported utilization rates were very low. Furthermore, the majority of respondents (79%) stated that they have gone to the emergency room for a non-emergency when they could not access to a doctor.

**Figure 18. Where residents seek healthcare, 2019**

- United Indian Health Services: 7%
- Redwood Medical Offices: 16%
- Del Norte Community Health Clinic (DNCHC): 17%
- Sutter Coast Hospital: 21%

*Source: Stakeholder Survey*

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**Finding 21. Public assistance programs are under-utilized.**

In comparison to poverty rates in Del Norte County, utilization rates for public benefits and assistance programs are generally low. However, the utilization rate for Medi-Cal has increased over the last decade, while the utilization rates for CalWORKS, and County Medical Services Program (CMSP) have decreased.\(^5\) Although it would be expected for utilization rates to decrease if the population decreases, the number of folks using services, with the exception of Medi-Cal, has decreased at a higher rate than the population, which has decreased by about 4% since 2010.\(^6\)

**Table 5. Public assistance program utilization (annual average), Del Norte County, 2007-2017**

<table>
<thead>
<tr>
<th>Program</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>CalWORKs</td>
<td>880</td>
<td>795</td>
<td>783</td>
<td>726</td>
<td>685</td>
<td>661</td>
<td>598</td>
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<tr>
<td>Homeless Assistance</td>
<td>8</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>4</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>CalFresh</td>
<td>2,602</td>
<td>2,532</td>
<td>2,540</td>
<td>2,523</td>
<td>2,606</td>
<td>2,570</td>
<td>2,524</td>
</tr>
<tr>
<td>Medi-Cal</td>
<td>2,851</td>
<td>2,910</td>
<td>4,291</td>
<td>4,327</td>
<td>4,676</td>
<td>4,871</td>
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<td>CMSP</td>
<td>137</td>
<td>147</td>
<td>18</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

*Source: Department of Health and Human Services – Public Assistance/Employment and Training Branch*

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5. Health Outcomes

5.a. Physical Activity and Nutrition

Physical activity and nutrition are two of the most important protective factors for health. Staying physically active and eating well can help control weight, reduce risk of chronic disease, strengthen bones and muscles, improve mental wellbeing and mood, and increase chances of living longer.

Finding 22. The majority of residents are engaging in healthy levels of physical activity.

The majority of adults in the County are engaging in healthy levels of physical activity. The prevalence of physical inactivity amongst adults aged 20 years and older in Del Norte County is about 19%, which is far below California (28%) and the Healthy People 2020 target (33%). More children and teens ages 5-17 are engaged in at least 60 minutes of physical activity daily in the past week, than in California overall.54

Figure 19. Prevalence of no leisure-time physical activity among adults, 2015

19% 28% 33%
Del Norte California HP2020

Source: Center for Disease Control Interactive Atlas

Community Voices

In community forums, participants expressed that they see residents exercising regularly outside, but are still concerned with the amount of people who smoke and are overweight due to unhealthy dietary choices. Also, residents expressed a desire for more youth-focused recreational opportunities especially for older children and teenagers. Participants highlighted field trip opportunities to the beach as an idea, and recommended taking advantage of the new gymnasium and municipal pool to host more activities for the youth. In addition, residents cited the need for an indoor activity center for people to use when the weather is rainy.

5.b. Behavioral Health

Mental health disorders can impact successful performance of mental functions, impacting a person’s ability to function in everyday life, maintain fulfilling relationships with others, adapt to change, and cope with challenges. Mental health is essential to personal wellbeing, family and relationships, and contribution to society. Mental health frequently contributes to a host of health issues including disability, pain, chronic illness, substance abuse and even death.

5.b.i. Mental Health and Behavioral Disorders

Finding 23. Del Norte County has the highest estimated need for mental health services in the state, with an even greater need among those living below twice the poverty limit.

Del Norte County has the highest estimated mental health service needs in the state. About 60% of survey respondents indicate that emotional or mental health issues are among one of the greatest challenges facing their County. According to the Department of Health Care Services (DHCS) mental health prevalence estimates, 19% of Del Norte County residents need mental health services and 8% need of mental health services for severe mental illness (SMI).

<table>
<thead>
<tr>
<th></th>
<th>Del Norte County</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need for any MH service</td>
<td>19% (Highest in CA)</td>
<td>16%</td>
</tr>
<tr>
<td>Need for SMI service</td>
<td>8% (Highest in CA)</td>
<td>4%</td>
</tr>
</tbody>
</table>

Table 6. Estimated mental health service needs, 2012

Although Del Norte County has one of the highest needs for mental health services, the County is designated as a Mental Health Professional Shortage Area and experiences chronic shortage of mental

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health providers.\textsuperscript{56} The wide gap between demand for services and the availability of services indicates a critical need for more mental health services and resources in Del Norte County.

Finding 24. Older youth approaching the end of high school experience higher rates of depression and suicide ideation in comparison to the rest of the state.

While 9\textsuperscript{th} graders report depression-related feelings at a similar rate to the state, 11\textsuperscript{th} graders report symptoms of depression and suicide ideation at higher rates than the rest of the state.\textsuperscript{57}

Figure 20. Depression-related feelings among youth, 2013-2015

![Depression-related feelings among youth, 2013-2015](source: Kidsdata. Lucille Packard Foundation for Children’s Health)

According to the California Healthy Kids Survey, many 9\textsuperscript{th} graders (31\%) and 11\textsuperscript{th} graders (36\%) in Del Norte County report feeling chronic sadness or hopelessness during the past year. In addition, 9\textsuperscript{th} and 11\textsuperscript{th} grade students in Del Norte County have a higher rate of suicide ideation compared to their counterparts across the state (Table 7).

Table 7. Youth seriously contemplating suicide, 2015-2017

<table>
<thead>
<tr>
<th></th>
<th>Del Norte County</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>9\textsuperscript{th} Grade Students</td>
<td>17%</td>
<td>16%</td>
</tr>
<tr>
<td>11\textsuperscript{th} Grade Students</td>
<td>22%</td>
<td>16%</td>
</tr>
</tbody>
</table>

Source: California School Climate, Health, and Learning Surveys

Finding 25. School staff believe students need better school-based mental health supports.

According to the California School Climate Survey (Figure 21), school staff feel they need more professional development on meeting the social, emotional, and developmental needs of youth and perceive the current counseling and support services available to students as inadequate. \textsuperscript{58}

\textsuperscript{56} Primary Care Health Professional Shortage Area detail. Retrieved June 21, 2019, from https://healthdata.gov/
\textsuperscript{58} California School Climate, Health, and Learning Surveys. Retrieved June 20, 2019 from https://calschls.org/reports-data/search-lea-reports/
Finding 26. Del Norte County has the second highest rate of diagnosis for alcohol and drug disorders in California.

According to the DHCS Mental Health Prevalence estimates, 11% of the population in Del Norte County has an alcohol or drug diagnosis, which is the second highest rate in the state. Of the 3,753 people with this diagnosis, 207 are youth between the ages of 12-17. This means that about 10% of youth between the ages of 12-17 have an alcohol or drug diagnosis, with the largest share related to alcohol abuse.

**Table 8. Alcohol or drug diagnoses, 2012**

<table>
<thead>
<tr>
<th>Age</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth age 12-17</td>
<td>207</td>
<td>10%</td>
</tr>
<tr>
<td>All ages</td>
<td>3,573</td>
<td>11%</td>
</tr>
</tbody>
</table>

*Source: Department of Health Care Services*

In the Del Norte County Community Health Assessment Survey, the majority (79.9%) of respondents consider alcohol or drug use as one of the biggest concerns in the County.

Finding 27. The majority of the clients served by the County’s Alcohol and Drug Prevention Program in the past year also had a mental health diagnosis.

Alcohol and drug abuse and addictive disorders often occur simultaneously with mental health illness and chronic health conditions (such as chronic liver disease and cirrhosis, heart disease, and diabetes, mental
health conditions and chronic pain). In Del Norte County, the majority (70%) of clients served by the County’s Alcohol and Drug Prevention Program in the past year also had a mental health diagnosis.\textsuperscript{59}

**Figure 22. Drug-induced death rate per 100,000 residents, 2018**

![Drug-induced death rate per 100,000 residents, 2018](image)

Source: CA DPH Health Status Profile for 2018

Alarmingly, the drug-induced death rate in Del Norte County is higher than that of California and the Healthy People 2020 target.\textsuperscript{60}

**Finding 28. In response to high youth rates of alcohol and drug abuse, the County has increased collaborative prevention efforts.**

In Del Norte County, 9\textsuperscript{th} graders and 11\textsuperscript{th} graders have a higher rate of using alcohol or other drugs (37% and 60%, respectively) compared to the statewide rate (23% and 33%, respectively). In particular, a notably higher percent of students consumed alcohol seven or more times in the past month (19% and 40%, respectively) compared to the statewide trend (10% and 25%, respectively). American Indian students had a notably higher rate (65%) of consuming alcohol seven or more time in the past month compared to their Hispanic (35%) or White (37%) counterparts. Historical data were not available to determine a trend over time.\textsuperscript{61} Overall, Del Norte County school staff report observing less alcohol and drug use amongst youth in recent years and recognize an increase in prioritization of substance use prevention amongst youth with sufficient resources and good collaboration with community organizations to address this issue.

Although alcohol and substance use among youth is relatively high compared to the rest of the state, the proportion of school staff reporting that the school has sufficient resources to address the substance use prevention needs of students has gone up from 3% (in the 2011-2012 school year) to 64% (in 2017-2018).

\textsuperscript{59} County of Del Norte Department of Health and Human Services. Dual Diagnosis and Behavioral Health Data.
Only one-fifth (21%) of school staff report that alcohol and drug (AOD) use is an issue among students compared to more than one-third (37%). Although this is still a high percentage, it shows a downward trend in perceived AOD use amongst youth and an upward trend in AOD prevention efforts overall.  

5.b.iii. Tobacco Use

Finding 29. One in four adult residents are cigarette smokers, at twice the overall state average.

One in four (25%) adult residents smoke cigarettes, which is twice the statewide rate (12%) and twice the Healthy People 2020 objective (12%). Smoking is more prevalent among adult men (21%) than women (14%).

Table 9. Smoking prevalence by gender in adults, Del Norte County, 2009

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently Smoke</td>
<td>21%</td>
<td>14%</td>
</tr>
<tr>
<td>Formerly Smoked</td>
<td>30%</td>
<td>26%</td>
</tr>
<tr>
<td>Never Smoked</td>
<td>49%</td>
<td>61%</td>
</tr>
</tbody>
</table>

Source: California Department of Public Health

Finding 30. Although cigarette smoking among youth has decreased, more young people and adults are vaping or using e-cigarettes.

Among youth, the prevalence of smoking in Del Norte County is only slightly higher than the California rate (Table 10), which may reflect positive impacts of cessation and educational programming. Between 2012 and 2017, most youth (99%) in elementary schools have self-reported that smoking cigarettes is bad for your health. The majority of older youth (75%) believe that smoking one or more packs of cigarettes a day is bad for your health, however, only 19% report that occasional smoking is bad.

Table 10. Prevalence of teenage smoking by gender, 2012-17

<table>
<thead>
<tr>
<th></th>
<th>Del Norte County</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>Female</td>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: California Department of Public Health

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64 Ibid
In Del Norte County, more teens are engaging in e-cigarette use in recent years. There is a decline among 7th and 9th grade students reporting use, but a sharp increase among 11th grade students.

**Figure 23. Prevalence of electronic cigarette use among 7th, 9th, and 11th grade students, 2013-2018**

![Graph showing e-cigarette use prevalence among 7th, 9th, and 11th grade students from 2013-2018]

**Source: California Healthy Kids Survey**

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**Finding 31.** Although current tobacco prevention efforts are perceived as impactful, community members expressed the desire for placing more emphasis on cessation efforts, limiting smoking areas, and limiting tobacco retailers.

The Del Norte County Tobacco Use Prevention Program (TUPP) is a part of the Department of Public Health’s prevention team and is funded by the California Tobacco tax Initiative, Prop 99 and Prop 56. This team is working to limit the number of tobacco retailers and locations where people can smoke. To limit the number of smokers and smoking areas, numerous organizations have adopted smoke-free and tobacco-free policies, including the Del Norte County Fairgrounds, the City of Crescent City, the Farmers Market, Family Resource Center, Sutter Coast Hospital, the Del Norte County Wellness Center, and more. Due to these policies, the smoking rate in Del Norte County has seen a decline in the number of people smoking. According to Del Norte County’s TUPP Program, these efforts have resulted in a decline in the number of people smoking.

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5.c. Chronic Conditions

Chronic diseases are diseases that last three months or longer, and while frequently preventable, they are often incurable and lead to ongoing, chronically poor health or, in some cases, death. Chronic diseases are the most expensive to treat, at both an individual and community level.

Finding 32. The leading causes of death in Del Norte County are cancer, heart disease, chronic lower respiratory disease, and unintentional injuries.

Del Norte County has a higher mortality rate compared to the rest of California, with the leading causes of deaths being cancer, heart disease, chronic lower respiratory disease, and unintentional injuries. Compared to statewide trends, Del Norte County has substantially higher mortality rates for chronic lower respiratory disease, unintentional injuries, motor vehicle traffic collisions, suicide, and fire-arm related deaths.66

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Del Norte</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>158</td>
<td>140</td>
</tr>
<tr>
<td>Coronary Heart Disease</td>
<td>96</td>
<td>89</td>
</tr>
<tr>
<td>Chronic Lower Respiratory Disease</td>
<td>74</td>
<td>32</td>
</tr>
<tr>
<td>Unintentional Injuries</td>
<td>64</td>
<td>30</td>
</tr>
<tr>
<td>Stroke</td>
<td>36</td>
<td>35</td>
</tr>
<tr>
<td>Motor Vehicle Traffic Collisions</td>
<td>23</td>
<td>9</td>
</tr>
<tr>
<td>Chronic Liver Disease and Cirrhosis</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>Suicide</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Diabetes</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Fire-Arm Related Deaths</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>Influenza and Pneumonia</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>Drug-Induced Deaths</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td><strong>ALL CAUSES</strong></td>
<td><strong>853</strong></td>
<td><strong>609</strong></td>
</tr>
</tbody>
</table>

*Source: California Department of Public Health*

Finding 33. Many low-income residents suffer from chronic health conditions.

The Center for Medicare and Medicaid Services (CMS) covers medical expenses for low-income individuals, and most hospitals receive a significant portion of their reimbursement for care from CMS. CMS tracks data for 17 chronic conditions among its beneficiaries, as these account for the majority of CMS spending on healthcare. Nearly half (48%) of Medi-Cal beneficiaries within the County have hypertension (e.g. high blood pressure) and many suffer from other chronic conditions, including

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hyperlipidemia (e.g. high cholesterol and triglycerides) (30%), arthritis (27%), diabetes (25%), and ischemic heart disease (i.e., blocked arteries) (22%). The prevalence of chronic health conditions among the County’s residents is comparable to statewide trends, and many of these chronic conditions are preventable through lifestyle changes and improved quality of life. Preventing chronic diseases (or managing the symptoms of chronic diseases when prevention is not possible) can help reduce costs for healthcare systems.

5.c.i. Cardiovascular Diseases and Stroke

**Finding 34. Cardiovascular disease is the second leading cause of death in Del Norte County.**

In Del Norte County, cardiovascular disease is one of the leading causes of death. Cardiovascular disease and certain chronic conditions are largely preventable through healthy lifestyle changes such as cessation of tobacco use, elimination of an unhealthy diet, and regular exercise. This local trend reflects statewide trends as CDPH’s California Burden of Disease and Injury Report from 2018 cites heart disease and cancer as the leading causes of death in California in 2010.

**Figure 24. Deaths due to chronic disease per 100,000 persons, 2014-2016**

![Diagram showing deaths due to chronic disease per 100,000 persons, 2014-2016]

5.c.ii. Cancer

**Finding 35. Although cancer is the leading cause of death in Del Norte County, overall mortality rates are comparable to statewide trends.**

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Although cancer is the leading cause of death in Del Norte County, overall mortality rates are comparable to statewide trends (Table 12). However, Del Norte County residents experience a notably higher rate of death from lung cancer and prostate cancer than the rest of the state.\(^\text{69}\)

**Table 12. Deaths due to Cancer per 100,000 persons, 2014-2016**

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Del Norte County</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung Cancer</td>
<td>38</td>
<td>29</td>
</tr>
<tr>
<td>Prostate Cancer</td>
<td>26</td>
<td>20</td>
</tr>
<tr>
<td>Breast Cancer</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>Colorectal Cancer</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>All Cancer</td>
<td>158</td>
<td>140</td>
</tr>
</tbody>
</table>

*Source: California Department of Public Health, CHSP*

Del Norte County has one of the highest rates of lung cancer deaths in the state, with a rate of 38 deaths per 100,000 people. Although the lung cancer rate decreased in recent years, racial and gender disparities persist. In an analysis that pooled data from Del Norte and Humboldt counties, non-Hispanic white residents faced the highest risk of lung cancer compared to other race and ethnic groups. In addition, Hispanic women faced the highest rate of lung cancer.\(^\text{70}\)

**5.c.iii. Diabetes**

**Finding 36.** The prevalence and incidence of diabetes in the County is slightly lower than in California overall.

In 2014, the prevalence of diabetes in Del Norte County (9.2%) was comparable to the overall statewide trend (8.8%), with a lower rate of newly diagnosed diabetes (7 cases per 1,000 for adults) compared to the state (10 cases per 1,000 adults).\(^\text{71}\)

The Healthy People 2020 objective for newly diagnosed diabetes is seven cases per 1,000; therefore, Del Norte County is faring better than the state and is on target with the HP 2020 objective.\(^\text{72}\)

It’s worth noting that the County’s rate of adult diabetes for pregnant women (12 out of 1,000) is significantly worse than the state rate.


\(^\text{72}\) California Health Interview Survey.
Finding 37. More Hispanic or Latino/a/X residents are obese compared to other racial groups.

Among all Del Norte residents, about one in three adult residents are obese (34%); this exceeds the HP 2020 objective of 31%. However, obesity rates vary across race and ethnicity groups in Del Norte County, with Hispanic or Latino adults having the highest (31%) obesity rates compared to other race and ethnicity groups (Table 13). Unfortunately, the California Health Interview Survey does not track obesity rate among Native American populations.

### Table 13. Adult rates of obesity by race and ethnicity, 2014

<table>
<thead>
<tr>
<th>Race and Ethnicity</th>
<th>Del Norte</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>31%</td>
<td>34%</td>
</tr>
<tr>
<td>Asian</td>
<td>12%</td>
<td>11%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>-</td>
<td>40%</td>
</tr>
<tr>
<td>Total</td>
<td>25%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Source: California Health Interview Survey

Finding 38. In Del Norte County, more than half of teen youth are overweight or obese and physical activity rates among youth are lower than the statewide rate.

Childhood obesity has reached epidemic levels across the nation. In Del Norte County, childhood obesity varies across age groups. Among younger children between ages 2-11, Del Norte County has a lower rate of obesity and overweight (6%) compared to the statewide trend (13%). However, among older youth between ages 12-17, more than half (52%) are overweight or obese, which is much higher than the HP 2020 objective of 16% and higher than the statewide rate of 33%.

### Table 15. Youth rates of overweight or obesity, 2014

<table>
<thead>
<tr>
<th>Age</th>
<th>Del Norte</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ages 2-11</td>
<td>6%</td>
<td>13%</td>
</tr>
<tr>
<td>Ages 12-17</td>
<td>52%</td>
<td>33%</td>
</tr>
</tbody>
</table>

Source: California Health Interview Survey

### Table 14. Percentage of students meeting all Healthy Fitness Zone Standards, 2017

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Del Norte</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th Grade</td>
<td>13%</td>
<td>25%</td>
</tr>
<tr>
<td>7th Grade</td>
<td>27%</td>
<td>31%</td>
</tr>
<tr>
<td>9th Grade</td>
<td>39%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Source: Kidsdata.org

Physical activity levels vary across grade levels in Del Norte County. Among 5th and 7th grade students in Del Norte County, they have lower levels of physical activity (13% and 27%, respectively) compared to their statewide counterparts (25% and 31%, respectively). However, 9th grade students have a slightly higher level of physical activity (39%) compared to their statewide counterparts (35%).

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75 Ibid
5.c.v. Chronic Respiratory Diseases

**Finding 39. Chronic respiratory diseases are the third leading cause of death in Del Norte County.**

Chronic respiratory diseases are chronic diseases that affect the airway and lungs, which include asthma, chronic obstructive pulmonary disease (COPD), occupational lung diseases, and pulmonary hypertension. Overall, the rate of chronic respiratory disease is high in Del Norte County compared to the rest of the state. The rate of deaths due to lung disease (e.g., lung cancer, COPD, asthma, influenza, and pneumonia) in Del Norte County is 121 per 100,000 population, which is notably higher than the statewide rate of 90 per 100,000. Specifically, lower respiratory disease (such as COPD) is the second leading cause of death among Del Norte County residents, with a death rate that is nearly double (74 per 100,000 people) the statewide rate (32 per 100,000). In addition, Del Norte has one of the highest death rates due to influenza and pneumonia in the state, with a rate of 23 deaths per 100,000 residents, which is higher than the statewide rate of 15 deaths per 100,000 people. 77

Tobacco smoke is a key risk factor in the development and progression of chronic respiratory diseases. Exposure to air pollutants, genetic factors, and respiratory infections can also play a role. A higher percent of adults in Del Norte County (15%) report smoking more than 100 cigarettes in their lifetime and are currently smokers compared to the rest of the state (19%). Smoking rates tend to be higher in low-income communities in Del Norte County. Children in Del Norte County have a slightly higher rate of asthma (17%) compared to children across the state (15%). 78 Among northern rural counties, the estimated rate of hospitalizations for asthma is 5.2 per 10,000 children. 79

5.c.vi. Oral Health

**Finding 40. Access to and utilization of preventative dental care services remains low, particularly among low-income populations.**

Poor oral health is associated with an increased risk of chronic health conditions such as heart disease, hypertension, stroke, and cancer. Oral health diseases are generally preventable and treatable with preventive care. The mortality rate due to oral and pharyngeal cancers is one important indicator of oral health status amongst adults. The incidence and mortality rates of oral and pharyngeal cancer in Del Norte County (11 and 2.4 per 100,000, respectively) is comparable to statewide trends (11 and 2.6 per 100,000, respectively) and is not one of the leading causes of death due to chronic disease. 80

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79 Breathe California Golden Gate Public Health Partnership. Del Norte County Summary.
Preventative dental care is a critical determinant of poor oral health outcomes, especially among low-income communities. In Del County, only 26% of residents eligible for Denti-Cal services are participating in annual dental visits, which is lower than the HP 2020 target of 49%. From 2015 to 2016, there was a notable increase in the percent of Denti-Cal eligible residents accessing dental exams, dental treatments, and other restorative and preventive dental services (Figure 25). In more recent years, oral health care access levels have remained the same or decreased.\(^8\)

**Figure 25. Rates of service claims by Denti-Cal eligible residents, Del Norte County, 2013-2017**

Poverty accounts for much of the differences in oral health care access in the Redwood Coast Region, which includes Del Norte, Humboldt, Trinity and Mendocino counties. As socioeconomic status improves, so does the likelihood of receiving professional teeth cleaning (Figure 26). Persons living in poverty are two times less likely to have their teeth professionally cleaned in the past year and seven times more likely to have gone five or more years without professional teeth cleaning compared to persons with higher socioeconomic status (i.e., living at or above 300% of poverty level).\(^8\) Persons who are uninsured or are beneficiaries of Denti-Cal insurance are significantly less likely to have their teeth cleaned in the past year.

**Figure 26. Time since last professional teeth cleaning,**

by income status and insurance type of respondents, Redwood Coast Region, CA

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\(^8\) First 5 Reports. School Readiness Assessment – Del Norte County (2017)
than those with private insurance and significantly more likely to have never received or gone five or more years without professional teeth cleaning (Figure 26Error! Reference source not found.).

Finding 41. A large proportion of children reported receiving a dental exam within the past year, but nearly half had at least one cavity.

A large portion of surveyed children in Del Norte County (78%) received a dental exam in the past year, which exceeds the Healthy People 2020 target of 49%. However, these data were collected from a small sample of children in school settings. In addition, although the majority (78%) of children received a dental exam in the last year, nearly half (45%) had at least one cavity.83

Table 16. Dental care and concerns among children, Del Norte County, 2017

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child has a regular dentist</td>
<td>72%</td>
<td>219</td>
</tr>
<tr>
<td>Child had a dental exam in the last year</td>
<td>78%</td>
<td>224</td>
</tr>
<tr>
<td>Number of Cavities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>43%</td>
<td>n/a</td>
</tr>
<tr>
<td>1-2</td>
<td>22%</td>
<td>219</td>
</tr>
<tr>
<td>3-4</td>
<td>15%</td>
<td>n/a</td>
</tr>
<tr>
<td>5 or more</td>
<td>8%</td>
<td>n/a</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>12%</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Source: First 5 School Readiness Assessment, 2017

Among children for whom the location of the most recent dental exam was known, most receive care at the Del Norte County Community Health Clinic (20%) or at a clinic outside of the County (9%). The data reflect that the largest group of children receive dental services somewhere unknown, or perhaps do not receive professional oral healthcare at all.

Figure 27. Location of dental services accessed by children, 2017

Source: First 5 School Readiness Assessment, 2017

83 Ibid
5.e. Maternal and Child Health

Maternal and child health programs focus on health issues concerning women, children, and families, such as access to prenatal and well-child care, infant mortality prevention, emergency services, newborn screening, and services for children with special needs. Investment in healthy children and mothers can avert more costly health problems downstream.

5.e.i. Maternal Health

Finding 42. Pregnant women in Del Norte County are not receiving adequate prenatal care.

Prenatal care reduces the risk of pregnancy complications, fetus and infant complications, and provides women with education about how to ensure a healthy pregnancy. Prenatal visits to a health care provider typically include physical exams, weight checks, blood tests and imaging tests such as ultrasound exams, to continually track maternal and fetus health. Pregnant women in Del Norte County are receiving a lower rate of prenatal care within first trimester compared to the rest of the state and the Healthy People 2020 target of 78%. 84

Figure 28. Prenatal care begun during the first trimester

UIHS and SCCC both offer prenatal services and the local deliverable hospital (SCH) also provides free community childbirth preparation classes. The classes frequently experience low turnout despite intensive outreach. During community engagement events, it was suggested that key barriers to accessing prenatal care are: transportation, transiency, substance use, perinatal mood and anxiety disorders, lack of insurance coverage, and involvement with—or fear of involvement with—child welfare services.

Community Voices

Residents shared that there are limited options for prenatal care. Some women don’t give birth in the County at all, and community members shared that more women are giving birth at home with the support of a midwife. Women in the community are finding natural and alternative ways to address some of their symptoms outside of the mainstream Western system.

84 UCSF Family Health Outcomes Project. California County MCAH Data Community Health Status Reports. Retrieved June 21, 2019 from https://fhop.ucsf.edu/california-county-mcah-data

Source: UCSF Family Health Outcomes Project
Finding 43. Pregnant women in Del Norte County generally have poorer pregnancy outcomes and a higher rate of substance use diagnosis compared to the rest of the state.

Del Norte County has a disproportionately higher number of live births whose mother received prenatal care paid by Medi-Cal insurance. Poverty during pregnancy has been shown to have adverse consequences for the mother and child in the short- and long-term.85

**Figure 29. Prenatal care covered by Medi-Cal Insurance per 100 Live Births, 2012-2016**

![Graph showing prenatal care covered by Medi-Cal Insurance per 100 Live Births, 2012-2016](Source: UCSF Family Health Outcomes Project)

Across almost all maternal health indicators, women in Del Norte County have worse pregnancy and post-pregnancy outcomes compared to their counterparts across the state (Table 17). During pregnancy, women in Del Norte County have a higher rate of being overweight or obese, having a substance use diagnosis, having gestational diabetes, having depressive symptoms, experiencing food insecurity, and not receiving Tdap vaccination.86,87

**Table 17. Maternal Health Indicators, 2013-2016**

<table>
<thead>
<tr>
<th></th>
<th>Period</th>
<th>Del Norte County</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uninsured pre-pregnancy per 100 females delivering a live birth</td>
<td>2013-15</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>Pre-pregnancy overweight or obesity per 100 females delivering a live birth</td>
<td>2016</td>
<td>58</td>
<td>50</td>
</tr>
<tr>
<td>Substance use diagnosis per 1,000 hospitalizations of pregnant females age 15-44</td>
<td>2013-15</td>
<td>93</td>
<td>20</td>
</tr>
<tr>
<td>Gestational diabetes per 1,000 females age 15 to 44</td>
<td>2015</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Prenatal depressive symptoms per 100 females delivering a live birth</td>
<td>2013-15</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>Postpartum depressive symptoms</td>
<td>2013-15</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>Food insecurity during pregnancy per 100 females delivering a live birth</td>
<td>2013-15</td>
<td>21</td>
<td>16</td>
</tr>
<tr>
<td>Tdap immunizations during pregnancy per 100 females delivering a live birth</td>
<td>2015-2016</td>
<td>45</td>
<td>50</td>
</tr>
</tbody>
</table>

*Source: UCSF Family Health Outcomes Project*

86 UCSF Family Health Outcomes Project. California County MCAH Data Community Health Status Reports. Retrieved June 21, 2019 from https://fhop.ucsf.edu/california-county-mcah-data
Del Norte County has a notably high rate of pregnant women with substance use diagnosis, which is 4.7 times the statewide rate. The Healthy People 2020 target for increasing abstinence from alcohol and cigarette smoking during pregnancy is about 99%, and 100% for binge drinking and illicit drug use. Women in Del Norte County also experience a higher rate of postpartum depression. Decreasing the proportion of women delivering a live birth who experience postpartum depressive symptoms is a HP2020 objective in the developmental phases, so a target has not yet been set.88

Finding 44. Del Norte County records a higher rate of teen births compared to California.

Teen pregnancy and childbearing have substantial social and economic costs through immediate and long-term impacts on teen parents and their children. Teen pregnancy are significant contributors to high school dropout rates among girls and the children of teenage mothers are more likely to have lower educational attainment, health problems, incarceration, teen pregnancy, and unemployment.89 In addition, pregnant teens have an increased risk for preeclampsia and gestational high blood pressure.90 Del Norte County records a higher rate of teen births compared to California, although rates have been decreasing for both Del Norte and California in recent years. Many survey respondents (20%) highlight teenage pregnancy as one of the most important health challenges in Del Norte County.

5.e.ii. Infant and Child Health

Finding 45. The County’s infant mortality rate is lower than the statewide rate.

Overall, infant mortality has improved over the years in Del Norte County. The infant mortality rate in Del Norte County is three per 1,000 live births, which is lower than both the statewide trend of five per 1,000 live births and the HP2020 target of six per 1,000 live births.91 However, the statistical significance of these

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88 UCSF Family Health Outcomes Project. California County MCAH Data Community Health Status Reports. Retrieved June 21, 2019 from https://fhop.ucsf.edu/california-county-mcah-data
values are questionable due to the extremely low sample size. The County also improved upon the rate of infants with low birthweight between 2012 and 2014, and recent trends indicate low birthweight rates that are comparable to the statewide trend and lower than the HP 2020 target of 7.8% of live births.

Figure 31. Percent of live born infants weighing less than 2,500 grams at birth, 2011-2016

Finding 46. Del Norte County’s immunization rate and breastfeeding rate are lower than statewide rates.

Getting timely vaccinations help children build up protection against preventable communicable diseases. Although the majority (88%) of kindergartners in Del Norte County have all required immunizations, this percentage is lower than the statewide immunization rate (93%).92 Breastfeeding is the best source of nutrition for most infants, and it can reduce the risk for some short- and long-term health conditions for both infants (e.g., asthma, obesity, diabetes, respiratory infection and sudden infant death syndrome) and mothers (e.g., high blood pressure, diabetes, ovarian cancer, breast cancer).93 Del Norte County has a smaller proportion of mothers practicing breastfeeding (90%) compared to the rest of the state (94%).94 However, Del Norte County exceeds the HP2020 target for infants who are breastfed (82%).

Finding 47. Del Norte has low availability of licensed child care providers.

High-quality affordable child care and early education programs can be impactful on a child’s development as well as the economic well-being of the family. Del Norte has a notably low availability of licensed child care providers. The majority (75%) of licensed child care centers only have part-time slots available (i.e., less than 30 hours per week), and most (98%) full-time slots (i.e., 30 or more hours per week) are located in family child care homes. Child care centers are facilities that provide care for infants, preschoolers, and/or school-age children during all or part of the day. In family child care homes, care is offered in the home of the provider, often a parent, and care is typically provided for children of a variety of ages.95

5.f. Communicable Diseases

Communicable or infectious diseases are spread, either directly or indirectly, from one person to another through contact with blood or bodily fluids, by breathing in an airborne virus, or by being bitten by an insect. Reporting cases of communicable disease is important in the planning and evaluation of prevention programs.


According to the CDPH County Health Status Profiles, the reported incidence of people diagnosed with HIV/AIDS, chlamydia, gonorrhea, and primary or secondary syphilis is lower than California. Among residents 13 years and older, HIV/AIDS prevalence is much lower in Del Norte (86 per 100,000) compared to California (396). Rates of sexually transmitted infections are also generally lower. The County has a lower rate of Chlamydia (318 per 100,000) compared to the state (515), and there are no cases of secondary syphilis. Although the County appears to generally be doing well in terms of overall Gonorrhea prevalence compared to the HP2020 goal, females have a much higher rate compared to males. The Gonorrhea rate among males (193 per 100,000) is comparable to the HP2020 target for males in the U.S. (195). However, Gonorrhea rate among females (345 per 100,000) is much higher than the HP2020 target for females (252) and higher than the statewide rate for females (218).

Community Voices

Many residents shared the County’s conservative climate prevents teens from accessing sexual health care resources and services or possibly receiving comprehensive sexual health education. Although there is no clinic providing affordable and confidential family planning and sexual health services to all ages, Open Door opened a Teen Clinic near the high school to encourage students to access services and resources there.

Source: California Department of Public Health

5.g. Violence and Preventable Injury

Injuries and violence are frequently accepted as “accidents” or “part of life,” however, most events resulting in injury, disability, or death and both predictable and preventable. Injuries, including injuries resulting from violence, are the leading cause of death in this country and are the leading cause of disability for all ages, genders, ethnic groups, and socioeconomic statuses. Injuries and violence can be costly to treat, contribute to poor mental health, and result in lost income.

Finding 49. The County has notably higher mortality rate due to violence and unintentional injuries death compared to statewide trends.

Violence and unintentional fatalities contribute to a large portion of preventable deaths in Del Norte County, with the leading cause being all unintentional injuries. In Del Norte, the number of deaths from planned (e.g., homicide or suicide) and unplanned (e.g., motor vehicle deaths) injuries per 100,000 persons has slightly increased since 2014, and the overall rate is higher than the statewide rate as well as the Healthy People 2020 target.97

Figure 34. Deaths due to injury per 100,000 residents, 2014-16

There is a notably higher mortality rate due to violence and unintentional injuries death compared to the rest of the state. The rate of deaths due to unintentional injuries in Del Norte County (64 per 100,000) is double the statewide rate (30 per 100,000).98

Table 18. Mortality Rates from Preventable Injuries, per 100,000 residents, 2018

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Del Norte</th>
<th>California</th>
<th>HP 2020 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unintentional Injuries</td>
<td>64</td>
<td>30</td>
<td>36</td>
</tr>
<tr>
<td>Suicide</td>
<td>20</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Motor Vehicle Traffic Collisions</td>
<td>23</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Firearm-related deaths</td>
<td>17</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Drug-Induced Deaths</td>
<td>16</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Homicide</td>
<td>8</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: California Department of Public Health

In addition, Del Norte County has two times the rate of death due to suicide compared to the state. Among high school students in Del Norte County, suicide ideation was disproportionately higher among students who identified as gay, lesbian, or bisexual (81%) compared to students who identified as straight (16%). Data are not available for suicide rates among Native American communities. However, the Yurok tribe recently declared an emergency because an alarming number of tribal members died by suicide in a short amount of time. In response, the community initiated suicide prevention programming.

Finding 50. The rate of deaths due to traffic fatalities is higher in Del Norte County compared to the rest of the state.

The mortality rate for motor vehicle traffic collisions is substantially higher in Del Norte County (23 deaths per 100,000 persons) compared to the statewide rate (9 deaths per 100,000 persons). However, the overall number of deaths due to traffic collisions was generally low with eight deaths in 2016 and six deaths in 2017, and recent data indicate a decreasing trend of traffic fatalities.

Finding 51. The overall crime rates in Del Norte County and California are comparable, but the rate of violent crimes is slightly higher than the statewide rate.

Safe neighborhoods that are free of crime and violence are an integral component of healthy neighborhoods. In Del Norte County, the violent crime rate has nearly doubled in the past nine years going from 3.5 crimes per 1,000 residents in 2007 up to 6 per 1,000 resident in 2016. Although the overall crime rate (which includes property crimes and violent crimes) in Del Norte County (29 per 1,000 resident) is

comparable to statewide trends (30 per 1,000 residents), the rate of violent crimes specifically is higher in Del Norte County (6 per 1,000) than the statewide rate (4.2 crimes per 1,000). It is important to note that crime trends are difficult to ascertain in small counties, since rates are susceptible to substantial swings due to small populations and rare instances of violent crime.

Finding 52. Del Norte has experienced a disproportionately higher rate of domestic violence compared to the rest of the state, and there has been an increase in recent years.

Del Norte County has experienced a dramatic increase in calls to police for violent or aggressive behavior within the home, with a rate higher than the statewide trend and an increasing trend in recent years (Figure 36). Many survey respondent (40%) highlight domestic violence as one of the most important health challenges in Del Norte, and many others (37%) also highlighted child abuse and neglect as one of the most important health challenges in Del Norte. In addition, residents shared that the tribal communities have very active domestic violence programs and that demand for these programs is high.

Figure 36. Domestic violence calls for assistance per 1,000 adults, 2010-2014

![Graph showing domestic violence calls for assistance per 1,000 adults, 2010-2014](source)

Finding 53. Del Norte County has experienced a consistently high rate of child abuse cases.

Del Norte County has had a high rate of child abuse cases since 2011, which reflects community members’ concerns about child abuse being a major issue in their community (Figure 37). The majority of child abuse in Del Norte County are due to general neglect (75%), physical abuse (15%), sexual abuse (9%), or other types of child abuse (1%). African American and American Indian children have a higher rate of child abuse (677 and 285 per 1,000, respectively) compared to all other race groups (Figure 38). The high level of childhood trauma is further indicated by the increasing rate of hospitalizations due to mental health issues.


among children ages 5-14 in northern rural California (which includes Del Norte, Lassen, Modoc, Plumas, Sierra, Siskiyou, and Trinity Counties), with a three-fold increase from 0.7 per 1,000 in 2012 to 2.2 per 1,000 in 2016. Although the regional rate is comparable to statewide levels (2.5 per 1,000), the rate of increase in northern rural California is markedly higher than the state which has maintained the same rate since 2012.104

Adverse Childhood Experiences (ACEs) includes all types of abuse, neglect, and other potentially traumatic experiences that occur to people under the age of 18. ACEs can have tremendous impact on a child’s current and future health and wellbeing. Having one or more ACEs has been linked to risky health behaviors, chronic health conditions, low life potential, and early death. County-specific data on Adverse Childhood Experiences (ACEs) in Del Norte County is not available. In northern rural California, a higher proportion of children (20%) experience two or more ACEs compared to the rest of the state (16%). Childhood trauma in Del Norte County may be exacerbated by the high rate of domestic violence, childhood poverty, food insecurity, substance use, and fatalities due to unintentional or intentional injuries (i.e., suicide, vehicle collisions, firearm-related deaths, homicide). Furthermore, Del Norte County has a higher proportion of children living with parents with depression or mental illness or alcohol compared to the rest of the state.

Figure 38. Reports of child abuse and neglect per 1,000 children, 2011-2015

<table>
<thead>
<tr>
<th>Year</th>
<th>Del Norte Rate</th>
<th>California Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>132</td>
<td>145</td>
</tr>
<tr>
<td>2012</td>
<td>146</td>
<td>142</td>
</tr>
<tr>
<td>2013</td>
<td>149</td>
<td>155</td>
</tr>
<tr>
<td>2014</td>
<td>155</td>
<td>153</td>
</tr>
<tr>
<td>2015</td>
<td>155</td>
<td>153</td>
</tr>
</tbody>
</table>

Figure 37. Rate of child abuse per 1,000 children, by race/ethnicity, 2015

- **Black or African American**: 677
- **American Indian or Alaska Native**: 285
- **White**: 150
- **Asian or Pacific Islander**: 78
- **Hispanic or Latino**: 74

*Source: Kidsdata. Lucille Packard Foundation for Children’s Health.*

**Community Voices**

Community members expressed concern about domestic violence and child abuse in their communities. One participant said, “A lot of people have experienced significant amounts of trauma. Then, other people have experienced small amounts of trauma but because they live in a community that has experienced so much trauma, their small traumas become major traumas in their lives.”

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6. Next Steps

This assessment of community health findings presents data and information to help Del Norte County’s Department of Health and Human Services, health providers, and concerned residents understand the range of specific health issues faced by the broader Del Norte County community.

The next stage, after completing this Community Health Assessment (CHA), is to prioritize health issues, needs, and gaps; identify community-wide health improvement objectives; develop specific strategies to address these objectives; and then develop an action plan that sets forth measurable targets and implementation steps for achieving improved health resources and outcomes. Community members and residents will come together develop these priorities and objectives, and the resulting Community Health Improvement Plan, or CHIP, will serve as a roadmap for Del Norte County’s Health and Human Services.
Appendix A. List of Sources and Methodological Limitations

List of Sources

Below are a list of secondary data sources and references leveraged for this report:

- American Public Health Association
- Breathe California
- California Center for Rural Policy
- California Department of Education – Healthy Kids Survey & School Staff Survey
- California Department of Public Health
- California Department of Health Care Services
- California Department Housing and Community Development
- California Food Policy Advocates
- California Health Resources and Services
- California Health Interview Survey
- California Healthy Kids Survey
- California Healthy Places Index (HPI)
- California Maternal, Child, and Adolescent Health Division
- California Office of Statewide Health Planning and Development
- California School Climate, Health, and Learning Surveys
- California’s Housing Future
- California Water Boards
- Centers for Medicare and Medicaid Services
- City of Crescent City, California
- Chronic Conditions Prevalence
- Community Health Indicators for Del Norte County
- County Health Rankings & Roadmaps
- Dartmouth Atlas of Health Care
- DATA USA
- Del Norte County Department of Health & Human Services
- Del Norte County Economic and Demographic Profile
- Del Norte Local Transportation Commission
- Del Norte Tripplicate
- Eunice Kennedy Shriver National Institute of Child Health and Human Development
- Fatality Analysis Reporting System (FARS)
- First Five California
- Feeding America - Map the Meal Gap
- Food Environment Atlas
- Healthdata.gov
- Healthy People 2020
- Just the Facts: Crime Trends in California
- Kidsdata.org
- Medi-Cal Dental Program (Denti-Cal)
- Mobilizing for Action through Planning and Partnerships (MAPP)
- National Institute Of Health
- Pediatric Child Health
- Public Health Alliance of Southern California
- Rhode Island Department of Labor and Training
- Stanford Digital Repository
- Sutter Health
- United States Census Bureau
- United States Centers for Disease Control and Prevention
- United States Department of Agriculture
- United States Department of Health and Human Services (HHS)
- United States Environmental Protection Agency
- United States Human Resources & Services Administration
- University of California San Francisco Family Health Outcomes Project
Methodological Limitations

**Limited Available Health Data:** Due to the scarce number of health care providers in the County, the majority of residents often access clinics and hospitals outside of the County. In addition, cross-agency integration of health care data is very limited or does not exist. Thus, this report utilizes secondary countywide data, data obtained through sampled populations, or estimations based on effective predictive models. All secondary data sources are cited throughout this report.

**Small Sample Sizes:** As a smaller County, Del Norte generally has a fewer numbers across most data sources. Small sample sizes can yield unreliable statistics. In addition, small populations that are translated into standard rates (e.g., number per 100,000 persons) can misrepresent or exaggerate local trends. Rates calculated from small populations can also vary greatly from year to year. To account for any statistical instability due to low sample size, the Healthy Del Norte team conducted further analysis that combined years.105

**Reliability of Self-Reported Data:** Most of the qualitative data analysis reported throughout the report is based on self-reported data from surveys, community meetings, focus groups and comment boards. Different factors come into play that can influence the validity of self-reported data. Recall timeframe could become an issue when participants under-report or over-report information.106 The reliability of self-reported data may become an issue if participants provide false information due to a lapse in time, or because they want to present themselves in an acceptable manner. Despite these limitations, feedback from the community about their experiences and challenges is an integral and invaluable part of the CHA process.

**Validity of Regional Data:** Due to some lack of county-specific data, the Healthy Del Norte Team used regional data, which combined information for Del Norte County with other neighboring or similar rural counties. Although this data does not capture Del Norte County itself, the trends allow us to understand the regional experiences that oftentimes reflect the experiences of Del Norte County. Wherever possible, regional data were integrated with additional secondary data or community input to validate findings.

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