

California's Rural North: Health Equity Landscape Scan

*California Center
for Rural Policy at
Cal Poly Humboldt*

&

*Rural Association of
Northern California
Health Officers*



Your Hosts:



The Rural Association of Northern California Health Officers (RANCHO) is an eleven county consortium consisting of Public Health and Health Services Department Directors, Assistant Directors, Health Officers, and Deputy Health Officers in the far northern region of California.



Cal Poly
Humboldt.

The California Center for Rural Policy (CCRP) at Cal Poly Humboldt is a research, evaluation, and policy center focused on improving the health and well-being of rural people and environments.

CCRP and RANCHO are partners on a grant from the California Department of Public Health. The grant is focused on improving health equity and promoting an equitable recovery from COVID-19.

California's Rural North: Health Equity Landscape Scan

Focus Areas:

- 1) Health Equity & Health Disparities.
- 2) Equity in the Public Health Workforce.
- 3) Trust Building and Community Engagement.
- 4) Data & Measurement Challenges in a Rural Region.



Report Methods

Primary data included:

- Interviews with Public Health Directors and Health Officers.
- Agendas and minutes from the 21 RANCHO meetings between July–December, 2022.
- Meeting cadence and collaboration survey conducted by CCRP.
- Meeting with Equity Leads, hosted by CDPH.

Secondary data sources included the U.S. Census Bureau, DataQuest (CDE), County Health Rankings and Roadmaps, and more (see full report for complete source list).

ATLAS.ti was used to analyze qualitative data from interviews.

RStudio was used to analyze quantitative data from secondary sources.

Health
equity
means
everyone

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has a
safe
place
to live.

can go
to
school.

understands
how Public
Health can
help their
family

has safe
water to
drink

has a place
to play.

has a
place
to work.

access to
quality
healthcare

can
navigate
healthcare
systems

has healthy
food to eat.

has a place
to connect
with others.

can get
help when
they need
it.

affordable
insurance
plan

has
clean air
to
breathe.

has reliable
transportation.

What is missing here?
What does health equity
mean to you?

equal
access
to
housing

healthy home
environment
for youth

Health Equity and Health Disparities

Health Equity is achieved when all people have equivalent opportunities and resources necessary to lead healthy lives (CDPH, 2020).

Health Disparities are inequitable and are directly related to the historical unequal distribution of social, political, economic, and environmental resources (CDC, 2022).

Health Equity and Health Disparities

Health disparities result from multiple factors, including:

- Poverty.
- Environmental threats.
- Inadequate access to health care.
- Individual and behavioral factors.
- Educational inequalities.

California's Rural North

- Higher rate of poverty compared to State.
- Geographic isolation and overall lack of access to health care, behavioral health support, and oral health.
- Substance use and suicide rates are higher than the State.
- Low educational attainment, specifically with regards to higher education.
- Climate events have significantly impacted the region.

Rural communities are not all alike. For example, while the entire region's population density is low, there is great variation in the lived experiences of individuals based on the degree of their geographic isolation.

RANCHO Region: Population & Land Area

- Counties that comprise RANCHO total about 2% ($\approx 700,000$) of California's total population.
- RANCHO Counties vary significantly in size, with Shasta County being the largest ($\approx 180,000$) and Modoc County being the smallest ($\approx 9,000$).
- The region itself comprises roughly 21.6% of California's total land area.

Figure 1: RANCHO County Population Size

County	Population Size
Shasta County	181,935
Humboldt County	137,014
Mendocino County	91,534
Lake County	67,749
Tehama County	65,345
Siskiyou County	44,151
Lassen County	32,949
Glenn County	28,675
Del Norte County	27,655
Trinity County	15,818
Modoc County	8,723

Land Acknowledgement & Data Sovereignty

The land area that comprises the RANCHO region is the ancestral home and unceded territory of many Tribal Nations.

CCRP and RANCHO recognize that Tribal Governments are the only authorized entity to speak for a sovereign nation.

Indigenous data sovereignty is the right of a nation to govern the collection, ownership, and application of its own data.

Source: University of Arizona Native Nations Institute.

RANCHO Region: Race/Ethnicity

The region's population is more white (78.6%) than the state as a whole (52.1%). The region has a higher American Indian or Alaska Native population (3.2%) relative to the state.

- A significant amount of the population identify as Hispanic or Latino (17.9%) and Multi-racial (8.1%).

Figure 2. Race/Ethnicity Breakdown, RANCHO and California Comparison

Race/Ethnicity	RANCHO Population	RANCHO	CA
Asian	17,896	2.6%	14.9%
American Indian/Alaska Native	22,651	3.2%	0.9%
Black	11,484	1.6%	5.7%
Hispanic or Latino	125,545	17.9%	39.5%
Multi-racial	57,119	8.1%	10.7%
Native Hawaiian/Other Pacific Islander	1,569	0.2%	0.4%
Some Other Race	39,711	5.7%	15.3%
White	551,118	78.6%	52.1%
Total Population	701,548		

RANCHO Region: Age

RANCHO's population has a higher percentage of individuals over the age of 60 than the State as a whole.

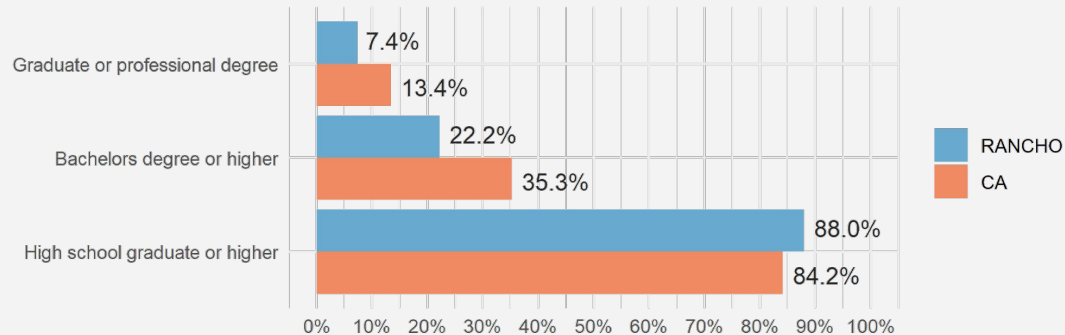
Figure 3. Age Group Proportions, RANCHO and California Comparison

Age Group	RANCHO Population	RANCHO % Rate	CA % Rate
0-9	80,630	11.5%	11.6%
10-19	83,801	11.9%	13.3%
20-29	86,582	12.3%	13.7%
30-39	87,313	12.4%	14.8%
40-49	79,187	11.3%	12.9%
50-59	89,323	12.7%	12.6%
60-69	100,690	14.4%	10.9%
70-79	64,695	9.2%	6.7%
80+	29,327	4.2%	3.4%

RANCHO Region: Educational Attainment

While high school graduation rates in RANCHO are similar to the state, educational attainment for higher education degrees lag behind the state.

Educational Attainment for Population 25 and Older



RANCHO is home to one public 4-year university.

Findings: Health Disparities in RANCHO

Local Health Departments identified similar concerns through Community Health Assessments:

- Lack of housing.
- Limited access to health care.
- Socioeconomic disadvantage.
- Geographic isolation.
- High-risk health behaviors.

Evidence strongly suggests that deaths associated with mental health, substance use, and tobacco use contribute significantly to elevated mortality rates in the region.

RANCHO counties consistently rank below most other counties in the state on key health outcome measures related to length and quality of life.

Findings: Impact of Climate-Related Events

While not explicitly elevated in community health assessments, climate resilience is a significant concern for the region.

RANCHO is disproportionately impacted by wildfires and extreme heat events. RANCHO has a significant agriculture industry which constitutes a larger share of the regional economy than that of the state.

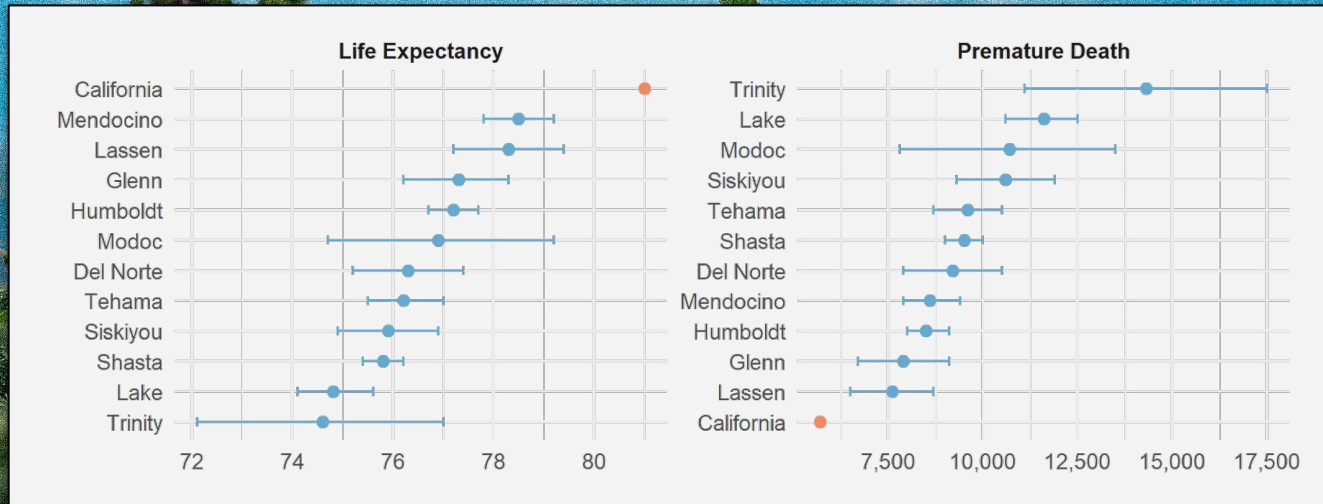
Climate change events tend to disproportionately impact populations that experience health disparities.

Vulnerable populations include:

- Aging populations.
- Those with less insulated infrastructure or substandard housing.
- Agricultural workers.
- Those with health conditions.
- Those who are geographically isolated.

Findings: Life Expectancy

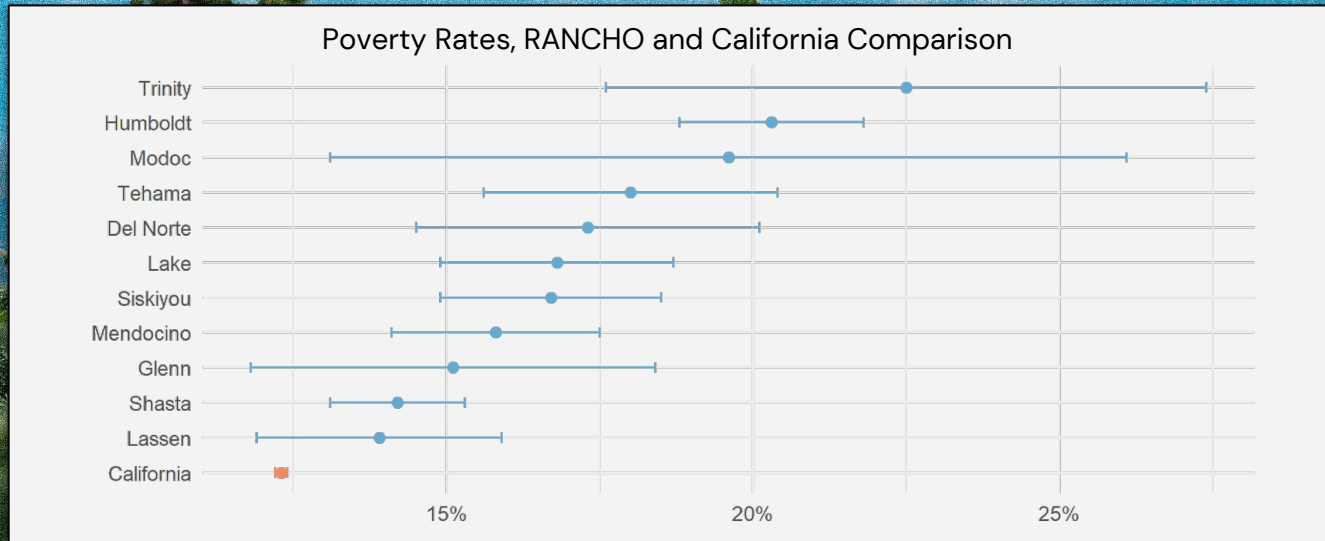
Life expectancy rates are lower and premature death rates are higher for RANCHO when compared to the state average.



Findings: Poverty

All RANCHO counties have a higher poverty rate compared to the state.

Health equity work must address poverty, a key factor that contributes to health disparities in the region.

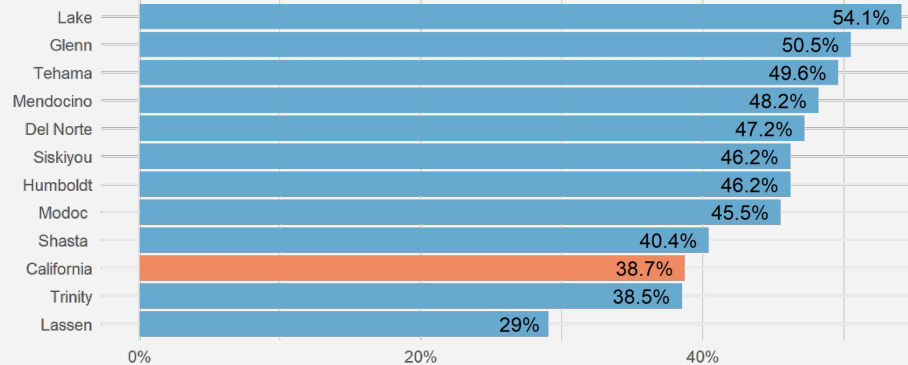


Findings: Poverty

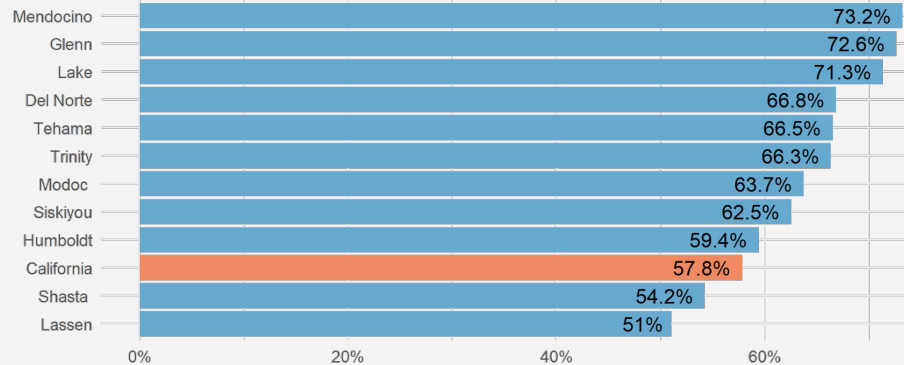
Most RANCHO counties have a higher percentage of the population eligible for Medi-Cal compared to the state.

Most RANCHO counties have a higher percentage of their K-12 students qualifying for Free and Reduced Price Meals (FRPM) compared to the state.

Percent of Population Eligible for Medi-Cal



Percent of K-12 Students Qualifying for FRPM



Findings: Geographic Isolation

The RANCHO region is characterized by many two-lane, narrow highways and isolated micro communities.

Some residents are required to travel long distances for basic amenities. Residents have described what this looks like:

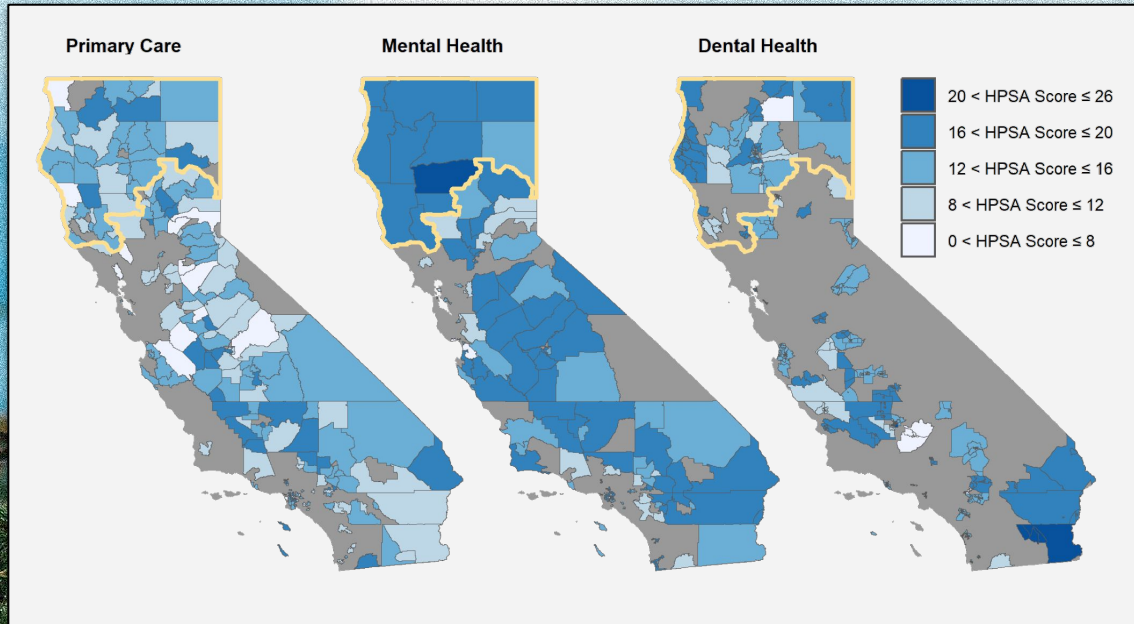
- Roads to basic services are often closed throughout the year.
- Health clinics are an hour or more away.
- Grocery stores are an hour or more away.
- Local schools are always on the brink of closure.
- Far away from any child care resources.

Many RANCHO residents must travel out-of-county or out-of-state for health care, oral health care and any specialized needs.

Findings: Geographic Isolation

Health equity work must take into account the needs of isolated communities, posing real challenges around equitable distribution of resources in an already under-resourced region.

Findings: Health Professional Shortage Areas

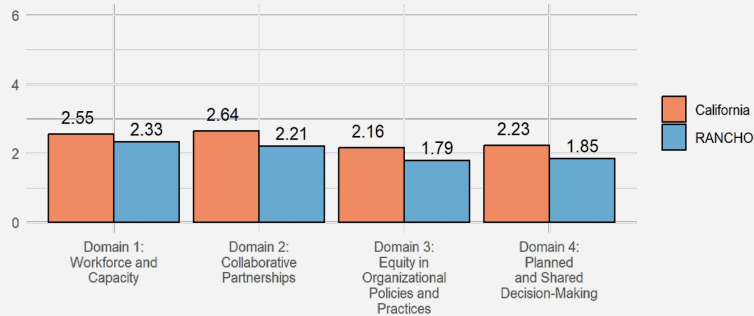


- The majority of RANCHO is covered by a Health Professional Shortage Area (HPSA) for primary and dental care providers.
- The entirety of the region is identified as an HPSA for mental health care providers.

Note: Higher HPSA Scores indicate greater need.

Findings: Efforts around Health Equity

Both RANCHO and the rest of the state's LHDs report being in the early stages of health equity efforts.



California Equitable Recovery Initiative (CERI) and other CDPH funding has provided RANCHO LHDs an opportunity to build capacity around health equity infrastructure.

Future of Public Health (FoPH) funding has also allowed LHDs to expand Public Health infrastructure.

Findings: Efforts around Health Equity

RANCHO LHDs are working to build more internal equity infrastructure to advance equity in their communities. Examples include:

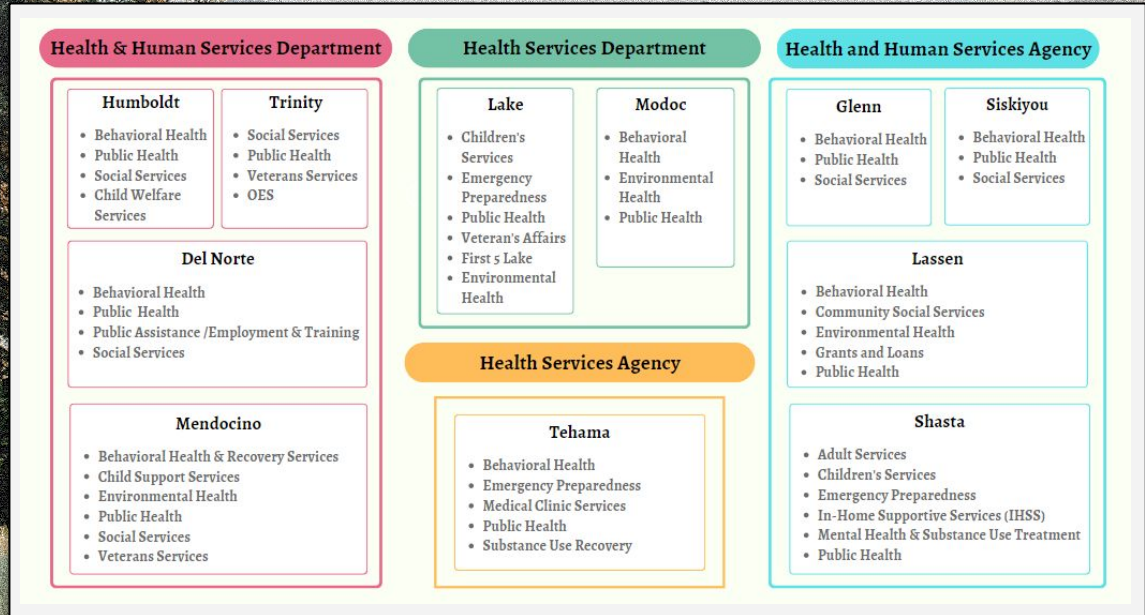
- Embedding equity principles in recruitment, retention, outreach, and service delivery.
- Updating and developing strategic, communication, and language access plans to reflect a commitment to equity.
- Reviewing Human Resource policies and plans for opportunities to incorporate equity in hiring practices.

- Developing equity checklists to help others develop programs and spaces that are safe and accessible to all people.
- Convening or participating in equity-focused and/or affinity groups and spaces.

Findings: RANCHO Public Health Workforce

LHDs in the region vary in size and structure. Departments roughly range from 16–230 FTEs.

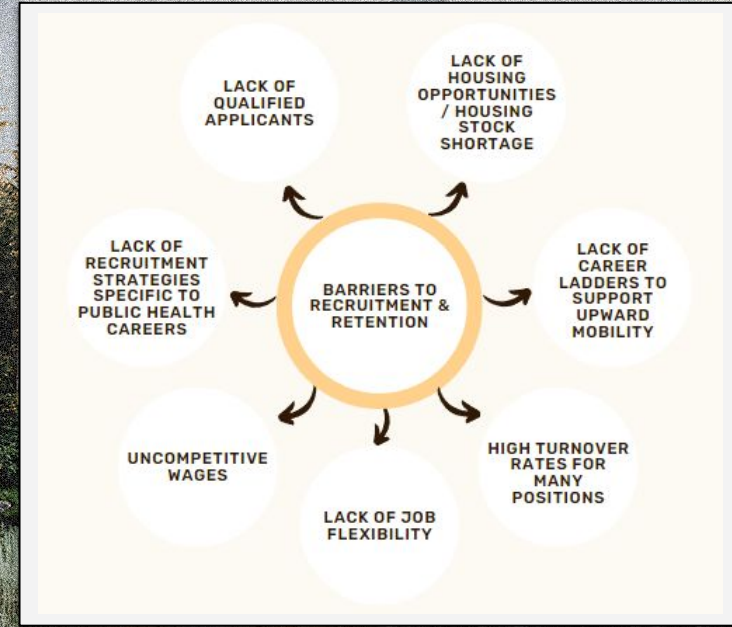
RANCHO Public Health Departments have similar funding streams, programs, and priorities despite the differences in the size of their workforce.



Findings: RANCHO Public Health Workforce

Turnover, a lack of qualified applicants, and housing shortages make recruitment and retention difficult in the region.

Specialty positions such as Health Officers, Public Health Nurses, and Epidemiologists are difficult to staff.



Findings: RANCHO Public Health Workforce

Some counties in the region have developed workforce pathways. For example:

- Humboldt County leverages graduates from the nursing program through College of the Redwoods (CR) and Cal Poly Humboldt.
- Mendocino County operates the SCRUBS program, preparing high school students for medical professions.

- Lassen County coordinates with the Community College to have students intern in Public Health.
- Trinity County operates a Cradle to Career program, having high school seniors work with Public Health's communicable disease team.

A scenic landscape featuring a large body of water in the foreground, surrounded by lush greenery and trees. In the background, there are rolling mountains under a clear sky with a faint rainbow visible in the upper right corner. The overall scene is peaceful and natural.

Findings: RANCHO Public Health Workforce

Workforce development strategies utilized by RANCHO include:

- Incentives and sign-on bonuses.
- Supporting job flexibility (childcare support, schedule flexibility to pursue additional education, supporting remote work).
- Tuition & loan repayment programs.

RANCHO LHDs are committed to creating and supporting a “people-centered workforce”.

Findings: RANCHO Public Health Workforce

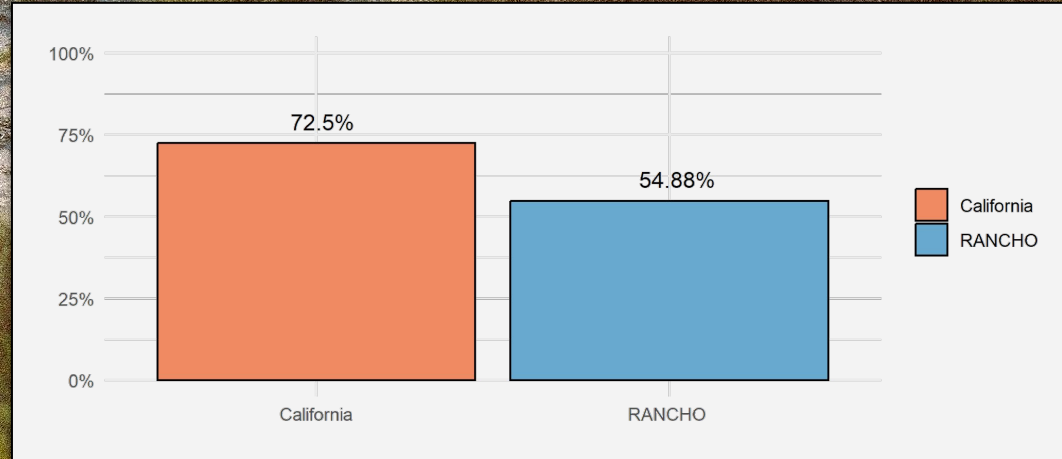
RANCHO Health Departments highlighted the following workforce development opportunities they would like to explore:

- Expanding partnerships with academic institutions.
- Expanding entry-level opportunities for RANCHO residents to enter the public health workforce.
- Creating career ladders for positions to have advancement opportunities.

Findings: Building Trust and Engaging RANCHO Communities

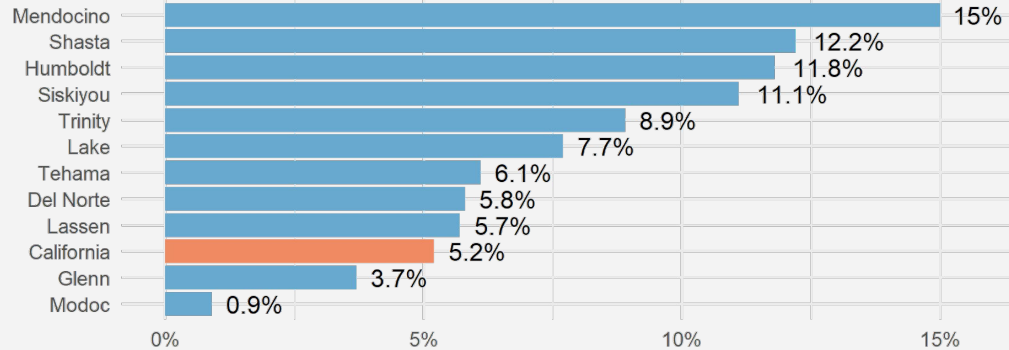
Based on publicly available data, and discussions with RANCHO representatives, the region faces mixed public acceptance of Public Health measures that protect and promote health.

RANCHO has a lower percentage of residents vaccinated compared to the State as a whole.



Findings: Building Trust and Engaging RANCHO Communities

Additionally, many RANCHO counties have higher percentage of children missing required immunizations than the State as a whole.



Distrust in vaccination and childhood immunization must be considered and addressed when working to advance health equity in rural California.

Findings: Building Trust and Engaging RANCHO Communities

RANCHO counties rely on collaboration with community partners to expand the reach and scope of efforts to advance health equity.

Community engagement efforts in the region center around four primary strategies:

- (1) Strategic community and/or Tribal partnerships for a specific purpose (ex. vaccination fairs, health clinics).
- (2) Facilitation and participation in health-focused community-wide coalitions.
- (3) Community-wide outreach and education (ex. media outreach and trainings).
- (4) Utilization of Community Health Workers who are embedded in rural regions and have experience with populations experiencing disparities.

Findings: Rural Data and Measurement Challenges

RANCHO counties expressed concern they did not have adequate data to drill down on populations or regions that experience health disparities.

Small sample sizes and multi-county data aggregations make analysis of certain metrics unreliable and inconclusive.

To alleviate rural data and measurement challenges, RANCHO LHDs:

- Hire or contract with Epidemiologists.
- Participate in data sharing coalitions.

Findings: Rural Data and Measurement Challenges

The following metrics are missing/omitted due to small sample sizes for some RANCHO counties:

- All drug-related overdose death rates
- Opioid-related overdose death rates (for 2019/2020)
- Psychostimulant-related overdose death rates
- Infant death per 1,000 live births
- Number of deaths among children under the age of 1 per 1,000 live births
- Number of deaths per 100,000 children and young adults (1-24)

Some data had wide margins of error due to small sample size.
Examples include:

- Percentage of driving deaths with alcohol impairment
- Years of potential life lost before age 75

Data were unstable for some RANCHO counties due to small sample size:
Examples include:

- Rates of early syphilis cases
- Rates of gonorrhea cases

Key Considerations for Health Equity Work

- Health equity work must address poverty, a key factor that contributes to health disparities in the region.
- The region's racial and ethnic breakdown is different from the state. On average, its population is older than the state.
- The RANCHO region is home to many geographically isolated communities. Health equity work must take into account the needs of isolated communities, posing real challenges around equitable distribution of resources in an already under-resourced region.
- While difficult to measure, counties noted that Adverse Childhood Experiences (ACE) and historical trauma have a significant impact on the region.

Race & Health Equity Work in RANCHO

Small numbers make it difficult for us to understand, through data, what is going on with our American Indian and Alaskan Native population, and our Hispanic population. Data is simply not adequate or accurate enough to understand the lived experiences of populations that tend to “disappear” in large data sets. This itself is a health equity issue. Through meaningful engagement and partnership with these populations and organizations that specialize in this work, we can better understand and work together, following their lead, to advance health equity in the RANCHO region.

Learn With Us

If you would like to learn from our wonderful rural California practitioners, all of our peer learning sessions are recorded and uploaded to CCRP's website.

<https://bit.ly/RANCHOMeetings>

Peer Learning Session 1: Modoc County Promotores Program

The screenshot shows a YouTube video player interface. At the top, it says 'RANCHO Peer Learning Session P...' with a 'Watch later' and 'Share' button. Below the video player, there is a 'Your Hosts' section featuring logos for RANCHO, CCRP, and Humboldt. The RANCHO logo includes the text: 'The Rural Association of Northern California Health Officers (RANCHO) is an eleven county consortium consisting of Public Health and Health Services Department Directors, Assistant Directors, Health Officers, and Deputy Health Officers in the far northern region of California.' The CCRP logo includes the text: 'California Center for Rural Policy (CCRP) at Cal Poly Humboldt is a research, evaluation, and policy center focused on improving the health and well-being of rural people and environments.' At the bottom, it states: 'CCRP and RANCHO are partners on a grant from the California Department of Public Health. The grant focuses on health equity and promoting an equitable recovery from COVID-19.' A 'Watch on YouTube' button is at the bottom left.

Peer Learning Session 2: Mendocino County on Tribal Engagement

The screenshot shows a YouTube video player interface. The video title is 'Health Equity in the Rural North: Peer Learning Sessions 2023'. Below the title, it says: 'Hosted by the Rural Association of Northern California Health Officers (RANCHO) and the California Center for Rural Policy (CCRP) at Cal Poly Humboldt.' Logos for CCRP, Humboldt, and RANCHO are at the bottom. A 'Watch on YouTube' button is at the bottom left.

Peer Learning Session 3: Shasta County Community Organizers

The screenshot shows a YouTube video player interface. The video title is 'RANCHO Overview'. Below the title, there is a list of bullet points: 'RANCHO counties consistently rank below most other counties in the state on key health outcome measures related to length and quality of life. In 2019, nine of the eleven RANCHO counties fell within the lowest quartile of the health outcome measures.' 'Similar concerns in county-level communities: Lack of housing, limited access to health care and behavioral health care, socioeconomic inequality, geographic isolation, and high-risk health behaviors.' 'LHOs highlighted health disparities for the following groups: Tribal populations, Latino populations, populations living in poverty, aging populations, those who are geographically isolated, and those who are experiencing substance use or mental health issues.' At the bottom, it says: 'Behavioral health, including substance use and suicide, are cited as contributing factors for morbidity and mortality in the region.' A 'Watch on YouTube' button is at the bottom left.

Moving Forward Together: How You Can Help

Today we have talked about a lot of concerns for our region, and we know that there are many people working to advance health equity and improve health outcomes in our region, and across other counties in rural California. Through our peer learning sessions, we are featuring the innovation, creativity, and resourcefulness of practitioners and leaders who live and work in rural California.

Invitation to our guests: If you know of any work happening in a RANCHO county that relates to Health Equity, please reach out to us! CCRP wants to elevate the innovative work happening in the Rural North!

CCRP will be hosting a second peer learning session in the upcoming months to cover how Public Health staff can share and utilize the Landscape Scan.

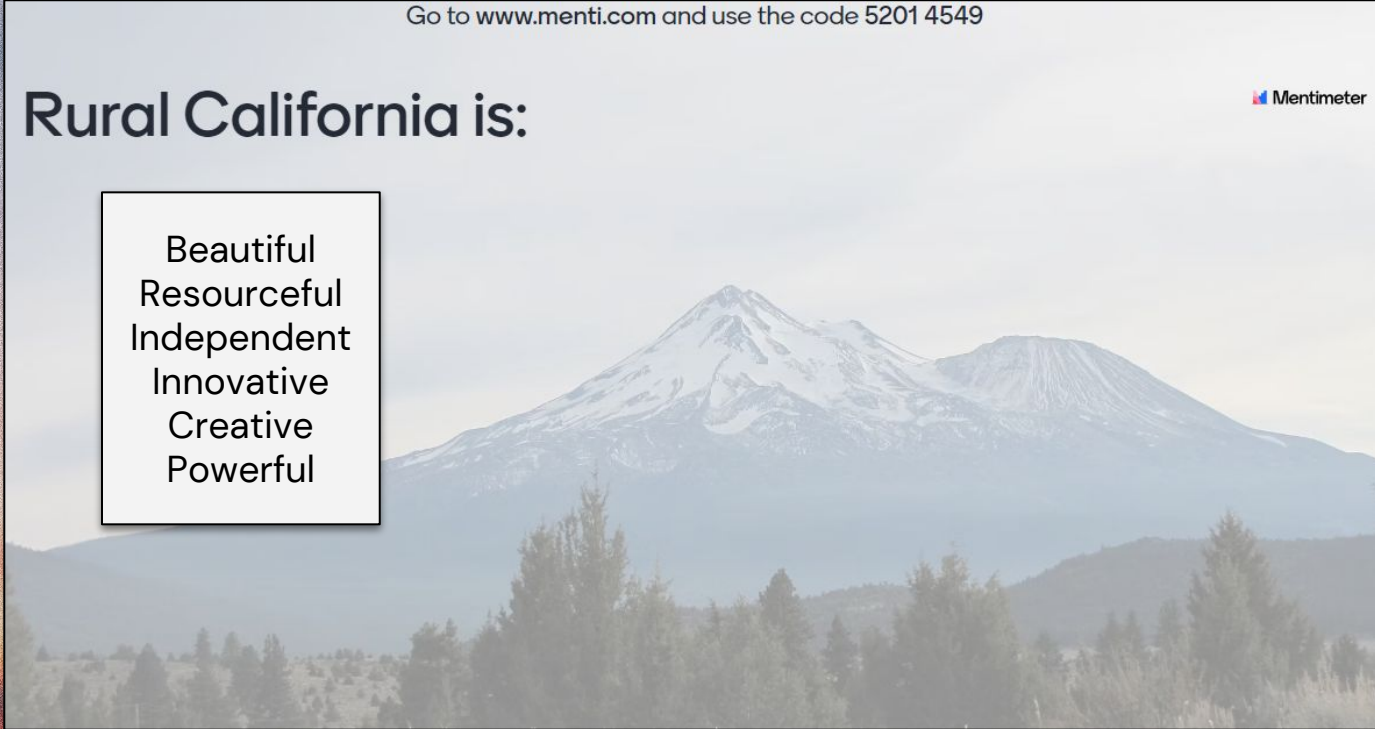
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Go to www.menti.com and use the code 5201 4549

Rural California is:

Mentimeter

Beautiful
Resourceful
Independent
Innovative
Creative
Powerful





THANK YOU!

A huge thank you to all the RANCHO counties and the California Department of Public Health (CDPH) for informing this report!

Thank you for joining us today!

CCRP Team & How To Reach Us

- Dawn Arledge, Executive Director at Dawn.Arledge@humboldt.edu
- Devin Flynn, Research Analyst at Devin.Flynn@humboldt.edu

Please contact CCRP at (707) 826-3400 at any time to ask questions, give input, or schedule a meeting.