Mendocino Coast Health Care District
to ensure local access to health care

LIST OF COMMUNICATIONS RECEIVED

January 25, 2025

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2	12/19/2023	Adventist Health Blue Shield Termination Patient FAQ, 12.8.23
7	12/22/2023	Adventist Health Blue Shield Contract Agreement 12.21.23
8	1/4/2024	Adventist Health Letter from President to Patients 12.22.23
11	12/14/2023	Adventist Health - 515 Cypress Street Roof/skylights leak
12	1/10/2023	Adventist Health - Neva Canon Room
13	12/15/2024	Devenney Group - NPC 4 and NPC 5 Applications HCAI
17	12/22/2023	Eastshore Consulting - Compliance Notice, registered Municipal Advisor
18	12/15/2023	HCAI - Seismic Compliance plan approval and eligibility
19	12/14/2023	Public Comment on Board procedure
23	1/19/2023	Public Comment on Board procedure
25	12/20/2023	Mendocino County Housing and Disability Advocacy Program (HDAP) Allocation Stakeholder Notification
27	12/28/2023	Mendocino County Counsel - Brown Act/Ethics Training
28	12/14/2023	Report: California's Redwood Coast: Exploring the Roots of Health Disparities (11/30/23 draft)

Blue Shield

Leach,Judy <leachjl@ah.org>

Tue 12/19/2023 1:12 PM

1 attachments (122 KB)

Blue Shield Termination Patient FAQ _Dec. 8 2023-445 p.m_.pdf;

You likely recently heard from a local citizen regarding his concerns about access to care issue connected to his Blue Shield Health plan. It's important for this local community to know that **this individual was NOT referencing an issue related to Adventist Health Mendocino Coast**.

It is unfortunate that the perception of the public protesting on our local hospital premises and comments made to the community through social media, makes it seem like this is about care at the coast. His public protests have articulated his need for cancer screening with a colonoscopy. **You will be pleased to learn that we reached out directly to him this week to learn more. We immediately helped facilitate a consult for him through one of our excellent surgeons at the coast and he will now have peace of mind knowing that he can have care close to home should he desire.**

As a community leader, you can help spread the news that regardless of a person's insurance, they will always have access to the hospital ER. Additionally, this Blue Shield contract negotiation does not currently impact clinic visits.

It is unfortunate that Blue Shield walked away from the negotiations with Adventist Health throughout the state of California within the past month. Other health systems are also struggling with their Blue Shield contracts. We agree with the community that Blue Shield needs to keep care available for their members. That is why we are asking Blue Shield members to call the number on back of their cards and express their deep concerns. It is our hope that they will return to the table with AH and do the right thing for their members.

We will continue to advocate for hospital services in our community. I hope you will also join Adventist Health in supporting care close to home. Are you aware that Blue Shield is reimbursing Mendocino and Lake county hospitals 30% lower than what Santa Rosa hospitals receive? Additionally, Blue Shield has implemented a 10% premium increase of local employers who have selected Blue Shield this year. This is not acceptable. Since the pandemic, the cost of delivering healthcare, especially for hospitals, has escalated to an all time high as a result of increased wages, costs for equipment, pharmaceutical supplies and more.

I am providing you the attached FAQs which you might find helpful regarding access questions for Blue Shield.

People who have concerns about their coverage being denied do have a process to appeal the denial through the state. Here's the link from the CA Department of Managed Care website on Continuity of Care if Blue Shield continues to refuse care. https://www.dmhc.ca.gov/healthcareincalifornia/yourhealthcarerights/continuityofcare.aspx .

Here is additional information you might find helpful. The continuity of care forms are completed by your provider.

If Your Doctor, Medical Group, or Hospital Leaves Your Health Plan
You may receive a notice that your doctor, medical group, or hospital is no longer in your health plan.
Usually this means that you must change doctors, medical groups, or hospitals. But in some cases, you may be able to keep your doctor, medical group, or hospital for a limited time. This is called "continuity of care."
To receive continuity of care, you must call your health plan to ask for continuity of care. Also, your doctor, medical group, or hospital must agree to keep you as a patient.
Only people with certain kinds of health problems or conditions can get continuity of care:

Type of Problem or Condition	How long you get continuity of care

Acute Condition (for example, pneumonia)	As long as the condition lasts
Serious Chronic Condition (for example, severe diabetes or heart disease)	No more than 12 months - usually until you complete a period of treatment, and your doctor can safely transfer your care to another doctor
Pregnancy	During Pregnancy and immediately after the delivery (the post-partum period)
Terminal Illness	As long as the person lives
Care of a Child under 3 years	For up to 12 months
An already scheduled surgery or other procedure (for example, knee surgery or colonoscopy)	The surgery or procedure must be scheduled to happen within 180 days of your doctor or hospital leaving your health plan.

If Your Health Plan Changes and You Lose Your Doctor, Medical Group, or Hospital

You may also qualify for continuity of care if your health plan changes, and you are required to switch to a new plan. This is called "new enrollee" continuity of care. The rules are the same as the rules described above.

Continuity of care is available if you get your health plan from your employer, your employer stops offering that plan and you have to change to a plan that does not have your treating doctor, medical group, or hospital.

Continuity of care is available if you buy your own individual health plan (either through Covered California or directly from the plan) and you have to change plans because your individual health plan is no longer available in the marketplace.

Check with your health plan to find out if you qualify for continuity of care. Tell them the name of your doctor, medical group, or hospital, your medical condition, and the treatments you are receiving. If you have problems asking for continuity of care or have any other questions, please call the Department's Help Center at 1-888-466-2219.

Judy Leach, MOL | Hospital President| Administration
Adventist Health Mendocino Coast
700 River Drive **|** Fort Bragg, CA 95437 |
D 707-961-4633 | leachjl@ah.org

December 11, 2023

FAQ for patients

The following is a list of frequently asked questions regarding the termination of Blue Shield of California should patients have questions.

Q: What's happening?
A: Adventist Health's contract with Blue Shield of California has terminated on Dec. 1, 2023, which will affect Blue Shield of California commercially insured PPO/EPO/HMO, Medicare Advantage PPO/HMO, and Medi-Cal Managed Care HMO patients who receive our services and the physicians who care for them.

Q: Why is this happening?
A: After 11 months of negotiations, Adventist Health was unable to reach a fair agreement to continue as an in-network participating provider with Blue Shield of California. Our contract with Blue Shield terminated at 12:01 a.m. on Dec. 1, 2023, at Adventist Health Bakersfield, Adventist Health Clear Lake, Adventist Health Delano, Adventist Health Glendale, Adventist Health Hanford, Adventist Health Howard Memorial, Adventist Health Lodi Memorial, Adventist Health Mendocino, Adventist Health Reedley, Adventist Health Selma, Adventist Health Simi Valley, Adventist Health Sonora, Adventist Health St. Helena, Adventist Health Tulare, Adventist Health Tehachapi Valley, Adventist Health Ukiah Valley and Adventist Health White Memorial hospitals.

Q: Why weren't patients notified by Adventist Health before Dec. 1, 2023, that the contract could be terminated?
A: Adventist Health drafted communication to be released at the end of October 2023, informing patients of the pending contract termination. In good faith and even though it was not required, Adventist Health sent draft communication to Blue Shield before sending any communication to patients. For various reasons that lacked merit, Blue Shield responded by issuing a cease-and-desist letter objecting to Adventist Health's draft communication. Adventist Health responded to the cease-and-desist letter, asserting Adventist Health was within its legal rights to notify patients. In good faith and without conceding any fault, Adventist Health further reviewed and slightly modified the draft communication to address some of Blue Shield's concerns. Since the cease-and-desist letter lacked merit, Adventist Health proceeded with sending the modified communication to patients much later than previously planned.

Q: I am very concerned about this, what can I do?
A: If you receive healthcare coverage from your employer, your employer needs to know your concerns. Speak to your human resources department about your concerns.

Q: What does this mean if I am in the hospital on or after 12:01 a.m. on the termination date?
A: You will be covered by your applicable healthcare service plan until you are discharged from the Adventist Health hospital where you are receiving care. However, your healthcare service plan may elect to transfer you to another contracted hospital, and it may only transfer a patient if the transfer can be safely performed. You will need to confirm the details of your insurance benefit by calling your healthcare service plan customer service number on your insurance card. You can also use this number to ask your health plan if you are eligible to complete your current episode of care at the Adventist Health hospital where you are receiving care as a continuity of care service.

Q: What if I have to go to the Emergency Department?
A: You can always come to an Adventist Health hospital for medical emergencies. However, you should ALWAYS go to the nearest hospital in an emergency, regardless of your insurance coverage or ability to pay. Blue Shield should cover all emergency visits to the hospital.

Q: What is an Out-of-Network Request form?
A: Blue Shield has an out-of-network referral request form that can be completed by Adventist Health hospital staff at the patient's request to allow them to continue care at our local hospitals and affected clinics as an in-network provider under at least one of the following criteria:

- There is no network provider/facility within 30 miles of the member's home.
- The member's network provider is unable to perform the necessary service and is forced to an out-of-network specialist/facility.
- There are significant scheduling barriers whereby the member is unable to make an appointment in a timely manner with a network provider.

Q: Will clinic visits be covered through Blue Shield?
A: The contract termination affects Adventist Health clinics differently. With the exception of Adventist Health Lodi Memorial, Delano's rural health clinic(s), and Glendale Adventist Medical Center d.b.a. Institute and Orthopedic Center, our contracts remain in effect, and the clinics remain as in-network Blue Shield providers until March 2024. Regardless of the market, we hope established patients will continue to see their physicians at our Adventist Health clinics as we continue contract negotiations. Please contact your provider's office and your health plan.

Q: What if I'm scheduled to have a surgical or outpatient procedure, or receiving care for a chronic or terminal illness (such as cancer)?
A: Some members may be able to receive care for a period of time as a continuity of care service. You must receive specific authorization from their healthcare service plan for a continuity of care service. You should call the customer service number on your insurance card and ask about continuity of care service.

Q: How can Adventist Health assist patients in completing their request to Blue Shield for continuity of care?
A: Patients must call their health plan using the number on the back of their insurance card and request continuity of care. Adventist Health can provide a copy of the Blue Shield of California continuity of care brochure and assist the patient in completing the patient and provider information. In addition, Adventist Health will provide patient documents from their treating physician.

Q: I want to continue using my local Adventist Health hospital, what can I do?
A: Our Adventist Health hospitals are contracted with many different healthcare service plans. You should contact your healthcare service plan's customer service number to ask about your benefits and out-of-network options for care.

Q: Can I still see my physician at the clinic?
A: You should contact your applicable health plan to find out if there is a change in patient responsibility. We realize how important continuity of care is for you with the care team who knows you best.

CONTINUED

Q: Will I still have coverage for Adventist Health Home Care?
A: Yes. Blue Shield of California continues to honor its contract with Adventist Health home care patients.

Q: Will Adventist Health re-establish a contract with Blue Shield?
A: Adventist Health remains open to discussions. We will provide updates should the current situation change. All the latest information will be shared at AdventistHealth.org/KeepCareLocal.

Q: Who should I contact if I have more questions?
A: Please contact your health plan's customer service number on your health plan insurance ID card. This will give you the most accurate and up-to-date information regarding your benefits and network. You may also contact the Department of Managed Health Care, which protects HMO consumers, at its toll-free number, voice 888-466-2219 or TDD 877-688-9891; or the California Department of Insurance Consumer Hotline at voice 800-927-4357 or TDD 800-482-4833.

Fwd: Blue Shield and AH - Email to Community Partners - For Site Admins to send

Leach,Judy <leachjl@ah.org>

Fri 12/22/2023 11:21 AM

To:Ted Williams <williamst@mendocinocounty.org>;Jason Morse <jmorse@mcn.org>;Bernie Norvell <bnorvell@mcn.org>;Paul Garza <pgarza@mcdh.org>;Sara Spring <sspring@mcdh.org>;Susan Savage <ssavage@mcdh.org>; Paul Katzeff <pk@thanksgivingcoffee.com> <pk@thanksgivingcoffee.com>;Lee Finney <lfinney@mcdh.org>

1 attachments (99 KB)

Blue Shield California and Adventist Health Dec 21, 2023-1.pdf;

I am pleased to let you know that Adventist Health and Blue Shield have reached a new agreement that provides Blue Shield plan members with continued in-network access to hospital-based services at Adventist Health facilities, effective retroactively December 1, 2023.

This agreement allows us to continue our long-standing working relationship with Blue Shield. The new contract includes all 18 Adventist hospitals across California, including our hospitals in Mendocino, Lake, Butte, and Tehama counties.

We want to express our gratitude for the trust you and your team have placed in us as your healthcare provider. It is a trust that we work tirelessly to earn every day. We remain dedicated to serving our patients and building a healthy and stronger community together.

If you have any further questions or need assistance, please do not hesitate to reach out to our team. We are here for you and will do everything we can to ensure continued access to quality healthcare remains close to home.

Sincerely,
Judy Leach
Hospital Administrator

[ADVENTISTHEALTH:INTERNAL]

Blue Shield Update | Letter to NCN Blue Shield Members

Brown,Denice <BrownD11@ah.org>
on behalf of
Howe,Judson <HoweJH@ah.org>
Thu 1/4/2024 2:04 PM

1 attachments (100 KB)
Letter From President to Patients and Community Partners Dec. 22 2023 FINAL.pdf;

All -

Happy New Year! I hope everyone enjoyed the holidays.

As I shared before the holidays, Adventist Health and Blue Shield reached a new contract agreement that provides Blue Shield plan members with continued in-network access to hospital-based services at Adventist Health facilities, effective December 1, 2023.

This agreement allows us to continue our long-standing working relationship with Blue Shield, and we are excited to continue caring for their members. The new contract includes all 18 Adventist hospitals across California, including our hospitals in Lake, Butte, Tehama, and Mendocino counties.

Please see the attached letter, which is being mailed to Blue Shield members in the North Coast Network markets for our hospitals in Lake, Butte, Tehama, and Mendocino counties. This includes Adventist Health Clear Lake, Adventist Health Howard Memorial, Adventist Health Mendocino Coast, and Adventist Health Ukiah Valley hospitals. Blue Shield members will begin receiving this letter this week.

Thank you again for your patience as we navigated this challenge. We sincerely appreciate your continued dedication and commitment to our communities and for working to keep care local.

More information is available on our website at https://www.adventisthealth.org/patient-resources/keep-care-local/ . If you have any questions, please reach out to your leader.

Thank you,

Judson Howe
President, North Coast Network

CONTACT:

Jonna Constantine
Blue Shield of California
510-607-2359
media@blueshieldca.com

Japhet De Oliveira
Adventist Health
303-601-6349
DeolivJ@ah.org

FOR IMMEDIATE RELEASE

Blue Shield of California Members Have Network Access to Adventist Health Hospitals

ROSEVILLE, Calif. Dec. 21, 2023 – Blue Shield of California and Adventist Health Keep Care Local | Adventist Health have reached a new agreement that provides Blue Shield members in-network access to Adventist hospitals.

The arrangement includes all 18 Adventist hospitals across California and is effective Dec 1, 2023.

"As a mission-driven health plan, our goal is for our members to have access to quality care that's sustainably affordable," said Aliza Arjoyan, Blue Shield's Senior Vice President of Provider Partnerships and Network Management. "Adventist Health has been a part of Blue Shield's network of providers for a long time, and I look forward to continued collaboration with the hospital system."

"We are pleased to continue our long-working relationship with Blue Shield of California," says Kerry L. Heinrich, President and CEO. "Our mission calls us to provide access to high-quality care close to home in the communities we serve, and we are excited to continue caring for Blue Shield members."

Blue Shield serves more than 4.8 million members in California through network relationships with about 350 hospitals and more than 122,000 providers across the state.

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About Adventist Health

Adventist Health is a faith-based, nonprofit, integrated health system serving more than 90 communities on the West Coast and Hawaii with over 400 sites of care, including 26 acute care facilities. Founded on Adventist heritage and values, Adventist Health provides care in hospitals, clinics, home care, and hospice agencies in both rural and urban communities. Our compassionate and talented team of 37,000 includes employees, physicians, allied health professionals and volunteers driven in pursuit of one mission: living God's love by inspiring health, wholeness, and hope. We are committed to staying true to our heritage by providing patient-centered, quality care. Together, we are transforming the healthcare experience with an innovative and whole-person focus on physical, mental, spiritual and social healing to support community well-being.

About Blue Shield of California

Blue Shield of California strives to create a healthcare system worthy of its family and friends that is sustainably affordable. Blue Shield of California is a tax paying, nonprofit, independent member of the Blue Shield Association with more than 4.8 million members, over 7,500 employees and more than $24 billion in annual revenue. Founded in 1939 in San Francisco and now headquartered in Oakland, Blue Shield of California and its affiliates provide health, dental, vision, Medicaid and Medicare healthcare service plans in California. The company has contributed more than $97 million to Blue Shield of California Foundation in the last three years to have an impact on California communities.

For more news about Blue Shield of California, please visit news.blueshieldca.com.

Or follow us on LinkedIn, Twitter, or Facebook.

515 Cypress - Roof Replacement

Johnston,Peter <JohnstPJ@ah.org>

Thu 12/14/2023 4:46 PM

To:Lee Finney <lfinney@mcdh.org>
Cc:Leach,Judy <leachjl@ah.org>

Lee,
A while back we requested the District consider issues with the roof at the 515 Cypress Street. The roof and skylights leak in rainstorms. As you might recall the roof is a very old shake shingle roof that is no longer serviceable. Even going up on the roof to attempt temporary patches has become unsafe. We provided the district with a quote from as local contractor as a starting point. I believe you formed an ad-hoc committee to get additional bids for this much needed project.
Since that time the rains have begun and were getting reports of leaks from the skylights and possibly some new areas of bad roof. Dealing with buckets in the halls and offices when it rains has cause some stress. However my main concern is the potential for damage to the ceiling, walls and floors in an occupied building. Will you please update us on your progress? We would like to be able to respond to the occupants with a timeline for a possible resolution.
Let me know if I can help.
Thanks,
Peter

Peter J. Johnston | *Facilities Manager - FMM*
Adventist Health Mendocino Coast | 700 River Dr, Fort Bragg, Ca 95437
Cell: 707-962-7523
johnstpj@ah.org

AdventistHealth

Neva Cannon Room

Johnston,Peter <JohnstPJ@ah.org>

Wed 1/10/2024 9:26 AM

To:Lee Finney <lfinney@mcdh.org>
Cc:Norvell,Michelle <norvelm@ah.org>;Hall,Nicole <hallnm@ah.org>

Lee,
As you know we are moving the gift shop to the South Lobby soon. The materials will be arriving this Thursday. Would it be possible use part the Neva Cannon room for a short term storage of the New Gift Shop material?

It should only take 2 weeks to complete the project.

This would allow us to have the construction materials closer to the work being done. If any issues come up during that time we could make arrangements to move things to another location.

Thanks,
Peter

Peter J. Johnston | *Facilities Manager - FMM*
Adventist Health Mendocino Coast | 700 River Dr, Fort Bragg, Ca 95437
Cell: 707-962-7523
johnstpj@ah.org
AdventistHealth

Please Note :
I will be out of the office starting January 11th returning on the 22nd.

MCHCD | NPC5 Application

Dudley Campbell <dcampbell@devenneygroup.com>

Fri 12/15/2023 3:42 PM

To:Lee Finney <lfinney@mcdh.org>
Cc:Paul Garza <pgarza@mcdh.org>;Andrew Flanigan <aflanigan@devenneygroup.com>;
18000.00@devenneygroup.tonicdm.com <18000.00@devenneygroup.tonicdm.com>

1 attachments (4 MB)

10301_NPC5 Evaluation_BLDMulti_HCAI-FD-121_231215.pdf;

Lee,

Attached is the last application that we need your signature on.

Please sign and send back the cover for us to use in submitting the NPC5 Evaluation Report.

Thank you,

Devenney GROUP

DUDLEY CAMPBELL, AIA, NCARB, LEED AP
CHIEF OPERATIONS OFFICER

6900 East Camelback Road, Suite 500, Scottsdale, AZ 85251
602.343.4077 o, 312.259.8069 m
dcampbell@devenneygroup.com
www.devenneygroup.com
Transforming healthcare delivery through design

MCHCD | HCAI Facility #10301 | NPC5 Evaluation

Dudley Campbell <dcampbell@devenneygroup.com>

Mon 12/18/2023 9:31 AM

To:SeismicComplianceUnit@hcai.ca.gov <SeismicComplianceUnit@hcai.ca.gov>
Cc:Lee Finney <lfinney@mcdh.org>;18000.00@devenneygroup.tonicdm.com <18000.00@devenneygroup.tonicdm.com>; Cynthia Cheng <Cynthia@gaynerengineers.com>;Andrew Flanigan <aflanigan@devenneygroup.com>

3 attachments (3 MB)

10301_NPC5_Transmittal_231218.pdf; 10301_NPC5 Evaluation_BLDMulti_HCAI-FD-121_231215.pdf; 10301_NPC5_EVAL_BLDMULTI_20231217.pdf;

Attached is the Transmittal, New Project Application and NPC5 Evaluation Report for the above referenced facility.

Please review and let us know if you have any questions or concerns.

Thank you,

DUDLEY CAMPBELL, AIA, NCARB, LEED AP
CHIEF OPERATIONS OFFICER

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602.343.4077 o, 312.259.8069 m
dcampbell@devenneygroup.com
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Transforming healthcare delivery through design

RE: Signature Pages

Dudley Campbell <dcampbell@devenneygroup.com>
Fri 12/15/2023 6:38 AM
To:Lee Finney <lfinney@mcdh.org>;Andrew Flanigan <aflanigan@devenneygroup.com>;Paul Garza <pgarza@mcdh.org>

Thanks for the documents Lee. I will get them to Degenkolb for them to make the official NPC4 submittal.

I will get you the last application for the NPC5 today for your signature and then this can be submitted and you will be all done with the NPC evaluations.

Thank you,

Devenney GROUP

DUDLEY CAMPBELL, AIA, NCARB, LEED AP
CHIEF OPERATIONS OFFICER

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Transforming healthcare delivery through design

From: Lee Finney <lfinney@mcdh.org>
Sent: Friday, December 15, 2023 12:41 AM
To: Dudley Campbell <dcampbell@devenneygroup.com>; Andrew Flanigan <aflanigan@devenneygroup.com>; Paul Garza <pgarza@mcdh.org>
Subject: Signature Pages

NPC 4 and NPC 5 Evaluations approved. Here are the building signature pages I've signed. Let me know if you need anything else.

Before too long, Paul Garza and I need to talk to you about doing some more design options for us (with full costs) but for now, thanks for getting us through the HCAI Process and Happy Holidays!

Lee

Lee Finney
Chair of the Board of Directors
Mendocino Coast Health Care District
443-569-9756

MCHDH | NPC Materials

Dudley Campbell <dcampbell@devenneygroup.com>

Tue 1/2/2024 2:57 PM

To:Lee Finney <lfinney@mcdh.org>;Paul Garza <pgarza@mcdh.org>
Cc:Andrew Flanigan <aflanigan@devenneygroup.com>;18000.00@devenneygroup.tonicdm.com <18000.00@devenneygroup.tonicdm.com>;Chris Hilson <chilson@degenkolb.com>;Cynthia Cheng <Cynthia@gaynerengineers.com>;Devon Lumbard <dlumbard@degenkolb.com>

Lee and Paul,

Happy New Year!

Below is a link to download the final NPC4 and NPC5 materials to HCAI at the end of last year to meet the compliance deadlines.

https://www.dropbox.com/scl/fo/wp40h66b2csenwyk55yuq/h?rlkey=ipnifch2jvjanlt480ypohwvh&dl=0

Please let us know if you would like to have a meeting to go over the materials and next steps.

Thank you,

Devenney GROUP

DUDLEY CAMPBELL, AIA, NCARB, LEED AP
CHIEF OPERATIONS OFFICER

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Transforming healthcare delivery through design

Happy Holidays & Eastshore Consulting Annual G-10 Disclosure

Shin Green <shin@eastshoreconsulting.com>

Fri 12/22/2023 12:54 PM

To:Lee Finney <lfinney@mcdh.org>
Cc:'Michael Riemenschneider' <michael@eastshoreconsulting.com>

Lee,

Happy Holidays. I hope that you, and everybody at Mendocino Coast HCD are doing well, and ready to start enjoying a wonderful holiday break.

As we have traditionally done around this time of the year, we wanted to send this quick note to share one end-of-the-year compliance item. Specifically, pursuant to Municipal Securities Rulemaking Board Rule G-10 on Investor and Municipal Advisory Client Education and Protection, Municipal Advisors (such as us at Eastshore) are annually required to provide certain written information to their municipal entity and obligated person clients which includes the following:

- *Eastshore Consulting LLC is currently registered as a Municipal Advisor with the U.S. Securities and Exchange Commission and the Municipal Securities Rulemaking Board.*
- *Within the Municipal Securities Rulemaking Board ("MSRB") website at www.msrb.org, you may obtain the Municipal Advisory client brochure that is posted on the MSRB website. The brochure describes the protections that may be provided by the MSRB Rules along with how to file a complaint with financial regulatory authorities.*

We hope you find this informative, and at your convenience, please do confirm your receipt of this email.

Otherwise, I am looking forward to connecting with you and the Adventist team in early next year to move the modernization project forward and paying a visit (or two) to Fort Bragg. But for now our warmest holiday wishes and all our best,

Shin Green, Principal
Eastshore Consulting LLC
1714 Franklin Street, #100-406
Oakland, CA 94612

Phone: (510) 725-2930
Email: shin@eastshoreconsulting.com

Mendocino Coast Seismic Compliance Plan and Small and Rural Hospital Eligibility

Scheuerman, Carl@HCAI <Carl.Scheuerman@hcai.ca.gov>

Fri 12/15/2023 2:03 PM

To:Dudley Campbell <dcampbell@devenneygroup.com>
Cc:18000.00@devenneygroup.tonicdm.com <18000.00@devenneygroup.tonicdm.com>;Andrew Flanigan <aflanigan@devenneygroup.com>;Sumer, Ali@HCAI <Ali.Sumer@hcai.ca.gov>;Marion, Jeremy@HCAI <Jeremy.Marion@hcai.ca.gov>;Lee Finney <lfinney@mcdh.org>;Paul Garza <pgarza@mcdh.org>

1 attachments (485 KB)

SB395 - 10301- Mendocino Coast HCD - SCR-2023-00018 Compliance Plan Approval Letter.pdf;

Hi Ms. Finney –

On behalf of HCAI, I would like to welcome the Mendicino Coast Heath Care District into the stat's Small and Rural Hospital Relief Program. You previously received a letter from JP Marion advising you that MCHD had been accepted into the program. Attached please find the acceptance letter for the updated seismic compliance plan for your facility.

Next step is to hold a meeting to explain the program in detail and discuss how your updated compliance plan guides your involvement. We propose a half-hour Microsoft Teams meeting for Monday, January 8, 2024, 9:00am-9:30am. Please let me know if this works for you; if not, please propose an alternate date and time.

We're excited to have Mendo Coast in the program and look forward to working with you to support your seismic improvement effort.

Carl Scheuerman MBA, LFACHE
Senior Policy Advisor
Office of Statewide Hospital Planning & Development

Department of Health Care Access and Information

Department of Healthcare Access and Information
2020 W. El Camino Avenue, Suite 800
Sacramento, CA 95833
Carl.Scheuerman@hcai.ca.gov
916-440-8330 (office)
916-203-2174 (cell)

Response to Memorandum of Ad Hoc on Hiring and Office Committee dated Dec. 14

malcolm macdonald <malcolmlorne@yahoo.com>

Thu 12/14/2023 8:28 AM

To:Lee Finney <lfinney@mcdh.org>;Paul Katzeff <pk@thanksgivingcoffee.com>;Sara Spring <sspring@mcdh.org>;Susan Savage <ssavage@mcdh.org>;Paul Garza <pgarza@mcdh.org>

1. July 13, 2023 Job description for an executive director Salary range $75.000 to $95,000 “Typical Duties and Responsibilities” included “Prepares agendas for meetings of the Board of Directors”

   This “Job Description” was the product of the Ad Hoc Committee on Office and Hiring and was to be presented by Director Savage, but was removed from the agenda by a vote of the board.

2. July 17, 2023 Nearly identical agenda item removed from agenda by vote of the board.

3. July 27, 2023 Agenda item authored by Director Savage of “Ad Hoc committee on staffing” titled “Critical Questions to be Determined ASAP,” which included “What would be the job description(s) of the positions we'd like?” and What would be our advertising and hiring process and timeline?” This item was removed from the agenda by the board. At this meeting the board voted to amend the bylaws in order to move the date of the regular August board meeting so as to accommodate Director Savage's schedule.

4. August 10, 2023 Meeting Minutes reflect: “After discussion, it was moved by Director Savage, seconded by Director Finney, that we hire an executive director whose job description would include...”

   “Organize district documents... Prepare agendas with input... Attend regular meetings with stakeholders... Handle preparation of and responses to RFPs... Manage the office space... Staff the office... Research grants... Implement the budget... Hire additional staff as needed...” [Some tasks omitted from the list]

   By a 4-0 vote “The creation of an executive director position was approved.” Note that the board did not take action to hire, contract with, or otherwise engage an entire staff services organization.

   According to the August 10th meeting minutes authored by Director Savage, “It was agreed that Director Savage redraft the job description to include the tasks listed above to be discussed at our next meeting on August 17.”

5. August 17, 2023 According to the minutes prepared by Director Savage the board voted 3-0, with Director Katzeff absent, to adopt the job descriptions for Executive Director. The minutes state, “The job description as amended was adopted. It was agreed to post the position on all appropriate platforms.”

   Here we must stop and take note that again the position as described by multiple board votes was that of “executive director.”

Also, and of significant importance, is the instruction reflected in her own minutes that Director Savage, as Board Secretary, post the position of executive director “on all available platforms.”

The word platforms is plural in Director Savage's minutes. It would appear that Director Savage may have posted the executive director position only on the district's website.

On this matter, beginning on December 3, 2023, I emailed Director Savage to ask, “Can you let me know which platform(s) the executive director position has been posted on?”

On December 7th, I emailed Director Savage again, asking, “I am also still waiting for a response to the question: How many platforms was the executive director job opening posted on?”

On December 12th, once more I emailed Director Savage, “ I am going to ask you directly again: In how many places did you post the MCHCD executive director job opening?”

None of these three requests for basic information was responded to though Director Savage was responding to me via email about other subjects such as a record request, board minutes, and video links to board meetings. The second of these requests for the platforms the executive director position was posted to came within an email thread that extended to ten correspondences on other board matters. The logical conclusion most anyone would take from this lack of response is that Director Savage was evading or refusing to answer the question as to how many platforms the executive director position was posted on.

This is a crucial matter. If Director Savage failed to follow the full board's direction to place the executive director position on all appropriate platforms then the process has been corrupted from that point on.

If this has occurred, in any way, shape, or form, then Director Savage must be removed from the ad hoc committee and that ad hoc reconstituted with two new members; suggestions would be limited to the chair and vice chair on or the chair and treasurer.

BTW: As of late night December 13, 2023, the August 17, 2023 agenda, minutes, and video link to the meeting are missing from the district's website. This in spite of my December 6th email to Director Savage alerting her that the August 17th material was missing. On December 7th Director Savage replied (this was part of the email thread that also included my second request about how many platforms the executive director position had been posted on), “It was posted as per the email I sent you. But it isn't showing up on the public side. Streamline will need to help with why not. Back to you ASAP.”

There was no “ASAP” nor, as explained above, has the August 17th omission been rectified a week later.

6. September 25, 2023. The latest memorandum from the Ad Hoc on Hiring and Office Committee states that on September 25th “A letter of interest and resume was received from Kathy Wylie to provide administrative services to the district for one year.”

This is a (deliberate?) misstatement of Ms. Wylie's intent in her September 25th correspondence. Ms. Wylie's opening sentence in her letter reads, “I am writing to express my interest in the Executive Director position for the Mendocino Coast Health Care District.”

Ms. Wylie did not use the phrase “administrative services” anywhere in her letter. A member or both members of the hiring ad hoc have changed the wording in their memorandum. It would be reasonable for any other board member or community member to surmise that this was done to provide a link to the administrative services potentially provided by Regional Government Services (RGS) and to divert from the sole purpose voted on by the full board, posting on all appropriate platforms for an executive director.

7. October 2, 2023. The memorandum provided by the ad hoc on hiring states that on October 2nd “An initial informal proposal was received from Regional Government Services to provide administrative services for the district.”

   Note the phrase “administrative services.”

8. The ad hoc committee's memorandum fails to include the removal of Director Katzeff from this ad hoc and the inclusion of Director Garza as a replacement near the end of September.

9. On December 3, 2023 I filed a public records request for all communications between Directors Finney, Garza, and Savage to RGS and Kathy Wylie from late September dates to December 3rd. Director Savage did respond with an email from Kathy Wylie which included Wylie's cover letter regarding the executive director position and a copy of her resume. Director Savage also supplied copies of some texts. Many of those texts reflect that Director Savage appeared to be traveling out of the area during much of October and was often unable to successfully participate in distance communications with Ms. Wylie and/or Director Garza.

   Though more than ten days have passed since the filing of the public records request, none of the potential respondents has supplied an RGS “initial informal proposal” from October 2nd.

   If such a document exists, it has not been produced at any subsequent board meeting.

   The ad hoc memorandum dated December 14, 2023, does not provide information as to whether RGS responded to the posting on the MCHCD website or if a member of the ad hoc sought out RGS.

10. The ad hoc memorandum states that on October 12, 2023, Kathy Wylie participated in a zoom meeting, and that she agreed “that contracting through RGS would be workable for her.”

    Susan Savage's texts show a text dated October 6, 2023, at 3:27 pm with Director Savage stating, “Hello Kathy! Possible to join Garza & I now on Zoom to discuss possibilities? Emailed you the link. We're on now.”

    This communication more than a week before October 12th is not noted in the ad hoc memorandum.

Savage's texts suggest that at least one more zoom or teleconference meeting with Wylie occurred on or about October 18th. This is not referenced in the ad hoc's memorandum.

11. October 18, 2023 The ad hoc's memorandum states, “An amended informal proposal was received from RGS, adding Kathy Wylie as one of their contracted administrators.

    No October 18th “amended informal proposal” from RGS has been supplied for public perusal at any subsequent MCHCD board meeting or as part of a public records act response. Note that at the October 26, 2023 regular board meeting Mr. Garza was listed as the lead for an agenda item (13.4), “Report from the Ad Hoc Committee on Office and Hiring.” At the October 26th board meeting Mr. Garza mentioned none of this October activity regarding Kathy Wylie or RGS.

    Subsequently, a copy of an email from Sophia Selivanoff, executive director at Regional Government Services, came into my possession. The email was dated October 20, 2023. It is addressed to Mr. Garza and Ms. Savage. The Ad Hoc led by the aforementioned MCHCD board members does not mention an October 20th email in their current memorandum. The “Proposed Key Personnel” of RGS listed within this email includes Kathy Wylie with the title “Senior Advisor and Primary Agency Administrator.”

    On December 3, 2023, I sent Kathy Wylie a message asking, “How long have you been associated with RGS?”

    There was no reply throughout the following day. At 10:35 pm on December 4th I asked Kathy, “Are you going to answer?”

    There has been no response as of late night December 13, 2023.This is unusual in that Kathy Wylie and I have exchanged messages many times over the past few years, including a message exchange less than two hours apart on November 27, 2023 (about the problems with the website being offline).

The Ad Hoc on Office and Hiring needs to be reconstituted with different board members. The Executive Director position needs to be posted on many more platforms and the process can go forward from there in a more legitimate and transparent manner.

Public Comment

malcolm macdonald <malcolmlorne@yahoo.com>

Fri 1/19/2024 2:57 PM

To:Paul Katzeff <pk@thanksgivingcoffee.com>;Sara Spring <sspring@mcdh.org>;Lee Finney <lfinney@mcdh.org>;Susan Savage <ssavage@mcdh.org>;Paul Garza <pgarza@mcdh.org>

In connection with public comment on non-agenda items at MCHCD Special Board meetings:

During 2023, the Mendocino Coast Health Care District Board of Directors held thirteen special (non regular) board meetings. At the first eleven of these, the agenda item “Comments from the Community” contained instructive language like that used at the September 21, 2023 meeting, “This portion of the meeting is reserved for persons desiring to address the Board of Directors on any matter over which the District has jurisdiction that is not on the agenda.”

The wording at 2019 special meetings was, “This portion of the meeting is reserved for persons desiring to address the Board of Directors on any matter which the District has jurisdiction.”

In 2020 and 2021, the same. In February 2022, with a new chair, the wording varied slightly, “This portion of the meeting is reserved for persons desiring to address the Board of Directors on non-

agenda issues,” but the intent remained the same.

The October 13, 2022 special meeting, chaired by the same person as in 2020 and 2021, used, “Members of the public may take this opportunity to comment on non-agenda items.”

It is clear what the longstanding practice is for public comments at special MCHCD board meetings.

Not only has the practice of public comments on non-agenda items been a longstanding practice at MCHCD meetings, it is the current practice at Mendocino County Board of Supervisors special meetings. For examples, see agendas for May 22, 2023, April 14, 2023, and October 10, 2023 special supervisors meetings.

When I spoke with Fifth District Supervisor Ted Williams on January 5th, I asked “Does the BOS allow public comment on non-agenda items at special meetings?”

Supervisor Williams responded, “Always.”

The Supervisor added, “The [Brown] Act allows flexibility.”

This leads us to California Government Code 54954.3(a). The final sentence of 54954.3(a), “Every notice for a special meeting shall provide an opportunity for members of the public to directly address the legislative body concerning any item that has been described in the notice for the meeting before or during consideration of that item,” is an affirming sentence. The current leadership of the MCHCD Board has twisted that affirmation into a denial of the public's right to comment on non-agenda topics pertinent to the health care district. There is no statement in 54954.3 denying the public the right to comment on non-agenda items. This is not a case of glass half full vs. glass half empty, the MCHCD leadership's position is akin to slamming a lid on the glass.

There is a simple logic that goes along with placing a public comment section before the core items in a special meeting agenda. The public is already entitled to comment on any agenda item in public session of a special board meeting. Therefore, it is obvious that the comment session prior to the “special” items is designated for topics not on the agenda yet pertinent to the district.

I request that this board acknowledge the error that took place at the January 4, 2024 MCHCD special meeting and correct that error.

Malcolm Macdonald

HDAP Allocation Stakeholder Notification

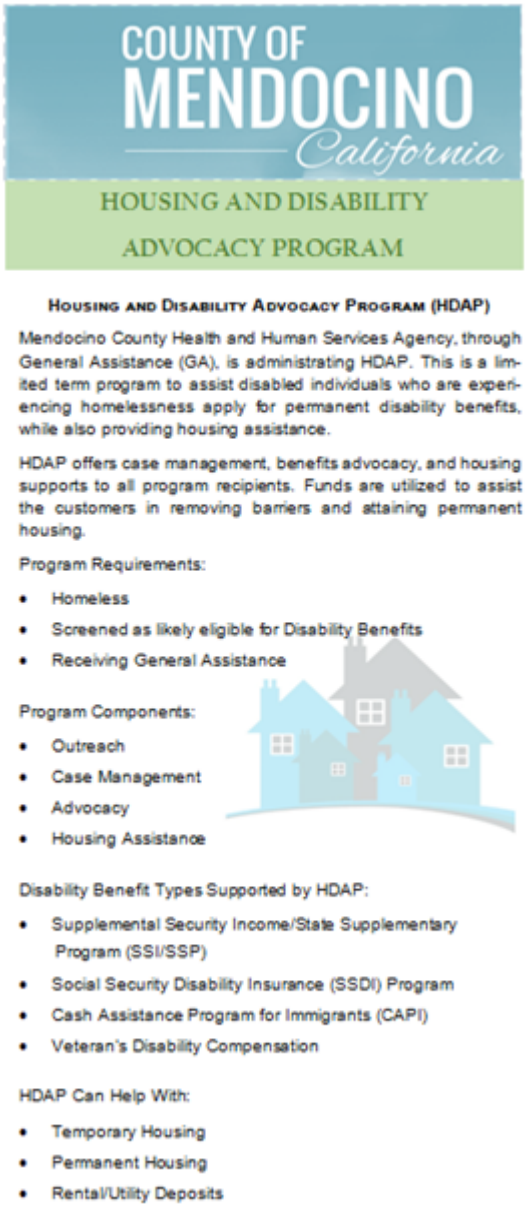
Francesca Rosales <rosalesf@mendocinocounty.gov>

Wed 12/20/2023 4:47 PM

To:ASIPS <asips@mendocinocounty.gov>

1 attachments (206 KB)

HDAP 2023-2024 Stakeholder Letter- Signed.pdf;



COUNTY OF MENDOCINO
California

HOUSING AND DISABILITY ADVOCACY PROGRAM

Housing and Disability Advocacy Program (HDAP)

Mendocino County Health and Human Services Agency, through General Assistance (GA), is administrating HDAP. This is a limited term program to assist disabled individuals who are experiencing homelessness apply for permanent disability benefits, while also providing housing assistance.

HDAP offers case management, benefits advocacy, and housing supports to all program recipients. Funds are utilized to assist the customers in removing barriers and attaining permanent housing.

Program Requirements:

- Homeless
- Screened as likely eligible for Disability Benefits
- Receiving General Assistance

Program Components:

- Outreach
- Case Management
- Advocacy
- Housing Assistance

Disability Benefit Types Supported by HDAP:

- Supplemental Security Income/State Supplementary Program (SSI/SSP)
- Social Security Disability Insurance (SSDI) Program
- Cash Assistance Program for Immigrants (CAPI)
- Veteran's Disability Compensation

HDAP Can Help With:

- Temporary Housing
- Permanent Housing
- Rental/Utility Deposits

Good afternoon,

Please see the attached notification for Mendocino County Department of Social Services, Housing and Disability Advocacy Program (HDAP).

The attached notice is informing you of the most recent allocation allotment received by Mendocino County to continue administration of HDAP.

Contact information for program management is included in the attached letter if you have any questions.
Thank you for being a valued Community Partner and Homeless Service Provider.

If you have any changes to your contact information,
please respond to this e mail, so our records can be updated.

Thank you,

Francesca Rosales
Program Administrator
Mendocino County Social Services
Adult and Aging Services
Integrated Program Support
747 S. State St. Ukiah, Ca. 95482
✉ rosalesf@mendocinocounty.gov
☎ Desk: (707) 463-7904 Cell: (707) 830-0008

Trustworthiness, Respect, Responsibility, Fairness, Caring and Citizenship.

MENDOCINO COUNTY
social services

Think before you print.

Brown Act & Ethics Training [1/16/24]

Julianna Chapman <chapmanj@mendocinocounty.gov>
Mon 12/18/2023 8:58 AM
To:Lee Finney <lfinney@mcdh.org>

Greetings,

Please note and share with your staff that County Counsel is offering the following training:

Brown Act & Ethics Training

Tuesday, January 16, 2024

9:00 AM -11:00 AM

This training will be held via Teams. If you are interested, please email the following information to Julianna Chapman, Legal Services Supervisor at chapmanj@mendocinocounty.gov:

- Name
- Entity
- Phone Number

A link will be sent to those registered prior to the training.

***Please note that to receive a certificate, you must participate in the full 2-hour training.**

Julianna Chapman, Legal Services Supervisor
County Counsel
Mendocino County
501 Low Gap Road, Rm 1030
Ukiah, CA 95482
Telephone (707) 234-6885
chapmanj@mendocinocounty.gov

California's Redwood Coast: Exploring the Roots of Health Disparities (DRAFT 11-30-23)

Report Author: Schuyler Kirsch

November 2023

California Center for Rural Policy at Cal Poly Humboldt

RANCHO
Rural Association of Northern California Health Officers

Cal Poly Humboldt.

CCRP
California Center for Rural Policy

Acknowledgements

This report was made possible by funding from the California Department of Public Health and in-kind support from Cal Poly Humboldt.

The California Center for Rural Policy would specifically like to thank:

- CCRP Staff: Sydney Lyons, Nick Ortiz, Alisha Hammer, Nino Dzotsenidze, and Dawn Arledge
- Dr. Tom Jackson, Jr. Ph.D., President, Cal Poly Humboldt
- Connie Stewart, Executive Direct of Initiatives, Cal Poly Humboldt
- Cal Poly Humboldt Sponsored Programs Foundation
- Redwood Region RISE participants and reviewers

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CCRP
California Center
for Rural Policy

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

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Table of Contents

EXECUTIVE SUMMARY

The population of the Redwood Coast (comprised of Del Norte, Humboldt, Mendocino, and Lake counties) faces many challenges including striking health disparities compared to the whole of California. These health disparities include elevated premature death, rates of disability, and behavioral risk factors. This report aims to identify high-impact health determinants contributing to these health disparities between the Redwood Coast and the state, and to provide targeted policy recommendations for closing these gaps.

Multiple data sources suggest that these disparities in health outcomes primarily stem from elevated tobacco use, substance use, and mental health challenges. The consequences of these disparities include elevated lung cancer, respiratory diseases, motor vehicle deaths, drug-induced and liver diseases, and suicides.

The region has a higher proportion of populations at risk for tobacco use, substance use and mental health challenges, including those living in poverty, homeless individuals, people with

lower levels of educational attainment, people living alone, and those who have experienced multiple adverse childhood experiences (ACEs). While these challenges are experienced broadly in the region, people of color, disabled groups, and lesbian, gay, and bisexual individuals face particularly pronounced health and socioeconomic challenges.

The region also experiences adverse disparities in access to healthcare, which appears to disproportionately impact those with lower incomes and people with mental health challenges. Moreover, Redwood Coast adults who have mental health challenges are at far higher risk of experiencing delayed care.

In light of these findings, this report underscores three **policy focus areas**, with a particular focus on serving the at-risk populations:

1. Smoking Prevention, Education, and Cessation
2. Substance Use Prevention and Treatment
3. Suicide Prevention and Access to Mental Health Care

Addressing these concerns in the Redwood Coast is imperative to bridge healthcare disparities and enhance the overall well-being of its residents.

DATA SOURCES AND METHODS

This report draws from a wide array of data sources, as detailed below. In this section, we offer a brief overview of the primary data methods and constraints, while a more extensive examination can be found in Appendix A.

Data Sources

- U.S. Census Bureau American Community Survey (ACS)
- California Department of Finance (DOF)
- The California Health Information Survey (CHIS)
- County Health Rankings & Roadmaps (CHRR)
- U.S. Health Resources & Services Administration (HRSA)
- Center for Disease Control (CDC) PLACES Data
- California School Climate, Health, and Learning Surveys (CalSCHLS)
- Kidsdata.org
- California Department of Public Health (CDPH), County Health Status Profiles
- CDPH, Overdose Surveillance Dashboard
- CDPH, Chronic Hepatitis C California Surveillance Report
- CDPH, California Blood Lead Data, 2021
- Cal Fire Wildfire Perimeters and Prescribed Burns (Cal Fire)
- California Office of Traffic Safety (OTS)

- UC Berkeley Transportation Injury Mapping System (TIMS)
- CalEnviroScreen 4.0

Key Data Methods and Limitations

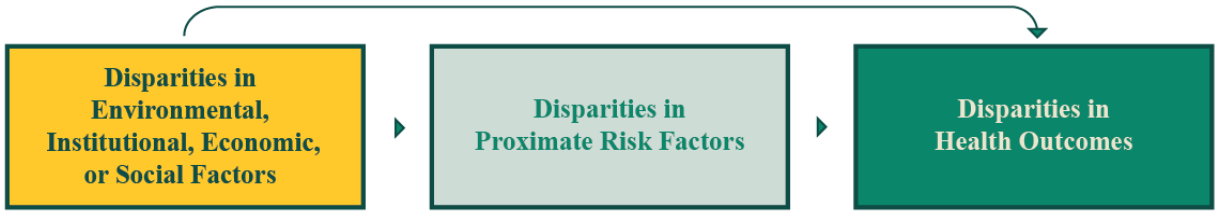
- 95% confidence intervals are presented wherever the necessary information is available. Generally, these are illustrated with horizontal bars. Wide confidence intervals indicate a greater level of uncertainty.
- Some data points are not shown either because they have been suppressed by the data provider or because of high levels of statistical uncertainty.[1]
- Data that are generated using statistical modeling (i.e. small area estimation techniques) are denoted as SAE. SAE data is limited and should not be used to measure impacts of local area policy interventions.
- California Health Information Survey (CHIS) data include only Humboldt, Mendocino, Lake Counties, referred to in these visualizations as HML. Del Norte is aggregated with a broader seven California region, therefore including Del Norte would substantially skew the data for the region.
- The word "significant" is used deliberately throughout this report to indicate a statistically significant difference.

Section 1. CONCEPTUAL FRAMEWORK

The conceptual framework of this report takes inspiration from Bay Area Regional Health Inequities Initiative (BARHII) framework, which posits a flow from upstream factors such as social, living environment, and institutional inequities to downstream factors such as health behaviors, diseases, and ultimately mortality rates (BARHII).

Figure 1.1

Conceptual Framework



To maintain focus on the most salient health determinants, this report works backwards from these upstream disparities in health outcomes, looking first at regional disparities in mortality rates, diseases, and disabilities to identify where disparities exist between the region and state

[1] Usually because of extremely wide confidence intervals (e.g. a sample proportion that includes 0 or 100%) or because the data provider denotes the estimate as statistically unstable.

averages, such as for example disparities in lung cancer rates (see "Overview of Health Outcomes"). This analysis produces a set of health outcomes where there is significant and adverse disparity between the region and the state to provide a focused approach to identify immediate or 'proximate' downstream factors contributing to these disparities, such as health behaviors including tobacco use (see "Proximate Risk Factors").

Subsequently, the report looks further upstream to identify the institutional, economic, and/or social factors that may contribute to these disparities in proximate risk factors, such as the role of poverty in tobacco use, as well as considering the potential for direct relationships with these deeper factors on health such as the link between poverty and chronic stress (see "Institutional, Economic, and Social Factors"). Because of the potentially vast array of such factors, focus is maintained on those factors commonly raised in the region's community health assessments.

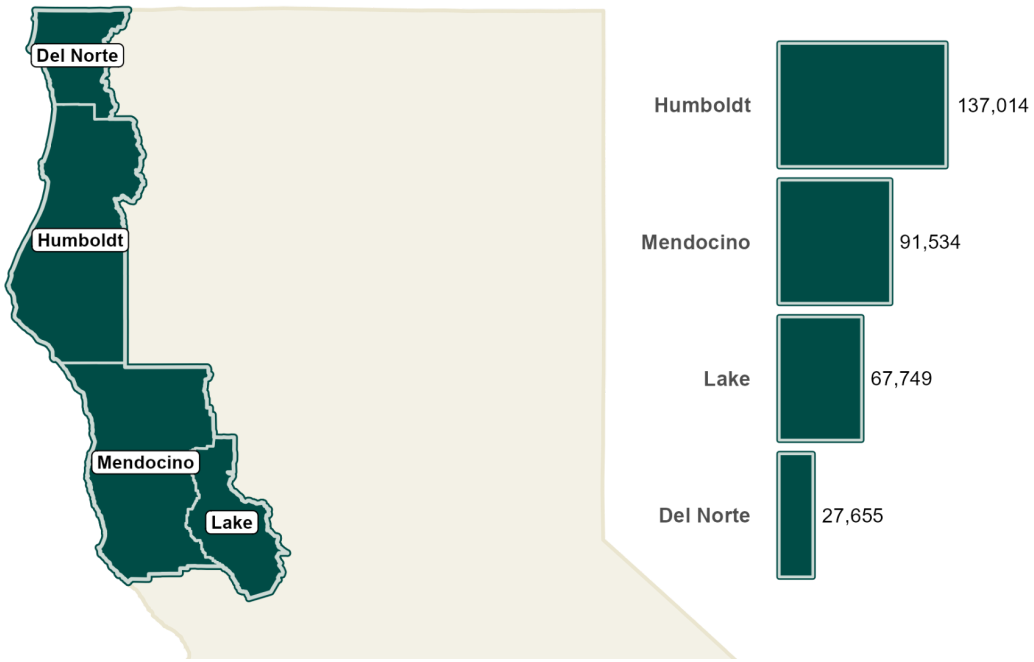
The report further examines the health consequences from environmental factors, such as wildfires (see "Environmental Factors").

By identifying health factors displaying substantial and adverse disparities between the Redwood Coast region and the state, the aim of this report is to uncover opportunities for directing focus and allocating resources towards high-priority and impactful health determinants. The report concludes by presenting a list of policy focus areas and corresponding resources based on the most compelling and high-impact disparities in health factors.

Section 2. OVERVIEW OF THE REGION

The Redwood Coast, situated in the northwesternmost region of California comprises four of the state's most remote and rural counties (see Appendix B). The total population of the region is 323,952….

Figure 3.1
Redwood Coast Region and Population (2017 - 2021)

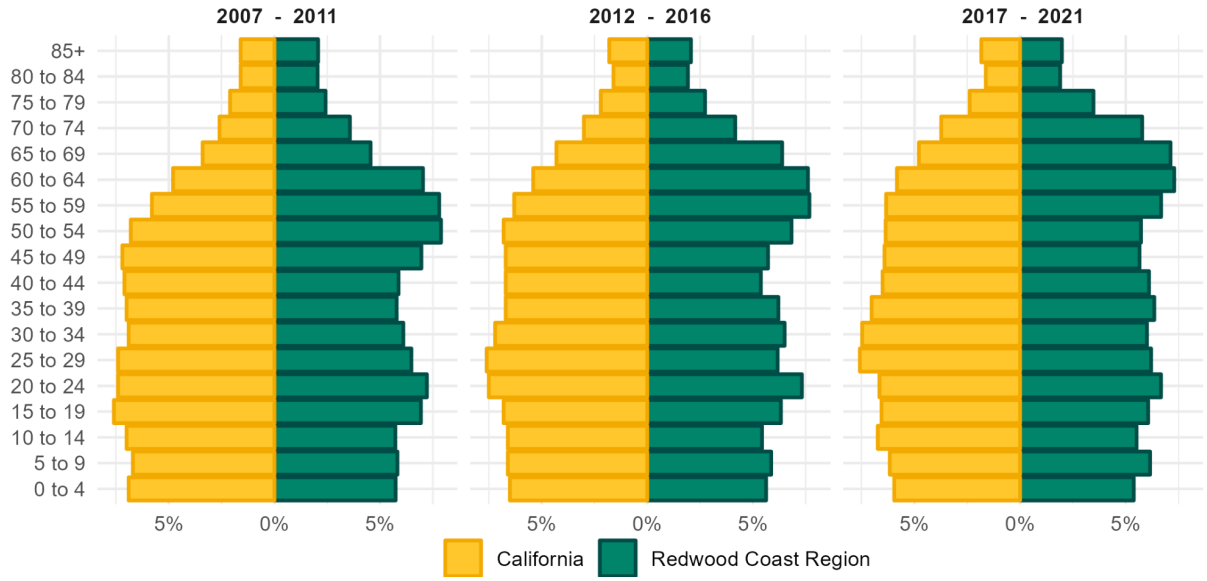


Note. Data sourced from the ACS.

Population Dynamics

The Redwood Coast population is considerably older compared to the state average. Across the region the median age is significantly higher than the state median (see Appendix B). The higher median age in the region is influenced by a significant and sizable group of older residents advancing in age. From 2007 to 2011, this cohort ranged from 45 to 64 years old, and more recently, between 2017 and 2021, their age range shifted to 55 to 74 years old. Such a population distribution exerts downward pressure on population growth among other implications such as additional strain on healthcare resources. As shown in Appendix B, the population has declined in recent years, driven in large part by higher deaths, and recent DOF projections predict future decline in the Redwood Coast population.

Figure 2.2
Age Distribution (2007 - 2021)

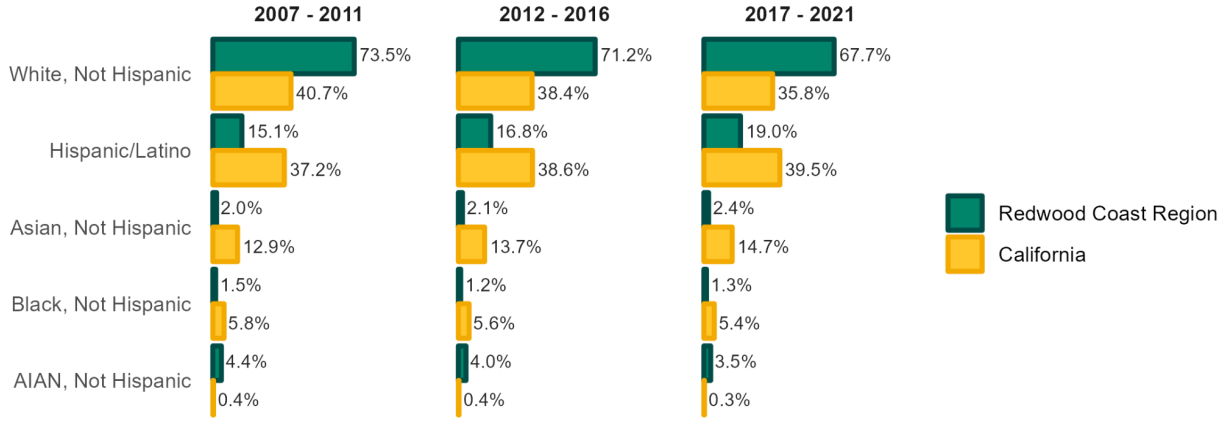


Note. Data sourced from the ACS.

As shown below, the region is primarily populated by white, non-Hispanic individuals, who constitute 67.7% of the total regional population— almost double the statewide proportion of 35.8% for this group. Hispanic or Latino individuals constitute a further 19.0% of the population, a share that is growing but small relative to the state population. While other minority groups are underrepresented compared to the state population, the American Indian Alaskan Native (AIAN) population is proportionately higher than the state population, representing 2.4% of the Redwood Coast population as opposed to only 0.3% of the statewide population.

Figure 2.3

Race and Ethnicity (2007 - 2021)



Note. Data sourced from the ACS.

Takeaways

1. The region's population is significantly older compared to the state. The region's aging population structure has important implications for future population change and healthcare needs.
2. The population is primarily white, non-Hispanic. The population is composed of a relatively small population of people of color or Hispanic populations; however, the AIAN population is larger in the Redwood Coast relative to the state population.

Section 3. OVERVIEW OF HEALTH OUTCOMES

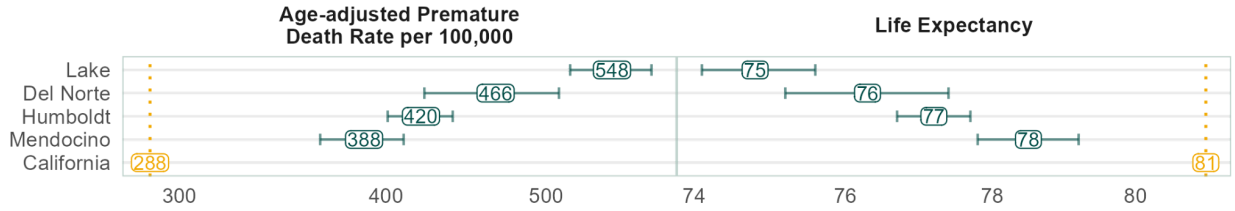
Life Expectancy and Mortality Rates

Life expectancy is a fundamental metric that reflects a broad spectrum of health factors, indicating the cumulative influence of wide-ranging health determinants. Disparities in life expectancy, therefore, serve as a good starting point for uncovering signals of disparities in health determinants between geographies and populations.

As shown below, life expectancy at birth is significantly lower than the statewide average, and age-adjusted premature deaths per 100,000 are significantly higher across the region.[2] Additional data presented in Appendix B indicate that premature death is elevated among AIAN and Black communities in the Redwood Coast region. These data also show that premature death is on a long-term downward trajectory in all but Lake County.

Figure 3.1

Premature Death and Life Expectancy (2018 - 2020)



Note. Data sourced from CHRR.

Disaggregating mortality rates by cause of death allows for a targeted examination of the determinants of health that specifically contribute to the elevated causes of premature death and lower life expectancy within the region.

[2] Defined as the number of deaths occurring before age 75 per 100,000 population. This is in distinction to the Years of Potential Life (YPLL) indicator which is presented in Appendix B. YPLL is defined as the number of years of life lost due to deaths prior to age 75. For instance, the death of a 40 year old would amount to 35 YPLL.

As shown below, the region experiences higher age-adjusted mortalities across most causes of death. However, these data show a clear regional pattern of substantially higher death rates in several categories, including **unintentional injuries, all cancers, drug-induced deaths, chronic lower respiratory disease, lung cancer, chronic liver disease and cirrhosis, suicide, motor vehicle traffic crashes, coronary heart disease, prostate cancer[3], and firearm related deaths**.

There is also an alarmingly high rate of stroke mortalities in Humboldt County. This phenomenon is persistent over time and does not appear to be a statistical aberration. See Appendix C for a discussion of Humboldt's elevated stroke mortality rate.

Figure 3.2

Age-Adjusted Mortality Rates per 100,000 (2019 - 2021)

	Lake	Del Norte	Humboldt	Mendocino	CA
Accidents (Unintentional Injuries)	135*	78*	74*	106*	43
All Cancers	170*	182*	173*	160*	125
Drug Induced Deaths	78*	30	37*	56*	21
Chronic Lower Respiratory Disease	49*	57*	45*	32	26
Lung Cancer	41*	48*	33*	31*	22
Chronic Liver Disease and Cirrhosis	54*	31*	25*	17	14
Suicide	24*	26*	20*	24*	10
Motor Vehicle Traffic Crashes	30*	19	16*	29*	11
Coronary Heart Disease	112*	66	98*	98*	79
Prostate Cancer	19	35*	29*	24	18
Firearm Related Deaths	12	17*	14*	14*	8
Female Breast Cancer	20	21	26*	19	18
Colorectal Cancer	14	15	13	16*	12
Cerebrovascular Disease (Stroke)	32	41	98*	35	37
Homicide	7	7	8	9	6
Influenza and Pneumonia	11	22*	8*	12	12
Diabetes	15*	43*	22	20	23
Alzheimer's Disease	15*	14*	14*	13*	37

Difference from State (X)

- 90 < X
- 60 < X ≤ 90
- 30 < X ≤ 60
- 5 < X ≤ 30
- 0 < X ≤ 5
- X ≤0

Note. Data sourced from the California Department of Public Health and the California Conference of Local Health's *County Health Status Profiles* report data. The color scale denotes differences (X) between the region's mortality rate and the corresponding state rate. Gold and yellow indicate higher mortality rates compared to the state. Asterisks (*) denote a statistically significant difference compared to the state rate. None of these causes include deaths where COVID-19 is the underlying cause of death.[4]

[3] Per 100,000 males.

[4] According to CDPH, "Deaths where COVID-19 was coded as the underlying cause of death are only included for all causes of death and are not included in any of the specific mortality health indicators. However, deaths where COVID-19 was listed as a significant condition contributing to death but not the underlying cause of death may be included for these health indicators" (2022).

An analysis of trends in these mortality rates is available in Appendix C. These data indicate rising unintentionally injury deaths, drug-induced deaths, chronic liver disease, prostate cancer, all cancers, motor vehicle deaths, and breast cancer.

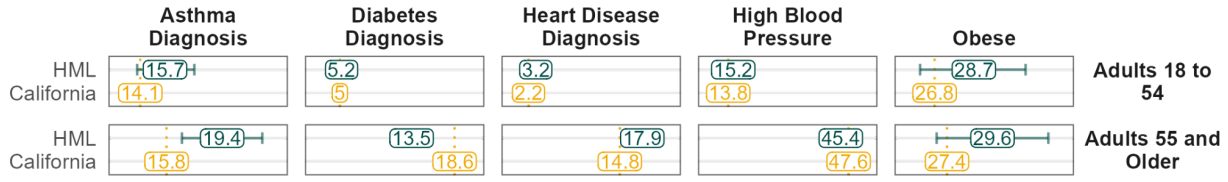
Health Conditions

County-level morbidity data are more limited when compared to mortality data, highlighting data gaps in understanding health disparities in rural areas. To address these limitations, both CHIS and CDC PLACES datasets are employed to identify signals of health disparity.

As shown below, CHIS data reveals moderately elevated rates of asthma, heart disease, and obesity, although these data do not include Del Norte[5]. Conversely, rates of diabetes and high blood pressure are similar to or lower than the state averages. CDC PLACES data presented in Appendix C, although limited to small area estimation (SAE) techniques,[6] suggests elevated age-adjusted rates across almost all estimated health conditions including chronic obstructive pulmonary disease (COPD), tooth loss, depression, coronary heart disease, and multiple other conditions.

Figure 3.3

Morbidities, Percent of Population (High Blood Pressure 2019-2022, All Other 2011-2022)[7]



Note. Data sourced from the CHIS. Humboldt, Mendocino, and Lake (HML) counties only.

Both approaches point to a higher prevalence of respiratory diseases, heart disease, obesity, and a relatively low prevalence of diabetes and high blood pressure regionally.

Disability Rates

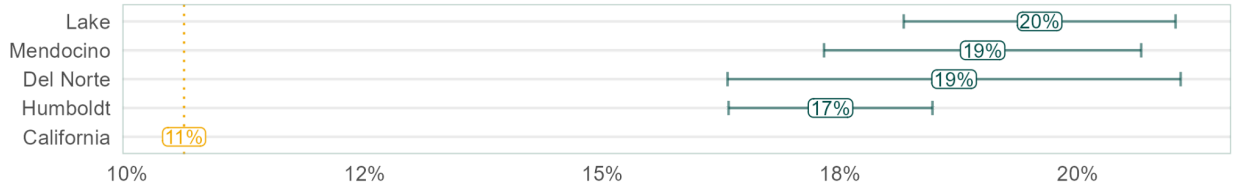
As shown in the figures below, disability rates are higher than the state rate across the region. While the aging population is a contributing factor, it is noteworthy that even among individuals

[5] All CHIS data include only Humboldt, Mendocino, and Lake (HML) counties.
[6] See Appendix A for a discussion on the limitations of these techniques.
[7] See Appendix C for an alternative data source on health conditions produced using Small Area Estimation (SAE) techniques. Though limited, these data suggest elevated levels of all morbidities presented, including those above, except diabetes and high cholesterol.

aged 18 to 34, disability rates are significantly higher than the state average (see Appendix C). This suggests that factors beyond the aging population play a role in the region's elevated disability rates. Potential contributing factors are explored further in the next section.[8]

Figure 3.4

Disability Rates (2017 - 2021)



Note. Data sourced from the ACS.

Takeaways

1. The most substantial adverse health disparities between the region and the state are evident in rates of unintentional injuries deaths, all cancers, drug-induced deaths, chronic lower respiratory disease, chronic liver disease and cirrhosis, lung cancer, coronary heart disease, suicide, motor vehicle traffic crash, prostate cancer, and firearm related deaths.
2. Rates of disability are much higher than state averages in the region, even among young adults.

Section 4. PROXIMATE RISK FACTORS

This section explores the potential factors contributing to the health disparities between the Redwood Coast region and the state, as identified in the previous section. The aim is to identify and quantify the proximate risk factors, which are directly linked to these health outcomes, such as the role of smoking in lung cancer. A more comprehensive analysis of the underlying factors (e.g. poverty) potentially related to these proximate risk factors will be explored in the subsequent section. Identifying proximate factors allows for a more focused approach to exploration of deeper factors as well as a more focused approach to policy solutions.

Smoking

As shown in the previous section, evidence demonstrates higher mortality rates from cancer, lung cancer, chronic lower respiratory disease, and heart disease compared to state averages.

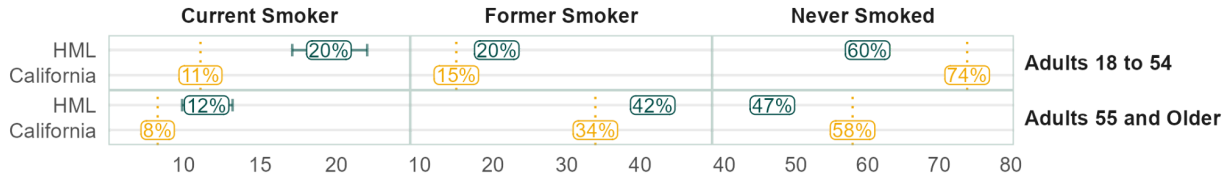
[8] Disability rates by race and ethnicity are presented in Appendix C.

Lung Cancer and Chronic Lower Respiratory Disease

Cigarette smoking is the main cause of lung cancer and COPD— a leading respiratory disease— and a risk factor for asthma (Mayo Clinic: "Lung Cancer;" Mayo Clinic: "COPD;" American Lung Association, "Asthma Causes and Risk Factors"). The data presented below from various sources reveals significantly and substantially higher smoking rates across the region. Notably, the proportion of current smokers among adults aged 18 to 54 in the Redwood Coast region is nearly double the state average. This striking disparity indicates that smoking may play a crucial role in explaining and addressing the region's elevated rates of cancer, lung cancer, and respiratory illnesses.

Figure 4.1

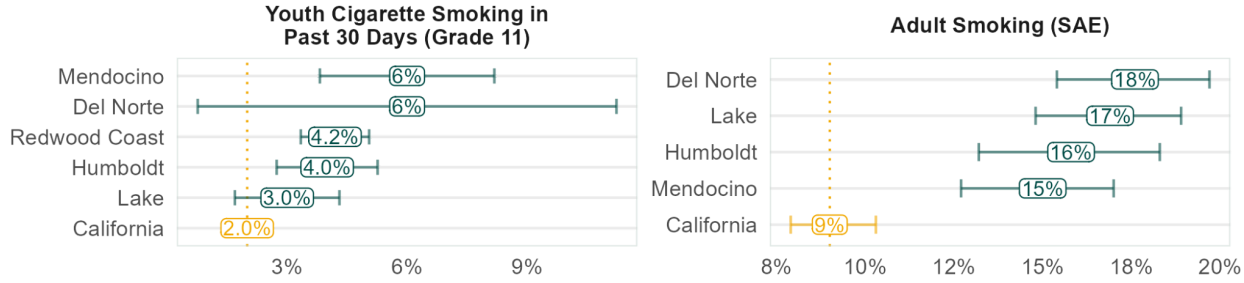
Smoking Rates (2011 - 2022)



Note. Data sourced from the CHIS.

Figure 4.2

Smoking, Percent of Population (Youth Data 2019 - 2021, Adult Estimates 2020)



Note. Estimate adult data sourced from CHRR. Estimated adult smoking data are model-based predictions. Youth smoking data were sourced from CalSCHLS "Secondary Student: Substance Use" data portal.[9]

Heart Disease

According to the CDC, the primary risk factors for heart disease include high blood pressure, high LDL cholesterol, diabetes, unhealthy diet, physical inactivity, obesity, smoking, and

[9] Youth smoking data are based on surveys of 11th grade students in participating school districts within each county. Youth smoking is defined as students who responded that they had consumed cigarettes in the past 30 days. Confidence intervals were calculated by the author.

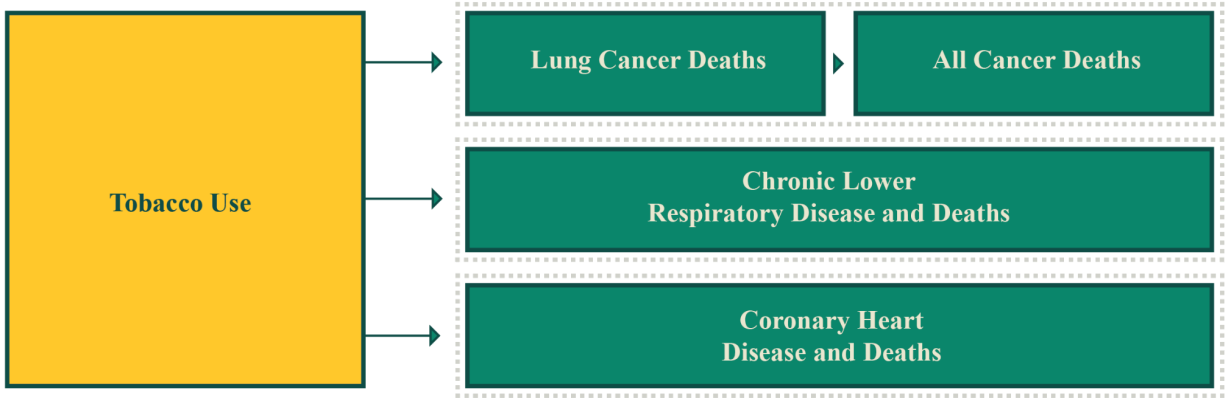
exposure to secondhand smoke ("Heart Disease and Stroke"). As previously shown, the available evidence indicates that rates of high blood pressure, high cholesterol, and diabetes in the region are comparable or superior to state averages (see Appendix C and "Health Conditions"). Additionally, although limited in scope, CHIS data suggest that diets in Humboldt, Mendocino, and Lake (HML) counties are on par with or, in some cases, better than the statewide average, and indicators of physical activity in these counties are similar or superior to statewide averages across these counties (see Appendix D)[10]. While the data for Del Norte are more limited, these data suggest that food access in Del Norte is more limited and rates of physical inactivity are somewhat higher. However, while diet and exercise may be contributing factors for Del Norte county, this evidence highlights obesity and smoking as key concerns for heart disease regionwide.

Studies reveal that smoking poses a greater risk for heart disease compared to obesity (Benis, et al., 2016). Furthermore, estimated differences between the region and the state in terms of obesity rates reach a maximum of approximately 1.13 times higher than the state average. In contrast, smoking rates are 1.5 to 1.8 times higher, strongly indicating that smoking is a critical factor contributing to the region's elevated rates of coronary heart disease.

The following diagram depicts these health disparities and the proximate risk factors potentially associated with them. Among these health outcomes, tobacco use stands out as a widely recognized and prominent risk factor and data strongly indicate that rates of smoking are significantly and substantially higher in the region.

Figure 4.3

Proximate Risk Factors for Disparities in Health Outcomes



[10] Data for Del Norte are more limited, but the available data do not rule out diet and physical inactivity as contributing factors to the disparity in heart disease between Del Norte and the state.

Mental Health and Substance Use

As previously identified, the region exhibits elevated rates of accidental (unintentional injuries), drug-induced deaths, motor vehicle accidents, liver disease, suicides, and firearm-related deaths. Further analysis below reveals that these disparities in health outcomes align closely with the heightened prevalence of mental health challenges and substance use-related issues within the region, challenges that may also help to explain the elevated rates of disability observed in the region.

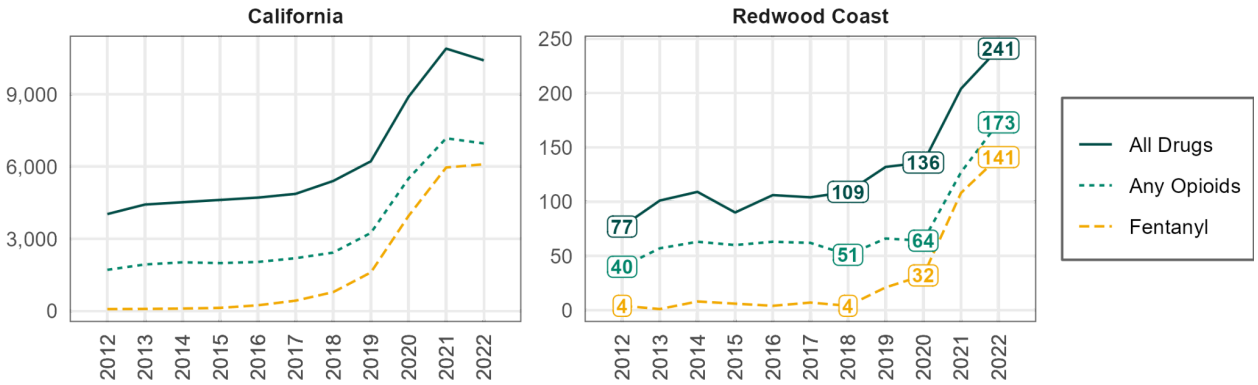
Drug-Induced Deaths

The category of unintentional injuries includes unintentional poisoning or drug overdose, alcohol poisoning, motor vehicle accidents, and other unintentional injuries. Nationally, unintentional poisoning, including drug overdose, has emerged as the leading cause of death within the unintentional injury category, a trend that began in the mid-1990s. However, since the mid-1990s and continuing to the present, unintentional poisoning deaths, particularly from drug overdoses, have risen sharply. As of 2021, nationwide data indicates that poisoning, such as drug overdoses, accounted for more than half of all unintentional injury deaths, followed by motor vehicle accidents (CDC)[11]. Consequently, the region's elevated rates of drug-induced and motor vehicle deaths likely contribute substantially to the higher prevalence of unintentional injury deaths within the region.

As shown in the figures below, drug-induced deaths have risen sharply in the Redwood Coast region starting around 2018. This rise in overdose deaths has been sharply exacerbated by the fentanyl epidemic in recent years. Statewide, fentanyl deaths have risen exponentially starting around 2017 and now account for over half of statewide overdose deaths. Similarly, fentanyl deaths have also risen exponentially in the Redwood Coast region and now account for roughly half of all drug overdose deaths.

Figure 4.4
Fentanyl Overdose Deaths (2012 - 2022)

[11] A 2019 report for Humboldt County found findings that indicate a similar trend, with the largest component being overdose, followed by motor vehicle crash injury deaths (source). This report also found that the majority of the disparity between unintentional injury mortality rate and the state is attributable to these two causes of death.

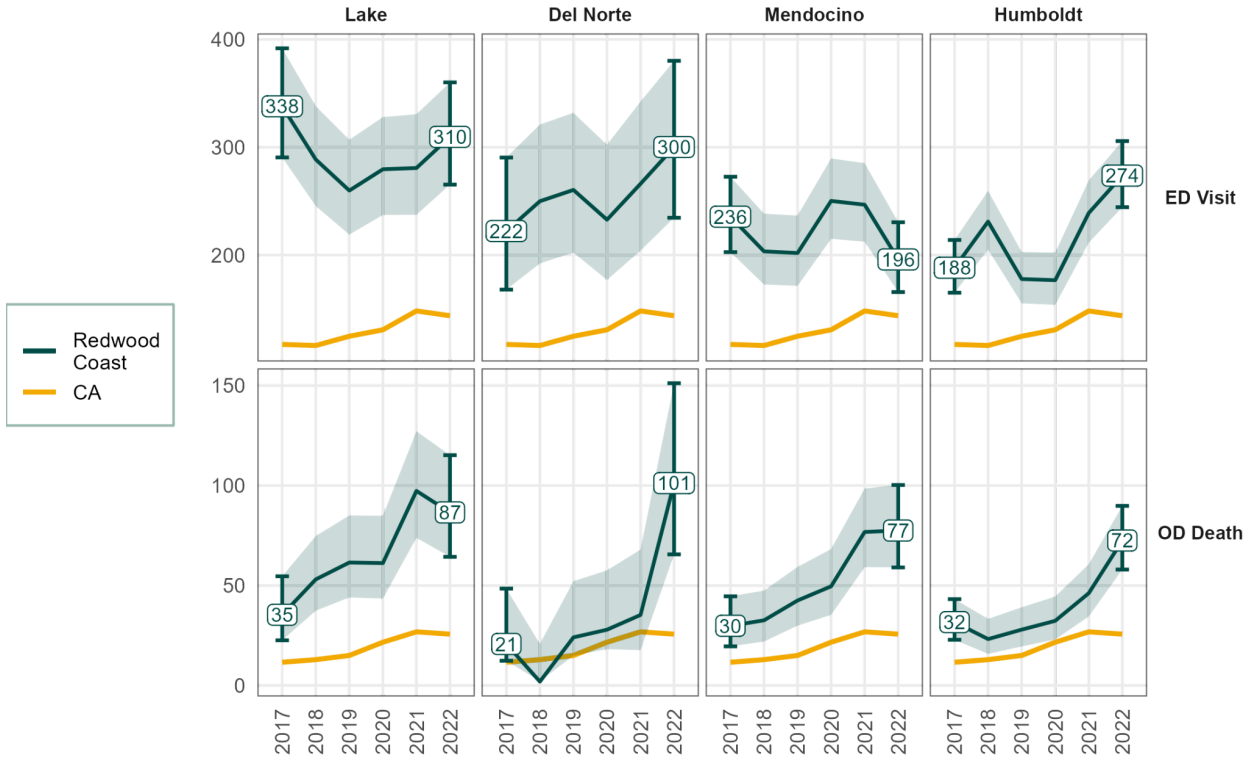


Note. Data sourced from the CDPH's "California Overdose Surveillance Dashboard."

The crisis appears to be significantly and substantially worse in the Redwood Coast region compared to the state. As shown below, drug overdose emergency department (ED) and overdose (OD) death rates are significantly higher than the state rate across the region.

Figure 4.5

Age-Adjusted Drug Overdose Rate per 100,000 (2017 - 2022)



Note. Data sourced from the CDPH's "California Overdose Surveillance Dashboard." Shaded regions and bars represent confidence intervals. Confidence intervals were provided by the data source.

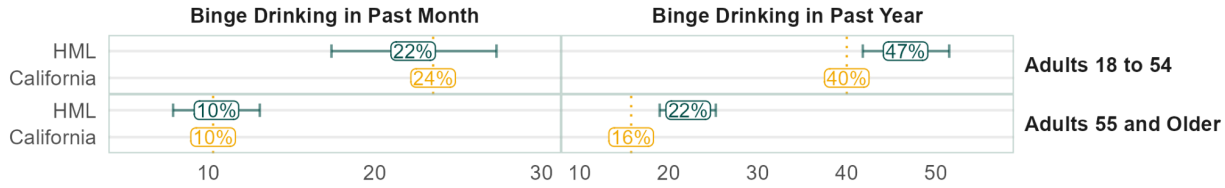
Liver Disease and Cirrhosis

Rates of liver disease deaths are elevated across the region. Moreover, as shown in Appendix C, rates of liver disease mortality have increased in recent years statewide; in the Redwood Coast region, this increase is occurring faster than the state in all but Humboldt, highlighting the urgency of addressing this worsening trend.[12]

According to the Mayo Clinic, heavy alcohol consumption is a leading risk factor for liver disease ("Liver Disease"). As shown below, multiple data sources collectively signal higher rates of excessive drinking. As shown below, multiple data sources collectively signal higher rates of excessive drinking. CHIS binge drinking data is somewhat limited, however at least one CHIS heavy drinking variable indicates higher rates of binge drinking[13]. Additional data sources show binge drinking among youth is sharply and significantly higher than the state average while SAE estimation techniques suggest substantially higher rates of binge drinking among adults.

Figure 4.6

Binge Drinking in Past Year (Left 2021 - 2022, Right 2011 - 2015)



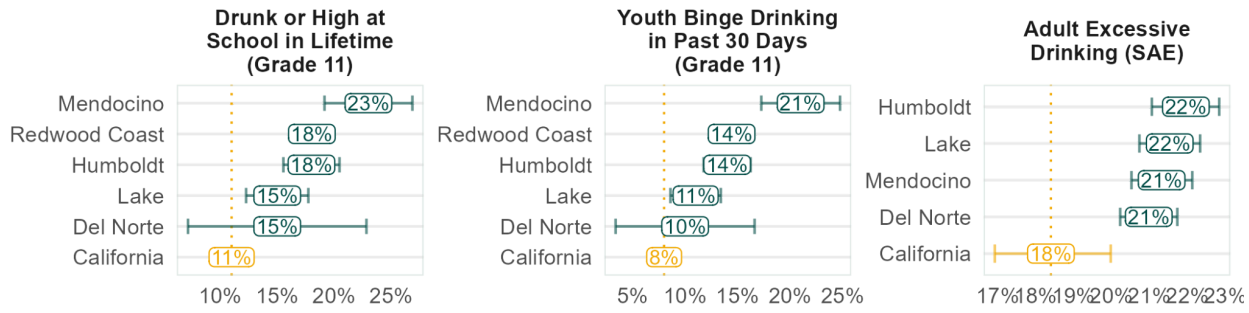
Note. Data sourced from the CHIS. The proportion of adults who had at least one episode of binge drinking in the past year. Binge drinking is defined as five or more drinks for males and four or more for females within two hours.

Figure 4.7

Alcohol Use Indicators (Adult Excessive Drinking 2020, Youth Data 2017 - 2019)

[12] The 2021-2019 CDPH data release compared to the 2019-2017.

[13] Adult binge drinking data from CHIS is limited to only a few years. Data collected between 2021 and 2022 on recent binge drinking show rates consistent with state averages but with wide confidence intervals reflecting the limited duration of data collection. CHIS data collected between 2011 and 2015 show higher rates of binge drinking in the past year.



Note. Estimate adult data sourced from CHRR. Estimated adult binge drinking data are model-based predictions. Youth binge drinking data were sourced from CalSCHLS "Secondary Student: Substance Use" data portal.[14]

Another critical risk factor for liver disease results from hepatic infections from injection drug use (Mayo Clinic: "Liver Disease"). Hepatitis C is primarily transmitted through sharing needles, and a 2018 report from the CDPH reveals that rates of hepatitis C in the Redwood Coast region are the highest in the state (see Appendix C).

Substance Use and Motor Vehicle Deaths

As shown previously, motor vehicle mortality rates are sharply elevated across the region. Traffic safety ranking data from the California Office of Traffic Safety (OTS) reveal factors potentially contributing to the region's elevated rates of motor vehicle traffic fatalities (2023). These data reveal a clear trend toward a higher risk of pedestrian, hit-and-run, nighttime, and alcohol-involved fatal and injury traffic accidents in the Redwood Coast.

Figure 4.8
OTS Crash Risk Rankings, 2017 - 2020 Average[15]

[14] Youth binge drinking data are based on surveys of 11th grade students in participating school districts within each county. Youth binge drinking is defined as five or more drinks during a period of "few hours". Confidence intervals were calculated by the author.
[15] Lassen County is ranked lower risk by the OTS (data years = 2017-2020), however, CHRR data (data years = 2016-2020) indicate a higher proportion of alcohol-impaired driving deaths than the state. While differences in methodologies (CHRR only looks at deaths) may account for this apparent discrepancy, some of the difference appears to be explained by the difference in time period and wide year-to-year fluctuations in the data due to the county's small population. CHRR data indicate that 60% of driving fatalities involved alcohol, while in 2017 and 2019, 0% of driving deaths involved alcohol.

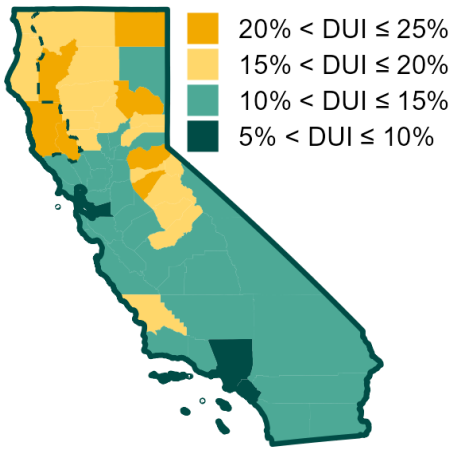
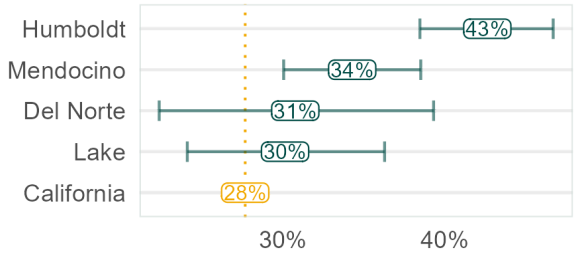
	Lake	Del Norte	Humboldt	Mendocino	Redwood Coast Avg.
Total Fatal and Injury	28.2	28.8	37.8	38.5	33.3
Pedestrians	22.8	26.5	2.0	17.2	17.1
Hit and Run	25.0	17.2	12.0	20.2	18.6
Alcohol Involved	14.2	34.2	21.2	8.8	19.6
Nighttime	25.0	25.5	16.5	20.8	21.9
Motorcycles	26.5	27.8	23.8	30.5	27.1
Bicyclists	46.5	18.8	15.5	44.0	31.2
Speed Related	39.0	22.5	52.8	35.8	37.5

Top 10 (Worst)
10 < OTS ≤ 20
20 < OTS ≤ 30
30 < OTS ≤ 40
40 < OTS ≤ 50
50 < OTS ≤ 58 (Best)

Note. Data sourced from the OTS. The OTS ranks each California county from 1 (worst) to 58 (best) for each criteria above. Gold and yellow indicate higher risk. These rankings are averaged over the four years of data available from the OTS from 2017 through 2020. Nighttime is defined as occurring between 9pm and 2:59am.

Two additional data sources highlight the role of substance use in traffic safety in the Redwood Coast. As shown below, driving under the influence (DUI) crashes account for a greater proportion of all vehicle crashes (including those without injury) compared to the majority of the state. Furthermore, alcohol-involved driving deaths are higher across the region.

Figure 4.9

Drug and/or Alcohol DUI as a Percent of All Crashes (2012 - 2021)	*Percent of Driving Deaths Involving Alcohol (2016 - 2020)*
	
Note. Data sourced from TIMS. Includes both alcohol and drug DUIs.	*Note. Data sourced from CHRR.*

A national study suggests a clustering of pedestrian, hit-and-run, and nighttime accidents around a common risk factor: late night alcohol use. This study also reveals that nearly one-fifth of

pedestrian traffic fatalities in the United States are the result of a hit-and-run, and that fatal pedestrian hit-and-runs are far more likely to occur during the evening and involve alcohol use (Arnold et al., 2010).

While there are certainly other factors contributing to the region's elevated motor vehicle crash fatalities, substance use appears to play a critical role in the region's elevated motor vehicle deaths and— along with drug-induced deaths— unintentional injuries deaths as well.[16,17]

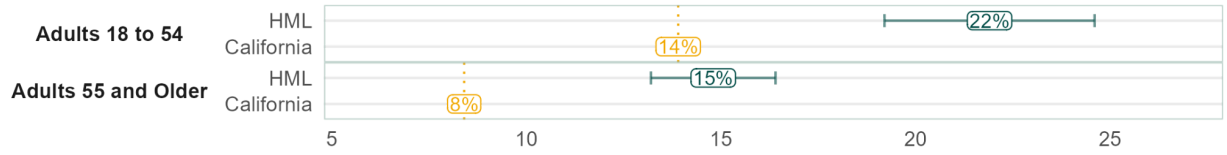
Suicide Ideation, Suicides, and Firearm-Related Deaths:

The previous section revealed higher rates of both suicides and firearm-related deaths in the region. On a national scale, suicides constitute more than half of firearm deaths, followed by homicide, whereas less than three percent of firearm deaths are unintentional (Gramlich, 2023). Furthermore, a 2022 report found that roughly half of Humboldt County suicides occurring between 2005 and 2021 were by firearm (source). Consequently, the region's heightened firearm-related deaths may be largely influenced by its elevated suicide rate.

As shown below, multiple data sources also strongly signal higher risk factors for suicide. Both youth and adults are more likely to report having considered suicide, and youth in the region are more likely to have reported feelings of sadness across the Redwood Coast. Studies have shown a strong link between suicide ideation and completion (Dekkers, et al., 2018); therefore, suicide ideation provides a proximate explanation for both the region's elevated suicide rate and elevated firearm-related deaths.

Figure 4.10

Have you ever seriously thought about committing suicide? (2011 - 2022)



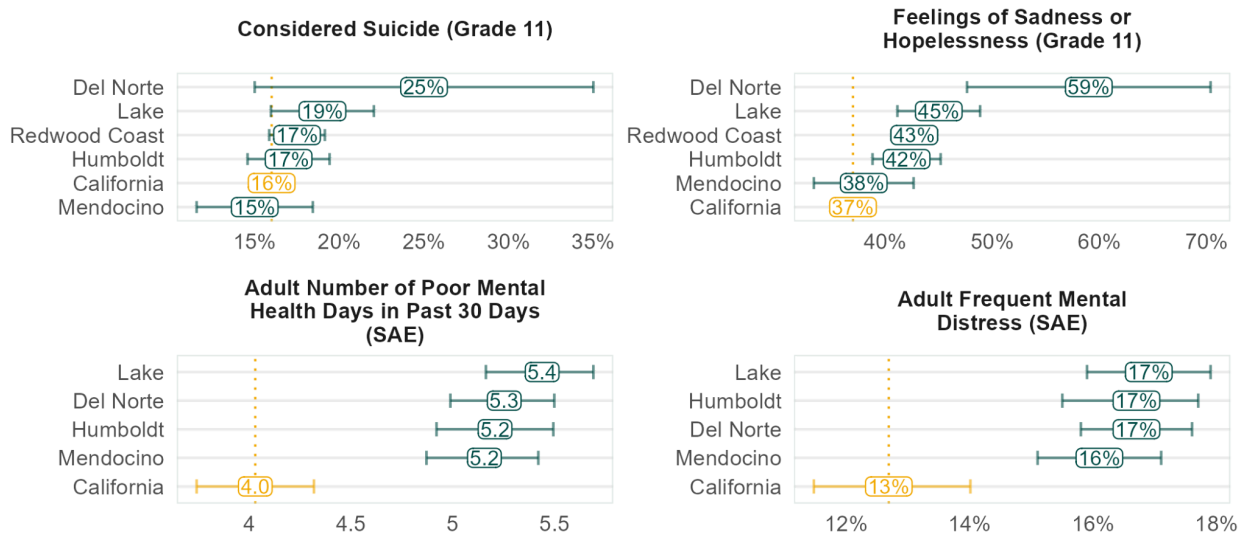
Note. Data sourced from the CHIS.

Figure 4.11

Mental Health Indicators (Adult Estimates 2020, Youth Data 2017 - 2019)

[16] Another factor not captured above, but particularly salient in the rural Redwood Coast context, is emergency medical response (EMS) times. EMS response times are significantly associated with motor vehicle mortality rates (Byrne et al., 2019). Research indicates a 1.46 times greater risk of mortality for an EMS response time of 12 or more minutes compared to seven or fewer. A national study found that the median EMS response time is six minutes in urban or suburban regions and 13 minutes in rural areas. This study also found that 10% of EMS response times were 26 minutes or longer in rural areas (Carr et al., 2017).

[17] Motor vehicle deaths are included in unintentional injury deaths.



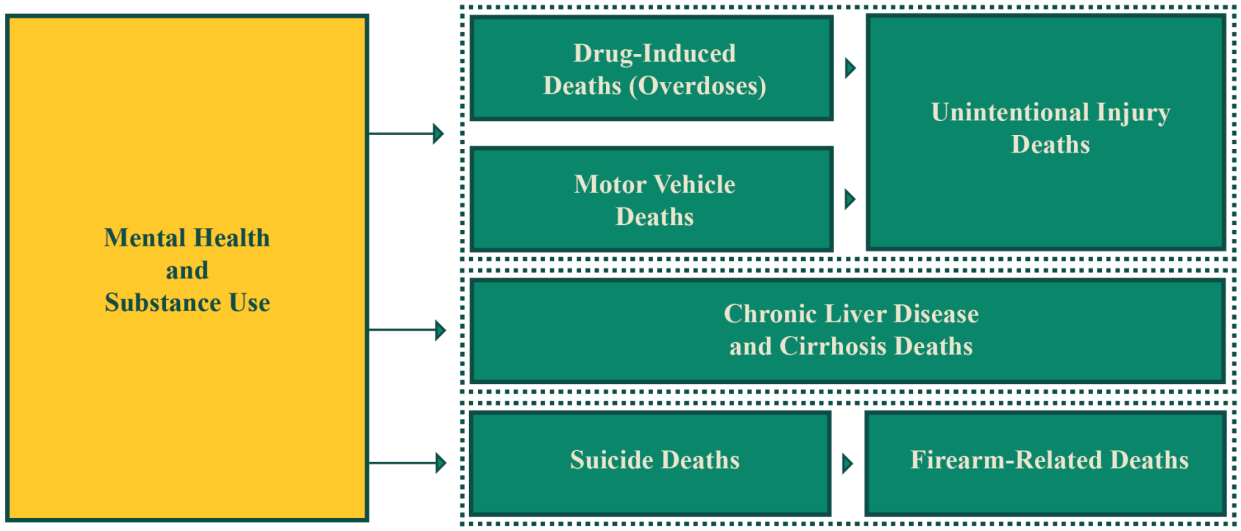
Note. Estimate adult data sourced from CHRR. Youth data were sourced from CalSCHLS "Secondary Student: Substance Use" data portal.

It may be that mental health and substance use are also factors contributing to the region's elevated rates of disability, particularly among adults 18 to 34. Both mental health and substance use disorders are leading causes of disability and *the* dominant causes of disability among adults younger than 35, accounting for over 35% of years lived with disability nationwide (National Center for Complementary and Integrative Health). See Appendix C for further analysis of disability rates.

The figure below illustrates the health outcomes, proximate factors, and relationships explored in relation to mental health and substance use. Amongst the leading causes of illness and death, mental health and substance use appear to play either a direct or indirect role in contributing to many of the disparities in health outcomes in the region. Along with the analysis of tobacco use illustrated previously, those health outcomes with the strongest disparity between the Redwood Coast and the state appear to be strongly influenced by tobacco use, substance use, and mental health factors.

Figure 4.12

Mental Health and Substance Use are Contributing Factors to Disparities in Health Outcomes



Takeaways

1. The evidence indicates that rates of mental illness, substance use, and tobacco use are elevated relative to the state.
2. Health outcome disparities between the region and the state are largely consistent with these elevated mental and behavioral health challenges.

Section 5. ECONOMIC, SOCIAL, INSTITUTIONAL, AND ENVIRONMENTAL FACTORS

The Social Determinants of Health (SDOH) is a popular framework for conceptualizing non-medical factors that influence health outcomes. This framework typically encompasses five key themes: economic stability, educational access, health access, neighborhood environment, and the social context (Healthy People 2030). The following section analyzes factors drawn from this framework and also considers related factors that are broadly discussed in the region's community health assessments.

A review of the region's community health planning documents reveals several emergent health factors within the context of the social determinants of health summarized below.

Figure 5.1

Public Health Planning Document Themes

Socioeconomic Factors	Social Factors	Healthcare Barriers
• **Poverty** and/or **Employment** (Del	• **Adverse childhood experiences, child**	• **Lack of providers, access**

Norte, Mendocino, Lake) ● **Housing issues** (Humboldt, Mendocino, Lake) ● **Food issues** (Humboldt, Del Norte, Lake)	**abuse** (Del Norte, Mendocino) ● **Domestic violence** (Del Norte)	**to care** (all) ● **Lack of mental or behavioral health providers** (Humboldt, Del Norte) ● **Lack of dental care providers** (Del Norte)

While this study does not attempt to establish direct cause-and-effect relationships between these factors and the proximate risk factors or health outcomes discussed earlier, it does investigate the connections between these factors and the proximate determinants and health outcomes. This inquiry serves a dual purpose: firstly, to ascertain whether substantial disparities exist between the state and the region for each factor addressed below, and to, secondly, where data allows, quantify the strength of the association between these risk factors and the health behaviors and outcomes previously examined. This serves the overarching goal of not only identifying potential adverse disparities but also, by assessing the strength of these relationships, determining populations that are most at risk.

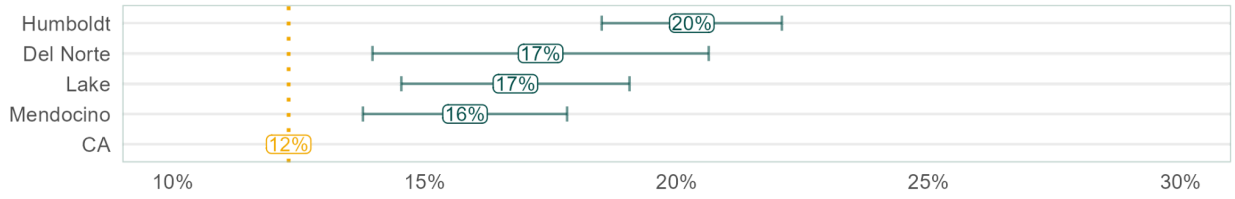
Socioeconomic Factors

Poverty

Economic conditions strongly influence health disparities. Poverty is linked to lower life expectancy and increased health risks related to obesity, smoking, substance use, and chronic stress (Healthy People 2030). Child poverty is particularly detrimental to health and well-being. Children raised in low-income households face multiple adverse conditions that harm their health and contribute to a cycle of economic disadvantage. These conditions include impaired early childhood brain development, obstacles to learning and social functioning, and increased behavioral problems (Damon). Children in poverty are also more likely to suffer from lead poisoning, experience abuse, neglect, hunger, drop out of high school, or become teenage parents (Aber et al., 2012).

As shown below, poverty rates are sharply higher in the Redwood Coast compared to the state rate. Furthermore, data presented in Appendix E show that poverty rates are particularly high among children and youth as well as people of color and Hispanic populations.

Figure 5.1
Poverty Rates (2017 - 2021)



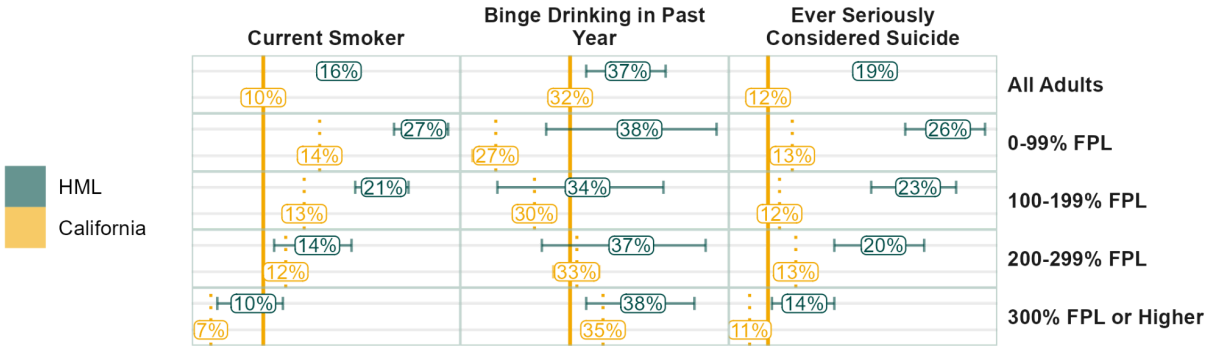
Note. Data sourced from the ACS.

As shown below, poverty in the Redwood Coast appears to be strongly connected with two proximate risk factors including smoking and suicide ideation. Nearly 27% people living below the poverty line in the region are current smokers compared to just 15% statewide. Similarly, 26% of people living below the federal poverty level (FPL) have seriously considered suicide.

Statewide, recent binge drinking is *positively* associated with income, a finding that is not uncommon of studies linking socioeconomic status to heavy drinking (Collins, 2016). Regionally, those with incomes above the poverty line have rates of binge drinking consistent with state rates, however among those below the poverty rates of binge drinking are significantly higher compared to those in the same income bracket statewide.

Figure 5.2

Proximate Risk Factors by Income Range (2011 - 2021, Binge Drinking 2011 - 2015)



Note. Data sourced from the CHIS. FPL refers to the federal poverty line.

While a causal mechanism, if any, between smoking, suicide ideation and poverty is unclear, those with low or moderate incomes are at much greater risk of these risk factors in the Redwood Coast. Therefore, policies intended to address these risk factors should have a focus on these income groups.

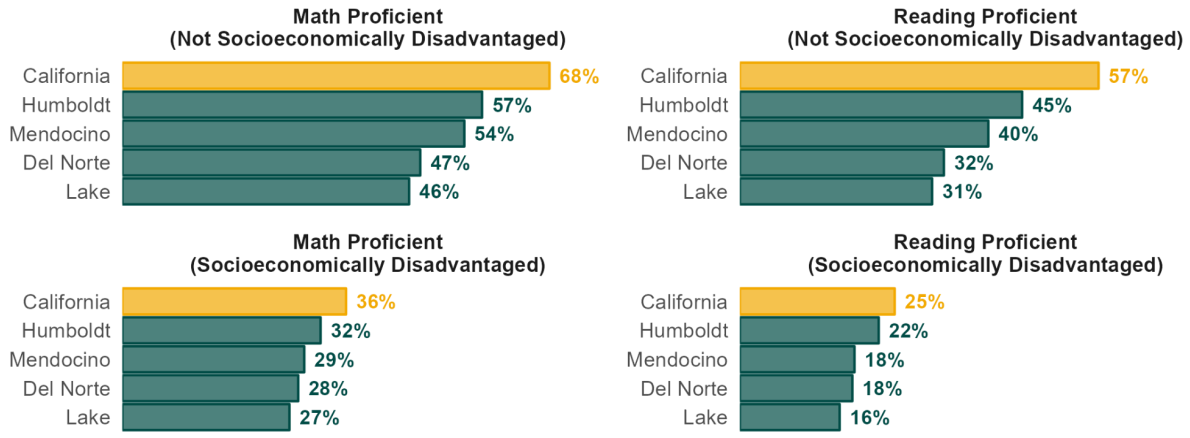
Educational Access and Outcomes

Statistically, people with higher levels of education live longer and have lower all-cause mortality rates. While the link between health and education is debated, research suggests that individuals with higher education levels are less prone to certain *preventable* illnesses/mortalities and tend to live longer. Education is strongly linked to mortalities from lung cancer, respiratory diseases, homicides, and certain accidents, whereas the link is less strong for causes of death that are less preventable such as cancers other than lung cancer (Hernandez and Hummer, 2013). In recent decades, smoking has become strongly associated with education levels. In the late 1960s, approximately 40% of college-educated people smoked compared to 45% of people without a college education, but the proportion of college graduates who smoke has fallen faster than that of those without a college degree. More recently, just 6.5% of college graduates smoke compared to 23.1% for those with a high school diploma or less (Cahn et al., 2018). Therefore, factors tied to preventable and behavioral risk appear to influence the relationship between health and education.

According to Healthy People 2030, target objectives for improving educational access include improving high school graduation rates, increasing college enrollment, and improving math and reading proficiencies in K-12 students ("Education Access and Quality"). As shown below, in the Redwood Coast, gaps in educational attainment start early, with K-12 students lagging behind their statewide peers on reading and math proficiency.

Figure 5.5

K-12 Math and Reading Proficiency by Socioeconomic Status (2017 - 2019)

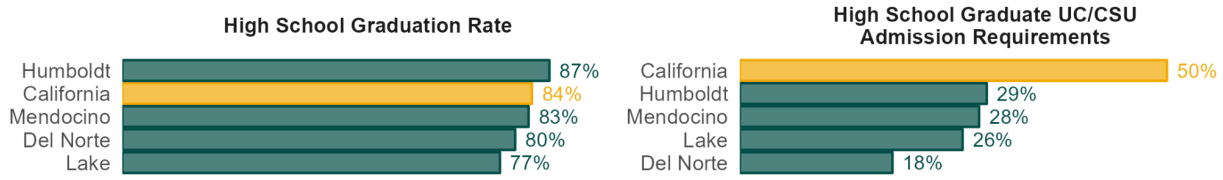


Note. Data sourced from Kidsdata.org. Includes grades 3, 4, 5, 6, 7, 8, and 11. Based on California Assessment of Student Performance and Progress's 'Smarter Balanced Summative Assessment'.

In the Redwood Coast, high school graduation rates are on par with the state rate, but high school graduates in the region are much less prepared for college admission compared to the state average. Across the region, high school graduates complete the course requirements for admission to the University of California (UC) or California State University (CSU) systems (i.e. "A–G courses") at roughly half the rate of their statewide counterparts.

Figure 5.6

High School Graduation Rates and College Preparedness (2017 - 2021)

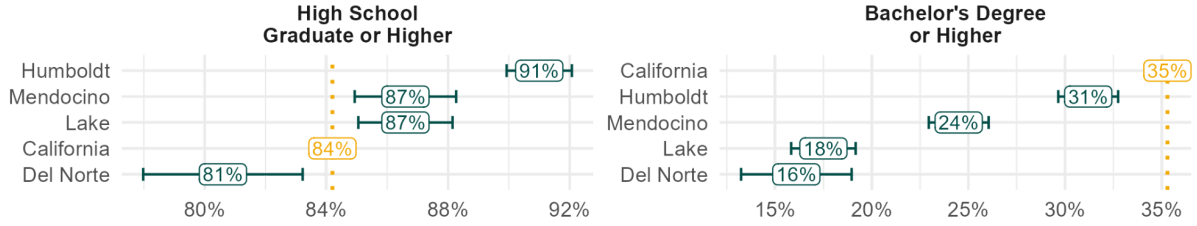


Note. Data sourced from Kidsdata.org. Admission requirements data including only 2017-2019. Percents are annual averages. High school graduation rate is defined as the percentage of public school students from the graduating class who receive a high school diploma. Admission requirements is defined as the percentage of high school graduates who complete all courses required for UC/CSU admission with a grade of "C" or better.

Correspondingly, except for Del Norte[18], the adult population has achieved high school graduation rates that are on par with or even exceed the state average. However, all Redwood Coast counties lag behind in four-year degree attainment. Therefore, while the region fairs relatively well in terms of high school graduation, it appears that the educational system faces challenges in preparing high school graduates for college.[19]

Figure 5.7

Educational Attainment, Population 25 Years or Older (2017 - 2021)



Note. Data sourced from the ACS.

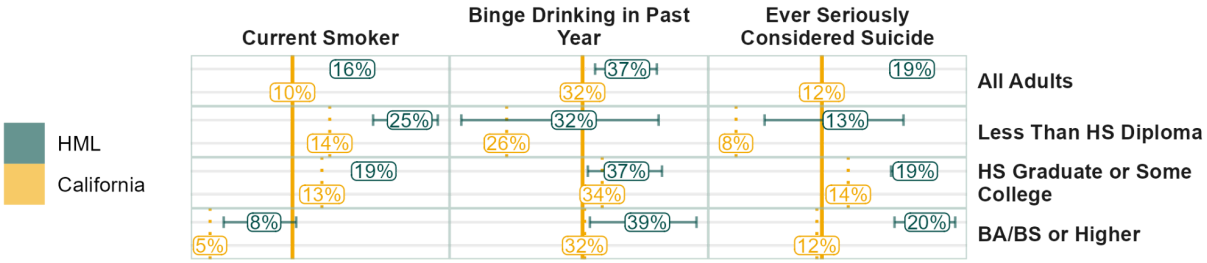
[18] Del Norte's figure is likely substantially skewed by the Pelican Bay State Prison population.

[19] Another contributing factor for the gap in higher educational attainment may be a comparative lack of four-year colleges and universities that are geographically accessible for much of the population in the region. Only Humboldt County is home to a public university.

With respect to the health challenges for the region, educational attainment appears to be strongly associated with tobacco use.[20] Both in the region and across the state, smoking rates decrease significantly as educational attainment increases— however, this relationship is particularly strong in the Redwood Coast. One in four individuals with less than a four-year college degree is a current smoker in the Redwood Coast, compared to just 14% statewide. Therefore, to combat tobacco use effectively in the region, it is crucial to focus efforts on adults with lower levels of education and on young people who may be facing academic difficulties.

Figure 5.8

Proximate Risk Factors by Education (2011 - 2022, Binge Drinking 2011 - 2015)



Note. Data sourced from the CHIS.

Social Factors

Social Isolation

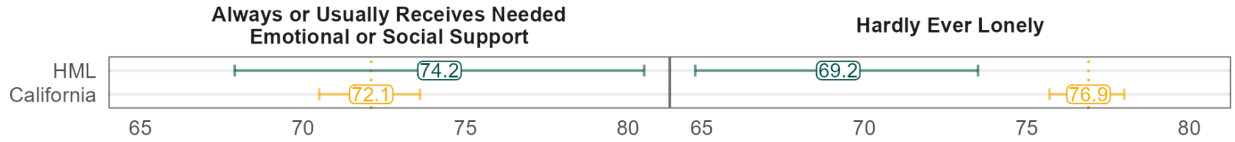
A recent Surgeon General report brought national attention to health impacts of social isolation and loneliness, raising the issue as urgent and requiring 'immediate awareness and action'. The report documents the health risks of social isolation and loneliness including a wide range of physical and mental health outcomes including cardiovascular disease, hypertension, diabetes, infectious disease, cognitive decline, depression, and anxiety (U.S. Surgeon General, 2023).[21,22]

Data on loneliness at the local level is scarce. However, as shown below, data from CHIS indicate that loneliness among adults 65 and over significantly fewer indicates hardly ever feeling lonely, suggesting that the experience of loneliness among the elderly population is more prevalent in HML.

[20] Alcohol use and suicide ideation do not exhibit clear relationships with educational attainment. Rates of both appear to be *lower* among those with less than a high school education.
[21] The Surgeon General defines **social isolation** as "Objectively having few social relationships, social roles, group memberships, and infrequent social interaction. (2023)".
[22] The Surgeon General defines **loneliness** as "A subjective distressing experience that results from perceived isolation or inadequate meaningful connections, where inadequate refers to the discrepancy or unmet need between an individual's preferred and actual experience (2023)".

Figure 5.9

Loneliness, 65+ (2019 - 2020)

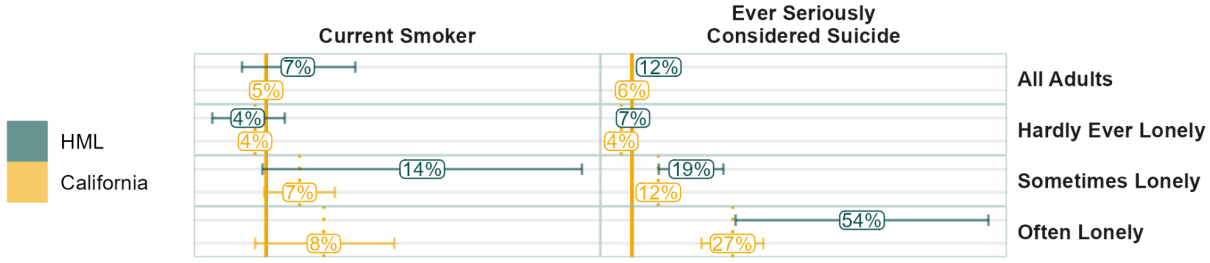


Note. Data sourced from the CHIS.

As shown below, older adults who experience loneliness are at higher risk of smoking and suicide ideation. In particular, over half of Redwood Coast seniors who report often feeling lonely have seriously considered suicide, significantly and substantially higher than those who report sometimes feeling lonely or hardly ever feeling lonely. Therefore, older Redwood Coast residents who indicate that they often feel lonely appear to be at high risk for one of the region's most elevated causes of death.

Figure 5.10

Proximate Risk Factors by Loneliness, Age 65+ (2019 - 2020)

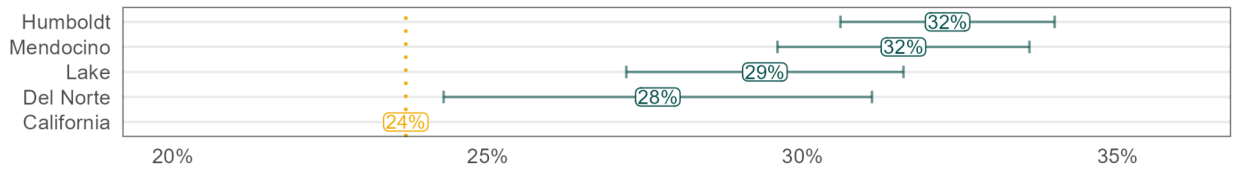


Note. Data sourced from the CHIS. Binge drinking data are not available for 2019 and 2020. Smoking data not available for the "Often Lonely" category.

As shown in the figures below, significantly more householders live alone in the Redwood Coast, indicating greater levels of social isolation within the household context. Isolation is a critical risk factor for suicide, particularly among men who are are about four times more likely to commit suicide compared to women (CDC, 2023). Men who live alone are at elevated risk for suicide, and middle aged men living alone are two times more likely to die by suicide than men not living alone (U.S. Surgeon General). As shown in Appendix H, significantly and substantially more men in the HML region live alone, including middle aged men.

Figure H.1

Householders Living Alone, Percent of Households (2017 - 2021)



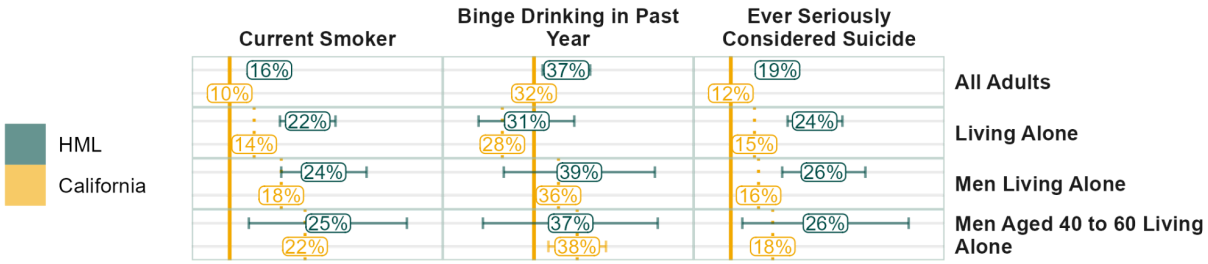
Note. Data sourced from the ACS.

As shown below, living alone appears to be positively associated with smoking and suicide ideation, with 22% of adults living alone being a current smoker, and nearly a quarter of adults living alone having considered suicide. Conversely, living alone does not appear to be related to recent binge drinking.

While there is only a slightly higher rate of suicide *ideation* among men who live alone, studies show that men tend to be more likely to die from a suicide attempt compared to women, as men tend to choose more lethal means of suicide such as firearms (National Institute of Mental Health.). Therefore, while living alone does not appear to have a larger impact on the probability of suicide *ideation* on men compared to women, the impact that it has may be more likely to result in a completed suicide.

Figure 5.12

Proximate Risk Factors by Isolation, Sex, and Age (2011 - 2021)



Note. Data sourced from the CHIS.

Social isolation and loneliness appear to be potential risk factors for the health challenges in the region. Monitoring isolation and loneliness and promoting quality social connection may therefore be effective approaches to improving the health of the region.

Adverse Childhood Experiences

Research has shown that childhood experiences have profound and lasting effects on health behaviors and outcomes later in life. People who have multiple adverse childhood experiences (ACEs) are at far greater risk of poor health outcomes or behaviors including depression, substance use, and tobacco use (Center on the Developing Child). ACEs include abuse and

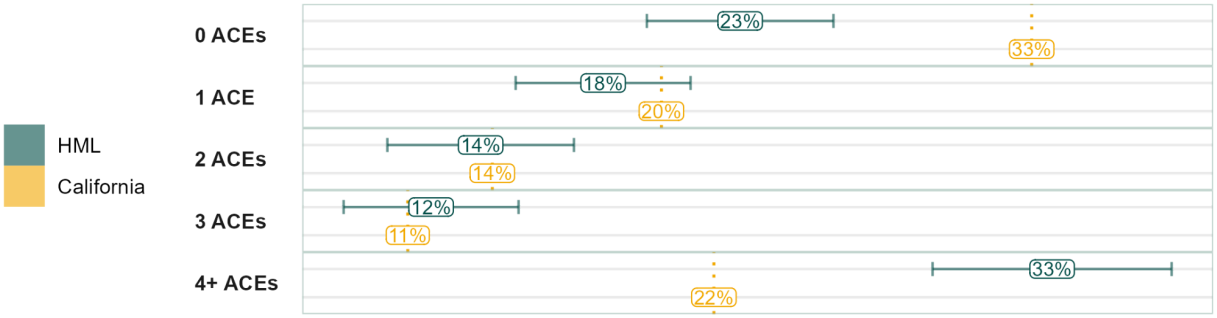
neglect as well as dysfunction in the household including mental illness, problematic substance use, violence against mothers, or imprisonment of a household member (Anda et al., 1998).

The probability of poor health outcomes increases with the number of ACEs in childhood in a dose-dependent fashion (see Appendix F). For example, an individual with one ACE is approximately 1.3 times more likely to have ever injected drugs compared to an individual with no ACEs. For an individual with four or more ACES, however, this likelihood profoundly rises to 10.3 times. Studies show that ACEs are strongly associated with a higher prevalence of all proximate risk factors identified in this report including tobacco use, substance abuse, and mental health challenges.

The proportion of adults with four or more ACEs is significantly and substantially higher in the Redwood Coast compared to the state average, while the percentage of adults with zero ACEs is significantly lower. Furthermore, as shown in Appendix F, recent data reveals that rates of domestic violence and child abuse are elevated across the region, indicating that the region's youth are at risk for ACEs.

Figure 5.13

Number of ACEs Among Adults, Percent of Population (2021 - 2022)

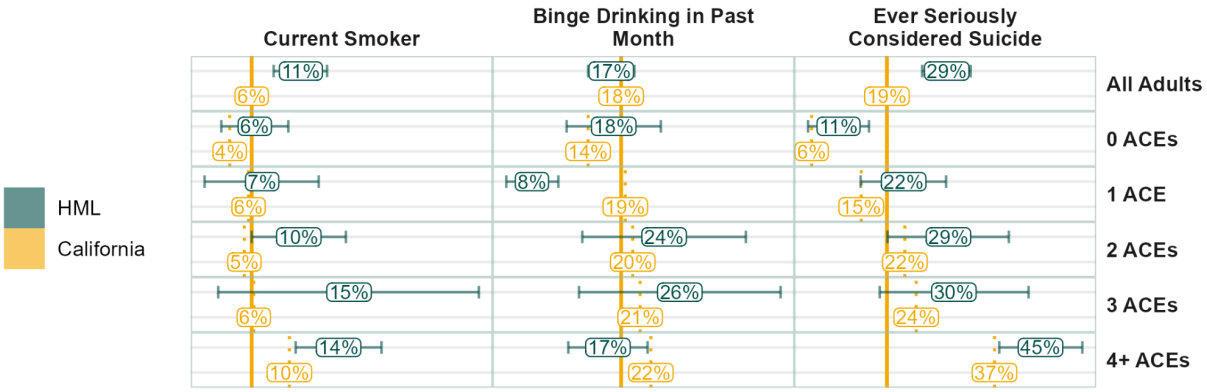


Note. Data sourced from the CHIS.

Statewide, smoking, recent binge drinking, and suicide ideation are positively associated with ACEs. Regional estimates, while subject to more statistical variation, indicate a similar trend. In particular, 45% of Redwood Coast adults with four or more ACEs have seriously contemplated suicide during their lives compared to just 11% of Redwood Coast adults with no ACEs and 6% of California adults with no ACEs. Therefore, Redwood Coast residents indicating multiple ACEs are at high risk for one of the region's most elevated causes of death.

Figure 5.14

Proximate Risk Factors by Number of ACEs (2021 - 2022)



Note. Data sourced from the CHIS. ACEs data are available only for 2021. To make cross variable comparisons, the data must share a year in common. Binge Drinking in the Past Month is available for the 2021 year whereas Binge Drinking in the Past Year is not. Current Smoker with 1 ACE is statistically unreliable.

Due to the relationship between ACEs and future health behavior and outcomes endemic in Redwood Coast, these findings present a potential root factor that may explain some of the region's elevated tobacco, substance use, and suicide risk. Therefore, interrupting the cycle of ACEs and subsequent health consequences may present a powerful opportunity for improving the long-term health of the region. In particular, the CDC estimates that prevention of ACEs has the potential to reduce depression by 44%, smoking rates by 33%, heavy alcohol use by 24% as well as making substantial improvements in corresponding health outcomes such as COPD and improvement in economic well-being (2021).

The Centers for Disease Control (CDC) has identified strategies and approaches to help prevent or reduce the impact of ACEs. These approaches are discussed further in "Findings and Recommendations".

Community and Institutional Factors

Homelessness

People experiencing homelessness face a significantly higher risk of premature death, chronic disease, depression, and substance use (Collins 2016).[23] While the data presented below indicate an elevated level of homelessness in the Redwood Coast, it is important to acknowledge that tracking and measuring homelessness is a complex task, leading to limitations and uncertainties

[23] By some estimates 9 to 10 times higher than the general population.

in these figures. Nevertheless, these indicators suggest an elevated homelessness rate across the region compared to the rest of California.

As shown below, homeless point-in-time (PIT) data from the Department of Housing and Urban Development (HUD) reveal that homelessness on a per capita basis in the region exceeds the state average across the region.[24] These data do not include Del Norte, however, a 2023 report from the NorCal CoC region found 694 homeless in Del Norte amounting to a rate of 2,525 per 100,000 population (source).

Figure 5.3

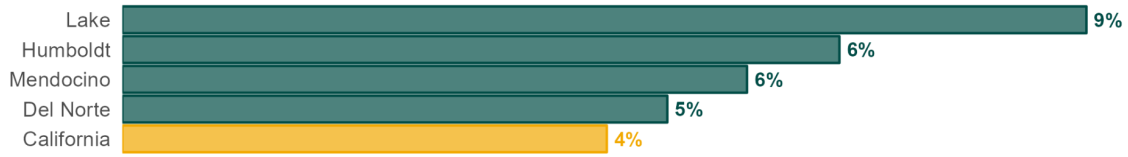
Total Counted Homeless per 100,000 Population by Continuum of Care (2016 - 2020)[25]

Note. Data sourced from the U.S. Department of Housing and Urban Development's datasets on Point-in-Time (PIT) estimates, a count of sheltered and unsheltered individuals experiencing homelessness. Data are 5-year averages from 2016 to 2020. Rates calculated by the author using population data are 5-year estimates from the ACS from 2016 to 2020. Population estimates are summed for each CoC service area by county.

Similarly, as shown below, an alternative data source indicates a greater proportion of youth homelessness among public school students across the region.

Figure 5.4

Homeless Public School Children (2011 - 2014 and 2016 - 2018)



[24] HUD compiles reported homeless counts gathered by regional participants of the Continuum of Care (CoC) program throughout the U.S. During a 24-hour period in the first ten days of January each year, CoC participants conduct a Point-in-Time (PIT) count of homeless people in their respective regions. These counts include both sheltered homeless as well as people living in areas not meant for habitation.
See Appendix H for a comparison of all Continuums of Care in California. Humboldt and Mendocino CoCs have the highest rates in the state.

[25] The 2021 data, which shows a dubious decline in measured homelessness, are deliberately excluded. These data are not comparable to prior year estimates due the the effects of COVID restrictions. Many shelters, for example, reduced capacity in response to CDC COVID-19 guidelines, reducing the headcount of sheltered homeless (U.S. Department of Housing and Urban Development).

Note. Data sourced from Kidsdata.org. Defined as the percentage of public school students recorded as being homeless at any point during the school year. Data for 2015 are not available. Modoc County data is missing for all but 2014

While local data on the connection between homelessness and health is limited, state-level data reveals that homeless public school students have substantially higher rates of cigarette smoking, substance use, and suicidal thoughts compared to their non-homeless peers (CalSchls). Given the established health risks associated with homelessness, addressing smoking, substance use, and suicide prevention in the homeless population is crucial. Such efforts not only benefit individuals experiencing homelessness but also play a vital role in enhancing the overall health of the community.

See Appendix J for an assessment of housing affordability and availability. These data suggest a scarcity of housing as indicated by lower rental vacancy rates. However, except for Humboldt County, rental affordability (taking both rent and income into account) is consistent with the state average[26].

Food Environment and Nutrition

A healthy diet composed of limited portions of vegetables, fruits, whole grains, low fat dairy, proteins, and healthy oils is associated with lower all-cause mortality, cardiovascular disease, obesity, diabetes, breast and colorectal cancer (Healthy People 2030). Thus, barriers that prevent access to a healthy diet such as poverty, high prices, or transportation, may have an adverse influence on these health outcomes.

Rates of heart disease are elevated across the region along with somewhat elevated rates of obesity, breast cancer and colorectal cancer[27]. Conversely, however, evidence suggested rates of diabetes consistent with or lower than state averages across the region. Food related health issues are raised in Humboldt, Del Norte, and Lake county health planning documents. In particular, a 2019 Del Norte Community Health Assessment found high rates of food insecurity in Del Norte, disproportionately impacting children (source).

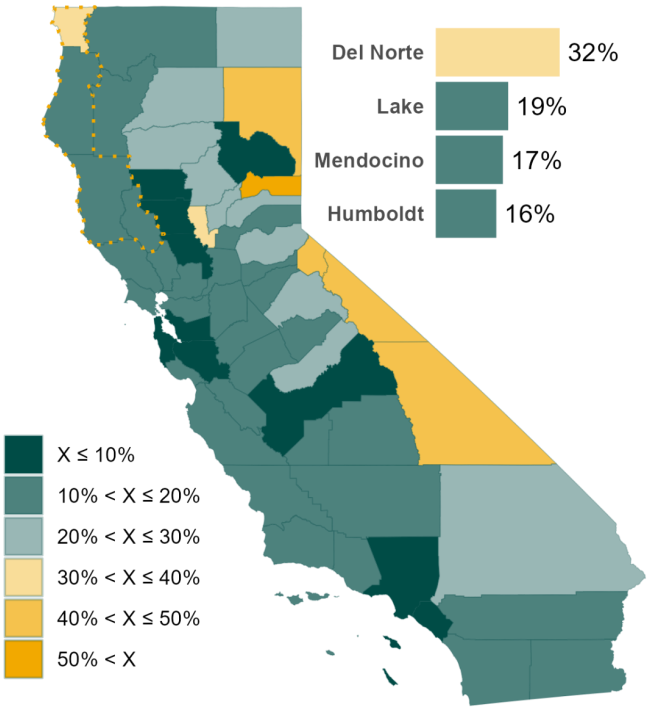
[26] Humboldt County's affordability, as indicated by the percentage of the population paying 35% or more of their income on rent, is likely strongly influenced by the student population who statistically would have little or no income.

[27] The most recent CDPH data release shows a lower rate of age-adjusted heart disease mortality in Del Norte County, however, the 2017-2019 data release shows higher rates in Del Norte. Moreover, CDC PLACES data suggest higher rates of heart disease in Del Norte County.

As shown below, nearly one-third of the Del Norte population lives more than 10 miles from a grocery store. Although proximity in and of itself has been found to only have a moderate impact on diet, in the region's more extreme rural environments, distance and scarcity of options may compound with other factors such as poverty to create barriers to healthy food options that ultimately contribute to disease outcomes (Ploeg and Rahkovsky, 2016). Such barriers may be contributing factors to adverse food related health outcomes above.

Figure 5.18

Percent of Population Living More than 10 Miles from a Grocery Store (2015)[28]



Note. Data sourced from the USDA Food Environment Atlas.

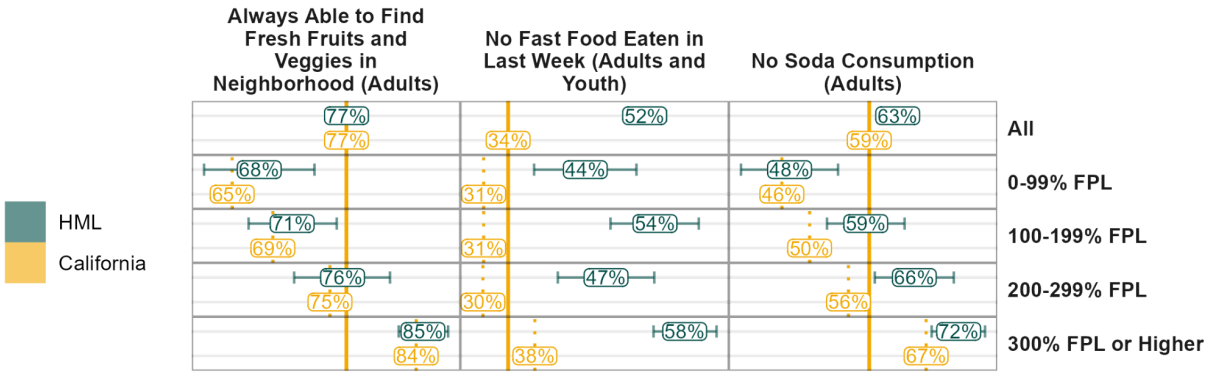
Unfortunately, what data are available strongly suggest that Del Norte is most impacted by food insecurity in the Redwood Coast, yet, CHIS data are not available for Del Norte County to further assess this county's most vulnerable populations. What data are available, for HML, indicate that dietary factors in the region appear to be strongly influenced by household income (see below). Consistent with statewide trends, higher income households are more likely to have local access to fresh produce and less likely to have recently consumed soda and fast-food and are more likely to have access to fresh produce.

[28] USDA defines this as the "Percentage of people in a county living more than 1 mile from a supermarket or large grocery store if in an urban area, or more than 10 miles from a supermarket or large grocery store if in a rural area."

For the HML counties, CHIS data suggest dietary outcomes that are consistent with or superior to state averages across income strata, at least within the limited contexts of fast-food, soda, and fresh produce (see Appendix D for youth dietary outcomes).

Figure 5.19

Dietary Factors by Income Level (2011-2018)



Note. Data sourced from the CHIS. Fast Food data only include 2011-2016. Soda consumption data include only 2011-2017. FPL = federal poverty line.

Therefore, the available data suggest that food insecurity and dietary risks are greatest in Del Norte county and among low income households regionwide.

Healthcare Access and Barriers

The majority of the Redwood Coast is a designated Health Provider Shortage Area (HPSA): regions or populations identified by the U.S. Department of Health and Human Services (HHS) as having a shortage of primary care, mental health, or dental health providers.[29] As shown below, almost all of the region is a Primary Care HPSA, the entirety of the region is a Mental Health HPSA, and a substantial share is a Dental Health HPSA.[30]

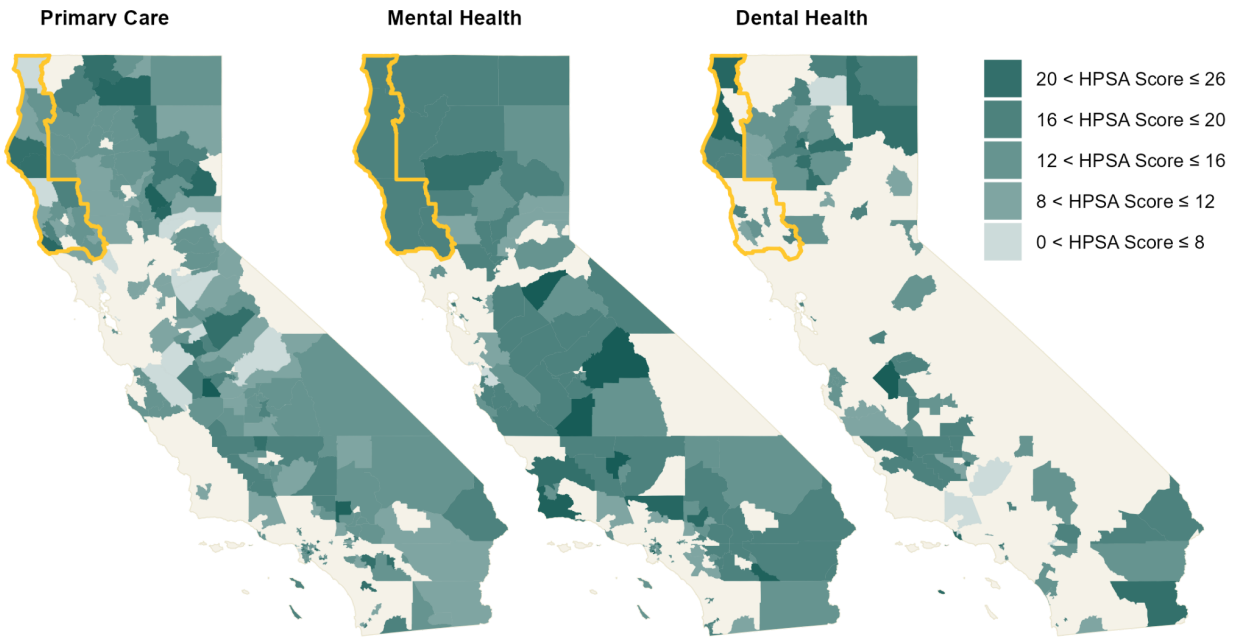
Figure 5.15

Health Professional Shortage Areas and Scores (2023)[31]

[29] These HPSAs are assigned a score, with scores ranging from 0 to 25 for Primary Care and Mental Health and from 0 to 26 for Dental Health, with higher scores indicating greater need. Factors considered in determining the score include the provider-to-population ratio, poverty rate, travel time to the nearest point of care outside of the region, and other factors relevant to the health field (Health Resources & Services Administration). HPSA scores for Primary Care also take into account indicators of infant health. Dental Health scores take into account water fluoridation status. Mental Health scores take into account the percentages of the population over 65 and under 18, alcohol abuse prevalence, and substance abuse prevalence.

[30] See Appendix F for a map of HHS Medically Underserved Areas and Populations.

[31] See national level maps made by the data provider located here: https://data.hrsa.gov/maps/map-gallery.



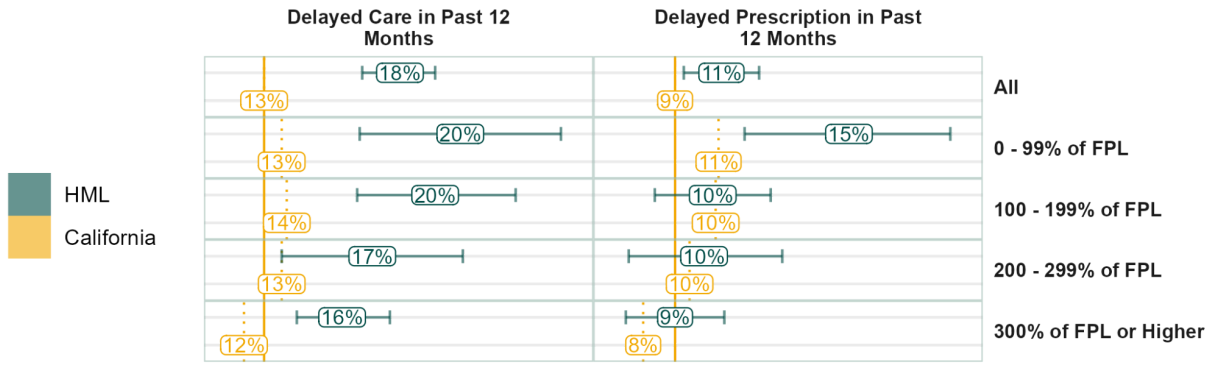
Note. Beige areas are not HPSAs. Blue areas are HPSAs, with darker hues indicating higher HPSA scores (or greater need). The Redwood Coast region is outlined in gold. Data sourced from the Health Resources and Service Administration's data on shortage areas, measuring HPSA areas in primary care, dental health, and mental health.

Access to timely care can prevent occurrence or exacerbation of disease through the prevention of modifiable risk factors, early detection of illness, and management of existing illness to prevent worsening symptoms (Olsen et al., 2010). Improved access to preventive services, including screenings for tobacco, alcohol, depression, and cancer, can lower mortality rates (Centers for Medicare & Medicaid Services, 2010). Conversely, however, delays in healthcare access have been linked to increased mortality (Pizer and Prentice, 2007).

As shown below, a significantly larger proportion of the Redwood Coast population has recently experienced delays in accessing primary healthcare in contrast to the state population. All income brackets experience higher rates of delayed care compared to the corresponding income groups statewide, however, there is a clear trend toward more delays among those with lower incomes. This trend indicates that the scarcity of healthcare impacts all socioeconomic strata, but disproportionately affects those with lower incomes. Moreover, those with incomes below the federal poverty line (FPL) are significantly more likely to have delayed a prescription compared to the same income category statewide, while those with higher income levels do not share this experience. Similar data in Appendix G show that all income strata report more 'difficulty' accessing care at rates significantly higher than the state rate

Figure 5.16

Delayed Healthcare, Percent of Total Population (Left 2011 - 2022, Right 2013 - 2022)



Note. Data sourced from the CHIS.

Delayed care may also be a factor in the region's elevated age-adjusted mortalities due to prostate cancer, breast cancer, and colorectal cancers. For all three, delayed care is associated with higher mortality (prostate_source, source_colon and breast).

Furthermore, CHIS data reveal a stark unmet need for care for those with mental health challenges. Among adults who have seriously considered suicide at some point in their lives, 42.5% (± 5.0%) have delayed care in the past 12 months compared to just 16.4% (± 2.4%) of HML adults who have never considered suicide.

See Appendix F for further analysis of the factors contributing to delayed care. These data and analysis suggest that factors such as transportation in addition to cost and insurance issues may be critical.

See Appendix C for an analysis of Humboldt County's elevated stroke mortality rate as it related to the healthcare resources in the county.

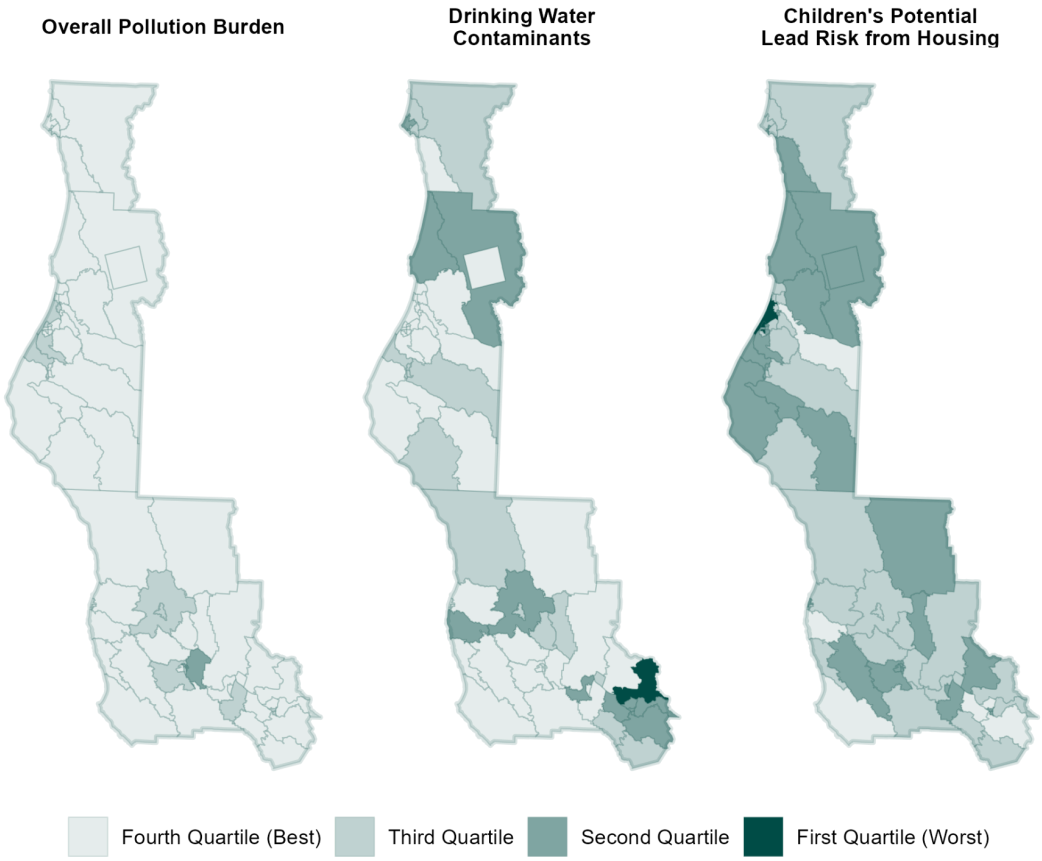
Environmental Factors

Environmental Quality Indicators

Environmental pollutants can contribute to respiratory disease, heart disease, and some cancers (Healthy People 2030, "Environmental Health"). As shown below, CalEnviroScreen 4.0 data indicate that overall the region's pollution burden is lower than the statewide estimates (see "Overall Pollution Burden" below). However, certain environmental risks are elevated in some areas of the region, including children's lead risk as well as drinking water contaminants. See Appendix H for all CalEnviroScreen 4.0 indicators.

Figure 6.1

CalEnviroScreen 4.0 Risk Factors



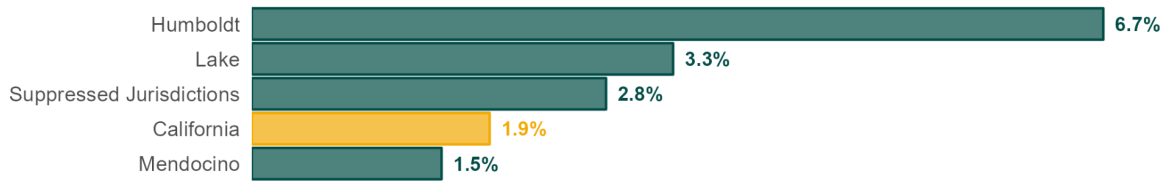
Note. Data sourced from CalEnviroScreen 4.0.

The data above suggest that children in the region may be more likely to be exposed to lead. However, it is critical to note that the CalEnviroScreen 4.0 "Children's Lead Risk from Housing" variable does not directly measure lead exposure, and instead infers a level of risk based on the incidence of child poverty and the age of housing structures[32]. An additional data source shown below, shows that children's blood lead levels (BLL) among children age 5 and under are elevated in Humboldt and Lake counties. Moreover, Humboldt's BLL levels are the second highest in the state.[33] CalEviroScreen4.0 data above suggest that the epicenter of lead risk in Humboldt County is in the Arcata-Eureka-Fortuna region.

Figure K.2

Blood Lead Levels, Children 5 and Under

[32] Exposure to lead-based paint in older homes is the most significant source of lead poisoning in children (source).
[33] Second to Nevada County.



Note. Data sourced from CDPH. Suppressed jurisdictions include Alpine, Amador, Calaveras, Colusa, Del Norte, Glenn, Inyo, Lassen, Mariposa, Modoc, Mono, Plumas, Sierra, Siskiyou, Trinity Tuolumne, Yuba.

Wildfires

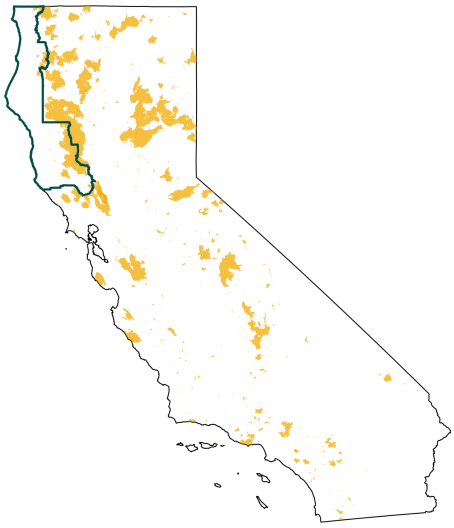
In contrast to man-made pollutants, wildfires and corresponding health risks have in recent years been far more severe in the northern region of the state (as shown below). Smoke from wildfires can impair lung function, contribute to bronchitis, asthma, and heart failure; the region's substantial elderly population are particularly vulnerable to these effects (United States Environmental Agency, 2023). These fires may exacerbate the region's disproportionately high levels of asthma and respiratory illness.

Although not necessarily specific to wildfires, weather-related events do appear to have had an outsized impact on the health of the region compared to the state. Approximately 78% of Redwood Coast residents experienced extreme weather events between 2019 and 2022 compared to just 42% of California residents. As shown below significantly and substantially more residents in the region experience adverse mental and physical health impacts due to recent extreme weather-related events compared to the state as a whole.

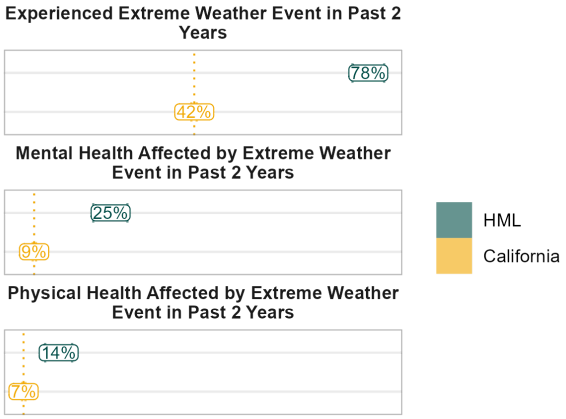
Figure 6.2

Wildfires, Burned Area (2018 - 2022)	*Health Effects of Extreme Weather Events, Percent of Population (2021-2022[34])*

[34] The data collection period includes 2021 and 2022, but the survey question asks respondents to respond based upon their experiences in the past two years. Thus, these data reflect events that may have occurred between 2019 through 2022.



Note. Data sourced from the California Department of Forestry and Fire Protection



Note. Data sourced from the CHIS.

Takeaways

1. Compared to state averages, the region experiences adverse disparities in rates of poverty, homelessness, educational attainment, household isolation, adverse childhood experiences, and access to healthcare.
2. Populations affected by these disparities are more likely to show two key risk factors linked to the health outcomes examined earlier: current smoking and suicide ideation. Although there is research supporting the connections between these disparities and substance use, the limited available local data on substance use do not provide clear links to these disparities specifically within the Redwood Coast.
3. The region faces healthcare shortages and low income households and people with mental health challenges disproportionately experience delays in accessing care.
4. Wildfire health risks and leading poisoning are two critical environmental risk factors for the region.

Section 7. EQUITY ANALYSIS AND AT-RISK POPULATIONS

The following presents a comparative analysis of health factors across different demographic groups within the HML region, emphasizing the identification of at-risk populations.

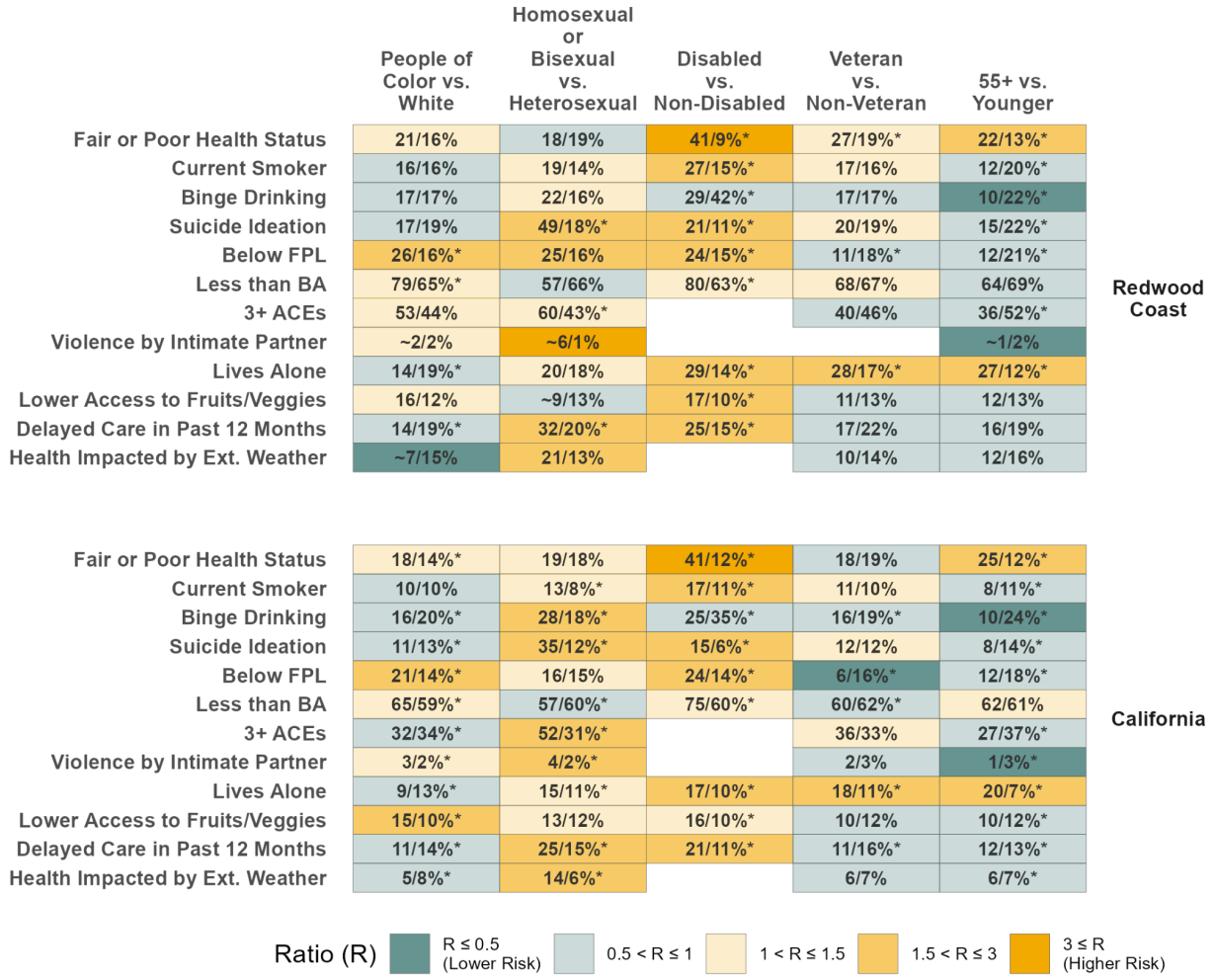
The figure below offers a visual comparison of health outcomes and factors across demographics. Each column illustrates the differences between two populations. As an example,

the first column contrasts the health factors of people of color to the white population. Gold shades denote adverse disparities for the primary population relative to the reference group. A specific observation reveals that, in the HML region, 26% of people of color live below the poverty line, in contrast to 16% of the white population.[35] From these data, several notable trends emerge further highlighting populations at risk in the HML region:

- People of color show higher rates of fair or poor health, higher poverty levels, lower educational attainment, higher ACEs, and more limited access to nutritious foods. Data presented in Appendix E show that people of color in Del Norte County experience higher rates of poverty and higher rates of lack of health insurance.
- Lesbian, gay, and bisexual communities within the HML region face numerous disparities: increased smoking and heavy alcohol consumption, suicidal thoughts, higher poverty rates, elevated ACEs rates, domestic violence, deferred medical care, and adverse weather-related health impacts. Alarmingly, half of this community has seriously contemplated suicide.
- People with disabilities in the region experience higher rates of poor health, increased smoking, suicidal thoughts, poverty, lower educational attainment, living alone, restricted access to healthy food, and deferred medical care.
- The 55+ demographic in the region tends to live solitarily. As expected, a higher percentage report fair or poor health, but this group generally has fewer risk factors. The health trends of the veteran population resemble these patterns, possibly due to a significant age overlap in these two groups within the region.[36]

Figure 7.1
Comparative Analysis of Demographic Disparities in Health Factors (2011 - 2022)

[35] Non-white Hispanics are included in people of color category and white Hispanics are included in the white group.
[36] In the HML region 16.8% of adults 55 and older have served in the military compared to just 4.4% for adults 18 to 54 (2011 - 2022 CHIS data).



Note. Data sourced from the CHIS. (*) denote statistically significant differences and (~) denote unstable estimates. It is possible that an estimate can be unstable and simultaneously significantly different. Missing values not shown. Years are selected based on all available years from 2011 on. Binge drinking is either “Binge Drinking in Past Month” or “Binge Drinking in Past Year” depending on data availability.

Section 8. POLICY FOCUS AREAS AND RECOMMENDATIONS

By uncovering health outcomes and risk factors that exhibit adverse disparity with state averages, the report's intention is to promote a clear understanding of the region's shared health challenges and at-risk populations, which, in turn, can guide prioritization and collaborative efforts to address these challenges. The following categorizes the report's findings into three policy areas. The focus is not to detail every challenge and potential solution but to emphasize and prioritize those that emerge as central and high-priority challenges.

Policy Focus Area 1: Smoking Prevention, Education, and Cessation

Key Findings	• Youth and adult smoking is substantially and significantly higher in the region. • Tobacco-related health outcomes are adversely impacted in the region.
At-Risk Populations	Regional data indicate that the following Redwood Coast populations are at elevated risk for tobacco use: • Both youth and adults • People with low income or moderate income • People with lower educational attainment • Youth with academic challenges • People experiencing loneliness or social isolation • People with multiple ACEs • Lesbain, gay, and bisexual individuals • Individuals with disabilities National SAMHSA data indicate that the AIAN may also be at high risk for tobacco use ("2021 NSDUH Detailed Tables").
Recommendations and Resources	• Make use of evidence-based models for tobacco cessation such as Rural Health Information Hub's *Rural Tobacco Control and Prevention Toolkit*, focusing on at-risk populations and addressing the perceived risk of tobacco use.
Suggested Indicators of Success	• A reduction of Grade 11 smoking rates to rates similar to the state rate as indicated by CalSCHLs data.[37] • A reduction in the proportion of 'current smokers' to a rate similar to the state rate as indicated by CHIS data. • Do **not** use smoking data from CHRR, CDC PLACES, or any other SAE data to measure success.[38]

Policy Focus Area 2: Substance Use Prevention and Treatment

Key Findings	• Substance use among youth and adults as well as adverse substance use related health outcomes are elevated in the region. • Redwood Coast rates of Hepatitis C are the highest in the state. • DUIs and alcohol-involved driving deaths are elevated across the region.
At-Risk Populations	Data limitations prevent a comprehensive analysis of the regional at-risk populations; however, local data indicate that the following populations

[37] For each toolkit, see "Program Clearinghouse" for examples of promising programs.
[38] See Appendix A for data limitations.

	are at elevated risk for binge drinking: ● Both youth and adults ● Lesbian, gay, and bisexual individuals National SAMHSA data indicate that the following populations may also be at high risk for substance use disorder ("2021 NSDUH Detailed Tables"): ● AIAN ● People of two or more races ● People with low or moderate income Research also indicates that people with multiple ACEs are at high risk for substance use (Anda et al., 1998).
Recommendations and Resources	● Make use of evidence-based models for substance use prevention and treatment such as Rural Health Information Hub's *Prevention & Treatment of Substance Use Disorders Toolkit*, focusing on at-risk populations and addressing the perceived risks of substance use. ● To address motor vehicle traffic facilities, consider using the UC Berkeley Transportation Injury Mapping System (TIMS) to monitor and respond to DUI, pedestrian and bicycle injury hotspots in your service area.[39]
Suggested Indicators of Success	● A reduction of Grade 11 students who have been "drunk or high at school" to rates similar to the state rate as indicated by CalSCHLs data.[40] ● A reduction in the proportion of DUI crashes to a rate similar to the state rate as indicated by TIMS data.[41] ● A reduction in "All Drugs" overdose deaths to rates similar to the state rate as indicated by the California Overdose Surveillance Dashboard from CDPH. ● Do **not** use alcohol use data from CHRR, CDC PLACES, or any other SAE data to measure alcohol intervention success.[42]

Policy Focus Area 3: Suicide Prevention and Access to Mental Health Care

Key Findings	● Suicides, suicidal ideation, and firearm-related deaths are

[39] This tool, for instance, identifies the intersection of 11th Street and H Street in Arcata, CA in Humboldt County as a hotspot. An account is required, but setup is free, easy, and quick.
[40] Binge drinking in the past 30 days may also be a useful indicator.
[41] Alternatively, alcohol involved OTS Crash Rankings or the proportion of alcohol-involved driving deaths from CHRR may be used.
[42] CHRR alcohol driving deaths does not use SAE data so this could function as an indicator of success.

	elevated in the region. ● The entire region is a mental health provider shortage area. ● Approximately 42.5% of Redwood Coast adults who have seriously considered suicide in their lives have delayed care in the past 12 months, compared to 16.4% of Redwood Coast adults who have not considered suicide. ● People with disabilities and lesbian, gay, and bisexual individuals are more likely to have contemplated suicide and more likely to have recently delayed health care.
At-Risk Populations	Regional data indicate that the following Redwood Coast populations are at elevated risk for suicide ideation: ● Both youth and adults ● People living alone, particularly men ● People with low or moderate income ● People experiencing loneliness or living alone ● People with multiple ACEs ● People experiencing suicidal ideation who have access to a firearm ● Lesbian, gay, and bisexual individuals ● Individuals with disabilities National SAMHSA data indicate that the following populations may also be at high risk for suicide ideation ("2021 NSDUH Detailed Tables"): ● AIAN ● People of two or more races ● Unemployed The CDC indicates that the following populations at elevated risk of suicide completion ("Preventing Suicide Requires a Comprehensive Approach"): ● Veterans ● AIAN ● Individuals with disabilities ● Middle aged adults (35-64 years of age) ● Lesbian, gay, or bisexual youth ● Men working in high risk occupations
Recommendations and Resources	● Make use of evidence-based models for suicide prevention and health access such as Rural Health Information Hub's *Suicide Prevention Toolkit*, *Rural Care Coordination Toolkit*, *Rural Transportation Toolkit*, and Rural Telehealth Toolkit focusing on at-risk populations. ● Work to address underlying risk factors such as child abuse, domestic violence, and ACEs. For instance CDC has prepared a short handbook of tangible evidence-based strategies and approaches to preventing ACEs. Specific recommendations

	include approaches such as early childhood home visitation, recruiting men and boys as allies in prevention, and mentoring programs.
Suggested Indicators of Success	● A reduction in the suicide mortality rate to rates similar to the state rate as indicated by County Health Status Profiles from the CDPH. ● A regionwide reduction of Grade 11 students who have "considered suicide" to rates similar to the state rate as indicated by CalSCHLs data. ● A regionwide reduction of rates of child abuse and domestic violence to rates similar to the state rates as indicated by kidsdata.org. ● A significant reduction in the proportion of the population with a history of suicide ideation who have recently "delayed care" as indicated by CHIS data. ● Do **not** use mental health SAE data from CHRR, CDC PLACES, or any other SAE data to measure success.

APPENDICES

Appendix A: Data Limitations and Methodology

Data Limitations

Several data limitations are evident within this report. First, some data points have suppressed data. In order to protect anonymity/confidentiality, data sources (e.g. CHRR) will omit county-level data when sample sizes are inadequate (e.g. $n < 12$). In the data visualizations throughout this report, missing data will either be suppressed from the visualization with notation, or the missing variable (e.g. county name) will be included in the visualization but without a corresponding value. Frustratingly, this often eliminates the ability to provide estimates for minority populations for counties with low populations.

Wherever feasible, data points include confidence intervals provided by the data source. Unless otherwise stated, all confidence intervals use a 95% level of confidence. In some cases, when necessary variables are available and confidence intervals are not provided by the data source, confidence intervals are calculated with 95% confidence. Because the Redwood Coast counties have small populations, the resulting small sample sizes often produce point estimates with wide confidence intervals.[43] This is a particular challenge quantifying a condition or event among a

[43] As an example, a point estimate for the poverty rate would be the estimated poverty rate (e.g. 20%), and the confidence interval would be a range of values that indicate the reliability of that point estimate. A wide confidence

small subset of a population. This further narrowing of an already small population increases the statistical uncertainty of the estimate, widening confidence intervals.

Data from the Centers for Disease Control (CDC) and Robert Wood Johnson Foundation PLACES project uses regression techniques to estimate health outcomes and behaviors at the county level based on data from the CDC's Behavioral Risk Factor Surveillance System (BRFSS) and the Census Bureau's ACS and Decennial Census population estimates. While these data are model based predictions, they have been shown to be consistent with BRFSS survey estimates at the county level. In light of these limitations, the data provider cautions against using the estimates to detect effects due to local area interventions, as such effects would not necessarily be reflected in the data used to construct the PLACES data (Centers for Disease Control and Prevention). These limitations also apply to some data from CHRR, as this source includes data derived from the PLACES project data. All data sources that use small area estimation techniques (SAE) are indicated as such throughout the report.

The California Health Information Survey (CHIS) is a rich dataset both in breadth and depth, providing direct survey evidence that in many cases are not available or comparable to other datasets. However, a limitation of these data is the aggregation of small population counties into larger statistical units. Because of this limitation, it is not possible to represent Del Norte County in these data as this county has been aggregated with seven other counties outside the Redwood Coast region. Therefore, CHIS data only includes Humboldt, Mendocino, and Lake counties, referred to as HML throughout this report.

Because of these disparate statistical challenges including limited population sizes, imperfect statistical representation of the geographic area, small area estimation (SAE) techniques, wherever possible multiple data sources will be used to bolster the weight of evidence, enabling the identification of trends that emerge from the collective signals conveyed by the data.

Where necessary, a more detailed discussion of data limitations particular to certain data sources is discussed further in their corresponding sections.

Terminology and Technical Methodology

The word "significant" is used deliberately and precisely throughout this report to mean that the difference between a variable and the state average is statistically significant at the level of confidence associated with the confidence interval provided by the data source. A difference between two variables is determined to be statistically significant when their confidence intervals do not intersect. Wide and overlapping confidence intervals should be interpreted as an absence

interval indicates that the point estimate is less reliable, whereas the narrow confidence interval indicates that the point estimate is likely close to reality.

of compelling evidence of difference rather than evidence of similarity between variables. Because of the data limitations above, the data sources used throughout this report may fail to indicate significant differences, when in fact true differences exist.

To facilitate interpretation and comparison of findings, we include the observational period during which the data was gathered in the title of each data visualization. Data publication dates are included in the References page.[44]

All data analysis and visualization in this report was conducted using the R programming language. In this environment, we primarily made use of the Tidyverse suite of R packages. U.S. Census data was drawn from the Census Bureau's application programming interface (API) via the TidyCensus R package. Unless otherwise stated, all maps in this report were made using data drawn from the Census Bureau via the TidyCensus library for R.

International Classification of Diseases (ICD-10) Codes for CDPH Data

Figure A.1

International Classification of Diseases (ICD-10) Codes

All Cancer Deaths	C00–C97
Colorectal Cancer	C18–C21, C260
Lung Cancer	C34
Female Breast Cancer	C50
Prostate Cancer	C61
Diabetes	E10–E14
Alzheimer's Disease	G30
Coronary Heart Disease	I20–I25
Cerebrovascular Disease (Stroke)	I60–I69
Influenza and Pneumonia	J09–J18

[44] When multiple data sources or variables are included, we include the total observational window. For example, if one variable has an observational window of 2015 to 2018 and another has an observational window of 2016 to 2019, 2015 to 2019 will be given in the title.

Chronic Lower Respiratory Disease	J40–J47
Chronic Liver Disease and Cirrhosis	K70, K73–K74
Accidents (Unintentional Injuries)	V01–X59, Y85–Y86
Motor Vehicle Traffic Crashes	V02–V04(1, 9), V092, V12–V14(3–9), V19(4–6), V20–V28(3–9), V29–V79(4–9), V80(3–5), V811, V821, V83–V86(0–3), V87(0–8), V892
Suicide	U03, X60–X84, Y870
Homicide	U01–U02, X85–Y09, Y871
Firearm Related Deaths	U014, W32–W34, X72–X74, X93–X95, Y22–Y24, Y350
Drug Overdose Deaths	X40–X44, X60–X64, X85, Y10–Y14

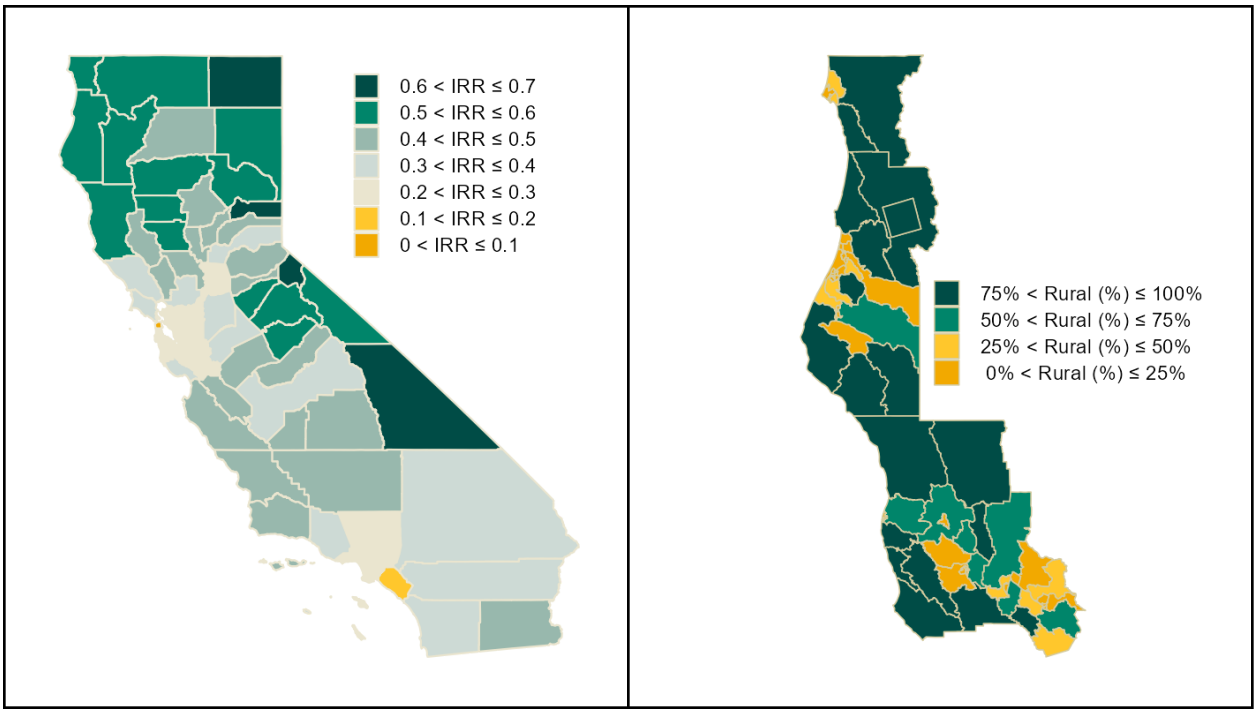
Note. Codes sourced from CDPH County Health Status Profiles 2023 (source).

Appendix B: Further Demographic Analysis

Figure 1.4

Measures of Rurality (2010)

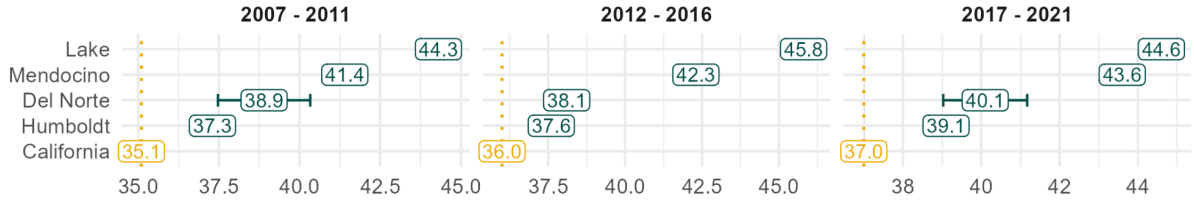
Index of Relative Rurality (IRR)	Census Population Designated "Rural"



Note. Left Panel: IRR scale ranges from 1 (most rural) to 0 (least rural). Data sourced from Kim and Waldorf's 2018 data set titled "The Index of Relative Rurality (IRR): US County Data for 2000 and 2010." Right Panel: Data sourced from 2010 Decennial Census variables P002001 - P002006.

Figure 3.1

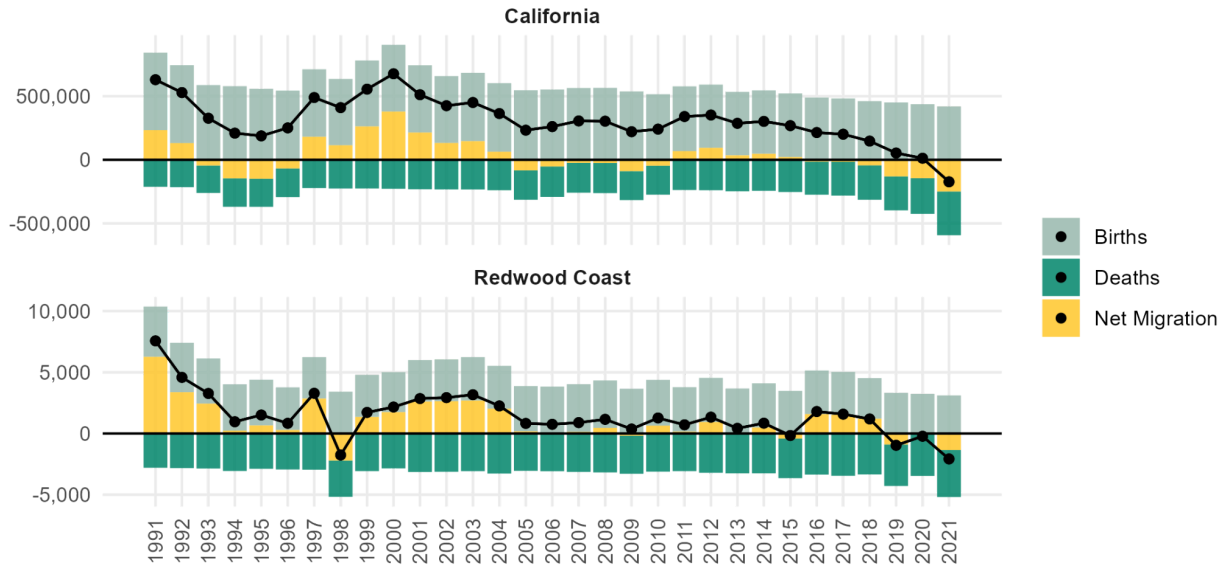
Median Age



Note. Data Source: American Community Survey 5 Year Estimates, Table B01002. Bars indicate 95% confidence intervals.

Figure 3.1

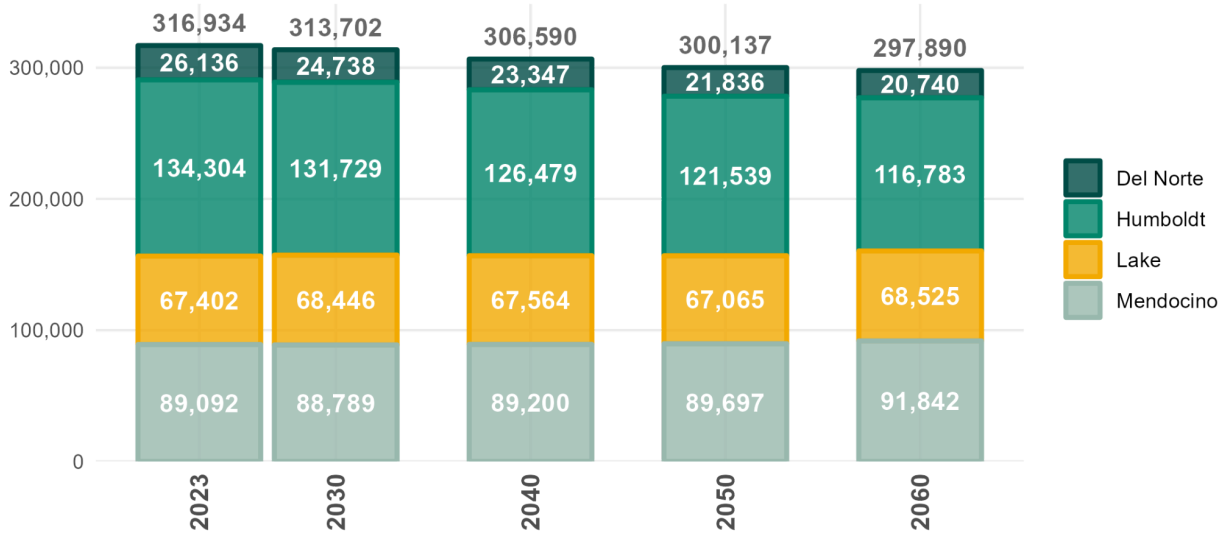
Population Growth and Components of Change



Note. Data sourced from the California Department of Finance

Figure 3.1

California Department of Finance Population Projections



Note. Data sourced from the California Department of Finance.

Figure 3.1

Race and Hispanic Origin, Percent of Population (2020)

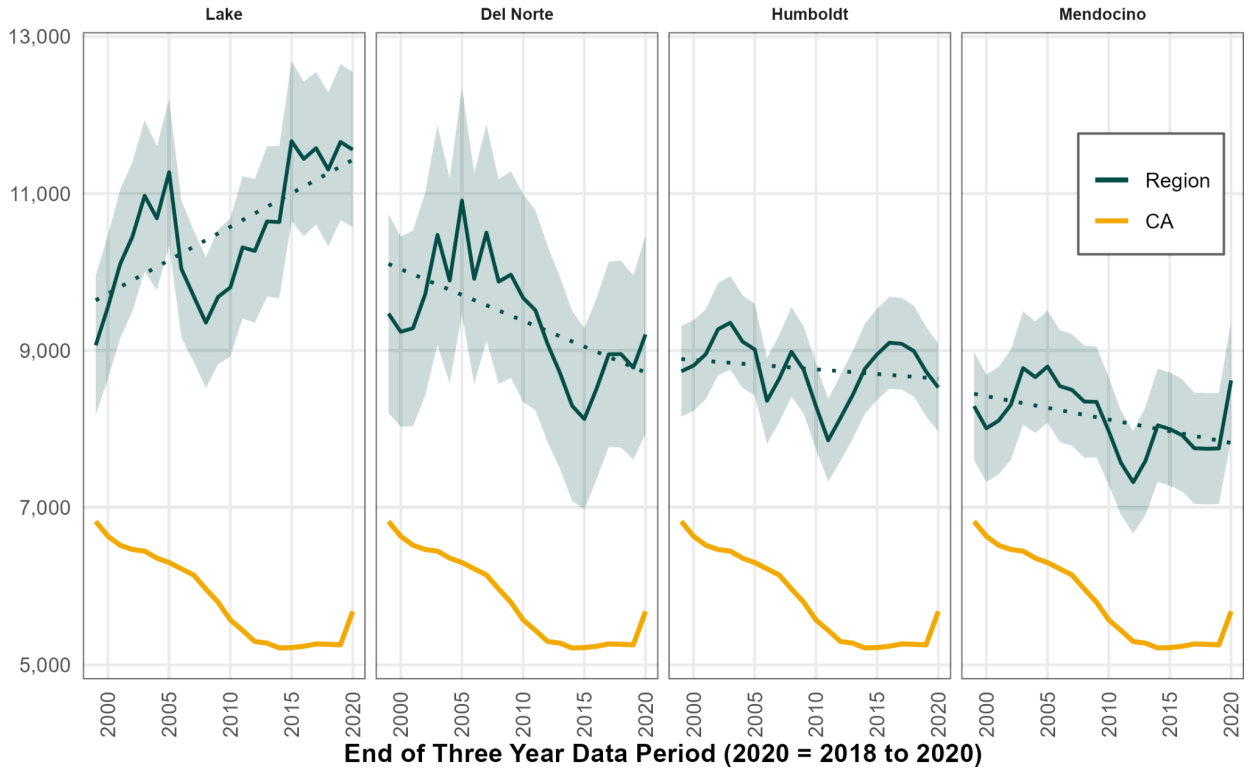
Note. Data Source: American Community Survey, Table B03002. Author's calculations.

Appendix C: Further Analysis of Health Outcomes

Trends in Mortality Rates and Premature Death

Figure C.1

Years of Potential Life Lost (YPLL) per 100,000 Population (1997 - 2020)



Note. Data sourced from CHRR. YPLL is defined as the number of years of life lost due to deaths prior to age 75. For instance, the death of a 40 year old would amount to 35 YPLL.

Figure 3.2

Age-Adjusted Mortality Rates per 100,000 (2019 - 2021)

	2017-2019					2019-2021				
	Lake	Del Norte	Humboldt	Mendocino	CA	Lake	Del Norte	Humboldt	Mendocino	CA
Accidents (Unintentional Injuries)	100*	61*	74*	82*	34	135*	78*	74*	106*	43
All Cancers	187*	176*	167*	145*	131	170*	182*	173*	160*	125
Drug Induced Deaths	54*	25*	36*	36*	14	78*	30	37*	56*	21
Chronic Lower Respiratory Disease	64*	59*	51*	39*	30	49*	57*	45*	32	26
Chronic Liver Disease and Cirrhosis	35*	23*	24*	14	12	54*	31*	25*	17	14
Lung Cancer	46*	46*	33*	28	24	41*	48*	33*	31*	22
Coronary Heart Disease	106*	93	100*	87	81	112*	66	98*	98*	79
Cerebrovascular Disease (Stroke)	44*	42	85*	36	36	32	41	98*	35	37
Suicide	32*	18	22*	20*	11	24*	26*	20*	24*	10
Motor Vehicle Traffic Crashes	22*	17	22*	25*	10	30*	19	16*	29*	11
Prostate Cancer	22	18	26*	24	18	19	35*	29*	24	18
Firearm Related Deaths	25*	16*	13*	16*	8	12	17*	14*	14*	8
Female Breast Cancer	22	20	22	18	19	20	21	26*	19	18
Colorectal Cancer	18*	10	15	16	12	14	15	13	16*	12
Homicide	11*	13*	6	6	5	7	7	8	9	6
Diabetes	18	32*	28*	19	21	15*	43*	22	20	23
Influenza and Pneumonia	17	24*	14	15	14	11	22*	8*	12	12
Alzheimer's Disease	19*	14*	19*	13*	35	15*	14*	14*	13*	37

Difference from State (X)

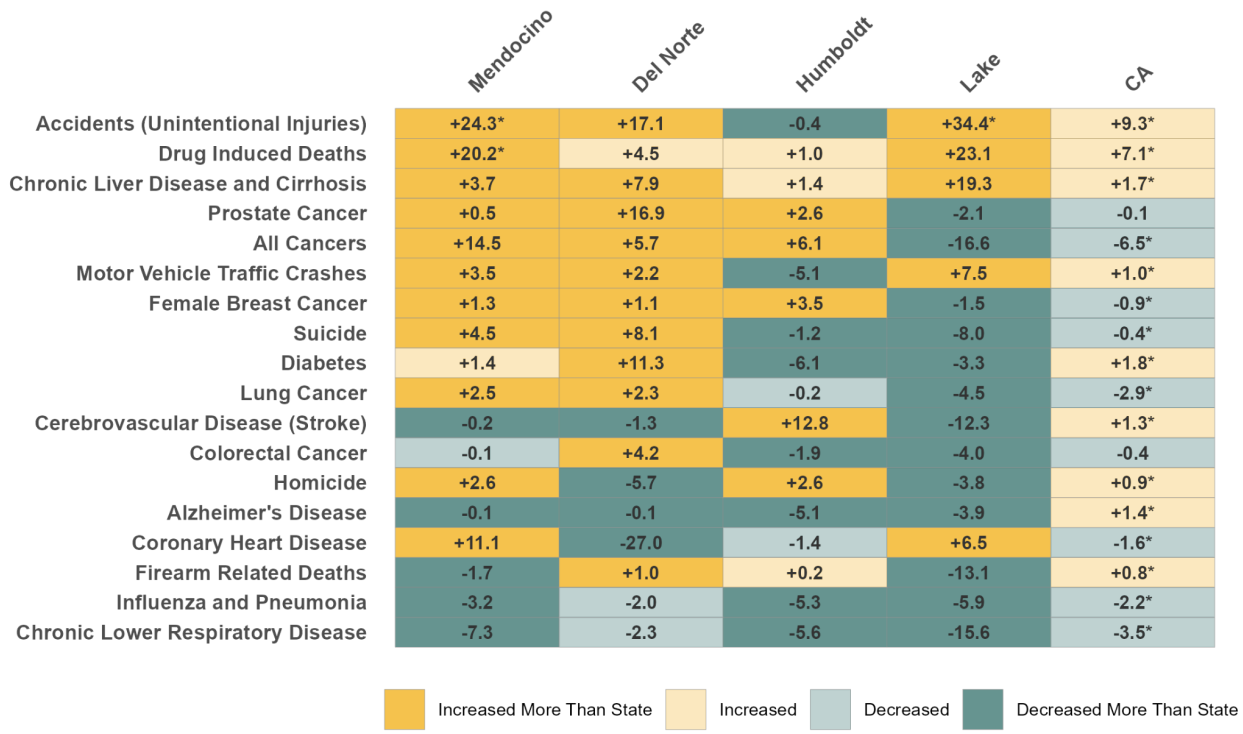
- 90 < X
- 60 < X ≤ 90
- 30 < X ≤ 60
- 5 < X ≤ 30
- 0 < X ≤ 5
- X ≤0

Note. Data sourced from the California Department of Public Health and the California Conference of Local Health's *County Health Status Profiles* report data. The color scale denotes differences (X) between the region's mortality rate and the corresponding state rate. Gold and yellow indicate higher mortality rates compared to the state. Asterisks (*) denote a statistically significant difference compared to the state rate. None of these causes include deaths where COVID-19 is the underlying cause of death.[45]

Figure C.2

Change in Age-Adjusted Mortality Rate per 100,000 from 2017-2019 Period to 2019-2021 Period

[45] According to CDPH, "Deaths where COVID-19 was coded as the underlying cause of death are only included for all causes of death and are not included in any of the specific mortality health indicators. However, deaths where COVID-19 was listed as a significant condition contributing to death but not the underlying cause of death may be included for these health indicators" (2022).



Note. Data sourced from the California Department of Public Health and the California Conference of Local Health's *County Health Status Profiles* report data. Numerical values indicate change in age-adjusted mortality rates. Asterisks (*) denote a statistically significant change over time.

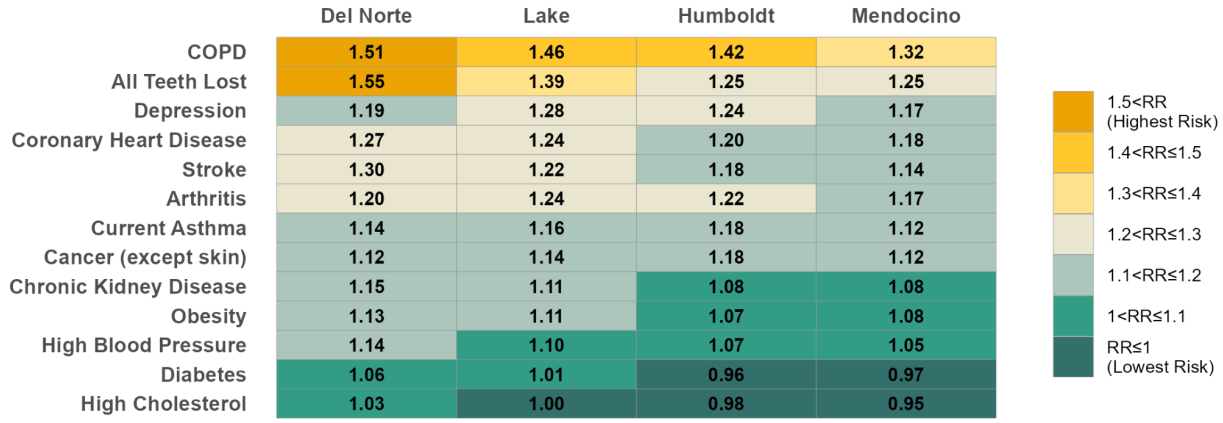
Health Conditions, SAE Estimation Techniques

A broader understanding of health conditions in the region is derived from data obtained from the Centers for Disease Control (CDC) and the Robert Wood Johnson Foundation PLACES project. However, it is important to note that these data have a critical limitation as they have been generated using small area estimation (SAE) techniques, rather than direct estimation such as surveys.[46] It is possible that the models used to predict these values may omit important local variables such as a local health intervention program and therefore fail to accurately predict health outcomes. Although direct estimates are preferred, SAE techniques can nevertheless offer helpful insights into health outcomes for areas with small populations where directly estimated data is unavailable. As shown below, this SAE model suggests health outcomes similar to state averages for diabetes and high cholesterol, whereas other conditions are predicted to be higher.

[46] SAE uses multivariate regression techniques to predict values for small geographic areas using the available data such as American Community Survey Data. These data on health outcomes at the county level are based on data from the CDC's Behavioral Risk Factor Surveillance System (BRFSS) and the Census Bureau's ACS and Decennial Census population estimates.

Figure C.3

Estimated Age-Adjusted Illness Risk Ratios (RR), SAE Technique (2019 - 2020)



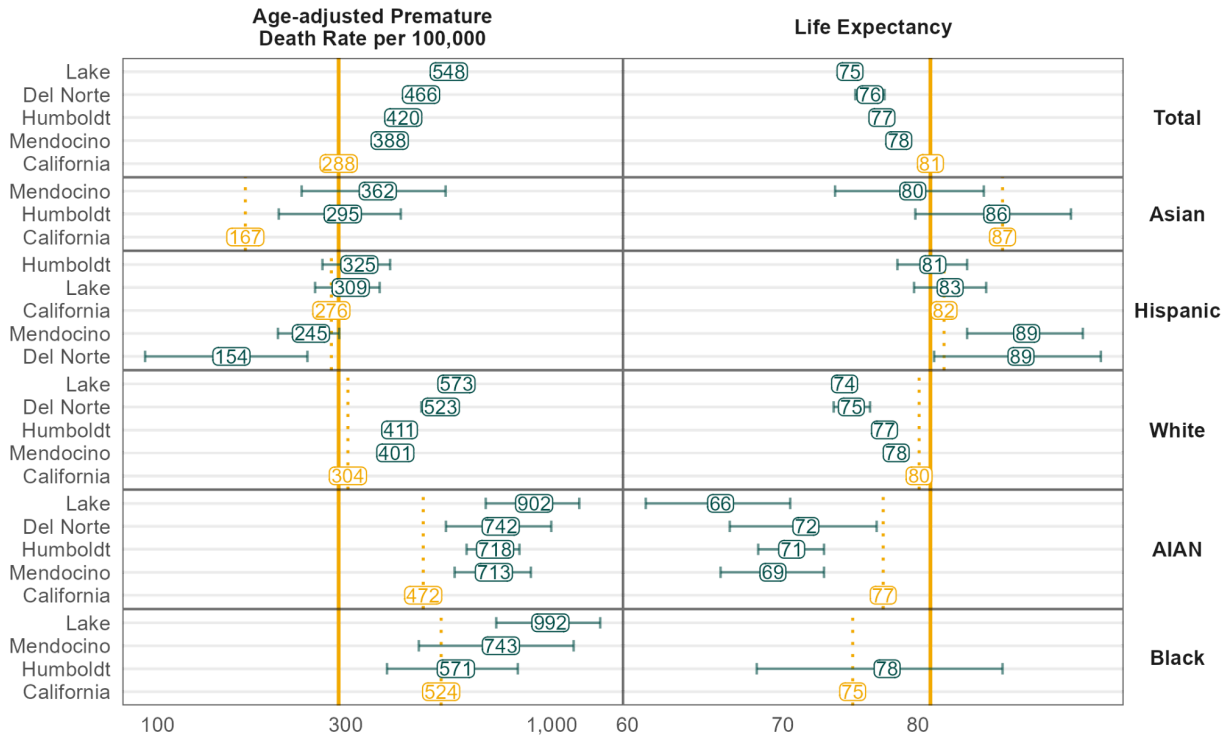
Note. Data sourced from the Centers for Disease Control and Prevention's 2022 release of the PLACES data set, *PLACES: Local Data for Better Health, County Data*. California estimates and not provided by the data source. California estimates were calculated by the author by taking a population-weighted average of all California counties using the population estimates provided in the dataset. Risk ratios (RR) calculated by taking the ratio of the local rate divided by the state rate. RR > 1 indicates higher risk relative to the state.

Health Outcomes by Race and Ethnicity

As shown below, the available data signal significantly and substantially higher age-adjusted premature death among white, American Indian and Black populations (see *AIAN* and *Black* rows, compared with dotted vertical lines). For the available data, Asian populations experience rates of premature death largely consistent with the overall state average but significantly higher than the state averages for their respective populations. On the other hand, the region's Hispanic population experiences rates of premature death and life expectancy consistent with or superior to both the state average for this population and the overall state population.

Figure C.4

Premature Death and Life Expectancy by Race and Ethnicity (2018 - 2020)

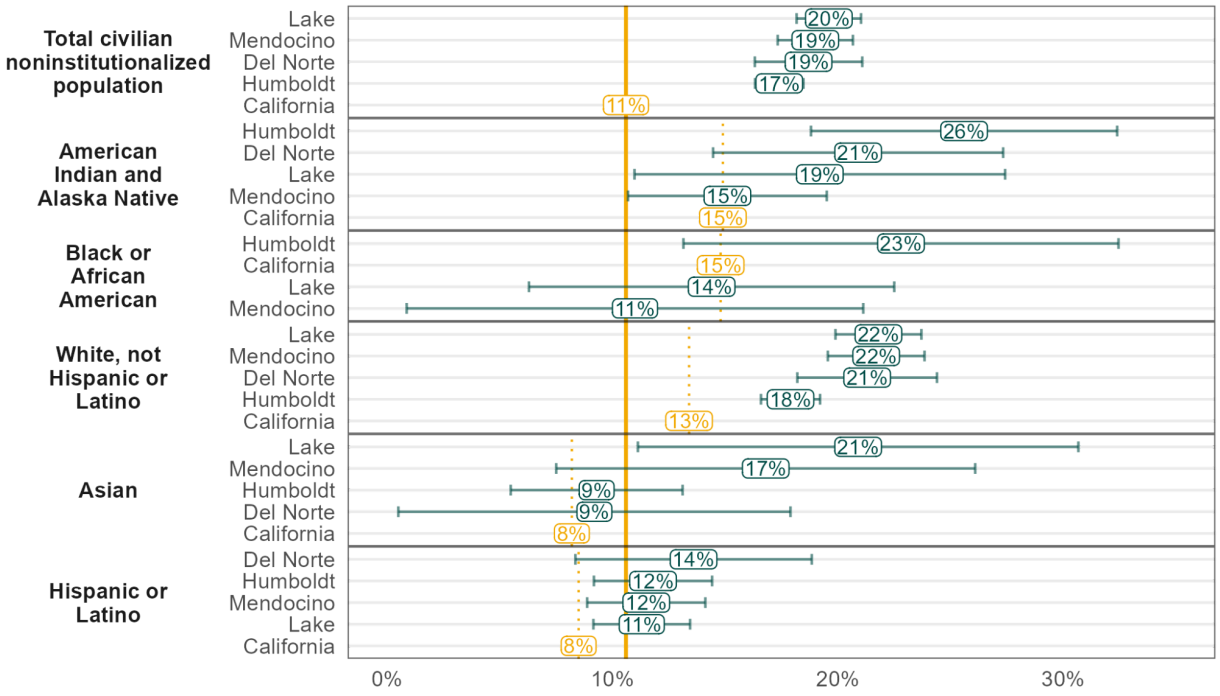


Note. Data sourced from the CHIS.

It is important to consider differences in disability rates and other health factors by race or ethnicity in the context of age, as differences in disability rates between populations can be strongly influenced by differences in the age structure of the population. Consistent with national and state trends, Latino households are substantially younger compared to the general population. On the other hand, the non-Hispanic, white community is substantially older compared to the general population (CHIS). Therefore, we should expect to see a greater level of age-related disparities in health outcomes for the non-Hispanic white population and a lower level of such disparities in the Hispanic population.

Figure C.5

Disability Rates by Race or Ethnicity (2017 - 2021)



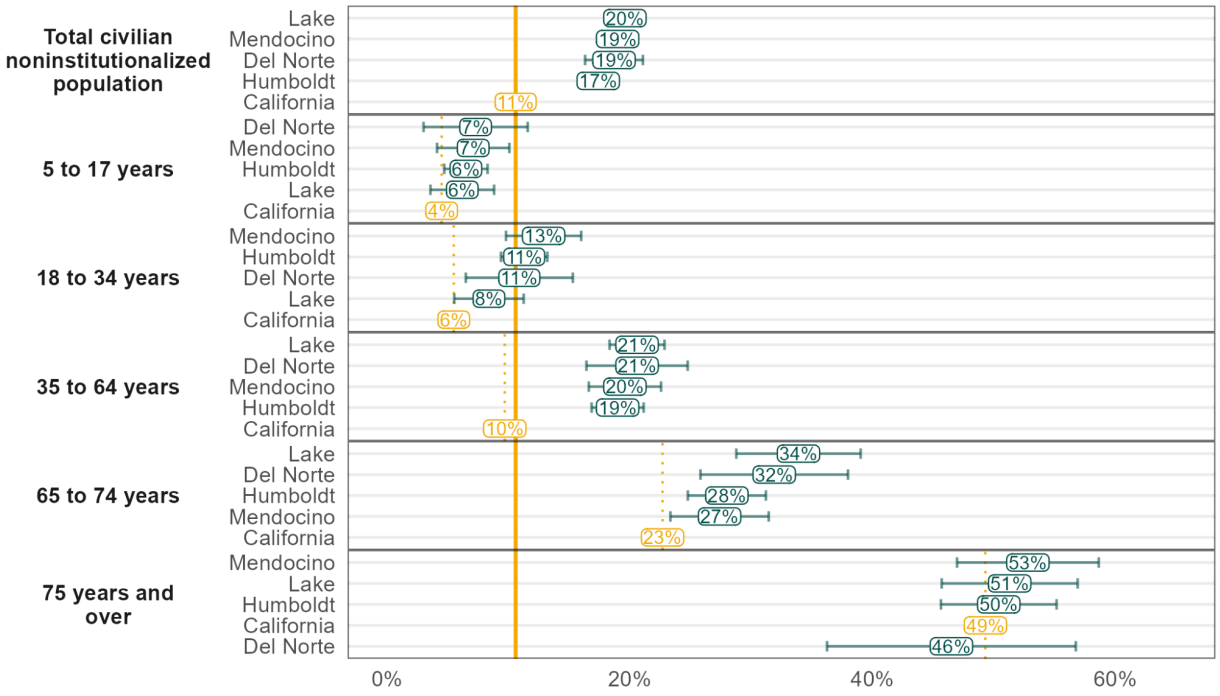
Note. Data sourced from the ACS. Missing data or estimates with confidence intervals that include zero are excluded from the visualization.

Disability Rates by Type and Age

Disability rates are higher in the region, including among those aged 18 to 34 and 35 to 64. Disability rates among this latter cohort are almost certainly impacted by a skewing of the age distribution, as in the Redwood Coast, proportionately more adults in this age range are closer to age 64. However, among 18 to 34 year olds, there is less room variation in age, and this population skews younger than the state population, indicating that age-related disability onset is not likely a factor behind the elevated disability rates among 18 to 34 year olds in the region. Therefore, analysis of this younger cohort may uncover factors other than age that contribute to higher disability rates in the region.

Figure C.6

Disability Rates by Age Range (2017 - 2021)



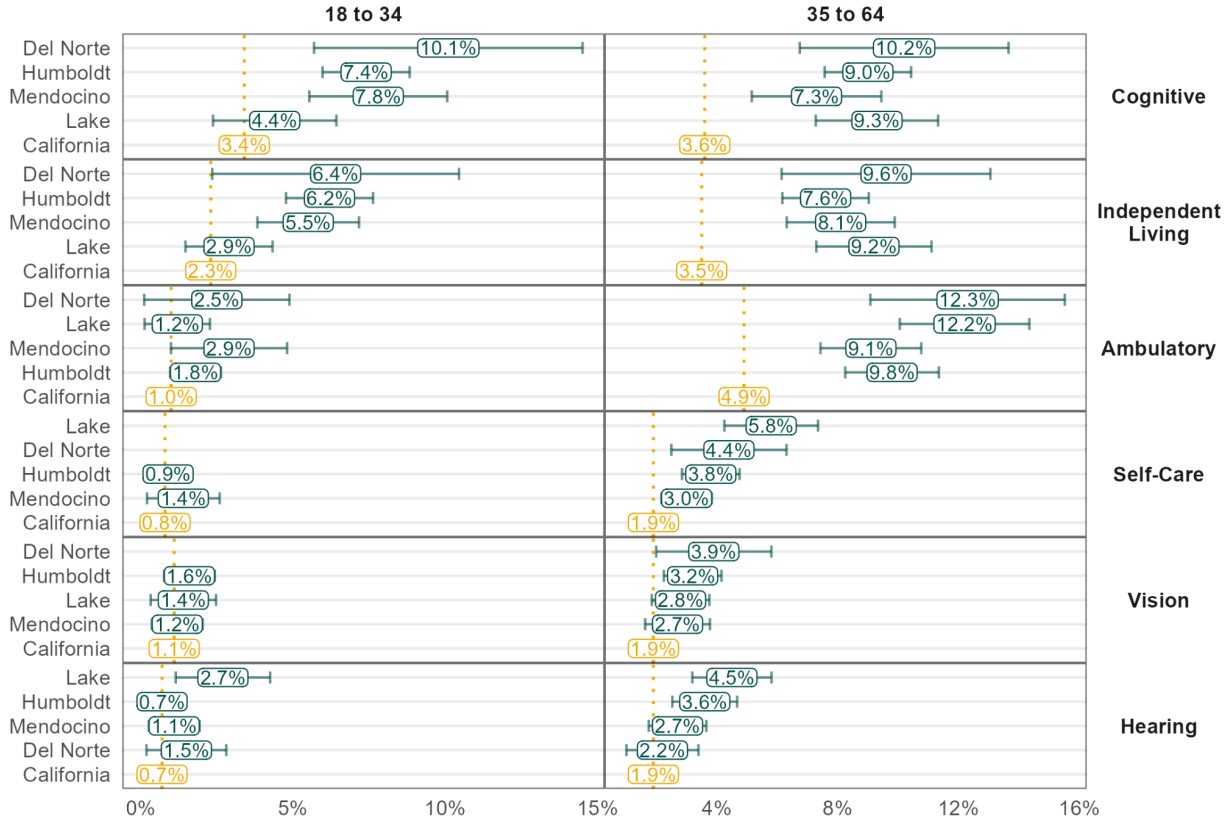
Note. Data sourced from the ACS.

As shown below, the data signal higher cognitive and independent living among this cohort. The American Community Survey (ACS) defines a cognitive disability as a difficulty resulting from a *physical, mental, or emotional* challenge that results in "serious difficulty concentrating, remembering, or making decisions," whereas an independent living disability is defined as a difficulty resulting from a *physical, mental, or emotional* challenge that results in difficulty "doing errands alone such as visiting a doctor's office or shopping".[47] Therefore, the two disability types that have the strongest signal of disparity have a potential mental health dimension. Both mental health and substance use disorders are leading causes of disability and *the* dominant causes of disability among adults younger than 35, accounting for over 35% of years lived with disability nationwide (National Center for Complementary and Integrative Health).

[47] American Community Survey disability definitions:
Hearing: "deaf or … serious difficulty hearing"
Vision: "blind or … serious difficulty seeing even when wearing glasses"
Cognitive: 'due to physical, mental, or emotional condition: "serious difficulty concentrating, remembering, or making decisions"'
Ambulatory: "serious difficulty walking or climbing stairs"
Self-care: "difficulty dressing or bathing"
Independent living: 'due to physical, mental, or emotional condition, difficulty: "doing errands alone such as visiting a doctor's office or shopping"'

Figure C.7

Disability Rates by Type and Age Range (2017 - 2021)



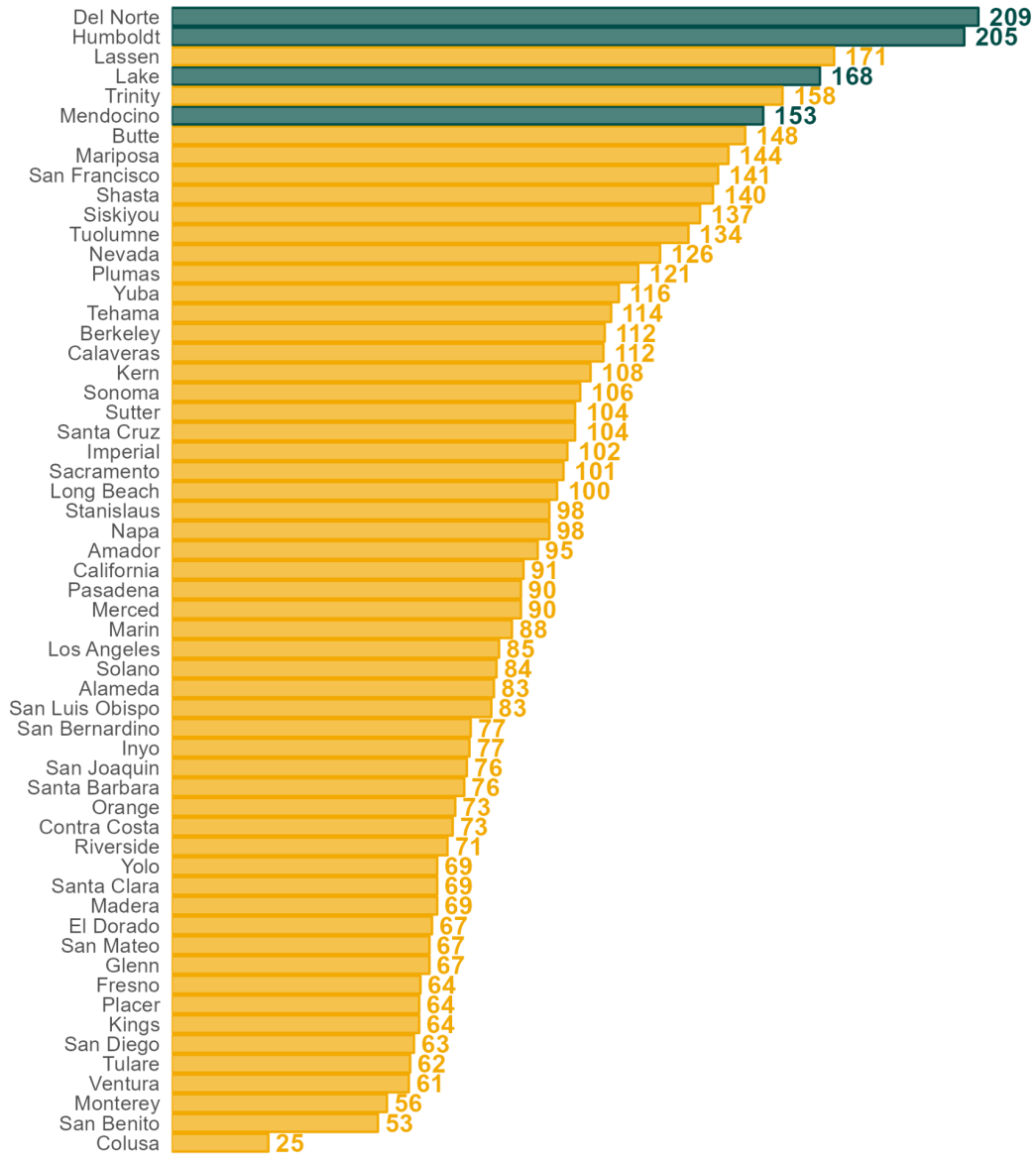
Note. Data sourced from the ACS. Values that have a lower confidence interval that includes zero are excluded from the visualization.

Given the evidence of mental health and substance use challenges for the region, these proximate factors may be major forces behind the region's disparities in disability rates, at least among adults younger than 35.

Hepatitis C Infections

Figure C.8

Newly Reported Chronic Hepatitis C per 100,000 Population (2014, 2016, and 2018)



Note. Data sourced from the CDPH. Rates are averaged over 2014, 2016, and 2018.

Stroke Mortality in Humboldt County

Humboldt County's elevated stroke rate is persistent and rising over time. The rate has been consistently elevated since at least the 2015-2017 CDPH data release (source) when the age-adjusted rate was 67.6 per 100,000. As shown in Appendix C, the rate was 85 for the 2017-2019 data release compared to 98 for the 2019-2021 data release.

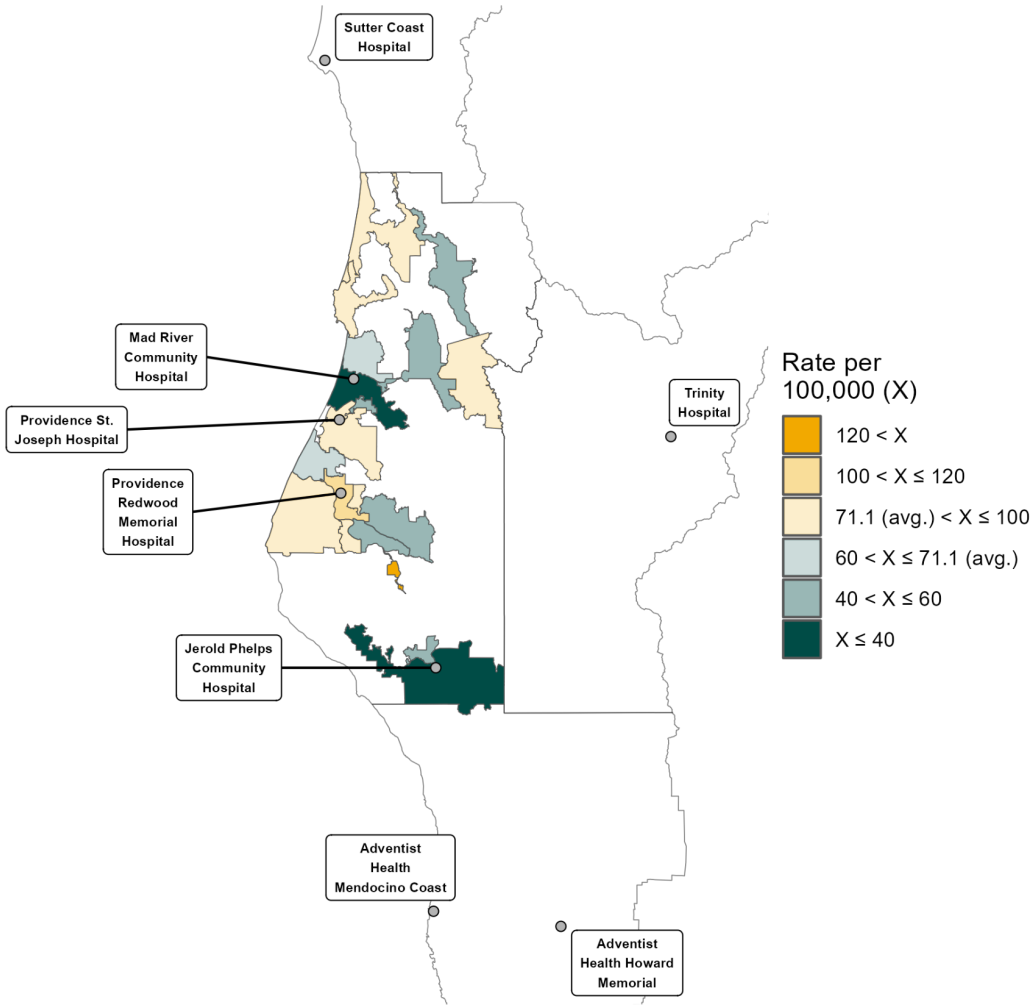
A report from the Humboldt County Department of Health and Human Services (HDHHS) found that the elevated stroke rate is evident in over 80% of Humboldt County ZIP codes, ranging from the most rural to the most populous areas of the county. Furthermore, the report found that the

average age of stroke death in Humboldt County is 83 and that the region's elevated rate is driven, at least in part, by factors *other than* risk behaviors (e.g. smoking) and chronic conditions (source).

Both prevention and the time it takes to receive emergency care are key risk factors for stroke mortality. Local doctors indicate smoking, check ups to catch warning signs, lack of facilities that can treat stroke, timely access to care, and culture of delaying care or avoiding medicine as factors potentially contributing to the county's exceptional rate (source).

The only two ZIP codes in Humboldt County with a stroke mortality rate lower than the state average have a hospital within them; these include the Mad River Community Hospital in 95521 and the Jerold Phelps Community Hospital in 95542. On the other hand, other ZIP codes which have a hospital have higher than average rates, indicating the proximity to an emergency department is not the only factor contributing to higher stroke mortality rates.

Figure D.1
Emergency Department Location and Stroke Mortality Rate by ZIP Code in Humboldt County (2005 - 2018)



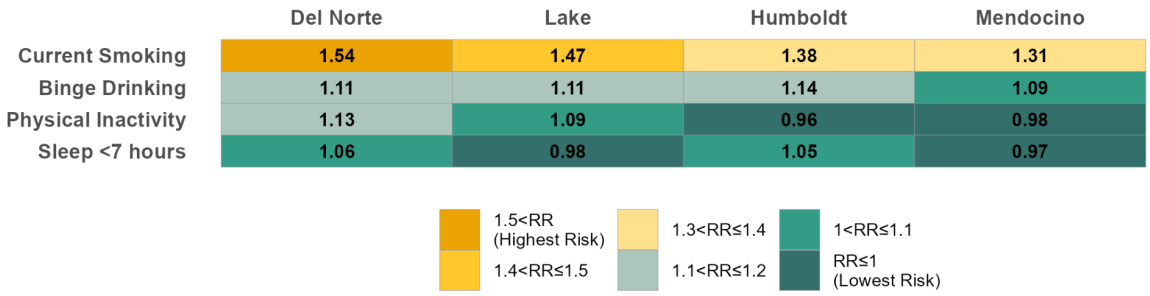
Note. Stroke data sourced from HDHHS. Emergency facility data sourced from California Health and Human Services. Humboldt County's average rate for 2005 to 2018 was 71.1 per 100,000. Gold areas indicate ZIP codes with higher than county average rates and emerald areas indicate lower than county average rates. The California rate during this time period was 43.4. ZIP codes with fewer than five stroke mortalities are not shown.

Appendix D: Further Analysis of Health Risks

Health Risk Behaviors, SAE Estimation Techniques

Figure D.1

Estimated Health Behaviors Risk Ratios (RR), SAE Technique (2019 - 2020)

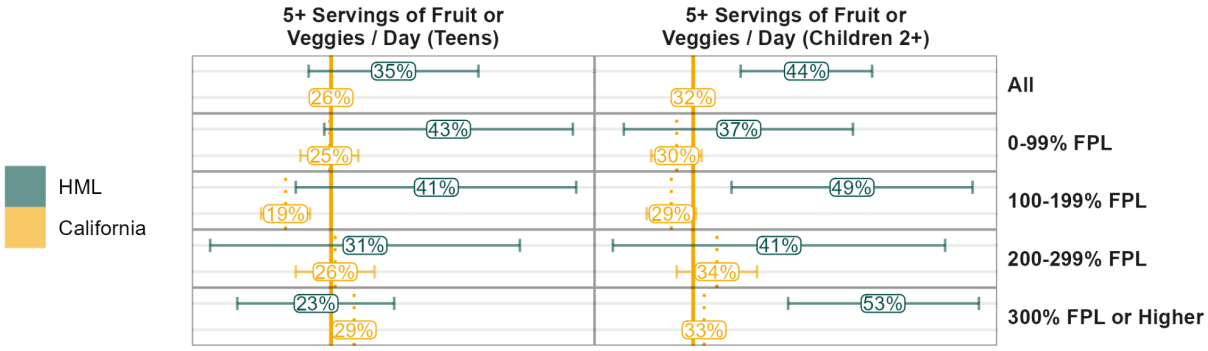


Note. Data sourced from the Centers for Disease Control and Prevention's 2022 release of the PLACES data set, *PLACES: Local Data for Better Health, County Data*. California estimates and not provided by the data source. California estimates were calculated by the author by taking a population-weighted average of all California counties using the population estimates provided in the dataset. Risk ratios (RR) calculated by taking the ratio of the local rate divided by the state rate. RR > 1 indicates higher risk relative to the state.

Diet and Physical Activity

Figure D.3

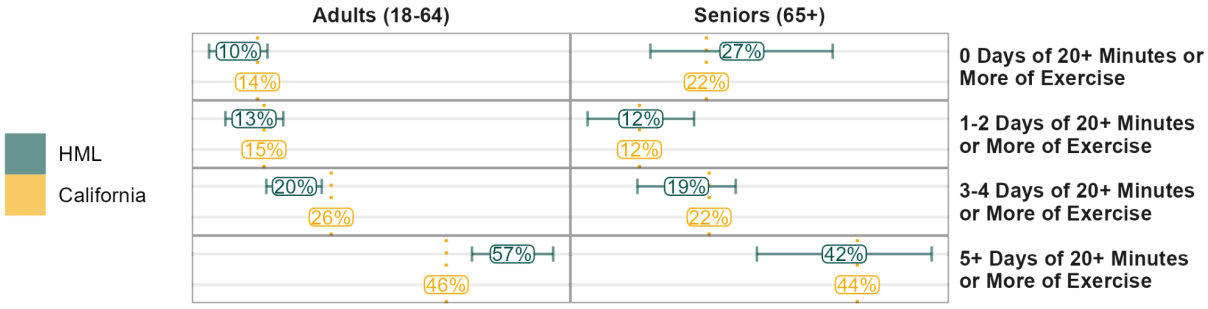
Diet Indicators, Youth (2011-2020)



Note. Data sourced from the CHIS. FPL = federal poverty line.

Figure D.4

Physical Activity (2017-2018)

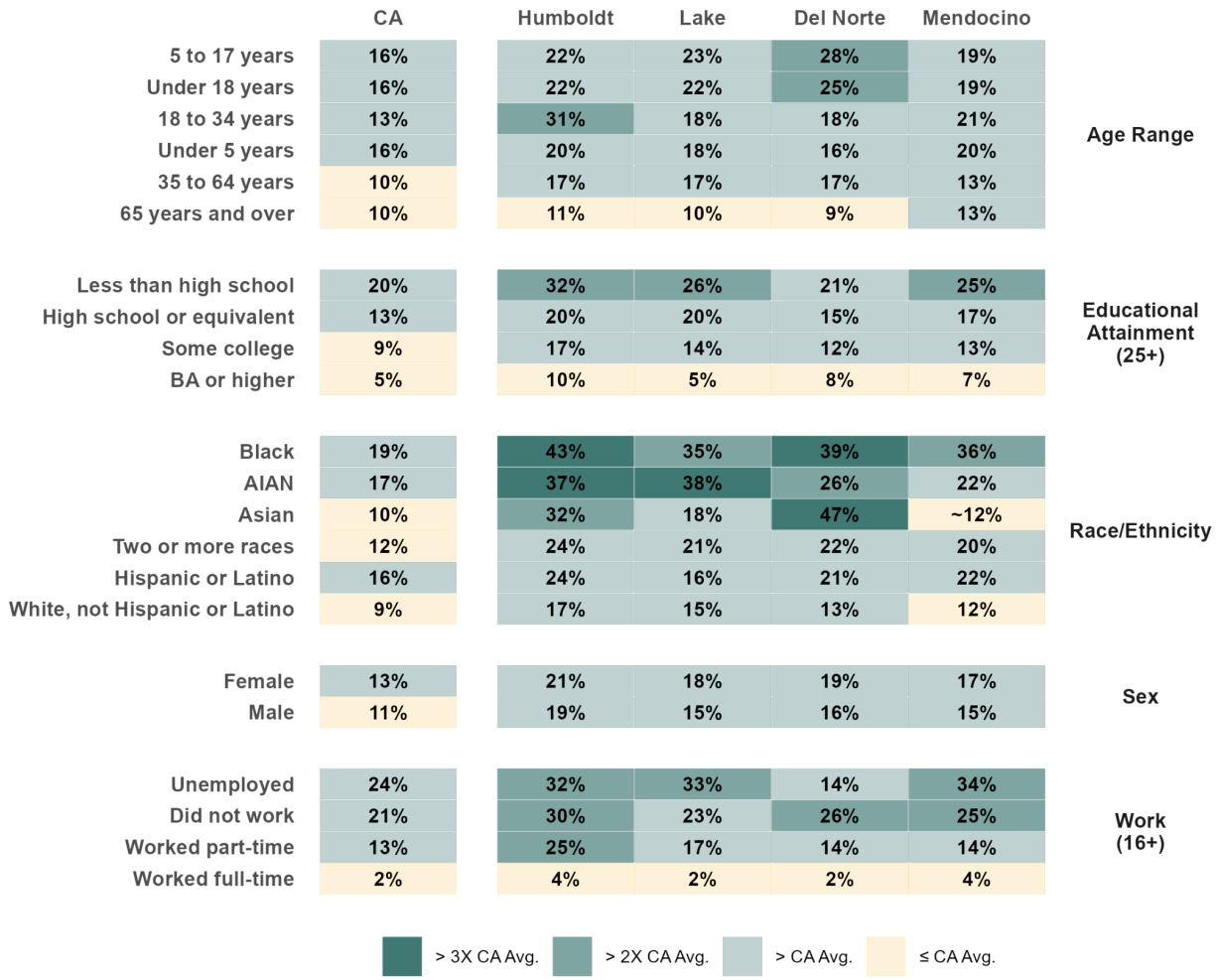


Note. Data sourced from the CHIS.

Appendix E: Disaggregated Poverty Rates

Figure E.1

Disaggregated Poverty Rates.



Note. Data sourced from the ACS. (~) denotes statistically unstable estimate[48].

Appendix F: ACEs, Child Abuse, and Domestic Violence

Figure F.1

Odds Ratios, Adjusted for Age, Gender, Race, and Educational Attainment (Anda et al., 1998)

Number of ACEs	0	1	2	3	4 or More

[48] For these data, an estimate is determined to be statistically unstable if it is not significantly higher than 0 or significantly lower than 100%.

Current smoker	1	1.1	1.5	2	2.2
Considers self an alcoholic	1	2	4	4.9	7.4
Ever used illicit drugs	1	1.7	2.9	3.6	4.7
Ever injected drugs	1	1.3	3.8	7.1	10.3
Two or more weeks of depressed mood in the past year	1	1.5	2.4	2.6	4.6
Ever attempted suicide	1	1.8	3	6.6	12.2

Figure F.2

Reported or Substantiated Abuse or Neglect per 1,000 Children Aged 0 to 17 (2020)

Note. For reported abuse, data is sourced from KidsData's 2020 data set titled "Reports of Child Abuse and Neglect;" for substantiated abuse, data is sourced from KidsData's 2020 data set titled "Substantiated Cases of Child Abuse and Neglect."

Figure F.3

Domestic Violence Calls per 1,000 Population (2016-2020)

Note. Domestic violence call totals sourced from Kidsdata.org. Population data sourced from ACS five year estimates. Data were aggregated over a five year period and rates were calculated by the author.

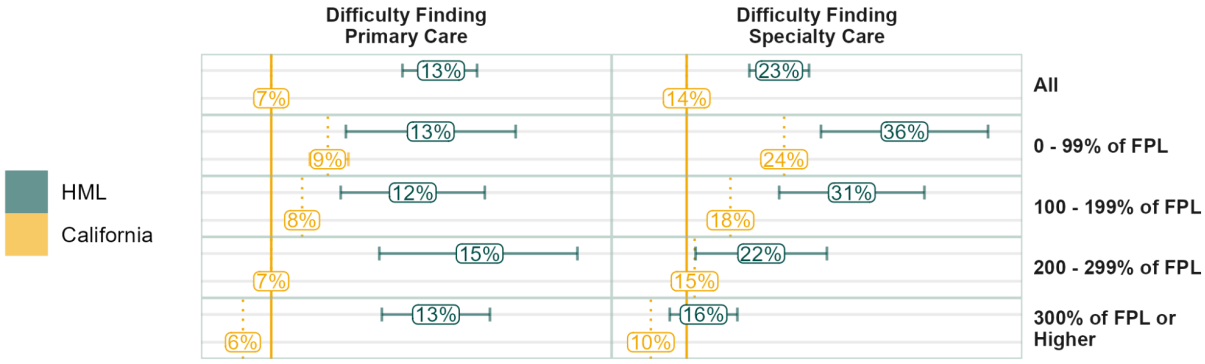
Appendix G: Further Evidence for Healthcare Barriers

'Difficulty' Accessing Care by Income Level

All income strata report 'difficulty' accessing care at rates significantly higher than the state rate.

Figure 5.17

Difficulty Finding Care, Percent of Adult Population (2013-2022)



Note. Data sourced from the CHIS.

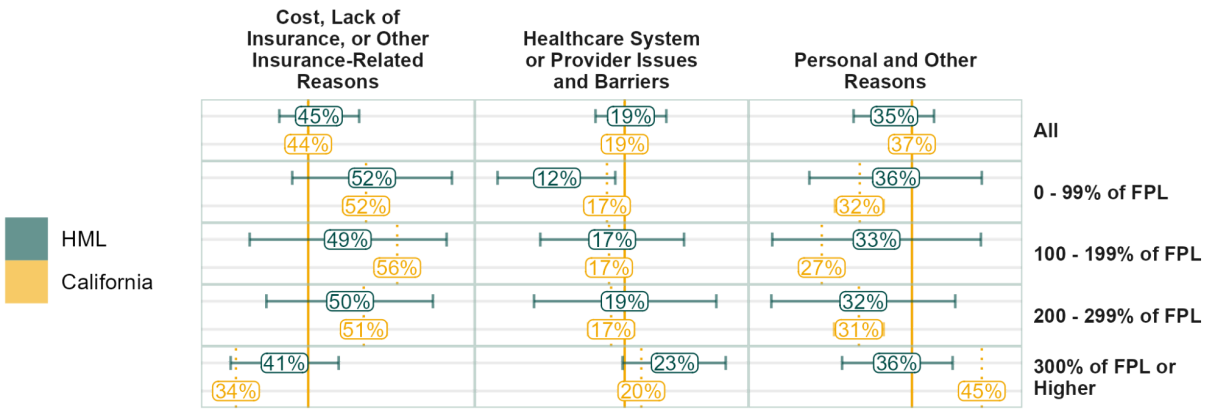
Further Analysis of Barriers to Healthcare

Rural areas are uniquely impacted by barriers to healthcare. Cultural, transportation, financial, and technology barriers as well as a simple lack of available healthcare resources all contribute to reduced healthcare access and utilization in rural areas (Biswas et al., 2015).

Regionally, issues arising specifically from the limitations of the region's healthcare system may only be one factor in producing delayed care among low income individuals, suggesting that factors not specifically tied to the shortage of healthcare providers and facilities in the region may be salient. As shown below, among low income households that delayed care, only about 12% cite the healthcare system as the reason. Roughly half cite cost of insurance issues, but a remaining one-third cite personal or other reasons for their healthcare delays.

Figure G.2

Main Reason for Delayed or Forgone Care, Population Who Delayed Care (2013 - 2022)

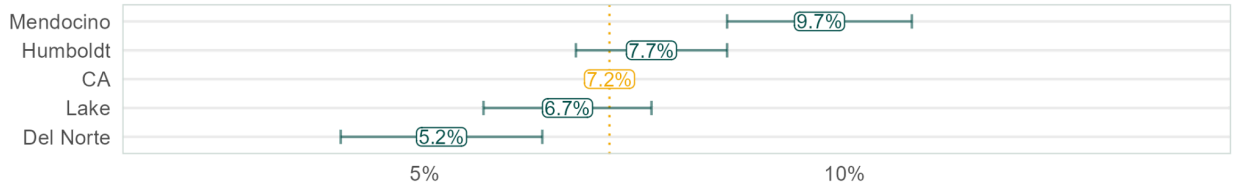


Note. Data sourced from the CHIS.

Cost and Insurance Barriers: Insurance barriers appear to disproportionately impact households with children, AIAN, and Hispanic communities.

Figure G.3

Uninsured Rates (2017 - 2021)



Note. Data sourced from the ACS.

Figure G.3

Disaggregated Uninsured Rates (2017 - 2021)

	CA	Mendocino	Lake	Humboldt	Del Norte	
19 to 64 years	10%	14%	11%	11%	7%	Age Range
Under 19 years	3%	7%	2%	5%	5%	
65 years and older	1%	2%	1%	~0%	~1%	
Not a citizen	22%	32%	27%	23%	~1%	Citizenship
Foreign born	13%	22%	17%	13%	~0%	
Native born	5%	8%	6%	7%	6%	
Naturalized	5%	8%	6%	4%	~0%	
Less than high school graduate	18%	19%	17%	14%	5%	Educational Attainment (25+)
High school graduate (includes equivalency)	11%	15%	8%	10%	8%	
Bachelor's degree or higher	3%	5%	4%	5%	4%	
American Indian and Alaska Native	12%	16%	22%	11%	12%	Race/Ethnicity
Hispanic or Latino (of any race)	12%	16%	12%	8%	5%	
Two or more races	8%	14%	9%	6%	11%	
White, not Hispanic or Latino	4%	7%	4%	7%	4%	
Black or African American	6%	~2%	~7%	13%	~0%	
Asian	4%	8%	~2%	6%	~0%	
Male	8%	12%	9%	9%	5%	Sex
Female	6%	8%	5%	6%	5%	
Unemployed	18%	21%	22%	15%	15%	Work (16+)
Employed	9%	14%	10%	10%	8%	
Not in labor force	12%	12%	10%	12%	4%	

> 3X CA Avg. > 2X CA Avg. > CA Avg. ≤ CA Avg.

Note. Data sourced from the ACS.

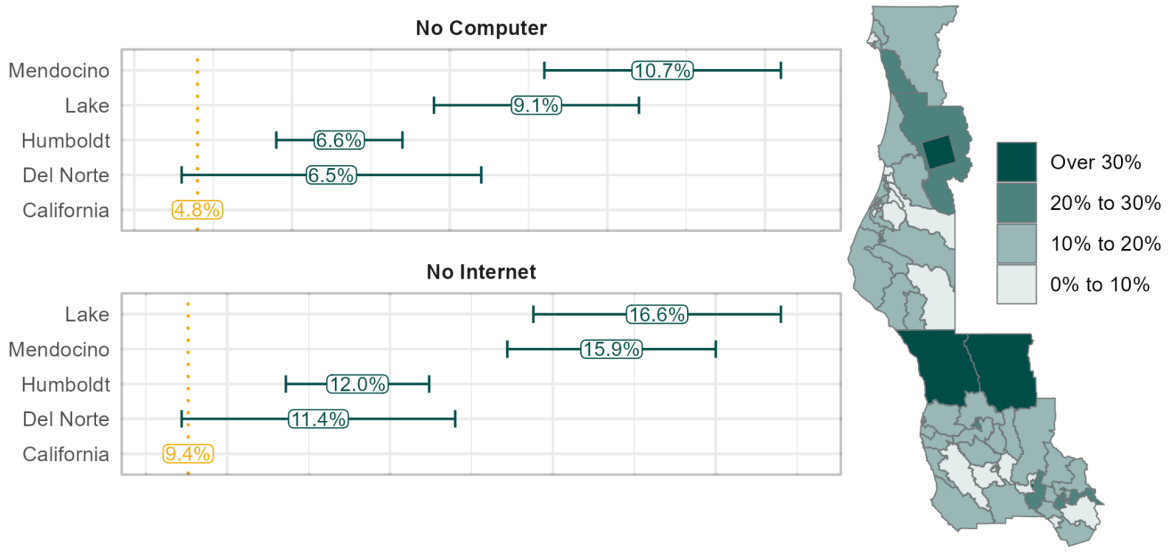
The remaining 36% of respondents (in the figure above) cited personal or other reasons as the main reason for delayed care.

Cultural Perceptions: Patients in rural areas may hesitate to seek medical care due to concerns about stigma, discrimination, and confidentiality, especially when their healthcare providers are also part of their close-knit community. Studies have shown that rural residents, including minorities and vulnerable populations, face barriers in accessing healthcare, with factors socio-economic status and stigmas influencing their treatment-seeking behaviors and the quality of care they receive (Biswas et al., 2015). For instance, as shown in "Equity Analysis and At-Risk Populations," lesbian, gay, and bisexual individuals are significantly more likely to have recently delayed care.

Transportation: Travel time has also been shown to be a barrier to healthcare-seeking and transportation barriers are particularly critical among lower income and the under or uninsured (Biswas et al., 2015; Gerber et al., 2013). Transportation may also be a complicating factor for individuals with disabilities. As shown in "Equity Analysis and At-Risk Populations," individuals with disabilities are significantly more likely to have recently delayed care.

Internet Access: With the rise of telehealth services, access to the internet (particularly in a private setting) is increasingly helpful for addressing transportation barriers to healthcare. Unfortunately, significantly more Redwood Coast households lack internet access compared with the state averages (as shown below). This problem is likely caused by a combination of the region's rural setting, which limits access to affordable broadband, and its high poverty rate, which makes internet access unaffordable for many. The rise of telehealth could be a part of the region's overall strategy to improve healthcare access; however, increasing the availability of broadband will be critical in this effort.

Figure G.4
Householders without Internet Access (2017 - 2021)



Note. Data sourced from the ACS. Map indicates percentage of households lacking any form of internet subscription.

Appendix H: Further Evidence for Social Isolation

Figure 5.11

Living Alone, Percent of Population (2011 - 2021)

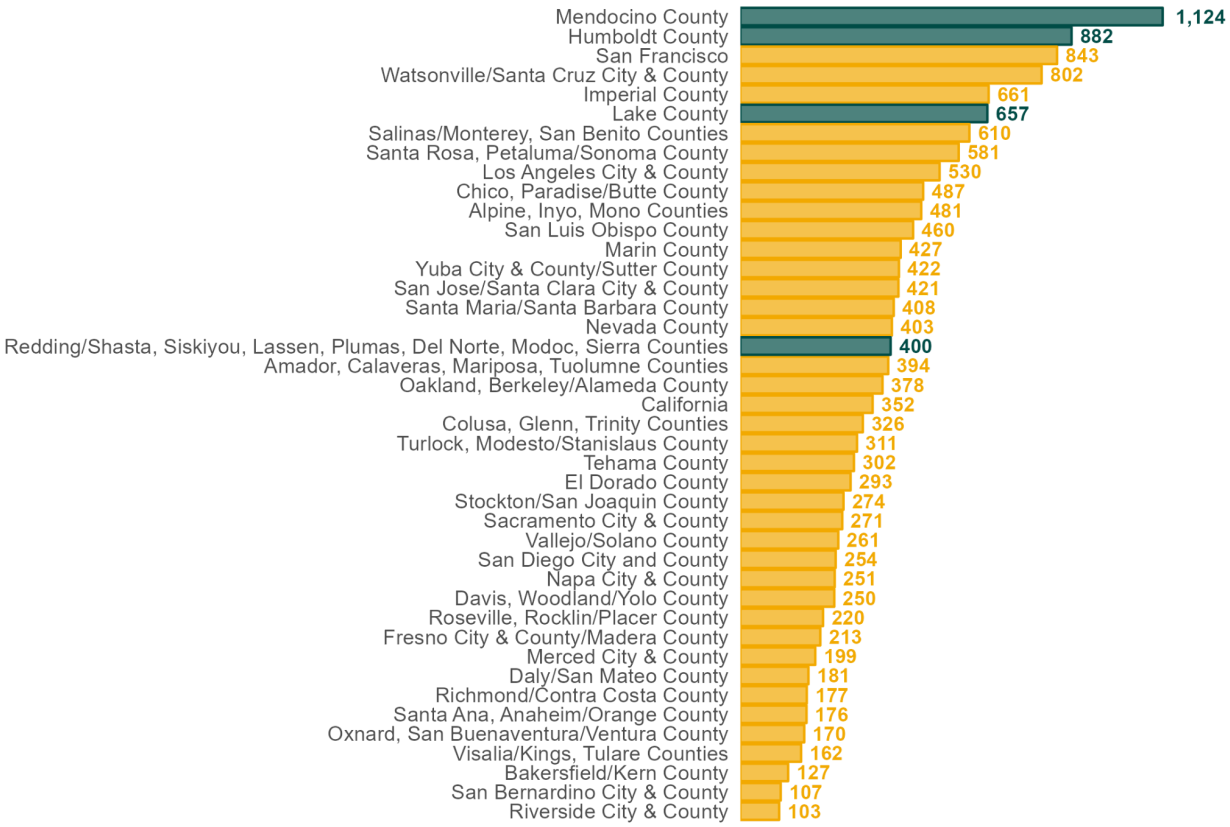
Note. Data sourced from the CHIS. Note that these data are percent of population whereas the ACS data in the body of the report are percent of households.

Appendix I: Statewide Point-in-Time Homeless Counts per 100,000 Population

Below is the complete version of the point-in-time count for each continuum of care reporting to HUD in California.

Figure I.1

Total Counted Homeless (Sheltered and Unsheltered) per 100,000 Population (2016 - 2020)

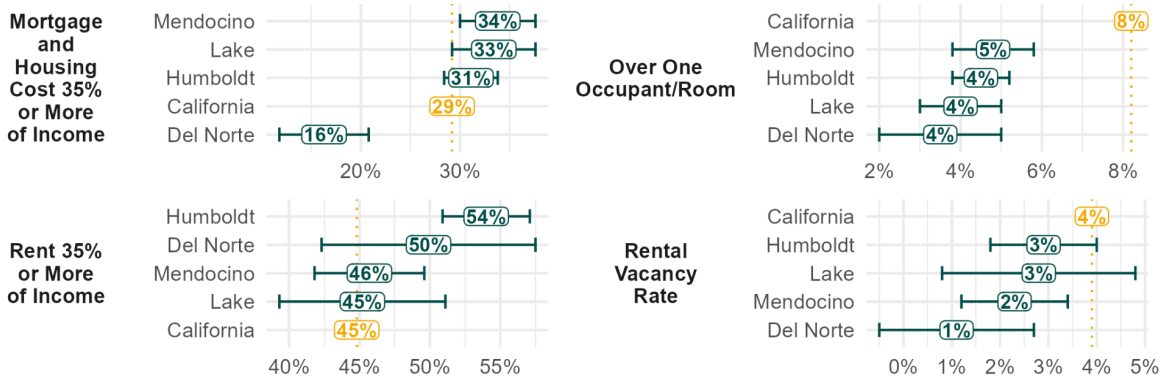


Note. Data sourced from the U.S. Department of Housing and Urban Development's datasets on Point-in-Time (PIT) estimates, a count of sheltered and unsheltered individuals experiencing homelessness. Data are 5-year averages from 2016 to 2020. Rates calculated by the author using population data are 5-year estimates from the American Community Survey from 2016 to 2020. Population estimates are summed for each CoC service area by county.

Appendix J: Housing Affordability Indicators

Figure J.1

Housing Affordability, Conditions, and Availability (2017 - 2021)

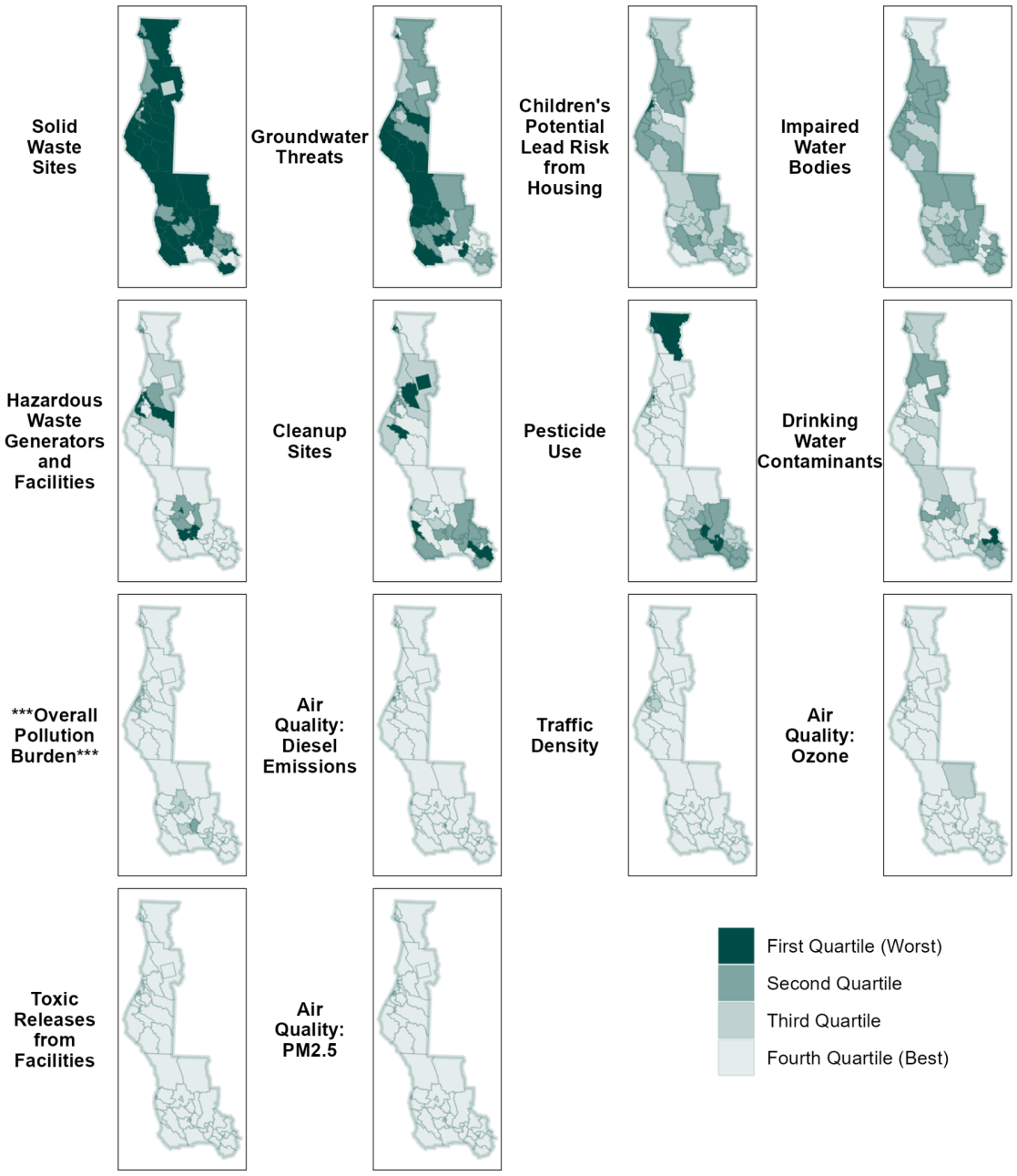


Note. Data sourced from the ACS.

Appendix H: CalEnviroScreen 4.0 All Indicators

Figure 6.1

CalEnviroScreen 4.0 All Indicators



Note. Data sourced from CalEnviroScreen 4.0.

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RE: Complete with DocuSign: 2023-12-20 MCHD (Fin Srvs)_V 3.0.docx.pdf

Anna Marie Will <awill@rgs.ca.gov>

Sat 12/23/2023 5:26 PM

To:Lee Finney <lfinney@mcdh.org>
Cc:Sophia Selivanoff <sselivanoff@rgs.ca.gov>

Hi Lee – I have made the requested corrections as noted below and have re-posed the document for execution.

Enjoy the holidays!

Regards,

Anna Marie Will
Contracts Administrator
(650) 587-7300 X 25
REGIONAL GOVERNMENT SERVICES
SERVING PUBLIC AGENCIES SINCE 2002

Regional Government Services
PO Box 1350
Carmel Valley, CA. 93924

From: Lee Finney <lfinney@mcdh.org>
Sent: Saturday, December 23, 2023 1:40 PM
To: Anna Marie Will <awill@rgs.ca.gov>
Subject: Re: Complete with DocuSign: 2023-12-20 MCHD (Fin Srvs)_V 3.0.docx.pdf

Hi Anna Marie,

Sorry to be slow getting back to you but I needed to compare the docusign version you sent me with the version reviewed and approved by our attorney yesterday. and this took a little time. There are a couple of small changes I need you to make before I sign please.

- the Agency's name is the Mendocino Coast Health Care District (MCHCD) where you have the Mendocino Coast Healthcare District (MCHD) which is not our official name nor how we are known; even though I know that healthcare is often one word, in our case it is two words.
- Exhibit B, in the paragraph under "Administrator Services", second line you have the words "Board Chair Board" and I think the second Board needs to be deleted.
- I would like to change the effective date to 12/23/23 please as this is the date that I am signing it and the contract cannot be effective until after our attorney reviewed and approved it which could not happen until late yesterday. Recognizing that this is Saturday and you may not see this until the day after Christmas, 12/26/23 could be the effective date as well, or any date after 12/22/23.

Thank you for you assistance with getting this contract in place.

Lee Finney
Chair of the Board of Directors

Mendocino Coast Health Care District

From: DocuSign System <dse_na2@docusign.net> on behalf of Anna Marie Will via DocuSign <dse_na2@docusign.net>
Sent: Friday, December 22, 2023 2:04 PM
To: Lee Finney <lfinney@mcdh.org>
Subject: Complete with DocuSign: 2023-12-20 MCHD (Fin Srvs)_V 3.0.docx.pdf

Anna Marie Will sent you a document to review and sign.

REVIEW DOCUMENT

Anna Marie Will
awill@rgs.ca.gov

Hi – The Agreement for Services for the Mendocino Coast Healthcare District is now ready for execution.

The DocuSign link provides you access to the Agreement as well as a secure and legally binding digital signature process that eliminates the need for printing and manual distribution of the Agreement for signature.

I look forward to assisting you with completing the Agreement signature process, and RGS appreciates the opportunity to be of service to you and the MCHD.

Please contact me if you should have any questions regarding the Agreement or the signature process.

Anna Marie Will
Contracts Administrator
(650) 587-7300 X 25 | awill@rgs.ca.gov

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