OREGON PARTNERSHIP

Thursday, October 11, 2018
Portland State Office Building
800 NE Oregon Street, Room 918
Portland, OR 97232

Webinar Link: Skype Link
Conference call line for audio: 503-934-1400
Access code: 37701451

Meeting Objectives:

- Brainstorm potential strategic issues
- Develop understanding of why an issue is strategic
- Identify strategic issues for community prioritization

Time	Items
9:00 – 9:45	**Welcome, introductions and review of last meeting** *Approve minutes, approve charter, approve vision*
9:45 – 10:00	**Proposed process for identifying strategic issues**
9:45 – 11:00	**Review findings from the State Health Assessment**
11:00 – 11:15	**Break**
11:15 – 12:00pm	**Brainstorm potential strategic issues**
12:00 – 12:30pm	**Lunch**
12:30 – 12:40pm	**Public Comment**
12:40– 1:40pm	**Understand why issue is strategic**
1:40 – 2:40pm	**Finalize strategic issues**
2:40 – 3:00pm	**Wrap-up and next steps**

2020-2024 State Health Improvement Plan
PartnerSHIP Meeting #2
October 11, 2018

PUBLIC HEALTH DIVISION

Office of the State Public Health Director

Introductions

Name, agency and preferred pronoun

Do you have any announcements from your agency you'd like to share?

For members joining for the first time, please also share:

- A bit about the work of your agency or organization
- Why you were interested in joining the PartnerSHIP

Debrief last meeting

What are your take-aways from the first meeting?

Finalize vision

Original:
Oregon will be a place where optimal health is achieved for everyone across the lifespan regardless of race, ethnicity, ability, gender, sexual orientation, socioeconomic status, nationality and geography.

Proposed:
Oregon will be a place where health and wellbeing are achievable across the lifespan for people of all races, ethnicities, disabilities, genders, sexual orientations, socioeconomic statuses, nationalities and geographic locations.

OREGON PARTNERSHIP MEETING

Tuesday, September 18th, 2018
Portland State Office Building
800 NE Oregon St. Portland, OR 97232
September 18, 2017

Members in attendance: Katrina Hedberg, Frank Franklin, Kelle Little, Paul Virtue, Kirt Toombs, Holden Leung, Kim Sogge, Cat Livingston, David Bangsberg

Members on phone: Victoria Warren-Mears, Annie Valtierra-Sanchez, Clarice Amorim Freitas, Alicia Ramirez, Rebeckah C. Berry, Laura Williams

Members absent: Jim Rickards, Brian K. Gibbs, Erin Schulten, Lee Po Cha, Ernesto Fonseca,

Facilitator and Staff: Lisa Ladendorff, NEON, Christy Hudson, OHA-PHD

Meeting Objectives:

- Get to know other members of the PartnerSHIP
- Understand history, role and landscape of state and community health improvement plans in Oregon
- Understand process for developing the 2020-2024 State Health Improvement Plan
- Determine criteria for identifying strategic issues

Welcome, Introductions and Icebreaker

Members shared a bit about their agency, their role and why they were interested in joining the PartnerSHIP. Members then also shared stories regarding their name as an icebreaker.

Understood history, role and landscape of SHIPs and CHIPs in Oregon

During introductions, most members shared they had involvement with CHAs and CHIPs in their local areas. State staff provided an overview of the purpose and requirements of State Health Assessments and State Health Improvements Plans (SHIP). The SHA and SHIP are required for public health accreditation. Public health accreditation requires a health improvement plan every five years. Coordinated Care Organizations are required to implement a CHIP every five years. Non-profit hospitals are also required to produce a community health needs assessment every three years. The SHIP is aimed to inform state health priorities with potential influence on policies and investments. Changes in CCO contract requirements will increase funding investments for CHIPs. The plan we are currently developing will take effect January 2020 through December 2024.

Priorities of the 2015-2019 SHIP are tobacco, obesity, oral health, substance abuse, suicide, immunization rates, and infection. Member spent time reviewing the current SHIP and provided observation on the organization, strategies and interventions:

- Within suicide priority, David shared appreciation for attention to youth and school-based systems, opportunities within health systems and strategies to reduce legal means to suicide. Gaps in incentives to encourage health systems to move outside the clinic and into population level intervention. Also,

there's a lot of discussion with CCOs about behavioral health integration, but not necessarily suicide prevention.

- Within communicable disease priority, Holden remarked that the priority spanned population level impacts to specific hospitalization issues. Given increase in STIs, question about role of ODE in providing education. Also identified a need for targeted, culturally responsive, Hep C education among Vietnamese communities.
- Within obesity priority, Rebeckah observed that strategies were laid out well. However, it would be helpful if the next SHIP shared specific examples of interventions in place around the state – particularly in areas where improvements are being seen.
- Within alcohol and drug priority, there was an interesting mix of population and system interventions. A lot of attention to payment opportunities within health systems – and less about ensuring access to treatment services – which is a common barrier in the community.

MAPP process and developing the 2020-2024 SHIP

The Mobilization for Action through Planning and Partnerships (MAPP) framework will be used to develop the SHIP. MAPP is an evidenced based model for health assessment and planning and frequently used in CHA and CHIP development around the state. Developed by the National Association of City and County Health Officials (NACCHO), it is comprised of six phases, from assessment through implementation of a plan. The SHA was completed over the first three phases of the MAPP (organizing for success, visioning and completion of 4 assessments). We are now in phase 4 – identifying strategic issues. The intent of using MAPP as a framework, is to shift focus from the public health system alone to the entire community.

Christy shared the timeline and details for development process, including roles of the core group, PartnerSHIP and community at large. A significant community input process will inform the priorities for the next SHIP. OHA will be awarding mini-grants to community organizations interested in soliciting feedback on the strategic issues that will be identified by the PartnerSHIP at the next meeting.

David voiced concern about what doesn't make the list of 12 – what's been forgotten or new. Is there any way to leave an open door for communities to raise attention to issues of concern that aren't on the list of strategic issues created by the PartnerSHIP? Christy shared that this was a common question and concern that had been raised by others, and that yes, there will be an open opportunity for communities to highlight other priorities that aren't on the list.

Adopt vision, values, and charter for the SHIP

Members identified values they would like to use in development of the SHIP:

- Equity
- Empowerment
- Inclusion (culturally responsive)
- Accountability
- Social justice
- Strengths-based
- Authentic community input
- Actionable
- Evidence-based

- Magnitude of impact

These values were compared with the values originally identified last summer by the SHA Steering Committee;

- Equity
- Accountability
- Empowerment
- Transparency
- Inclusion

Discussion followed:

- Lisa observed that some values were shared, others not. Lisa and others proposed values that were combinable.
- Paul shared that the SHA steering committee included accountability and transparency in reference to what was included in the document and the process of being clear about why decisions were being made.
- Katrina likes authentic community input.
- Cat observed that evidence based has not been mentioned – all work should be based in evidence as much as possible. Also – consideration for the magnitude of population health impact. Lisa shared that both of these are also criteria that will be considered later this afternoon.
- Paul suggested that we write out the newly proposed values during lunch and determine consensus once we've seen them written out.

Group used thumb voting to react to Paul's proposal – group agreed.

Members then reviewed the vision statement developed by the SHA Steering Committee which reads:

Oregon will be a place where optimal health is achieved for everyone across the lifespan, regardless of race, ethnicity, ability, gender, sexual orientation, socioeconomic status, nationality and geography.

Initial round of thumb voting used to see how members felt about statement as written. Four members indicated they had a comment or question.

- Kim voiced question about use of gender vs gender identity. To some, these are distinct identities. Paul explained that gender was intended to be inclusive, and only gender was used for simplicity and readability.
- Paul shared concern about word "optimal" – optimal for who? And at what level? Is this the same for everyone or does it depend on where you're starting from? David shared it could be interpreted as an anti-equity statement.
- Kirt inquired about why ability was used vs disability. Provides a tone of "ableism". Katrina responded it was to highlight the positive, vs deficiencies, and that ableism was intended to be more inclusive. Kirt stated that disability does provide a positive spin and that the term is more commonly used and preferred in the disability community. Paul shared that there was disagreement between ability/disability in a disability related work group on which he participated.
- Alicia expressed comment about the values: will culturally appropriate be included within the value of inclusion. Group affirmed this decision. She also inquired about impact of health literacy. Lisa reflected that this is included in "authentic community input"

- Kim asked if it was intended for people to identify with the vision statement. If not, what might be the potential impacts if someone didn't identify with the statement. Lisa reflected that this statement is not meant to be exclusive and that it is the role of PartnerSHIP members to ensure that priorities and strategies are considering all people and identities.
- Paul added that disability does seem to be the more commonly used term on .gov websites.
- Katrina suggested removing optimal. David agreed with Katrina – and proposed adding wellbeing.
- Alicia voiced concern about word of "regardless" – sounds negative or demeaning.

Lisa asked for voting on the items of discussion related to gender, optimal and ability.

- Gender will remain as is.
- Ability will be changed to disability
- Optimal removed and replaced with "health and wellbeing"
- Regardless of removed.

The vision arrived at consensus on the following (with permission to OHA to wordsmith):

Oregon will be place where health and well-being is achieved for everyone across the lifespan; for all races, ethnicities, disabilities, genders, sexual orientations, socioeconomic status, nationalities and geographic locations.

Group broke for lunch

Through discussion, PartnerSHIP members agreed upon new values of:

- Equity and social justice
- Empowerment
- Strengths-based
- Culturally responsive inclusion to achieve authentic community input
- Accountability to action, evidence base and population impact

Charter was reviewed. Group identified Paul Virtue to be co-chair, in partnership with Katrina Hedberg. Kirt inquired about what consensus means in the context of decision making. Lisa explained that group will be talking about process of consensus in afternoon. Request that determined process for consensus be included in the charter. PHD staff will include language based on decisions after lunch.

Ground rules for the PartnerSHIP

Members identified ground rules for working together

- Respect for differing opinions
- Ouch/oh! - If something is said that you find hurtful or disrespectful – you can say ouch to notify the group that this has happened and that the person who said it can say "oh" and take a step back.
- Be clear when something is open for debate or discussion versus information sharing
- Be present in the meeting (mind use of cell phones, etc.)
- If full consensus is not achieved – those opposing will be unified in voice of the PartnerSHIP

Determining consensus

Members discussed experience of consensus and what method they would like to use to achieve consensus. Consensus leads toward buy-in while still ensuring everyone is heard. Consensus does not necessarily mean "I love it" – but rather "I can live with it". Group determined consensus would be achieved through the following process:

- Following discussion, a poll would be taken: thumbs up (I agree), thumbs down (I disagree) and thumbs sideways (I have a question, comment or need to talk through this more).
- If after three rounds, consensus it not achieved, the discussion will be tabled while co-chairs and facilitators determine best course of action.
- If dissention accounts for 20% or less of those participating, the dissenters can agree to step aside. The dissenters will not publicly denigrate the decision.

Identifying criteria

Members reviewed a list of possible criteria that could be used to determine the strategies of concern. Members then considered these criteria when reviewing the State Health Assessment and State Health Indicators. Group then discussed which criteria were most helpful when reviewing the data: Magnitude and severity, disparity, up-stream determinants, evidence-based practices (EBP). There was some disagreement in the group about usefulness of evidence-based practice. Some raised concern that EBPs had often not been studied in marginalized communities, and therefore it was questionable whether a practice would be effective in all communities. Others felt strongly that issues should only be considered if there was a proven intervention to address it. Consensus was not achieved. Final criteria will be revisited at the next meeting.

Next steps in preparation for October 11th meeting:

There is a change in location of the next meeting. The meeting will be held at the Portland State Office Building, 9th floor. Updated location information will be sent.

Members are asked to read SHA and SHIs before next meeting – and start to pull out issues they'd like to suggest as a strategic issue. Please let Christy Hudson know if you will be unable to attend the meeting as this assists with meeting plans and ordering lunch.

Oregon's State Health Improvement Plan
Oregon PartnerSHIP
2018-2020

PURPOSE

The purpose of Oregon's State Health Improvement Plan (SHIP) is to identify population-wide priorities and strategies for improving the health of people in Oregon. The SHIP serves as the basis for taking collective action on key health issues in Oregon. The SHIP should reflect the results of a collaborative planning process that includes significant involvement by communities experiencing disproportionate health disparities.

BACKGROUND

Per Standard 5.2 of the Public Health Accreditation Board, Standards and Measures, accredited health departments are required to participate in or lead a collaborative process resulting in a comprehensive health improvement plan at least once every five years. The improvement plan requires:

a. A collaborative process that includes a variety of partners
b. Use of data from the State Health Assessment and consideration for local priorities identified in community health improvement plans (CHIPs)
c. Identification of assets and resources
d. Use of measurable outcomes
e. Use of policy changes

The Oregon PartnerSHIP will provide guidance and oversight of the process to develop a comprehensive SHIP for the period of 2020-2024. The Oregon Public Health Advisory Board provides oversight for the SHIP.

MEMBERSHIP

The Oregon PartnerSHIP is comprised of representatives from a wide range of sectors and communities that are potential partners in SHIP implementation.

LEADERSHIP

The Oregon Health Authority, Public Health Division (PHD) will convene the PartnerSHIP and its subcommittees. The Policy and Partnerships team within the Office of the State Public Health Director will provide meeting support. Co-chairs of the PartnerSHIP will be the State Health Officer (also executive sponsor for the PHD) and one other member to be identified by the PartnerSHIP.

PROCESS

The process will be guided by the Mobilizing for Action through Planning and Partnerships (MAPP) framework, as developed by the National Association of County and City Health Officials (NACCHO). While the SHA was developed over the first three phases of the MAPP, the SHIP will be developed and implemented over the second three phases of the MAPP: Identify Strategic Issues, Formulate Goals and Strategies and the Action Cycle.

SCOPE

From September 2018 through January 2020, the PartnerSHIP will provide leadership and engage the public health community in the following efforts to develop a state health improvement plan for Oregon.

- Develop a SHIP that aims to achieve the vision set forth by the SHA steering committee.
- Design a SHIP prioritization process, including identification of criteria that will address health inequities.
- Identify cross-cutting health and strategic issues based on the SHA and priorities identified in CHIPs.
- Inform the development and membership representation for subcommittees based on identified priorities.
- Provide input on the community engagement process and assist in sharing engagement opportunities with other stakeholders throughout development with maximum transparency.
- Communicate about the SHIP to stakeholders, networks and the public at large
- Provide input and recommendation for process of implementing the 2020-2024 State Health Improvement Plan.

RESPONSIBILITY

Members of the Oregon PartnerSHIP will use their experience, expertise, and insight to create a SHIP that identifies strategic priorities as defined and interpreted by community members, specifically those experiencing health disparities. Members should have a basic understanding of public health practice, be genuinely interested in the success of the SHIP, and be able to actively participate in the process.

Steering Committee member responsibilities are to:

- Maintain vision, values and direction for the SHIP.
- Bring ideas and solicit input from other stakeholders and the community at large.
- Participate in a subcommittee of interest and provide two-way communication between the PartnerSHIP and subcommittees.
- Approve SHIP measures, objectives and work plans.
- Attend all PartnerSHIP and subcommittee meetings (or provide a delegate)
- Review materials ahead of the meeting and come prepared to discuss and participate.
- Facilitate conversation with community groups to gather feedback on strategic issues and strategies.

Chair responsibilities are to:

- Work with PHD staff to develop materials and agendas for meetings.
- Represent the PartnerSHIP at meetings or presentations with other stakeholders and partners as necessary.

DECISION-MAKING PROCESS

Decisions will be based on consensus. Three rounds of thumb voting will be used to determine consensus on a particular issue: thumbs up (I agree), thumbs sideway (I have a question, comment or need more discussion), thumbs down (I disagree). If after three rounds, consensus is still undetermined, facilitators and co-chairs will discuss and propose a course of action. In situations where consensus cannot be achieved due to 20% or less of members in disagreement, the 80/20 rule will be enacted where the person(s) blocking consensus will agree to step aside from the decision for purpose of moving forward.

MEETING EXPECTATIONS & TIME COMMITMENT

- Four to five half-day in person meetings (remote meeting options will also be available) to be held between September 2018 and January 2020 with ongoing work as necessary in between meetings (document review etc.).
- Subcommittee work March – September, 2019. Will include in-person meetings with a remote option or phone call and documentation review. Subcommittees will likely meet on a monthly basis.
- Meetings will be conducted in accordance with Oregon's Public Meetings Law (ORS 192.610 through 192.710) and Public Records Law (ORS 192.001 through 192.505) and documented on the SHIP website: www.healthoregon.org/ship.
- A public meeting notice will be provided to the public and media at least 10 days in advance of each regular meeting and at least five days in advance of any special meeting.
- Written minutes will be taken at all regular and special meetings.
- Option for Steering Committee members to continue participation in the Action Cycle of the State Health Improvement Plan.

COMPENSATION

Lunch and refreshments will be provided during in person PartnerSHIP meetings. Parking or parking reimbursement will also be provided. For members travelling more than 70 miles to in-person meetings, mileage reimbursement or airfare and the cost of lodging and meals at Federal per diem rates will be provided.

CHARTER REVIEW

Charter will sunset at final online posting and distribution of the 2020-2024 State Health Improvement Plan.

Community Input Process: Mini-grantees

- Eastern Oregon Center for Independent Living
- Micronesian Islander Community (APANO)
- Northwest Portland Area Indian Health Board
- Next Door
- Q Center
- Self-Enhancement Inc.
- Unite Oregon

Identifying Strategic Issues

Goal: Identify approximately 12 strategic issues based on the State Health Assessment and priorities in your community

- Strategic issues are critical challenges that must be addressed in order for a community to achieve its vision
- While critical issues are important, strategic issues are important AND forward thinking and seize on current opportunities
- Strategic issues center around a tension or conflict to be resolved, have no agreed upon solution, and must be something the public health system can address.

Purpose of the SHIP

- Identify state population health priorities
- Influence community health improvement plans
- Potential resource investment
- Inform policy development
- Encourage cross-sector efforts

Proposed Process

1) Review findings from State Health Assessment
2) Round robin brainstorm to nominate strategic issues
3) Voting round 1 and discussion
4) Voting round 2 and discussion
5) Voting round 3 and discussion (if needed)

Discussion to be grounded in criteria:

- Disparities
- Magnitude and seriousness
- Upstream determinants

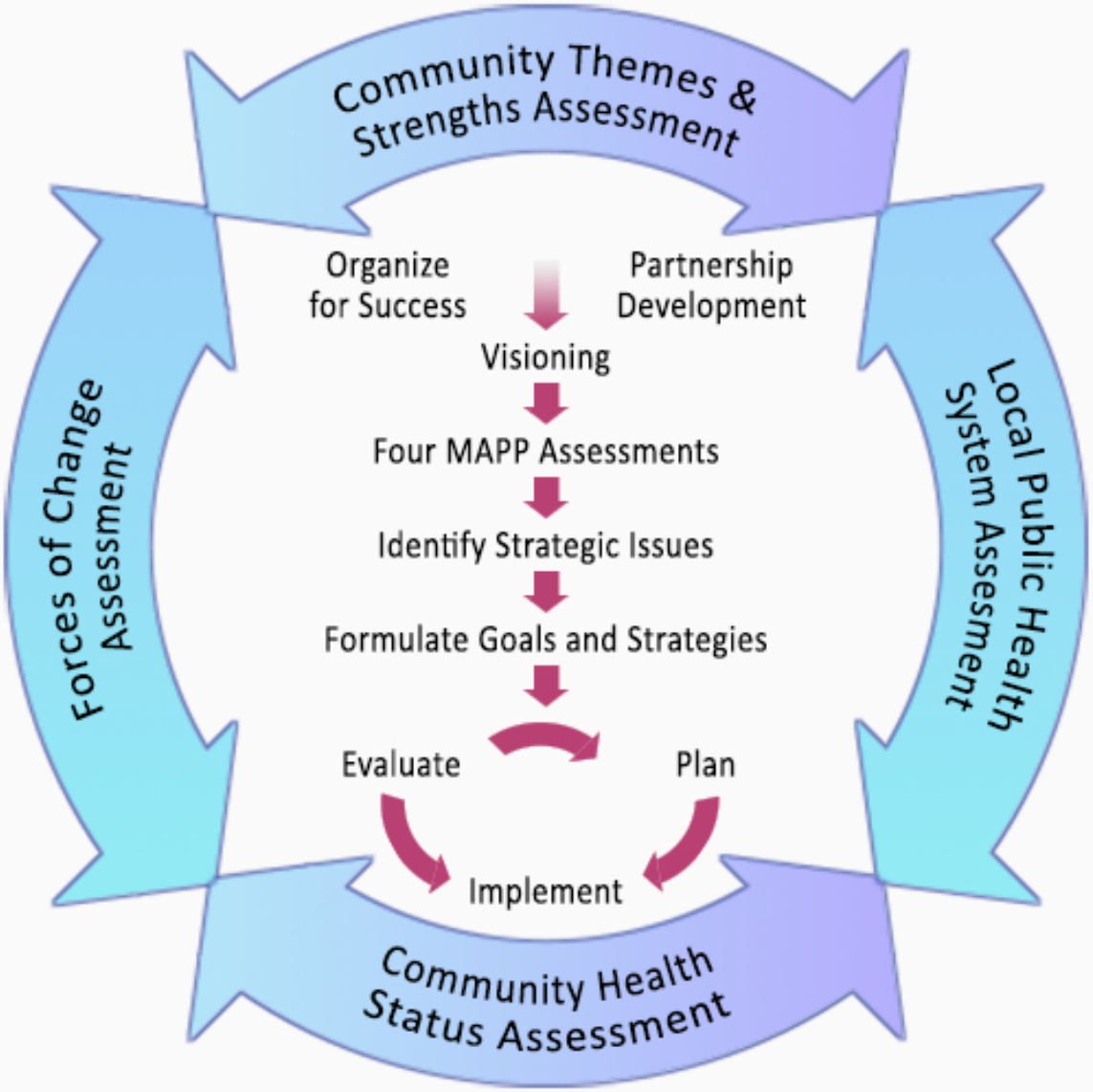
Criteria

Criteria	Definitions	Example
Magnitude & Seriousness	Associated with death or disability, and impacts a large population	Tobacco use is number one cause of preventable death; 1 in 5 people in Oregon use tobacco
Disparities	Subgroups disproportionately impacted	New HIV infections disproportionately impact gay men and African Americans
Upstream Determinant	Root cause of health outcomes	Housing status, education and ACEs

Identify strategic issues

- What issues must be addressed in order to achieve the vision?
- What disparities exist?
- What are the consequences of not addressing this issue?

Findings from the State Health Assessment


Community Themes & Strengths Assessment
Organize for Success
Partnership Development
Visioning
Four MAPP Assessments
Identify Strategic Issues
Formulate Goals and Strategies
Evaluate
Plan
Implement
Forces of Change Assessment
Local Public Health System Assesment
Community Health Status Assessment

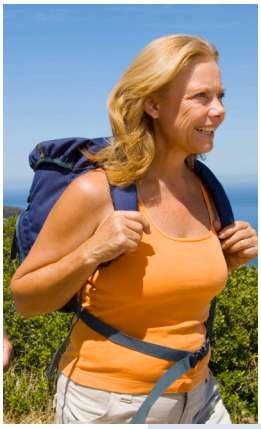
Reacting to the SHA

- What data is notable to you?

- Consider criteria
  - Disparities
  - Magnitude and seriousness
  - Upstream determinants

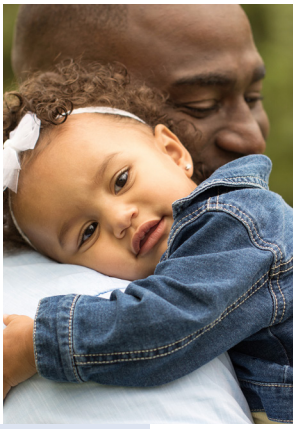
2018

Oregon's State Health Assessment







Oregon Health Authority
PUBLIC HEALTH DIVISION

Acknowledgements

The State Health Assessment (SHA) would not have been possible without the efforts of many individuals, including the SHA Steering and Subcommittee members, Public Health Division staff, and hundreds of people across our state who attended community meetings, completed an online survey, and provided public comment.

Core, Steering and Subcommittee Membership

Core Group – Public Health Division, Oregon Health Authority

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Policy Specialist

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Dear Colleagues,

We know that the majority of what influences health happens outside of the doctor's office. Without a thorough understanding of the many factors that contribute to health and well-being, we will not significantly improve health outcomes for people in Oregon. To that end, I am pleased to share with you the 2018 State Health Assessment (SHA). This is the Oregon Health Authority's comprehensive resource for describing the opportunities and challenges that we face in our state to ensure that every person can achieve optimal health and well-being.

The development of the SHA was led by the SHA Steering Committee and the Health Status Assessment and Themes and Strengths Assessment subcommittees. These groups were made up of people representing a variety of perspectives related to health: culturally-specific organizations, coordinated care organizations and community advisory councils, tribes, local public health authorities, and organizations involved with transportation, education, housing, social services, health care, and more. I am grateful for the time and leadership of our partners who are committed to the SHA process. I also thank the people in Oregon who devoted their time to provide additional perspectives on what it takes for communities to be healthy and achieve well-being for everyone.

As we move forward to shape the priorities for health in Oregon from 2020 to 2024, we want to continue to hear from you. We want your ideas for how the Oregon Health Authority should develop goals and strategies to advance work across the state that addresses the social determinants of health and creates health equity. We also need you to work with us to make these efforts successful, whether you're from Baker or Yamhill County, or anywhere in between.

Thank you for your partnership.

Sincerely,

Patrick M. Allen
Director

OREGON STATE PUBLIC HEALTH DIVISION
Office of the State Public Health Director
Kate Brown, Governor

Oregon Health Authority

800 NE Oregon Street, Suite 930
Portland, OR 97232
Phone: 971.673.1229
Fax: 971.673.1299

Dear Colleagues,

I am happy to share Oregon's 2018 State Health Assessment (SHA). Conducted every five years, Oregon's SHA provides a detailed description of the health of people in Oregon; our values, strengths, and needs; and the availability of critical public health protections that keep everyone safe and healthy.

I want to thank our many partners and community members who led the development of the SHA and contributed their perspectives through community meetings and surveys. The SHA includes qualitative and quantitative information gathered over the latter half of 2017, including; population health statistics, feedback from communities through an online survey, regional meetings, and focus groups with partner organizations; as well as data from the statewide public health modernization assessment conducted in 2016. The SHA highlights the strengths of our communities and the areas where persistent disparities are holding people back from achieving optimal health.

The Oregon Health Authority will use the SHA to identify priorities and strategies for the 2020 – 2024 State Health Improvement Plan. We also hope the SHA will be a tool for every organization in Oregon that is involved with local community health assessments so they have information they need to describe the health of people in their communities.

I look forward to continuing our work together on the next State Health Improvement Plan to help everyone in Oregon be as healthy as possible, regardless of race, ethnicity, ability, gender, sexual orientation, socioeconomic status, nationality, and geography.

Respectfully,

Lillian Shirley

Lillian Shirley, BSN, MPH, MPA
Public Health Director
Oregon Health Authority

Vision and Values

In September 2017, the SHA Steering Committee set out to express the vision for the 2018 SHA and the forthcoming State Health Improvement Plan (SHIP), which will be developed based on the 2018 SHA. The vision articulates what Oregon would like to achieve in the future, as a result of the strategies laid out in the 2020 – 2024 SHIP. The values are what the SHA and SHIP should collectively support.

Vision:

Oregon will be a place where optimal health is achieved for everyone, throughout the lifespan, regardless of race, ethnicity, ability, gender, sexual orientation, socioeconomic status, nationality, and geography.

Values:

Equity, Accountability, Empowerment, Transparency, Inclusion

Contents

Executive Summary

Every five years, the Oregon Health Authority, Public Health Division (OHA-PHD) describes the health of our state through the State Health Assessment (SHA). The SHA provides a data-driven resource that describes Oregon's health-related strengths as well as its leading health challenges. The SHA also attempts to illustrate Oregon's health as a state, compared to the rest of the country.

Vision:

Oregon will be a place where optimal health is achieved for everyone, throughout the lifespan, regardless of race, ethnicity, ability, gender, sexual orientation, socioeconomic status, nationality and geography.

Since Oregon published its last SHA in 2012, our state has made progress on many important measures, including:

- Reduction in opioid-related deaths;
- Reduction in rates of HIV infection;
- Increasing rates of immunization among 2-year-olds;
- Lower rates of teen pregnancy and births;
- Lower smoking rates among adults and teenagers.

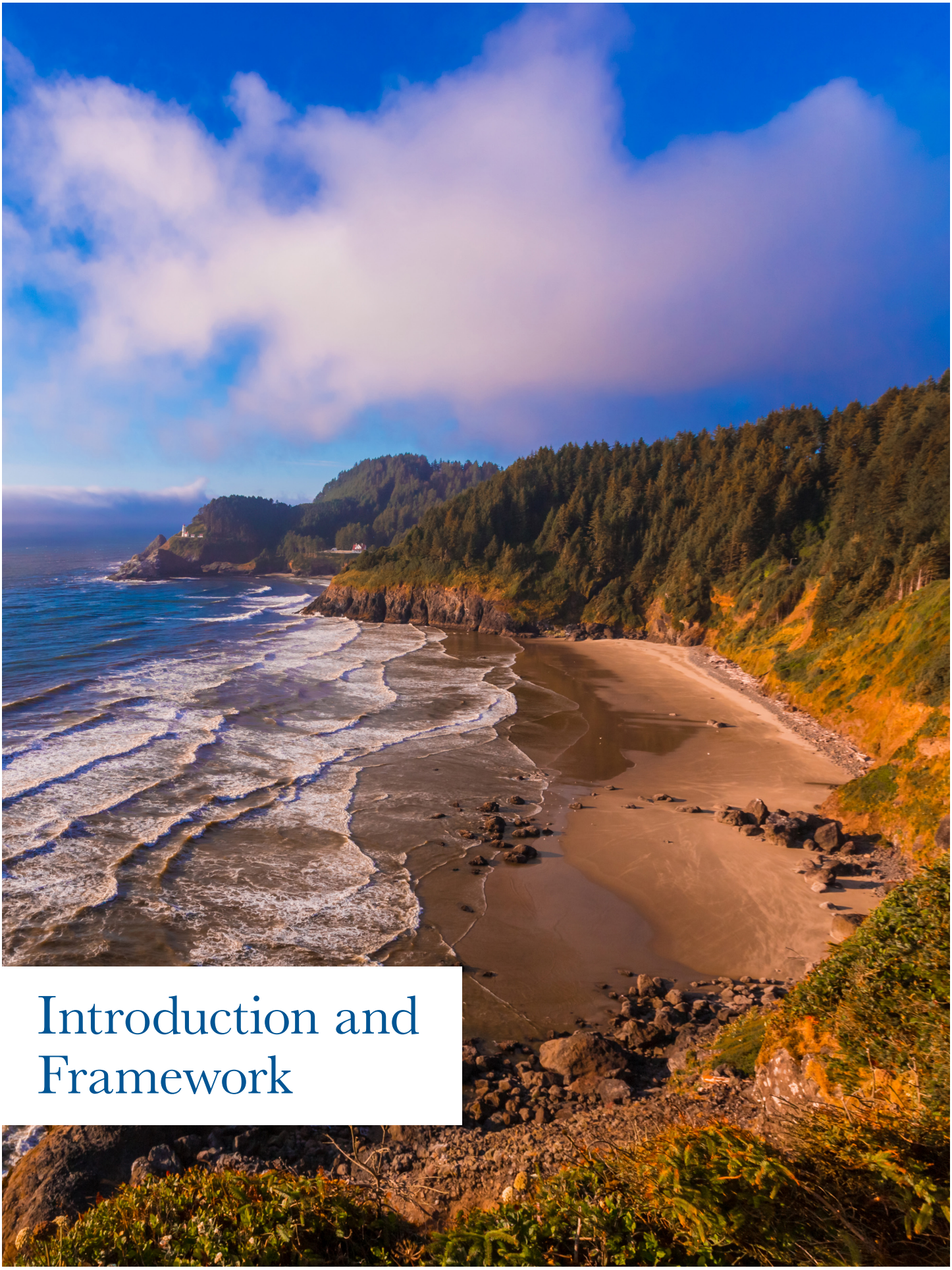
Oregon has also experienced gains in access to health insurance with the start-up of coordinated care organizations (CCOs) and the passage of the Affordable Care Act. However, some measures of health in Oregon have worsened, including rates of obesity, diabetes and suicide. In addition, Oregon's low standing in education, housing affordability and food insecurity have contributed to a decline in the state's relative standing in national scorecards of health measures. According to the United Health Foundation's Annual Health Rankings, Oregon was the 20st healthiest state in the country in 2017 (Massachusetts is 1st and Mississippi is 50th).* This is down from 13th in 2012 and 8th in 2011.† Many factors could be contributing to this relative worsening of health outcomes.

Oregon has a lot to be proud of: beautiful landscapes that provide boundless recreation, an ideal growing season that provides an abundance of local fruits and vegetables, and a rapidly growing population that is spurring economic growth in some parts of the state. However, many people in Oregon do not enjoy the benefits of educational attainment, economic opportunity and good health. This situation has created dramatic differences in health outcomes among people in Oregon, called health disparities, which are unacceptable.

The SHA is the result of many people from across Oregon who came together to describe what is needed for everyone in their community to be healthy. More than 900 people participated in community meetings or responded to an online survey.This information helps to illustrate the health disparities seen in quantitative data. Key findings include:

- People in Oregon want everyone to have their basic needs met, including affordable and quality housing, healthy foods, healthy environments, convenient transportation, education, economic stability, and child care. Only when these needs are met can we all be as healthy as possible.
- Some communities are disproportionately affected by health disparities.
- Communities are coming together, despite differences, to address health disparities and eliminate systems of oppression such as racism and classism.

The SHA is designed to help inform the health priorities of the 2020 – 2024 SHIP, a roadmap for helping Oregon realize the vision of a place where optimal health is achieved for everyone, throughout the lifespan, regardless of race, ethnicity, ability, gender, sexual orientation, socioeconomic status, nationality, and geography.



Introduction and Framework

Introduction and Framework

The World Health Organization* defines health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." There is not one single measure which describes how healthy Oregon is, but rather a constellation of factors that provide the overall picture. The SHA describes the health of people in Oregon, including their strengths, weaknesses, and areas for improvement. The SHA uses quantitative and qualitative data to share how people across Oregon describe the health of people in our state and what is needed for everyone to be healthy. The SHA will help to inform the strategic priorities for the 2020 – 2024 State Health Improvement Plan (SHIP).

The SHA Steering Committee identified a framework that relies on the four foundational programs for public health in Oregon, plus a fifth category, the social determinants of health. The SHA categorizes data within these five areas:

- **Social determinants of health** – Social conditions that influence health, like employment and education
- **Environmental health** – Factors in the natural and built environment that affect health, like air and water, transportation, housing, and occupation
- **Prevention and health promotion** – Behaviors and policies that affect health, like tobacco and alcohol use, and access to healthy food
- **Access to clinical preventive services** – Health care services that are critical to preventing long-term problems, like immunizations and cancer screening
- **Communicable disease control** – Transmissible diseases such as food borne diseases, sexually transmitted infections, HIV, pertussis, and health-care associated infections

* http://www.who.int/about/mission/en/

Health Equity and the Social Determinants of Health

Health equity is defined as the absence of unfair, avoidable, or remediable differences in health among social groups.* Health equity exists when all people can reach their full health potential and are not disadvantaged because of their social and economic status, social class, race, ethnicity, religion, age, disability, gender identity, sexual orientation or other socially-determined circumstance.† Achieving health equity requires a fair and just distribution of resources and power that eliminates gaps in health outcomes between and within different social groups.

To ensure health equity, OHA-PHD must examine the root causes of health inequity. These root causes are collectively called the social determinants of health. Social determinants of health (SDOH) include access to healthy food, safe neighborhoods and housing, transportation, and education.

Social determinants and the places people live, work, learn and play, have the most significant effect on individual and population-level health. People of color and those living with fewer financial resources are more likely to bear the burden of unsafe neighborhoods, substandard housing, lack of transportation, and low-quality schools. As a result, some people and communities with less or no access to these resources experience worse health outcomes, poorer quality of life, and shorter lifespans.

Community members shared:

"Eradication of institutional racism…fair systems that treat everyone with respect and dignity"

"Equity and equal access to resources. It also requires an ability to understand that not everyone's needs will be met in the same way."

"To realize that in most cases people that are not healthy did not make the choice to be that way."

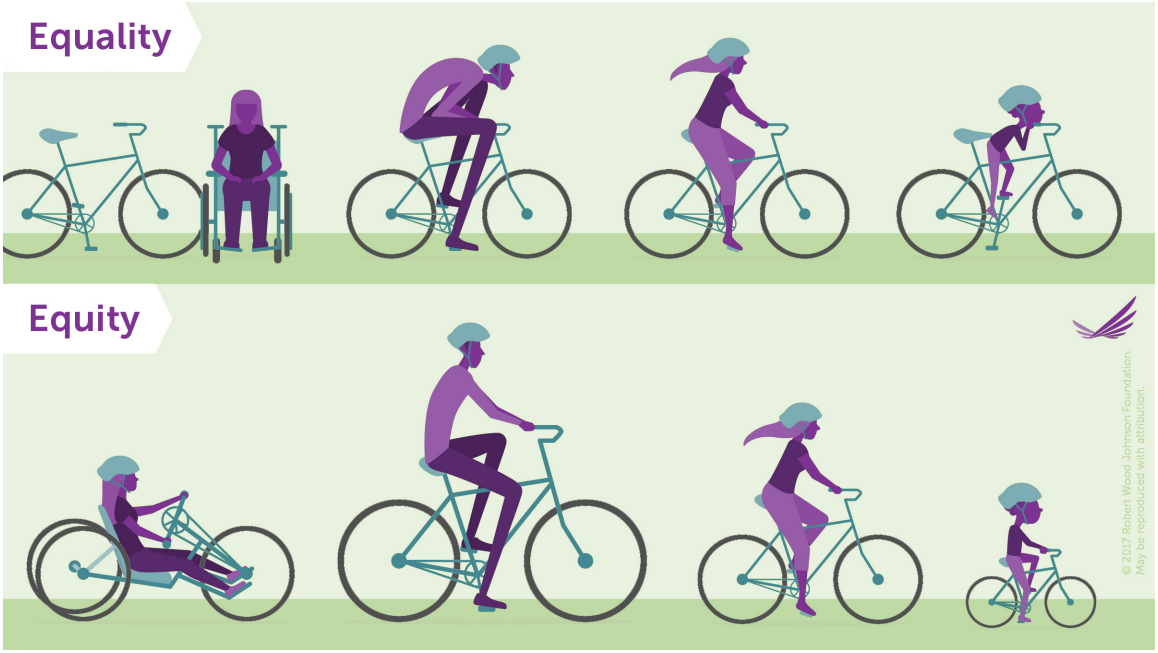
"Holding oppressive structures accountable for inequitable practices, changing antiquated processes for more equitable policies and more diverse representation in decision-making arenas."

"Community health looks at the experience of EVERY person and creature in the environment. If institutions of care, service and education are not addressing/ dismantling the areas of systematic oppression of marginalized people then the community is not healthy."

* World Health Organization, Commission on Social Determinants of Health, (2007). A Conceptual Framework for Action on the Social Determinants of Health.

† Winnipeg Regional Health Authority. (n.d.). Winnipeg Regional Health Authority's Position Statement on Health Equity. Available at http://www.wrha.mb.ca/about/healthequity/statement.php

Health equity means we all have the basics to be as healthy as possible



Racism and Discrimination Affect Health

In all the places where people live their lives, racism, classism, and other systems of oppression negatively affect people's health. These systems create barriers to resources like education, safe homes and neighborhoods, jobs, and health care. Racism has played a powerful role in Oregon's history, despite the state's current reputation for accepting differences. For example:

- When Oregon was first recognized as a state in 1859, it was the only state in the country that forbade people of color from living in the state.
- In 1862, an annual tax was levied on people of color to help maintain white settlers' access to land that had been taken from Oregon tribes.
- Oregon's legislature refused ratification of the 14th and 15th U.S. constitutional amendments (until 1973 and 1959, respectively), which aimed to grant citizenship to all persons born or naturalized in the United States, including former slaves, and give black men the right to vote.
- Redlining policies and other discriminatory loan practices enacted by the real estate industry prevented black families from purchasing homes in white neighborhoods through the 1990s.

The impact of Oregon's racist history remains starkly evident in the health disparities described in the SHA. Racism, whether overt,* implicit,† institutional,‡ or structural,§ continues to be a powerful force in our state and American society. Yet racism is not the only form of discrimination that people experience. People who are seen as different due to difference in ability, sexual orientation, gender, socioeconomic status, or geographic location also experience health disparities. Racism often compounds these challenges.

Discrimination causes stress. Likewise, trauma is a common experience for many people, especially communities of color. When these traumas are transmitted from one generation to the next, they can lead to epigenetic changes, or changes in our genes, which fuel health disparities. Neuroscience now paints a clear picture of how these factors of toxic stress and trauma can negatively affect brain development and lifelong outcomes in education, socioeconomic status, and health.

Throughout the SHA, OHA-PHD presents data that illustrates how systems of oppression and social determinants of health contribute to health outcomes and disparities. The SHA explores health disparities among specific groups, including:

- People of color
- People with disabilities
- People with low income
- People who identify as lesbian, gay, or bisexual
- People who live in rural or frontier areas of our state

* Overt racism against an individual, as in prejudicial comments or discriminatory actions.
† Implicit racism can occur when a person's attitudes influence their behaviors, but they are unaware of their bias.
‡ Institutional racism involves policies, practices, and procedures that work better for white people than for people of color; it can be unintentional or inadvertent.
§ Structural racism includes historical and current racism across all institutions, which results in an entire system that negatively affects people of color.

Key Findings of the SHA

I. How healthy is Oregon?

Oregon has made significant strides in many health outcome measures, health insurance coverage and access to medical care. Yet, our state's standing in national health rankings has declined, largely due to health factors that occur outside the doctor's office. These factors are often referred to as 'social determinants of health' and they include issues such as education, housing and transportation. According to the United Health Foundation's Annual Health Rankings, Oregon was the 20st healthiest state in the country in 2017 (Massachusetts is 1st and Mississippi is 50th).* This is down from 13th at the time the last SHA was published in 2012, and 8th in 2011.†

II. What is important to people in Oregon?

People in Oregon value self-determination, independence, and choice. They want to ensure that everyone has their basic needs met, including affordable and quality housing; access to healthy foods; convenient transportation; education; economic stability; and child care.

People in Oregon also recognize important factors that keep people healthy, such as a connection to family, friends, and community. However, they appreciate that not everyone is able to be healthy in their communities, often for reasons beyond their control. People in Oregon recognize that the best way to make sure that every person in our state can be healthy is to make our leadership reflect Oregon's increasingly diverse population.

III. What contributes to the health disparities that exist in Oregon?

People in Oregon recognize that systems of oppression, such as racism and classism, affect access to opportunities and resources that influence our health. They are aware that people in positions of authority and decision-making in Oregon usually represent white, dominant culture. People in Oregon recognize that until minority populations share decision-making authority in our state and American society more broadly, the decisions that get made will tend to favor the dominant culture, further contributing to health disparities.

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* National Health Rankings. For all national rankings identified in this document, 1 is best and 50/51 (when Washington D.C. is counted as a state) is worst.

† http://cdnfiles.americashealthrankings.org/SiteFiles/Reports/Americas-Health-Rankings-2012-v1.pdf

IV. What assets does Oregon have that can be used to improve health?

People in Oregon have abundant state pride, particularly in two assets: our distinct communities and our plentiful natural resources. People across the state reported high levels of civic engagement in their cities and towns, and considerable hope for a better future. Many also mentioned pride in the laws that have recently come out of the Oregon Legislature, such as Cover All Kids and the Reproductive Health Equity Act. A diverse mix of people attended community meetings across the state to contribute their perspectives to the SHA, yet these common themes emerged from all of the meetings.

Process for Development of the SHA

To develop the SHA, OHA-PHD used the Mobilizing Action through Planning and Partnership* (MAPP) framework, an evidence-based tool developed by the National Association of County and City Health Officials. This framework directed us to conduct four unique assessments in order to paint a complete picture of health in Oregon:

- **Public Health System Assessment** – Findings from the 2016 Public Health Modernization Assessment informed this assessment.
- **Health Status Assessment** – This assessment examined quantitative health indicators to describe the health status of people in Oregon.
- **Themes and Strengths Assessment** – This assessment was designed to capture community members' experiences with health.
- **Forces of Change Assessment** – This assessment identified external threats and opportunities, including political and social issues that could affect the health of people in Oregon.

To complete the four assessments, OHA-PHD established three groups according to the MAPP process: a Core Group, a Steering Committee and Subcommittees, and the Community at Large.

Core Group

The Core Group was comprised of Public Health Division staff who provided support to the steering and subcommittees and managed the assessment process. The Core Group met every few weeks throughout the SHA process to ensure that it aligned with the MAPP framework, prepare agendas and materials for the steering committee and subcommittees, and draft the SHA. Core Group members also attended community meetings around the state. They also reviewed other health assessments from around Oregon, including:

- Community health assessments produced by CCOs and local public health authorities
- Community health needs assessments produced by hospitals

* https://www.naccho.org/programs/public-health-infrastructure/performance-improvement/community-health-assessment/mapp

- Assessments conducted by the Oregon Health Authority such as the CCO Listening Session Summary Report (https://bit.ly/2u6A9MV) and the Behavioral Health Collaborative Report (https://bit.ly/2KJRGVd)
- Assessments completed by other agencies including the Oregon Rural and Frontier Health Facility Listening Tour Report (https://bit.ly/2N3Puob), Oregon Areas of Unmet Health Care Need Report, Oregon's Children and Youth with Special Health Care Needs (https://bit.ly/2KS97T3), Oregon's State Plan on Aging (https://bit.ly/2J71lzJ), and the State of Our Health 2015 (https://bit.ly/2N26wDq).

Steering Committee and Subcommittees

Many individuals provided direction and guidance throughout the SHA development process. Steering Committee members had experience in assessment and were representative of the public health system. Members represented culturally-specific organizations, local and tribal public health authorities, CCOs and CCO Community Advisory Councils (CACs), hospitals, regional health equity coalitions, and academia. The Steering Committee was responsible for developing the SHA and SHIP vision and values, identifying key findings, and completing the Forces of Change Assessment. Steering Committee members also participated on one of two subcommittees: Themes and Strengths Assessment or Health Status Assessment.

Themes and Strengths Assessment Subcommittee

More than 20 subcommittee members met three times between August and November 2017 to identify previous community engagement efforts; review themes across those efforts and local community health assessments; develop the strategy for community engagement; and provide input into the agenda, key questions, locations, and invitees for the SHA community meetings that were held in October 2017. Members also reviewed feedback collected during the SHA community engagement process, which included the community meetings, an online survey, and facilitated discussions with partner organizations. Many subcommittee members assisted with outreach to communities to encourage participation in the SHA process.

Health Status Assessment Subcommittee

Twenty subcommitee members met three times between August and November 2017 to recommend the framework for the SHA, review existing state health indicators; recommend additional indicators based on national frameworks; determine criteria by which indicators would be selected; and provide feedback on proposed indicators. This group was advised by subject-matter experts within the OHA-PHD. The final set of health indicators were prioritized based on criteria that included the following:

- **Magnitude** – Proportion of the population affected
- **Seriousness** – Issue is associated with death, severe disease, disability, or suffering
- **Trend** – Ability to track health indicator over time
- **Comparison** – Measure is comparable to national and local data
- **Alignment** – Measure aligns with national or local priorities
- **Data Quality** – Existence of an annual statewide data set

Community at Large

Broad community input was sought in the SHA development process. More than 900 individuals responded to the invitation to attend community meetings, complete an online survey, or participate in a facilitated conversation with an existing community group. More than 110 people attended one of seven community meetings in La Grande, Portland, Eugene, Grants Pass, Medford, Newport, and Madras in October 2017. An additional 788 people responded to an online survey that was available in English and Spanish and shared widely across the state. Direct quotes from these efforts are included in the SHA to further illustrate the health-related needs identified by participants. Finally, additional feedback was contributed by the following community groups:

- Hood River County Alcohol, Tobacco and Other Drug Prevention Coalition;
- Jackson County Substance Abuse Prevention Coalition;
- Senior and Disability Services Advisory Councils for Lane Council of Governments;
- Disability Services Advisory Council of Multnomah County;
- Willamette Valley Community Health CAC;
- The Alliance of Culturally-Specific Behavioral Health Providers and Programs;
- Linn Benton Regional Health Equity Alliance; and
- Cow Creek Band of Umpqua Tribe of Indians.

Demographics of the Community at Large

While the SHA process defined and sought a "community at large" that was racially and geographically representative of Oregon, the people who attended the seven community meetings and responded to the survey were less diverse.

Demographics of community meeting attendees:

- Nineteen counties were represented: Baker, Benton, Clackamas, Coos, Deschutes, Harney, Jackson, Jefferson, Josephine, Lane, Lincoln, Malheur, Multnomah, Tillamook, Umatilla, Union, Wasco, Washington, and Wallowa.
- Many attendees identified a professional affiliation with a health care or social service provider.
- A majority were female (77% female, 20% male, 3% other/non-binary).
- A majority had a college degree or higher (93% college degree,* 7% high school diploma or GED).
- Attendees were representative of Oregon by race and ethnicity (83% white, 13% Latina(o), 8% American Indian and Alaskan Native, 2% African American, 5.5% Asian, 1% Native Hawaiian and Pacific Islander).†

Demographics of survey respondents:

- All Oregon counties were represented. In the online survey, 68% of respondents lived outside of the Portland metro area.
- A majority (79%) had a professional affiliation with a health care or social service provider.
- A majority were female (78% female, 19% male, 1.8% other/non-binary, 0.9% transgender).
- A majority had a college degree or higher (78% college degree, 20% high school diploma or GED, 1% less than high school graduation).
- Respondents were representative of our state by race and ethnicity (84.5% white, 15.4% Latina(o), 4.4% American Indian and Alaskan Native, 5.0% African American, 2.8% Asian, 1.4% Native Hawaiian and Pacific Islander).‡

* Also includes those with some college and/or certificate degrees.
† Percentages don't total 100% because people identified multiple races.
‡ Percentages don't total 100% because people identified multiple races.

- Among Latina(o)-identified respondents, 64% were of Mexican or Mexican American descent, 9% were Chicano(a), 9% were Puerto Rican, and 25% identified another ethnicity.
- Among Asian-identified respondents, 39% were of Chinese descent. Other respondents identified as Filipino, Japanese, Korean, Vietnamese, or another ethnicity.

Data Limitations

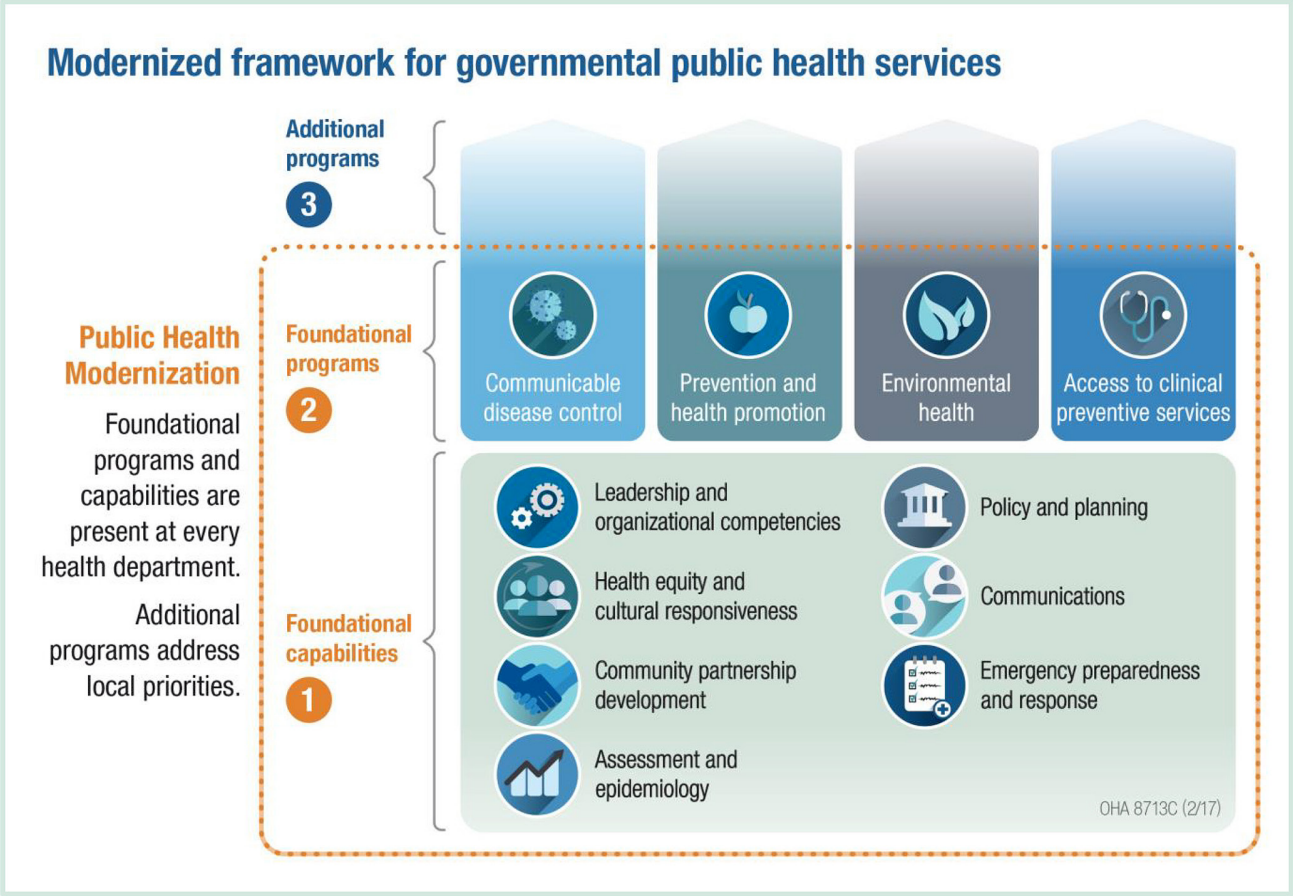
Despite a comprehensive effort to engage communities in the SHA process, there are some limitations to the data OHA-PHD collected. Educated women with a professional affiliation with a health care or social service provider are overrepresented in the responses gathered from the community meetings and the online survey. Also, people who have experienced health disparities may have faced barriers to participation, including time and location of meetings and distrust of state government.

To address these barriers, OHA-PHD staff reached out to agencies suggested by the Themes and Strengths Assessment Subcommittee. At OHA-PHD invitation, several agencies held internal discussions around the SHA's key community engagement questions and sent notes to the PHD to include in this report. OHA-PHD also purchased Facebook ads to reach populations that had not participated in the initial launch of the online survey. Additionally, the SHA incorporates findings from the OHA-Place Matters Oregon focus groups, which OHA conducted in 2014 with African Americans, Latina(o)s, American Indian and Alaska Native, and residents in rural areas of the state.

A lack of sufficiently granular data was also a challenge. Although OHA-PHD monitors a wealth of population data, many of the indicators do not allow for analysis by subgroup such as race, ethnicity or county. For some indicators, the data collection process does not encompass these and other subgroups. For example, it is difficult to capture health information about migrant workers or incarcerated populations. For other indicators, the number of people affected by a specific condition or behavior is not large enough to allow for meaningful analysis. In 2015, the Oregon Legislature enacted a statute related to the collection of data on race, ethnicity, language, and disability status. As this statute continues to be put into practice across the Oregon Health Authority and Department of Human Services, OHA-PHD expects the availability of granular data to improve.

Public Health System Assessment

The Oregon public health system is transforming through public health modernization. The model for public health modernization is built upon a set of 7 foundational capabilities and 4 foundational programs. Foundational capabilities are the knowledge, skills, and abilities needed to run effective public health programs like communicable disease control, prevention and health promotion, environmental health and access to clinical preventive services. Foundational programs, in turn, lead to better health outcomes.



In 2016, all state and local public health authorities completed a public health modernization assessment to learn about current capacity for providing foundational capabilities and programs. This assessment found:

- There are gaps in all areas across the public health system.
- Some public health authorities have more gaps than others.
- No foundational programs or capabilities have been significantly implemented across the state.
- The most significant gap was found in the health equity and cultural responsiveness capability. More than half of all people in Oregon live in an area where the public health authority does not have the capacity to sufficiently address health disparities.

In July 2017, members of the SHA Steering Committee and other community members participated in a webinar to learn about the 2016 public health modernization assessment and discuss how its findings could be applied to the SHA. This group highlighted the need for ongoing focus and reflection on what the public health system should be doing to reduce health disparities.

Public health authorities are already working to build capacity in the foundational capabilities, and this work will continue in coming years. The goal is a modern public health system – one where innovative public health agencies build upon their historic success at improving health with greater attention toward improving health equity.

Environmental Context

Forces of Changes Assessment

In order to describe the greater context of the SHA, the SHA Steering Committee identified the events, trends, and factors that affect health in Oregon or could affect it in the future.

Events – One-time occurrences, such as a natural disaster or passage of legislation

The committee identified the impact of changes in leadership at all levels of government, including federal, state, and government agencies, as the primary "event" affecting health in Oregon. While federal-level changes have threatened social and health services and protections such as the Affordable Care Act, Deferred Action for Childhood Arrivals (DACA), and the Indian Healthcare Improvement Act, state-level changes have created opportunities to improve population health, such as Cover All Kids, Tobacco 21, and the Reproductive Health Equity Act.

While the creation of CCOs has drawn national attention to Oregon's innovative approach to health care, challenges remain. People have reported facing barriers to accessing care because of a lack of health care providers, particularly in rural and frontier areas.

Other identified events of importance included natural disasters and other traumatic events, such as wildfires, earthquakes, tsunamis, and mass shootings.

Trends – Patterns over time, such as migration or gentrification

The primary trend that the committee identified was Oregon's quickly growing population. According to Census Bureau data, Oregon was the 6th fastest-growing state in the nation in 2016, and more than three-quarters of this growth came from people moving into the state. Oregon's Office of Economic Analysis (OEA) projects that the population will grow to 4.25 million people by 2020. Not only is the number of people in Oregon increasing, but the state is becoming more diverse.

This demographic change is fueling economic growth for some. However, it also exacerbates disparities, as seen in the current housing crisis affecting all parts of the state. A growing population also taxes health and social systems. The population of Oregon

is also growing older. An aging population places more demands on the medical system and long-term care facilities.

Committee members also expressed concern about the privatization of public health services as a result of declining resources for public health.

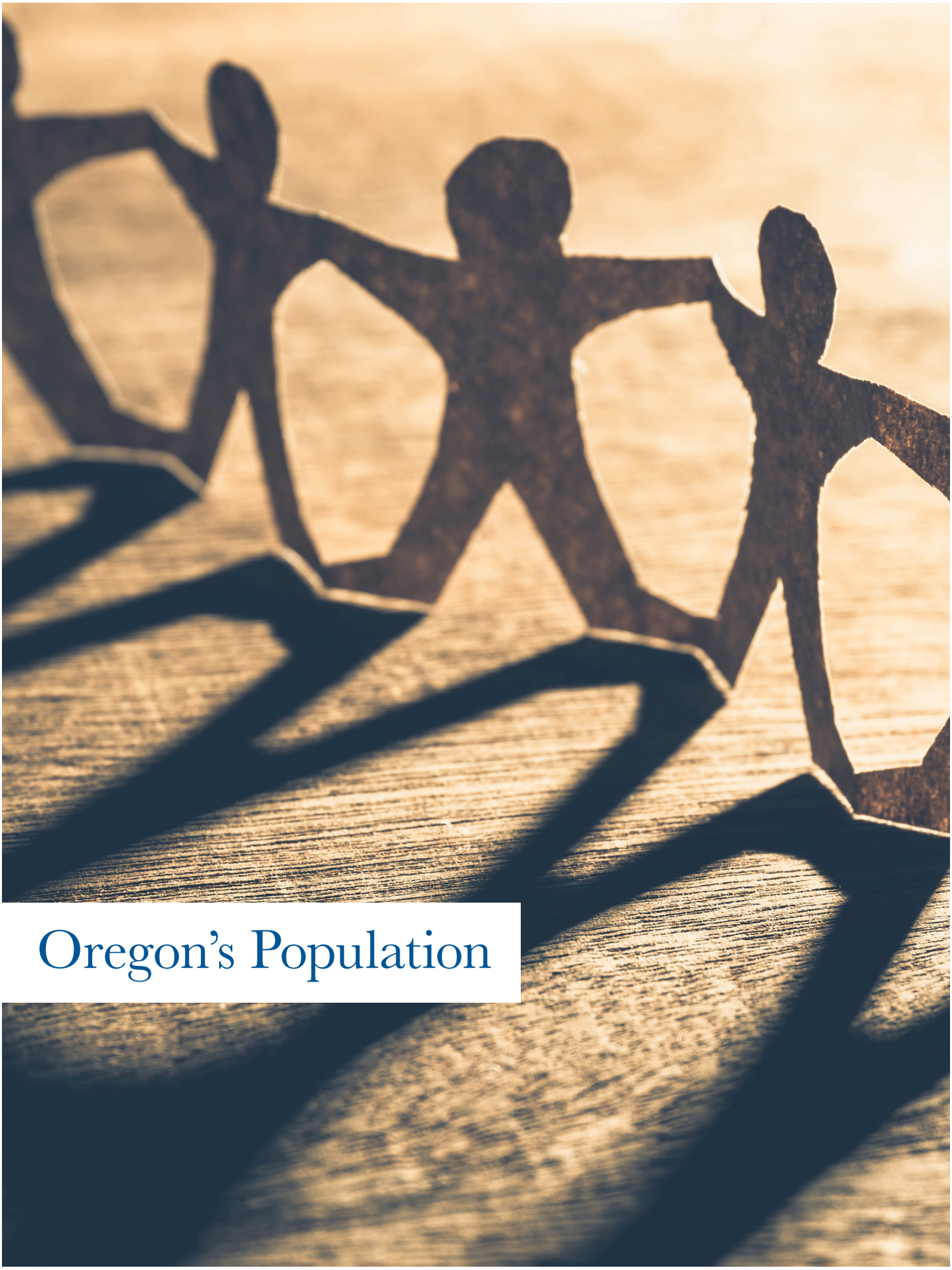
Other trends identified in the SHA include the potential negative impacts of climate change. The committee also noted the potential for climate-change solutions that could improve population health in Oregon, like greater consumption of locally-grown foods and increased use of active transportation options such as biking and walking.

Factors – Forces that are constant, such as geographic elements

The committee noted that people in Oregon are proud of the state's abundant natural resources, tremendous recreational opportunities, and strong tourist industry. However, outdoor opportunities are not accessible to everyone due to transportation and financial barriers. The tourism industry benefits many people in Oregon but has also reduced the affordability of housing in some communities. Finally, while beautiful, mountains create significant transportation barriers for isolated communities, particularly during winter.

The committee also highlighted Oregon's struggle to fund the high-quality state services that people expect the government to provide. For example, although most people agree that Oregon is a good place to raise a child, the state education system continues to be among the worst in the country. Until Oregon identifies a more sustainable revenue structure, basic services will be threatened.

The committee recognized that while the real estate market is thriving in some areas of the state, the experience of homelessness and housing instability is a reality for many people in Oregon. This is a growing problem as housing costs increase. Finally, while historical and current institutional and systemic racism contributes to segregation and gentrification, communities also report increased awareness of and conversations about racism in our state.



Oregon's Population

Oregon's Population

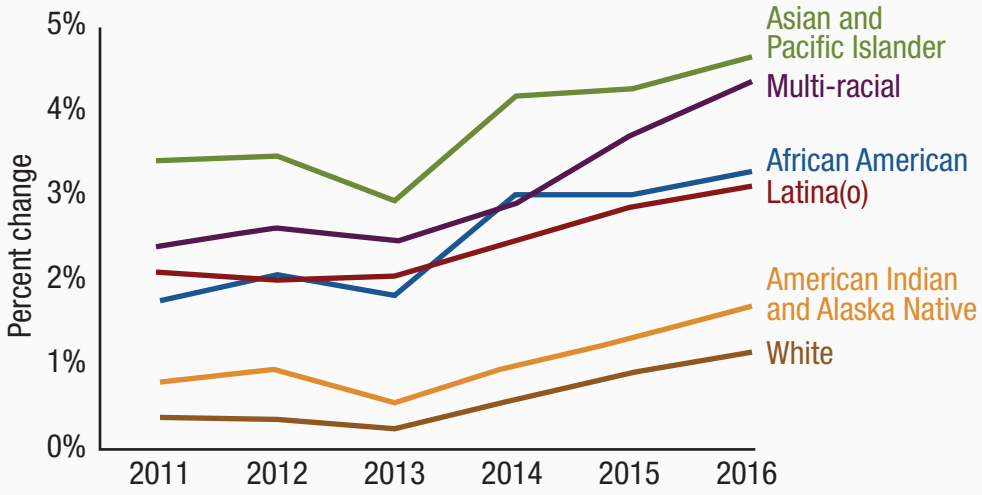
Understanding demographic changes is important for understanding specific health challenges experienced by different population groups. According to U.S. Census data, 4.1 million people were living in Oregon as of July 2017. This is an 8.1% increase since 2010. Oregon's Office of Economic Analysis (OEA) projects that the population will grow to 4.25 million people by 2020. Population growth has primarily occurred in urban areas such as the Portland metropolitan area and Bend.

Age, Race, and Ethnicity

The proportion of older adults has also increased, with the percentage of residents older than age 65 rising from 13.9% in 2010 to 16.8% in 2016. According to the OEA, older adults could represent 18.5% of Oregon's population by 2020.

Among people living in Oregon in 2016, 76% identified as white, 13% Latina(o), 5% Asian and Pacific Islander, 2% African American, 1% American Indian and Alaska Native, and 3% two or more races. The racial and ethnic distribution varies by age: 80% of adults (>18 years) are white and 10% are Latina(o); by contrast, 64% of children (<18 years) are white and 22% are Latina(o). Every county has become more diverse since 2013, with the largest increase in Asian populations.

Population growth by race and ethnicity, Oregon



Source: National Center for Health Statistics

Gender and Sexual Orientation

Two surveys provide population health data on people in Oregon who identify as Lesbian, Gay, or Bisexual (LGB): the adult Behavior Risk Factor Surveillance System (BRFSS) survey, and in youth, the Oregon Healthy Teens (OHT) survey. In 2016 in Oregon, 2% of men and 2% of women identified as lesbian or gay; and 2% of men and 4% of women identified as bisexual. Among 11th graders, 2% of boys and 1% of girls identified as lesbian or gay, and 4% of boys and 10% of girls identified as bisexual.

In 2017, the OHT survey added answer categories for gender including transgender, gender fluid, and other nonbinary answers. About 6% of 11th graders reported nonbinary or multiple gender answers. Among gender non-conforming youth, 64% identify as lesbian, gay, bisexual or questioning.

	Adult		Grade 11		
Demographics	**Men**	**Women**	**Boys**	**Girls**	**Gender Non-Conforming**
Heterosexual	95%	92%	92%	85%	36%
Lesbian and Gay	2%	2%	2%	1%	9%
Bisexual	2%	4%	4%	10%	15%
Questioning	NA	NA	2%	3%	40%

Source: Oregon BRFSS, 2013 – 2016 and Oregon Healthy Teens, 2017

Population health data are not available on the percentage of adults who identify as transgender or gender non-conforming in Oregon. However, a 2016 report from the Williams Institute* used BRFSS data from other states to generate national and state estimates for the transgender adult population. The report found that 0.6% of U.S. adults (about 1.4 million individuals) and 0.65% Oregon adults (about 20,000) identify as transgender.

* https://williamsinstitute.law.ucla.edu/research/how-many-adults-identify-as-transgender-in-the-united-states/

Disability

Living with a disability or special health care need can significantly affect a person's health. This results from the negative treatment of people with disabilities and their lack of access to conditions that promote health and well-being (e.g., safety, relationships, and health care). In Oregon, 24% of adults and 30% of youth report living with a disability. Furthermore, 19% of Oregon children from the age of birth to 17 years had a special health care need, or a chronic physical, developmental, behavioral, or emotional condition, that requires health and related services of a type or amount beyond that required by children generally.

The specific types of disability among adults and among youth in 11th grade are shown in the table below.

Demographics	Adults	Youth
Deaf and hard of hearing	5%	2%
Blind and low vision	3%	5%
Cognitive difficulties	12%	24%
Mobility issues	12%	3%
Difficulty with self-care	3%	1%
Difficulty with independent living	6%	9%
Any disability (one or more)	24%	30%

Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2016 and Oregon Healthy Teens 2017

Social Determinants of Health

Social Determinants of Health

People in Oregon recognize that the social determinants of health affect how healthy people can be. One out of every two comments collected during the SHA community engagement process was specific to the conditions in which people are born, grow, live, work, and age. Many of these themes are also addressed in the Environmental Health chapter. The social determinants of health are also commonly cited in community health assessments conducted by CCOs, local public health authorities, and hospitals.

Across Oregon, people shared similar concerns about affordable housing, quality education, and living wages. They also voiced worries about how racism, classism, and homophobia contribute to health disparities. Despite these challenges, many communities are empowered and engaged to work towards improvement. People who participated in the community engagement process expressed a strong sense of community and social cohesion, and 84% agreed that the quality of life in Oregon is good.

My community needs…

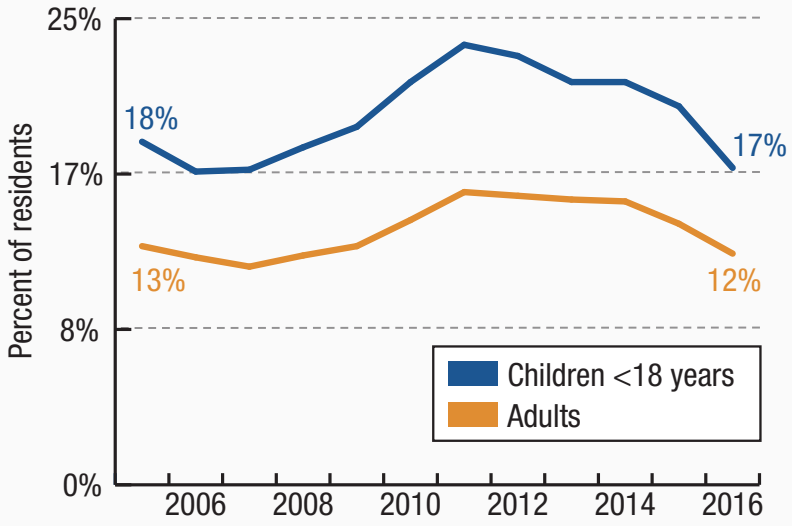
> "Living wage jobs, affordable health care, affordable housing, good schools, and recreational opportunities for all ages. Also, fairness in the justice system, access to healthy, affordable food, and ways to feel valued and give back to your community."
>
> – SHA Community Participant

Economics and Income Inequality

Poverty is a strong predictor of poor health. People with lower socioeconomic status experience higher rates of early death. They also have higher rates of factors that contribute to chronic disease, such as smoking and obesity. In 2016, 12% of Oregon adults and 17% of children lived at or below the federal poverty level. Almost all racial and ethnic groups in Oregon – particularly African Americans – experience higher levels of poverty than in the United States as a whole.

While the poorest fifth of households in Oregon earned just 4% of total income in 2016, the richest fifth earned 49%. Income inequality within communities can have broad health effects that raise the risk of poor health, cardiovascular disease, and death for lower-income residents. Oregon ranks 22nd out of 51 states (includes D.C.) for income inequality.* In Oregon, Benton County had the highest rate of income inequality while Jefferson County had the lowest.†

Adults and children less than 18 years living below federal poverty level by year, Oregon

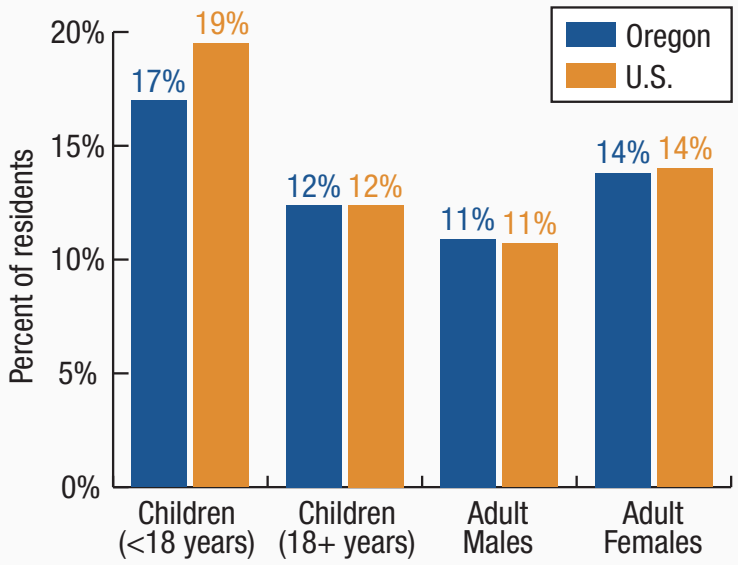


Source: American Community Survey (ACS)

* https://www.oregoncf.org/Templates/media/files/reports/top_indicators_2015.pdf

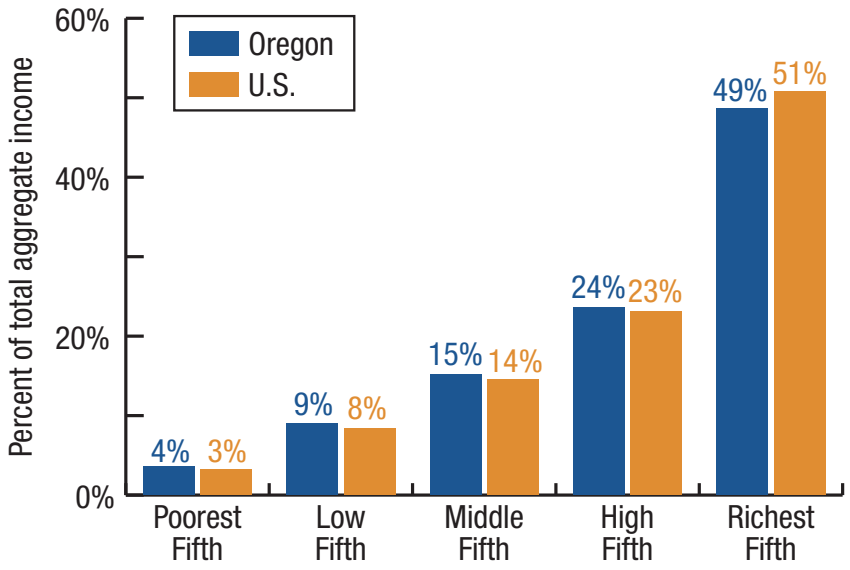
† County Health Rankings

Population living below federal poverty level by age and sex, Oregon and U.S.



Source: American Community Survey (ACS), 2016

Aggregate income by household quintile, Oregon and U.S.



Source: American Community Survey (ACS), 2016

Employment and Wages

Some, but not all, communities have recovered from the 2008 recession. In particular, communities that depend on timber industry profits struggle with economic insecurity.

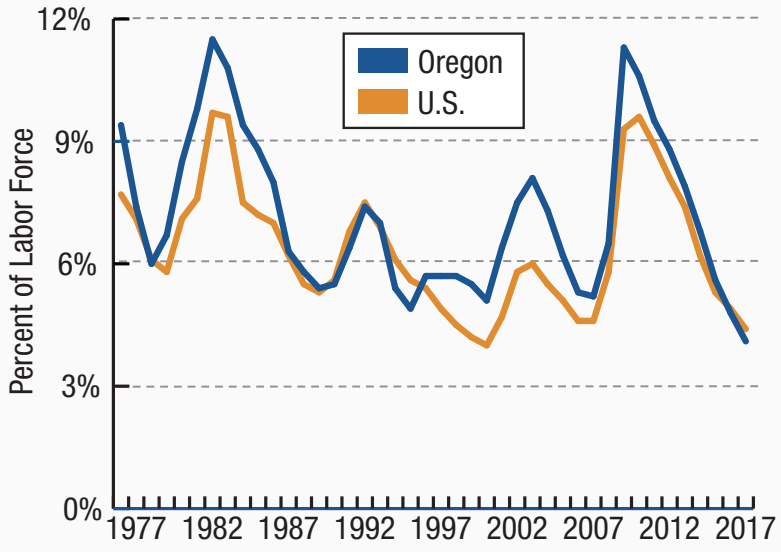
The primary approach to reducing poverty is through employment. As of October 2017, Oregon ranked 30th in the nation in unemployment, with 4.3% of people in the state unemployed according to the U.S. Bureau of Labor Statistics.*

My community needs…

> "Equitable distribution of resources and jobs that pay a decent wage and allow for time off."
>
> – SHA Community Participant

However, employment rates don't tell the whole story. Quantitative data and community members' comments make clear that obtaining a job that pays a living wage and includes paid sick leave is critical to being healthy. People fear the impact of taking time off work for health reasons, for themselves or as caregivers. Many seek jobs that would give them greater purpose and meaning and contribute more to the overall community. This is especially true for low-wage workers who make up a growing share of Oregon's economy.

Unemployment rate by year, Oregon and U.S.

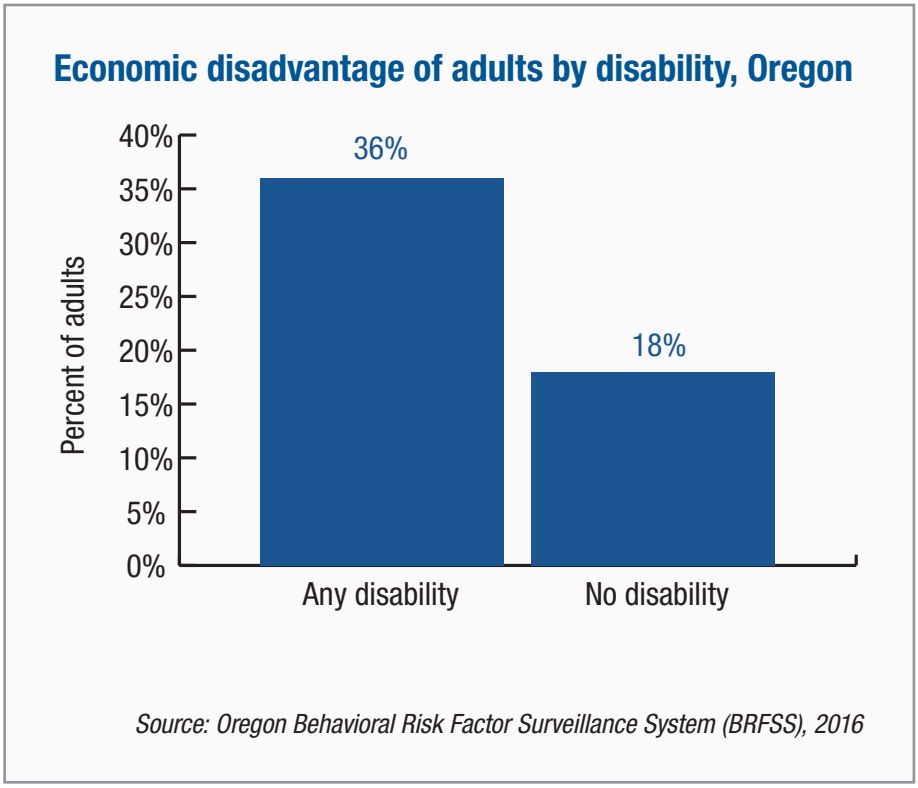


Source: U.S. Bureau of Labor Statistics

* https://www.bls.gov/web/laus/laumstrk.htm

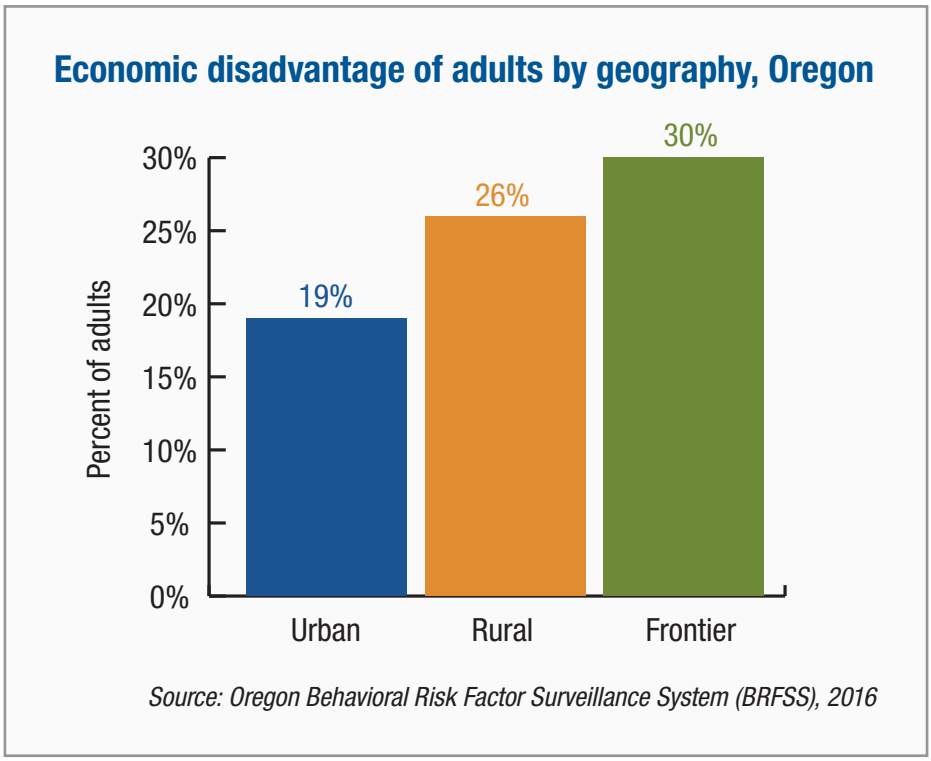
Economic Disparities

Adults with disabilities are more likely to have lower incomes.



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2016

Adults in rural and frontier areas of the state are more likely to have lower incomes.



Education

Educational outcomes are a critical determinant of health and income. Higher levels of education are associated with better health outcomes and longer, more productive lives. Health-related issues are a major cause of student absenteeism and inability to complete high school.

Early Childhood

Education about the world begins at birth, and the years between zero and age five are the most critical in terms of setting the course for long-term outcomes. Investments in early childhood education and development are important for long-term health and produce economic returns of $4 to $9 per $1 spent. These returns include long-term societal benefits such as reduced crime, less use of welfare benefits, and a workforce that produces higher tax revenues.*

Despite widespread knowledge of the societal benefits of high-quality early learning experiences, many people in Oregon struggle to find and afford quality day care and preschool education for their children. Oregon's shortage of high-quality child care is well-documented and the median annual price of toddler child care in Oregon is $11,976 per year, per child. This represents 63% of the total annual income of a minimum wage worker.† Oregon Prekindergarten, the state's largest publicly-funded preschool program, provides spaces for only six out of ten families facing poverty.‡ While other free preschool programs exist in Oregon, the have limited capacity. For example, Oregon Early Head Start, a state- and federally-funded program for children ages birth to three, currently provides access to only 8.1% of eligible children.§

My community needs…

> "Adequate education that includes children with disabilities or learning difference."
>
> – SHA Community Participant

> "A thorough and honest education for all about the history of our country, state, and locales, and about the lingering effects of colonialism."
>
> – SHA Community Participant

* The Harvard Center for the Developing Child. https://developingchild.harvard.edu/resources/inbrief-early-childhood-program-effectiveness/

† Grobe, D. and Weber, R. 2012 Oregon Child Care Market Price Study. Oregon Childcare Research Partnership, Oregon State University.

‡ 2017 Preschool Legislative Report, Early Learning Division.

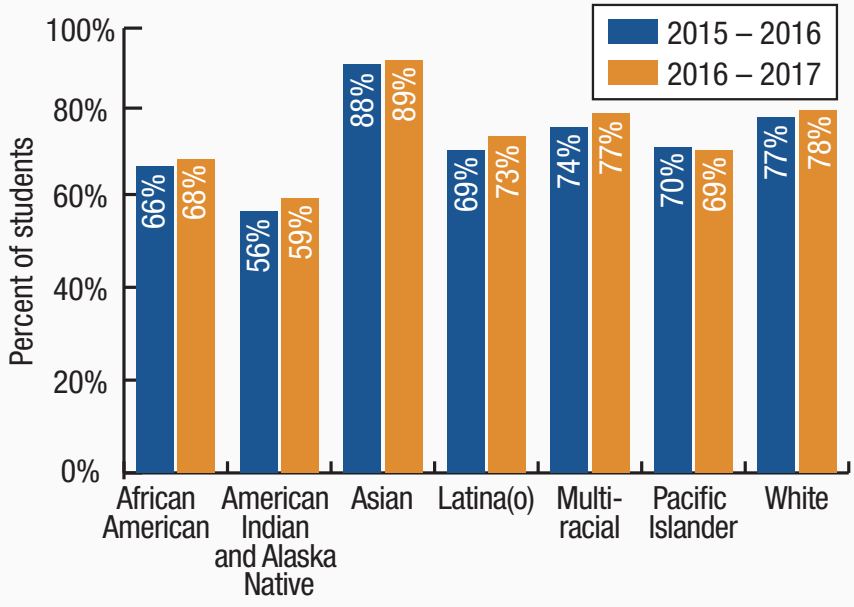
§ Oregon Early Head Start 2016 Program Information Report.

Graduation Rates and Absenteeism

Oregon has some of the worst education outcomes in the country, ranking 48th among states (Iowa is 1st and New Mexico is 50th).* During 2014 – 2015, only three out of every four students graduated from high school on time (within four years of entering high school). Crook County had the lowest graduation rate (46%) compared to Benton County with the highest rate (87%).†

Chronic absenteeism‡ makes it far more likely that a student will not complete high school. Oregon has one of the highest levels of chronic absenteeism in the nation; nearly one in five students was chronically absent during the 2015 – 2016 school year (missing more than 10% of the school year). Barriers that cause students to miss many days of school include poor physical or mental health, poverty, lack of transportation, and other family and community factors.§ Chronic absenteeism in Oregon disproportionately affects American Indian and Alaska Native, African American, and Latina(o) students; students with disabilities or special health care needs; students experiencing economic hardships; and students who have received at least one out-of-school suspension. Chronic absenteeism can lead to students dropping out of school, low graduation rates, and even to contacts with the juvenile justice system.¶

Four-year high school graduation rate by race and ethnicity, Oregon



Source: Oregon Department of Education

* https://www.americashealthrankings.org/learn/reports/2017-annual-report

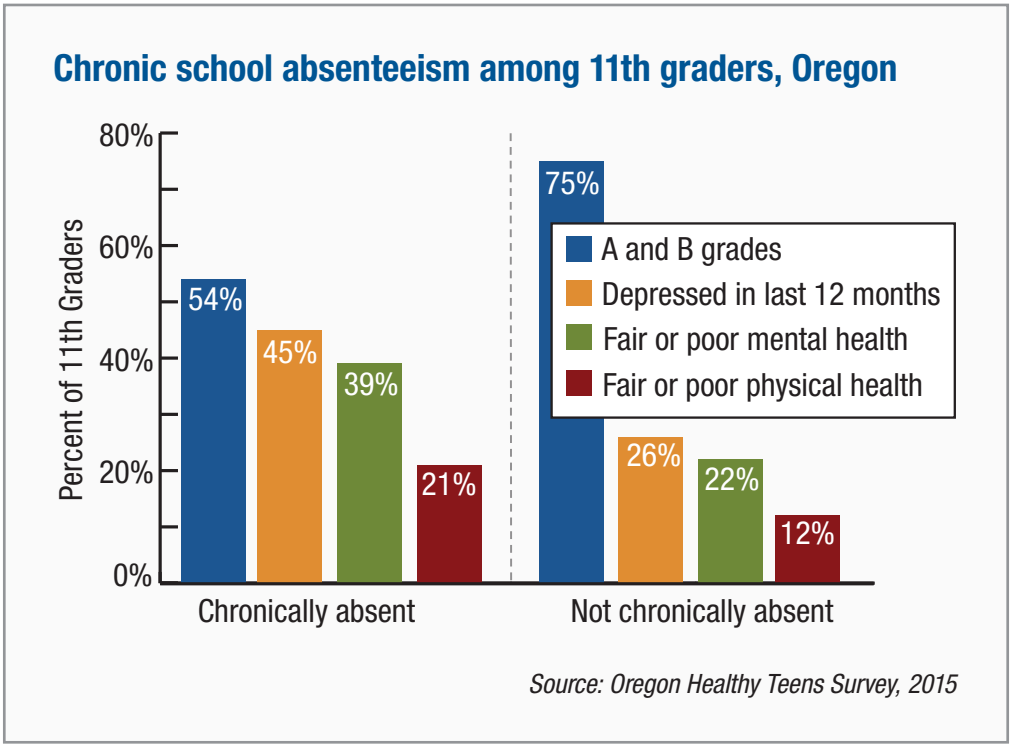
† County Health Rankings.

‡ Chronic absenteeism is defined as being absent 10% or more of the school year, or approximately 16 days.

§ Oregon Department of Education: Not Chronically Absent Report. http://www.oregon.gov/ode/reports-and-data/students/Pages/Attendance-and-Absenteeism.aspx

¶ http://www.oregon.gov/ode/students-and-family/healthsafety/Documents/Oregon%20Chronic%20Absenteeism%20State%20Plan.pdf

Students who are chronically absent are less likely to achieve A and B grades, and more likely to report depression, and fair or poor mental and physical health.



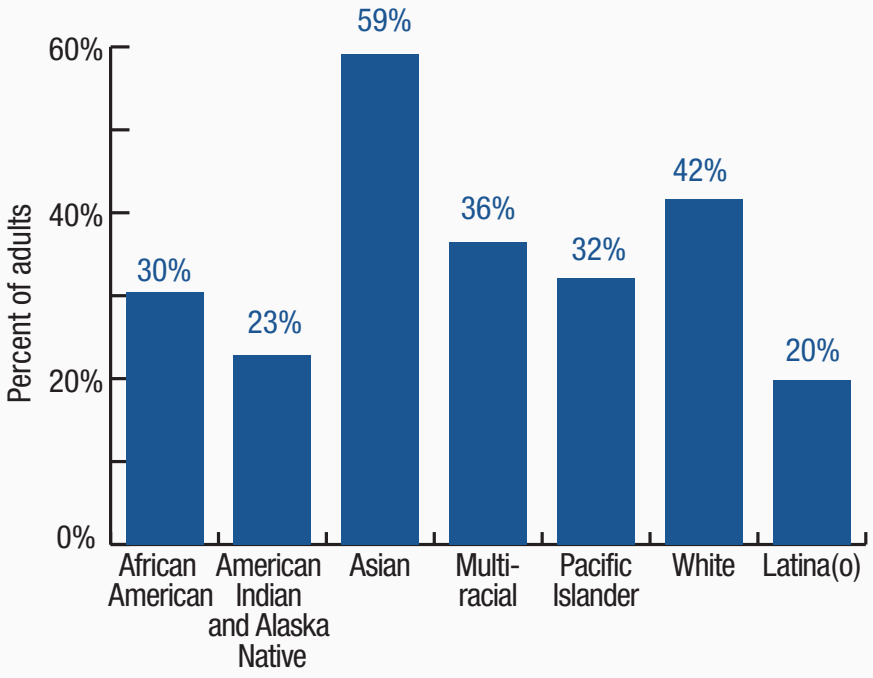
After High School

Post-secondary achievements, which have increased in Oregon in recent years, are an important determinant of health. From 2011 to 2015, 68% of adults had some post-secondary education, ranging from 38% of adults in Morrow County to 82% in Benton County.* Despite the growing demand for secondary education, it can bring financial burdens. Many people across the state talked about the effect of student debt that puts secondary education out of reach for many.

Educational Disparities

Adults who identify as Asian are more likely than their peers to have a post-secondary degree.

Post-secondary degree among adults greater than or equal to 25 years by race and ethnicity, Oregon

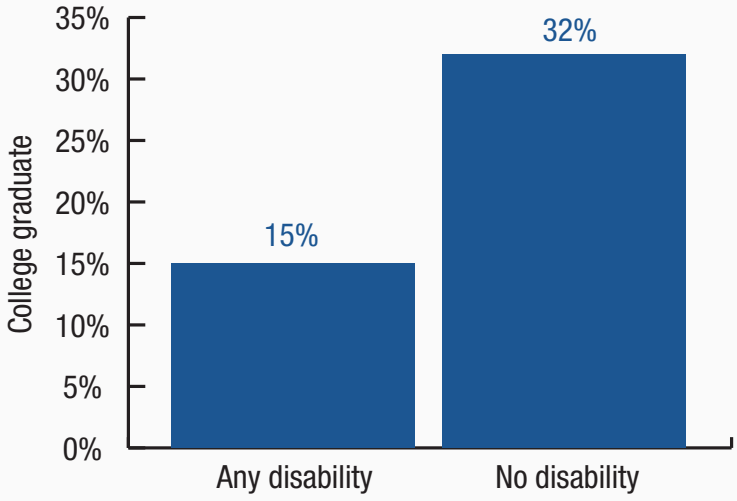


Source: American Community Survey (ACS), 2016

* County Health Rankings.

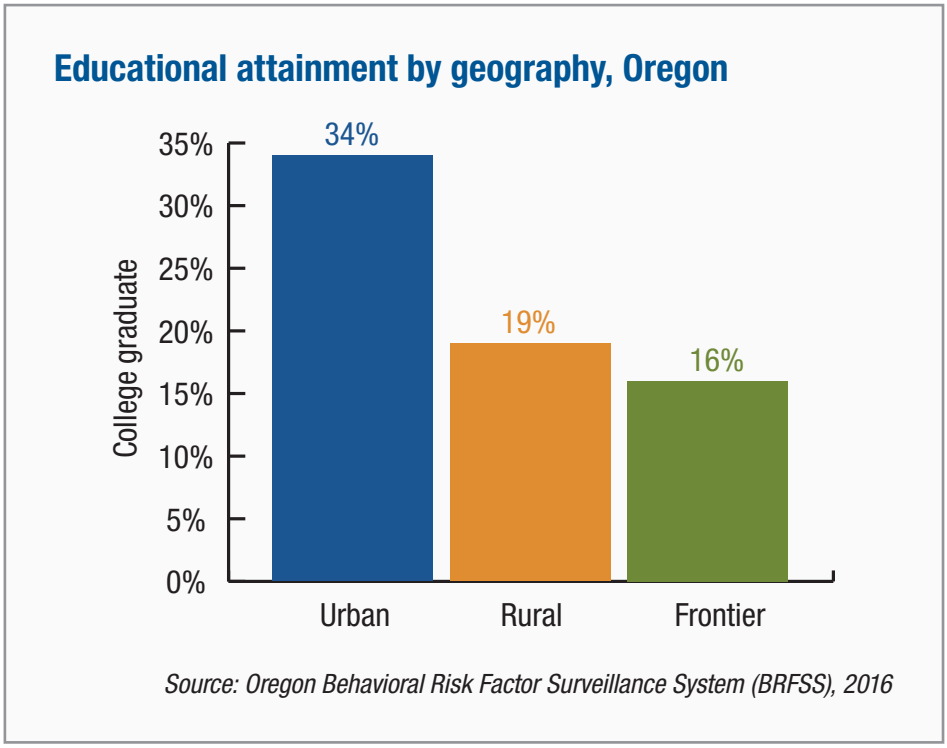
Adults living with a disability are less likely to have graduated from college.

Educational attainment of adults by disability status, Oregon



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2016

Adults who live in urban areas are more likely to have graduated from college.



Food Insecurity

Food insecurity in Oregon is worsening. Oregon ranks 44th in the country (down from 34th in 2009)* in food insecurity. Among children in Oregon, one in five are food-insecure, which means that they lack access to nutritionally adequate and safe food. Food insecurity is highest in rural communities, communities of color, households with children, and among renters. Single mothers in Oregon have higher food-insecurity rates than single mothers in every other state in the country.†

> "Make it affordable. There's no point in putting these healthy foods in the stores, if these families can't afford them, especially for mothers who have multiple children as a single mother. She may want to buy vegetables, but she can't afford it. She's got to make sure that that food lasts for the rest of the month. What's she going to go for? The macaroni and cheese that you can make stretch."
>
> – Place Matters Oregon focus group

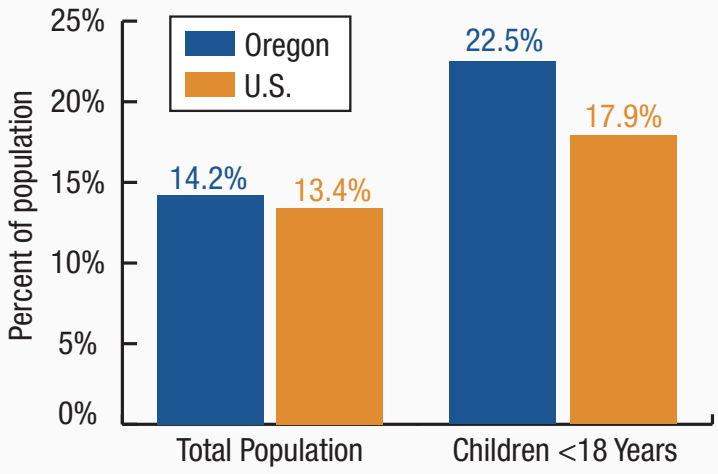
Food and nutrition assistance programs are a key support for low-income families and individuals. More than one million people in Oregon rely on the Supplemental Nutrition Assistance Program (SNAP) and other assistance to feed their families. Half of children in Oregon are eligible for free and reduced price school meals. Half of women living outside of Oregon's metro and urban areas used the Special Supplemental Program for Women, Infants, and Children (WIC) during their pregnancies.

* https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/interactive-charts-and-highlights/#States

† Oregon State University, Calculations from combined 2010 – 2015 Current Population Survey December supplement, provided by Prof. Mark Edwards, 2016.

Food insecurity influences health in several ways. Food-insecure adults are more likely to have poor or only fair health, diabetes, high blood pressure, high cholesterol, heart disease, and obesity. Children in food-insecure households are more likely to have poor health, behavior problems, poorer developmental outcomes, and be less ready to learn in school.*

Food insecurity among total population and children less than 18 years, Oregon and U.S.

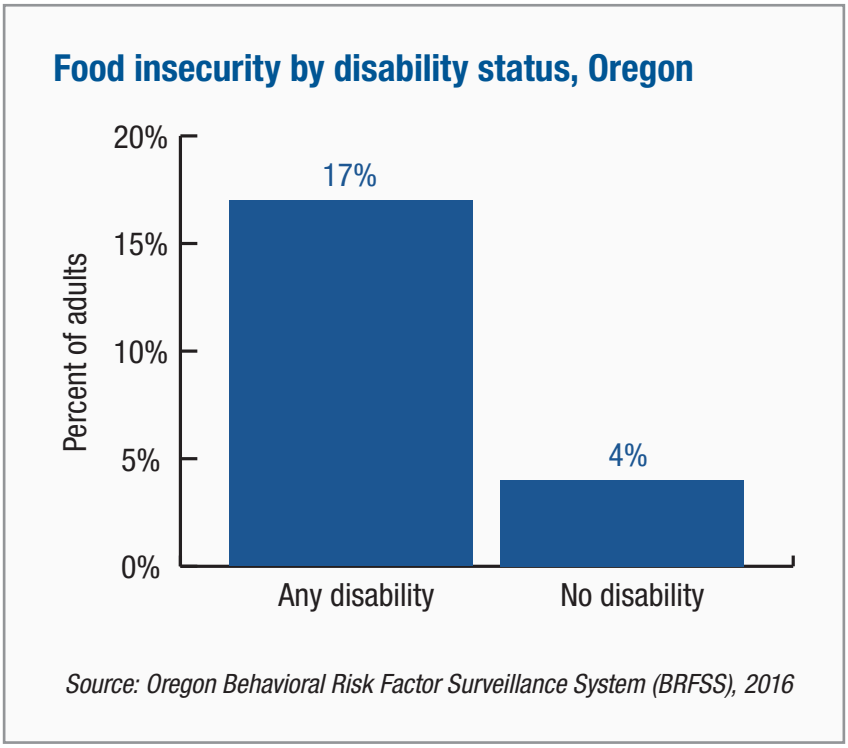


Source: Map the Meal Gap, Feeding America, 2015

* Issue Two (April 2014) (http://org2.salsalabs.com/o/5118/p/salsa/web/common/public/content?content_item_KEY=12015) – Food Security, Health, and Well-Being. Accessed online at http://childrenshealthwatch.org/discussion/food-insecurity-new-research/

Disparities Related to Food Insecurity

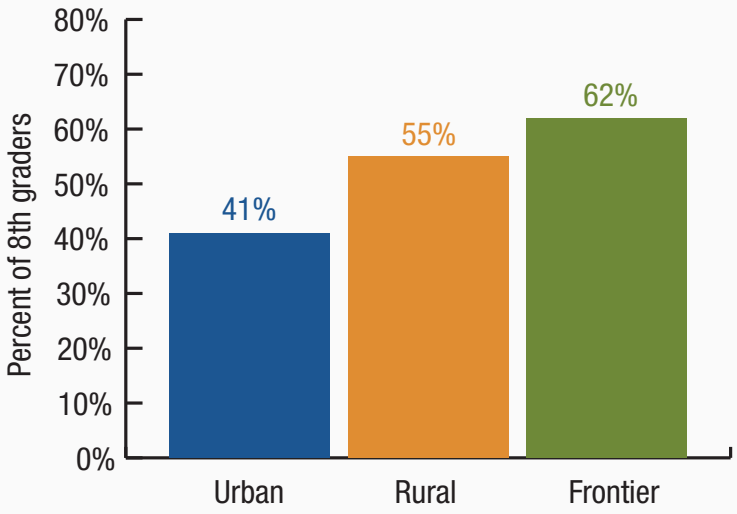
Adults with disabilities are more likely to report food insecurity.



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2016

Youth living in rural and frontier areas are more likely to receive free or reduced price lunch (FRPL) at school, an indicator of food insecurity.

Free or reduced price lunch (FRPL) among 8th graders, by geography, Oregon



Source: Oregon Healthy Teens, 2017

Housing and Homelessness

People across Oregon noted affordable housing as the most pressing issue related to the social determinants of health. In order for housing to be affordable, a household should pay no more than one-third of its income towards rent. Today, one in two Oregon households pays more than a third of its income towards rent, and one in three pays more than half of its income towards rent.

Oregon's affordable housing crisis is also reflected in our rates of homelessness. Low-income households are at higher risk of homelessness because they have little money left, after paying housing and utility costs, to pay for transportation, childcare, health care, and food. An unforeseen event or emergency often forces people in Oregon to make difficult decisions about what bills to pay, leading to late rent or mortgage payments.

According to the January 2017 Point-In-Time Count, 13,953 people were homeless in Oregon (up 6% from 2015). Due to the limitations of this data source, this is likely a significant undercount of the number of homeless people on a given night.*

My community needs…

"A depth of social-emotional intelligence (diversity, inclusion, social compassion) and equitable access to whole-health care including mental health, housing, food, education, employment opportunities, and life skills in particular for our youth who express acute anxiety about being successful in the big wide world outside of our often insulated, although lovely, communities. I'd especially love to see more options for unhoused individuals. As a country we continue to shove our unhoused, adult-children around treating them as a public nuisance rather than compassionately recognizing that they are traumatized individuals in need of care. Wonder what would happen if we gave them a safe place to sleep?"

– SHA Community Participant

Of the nearly 14,000 people experiencing homelessness, 43% were sheltered† and 57% were unsheltered.‡ Twenty-four percent were chronically homeless§ and 11% were veterans. One out of every four people were living in households with children.

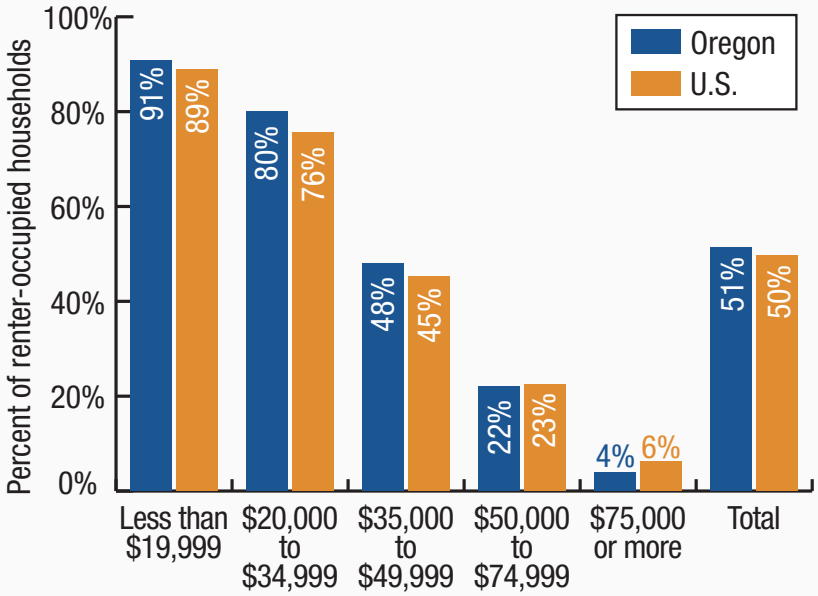
* https://www.nlchp.org/documents/HUD-PIT-report2017

† Residing in emergency shelter, transitional housing, or Safe Havens.

‡ Living on the street, in abandoned buildings, cars, RVs, or other places not meant for human habitation.

§ Defined by HUD as a homeless individual or head of household with a disability who: lives in a place not meant for human habitation, in an Emergency Shelter, or a Safe Haven; AND has been homeless continuously for at least two months (stays in an institution of fewer than 90 days do not constitute a break); OR has been homeless on at least four separate occasions in the last three years where the combined occasions total at least 12 months (occasions are separated by a break of at least seven nights).

Households paying 30% or more of income on rent by income group, Oregon and U.S.



Source: American Community Survey (ACS), 2016

Other Housing Challenges

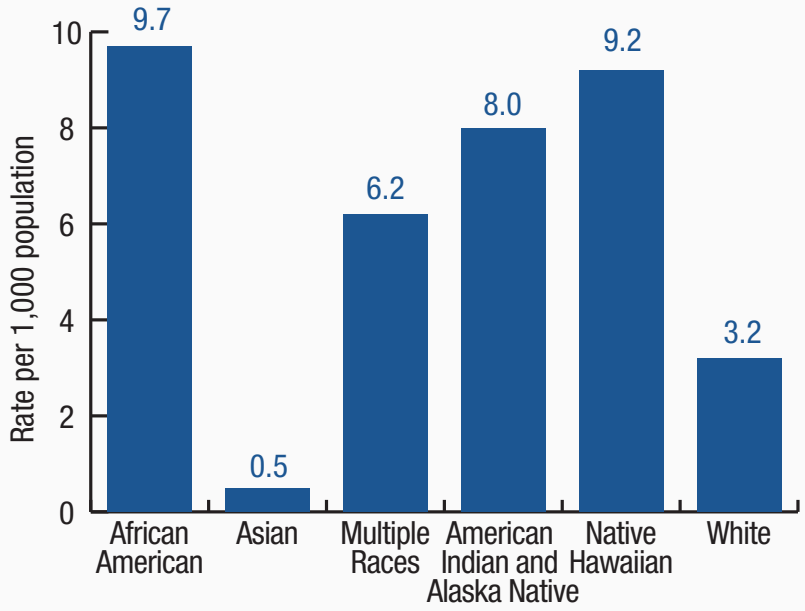
During the SHA community engagement process, many people identified a need for transitional housing, especially for persons in recovery from addiction or release from incarceration or hospitalization. Older adults, people with disabilities, people with behavioral health issues, people who have spent time in jail or prison, and survivors of domestic violence experience disproportionate housing challenges. Communities of color face a greater housing-cost burden than other communities in Oregon. One-third of all African American households spend more than 50% of their income on housing costs, compared to 17% of all households in the state.* Racism is evident in the housing market: a City of Portland audit found that landlords discriminated against African American and Latina(o) renters 64% of the time, charging them higher rents, deposits, and additional fees.† Just 32% of African Americans in Multnomah County owned homes in 2010, compared to 60% of Whites in the county, and 45% of African Americans nationally.‡

* http://www.oregon.gov/ohcs/docs/outreach/Summary-Housing-Needs-Assessment.pdf
† https://www.theatlantic.com/business/archive/2016/07/racist-history-portland/492035/
‡ https://www.theatlantic.com/business/archive/2016/07/racist-history-portland/492035/

Disparities Related to Homelessness

With the exception of Asians, people of color experience homelessness at a disproportionate rate.

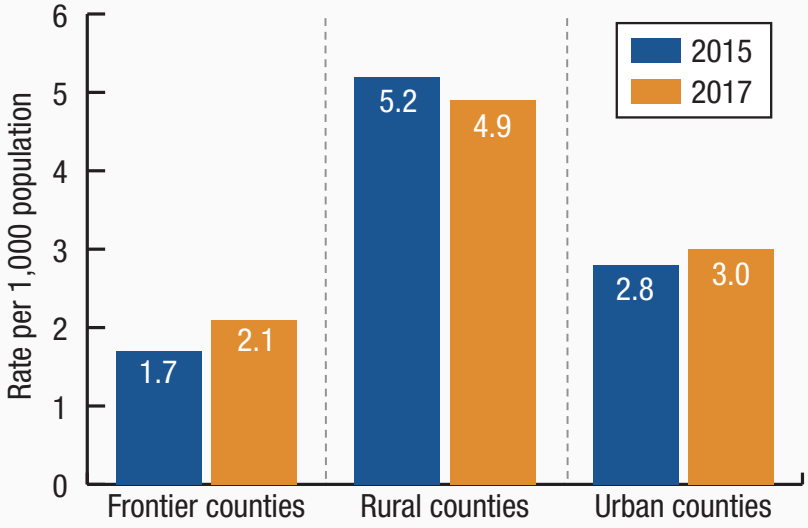
Estimates of the homeless population by race and ethnicity, Oregon



Source: Oregon Housing and Community Services, Point-in-Time Count, 2017

Rural counties have higher rates of homelessness than urban or frontier counties.

Estimates of the homeless population by frontier, rural and urban status of county, Oregon

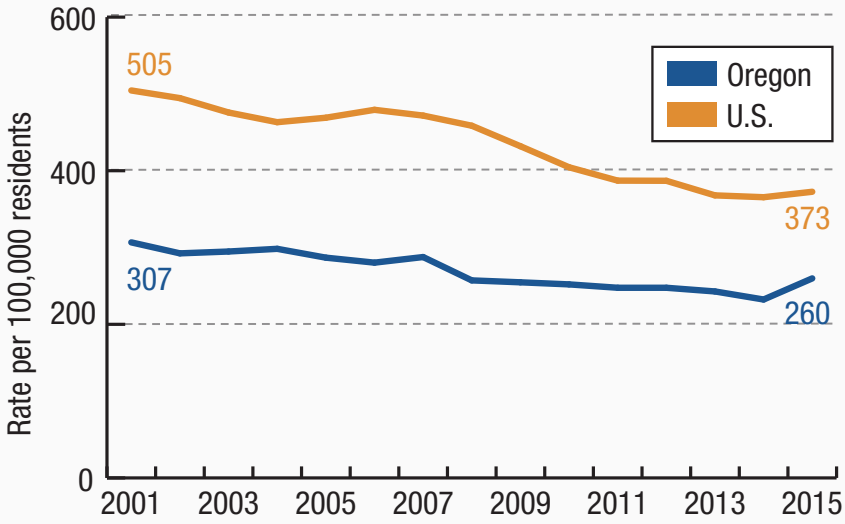


Source: Oregon Housing and Community Services, Point-in-Time Count, 2015 and 2017

Safety and Violence

Many people feel safe in their community, and Oregon experiences less violence than most other states (ranked 14th in the country). Aggravated assault, robbery, and rape are the most common serious violent crimes. Violent crime has been decreasing over time.

Violent crime by year, Oregon and U.S.

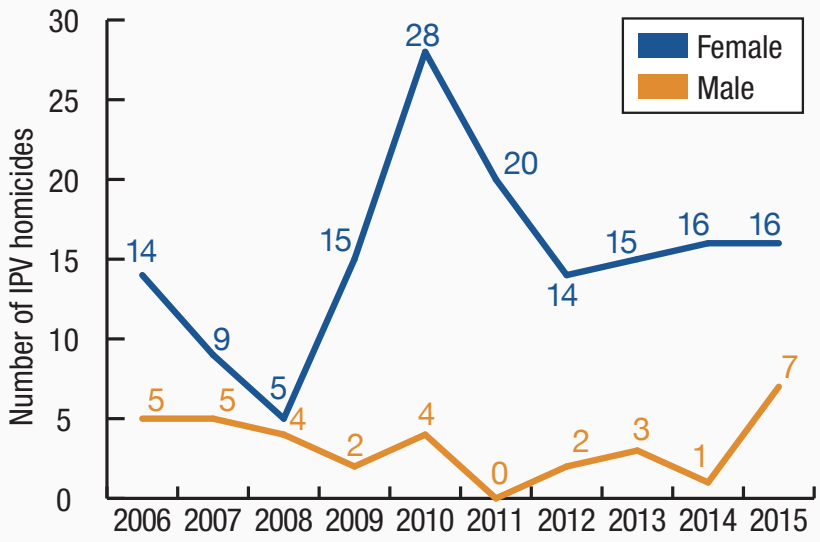


Source: Uniform Crime Reporting Statistics -– UCR Data Online

Intimate Partner Violence

Intimate partner violence (IPV) is a serious public health problem that affects individuals, families, and communities across Oregon. IPV encompasses physical, sexual, psychological, or emotional violence within a dating relationship, including stalking. It can occur in-person or virtually (e.g., online or via text message) between current or former dating partners. Approximately one in five homicides in Oregon in 2015 was the result of IPV. Although 78% of victims are White, African American, and American Indians and Alaska Natives experience the highest rates of IPV-related homicide (Figure 3). According to the annual report from The Oregon Domestic and Sexual Violence Service Providers, people in Oregon made 139,580 calls for help related to domestic violence, sexual assault, stalking, and related issues in 2016 (a 3.1% increase from 2015).*

Homicide victims killed by an intimate partner by year and sex of victim, Oregon



Source: Oregon Violent Death Reporting System

* http://www.oregon.gov/DHS/ABUSE/DOMESTIC/Documents/2016-Striving-to-Meet-the-Need.pdf

Teens and Children

Data from the 2017 Oregon Healthy Teens (OHT) survey show that approximately 3.7% of 11th graders report being physically harmed by a boyfriend or girlfriend (i.e. hit, slapped, hurt) in the past 12 months. Females, transgender, and gender-non-conforming students are six times more likely than males to report being pressured into sexual activity. Youth who identify as LGB are pressured into sexual activity at higher rates compared to their heterosexual peers.

My community needs…

> "Accountability for violence, especially intimate partner, teen dating violence, and bullying which are more common in our community than say, violence outside of the home due to unsafe neighborhoods."
>
> – SHA Community Participant

Abuse and neglect also occurs among children. In the one-year period from October 2015 to September 2016, the Oregon Department of Human Services (DHS) received 76,668 reports of abuse and neglect, up from 69,972 the prior year, according to the 2016 Child Welfare Data Book.* Of those, 38,086 were referred for investigation, and 7,677 were founded† for abuse or neglect. Almost 50% of all victims were younger than six years.

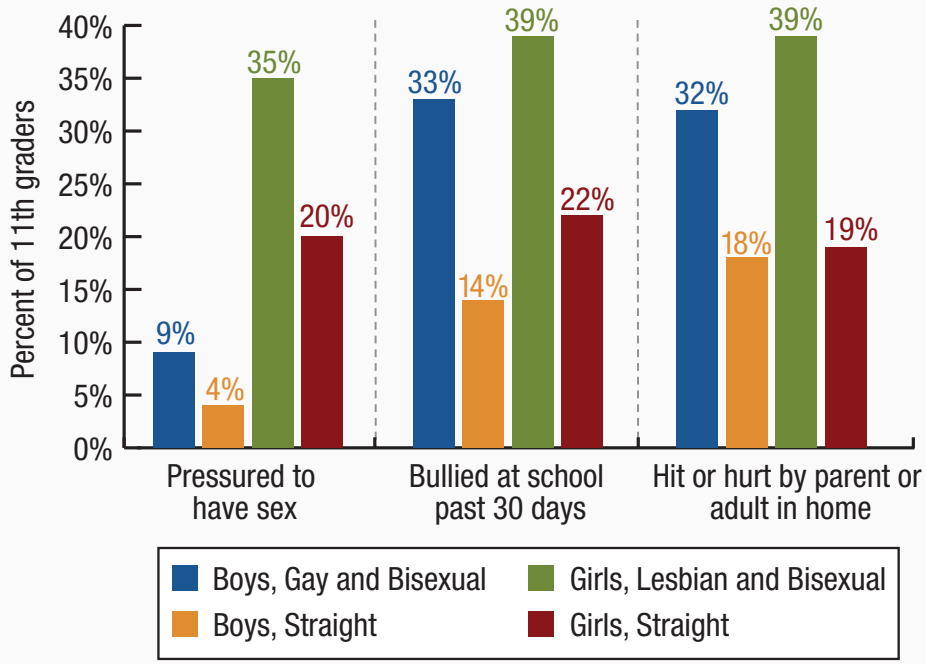
In families with DHS involvement, alcohol, drug use, and domestic violence were the most common stressors. In addition to the children described above, 11,191 children in Oregon spent at least one day in foster care from October 2015 to September 2016.

* http://www.oregon.gov/DHS/CHILDREN/CHILD-ABUSE/Documents/2016-cw-data-book.pdf
† Once a referral is founded, children are considered victims of abuse/neglect.

Disparities Related to Safety and Violence

Gay and bisexual youth are at higher risk for intimate partner violence and cyberbullying.

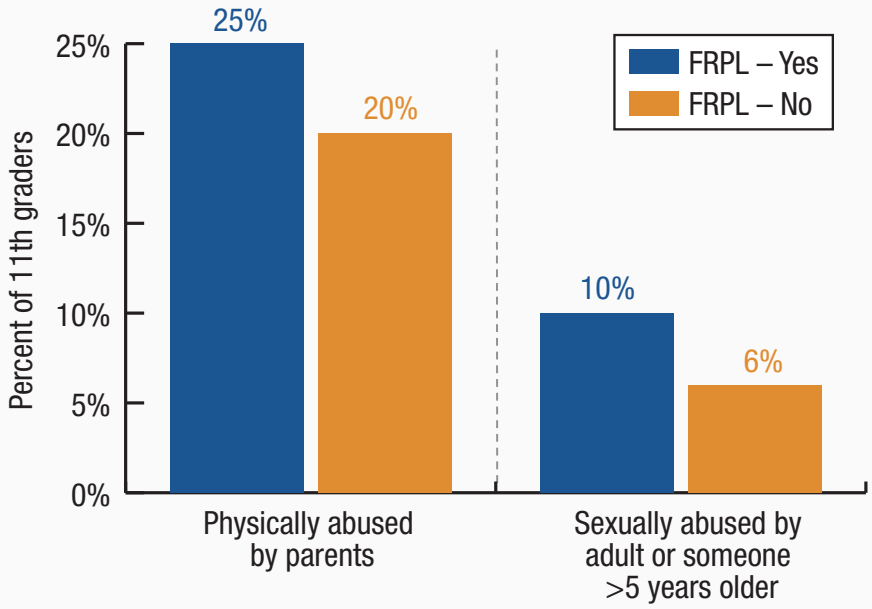
Safety and violence among 11th graders by gender and sexual orientation, Oregon



Source: Oregon Healthy Teens, 2017

Economically disadvantaged youth in Oregon report higher levels of abuse during childhood.

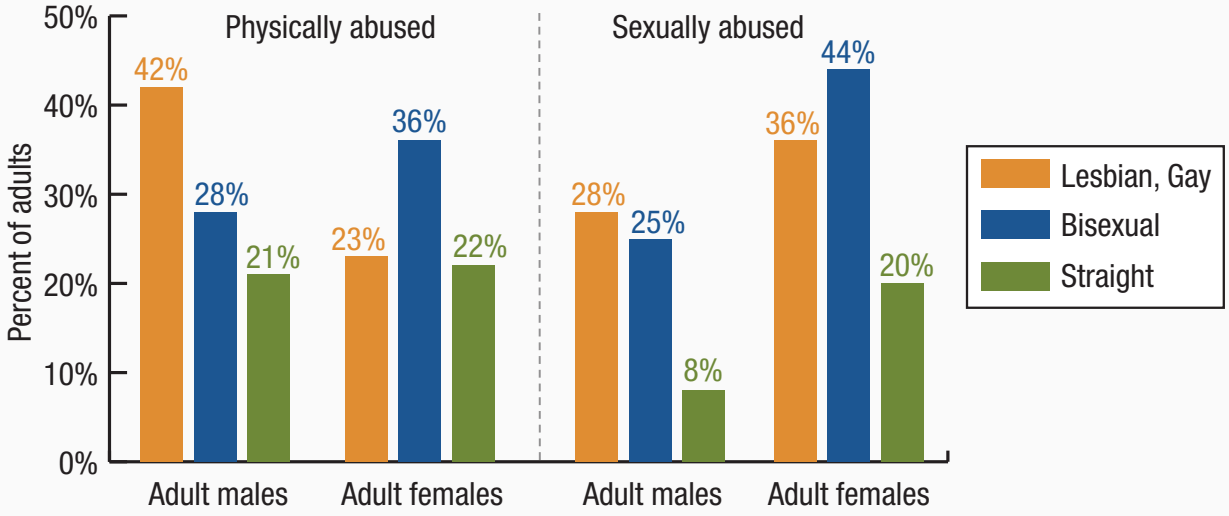
Physical or sexual abuse among 11th graders who receive free or reduced price lunch (FRPL), Oregon



Source: Oregon Healthy Teens, 2017

Adults who identify as gay report more abuse during childhood.

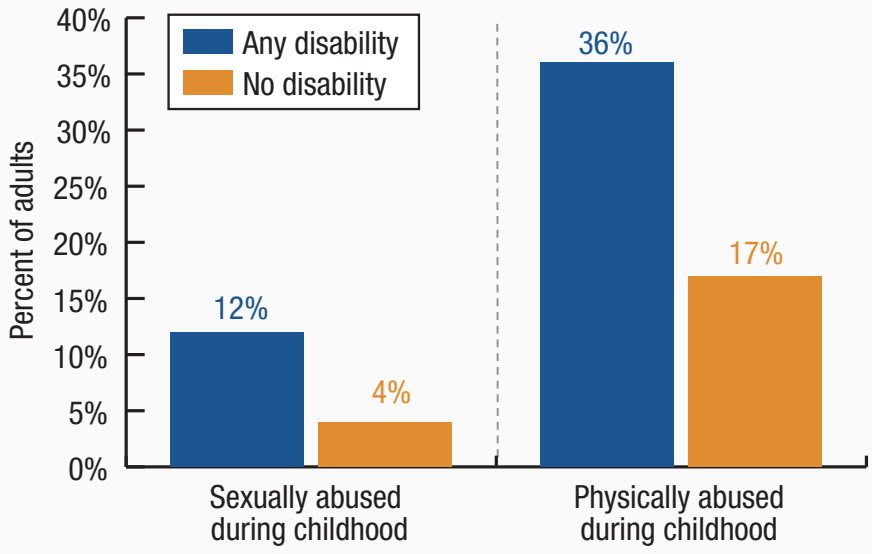
Childhood physical or sexual abuse among adults, by gender and sexual orientation, Oregon



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2013 – 2016

Adults living with a disability report experiences of sexual and physical abuse more often than adults and youth without a disability.

Childhood sexual or physical abuse among adults by disability status, Oregon



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2016

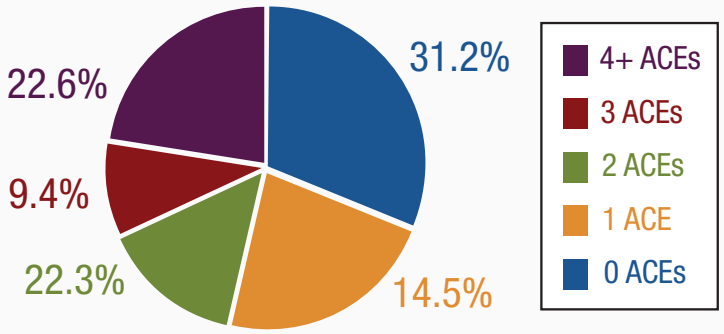
Trauma and Toxic Stress

Early traumatic experiences influence the developing brain, and toxic stress can interrupt normal brain development. These adverse childhood experiences (ACEs) are a root cause of many social, emotional, physical, and cognitive impairments. Impairments lead to higher rates of developmental delays and other problems in childhood,* as well as adult health-risk behaviors (e.g. smoking), behavioral health issues (e.g. depression, suicide, substance use), chronic diseases (e.g. heart disease, cancer, diabetes), disability, and early death.† Understanding the prevalence and impact of ACEs can inform efforts to prevent trauma and promote individual, family, and community resilience.

The Behavioral Risk Factor Surveillance Survey (BRFSS) asks Oregon adults about eight types‡ of adverse childhood experiences. The most commonly reported ACEs are household substance abuse (37.1%), emotional abuse (36.2%), and parental separation and divorce (33.2%).

There is growing evidence that the compounding impact of multiple ACEs, rather than the specific impact of any one experience, is what matters. Among Oregon adults, 46.2% experienced two or more ACEs during childhood and 22.3% experienced four or more. In addition, the National Survey of Children's Health (NSCH) asks parents to report on their children's exposure to a set of nine adverse childhood experiences.§ Among Oregon children 0 to 17 years old, 22.4% have experienced two or more ACEs. Among children with a special health care need, 41% have experienced two or more ACEs.

Number of ACEs among adults, Oregon



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2016

* Harvard University National Scientific Council on the Developing Child. InBrief: the impact of early adversity on children's development. Available from: http://46y5eh11fhgw3ve3ytpwxt9r.wpengine.netdna-cdn.com/wp-content/uploads/2015/05/inbrief-adversity-1.pdf)

† Felitti, Anda, Nordenberg et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study AM J of Prev Med, 1998

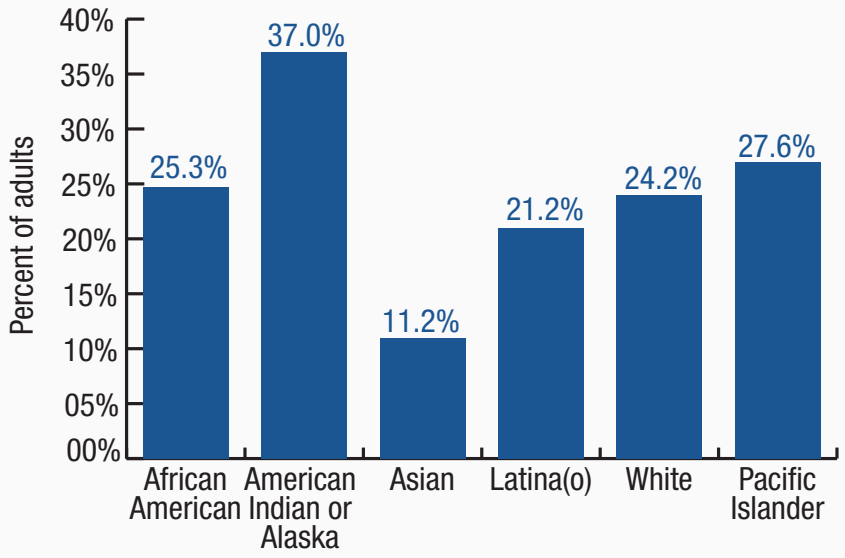
‡ Emotional, physical and sexual abuse, intimate partner violence, household substance use or mental illness, parental separation or divorce, and incarceration of a household member.

§ Hard to get by on income, parent/guardian divorce or separation, parent/guardian death, parent/guardian served time in jail, saw or heard violence in the home, victim of violence/witnessed neighborhood violence, lived with anyone mentally ill, suicidal or depressed, lived with anyone with alcohol or drug problem, often treated or judged unfairly due to race and ethnicity

Disparities Related to Trauma and Toxic Stress

Notable disparities exist in high ACE scores (four or more) among different populations of Oregon adults. In 2015 to 2016, the percentage of Oregon adults who reported four or more ACEs was higher for American Indians and Alaska Natives, and lower for Asians, compared to Whites.

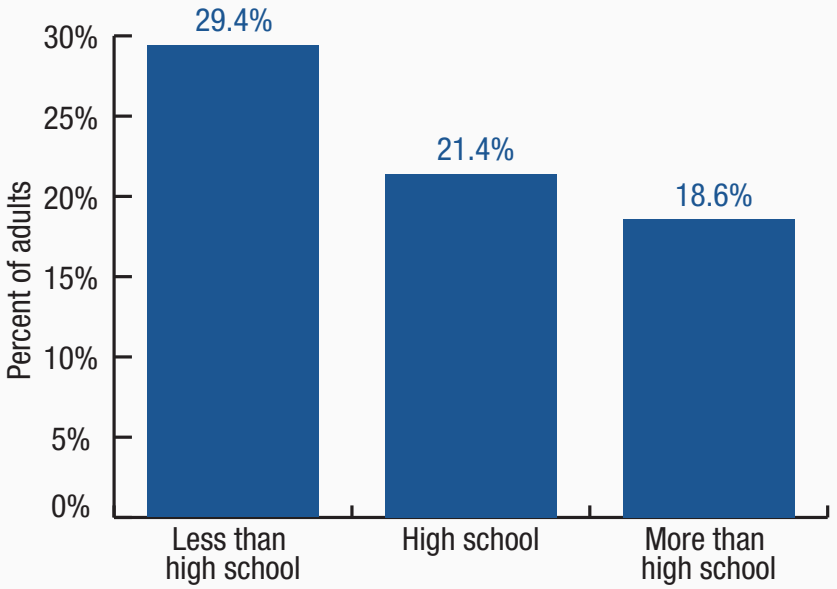
High ACE score (4+) among adults by race and ethnicity, Oregon



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), Preliminary race reporting, 2015 – 2016

The percentage of people in Oregon experiencing four or more ACEs is higher for those with less than a high school education (29.4%) compared to those with more than a high school education (18.6%).

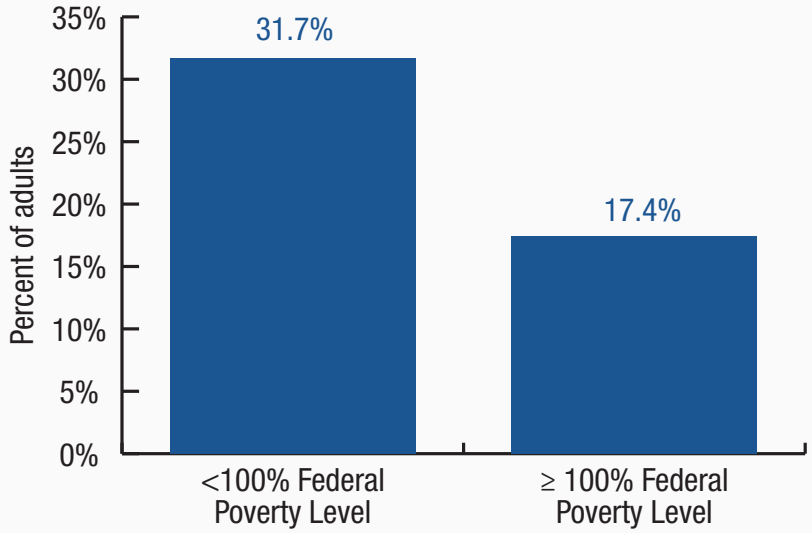
Adults with high ACE score (4+) by education level, Oregon



Source: Behavioral Risk Factor Surveillance System (BRFSS), 2013 – 2015

People living at or below the federal poverty level are more likely to have a high ACE score compared with those living above federal poverty level.

Adults with high ACE score (4+) by income, Oregon

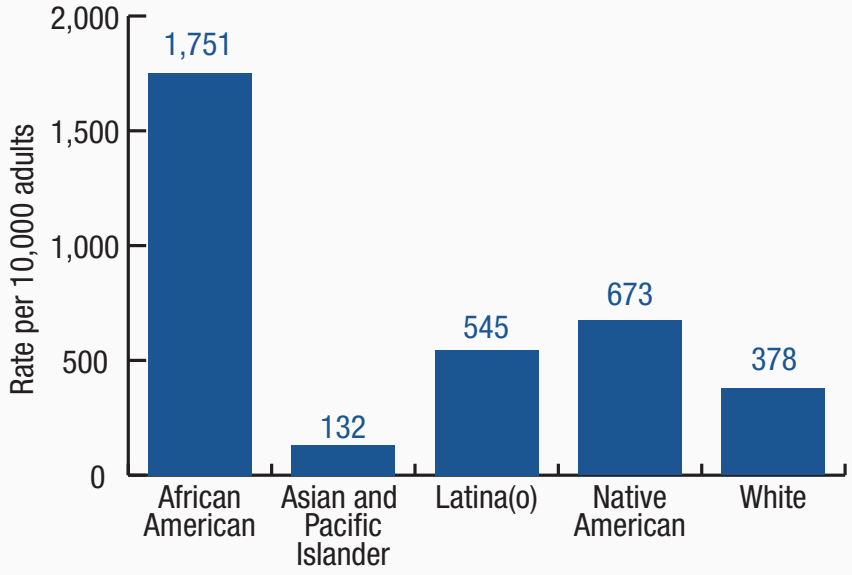


Source: Behavioral Risk Factor Surveillance System (BRFSS), 2013 – 2015

Incarceration

More than 200,000 people in Oregon spend time in a county, state, juvenile, or federal correctional institution every year. Approximately 180,000 spend time in a county jail, and 14,000 spend time in an institution operated by the Oregon Department of Corrections. The Oregon Youth Authority detains 6,000 adolescents every year and federal institutions detain another 1,700.

Population of state prisons by race and ethnicity, Oregon



Source: Oregon Department of Corrections, February 2018

In Oregon, a person who is incarcerated is more likely to be a person of color, less educated, and male, although the rate of incarcerated women is increasing. People living in poverty are more likely to be incarcerated than people with more financial resources. People involved with the criminal justice system often have histories of abuse, trauma, and behavioral health issues. Once released from incarceration, they often face barriers to accessing health care, housing, and employment and to establishing healthy social connections.

Incarceration of a family member is one of ten adverse childhood experiences assessed in the original ACEs Kaiser Permanente study. Among female prisoners in Oregon, 75% are mothers, which has profound consequences for many children in our state.*

> "Ashland police don't actually live in Ashland because they can't afford it. How does that impact their policing when they don't live in the community?"
>
> – SHA Community Participant

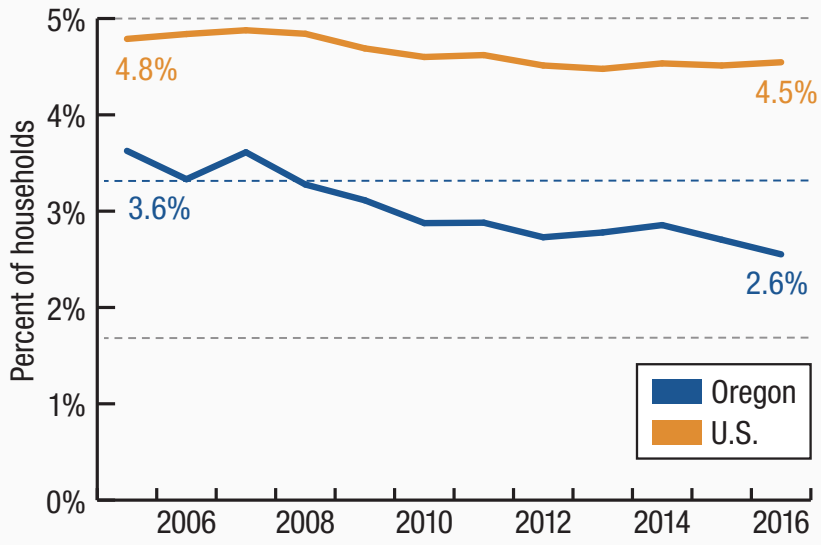
* https://static1.squarespace.com/static/524b5617e4b0b106ced5f067/t/57d9783159cc68421f6aa251/1473869876530/Oregon+Women+In+Prison+Background+Report+FINAL.pdf

Language

As communities in Oregon become more diverse, so do the languages spoken here. The most-commonly spoken languages after English include Spanish, Chinese, Vietnamese, Russian and other Slavic languages, Tagalog, and Arabic. According to U.S. Census data, 15% of Oregon households speak a language other than English in the home.

In Oregon, 2.6% of people live in households that are linguistically isolated, or where no one older than 14 speaks English very well. Linguistically-isolated households may be less likely to seek health or social services or to receive the information they need to be healthy. This figure has been gradually declining in Oregon and is lower than for the United States as a whole.

Households in which no one over 14 years old speaks English very well, Oregon and U.S.



Source: American Community Survey (ACS)

Social Cohesion and Segregation

Social cohesion is an important factor in creating health. Social cohesion is often defined as the willingness of members of a society to cooperate with each other in order to survive and prosper.*

Social capital refers to trust between people, confidence in institutions, and the sense of belonging to a society.† Greater access to social capital or stronger social cohesion among community members can enhance well-being. Conversely, if neighborhood conditions are poor, it can be difficult for people to get the support they need to be healthy.

Across the state, many people and communities that participated in the SHA described a strong sense of connection to family and friends. Of survey respondents, 85% said they could rely on support from family and friends during times of stress and need.

In the school setting, social cohesion also matters to health outcomes. More than 70% of Oregon 8th graders and more than 75% of Oregon 11th graders report having a teacher or other adult at school who cares about them. Students who have these connections report better physical and mental health.

> "Because you know that somebody cares, and when you know that you're cared about, somebody is concerned about you, it makes you feel better. It makes you look forward to the next day."
>
> – SHA Community Participant

Despite these widespread feelings of connectedness and cohesion, not all communities benefit from social cohesion. People of color who participated in the Place Matters Oregon focus groups talked about losing community cohesiveness as their urban neighborhoods have gentrified. For the 15% of SHA survey respondents who do not find support from friends and family, their sense of isolation may be even more profound, considering the connections they likely observe between other people in their communities.

* Stanley, Dick. (2003). What Do We Know about Social Cohesion: The Research Perspective of the Federal Government's Social Cohesion Research Network. The Canadian Journal of Sociology (28) 5-17. 10.2307/3341872.

† https://www.socialcapitalresearch.com/literature/definition.html

Fortunately, there are many ways to restore the social cohesion that has been stamped out by racism, discrimination, and oppression. SHA participants frequently mentioned faith-based communities as important assets for building community and providing safety-net services. People of color talked about the need for more youth activities, especially for kids at risk of drug and gang activity. Marginalized communities also discussed the importance of role models, particularly for children and young people growing up in environments without adequate resources.

My community needs…

> "Safety first. Our community needs to take a look at this statement and think about what it would mean to have a community where everyone truly felt safe. Everyone should at least feel safe from crime and injury and judgement. When that happens, we're opened up to all sorts of possibilities. To make that happen, all sorts of cool changes could take place... from simply creating more places for people to gather, to enticing community conversations between people who have different views or on the topic of 'what it means to be safe' or 'what it means to be welcoming' or 'meet your neighbor', to building neighborhoods with more 'eyes on the street' (storefront windows closer to sidewalks... without parking lots in between), street lights that work, sidewalks and bike lanes that are well maintained and connect residents to daily destinations, more celebrations of cultures, designing neighborhoods with houses that have welcoming fronts that entice walkers to say hello to the family that lives there (rather than a huge garage we disappear into)..."
>
> – SHA Community Participant

Environmental Health

Environmental Health

Our natural and built environments affect human health and quality of life. Nearly one in every four comments by SHA participants was directly related to environmental health. Many themes in the previous chapter on social determinants of health are also environmental concerns. Although most people in Oregon take pride in the beauty of our state and the abundance of natural resources, communities identified common concerns in the environment. Only 60% of survey respondents agreed that it's easy to be healthy in their community.

My community needs…

> "Clean water and air. Parks that are safe and have great play equipment. Safe routes to school, work, worship, and home using multiple modes of transportation. Health care, grocery stores, restaurants, fitness centers, entertainment are in walking distance or accessible by public transportation."
>
> – SHA Community Participant

Natural Environment

Many SHA participants voiced concerns related to the natural environment, especially about air and water. Some also expressed concern about climate change, which intensifies environmental health threats from wildfires, drought, floods, harmful algal blooms, and other events.

Air Quality

As the state's population continues to grow, so do the activities that contribute to pollution. Overall, Oregon's air quality has improved since the 1970s and levels of air quality pollutants in Oregon have been declining over time.*

* State of Oregon, Department of Environmental Quality Should Improve the Air Quality Permitting Process to Reduce Its Backlog and Better Safeguard Oregon's Air, http://sos.oregon.gov/audits/Documents/2018-01.pdf. Accessed 5/16/18

> "Too often, I smell the chemicals released by the factories on Johnson Creek Road (I'm in SE Portland), and I wonder if it's safe for my kids to breathe the air outside. And then I see one of my kids getting water from a water fountain at the park or at their school, and I worry- is there lead in that water? And then we try to get some exercise, but riding bikes with kids on streets without protected bike lanes is downright terrifying- there are so many cars, and so many of them are driving faster than the speed limit. How can we teach our kids to build exercise into their lives when it's not even safe to go for a bike ride?"
>
> –SHA Community Participant

However, air quality varies across the state. While most Oregon communities are meeting federal air-quality standards, in many parts of the state, the air is unhealthy to breathe on many days. The air pollutants of greatest concern in Oregon are fine particulate matter, air toxics, and ground level ozone (smog).* Fine particulate matter (PM2.5)† consists of airborne particles such as dust, dirt, soot, smoke, and droplets. Motor vehicles, wood stoves, forest fires, construction sites, and factories produce particle pollution. Long-term exposure to fine particulate matter has been associated with adverse health outcomes such as reduced lung function, the development of chronic bronchitis, heart disease, and early death.

Poor air quality can result from daily human activities, such as driving cars and trucks and burning wood for heating in uncertified wood stoves. Other causes include high-intensity events such as wildfires or prescribed burns, which weather conditions often make worse.‡ There is also evidence that people living near sources of PM2.5, such as roadways, are at higher health risk.§ Industrial sources of air toxics can make up a significant proportion of air pollution health risk to people living, working, and going to school nearby who breathe facility emissions,¶ even though these emissions represent a smaller source of overall pollutants in an airshed.

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* Oregon Department of Environmental Quality. Oregon Air Quality Annual Report – 2016. Published October 2017. http://www.oregon.gov/deq/FilterDocs/OrAirQualityAnnualReport2016.pdf. Accessed May 16, 2018.

† PM 2.5 is fine particulate matter with a diameter of 2.5 micrometers or less; a human hair is about 70 micrometers in diameter. (Environmental Protection Agency. Particulate Matter Basics. https://www.epa.gov/pm-pollution/particulate-matter-pm-basics. Accessed 2/15/1

‡ Oregon Department of Environmental Quality. 2015 Oregon Air Quality Data Summaries. July 2016.) Accessed online at http://www.oregon.gov/deq/FilterDocs/2015AQAnnualReport.pdf

§ Health Effects Institute. Traffic-Related Air Pollution: A Critical Review of the Literature on Emissions, Exposure, and Health Effects. Special Report 17, January 2010.)

¶ Environmental Protection Agency. Health and Environmental Effects of Hazardous Air Pollutants. https://www.epa.gov/haps/health-and-environmental-effects-hazardous-air-pollutants. Accessed May 16, 2018.

Communities exposed to poorer air quality include minority and low-income communities, tribal members, rural communities, and other communities traditionally underrepresented in environmental public processes.* For example, air toxics affect minority and low-income populations in the Portland area at higher rates than other groups in the metro area. Different types of emission sources also effect different minority groups. In general, the Latino/a population experiences the highest impacts from residential wood smoke; Asian communities and people living below the federal poverty level, from diesel emissions; and African Americans, from area source emissions such as dry cleaners, gas stations, or auto body shops.†

Water Security

Inadequate water supply poses risks to the health of people in Oregon and local economies. Climate change intensifies many of these risks. For example, storms and flooding can increase the risk of water contamination. Climate change models project heavier rainfall in Oregon's future, and the state has 258 cities and counties located in floodplains. Harmful Algal Blooms (HABs) are another water quality issue related to climate change that adversely affects recreation, tourism, livestock, and food production. Finally, Oregon will continue to experience recurring droughts that affect water supply.

Climate Change

Climate change is already affecting human health and is projected to increase health risks in the years to come. By 2050, average temperatures in Oregon are expected to rise by three to seven degrees and snowpack is expected to be less than half of what it was last century. These changes will result in more wildfires, drought, insect and disease outbreaks, and flooding.‡

The Oregon Health Authority's 2014 Climate and Health Profile Report (https://bit.ly/2m33ZND) outlines projected climate impacts in Oregon and their associated health risks. In many cases, climate change expands the variability and severity of existing environmental health risks. Communities of color and low-income communities face more environmental stressors, while having less access to the resources and opportunities they need to cope and adapt.

* Institute of Medicine. 1999. Toward Environmental Justice: Research, Education, and Health Policy Needs. Washington, DC: The National Academies Press. https://doi.org/10.17226/6034

† Oregon Department of Environmental Quality. Portland Air Toxics Solutions Committee Report and Recommendations. April 2012.

‡ The Third Oregon Climate Assessment. Oregon Climate Research Institute. January 2017. Accessed online at http://www.occri.net/media/1042/ocar3_final_125_web.pdf

Natural and Human-Caused Hazards

In Oregon, natural and human-caused hazards include winter storms, heat waves, earthquakes, tsunamis, new diseases, pandemics, and bioterrorism. The 2017 Oregon Public Health Hazard Vulnerability Assessment ranked the top threats based on probability of occurrence, public health consequences, and public health risk. A Cascadia Subduction Zone earthquake and resulting tsunami are most hazardous for the most-populated areas of the state. While winter storms pose the greatest risk for central and eastern Oregon.

People who responded to a previous statewide hazard vulnerability assessment completed in 2012* noted the need to better understand and meet the unique vulnerabilities of at-risk persons in our communities. For example, people with disabilities face additional barriers to care after disasters if shelter access, communication tools, equipment, and transportation systems are not designed to address their needs. Conversely, people with higher incomes and higher levels of education and home ownership tend to be better prepared for disasters.†

* https://www.oregon.gov/oha/PH/PREPAREDNESS/PARTNERS/Documents/OHA%208584%20PH%20Hazard%20Vulnerability.pdf

† Levac J, Toal-Sullivan D, O'Sullivan TL. Household emergency preparedness: a literature review. Jr comm Health. 2012 June;37(3):725-733.

2017 Oregon Public Health Hazard Vulnerability Assessment Summary

Top 10 hazards posing the largest risk to public health infrastructure, by region. (1 is the most probable.)		
Threat level	**Western Oregon**	**Central/Eastern Oregon**
1	Earthquake – Cascadia (3–5 minutes)	Winter storm
2	Public health emergency	Wildfire (with urban interface)
3	Flood – riverine	Flood – riverine
4	Winter storm	Public health emergency
5	Wildfire (with urban interface)	Drought
6	Earthquake – crustal (1 minute)	Windstorm
7	Landslide/debris flow	Hazmat release – transportation
8	Windstorm	Landslide/debris flow
9	Hazmat release – transportation	Earthquake – crustal (1 minute)
10	Hazmat release – fixed facility	Hazmat release – fixed facility

Built Environment

Many people in Oregon expressed the need for a built environment that provides access to basic needs and encourages connectivity and healthy behaviors. This includes access to healthy foods, active transportation options, safe housing, and safe places to be physically active, play and relax. SHA participants offered many ideas for ensuring that fitness and recreation opportunities are available to people of all ages and abilities. These ideas included improving the walkability and "bikeability" of communities and increasing access to Oregon's bountiful recreational areas and parks. SHA participants also mentioned community gardens and farmers markets as community assets. Finally, participants frequently mentioned the effects of substandard housing on health, particularly for people with lower incomes.

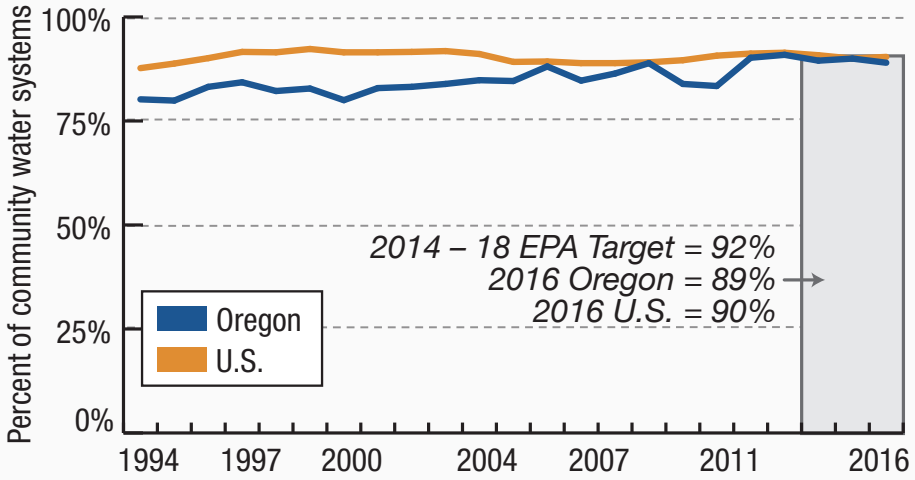
Drinking Water

Access to safe drinking water is essential to human health. Larger water systems that serve the majority of the state population generally meet safe drinking water standards, and this compares favorably to water systems across the United States. In 2016, 89% of community water systems in Oregon met all health-based standards, just below the national standard of 92%.

Human-generated as well as naturally-occurring contaminants (such as arsenic and nitrates) can affect drinking water, particularly for the roughly one in every four people in Oregon who rely on private wells for their drinking water. Long-term exposure to high levels of arsenic in drinking water has been associated with increased risk for diabetes, high blood pressure, and several types of cancer.* Statewide, nearly 10% of all OHA test results from private domestic wells show arsenic levels above 10 parts per billion (ppb), which is the safe drinking water standard for arsenic. Some parts of the state, such as Harney County (27%) and Malheur County (62%), have much higher rates. Private well owners in Oregon are not required to conduct routine water quality testing or treatment.

* https://ephtracking.cdc.gov/showArsenicYourHealth.action

Community water systems meeting all health-based standards by year, Oregon and U.S.



Source: Oregon State and Federal Safe Drinking Water Information Systems

Fluoride is an effective and affordable way to protect children, adults, and seniors from tooth decay and is recognized as one of the 10 greatest public health achievements of the 20th century. After communities fluoridate their water supplies, the percentage of children in the population with at least one cavity decreases by 15%, on average.* Despite strong evidence that water fluoridation is safe and improves oral health, Oregon ranks 48th among U.S. states by proportion of public water systems that are fluoridated.†

* The Guide to Community Preventive Services. Preventing Dental Caries: Community Eater Fluoridation. 2013. Retrieved from: www.thecommunityguide.org/oral/supportingmaterials/RRfluoridation.html

† America's Health Rankings, 2017.

Healthy Foods

Food is a necessity, and people's access to affordable, healthy food varies widely. Related concerns are discussed elsewhere in this report: Affordability, in Chapter 3 (Social Determinants of Health); how healthy food affects health outcomes, Chapter 5 (Prevention and Health Promotion); and foodborne- illness, Chapter 7 (Communicable Disease Control). Important environmental contexts also affect access to healthy food, such as climate change.

A resilient food system provides enough food to meet current needs while maintaining healthy ecosystems that can continue to produce food for future generations. A resilient food system also protects farmers and other food workers, consumers, and communities from the negative environmental effects and chemical exposures involved with growing and consuming food. Agriculture workers are disproportionately affected by pesticide exposures and are more likely to be food-insecure, compared to other groups.*†

* Grauel K; Chambers, K. 2014.Food Deserts and Migrant Farmworkers: Assessing Food Access in Oregon's Willamette Valley. Journal of Ethnobiology 34 (2):228-250.

† Farquhar-SA; Goff-NM; Shadbeh-N; Samples-J; Ventura-S; Sanchez-V; Rao-P; Davis-S Occupational health and safety status of indigenous and o farmworkers in Oregon. J Agric Saf Health 2009 Jan; 15(1):89-102

Transportation

Convenient, affordable transportation to and from work, school, stores that sell healthy foods, and health care providers is important to health. Transit gaps or deserts, where access to public transit is limited or doesn't exist, are common in Oregon, particularly in rural and frontier areas of the state.

Older adults, persons with disabilities, and children and youth with special health care needs in particular can be healthier when they have greater access to transportation. For example, sidewalks that meet the Americans with Disabilities Act guidelines and quality transit and paratransit services are critical to enabling people with restricted mobility to engage socially, to attend medical appointments, to shop, and to go to work.

My community needs…

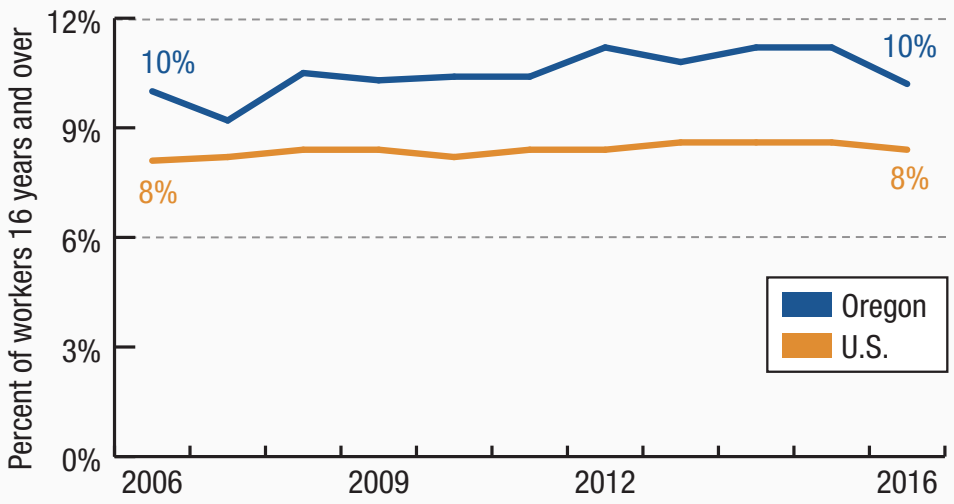
> "A better transportation system. Towns outside the Portland metro area don't usually have that resource. Silverton is a model. They have a shuttle that seniors can ride to the grocery, library, senior center, etc. It's by donation and makes it possible for them to age in place. Every community needs that."
>
> – SHA Community Participant

Walking, biking, and public transportation each allow people to get where they need to go and be physically active at the same time. When people have transportation options beyond motor vehicles, such access can boost their physical activity, reduce their exposure to air and noise pollution, minimize the risk and severity of crashes, decrease stress, and improve access to a variety of resources that contribute to health, including parks, trails, medical and social services, jobs, and schools. In 2016, only 10% of people in Oregon walked, biked, or took public transit to work.

From 2011 to 2015, 71% of people in Oregon drove to work alone. Of these solo drivers, 27% spent more than 30 minutes commuting; this figure ranges from 10% of commuters in Lake County to 55% in Columbia County.*

* County Health Rankings

Workers who walk, bike or take public transit to work, by year Oregon and U.S.



Source: American Community Survey (ACS)

"For everyone in my community to be healthy, it would mean that physical activity is baked into everyone's daily lives. For example, it should be easy and safe for everyone to walk and bike in their community. Where I live, I get physical activity every day by taking my dog for a walk in the neighborhood, and it's safe to do so at any time of day. I'm lucky to have a trail connecting my neighborhood to my office, so I can safely bike to work for most of my commute and get additional physical activity that way. Getting regular physical activity should not require driving to the gym, and it wouldn't if more people were served by safe walking and bicycle infrastructure. It would be great if we tracked access to safe walking and bicycling facilities, which is really access to the means for physical activity, as a public health measure."

– SHA Community Participant

"If I had a sidewalk, I would drive less, but I don't, so I have to drive more, and my kids have a limited area where they can play."

– SHA Community Participant

Healthy and Safe Housing

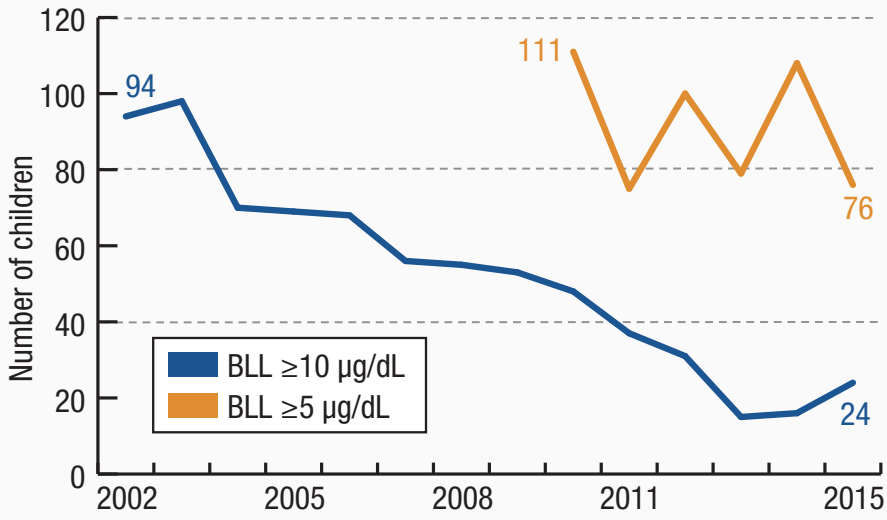
Many SHA participants identified the need for affordable housing that is also healthy and safe. Having safe housing means experiencing less exposure to lead and radon, secondhand smoke, fire hazards, mold and infestations, as well as having proper heating and cooling systems. From 2009 to 2013, 21% of Oregon households were living with a severe housing-related health problem,* ranging from 11% of households in Gilliam County to 24% in Josephine County.

High levels of lead are toxic to people of all ages, and young children face the highest risks for adverse health effects. Lead poisoning has neurological effects that are most damaging in early childhood when the brain is developing rapidly. In Oregon, the number of children with elevated blood lead levels (greater than or equal to 10 micrograms per deciliter) declined from 2003 to 2013, but the number has remained relatively flat since then.

My community needs…

> "Gardens and parks, shelter from rain and weather in affordable and accessible housing, a circle of wise elders, a multi-generational common ground area, a recreation center, great schools, air quality, and environmental awareness of healthy eco-systems."
>
> – SHA Community Participant

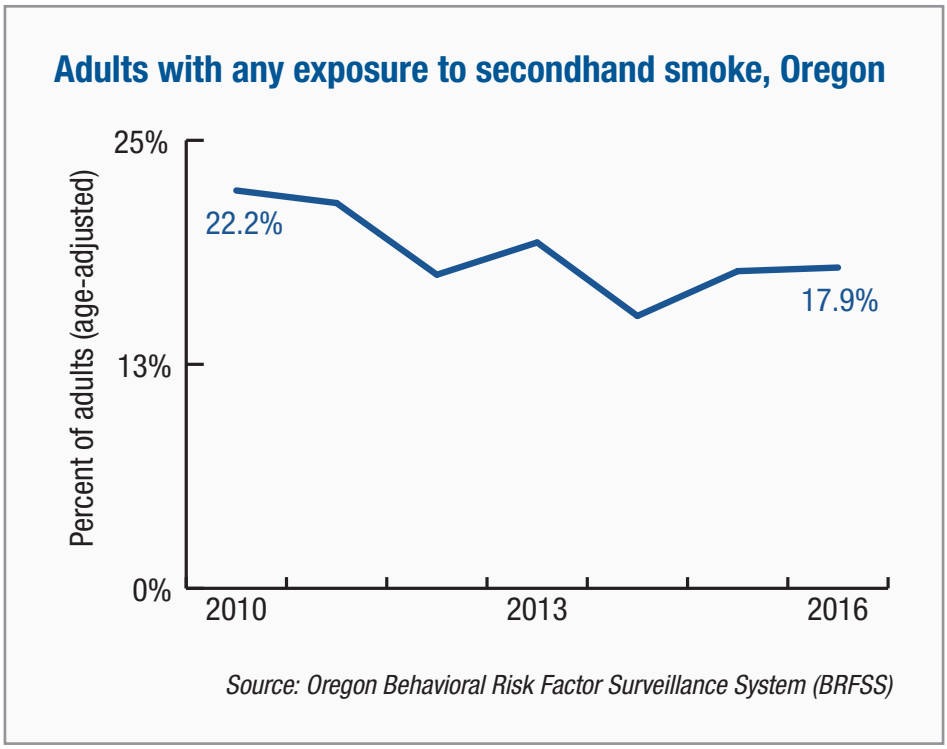
Children aged less than 6 years with confirmed elevated blood lead levels (BLL) by year, Oregon



Source: Oregon Public Health Division, Lead Poisoning Prevention Program

* Having at least one of the following: overcrowding, high housing cost, or lack of kitchen or plumbing facilities.

For secondhand smoke, there is no risk-free level of exposure; even brief exposure can be harmful to health. Cigarette smoking and exposure to secondhand smoke is the number one preventable cause of chronic disease, including heart disease, stroke, and diabetes. While Oregon has made much progress in limiting exposure to secondhand smoke in public spaces, exposure still occurs in homes and private spaces. In 2016, 17.9% of Oregon adults reported having been exposed to secondhand smoke, a slight decrease since 2010. Among students in 11th grade, 6% said they lived with someone who smokes or vapes tobacco inside the home.



Mold and radon also contribute to health concerns in our homes. Mold results from moisture caused by water leaks, humidity, and ventilation problems. Some types of mold can increase asthma and allergy risks. Radon is a radioactive gas found in soil and rock that can accumulate in buildings. Radon exposure is the second-leading cause of lung cancer after smoking, causing an estimated 13% of lung cancer deaths.* Removal of mold and radon from a home can be expensive and is often unaffordable for low-income households.

* NRC (National Research Council). 1999. Health Effects of Exposure to Radon: BEIR VI. Washington, DC:National Academies Press.

Access to Nature

Oregon is renowned for its natural resources, and community members identified access to and preservation of the natural environment as important to their health. They expressed the importance of hiking, beaches, parks, and the value of a healthy environment. Exposure to nature has been shown to improve health outcomes, including those related to obesity, cardiovascular disease, depression, and anxiety.* At the same time, many people in Oregon do not have easy access to nature and its benefits because of socioeconomic disparities and cultural barriers, particularly for communities of color.†

Land Use Planning

Land use decisions affect air quality, traffic safety, water quality, physical activity, and mental health. Modern land-use planning arose from a need to protect public health; industrialization led to cities establishing requirements to separate residents from industrial pollution emissions and to combat unsanitary conditions and overcrowding that promoted disease transmission. In contrast, land use decisions today tend to be driven by economic development. This separation between land use planning and public health has had broad implications for community health, with disproportionate effects for communities of color and lower-income communities.

For example, affluent and predominantly white communities and neighborhoods tend to have sidewalks, greenspace, and adequate street lighting, all of which foster physical activity and contribute to positive mental health outcomes.‡ Communities of color and lower-income communities, in contrast, tend to live closer to industrial facilities and air pollution;§ live further from stores that offer healthy foods;¶ and have fewer parks in their neighborhoods.** Land use planning decisions contribute to people spending more time in cars and less time being physically active. This also increases their risks for chronic disease, worsens air quality, and increases greenhouse gas emissions.†† Land use planning, transportation, and community design interact and significantly influence many of the primary determinants of community health.

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* Nature Contact and Human Health: A Research Agenda. Environmental Health Perspectives. 2017 July.

† https://www.cnn.com/2017/09/12/health/nature-wilderness-minorities/index.html OR https://www.nature.nps.gov/socialscience/docs/CompSurvey2008_2009RaceEthnicity.pdf

‡ National Association of County and City Officials. Factsheet: Public Health in Land Use Planning and Community Design. http://archived.naccho.org/topics/environmental/landuseplanning/upload/Land-Use-Fact-Sheet6-19-03.pdf. Accessed 3/8/2018.

§ Maantay J., Chakraborty, J., Brender, J. Proximity to Environmental Hazards: Environmental Justice and Adverse Health Outcomes. USEPA "Strengthening Environmental Justice Research and Decision Making: A symposium on the Science of Disproportionate Environmental Health Impacts," March 17-19, 2010. https://archive.epa.gov/ncer/ej/web/pdf/maantay.pdf. Accessed 3/8/2018.

¶ Hilmers, A., Hilmers, D. Dave, J. Neighborhood Disparities in Access to Healthy Foods and Their Effects on Environmental Justice. American Journal of Public Health 2012 September, 102(9): 1644-1654.

** Wen, M., Zhang, X., Harris, C., Holt, J., Croft, J. Spatial Disparities in the Distribution of Parks and Green Spaces in the USA. Annals of Behavioral Medicine 2013 February; 45(Supplement1): 18-27.

†† Frumkin H, Frank L, Jackson R. Urban Sprawl and Public Health: Designing, Planning, and Building for Healthy Communities. Island Press. Washington. 2004.

Occupational Environment

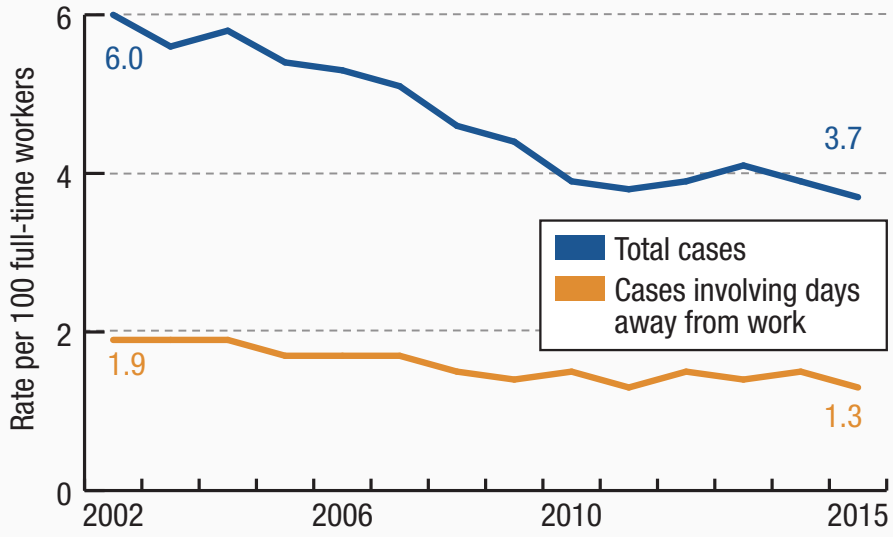
Oregon does an excellent job ensuring safety in the workplace, ranking 7th in the country in occupational fatalities.* However, some SHA participants identified the need for healthier workplaces. Controlling occupational hazards is an important way to prevent injuries and illnesses. Industries where workers experience the highest rates of days away from work include agriculture, forestry, fishing, utilities, transportation, warehousing, and construction.

Collecting information about work-related fatalities can lead to the development of regulations to protect workers. In 2016, 72 Oregon workers (3.9 deaths per 100,000 full-time workers) died from occupational injuries. This is a decrease from 2006 when the rate was 5.1 per 100,000 full-time workers. The industries with the highest percentage of fatalities were agriculture, forestry, fishing, and hunting (27.2%, combined); transportation and warehousing (20.5%, combined); and construction (13.6%).

Occupational lead exposure is another critical health problem in Oregon and the nation. Lead exposure can lead to cognitive impairment and adverse cardiovascular, kidney, and reproductive health issues. The rate of occupational lead exposure in Oregon declined from 2002 to 2010 but has remained flat since then (currently 2.4 per 100,000 workers). However, because many workers exposed to lead may not be tested or their tests may not be reported, data on adult blood lead exposure should be considered a low estimate.

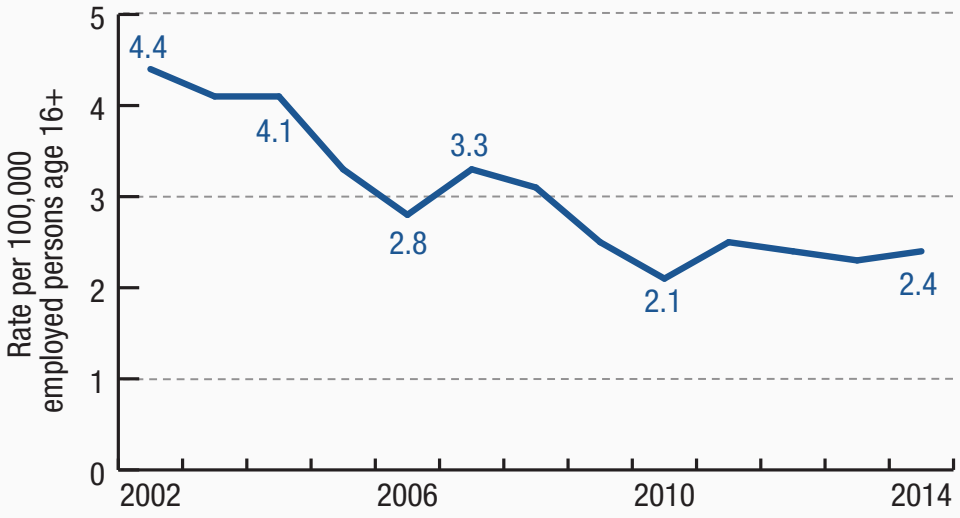
* America's Health Rankings

Non-fatal occupational injuries and illnesses by year, Oregon



Source: Bureau of Labor Statistics, Annual Survey of Occupational Injuries and Illnesses

Elevated blood lead levels (more than or equal to 25 mg/dL) among employed persons age 16+ by year, Oregon



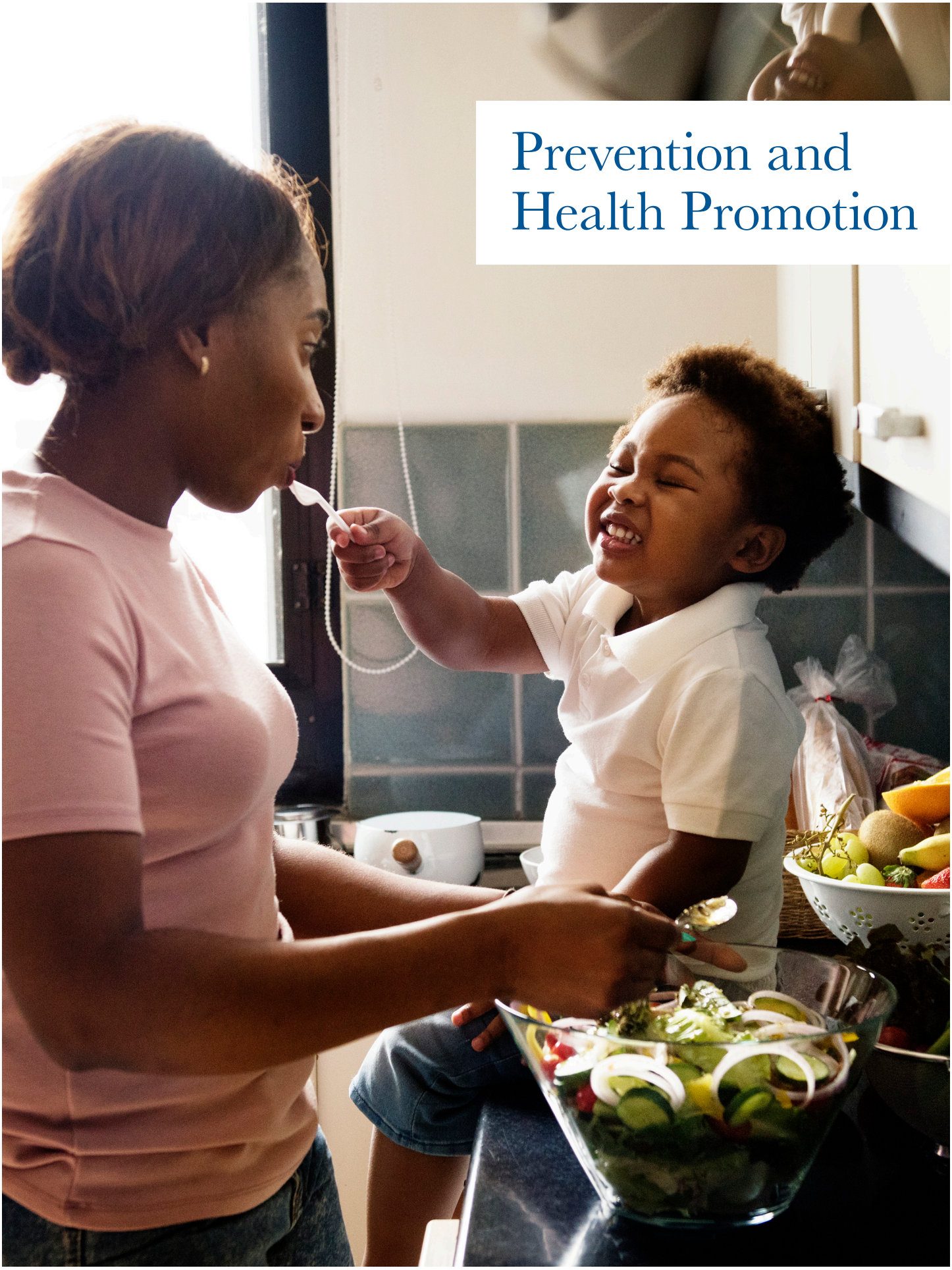
Source: Oregon Public Health Division, Lead Poisoning Prevention Program

My community needs…

> “Strong government regulation and oversight of industry to ensure clean water air and soil are maintained, that businesses ensure the safety of their workers, and schools are safe for students. Regulation of industrial and commercial pollutants, as well as day to day pollutants such as vehicle emissions.”

– SHA Community Participant

Prevention and Health Promotion



Prevention and Health Promotion

One out of every six comments received from community members was related to prevention and health promotion, an area that encompasses policies and programs that provide access to well-being for everyone. The most-commonly cited concerns were related to behavioral health (both mental health and addictions); healthy eating; physical activity; and health education, particularly for children and older adults. People in Oregon recognize that prevention is more effective and less expensive than treating a chronic disease. In addition, community members expressed a need for prevention efforts that promote holistic well-being. Among people living with chronic disease, many said they need tools to help them manage their health.

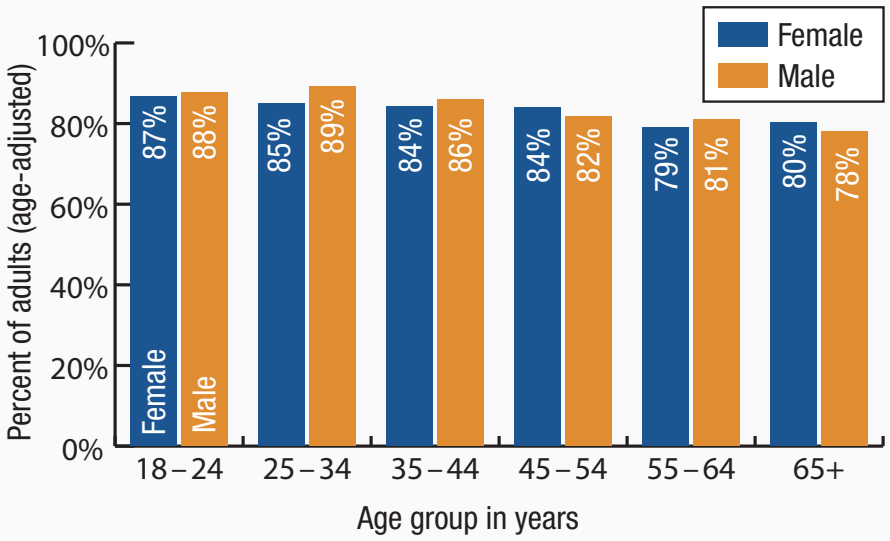
My community needs…

> "Access to the necessary means to prevent health problems before they start."
>
> – SHA Community Participant

Overall Health

Self-reported health is an important indicator of overall population health. From 2000 through 2016, more than 80% of Oregon adults reported being in good or excellent health.

Adults reporting good to excellent health by age and sex, Oregon

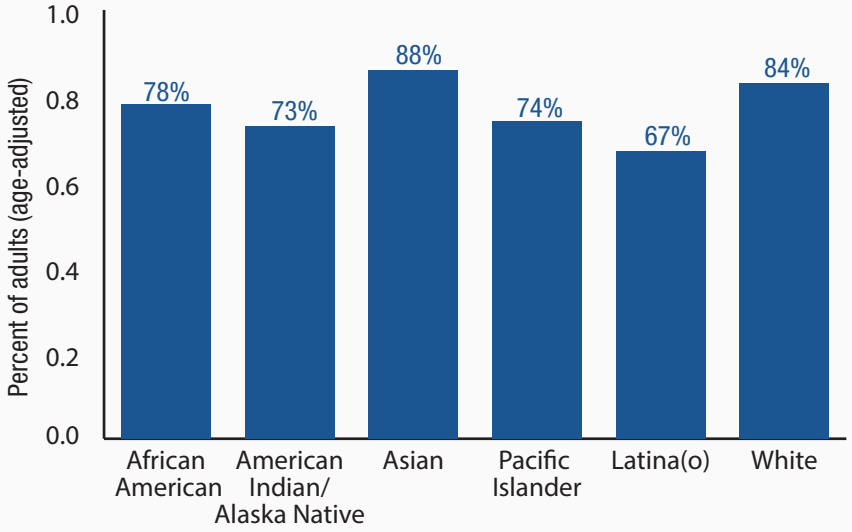


Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2016

Disparities in Overall Health

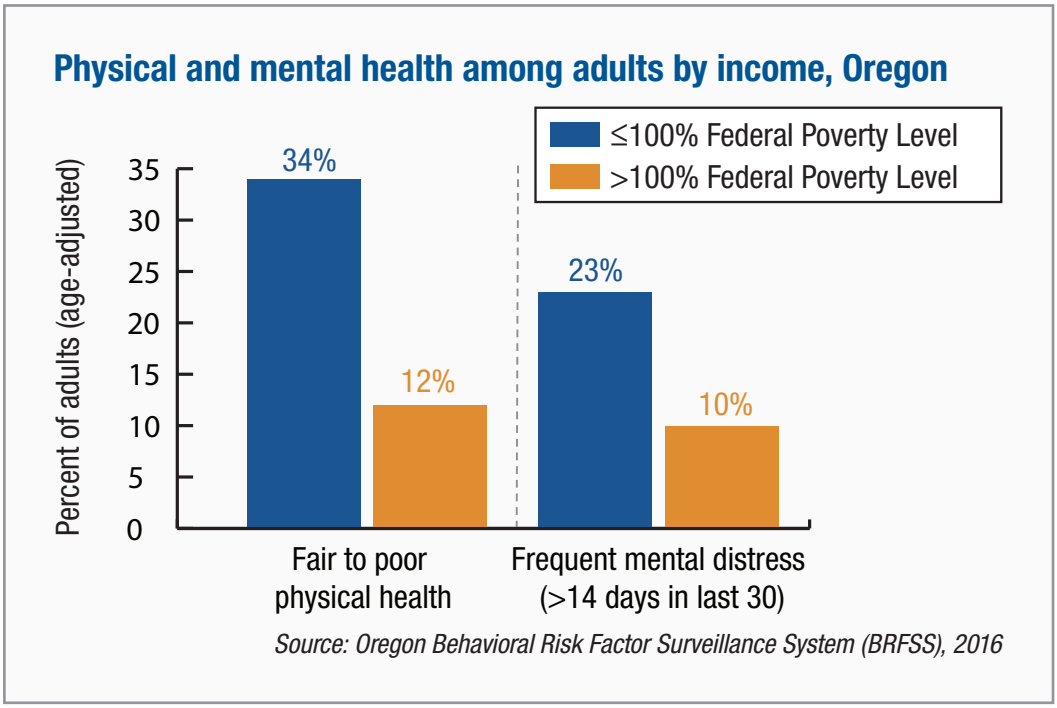
For adults who identify as African American, American Indian and Alaska Native, or Latina(o), the percentage who report good to excellent health is considerably lower than for those identifying as non-Latina(o) white or Asian and Pacific Islander.

Adults reporting good to excellent health by race and ethnicity, Oregon



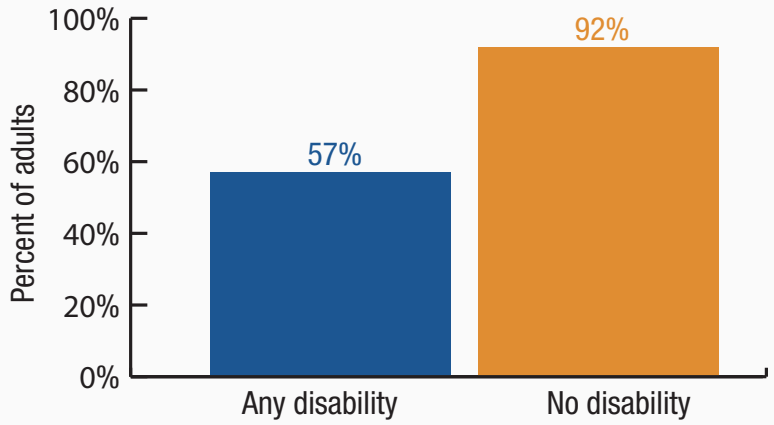
Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)
Preliminary race reporting, 2015 – 2016

Adults living at or below the federal poverty level are less likely to report good to excellent physical health. In addition, they are more than twice as likely to report frequent mental distress.



Adults living with a disability rate their physical health as lower than those with no disability.

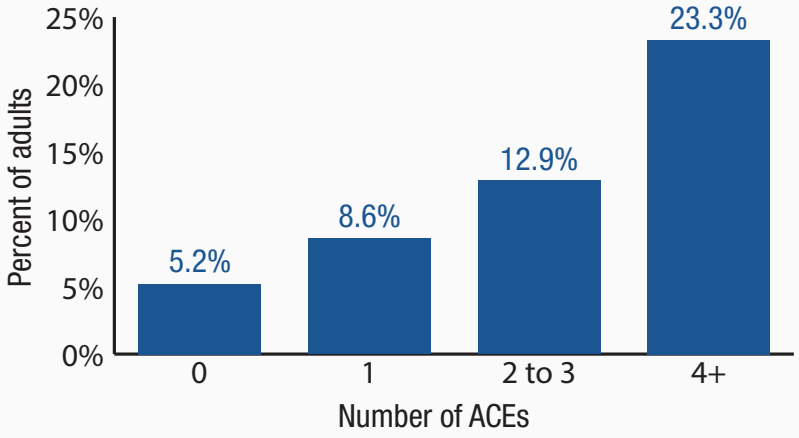
Good to excellent rating of physical health among adults by disability status, Oregon



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2016

People who have experienced four or more adverse childhood experiences (ACEs) are 4.5 times more likely to have difficulty concentrating, remembering, and making decisions due to their physical, mental or emotional condition, compared to those who experienced no ACEs.

Difficulty concentrating, remembering, and making decisions due to physical, mental, or emotional condition among adults by number of ACEs, Oregon



Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2016

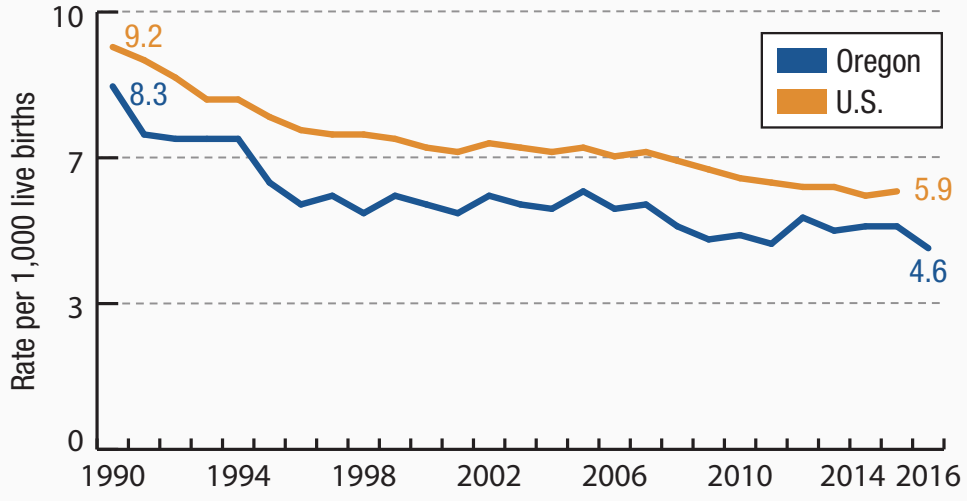
Maternal, Child, and Adolescent Health

Although the majority of community members agreed that Oregon is a good place to raise a child, Oregon ranks below average in child well-being. According to the 2017 Kids Count Data Book produced by the Annie E. Casey Foundation, Oregon ranks 31st out of 50 states across four domains of child well-being.*

> "I think we should focus on children at this point. Parents need to be able to get parenting education so that our next generation is safe, happy, healthy, and educated."
>
> – SHA Community Participant

Infant mortality (the death of an infant during the child's first year) in the United States has dramatically declined over the past 60 years. This decline is largely due to medical advances and hospital care provided to premature infants. Nationally, the leading causes of infant death are birth defects, prematurity/low birth weight, maternal complications of pregnancy, sudden unexplained infant death syndrome (SUIDS), and injuries. Oregon's infant death rate has been lower than the U.S. rate for more than 25 years, but racial and ethnic disparities persist.

Infant death rate by year, Oregon and U.S.



Source: Oregon Linked Birth/Death Certificate Data and NCHS (U.S.)

* http://www.aecf.org/m/resourcedoc/aecf-2017kidscountdatabook.pdf

Maternal depression (depression during pregnancy or after the baby's birth) adversely affects women, their infants, children, and families. Children of depressed mothers are at risk for health, developmental, emotional, behavioral, and learning problems that can last for many years. In Oregon, more than one in four new mothers (29.9%) report symptoms of depression either during pregnancy or after the birth of their babies.

Breast milk is the most complete form of nutrition for infants, with well-documented benefits for their health, growth, immunity, and development. Breastfeeding rates in Oregon are higher than in the nation as a whole. In 2014, 80.4% of Oregon mothers breastfed their infants at eight weeks after delivery (compared to 64.8% nationally), and 68.2% were still breastfeeding at six months postpartum (compared to 51.8% nationally).*

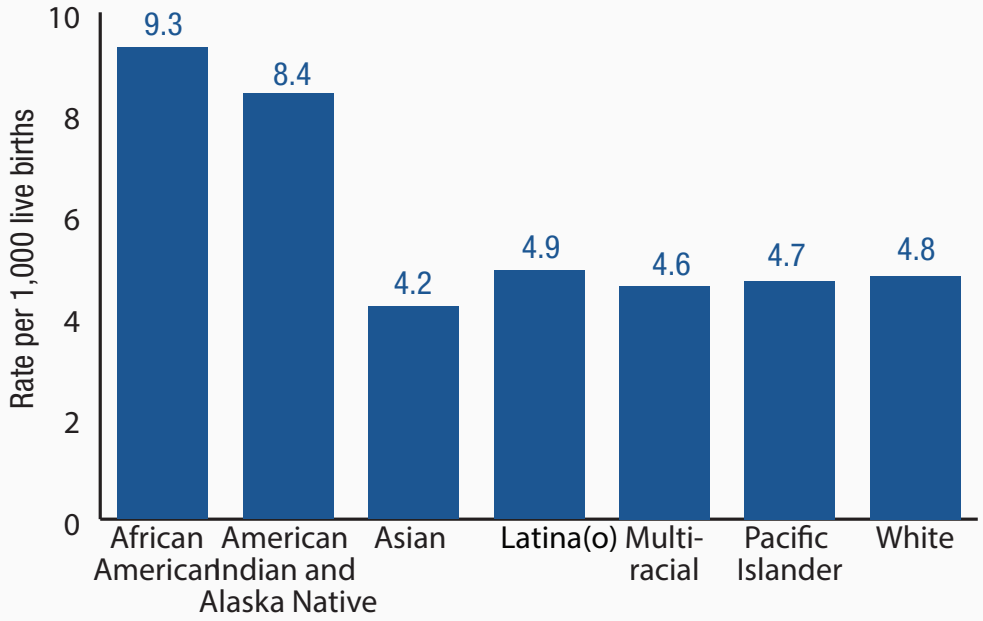
Schools often provide the best opportunity for health education and skill-building for healthy decision-making. The positive youth development (PYD) framework measures the physical, psychological, and social strengths that contribute to a young person's healthy development. Higher PYD levels are strongly associated with behaviors that promote physical and emotional health, as well as academic achievement. PYD levels among 8th and 11th graders in Oregon have remained relatively stable since 2006 when the measure was first reported, with a decline between 2013 and 2017. Just over half of students are meeting the PYD benchmark (56% of 8th graders and 57.7% of 11th graders). Latina(o) youth have the lowest level of PYD among 8th graders.

* Breastfeeding Among U.S. Children Born 2002 – 2013, CDC National Immunization Survey

Disparities in Maternal, Child, and Adolescent Health

On average from 2012 to 2016, infant death rates in Oregon were highest among African Americans (9.3 per 1,000 live births) and American Indians and Alaskan Natives (8.4 per 1,000 live births) as compared to Whites (4.8 per 1,000 live births).

Infant death by race and ethnicity, Oregon



Source: Oregon Linked Birth/Death Certificate Data and NCHS (U.S.), 2012 – 2016

Sexual Health

Ensuring young people have accurate information to make thoughtful choices about their sexual health is important to overall well-being. Within K-12 school settings, Oregon's Human Sexuality Education Law requires that youth have information about healthy relationships, consent, communication, pregnancy, and STI prevention, as well as resources for support when they need them. Although Oregon boasts one of

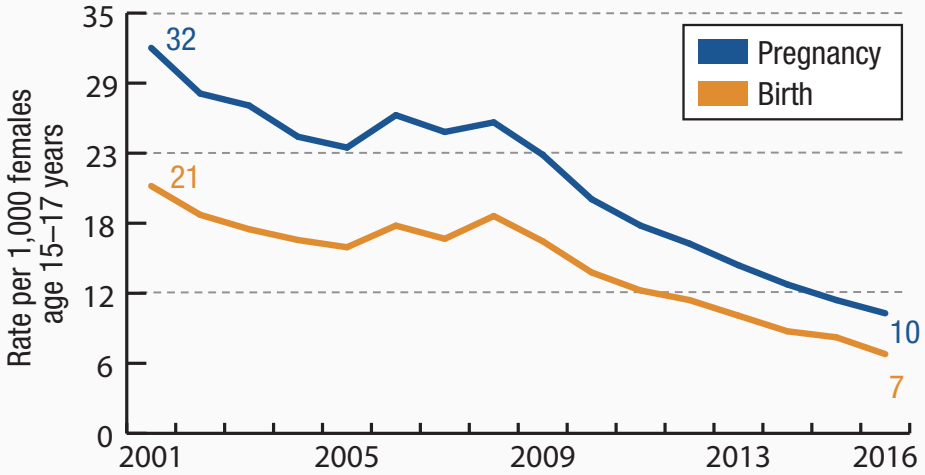
My community needs…

> "Better health education on sex ed, gender, and relationships."
>
> – SHA Community Participant

the most comprehensive sex-education curriculums in the country, some community members who participated in the SHA process felt that this curriculum wasn't being followed in their local schools and that education around sexual health was lacking.

In Oregon, sexual activity among 8th and 11th graders is on the decline. The teen pregnancy rate among females 15 to 17 years continues to fall, from 32.1 per 1,000 teens in 2001 to 10.0 per 1,000 in 2016. From 2010 to 2016, Benton County had the lowest teen birth rate (4.5 per 1,000), while Malheur County had the highest (23.1 per 1,000). Disparities in sexual health persist among youth of color, LGB youth, youth with disabilities, and youth in rural areas.

Teen pregnancy and birth (age 15 – 17 years) by year, Oregon

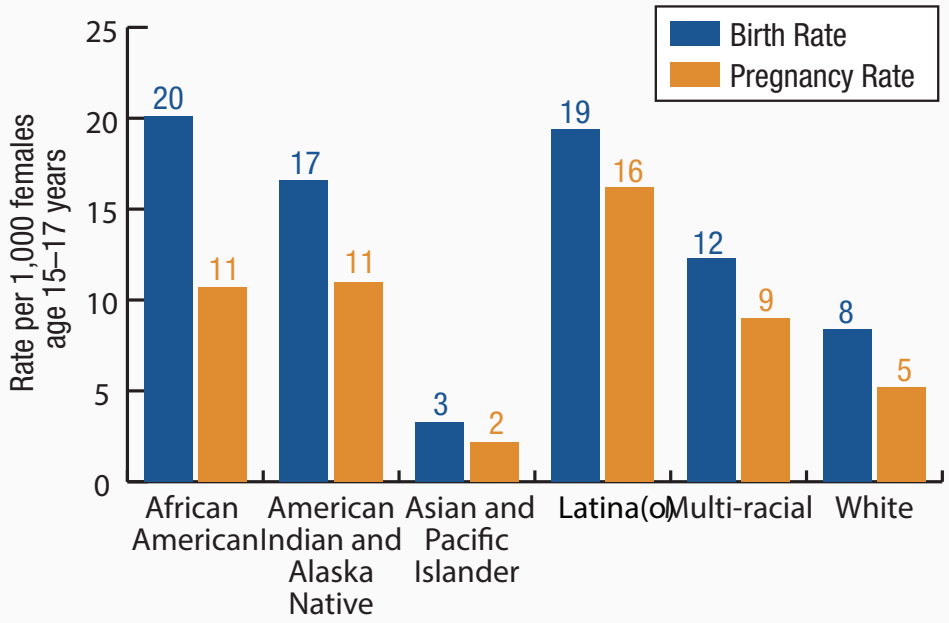


Source: Oregon Birth Certificate Data; Induced Termination of Pregnancy Database

Disparities in Sexual Health

In Oregon, the highest rates of teen pregnacy are among African American, American Indian and Alaska Native, and Latina teens.

Teen pregnancy and birth (age 15 – 17 years) by race and ethnicity, Oregon



Source: Oregon Birth Certificate Data; Induced Termination of Pregnancy Database, 2014 – 2016

Nutrition and Physical Activity

People in Oregon appreciate affordable, safe, and easily accessible opportunities for physical activity and outdoor recreation. People in Oregon are very active, ranking third in the country for physical activity.* Overall, most Oregon adults (88%) report adequate access to places where they can be physically active; however, large disparities are visible across the state, from just 7% reporting adequate access in Sherman County to 99% in Multnomah County.†

Although many of us can access opportunity for exercise, many SHA participants said that it's difficult to afford healthy foods. Others identified a need for health education to improve nutrition, such as community-based programs about preparing nutritious foods. Participants frequently pointed to community gardens and farmers markets as nutrition-related assets in their areas. Despite this, only 20% of adults report eating the recommended five servings of fruit and vegetables every day, a number that has remained stubbornly low for several years.

> "Healthy eating, exercise, running or walking 20 minutes a day, hiking, and outdoor activities."
>
> – SHA community participant

> "A tax on high sugar drinks."
>
> – SHA community participant

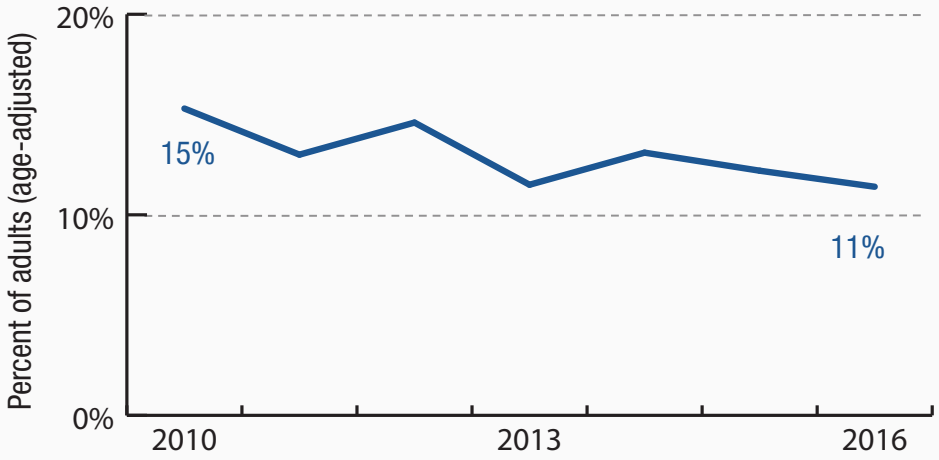
> "Have some type of fitness activities or facilitates that are usable at hours adaptable by young and old."
>
> – SHA Community Participant

> "Our community is rural and very poor. We need more investment in a community center, pool, and places for kids to recreate after school. Easy and affordable access to exercise facilities that are in good shape, affordable fresh foods like fruits and vegetables, and more access to food boxes for working families."
>
> – SHA Community Participant

* https://www.americashealthrankings.org/learn/reports/2017-annual-report
† County Health Rankings

In addition, about one in nine Oregon adults consume seven or more sodas per week, although this percentage has declined since 2010.

Adults who drank greater or equal to 7 sodas per week by year, Oregon

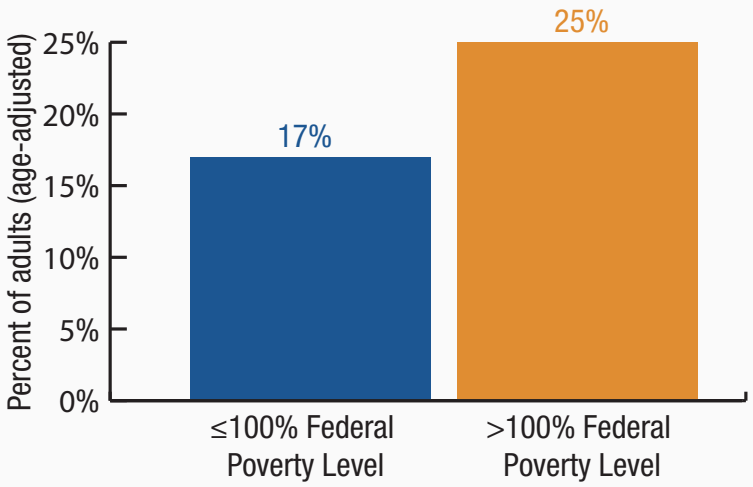


Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)

Disparities related to nutrition and physical activity

Adults with higher income are more likely to meet physical activity recommendations.

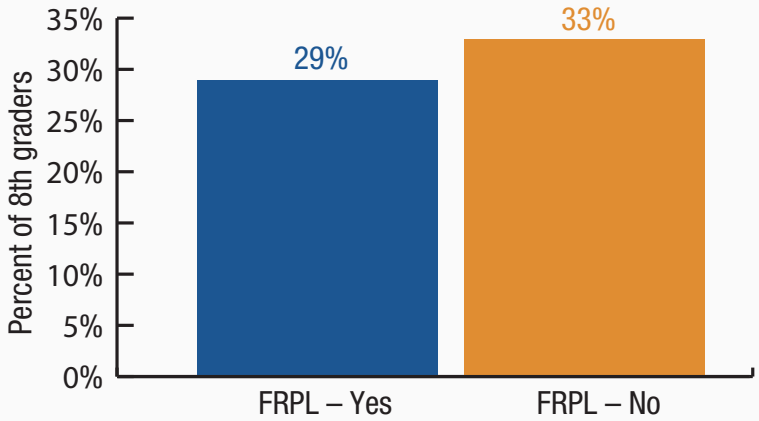
Adults that met physical activity recommendations by income status, Oregon



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2016

Children and teens who receive free or reduced price lunch (FRPL) at school are less likely to meet physical activity recommendations.

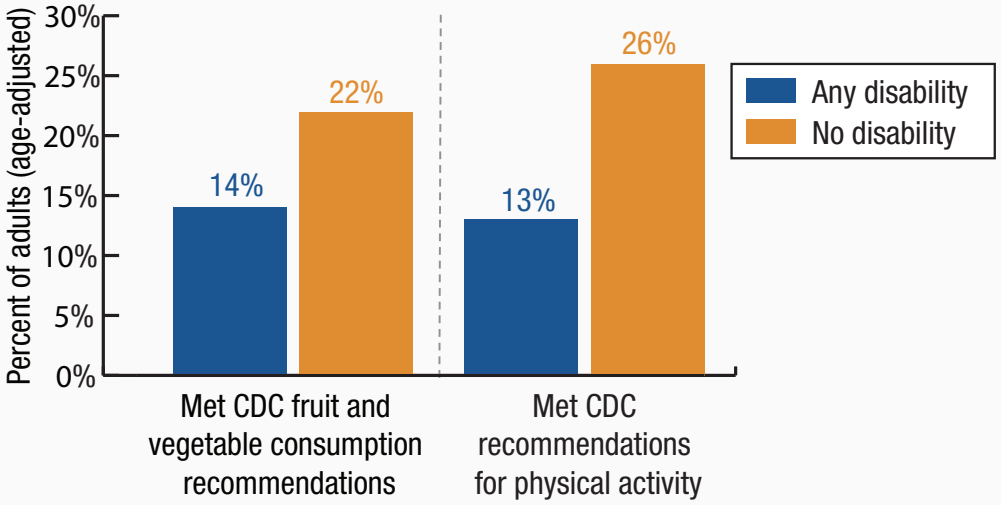
8th Graders that met physical activity recommendations by free or reduced price lunch (FRPL), Oregon



Source: Oregon Healthy Teens, 2017

Adults with disabilities also eat fewer fruits and vegetables and get less physical activity than those without disabilities.

Adults meeting CDC diet and physical activity recommendations by disability status, Oregon



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2015

Behavioral Health

Behavioral health, including mental health and addictions, is a priority concern for people in Oregon. A 2017 Pain in the Nation* report illustrated the epidemic of drug overdoses, alcohol, and suicide, ranking Oregon the 10th highest in the country for related deaths. Without significant improvements and investments in prevention-related policy and programs, deaths related to drugs, alcohol, and suicide could increase by 35% by 2025.

Mental Health

Oregon has the highest prevalence of mental illness among youth and adults in the nation. According to the 2017 State of Mental Health in America report, Oregon ranked 49th out of 51 states (including D.C.) in mental health outcomes (down from 40th in 2011).† An estimated 1 in every 5 adults is coping with a mental health condition. Mental health disorders are increasing among adolescents as well. In 2017, 30% of 8th graders and 32% of 11th graders reported being in a depressed mood for two weeks out of the past year. School-based mental health programs are an excellent opportunity to address this problem.

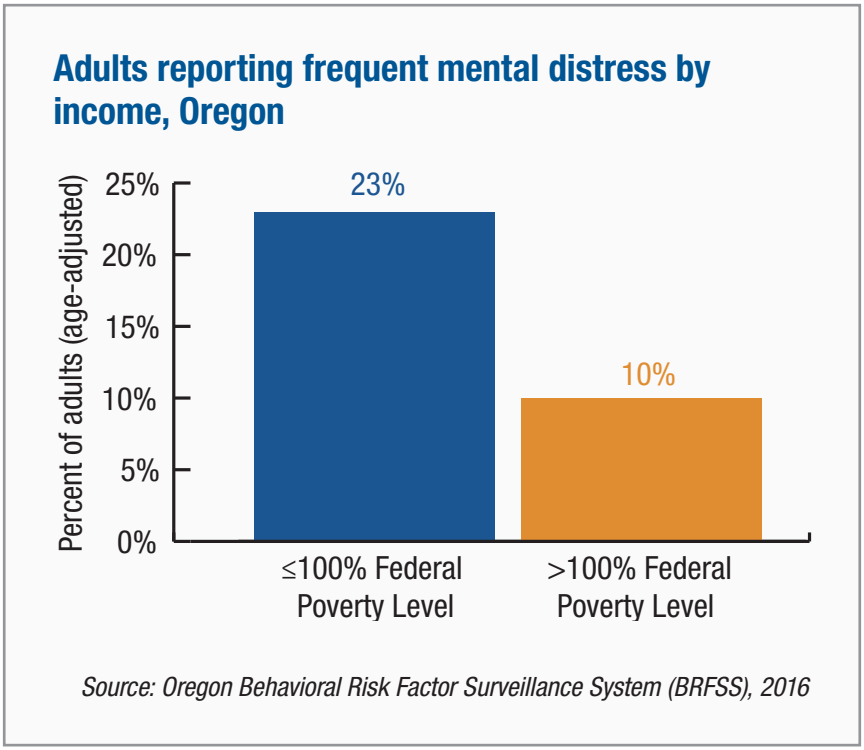
My community needs…

> "We need to look at better mental health and more access to the care we need."
>
> – SHA Community Participant

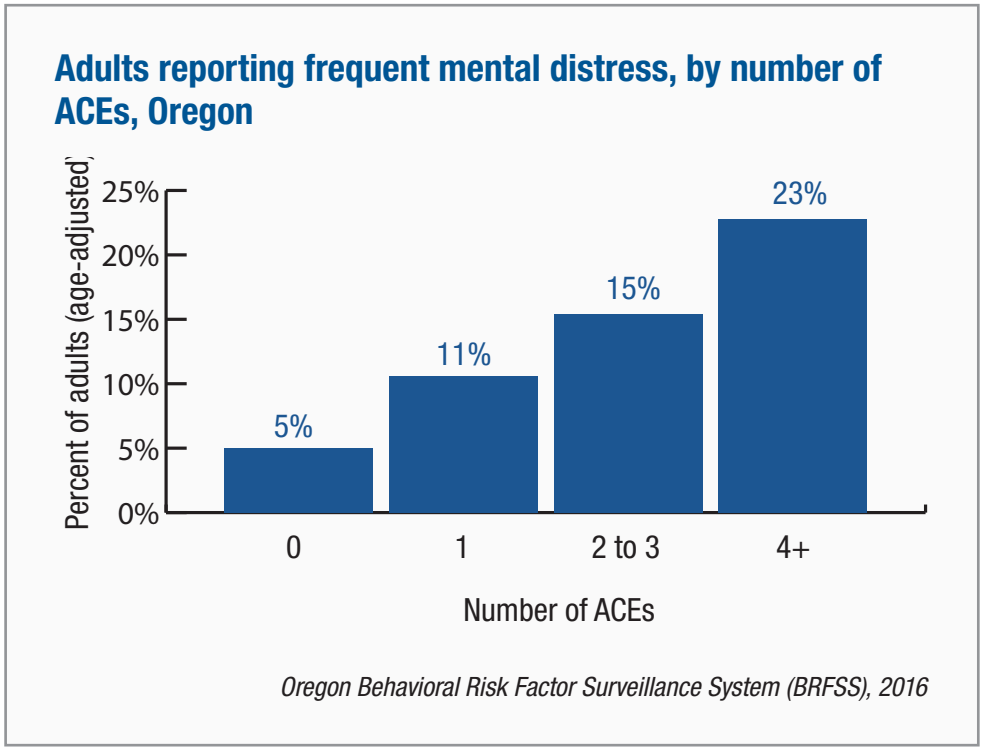
* healthyamericans.org/assets/files/TFAH-2017-PainNationRpt-FINAL.pdf
† http://www.mentalhealthamerica.net/issues/mental-health-america-printed-reports

Disparities Related to Mental Health

Adults living with low income report more frequent mental distress.

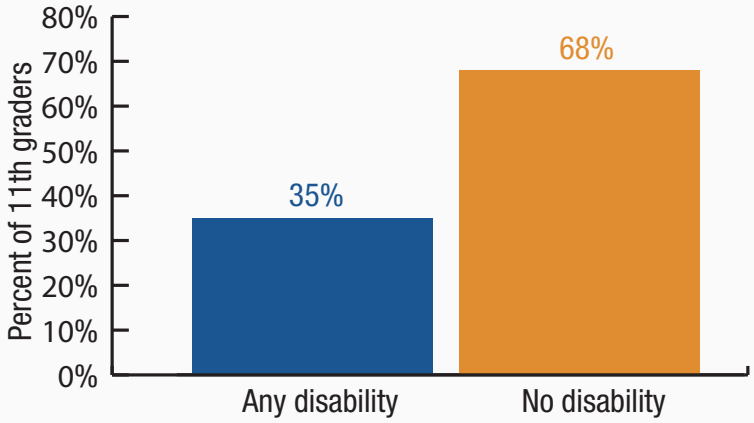


Adults who have experienced four or more ACEs are 4.6 times more likely to have frequent mental distress.



Positive youth development (PYD)* is a significant protective factor for emotional well-being among youth. Youth without a disability are more likely to meet the benchmark for PYD.

Positive youth development benchmark achievement by disability status among 11th graders, Oregon

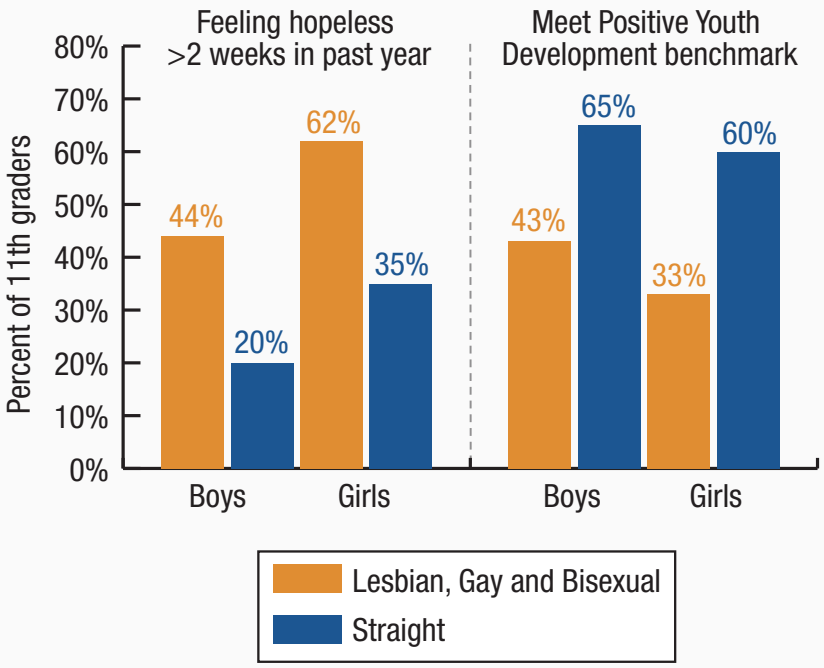


Source: Oregon Healthy Teens, 2017

* The PYD benchmark is a composite measure of physical, mental and emotional health status, and protective individual and environmental factors.

Gay and bisexual youth are at higher risk for a number of indicators of poor mental health.

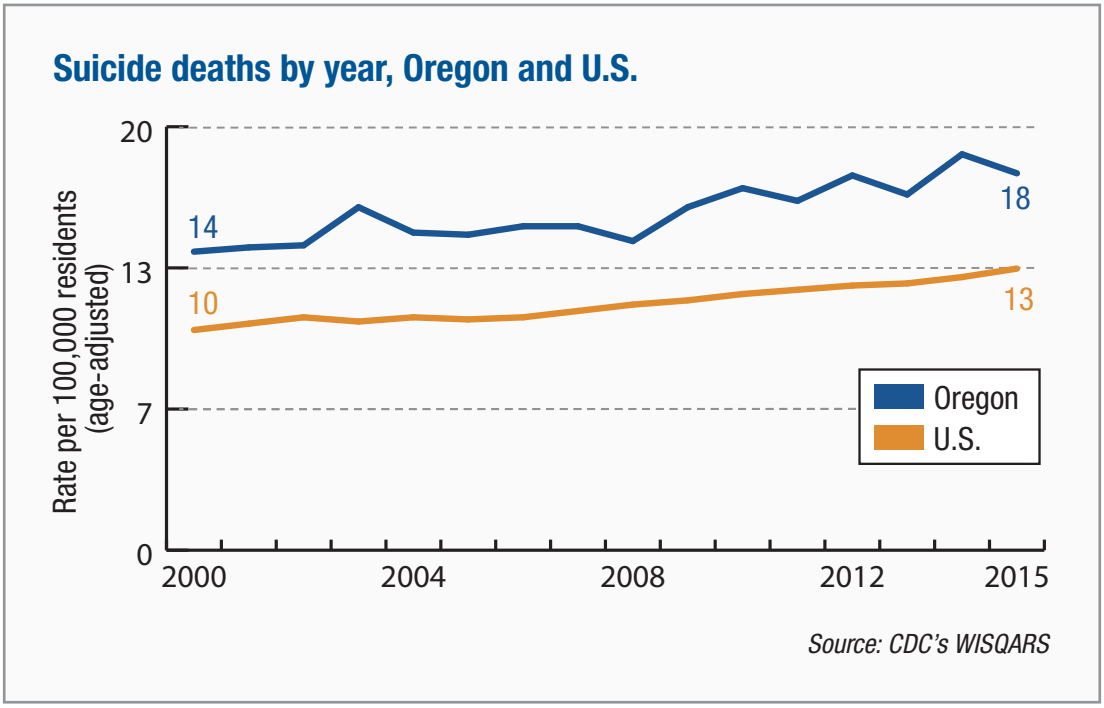
Poor mental health indicators among 11th graders by gender and sexual orientation, Oregon



Source: Oregon Healthy Teens, 2017

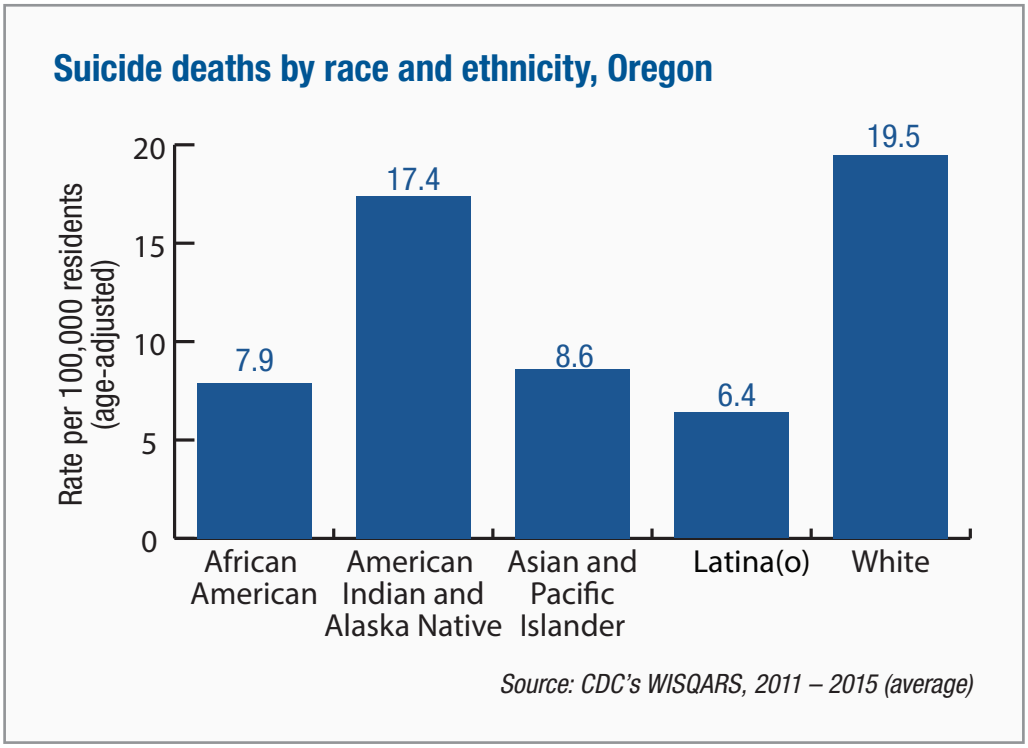
Suicide

Suicide is an important cause of early death in Oregon, and suicide rates in Oregon have been consistently higher than national rates for the past 30 years. Suicide rates in Oregon and the United States have been increasing over the past decade. In 2015, 762 people in Oregon died by suicide (17.8 per 100,000 residents). People who attempt suicide, when it's not fatal, can suffer lasting health problems that may include brain damage, organ failure, depression, and other mental health problems.

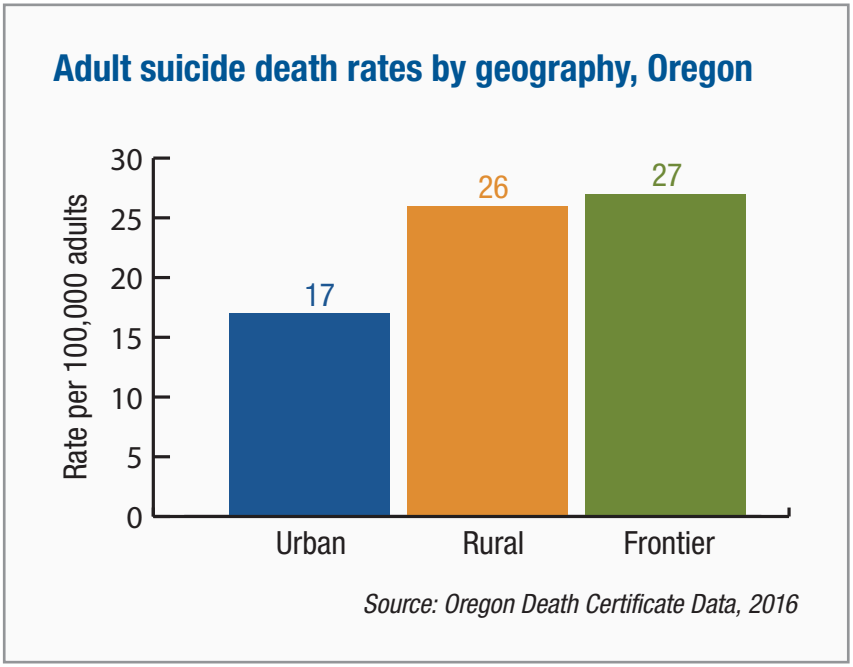


Disparities in Suicide

Suicide deaths are disproportionately high among white men and Indians and Alaska Natives.

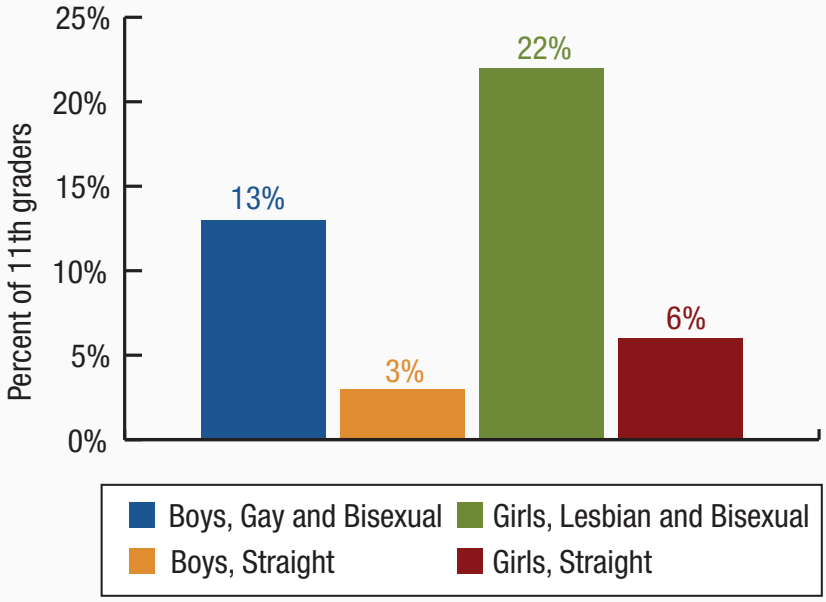


Suicide rates are highest in frontier and rural areas.



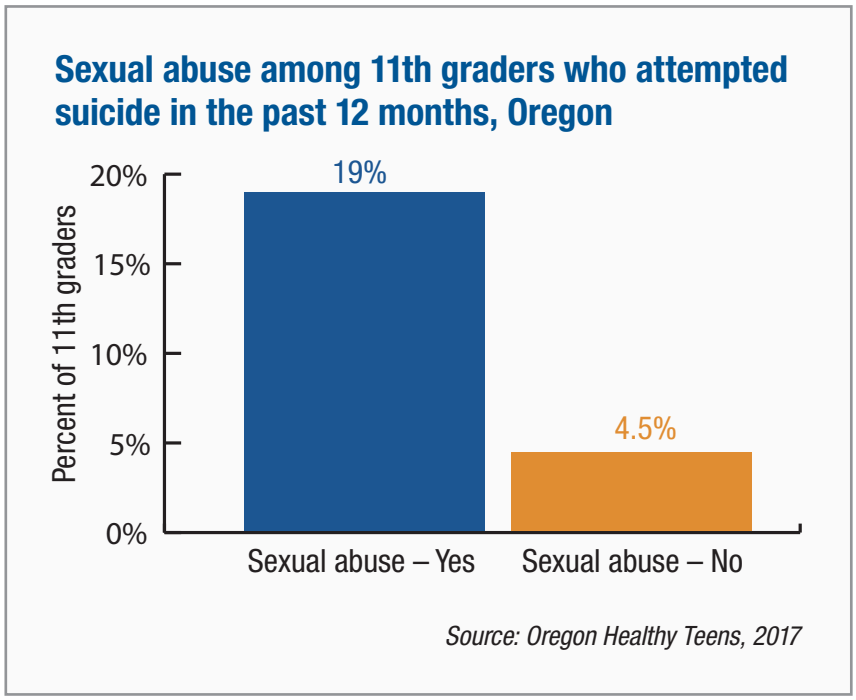
Gay and bisexual youth are more likely to have attempted suicide in the past year.

Attempted suicide in the past year by gender and sexual orientation, 11th grade

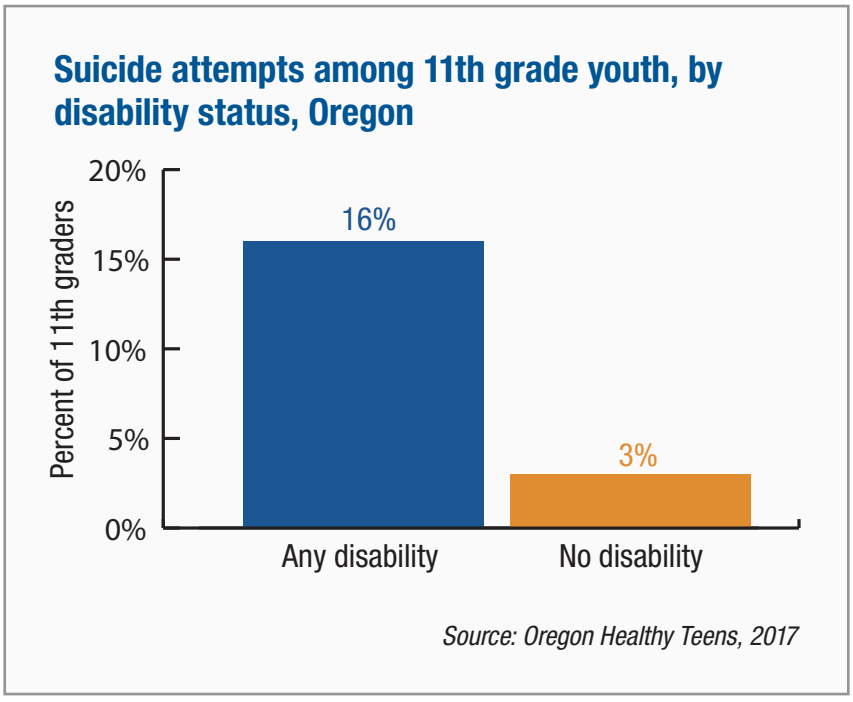


Source: Oregon Healthy Teens, 2017

Youth who have experienced physical or sexual abuse in the past 12 months are more likely to attempt suicide.

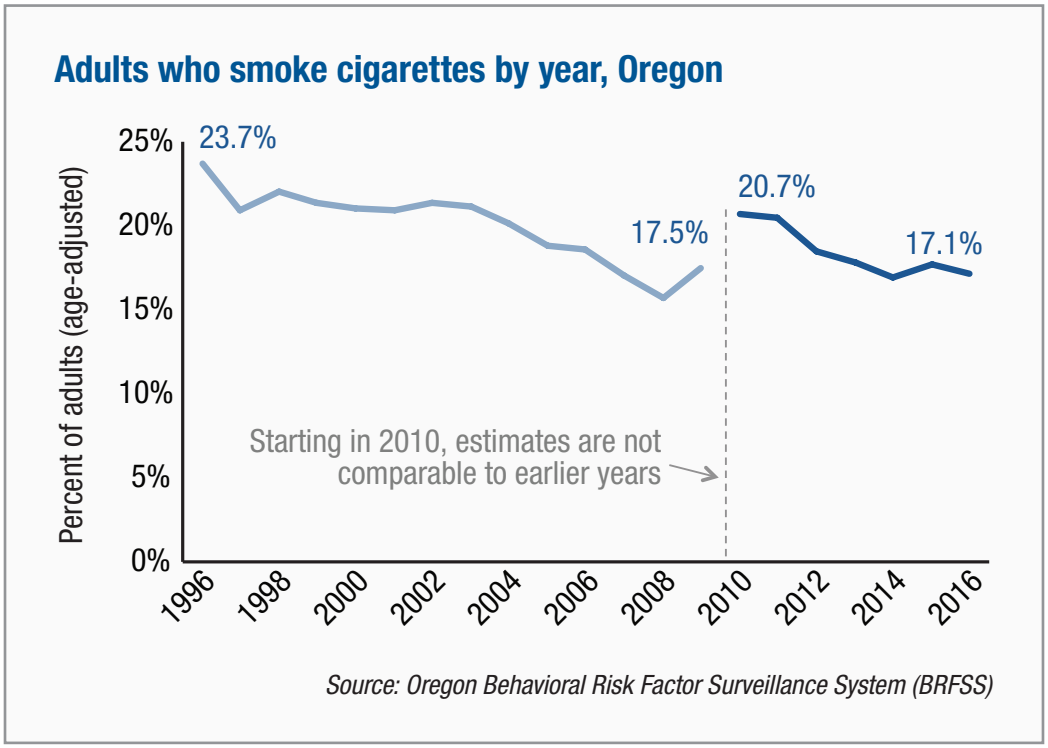


Youth with disabilities are more likely to attempt suicide.



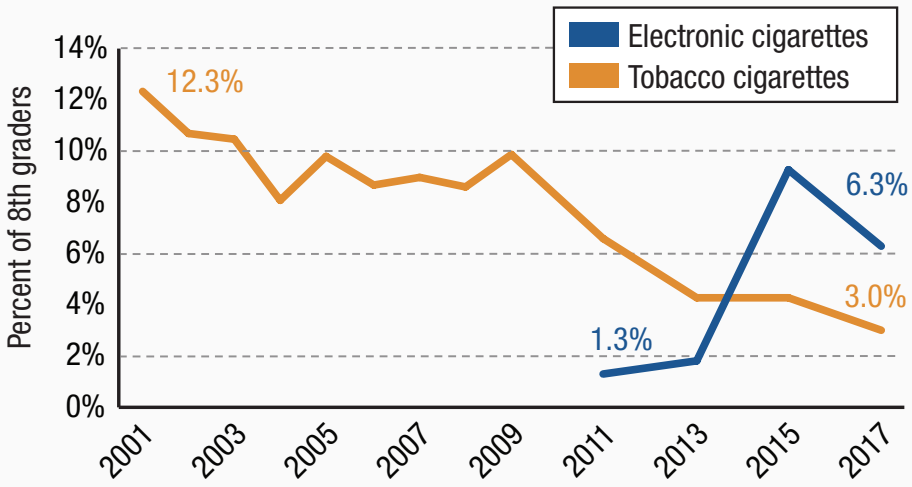
Tobacco, Alcohol and Other Drugs

Tobacco use remains the number one contributor to preventable death in Oregon, killing more than 7,500 people in Oregon every year. Secondhand smoke causes an additional 650 deaths every year. The consequences of tobacco use fall hardest on lower-income people and certain racial and ethnic groups.



We can potentially lessen the health consequences of tobacco use in Oregon by changing our environment and policies. For example, many people who participated in SHA community meetings asked for more enforcement of laws related to tobacco use and tobacco sales to minors.

8th-graders who smoke tobacco cigarettes and electronic cigarettes by year, Oregon

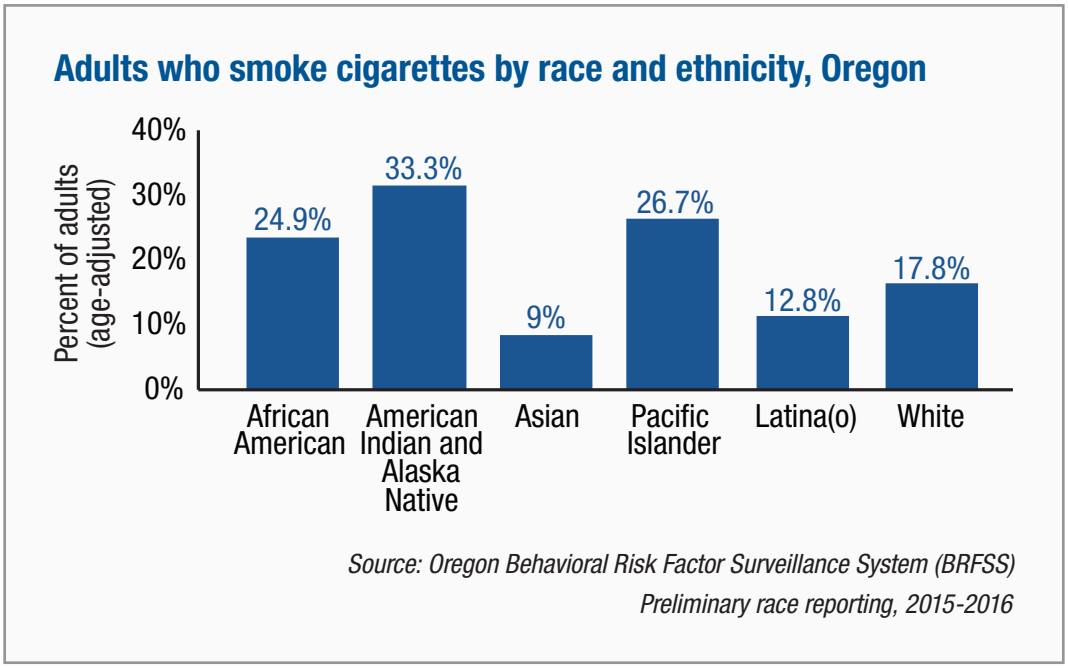


Source: Oregon Healthy Teens Survey

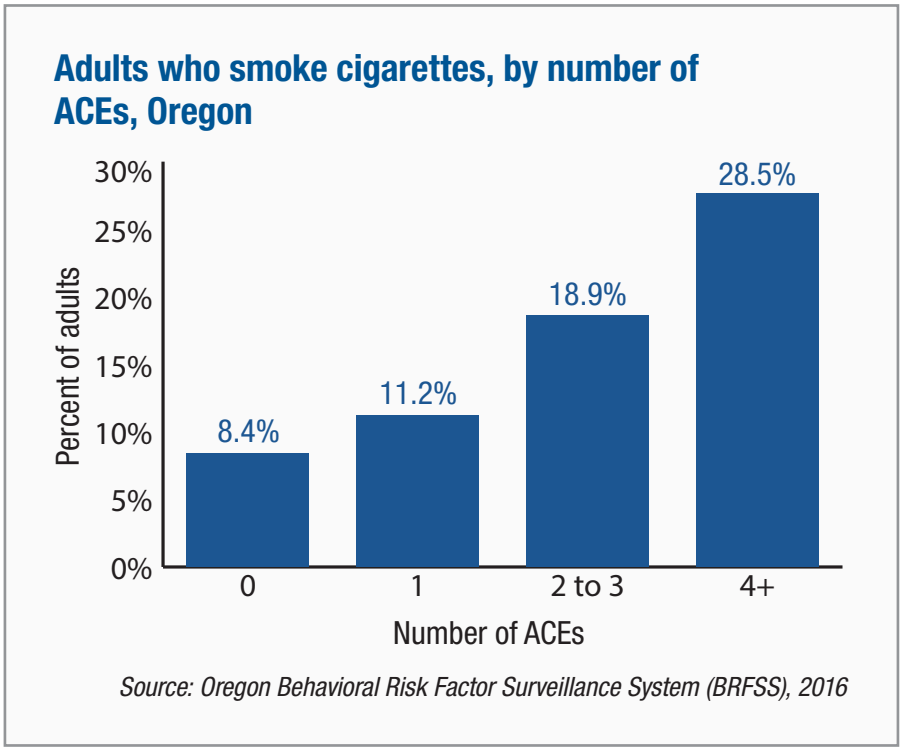
Note: There was no survey in 2010, 2012, 2014 or 2016

Disparities Related to Tobacco

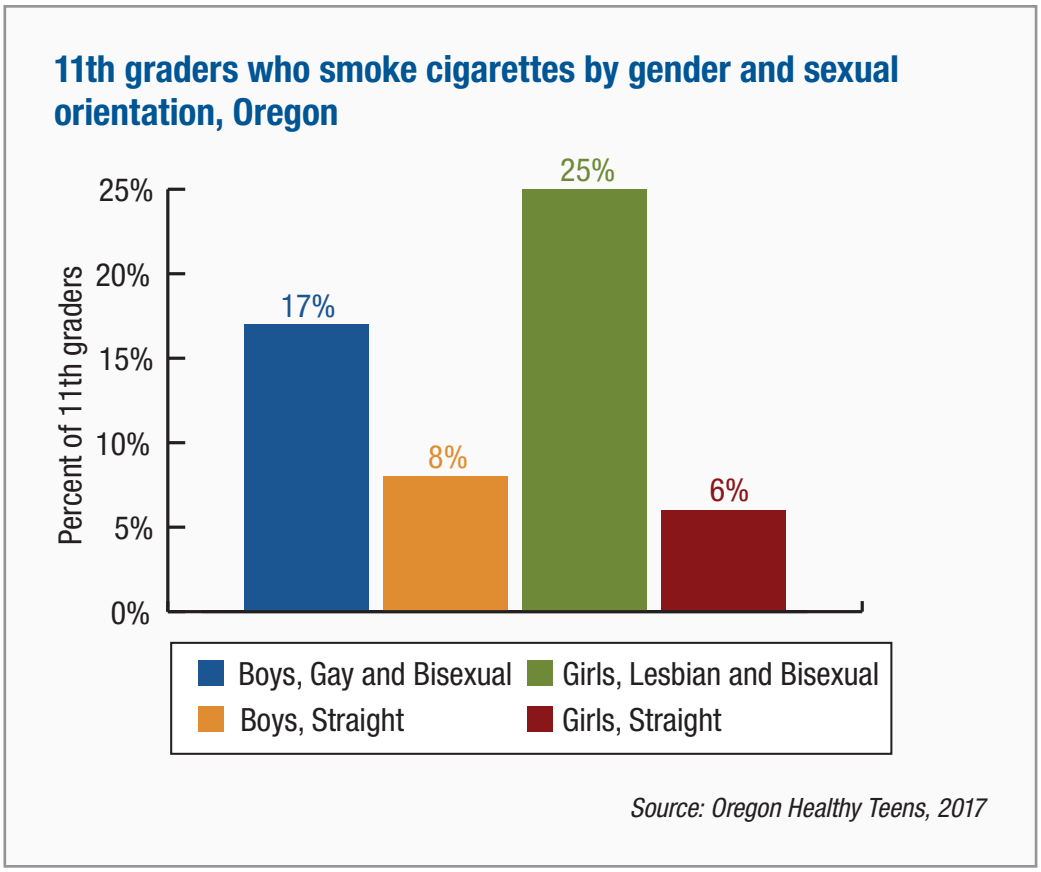
Cigarette use is higher among African Americans, American Indians and Alaska Natives, Latina(o)s and Pacific Islanders.



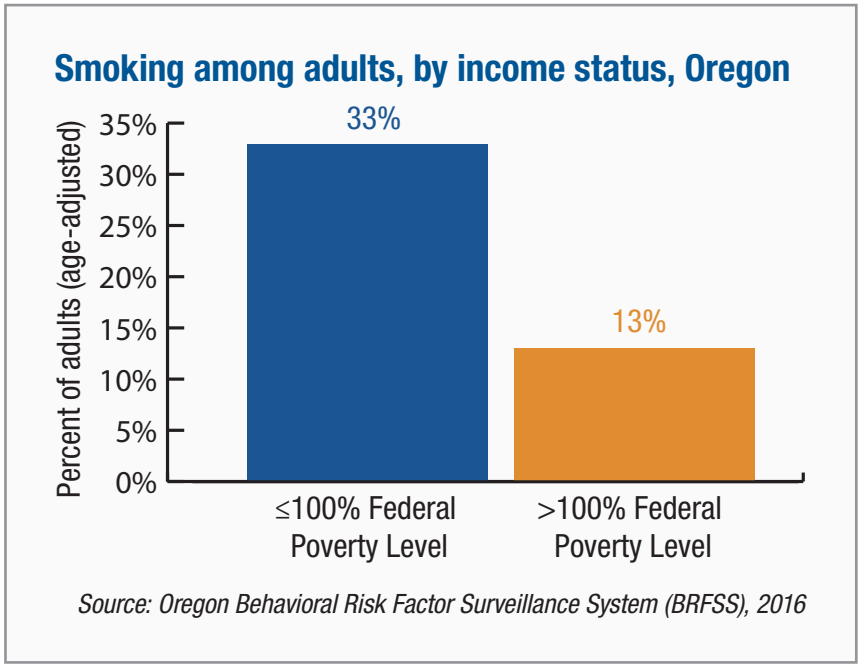
People who have experienced four or more ACEs are 3.4 times more likely to be a smoker.



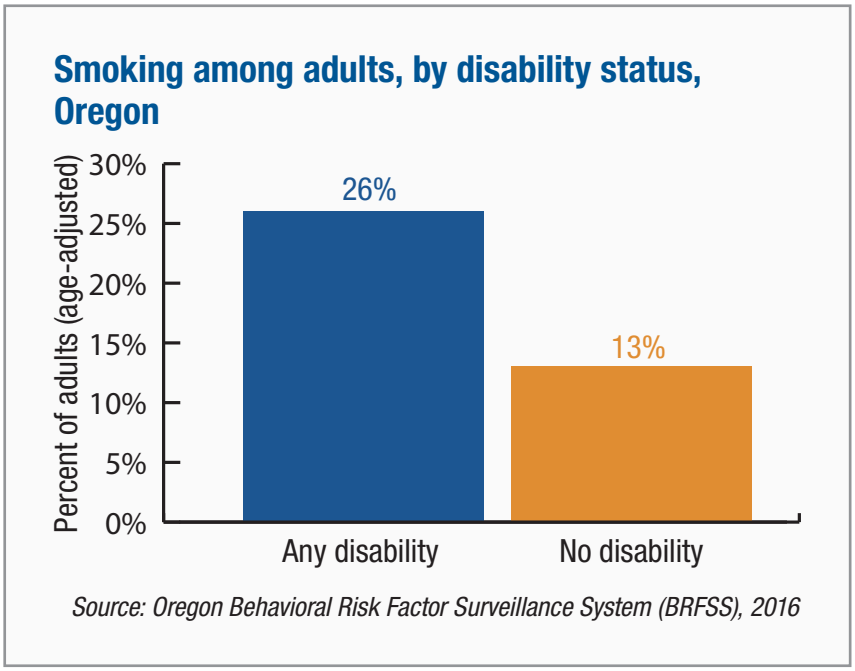
Gay and bisexual youth are more likely to smoke than their straight peers.



Cigarette use is almost twice as high among adults of low socioeconomic status compared to the general population.



Adults with disabilities are more likely to smoke.



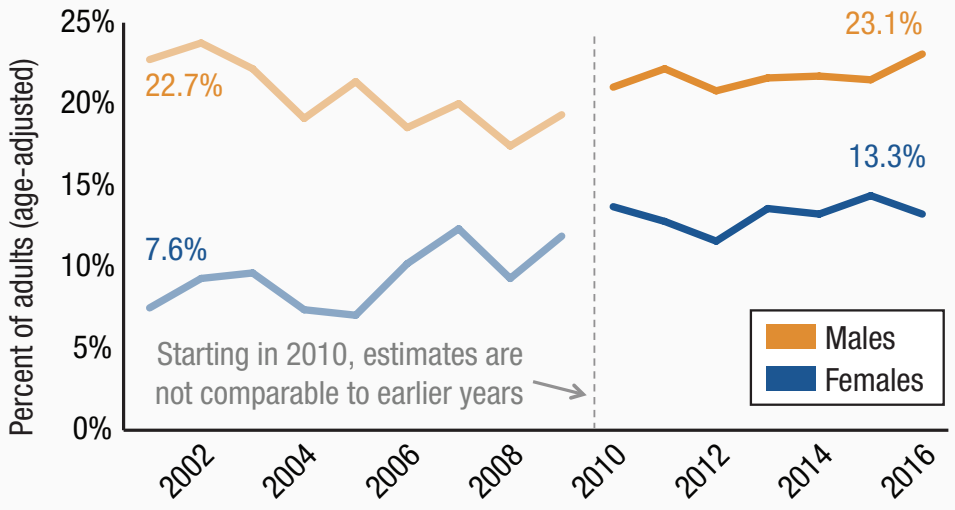
Alcohol

Oregon ranks third highest in the country for deaths related to alcohol.* Excessive alcohol use can increase a person's risk of developing serious health problems such as brain and liver damage, heart disease, cancer, fetal damage in pregnant women, and early death. It is a risk factor for injuries, violence, unintended pregnancy, and motor vehicle crashes. In 2015, 1,933 people in Oregon (43 per 100,000 population) died from alcohol-related causes, including chronic diseases, acute poisoning, injury, and perinatal causes. This represents a 38% increase in the overall rate of alcohol-related deaths since 2001. Binge drinking† and heavy drinking‡ among Oregon adults are of particular concern.

My community needs…

> "Fewer dispensaries, liquor stores, and smoke shops, especially within view of school and children. Restrictions on advertising marijuana, alcohol, and tobacco."
>
> – SHA Community Participant

Adult binge drinking by year and sex, Oregon



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)

* healthyamericans.org/assets/files/TFAH-2017-PainNationRpt-FINAL.pdf

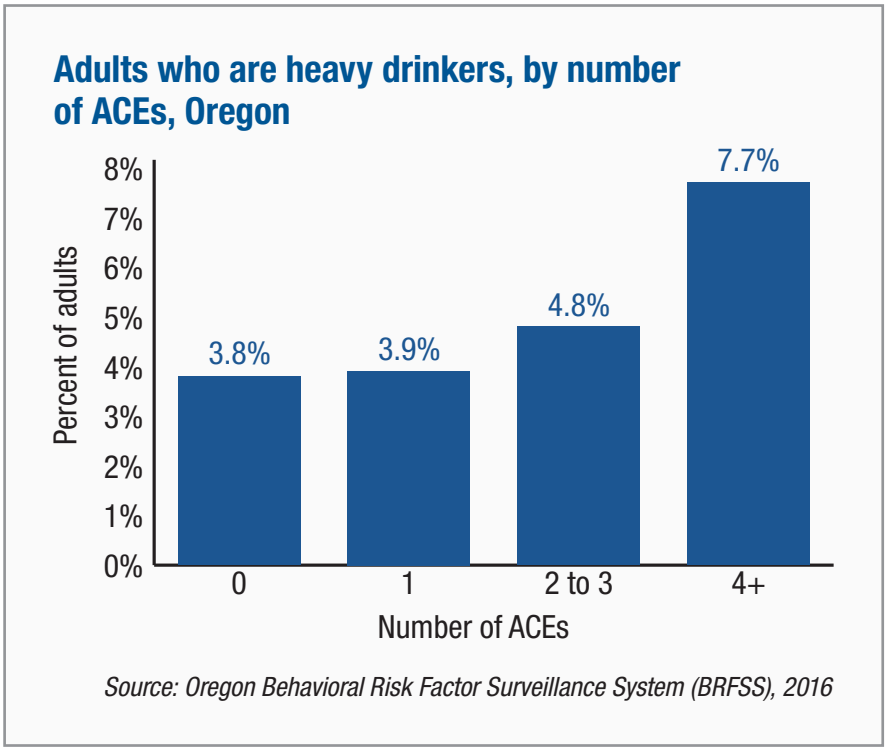
† Defined as drinking four or more drinks for women, and five or more drinks for men, on at least one occasion in the past 30 days.

‡ Defined as 15 drinks or more per week for men or eight drinks or more per week for women.

- In 2016, 17% of adults reported binge drinking on at least one occasion within the last month. Adult males report binge drinking more frequently than women.
- In 2017, 14% of 11th graders reported binge drinking on at least one occasion within the last month.
- Rates of adult binge or heavy drinking differ across the state, ranging from 11% in Jefferson County to around 26% in Grant County.

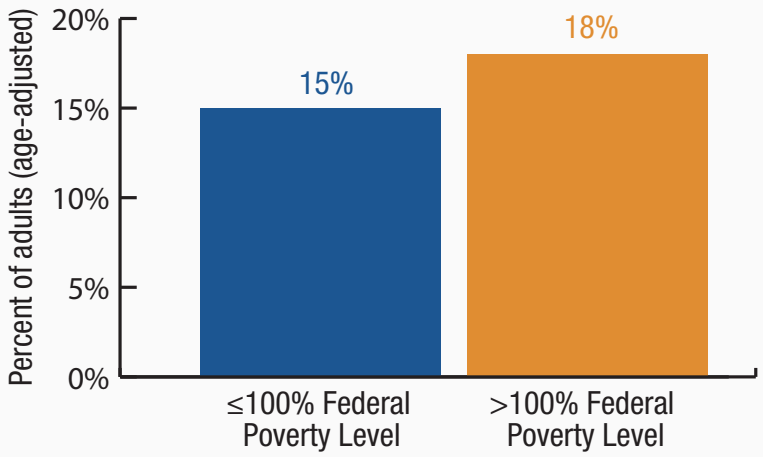
Alcohol-related Disparities

People with four or more ACEs are twice as likely to be heavy drinkers.



While people with lower income are more likely to smoke, they're less likely to binge drink.

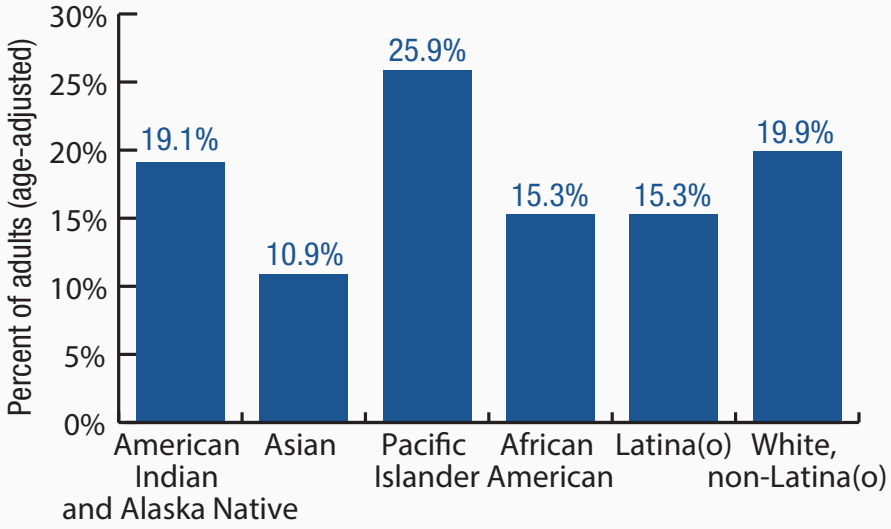
Binge drinking among adults, by income status, Oregon



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2016

American Indians and Alaska Natives, Pacific Islanders, and Whites have the highest prevalence of binge drinking.

Binge drinking, by race and ethnicity, Oregon

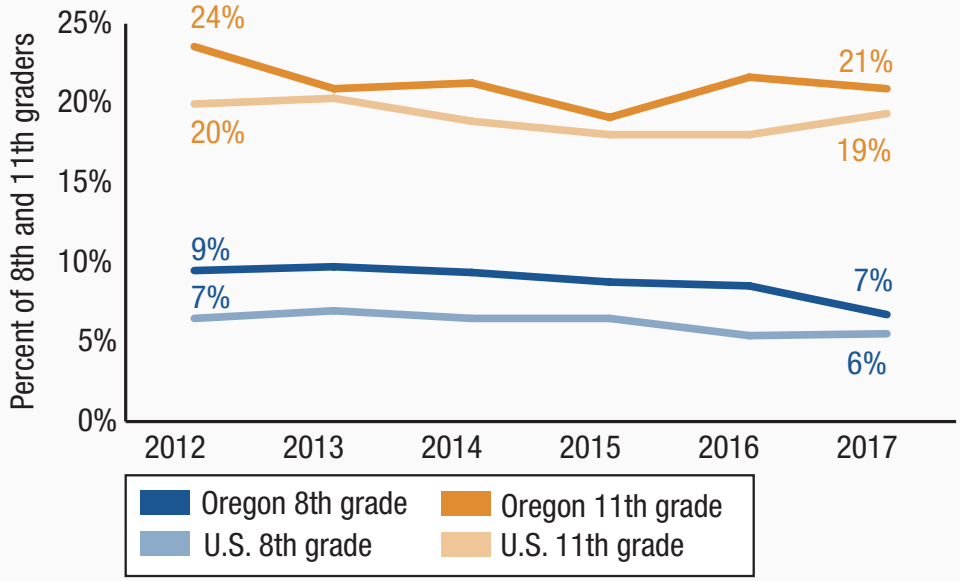


Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)
Preliminary race reporting, 2015-2016

Marijuana

Marijuana use among Oregon youth and adults has exceeded national rates for the past decade. Marijuana use is consistently higher for younger adults compared to older adults.

Current marijuana use among youth by year, Oregon and U.S.

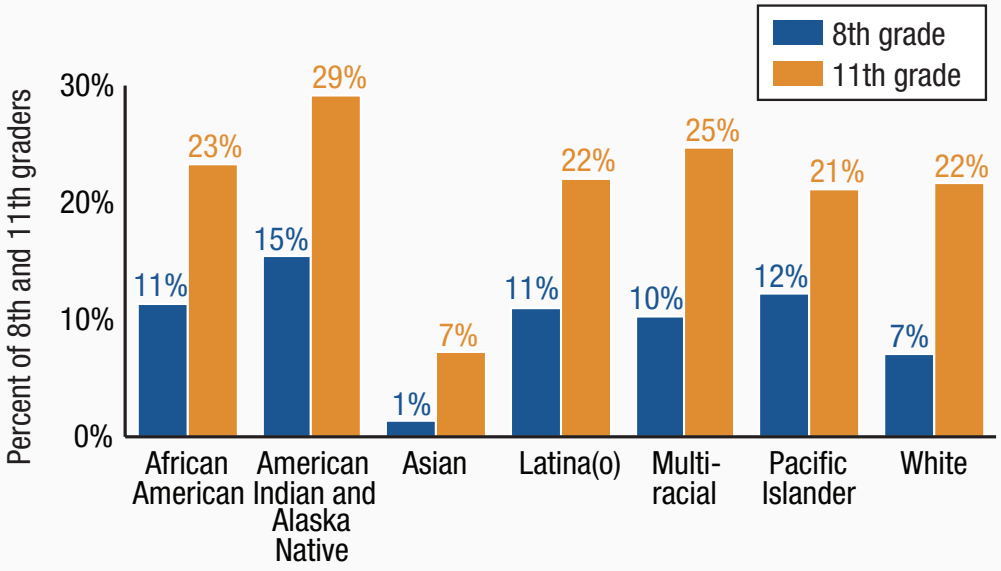


Source: Student Wellness Survey (2012, 2014 and 2016) and Oregon Healthy Teens Survey (2013, 2015 and 2017); Monitoring the Future Current Drug Use Trends (U.S.)

Disparities in Marijuana Use

American Indian and Alaska Native youth have the highest rates of marijuana use, while Asian youth have the lowest rates.

Current marijuana use among youth by race and ethnicity, Oregon



Source: Oregon Student Wellness Survey, 2016

Prescription and Illicit Drugs

The abuse of substances, both prescribed and controlled, has devastating effects on families and communities across Oregon.

Use of prescription pain relievers has driven a sharp increase in opioid misuse and related deaths since 1999. Opioids include prescription drugs as well as non-prescription drugs such as heroin. Opioid-related overdose deaths in Oregon increased steadily from 2000 to a peak in 2011. Fortunately, these deaths have been declining since 2011.

Methamphetamine is also a top concern, as the number of related deaths is comparable to deaths from opioids. According to Oregon's Criminal Justice Commission, 80% of convictions for possession of a controlled substance in 2016 were specific to possession of methamphetamine.* Methamphetamine made up the largest portion of drug arrests that year as well: 15,308, compared to 4,990 for heroin.†

My community needs…

> "Better control of drug distribution, rehab places for those trying to kick addictions."
>
> – SHA community participant

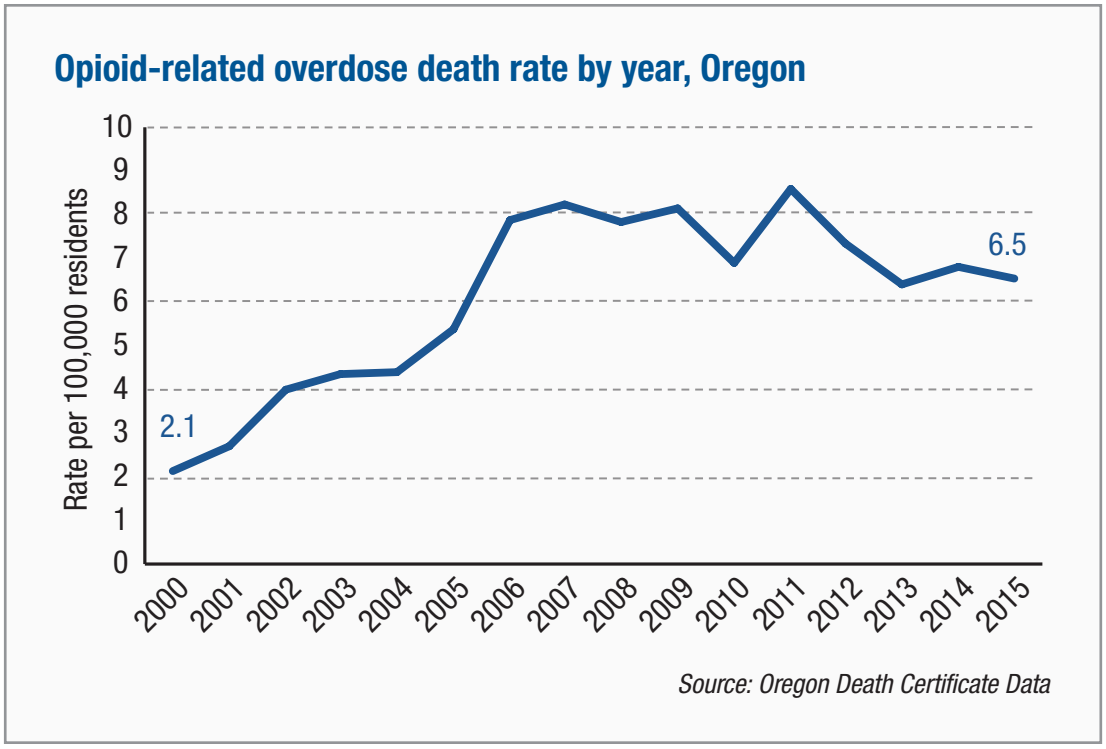
> "A serious, long-lasting, and impactful investment in all-substances addiction prevention and treatment."
>
> – SHA community participant

My community needs…

> "A miracle. Alcohol and drug abuse are rampant."
>
> – SHA Community Participant

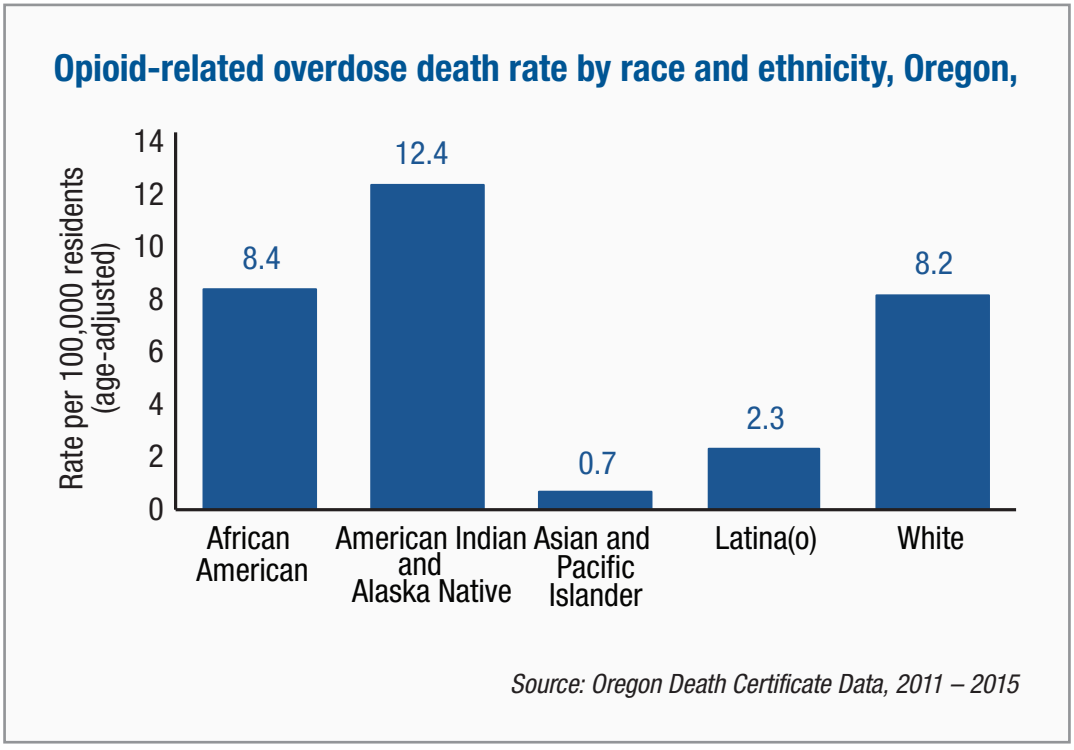
* http://www.oregon.gov/cjc/data/Pages/pcs.aspx

† http://www.oregonlive.com/pacific-northwest-news/index.ssf/2017/07/meth_heroin_pose_greatest_drug.html



Disparities Related to Prescription and Illicit Drugs

The lowest rate of opioid-related overdose deaths occurred among non-Latina(o), Asian and Pacific Islanders.

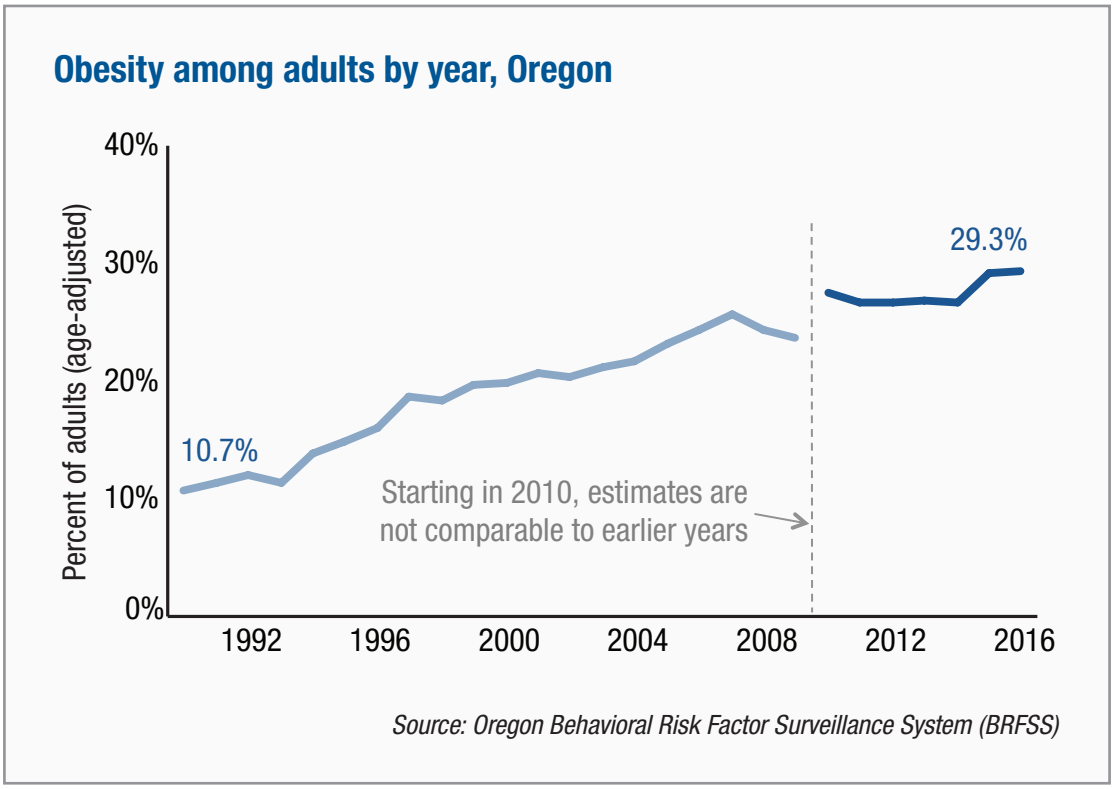


Chronic Diseases and Conditions

Many people in Oregon are living with a chronic disease, including cancers, cardiovascular diseases, asthma, obesity, and diabetes.

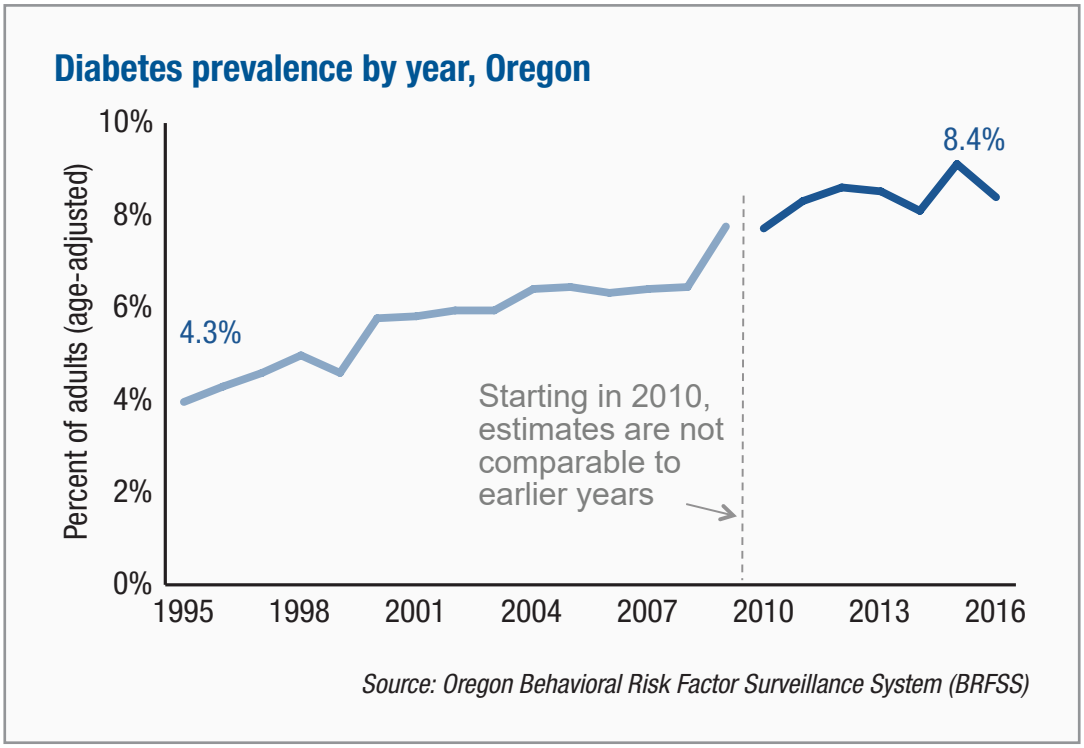
Obesity

Poor nutrition and lack of physical activity increase risk of obesity, the second-leading contributor to early death in Oregon and responsible for an estimated 6,000 deaths each year. Obesity prevalence among Oregon adults has risen quickly in the past two decades, from 11% in 1990 to 29% in 2016. Obesity is a major risk factor for high blood pressure, high cholesterol, diabetes, heart disease, and cancer. Children with obesity have a greater risk of high blood pressure, high cholesterol, type 2 diabetes, asthma, joint problems, fatty liver disease, gallstones, and gastroesophageal reflux disease (GERD).



Diabetes

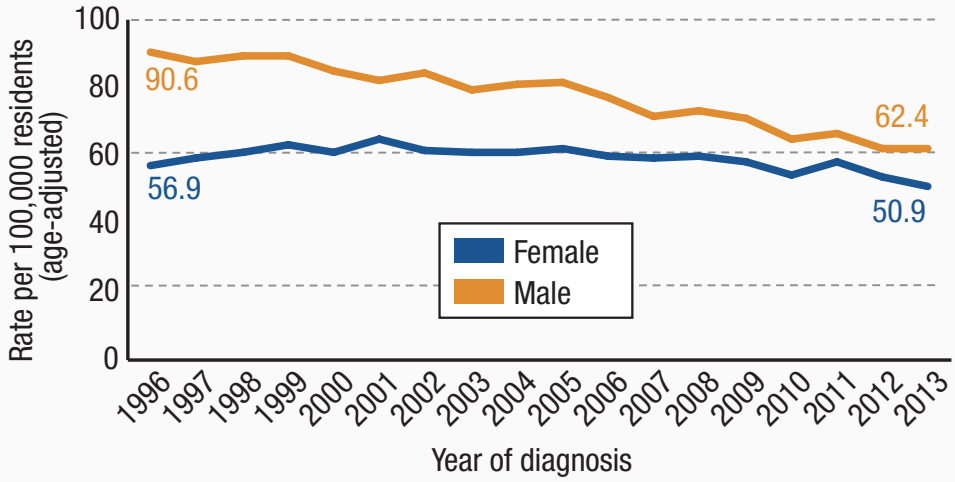
Diabetes is a chronic disease that occurs when glucose (sugar) levels in the blood are above normal. If not carefully managed, diabetes can cause heart attack, stroke, blindness, and kidney damage. Diabetes can also cause blood vessel and nerve damage so severe that it may result in limb amputation. In 2016, 8% of Oregon adults reported having diabetes, which is twice the percentage that reported having diabetes in 1995. The increase in diabetes prevalence is a national trend that tracks with increasing rates of obesity.



Lung Cancer

Lung cancer is the leading cause of cancer deaths in Oregon and was the second most-commonly reported cancer in 2014.* Oregon death certificates indicate that nearly four out of five lung cancer deaths are related to tobacco smoking.

Invasive lung cancer diagnoses by year and sex, Oregon



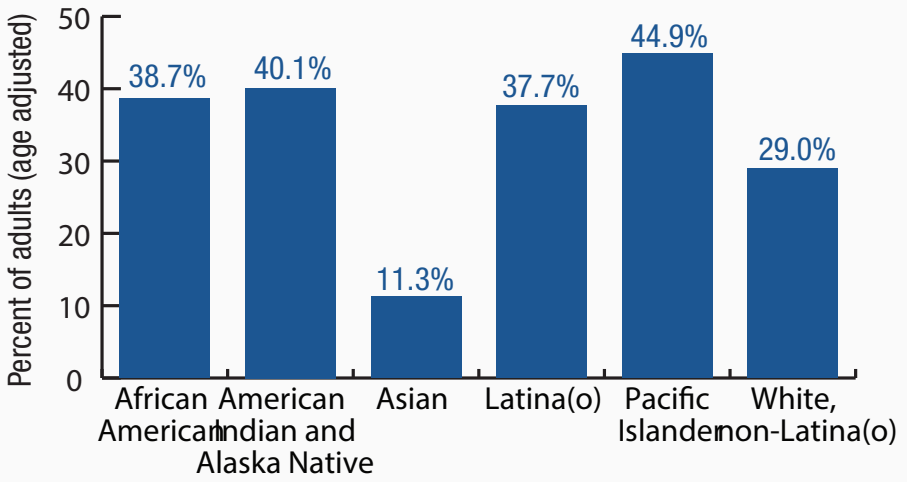
Source: Oregon State Cancer Registry (OSCaR)

* Oregon Death certificates 2014; OSCaR web tables.

Disparities in Chronic Diseases and Conditions

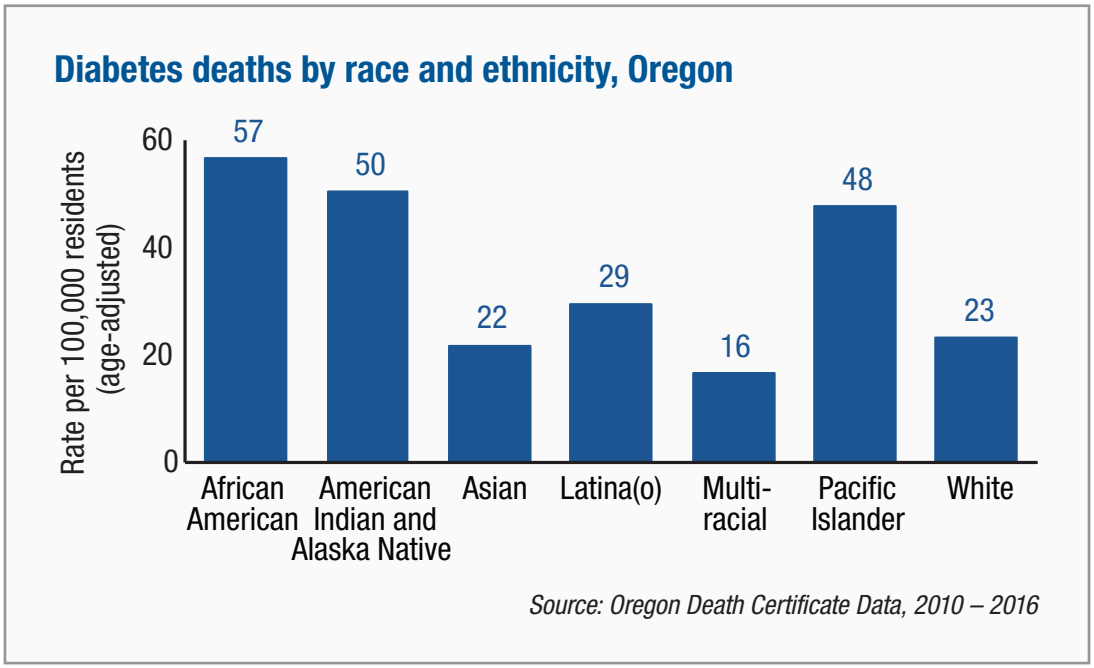
Obesity is highest among African Americans, American Indians and Alaska Natives, Latina(o)s, and Pacific Islanders.

Obesity among adults by race and ethnicity, Oregon

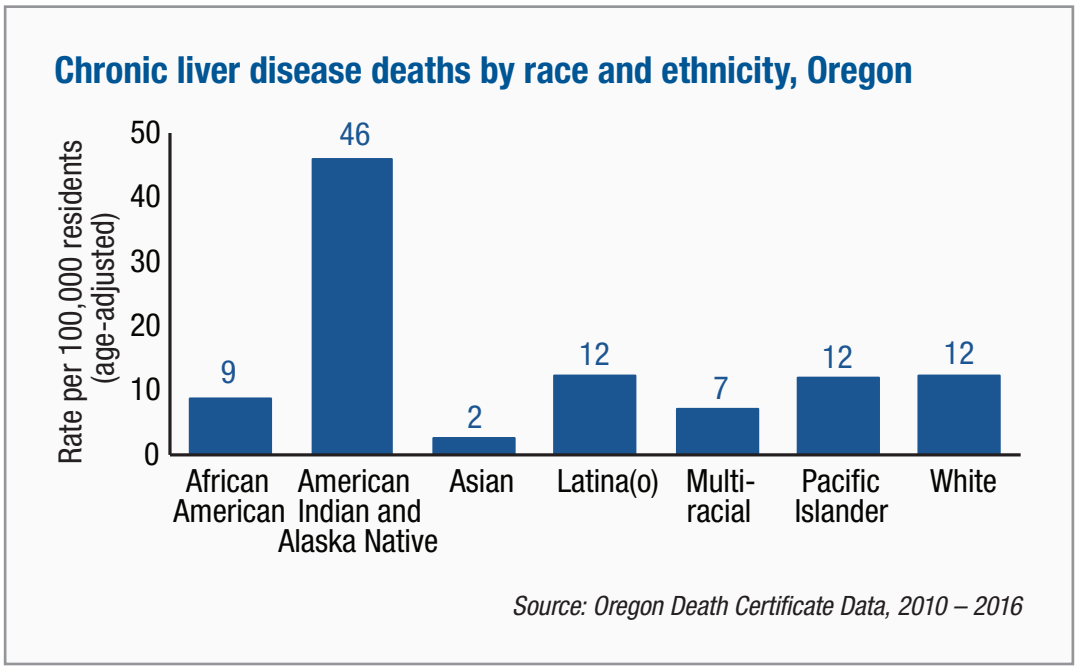


Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)
Preliminary race reporting, 2015-2016

American Indians and Alaska Natives and non-Latina(o) African Americans are more than twice as likely to die from diabetes as non-Latina(o) whites.

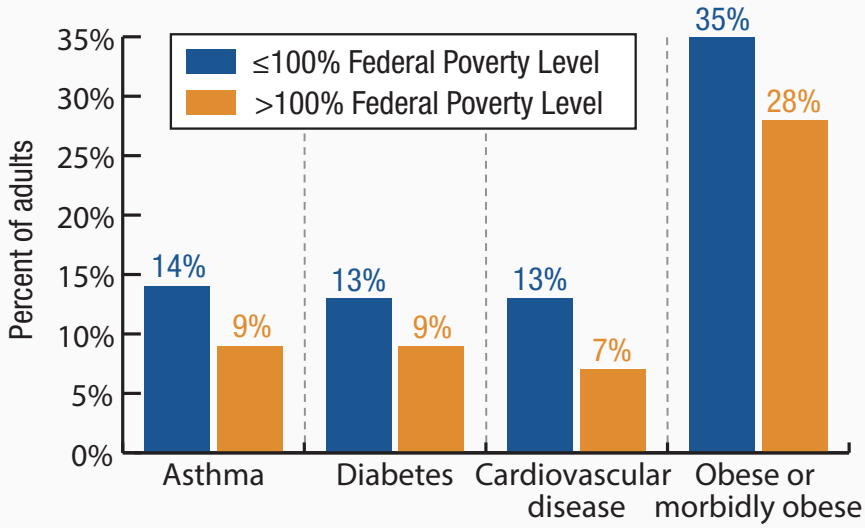


American Indians and Alaska Natives have a much higher death rate from chronic liver disease than any other group.



Chronic conditions vary by income. Adults living below the federal poverty level have a higher prevalence of asthma, obesity, diabetes, and cardiovascular disease.

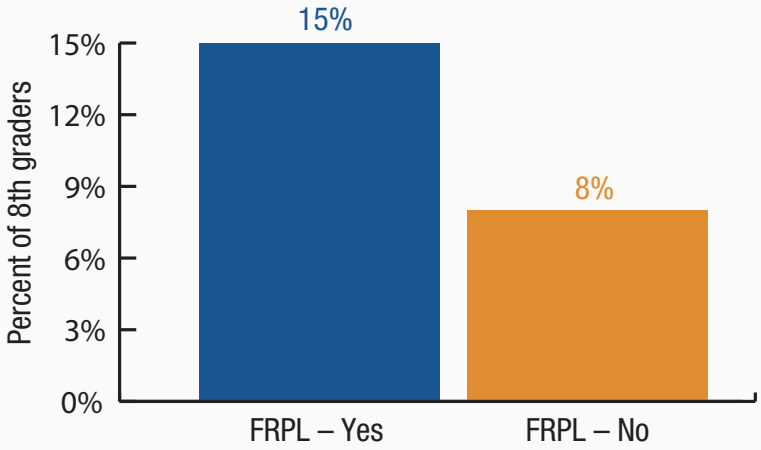
Chronic conditions by income, Oregon



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2015 – 2016

Likewise, children and teens who receive free or reduced price lunch (FRPL) at school are more likely to be obese.

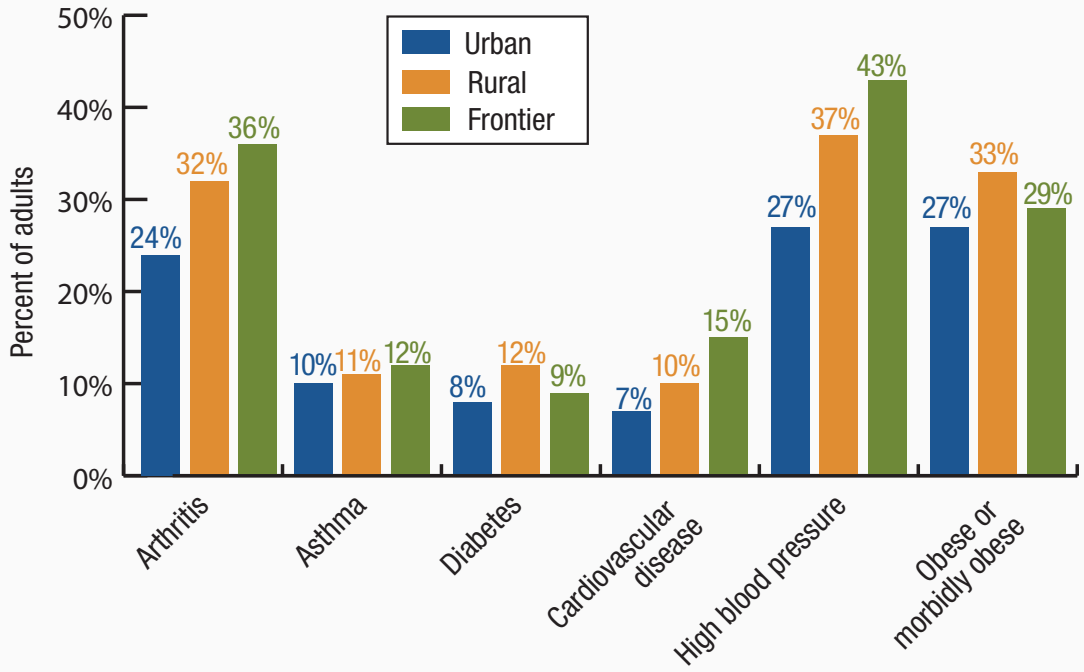
Obesity among 8th graders who receive free or reduced price lunch (FRPL), Oregon



Source: Oregon Healthy Teens, 2017

People living in rural and frontier areas have higher rates of chronic conditions compared to people in urban areas.

Chronic conditions among adults, by geography, Oregon

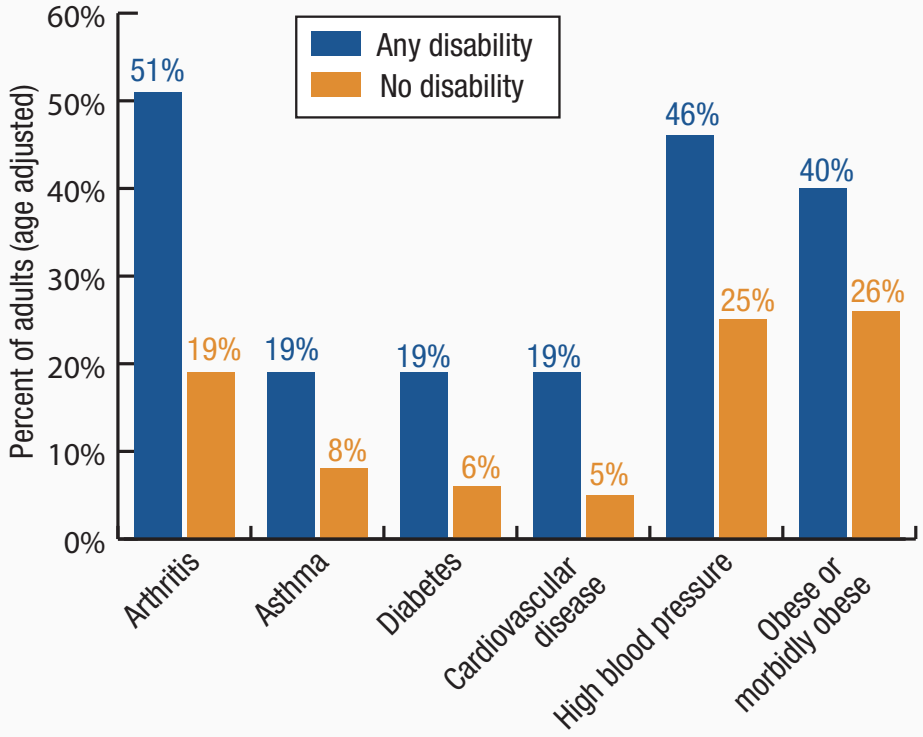


Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2016

NOTE: High blood pressure is from 2015

Chronic conditions are more common among people with disabilities.

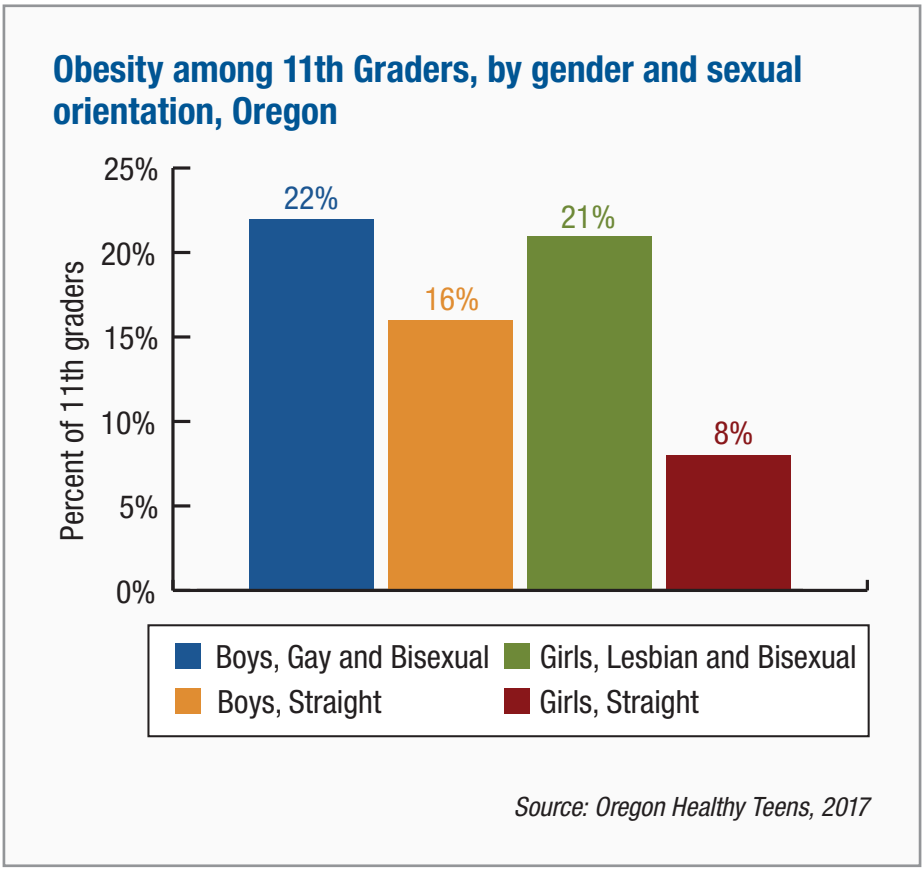
Chronic conditions among adults, by disability status, Oregon



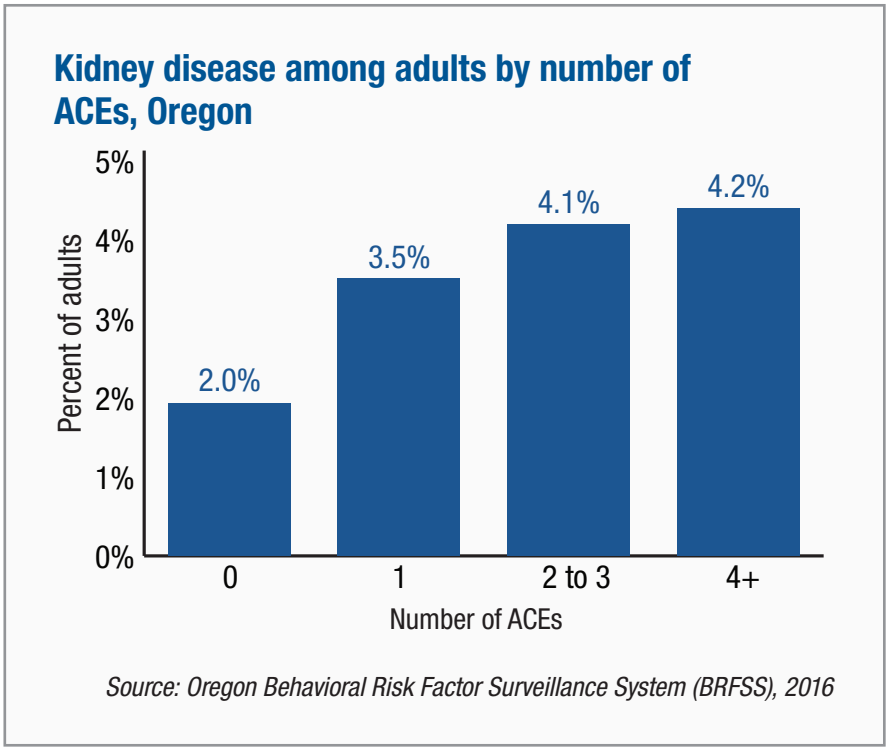
,Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2016

NOTE: High blood pressure is from 2015

Gay and bisexual youth are at higher risk for obesity.



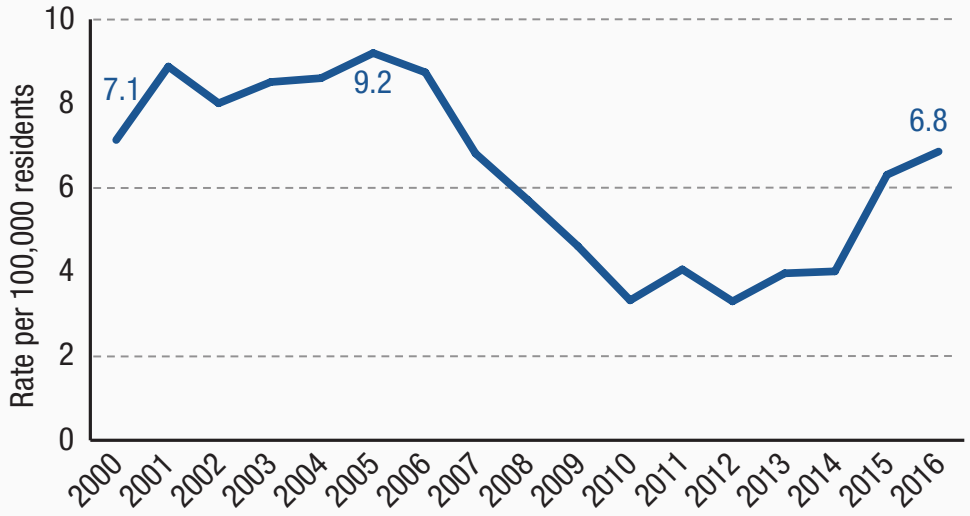
People who have experienced ACEs are more likely to have chronic diseases such as kidney disease.



Motor Vehicle Crashes

Deaths from motor vehicle crashes are an important cause of early death in Oregon and have been increasing since 2012. In 2016, there were 504 deaths related to a motor vehicle crash. Of these, 280 were drivers or passengers, 50 were motorcyclists, 81 were pedestrians and 9 were bicyclists. Thirty-three percent of driving-related deaths in Oregon involved alcohol. This figure ranges from 0% of motor vehicle-related deaths in Gilliam County to 60% of motor vehicle-related deaths in Sherman and Wallowa counties.* Some communities are actively working to reduce motor-vehicle-related fatalities such as Portland's Vision Zero initiative.†

Motor vehicle occupant mortality rate by year, Oregon



Source: Oregon Death Certificate Data

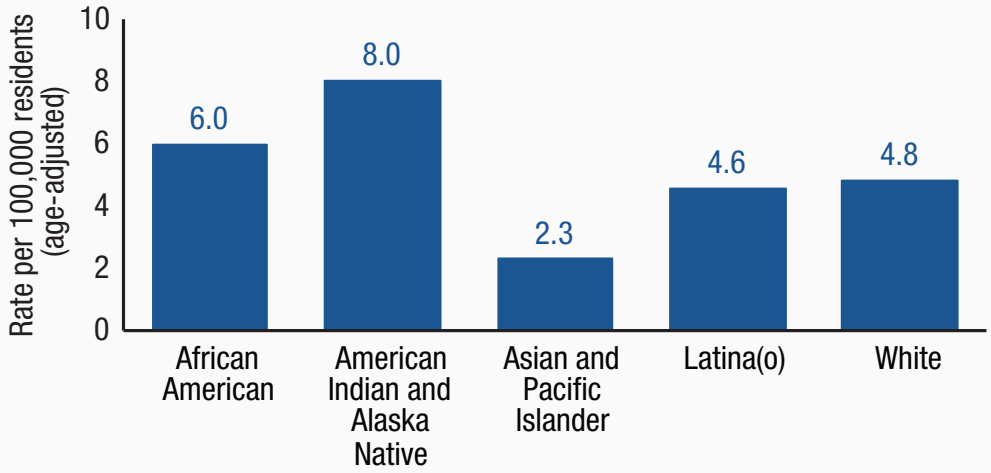
* County Health Rankings

† https://www.portlandoregon.gov/transportation/40390

Disparities in Motor Vehicle-Related Deaths

American Indians and Alaskan Natives experience significantly more motor vehicle deaths compared to other racial and ethnic groups.

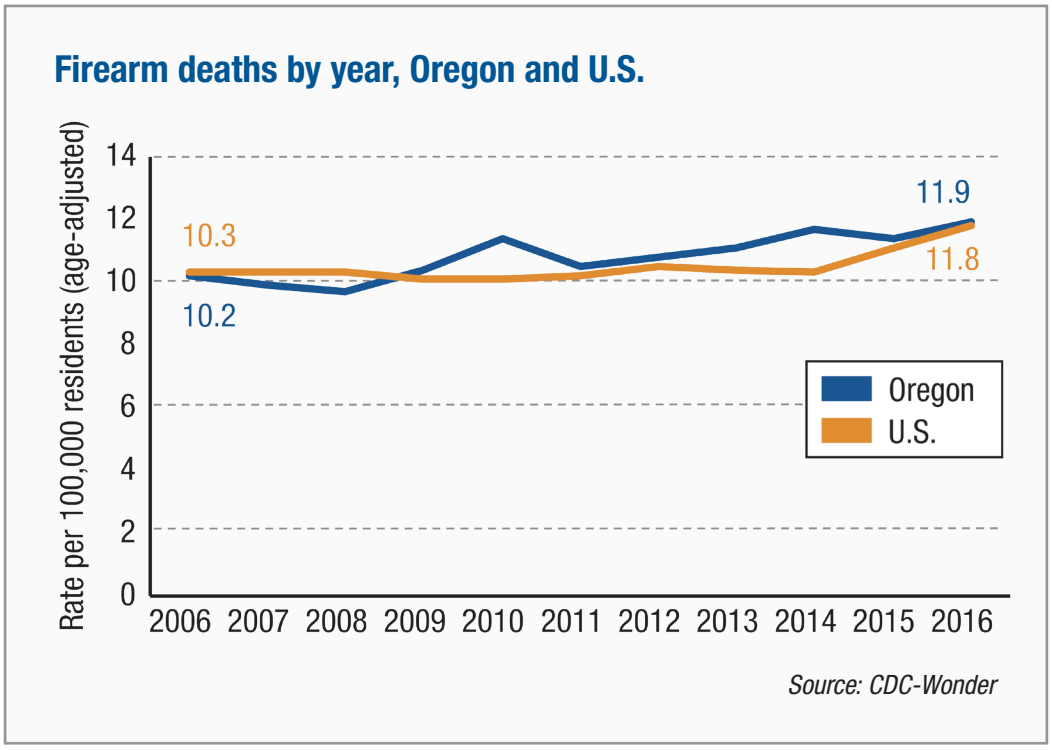
Motor vehicle occupant mortality rate by race and ethnicity, Oregon



Source: Oregon Death Certificate Data, 2012 – 2016 (average)

Firearms

Gun-related injury and death is a persistent and complex social and public health problem. Prior to 2010, Oregon had a firearm fatality rate comparable to the U.S. rate. Since then, both the number and rate of firearm deaths have increased in our state, putting Oregon ahead of the nation.



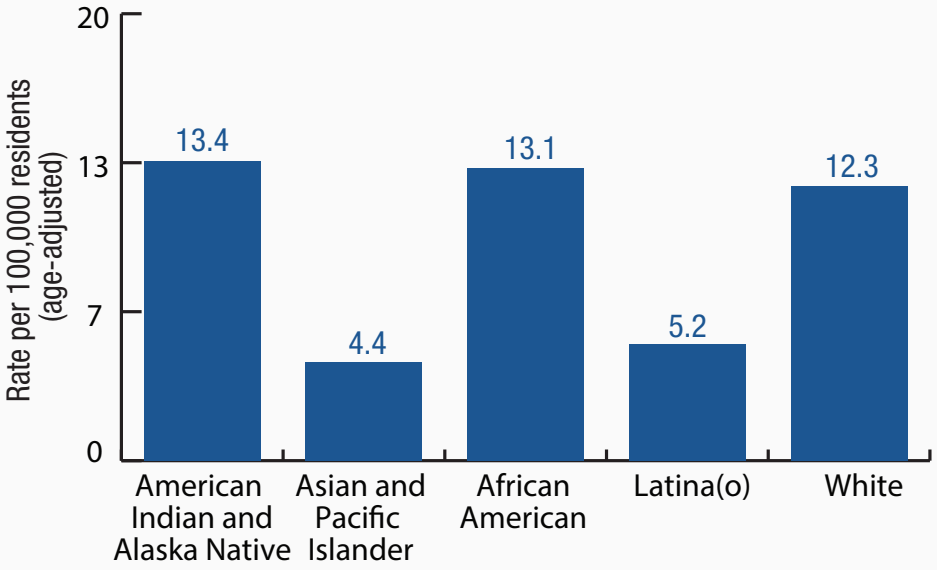
In 2008 – 2009, approximately 400 people in Oregon died from gun violence (10.0 deaths per 100,000 population). In 2014 – 2015, the number increased to 490 firearm deaths (11.5 deaths per 100,000 population). Most deaths from gun violence in Oregon involve one person, most often from a suicide. From 2003 to 2015, 140 gun-related incidents involved multiple deaths. One mass shooting in 2015 resulted in 10 deaths.

Between 2010 and 2015, men in Oregon were nearly six times more likely to die from firearm injury than women. Older white men had the highest risk of suicide death by firearm, and young African Americans had the highest risk of death by firearm homicide.

Disparities Related to Firearms

American Indians and Alaska Natives, African Americans and non-Latina(o) whites are more likely to die as a result of a firearm.

Firearm deaths by race and ethnicity, Oregon



Source: CDC-Wonder, 2012 – 2016

Note: Counts and rates for non-White Latina(o) have been suppressed due to small numerators and unstable rates, or zero counts

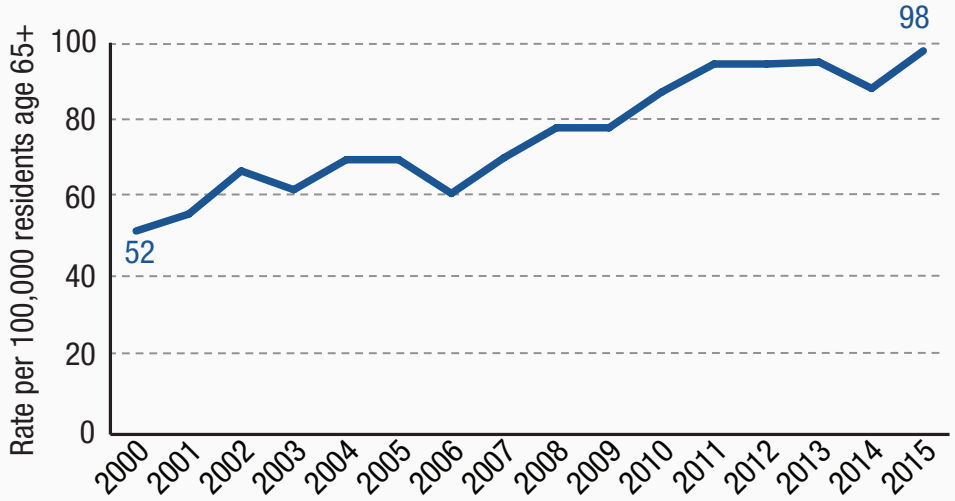
Older Adults

Oregon's growing population of older adults are a vital resource. Oregon has a high proportion of seniors living independently in their communities. Aging in place requires adequate resources such as transportation, community-based exercise and social opportunities, food and medicine delivery, and access to health care to manage acute and chronic conditions.

According to the United Health Foundation 2017 America's Health Rankings Senior Report, Oregon ranks 12th in the country for older adult health.* Community members and respondents to the SHA survey reinforced these findings; 75% agreed that Oregon is a good place to grow older. However, excessive drinking is more prevalent among older adults here. The state also lags in flu vaccinations and fall prevention among older adults.†

Among older adults, falls are the leading cause of injury-related death. Falls are also the most common cause of nonfatal injuries and hospital admissions for trauma. The death rate from falls among older men and women in Oregon rose from 52 deaths per 100,000 people in 2000, to 98 deaths per 100,000 people in 2015.

Fall-related mortality rate among persons 65 years of age and older by year, Oregon



Source: Oregon Death Certificate Data

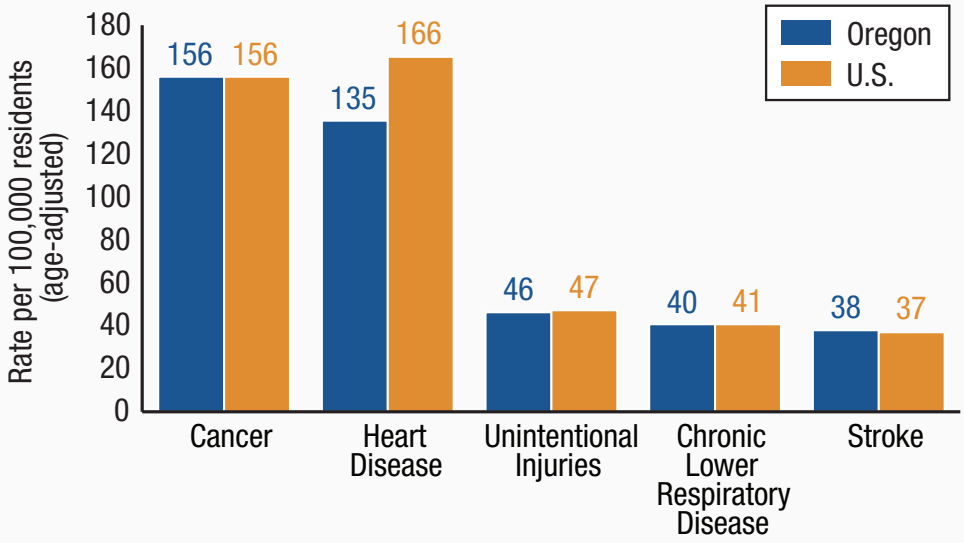
* https://assets.americashealthrankings.org/app/uploads/ahr2017_seniorreport.pdf

† America's Health Rankings Senior Report, 2017.

Causes of Death

The five primary causes of death in Oregon are cancer, heart disease, chronic lower respiratory disease, unintentional injuries, and stroke. Certain racial and ethnic groups face a higher risk of death from heart disease and stroke. Non-Latina(o) African Americans have nearly twice the rate of avoidable deaths from heart disease, stroke, and high blood pressure as non-Latina(o) whites.

Leading causes of death, Oregon and U.S.

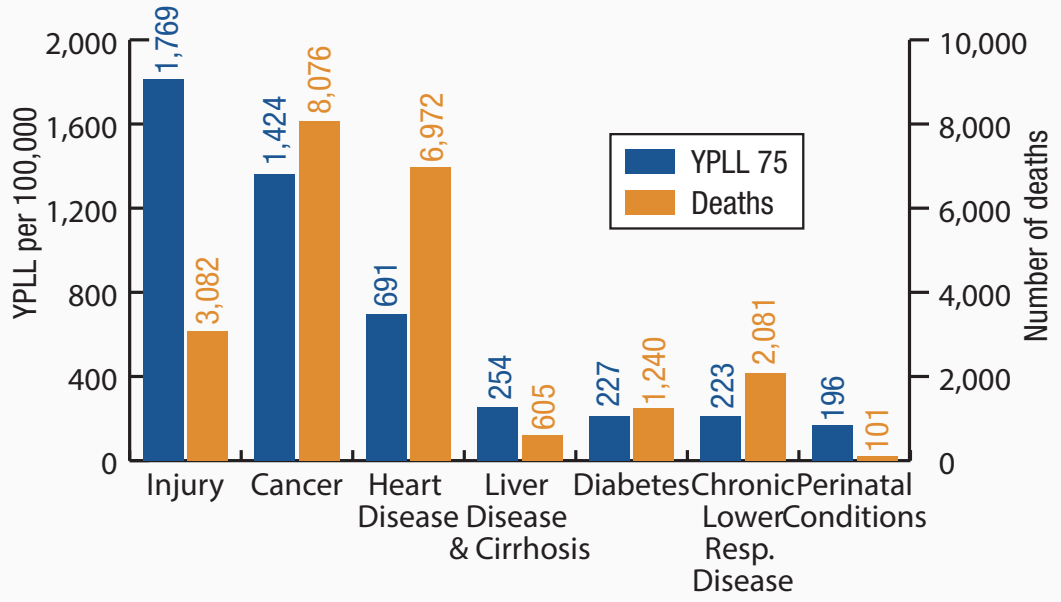


Source: Oregon Death Certificate Data and CDC WONDER (U.S.), 2016

Disparities in Potential Life Lost

One way to calculate the burden of early death is by measuring the number of years between a person's age at death and a standard age at death (e.g., 75 years). This is called estimating the years of potential life lost (YPLL). For example, a person dying at age 21 would result in 54 years of potential life lost, compared to a person dying at age 70, which would result in five years of potential life lost.

Leading causes of years of potential life lost (YPLL) before age 75, Oregon

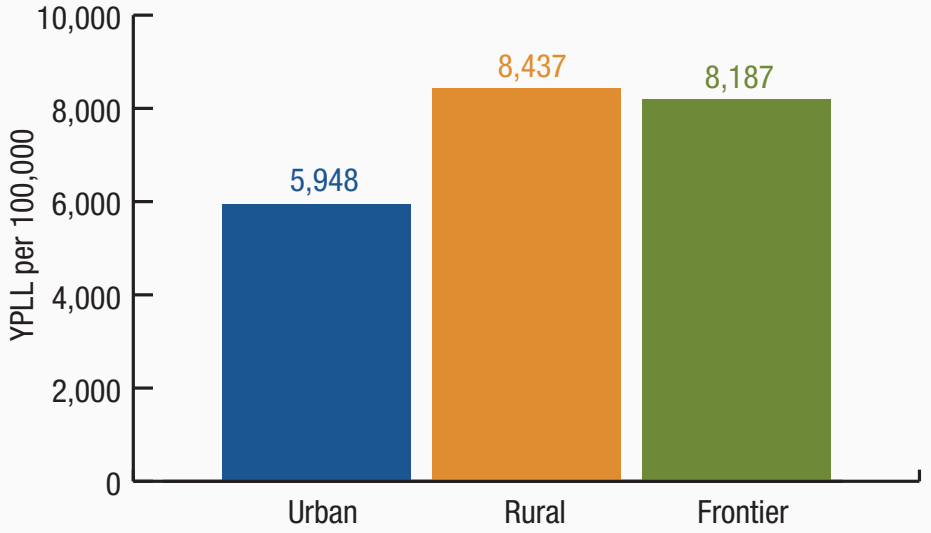


Source: Oregon Death Certificate Data, 2016

In Oregon in 2015, African Americans and American Indians and Alaska Natives had higher YPLL compared to Whites. Asians and Latina(o)s had lower YPLL compared to Whites. African Americans and American Indians and Alaska Natives have the highest YPLL from unintentional injuries, homicides, and diabetes. Whites have the highest YPLL from suicide, and African Americans have the highest YPLL from heart disease.

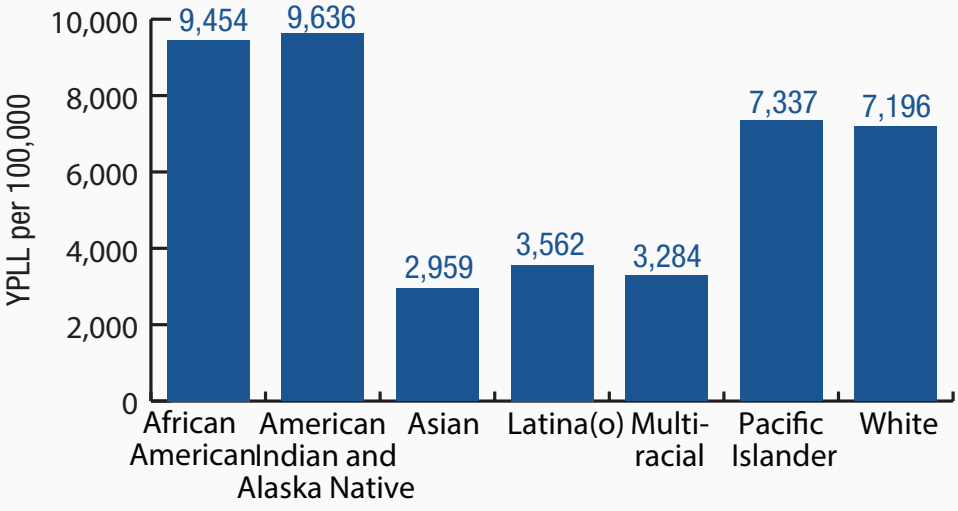
People living in rural and frontier areas are dying at an earlier age than people living in urban areas, as demonstrated by higher rates of YPLL before age 75.

Years of potential life lost (YPLL) before age 75 by geography, Oregon



Source: Oregon Death Certificate Data, 2015

Years of potential life lost (YPLL) before age 75 by race and ethnicity, Oregon



Source: Oregon Death Certificate Data, 2014 – 2016 (average)

Access to Clinical Preventive Services

Access to Clinical Preventive Services

People in Oregon need equitable access to health care, including physical and behavioral health care services. Access depends on having health insurance coverage, a provider, and transportation to visit a provider. Despite Oregon's aspirational approach to health care delivery that includes Coordinated Care Organizations, more than one-third of the themes expressed during the SHA community engagement process related to problems with accessing health care.

My community needs…

> "Health care and prescription drug coverage changes. Everyone needs to be able to have affordable health care coverage that actually covers them to see a doctor. Some people are paying for a plan which ends up being out of network and they still don't get covered to see a doctor. We also need to be able to have coverage for needed medications, procedures, tests, scans, and surgeries that will help make a person healthy in the end. Some things that are considered cosmetic, should be covered in order to make people feel better (i.e., excessive skin removal after having gastric bypass surgery. It not only causes skin infection issues, but it makes that person feel healthier mentally to finish their transformation). We should be able to pay for a circumcision for a new infant and not consider that cosmetic."
>
> – SHA Community Participant

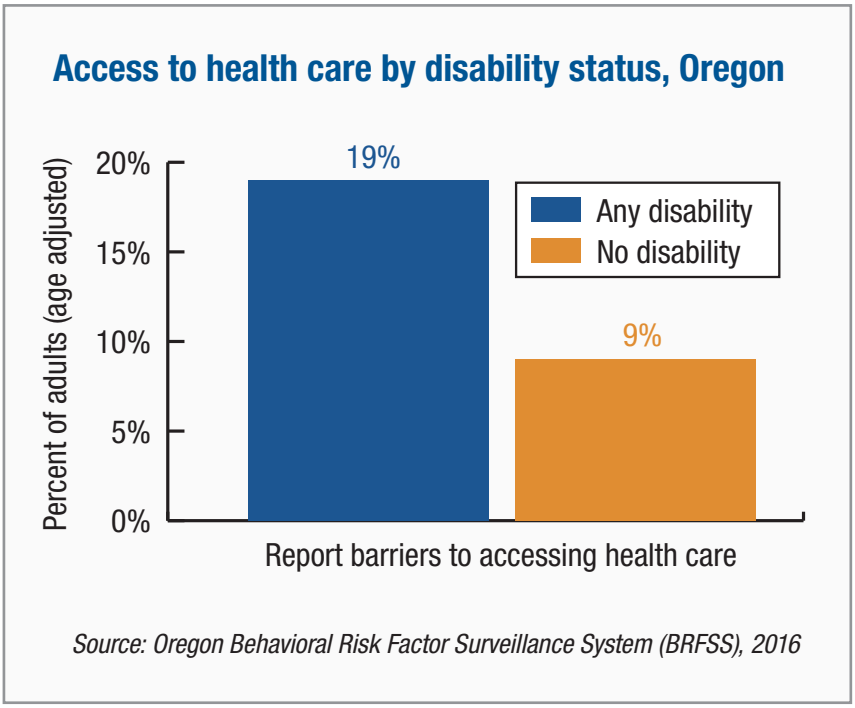
Health Insurance

Because of the Affordable Care Act (ACA), more people in Oregon have health insurance coverage than five years ago. In 2017, only 6.2% of children and adults in Oregon were uninsured, down from 14.5% in 2013. Despite high rates of insured people, many community members reported difficulty affording medical services because of high premiums, deductibles, and costs for services that are provided out of network. For example, some people said services covered by the CAWEM (Citizen/Alien-Waived Emergent Medical) program are insufficient. Additionally, one third of Oregon families with children with special health care needs reported that their associated out-of-pocket costs were "sometimes" or "never" reasonable.*

* http://childhealthdata.org/browse/survey/results?q=4832&r=39&g=619

Health Insurance Disparities

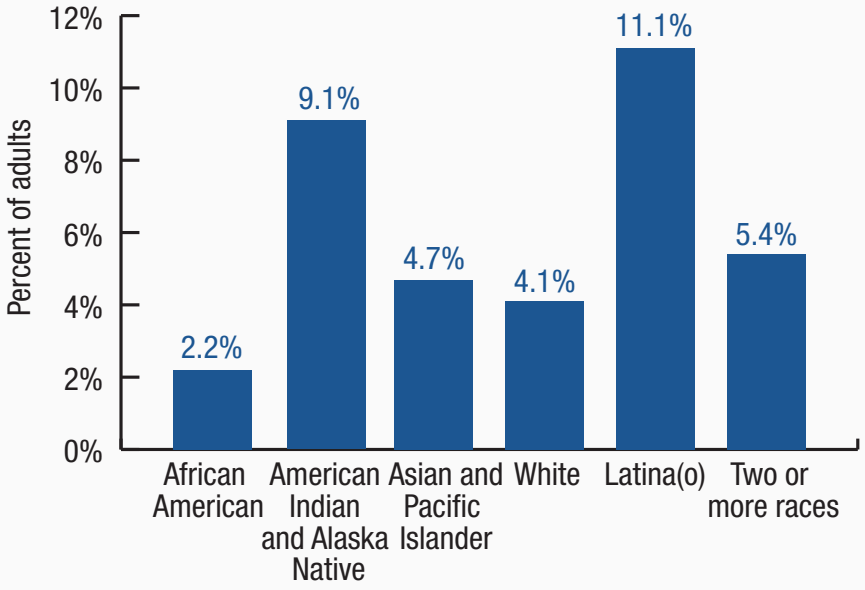
Oregon adults with disabilities are more than twice as likely as those without disabilities to report that they couldn't see a health care provider in the last twelve months because of cost.



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2016

Uninsured rates are highest among American Indians and Alaska Natives and Latina(o)s.

Uninsured by race and ethnicity and age, Oregon



Source: Oregon Health Insurance Survey, 2015

Health Care Providers

Many people across Oregon expressed difficulty accessing high-quality health care. Provider shortages create significant disparity across many parts of Oregon. Portland, Eugene, and Bend have greater access to providers, while rural, frontier, and coastal areas tend to have more unmet needs.*

> "I would like to be treated better and with respect. I've had many bad experiences using emergency services. People need to have more cultural sensitivity, I've noticed that they get frustrated with me for not speaking English and they make you feel less or as if one is weak. Many times, even if there is an interpreter, it is the attitude that makes the difference. They treat us as if they were doing us a favor."
>
> – SHA Community Participant

Primary care providers, dentists, behavioral health specialists, nurses, dieticians, and medical assistants all are in short supply. Restrictions on loan forgiveness programs, lack of housing, and licensing delays make the problem worse.† Oregon also faces a shortage of dentists. Nearly a quarter of Oregon's population live in a federally-designated dental health professional shortage area.

Simply getting to a provider's office, or getting there quickly, is difficult for many people. In Oregon, the average travel time to the nearest Patient Centered Primary Care Home (PCPCH) is 13.6 minutes. In urban areas, the travel time is 10 minutes; in rural areas, it is 13.1 minutes; and in frontier areas, it is 18.8 minutes. Twenty-six rural and frontier service areas do not have a PCPCH; the drive times for these areas can be as long as 81 minutes.‡ If a person needs specialty care, travel time can be even longer. For example, among children and youth with a special health care need, more than one third (38%) experienced a problem accessing specialty care. Many people in Oregon are interested in using telemedicine to bring specialty care to areas of the state that don't currently have access.

* https://www.ohsu.edu/xd/outreach/oregon-rural-health/resources/rural-frontier-listening-tour/upload/2016-ORH_ListeningTourReport_Final.pdf

† https://www.ohsu.edu/xd/outreach/oregon-rural-health/resources/rural-frontier-listening-tour/upload/2016-ORH_ListeningTourReport_Final.pdf

‡ Oregon Office of Rural Health, Oregon Areas of Unmet Health Care Need Report, August 2017.

Behavioral health care

Access to behavioral health care, including mental health and substance abuse treatment, is another serious challenge. There are 5,600 people for every full-time mental health care provider in Oregon. Thirty-three rural and frontier service areas have fewer than 0.5 mental health providers; 25 service areas have no mental health providers. In 2015, OHA held a series of behavioral health town halls across the state. Community members described many barriers related to provider shortages, long wait times, poor quality of care, and care that wasn't coordinated because medical staff were overloaded. More than half of children with a special health care need experienced problems obtaining mental health treatment or counseling. Also, people experiencing a psychiatric emergency face a significant lack of hospital beds.* These barriers to behavioral health care often create overcrowded jails and emergency rooms, which are ill-equipped to provide appropriate care and treatment for someone experiencing a behavioral health crisis.

> "There are a lot of people who are suffering due to untreated addiction and mental health issues."
>
> – SHA Community Participant

* http://www.oregon.gov/oha/HPA/CSI-BHP/Documents/OHA-2015-Behavioral-Health-Town-Hall-Report.pdf

Culturally Responsive Care

Finally, many SHA participants said communities need culturally responsive and trauma-informed health care. Services should be provided in appropriate languages, along with interpretation and translation when needed. Community members suggested increasing the diversity of providers and providing cultural-competency training for primary care providers. Greater use of traditional health workers can help ensure that health care is culturally and linguistically appropriate.

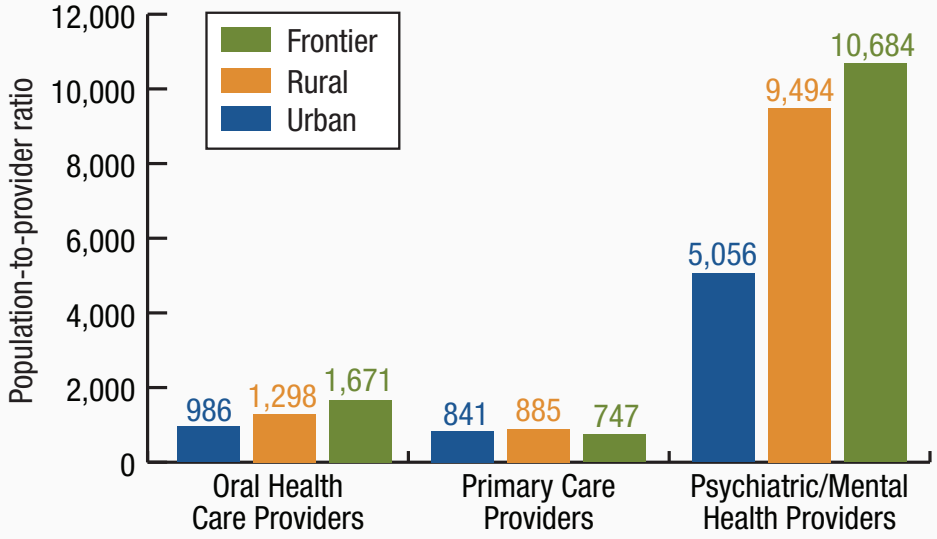
My community needs…

> "Resources that promote positive interaction with all health professionals where people feel safe sharing health concerns."
>
> – SHA Community

Disparities in Health Care Providers

There are significant disparities in population-to-provider ratios by geographic region within Oregon.

Population-to-provider ratio by provider type and county rurality, Oregon



Source: OHA Health Care Workforce Reporting Program (HWRP), 2015 – 2016

Health Literacy

Health literacy is an important issue to community members who participated in the SHA. Health literacy is the ability to understand basic health information in order to make appropriate health decisions. Only 12% of U.S. adults have proficient health literacy, according to the National Assessment of Adult Literacy. Low levels of health literacy have been linked to misuse of medications, higher rates of hospitalization, and lower use of preventive services. People most likely to experience low health literacy include older people, people of color, people with less than a high school degree or GED certificate, people with low income levels, non-native speakers of English, and people with compromised health status.

Preventive Services

Clinical preventive services include services such as annual exams, cancer screenings, and immunizations.

Well-Woman Care and Reproductive Health

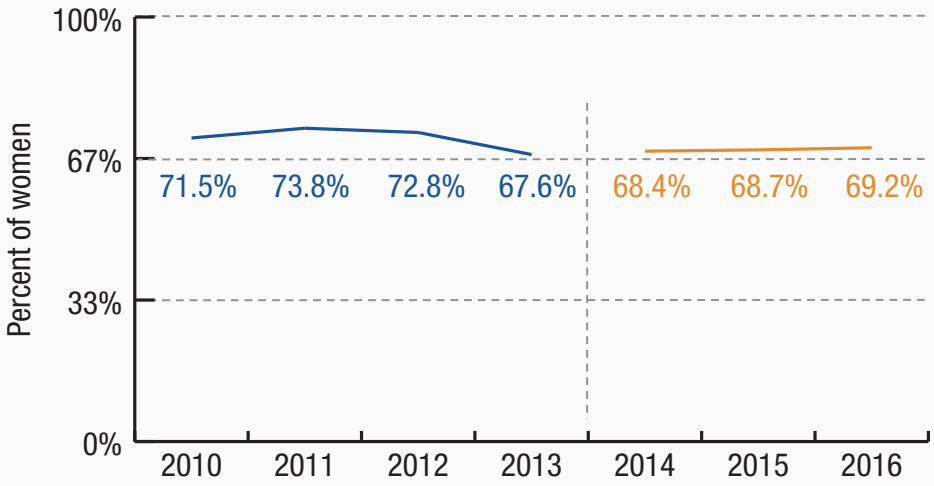
In 2015, just over half of women in Oregon (54.9%) aged 18 to 44 years had a routine checkup within the last year. Access to high-quality well-woman care:

- Provides an opportunity to receive recommended clinical preventive services; help with managing chronic conditions such as diabetes; counseling to achieve a healthy weight and to quit smoking; and immunizations.
- Increases the likelihood that any future pregnancies are intended.
- Decreases the likelihood of complications for future pregnancies.

When used correctly, contraceptives are very effective at preventing unintended pregnancy. In 2016, 69.2% of women at risk of unintended pregnancy reported using effective methods of contraception at last intercourse. Unintended pregnancy is disproportionately concentrated among younger, low-income women of color.

Early prenatal care is important to identify and treat health conditions that can affect mothers and babies. Health care providers can educate pregnant women about nutrition, alcohol use, tobacco use, exercise, and preparing for childbirth and infant care. Babies born to women who receive prenatal care are less likely to have low birth weight or to be born prematurely. The percentage of women starting prenatal care during the first trimester has improved in Oregon since 2008, reaching 80% in 2016.

Effective contraceptive use among women at risk of unintended pregnancy, Oregon



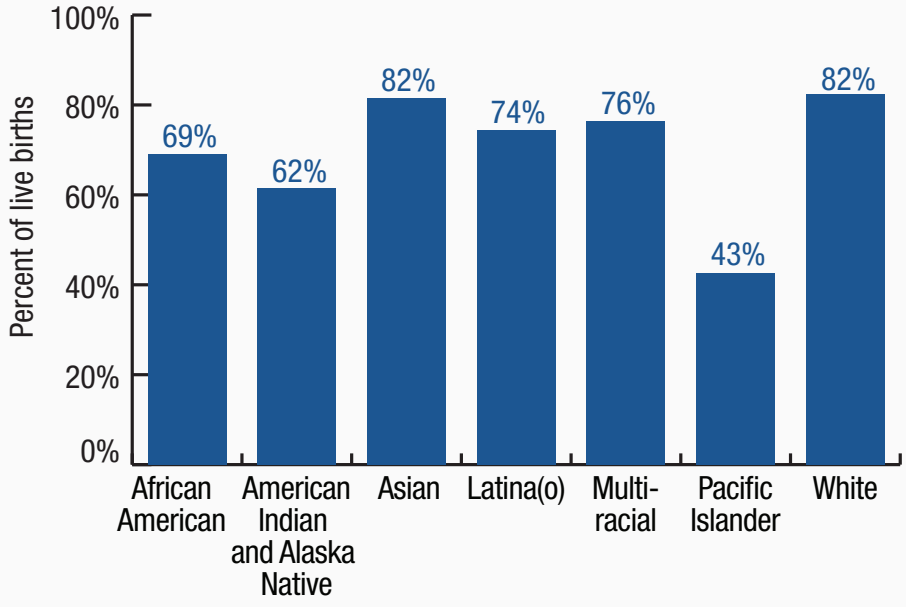
Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)

Notes: Starting in 2014, respondents are asked about their use of contraception "at last intercourse" rather than "currently". Also, the upper age limit of reproductive-age women was increased from 44 to 49 in 2014.

Disparities in Well-Woman Care and Reproductive Health

Relative to Whites and Asians, other racial and ethnic groups in Oregon access lower levels of prenatal care during the first trimester.

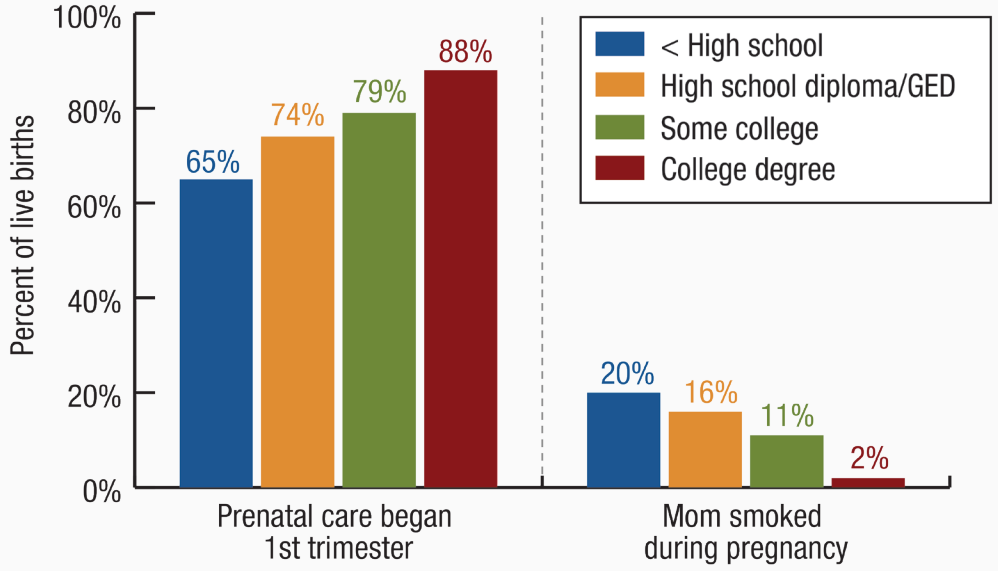
Prenatal care in the 1st trimester by race and ethnicity, Oregon



Source: Oregon Birth Certificate Data, 2016

Women with lower education levels are less likely to access prenatal care and are more likely to smoke during pregnancy, compared to women who have a college degree or higher.

Prenatal care and smoking during pregnancy, by education level, Oregon



Source: Oregon Birth Certificates, 2016

Child and Adolescent Health

Early childhood development is a marker for future social, behavioral, physical, and cognitive development. Early identification of developmental disorders is critical to lifelong health. The percentage of children with a developmental delay has been increasing over time. However, opportunity exists to increase the rates of developmental screening and detect more potential delays early.

The range of physical, cognitive, social, and emotional changes during adolescence calls for a unique approach to health care during this stage of life. Health behaviors established in adolescence often persist into adulthood, and many chronic diseases first emerge during this time. An important vehicle for delivering clinical preventative services, such as immunizations, is a comprehensive well-care visit that is aligned with the American Academy of Pediatrics guidelines.*

However, adolescents face many barriers to accessing well-care visits and other kinds of health care, even when insurance coverage is available. Commonly-cited barriers include: Concern that services will not be kept confidential; lack of transportation or access to

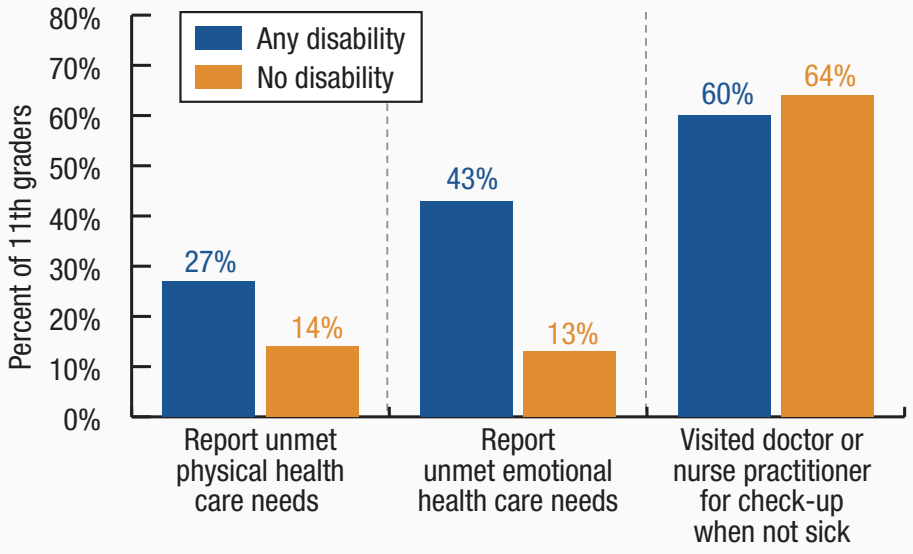
* Recommendations for Preventive Pediatric Health Care (https://www.aap.org/en-us/Documents/periodicity_schedule.pdf), Bright Futures, American Academy of Pediatrics

a convenient source of care; difficulty navigating the health care system; and lack of culturally-, linguistically- and youth-friendly providers. In 2017, 21% of 8th graders and 18% of 11th graders in Oregon reported having an unmet physical health care need in the past year. While school-based health centers can be an important asset for meeting the health care needs of students, only a quarter of school districts have a health center in one of their schools.

Disparities in Child and Adolescent Health

Youth with a disability are more likely to have an unmet physical or emotional health care need and less likely to have visited a provider in the past year.

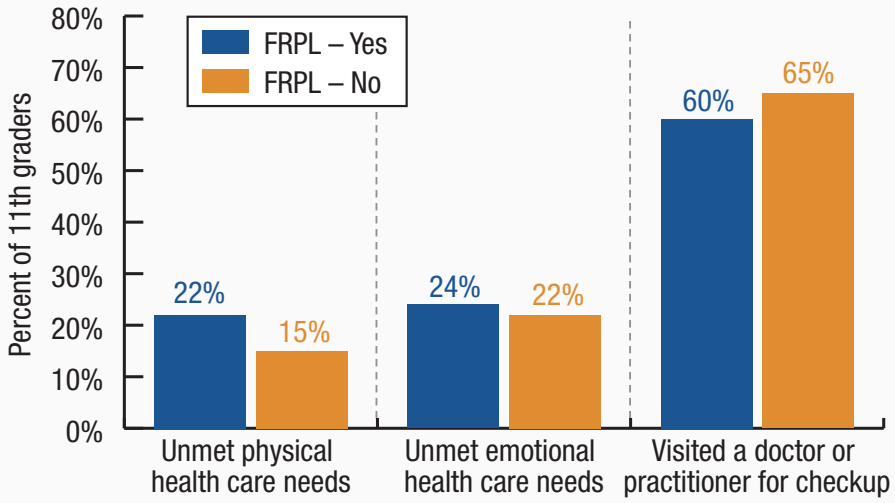
Health care access among 11th graders by disability status, Oregon



Source: Oregon Healthy Teens, 2017

Youth from low-income families are more likely to have unmet physical and emotional health care needs and less likely to have seen a doctor.

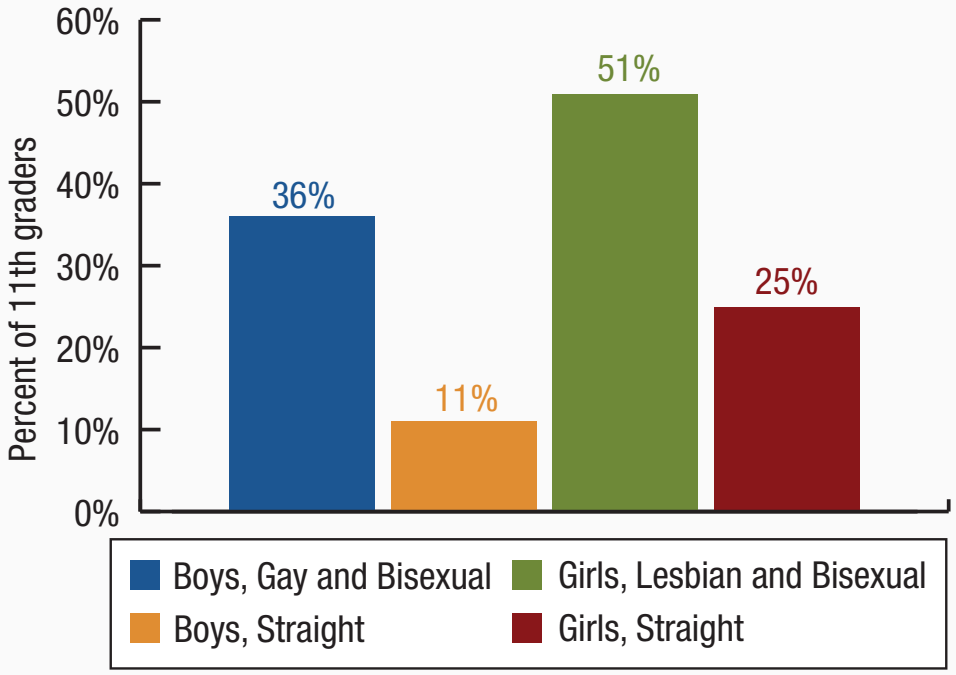
Health care access among 11th graders receiving free or reduced price lunch (FRPL), Oregon



Source: Oregon Healthy Teens, 2017

Gay and bisexual youth are much more likely to have unmet mental health care needs.

Unmet mental health needs among 11th graders by gender and sexual orientation, Oregon



Source: Oregon Healthy Teens, 2017

Immunizations

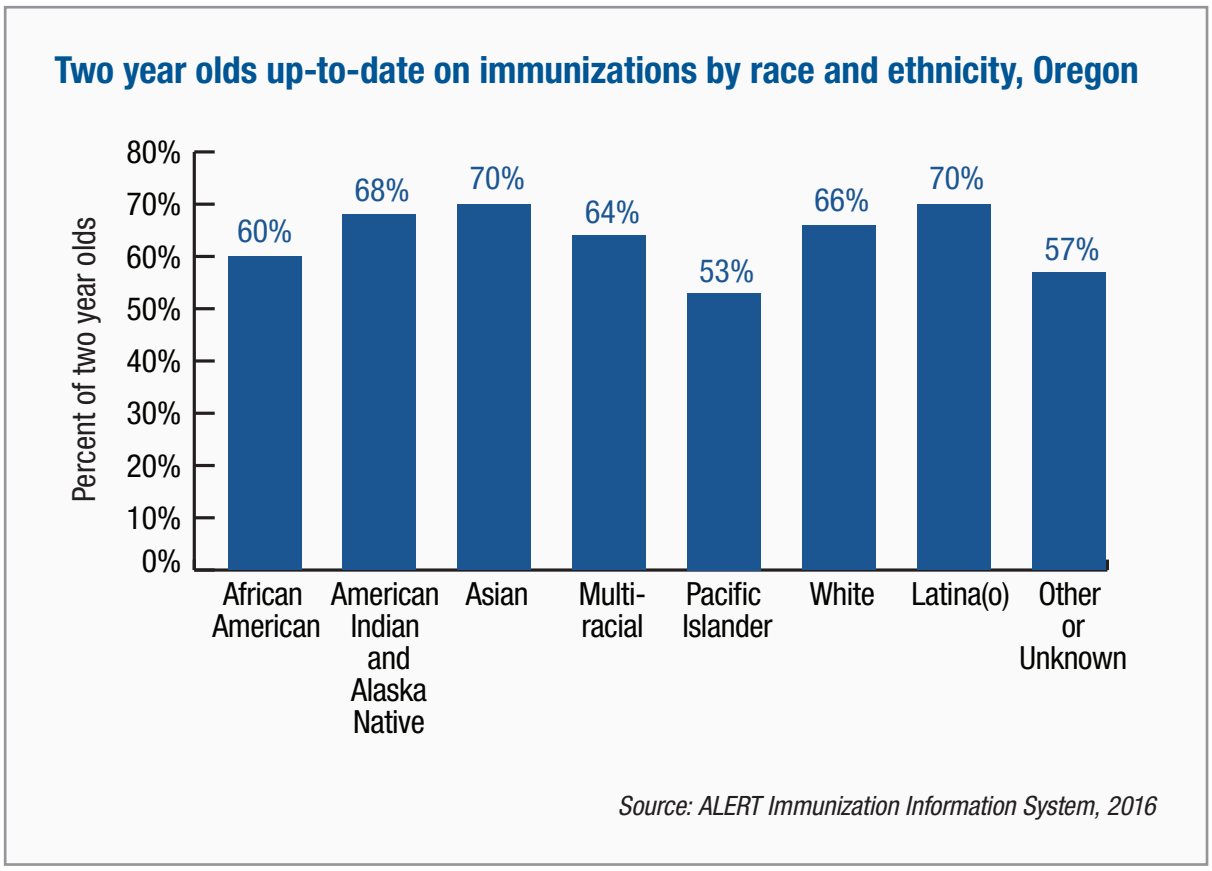
Vaccines are one of the greatest public health interventions of the 20th century. Yet, in Oregon, people's hesitancy about using vaccines, lack of access to health care, and other barriers contribute to lower-than-optimal immunization rates.

Oregon has one of the lowest immunization rates among children and adolescents in the country. In 2017, Oregon was ranked 45th in the country for the percentage of children 19 to 35 months who completed the recommended childhood immunizations.* In 2016, only 66% of two-year-olds were up to date on recommended vaccinations.

* America's Health Rankings

Oregon's immunization laws protect children against 11 vaccine-preventable diseases. These laws have improved the vaccination rate for kindergarteners to 89% in 2017. Yet Oregon still struggles with clusters of unvaccinated communities; for example, some schools report measles vaccination rates at or below 50% of students.

Influenza and pneumonia are among the top ten leading causes of death in the United States.



Vaccines and appropriate treatment can prevent many of these deaths. Although the influenza vaccine is recommended for everyone six months and older, Oregon's flu vaccination rates remain low. During the 2016 – 2017 influenza season, only 43% of people received a flu vaccination.

Cancer Screening

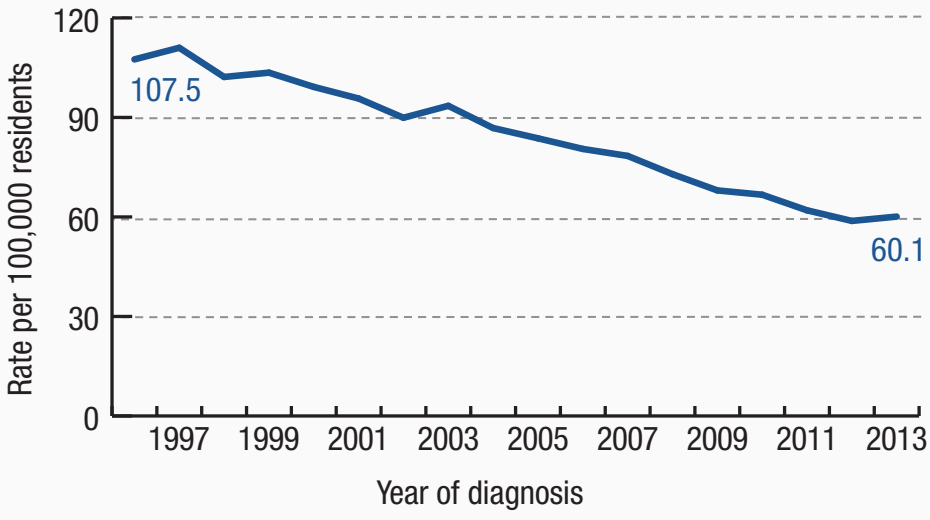
Colorectal cancer is the second-leading cause of cancer death in Oregon. The state has seen a steady decline in late-stage colorectal cancer diagnoses over the past 17 years. This is likely due to the steady increase in cancer screening over this same time period. Latina(o)s are less likely to have been screened for colorectal cancer.

Each year, approximately 3,000 women in Oregon are diagnosed with breast cancer, and nearly 500 die from breast cancer. Since 2009, the U.S. Preventive Services Task Force (USPSTF) has recommended mammogram screening for early detection of breast cancer every two years for women age 50 to 74. In 2016, 74% of women age 50 to 74 had received the recommended biennial mammogram screening.

Each year, on average, approximately 130 Oregon women are diagnosed with invasive cervical cancer, and about 40 die from the disease. Cervical cancer makes up a lower percentage of Oregon cancer deaths than breast cancer, and it is preventable when women receive appropriate screening and vaccination. The USPSTF currently recommends a pap screening for women ages 21 to 65 every three years. In 2016, 79% of women ages 21 to 65 years reported a pap screening in the past three years.

Fortunately, an effective HPV (human papillomavirus) vaccination recommended for adolescents is now available. It protects them from the most common anal, cervical, oropharyngeal, penile, vaginal, and vulvar cancers. However, only 43% of Oregon adolescents completed the HPV vaccination series in 2017.

Late stage colorectal cancer diagnosis among age 50 years or older by year, Oregon



Source: Oregon State Cancer Registry (OSCaR)

An estimated 5 to 10% of all cancers are hereditary. For example, people with hereditary breast and ovarian cancer syndrome (HBOC) are at higher risk of developing breast, ovarian, prostate, and pancreatic cancers. When people at high risk for cancer are identified early, they can benefit from screening and prevention strategies.

Oral Health

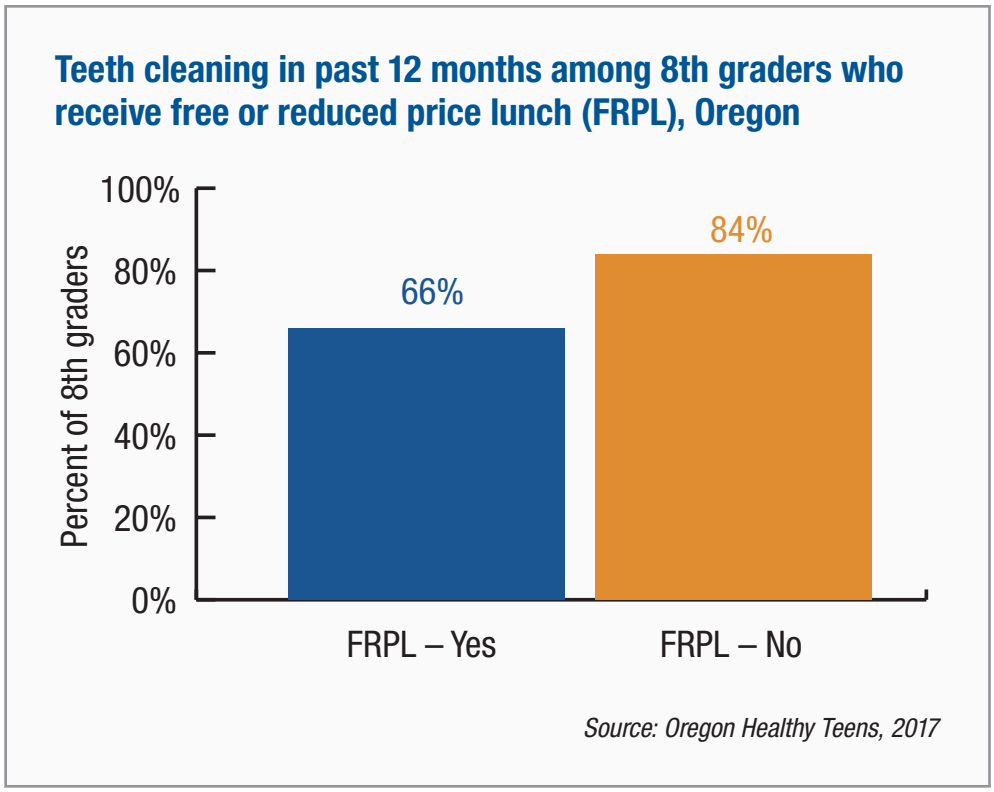
Oral health is important to well-being throughout a person's life. Although it's preventable, tooth decay is the most common chronic disease affecting U.S. children and adolescents. In Oregon, 58% of 3rd graders have experienced tooth decay. Left untreated, tooth decay often has serious consequences that can negatively affect a child's development and school performance. It can lead to diminished growth, social development, nutrition, speech development, and overall general health. Children with poor oral health have worse academic performance and are nearly three times more likely to miss school as a result of dental pain.* Over time, dental decay can become severe enough to require costly emergency treatment.

Many people in Oregon do not see a dentist as often as they should, despite its importance. Shortages of dental providers is a real problem: Oregon has only 0.42 dentists per 1,000 people, and 24 rural and frontier primary care service areas have no dentists. In 2016, only 65% of adult males and 69% of adult females had at least one dental visit in the past year. In 2016, only one in two children under the age of five had a dental visit within the previous year.

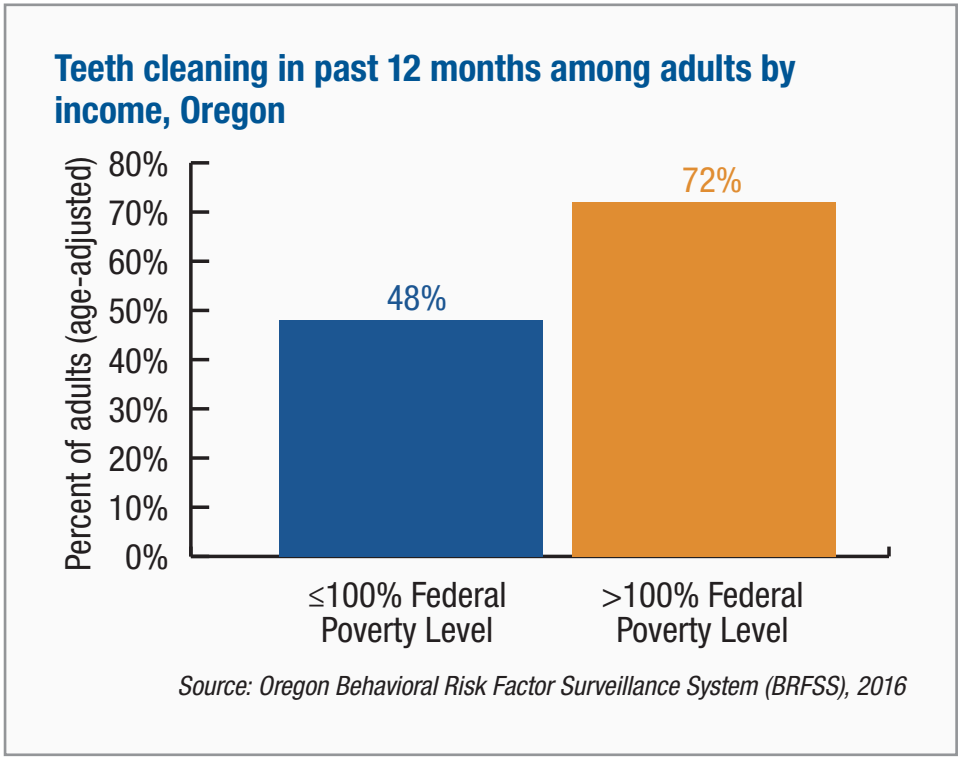
* Jackson SL, VannWilliam F Jr, Kotch JB, Pahel BT, Lee JY. Impact of poor oral health on children's school attendance and performance. American Journal of Public Health. 2011;101(10):1900 – 1906.

Disparities in Oral Health

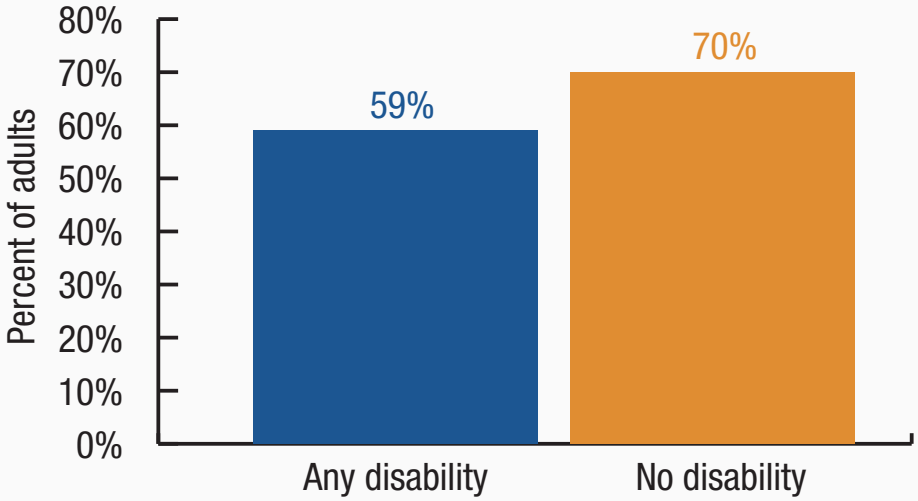
Adults and youth from low-income families are less likely to have had their teeth cleaned in the past year.



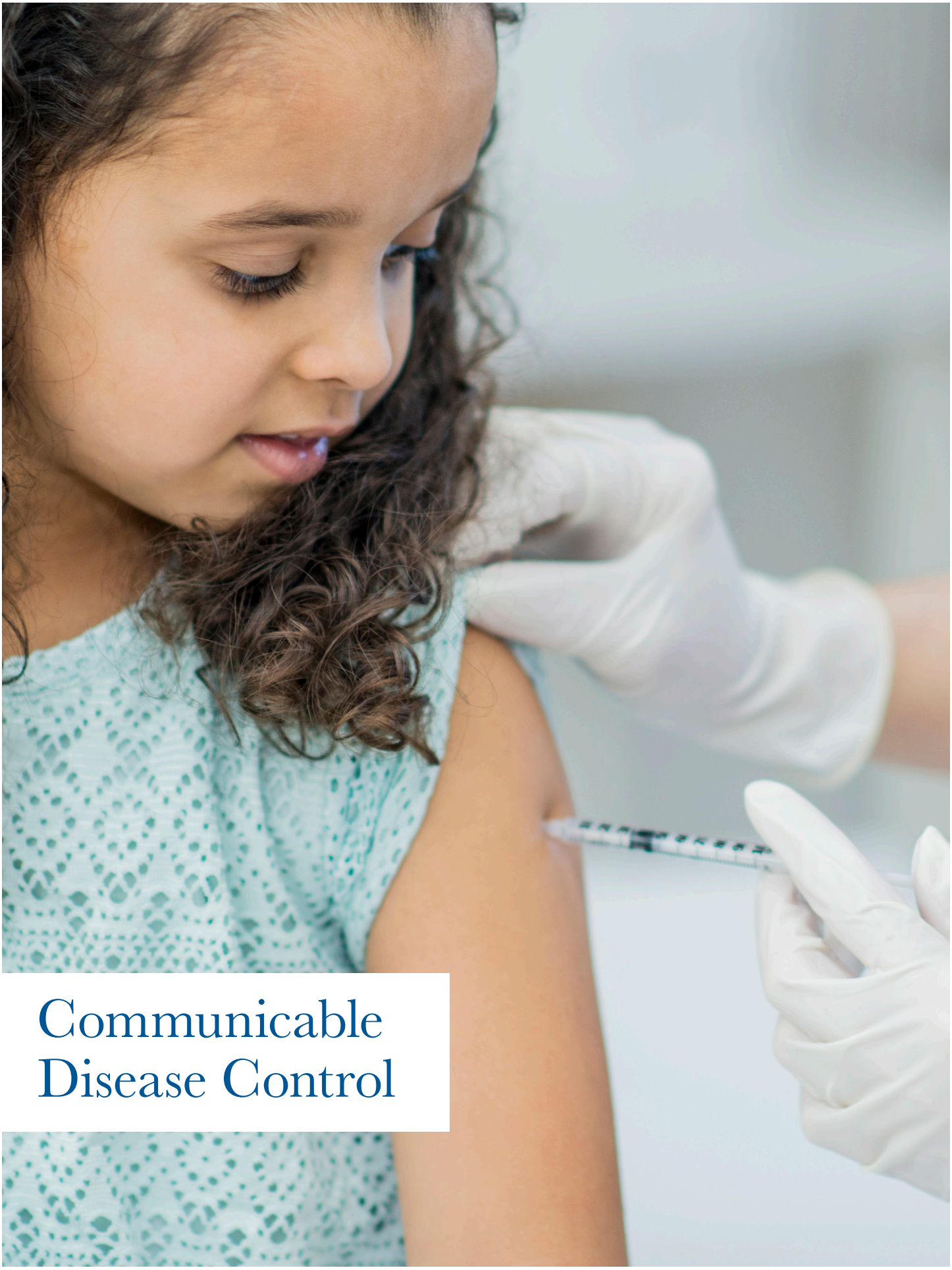
Adults with low income are less likely to have had their teeth cleaned in the past year.



Teeth cleaning in past 12 months among adults by disability status, Oregon



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), 2016



Communicable Disease Control

Communicable Disease Control

Communicable disease control refers to the prevention, detection, and response to transmissible infectious diseases. Although themes related to communicable disease were not frequently mentioned in the SHA community meetings or responses to the community survey, preventing communicable disease continues to be a priority for the public health system. According to the 2017 America's Health Rankings report, Oregon ranks 9th in the country for communicable disease rates.

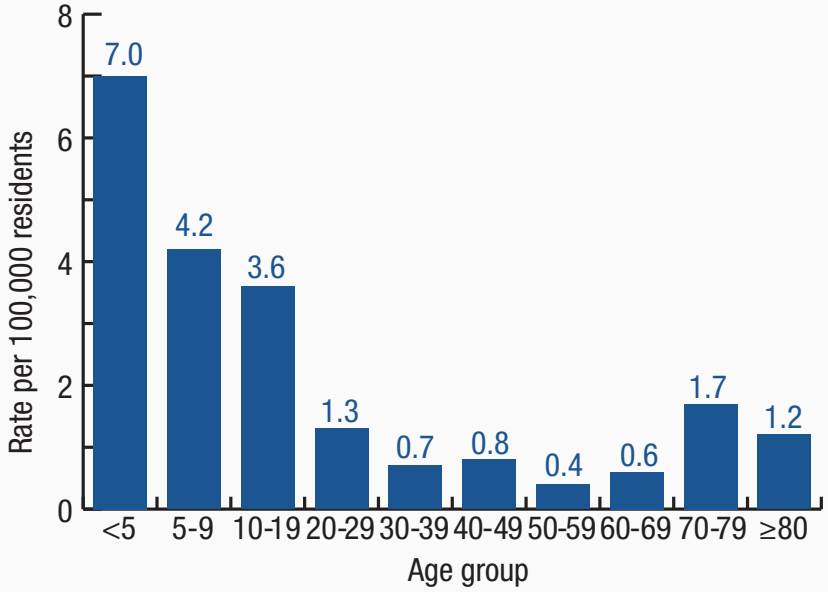
Foodborne and Waterborne Infections

E. coli

Most people who become sick with a foodborne illness will recover without any lasting health problems. But for some, a foodborne illness will have serious long-term health outcomes, which may include kidney failure, chronic arthritis, brain and nerve damage, or death.

Escherichia coli O157 (*E. coli*) causes stomach and intestinal irritation and inflammation (infectious gastroenteritis). Bloody diarrhea is a hallmark of *E. coli*, but the real risks are anemia and kidney failure (hemolytic uremic syndrome or HUS), especially among children under 10 years. Approximately 6% of people who contract *E. coli* will develop these complications, and 3 to 5% of people who develop HUS die from it. Children are at highest risk for experiencing illness caused by *E. coli*.

Reported E. coli O157 cases by age group, Oregon



Source: Oregon Reportable Diseases Database, 2016

Norovirus

Norovirus infection is a common cause of gastrointestinal illness. Symptoms include nausea, vomiting, diarrhea, dehydration, muscle aches, fever, and abdominal cramps. Symptoms typically resolve within a day but can remain for up to three days. Norovirus is highly contagious, and people typically get norovirus by eating contaminated food. Norovirus is the leading cause of foodborne-illness outbreaks in the United States. It is commonly transmitted from person to person in settings such as long-term care facilities (LTCFs) and cruise ships.

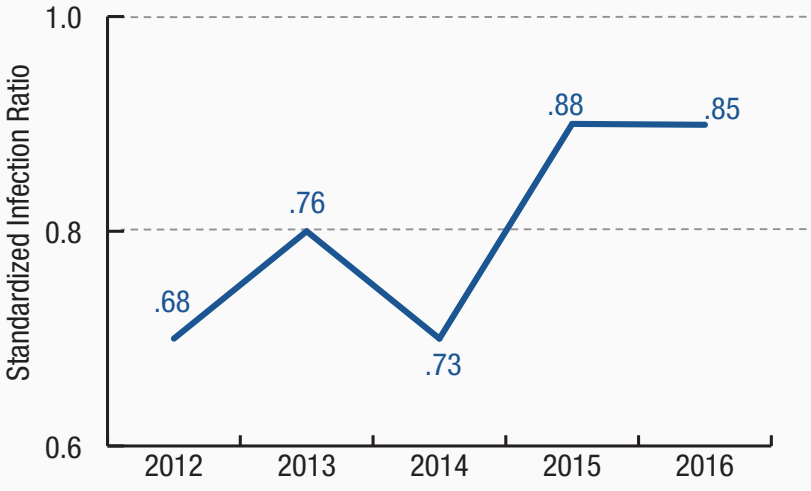
Health care-associated Infections

Health care-associated infections are those that affect people while they are receiving health care. These individuals often have other health conditions that put them at risk of life-threatening complications if they develop a health care-associated infection. These infections can require additional treatment, more days in the hospital, stronger or more antibiotics, and higher costs to patients and the health care system.

Clostridium difficile is a toxin-producing bacterium that can cause symptoms ranging from diarrhea to life-threatening inflammation of the colon. Clostridium difficile infection (CDI) is a leading cause of health care-associated infections and has become increasingly common.

Oregon tracks CDI prevention progress at the facility and state level using the metric recommended by the Centers for Disease Control and Prevention (CDC): the standardized infection ratio (SIR), which measures performance relative to the national average. From 2015 to 2016, Oregon's SIR has dropped slightly; it reflects 15% less CDI than was predicted based on the national average. However, Oregon's CDI SIR falls significantly short of the national reduction target of 30% set by the U.S. Department of Health and Human Services.

Reported cases of healthcare-onset C. difficile infections, Oregon



Source: National Healthcare Safety Network (NHSN), 2012 – 2016

Notes: NHSN does not conduct surveillance for Neonatal Intensive Care Units, Labor and Delivery Units, and well-baby nurseries. These are excluded from SIR calculations.

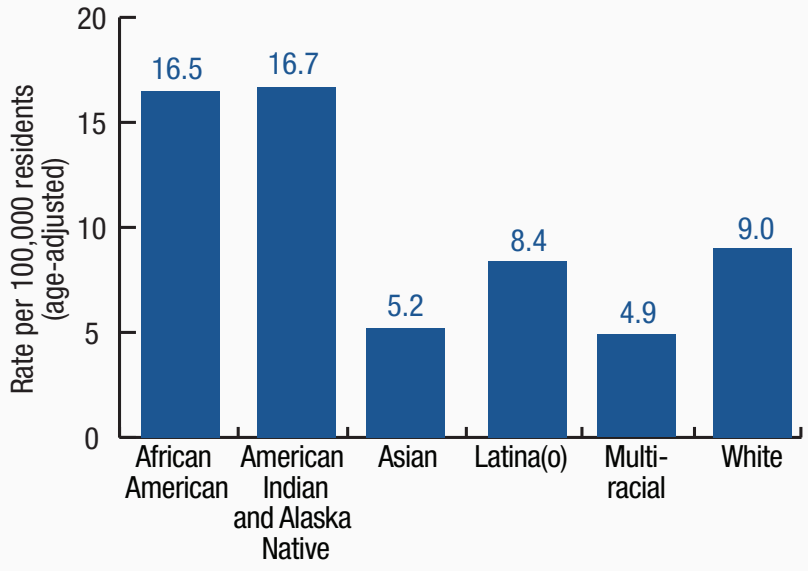
Hepatitis C

Hepatitis C virus (HCV) is the most common blood-borne pathogen in the United States and affects an estimated 2.7 million to 3.9 million (1.0% to 1.5%) residents. HCV can cause serious health problems such as liver disease, liver failure, and liver cancer. Of every 100 people infected with HCV, about 75 to 85 will become chronically infected. Of those, 60 to 70 will develop chronic liver disease, 5 to 20 will develop cirrhosis, and 1 to 5 will die from cirrhosis or liver cancer.

People born between 1945 and 1965 account for approximately 75% of all chronic HCV infections among adults in the United States. Although HCV can be treated, most persons with HCV do not know they are infected, do not receive the care they need (e.g., education, counseling, and medical monitoring), and are not evaluated for treatment. Today, most people become infected with HCV by sharing needles, syringes, or other equipment used to inject drugs.

The CDC estimates that the prevalence of HCV in adults in Oregon is 3%, the third-highest in the nation, and Oregon's mortality rate from HCV is the highest in the country. HCV disproportionately affects African Americans and American Indians and Alaska Natives in Oregon compared to Whites.

Hepatits C: death rate by race and ethnicity, Oregon



Source: Oregon Death Certificate Data, 2016

HIV and Other Sexually Transmitted Infections

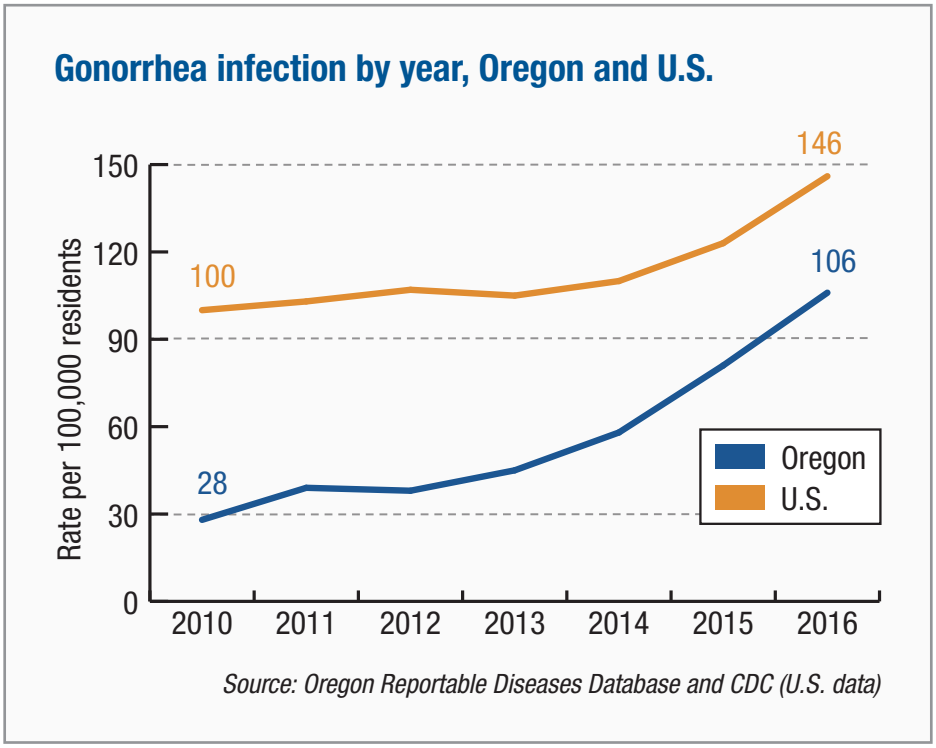
Sexually transmitted infections (STIs) are common in Oregon. In addition to increasing a person's risk for acquiring and transmitting HIV infection, STIs can lead to reproductive health complications, such as infertility and ectopic pregnancy. Rates of all STIs in Oregon, with the notable exception of HIV, are increasing.

Chlamydia

Chlamydia is the most common reportable disease in Oregon, increasing steadily over the past decade. Chlamydia is mostly commonly diagnosed in young women, ages 15 to 24 years of age. If detected, chlamydia is easily treatable with antibiotics. Left untreated, chlamydia is a major cause of pelvic inflammatory disease and infertility.

Gonorrhea

Similar to chlamydia, gonorrhea has been increasing in Oregon over the last decade. Untreated gonorrhea can result in serious health problems including pelvic inflammatory disease and ectopic pregnancy in women; complications from epididymitis, inflammation of the epididymis, and prostatitis, inflammation of the prostate, in men; and infertility in both. It also increases the likelihood of acquiring and transmitting HIV. The highest rates of gonorrhea occur in men and women in their 20s, and rates are higher among men. About 42% of men with gonorrhea report having sex with men. Of particular concern, gonorrhea bacteria have progressively developed resistance to the antibiotics commonly prescribed to treat the infection. This could become a major problem, as no clear treatment alternatives exist.

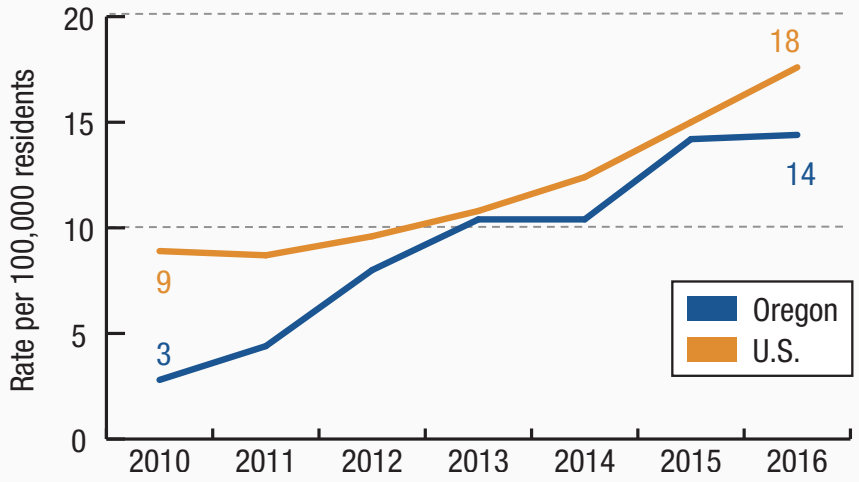


Source: Oregon Reportable Diseases Database and CDC (U.S. data)

Syphilis

Syphilis has reached epidemic levels in Oregon, increasing over 2000% from 2007 to 2016. In Oregon, more than half of all cases occur in men with HIV, typically men who have sex with men (MSM). Both HIV and syphilis may make a person more susceptible to the other. In addition, some data indicate that MSM with HIV may be more likely to choose sex partners with the same HIV status and may be less likely to use condoms, now that effective treatments have dramatically reduced the chances of transmitting HIV. These factors could increase the likelihood of acquiring or passing syphilis within sexual networks. Syphilis symptoms can easily be confused with other less serious diseases; however, untreated syphilis can result in paralysis, blindness, and even death. Regular screening for syphilis is one of the best ways to address the syphilis epidemic. Sexually active MSM and people living with HIV should be tested for syphilis four times per year. Women should be tested during pregnancy, as mothers can pass the infection to their children. Syphilis can be treated with penicillin.

Syphilis (primary, secondary, or early latent) by year, Oregon and U.S.



Source: Oregon Reportable Diseases Database and CDC (U.S. data)

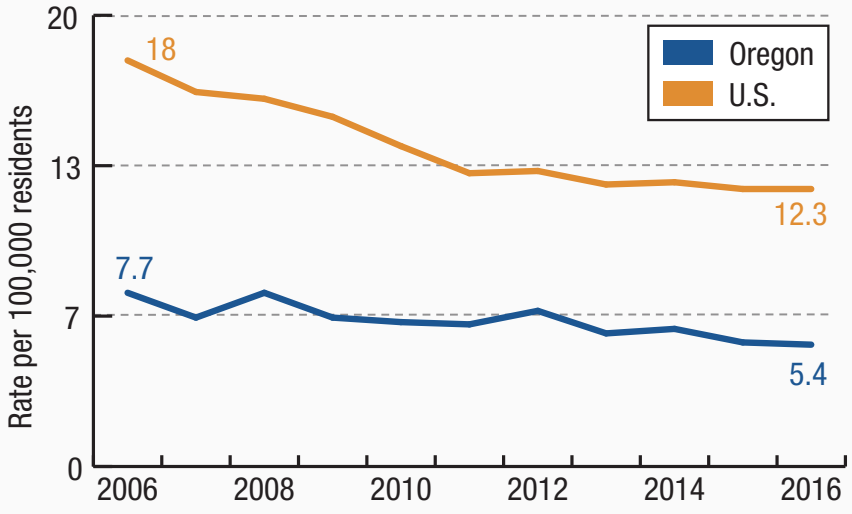
Human papillomavirus

Human papillomavirus (HPV) is the most common sexually transmitted infection in Oregon, affecting a high percentage of sexually active people. HPV infections can cause cervical, vaginal, and vulvar cancers in women and anal cancer, throat cancer, and genital warts in both men and women. Effective vaccination for HPV is now available. In 2017, Oregon ranked 23rd and 10th in the country for the percentage of female and male adolescents, respectively, who received the HPV vaccine.

HIV

HIV is a chronic and potentially fatal disease. It disproportionately affects sexual, racial, and ethnic minority groups. HIV rates in Oregon are approximately half of U.S. rates and have been declining in recent years. Among the approximately 200 new HIV cases that continue to be diagnosed in Oregon every year, most are among men who have sex with men; only 11% of new diagnoses in 2016 occurred in women. To address transmission, efforts should continue to focus on men who have sex with men as well as people who inject drugs or are also infected with hepatitis (HCV). Ending new HIV transmissions in Oregon will require widespread HIV testing, since only 37% of people in Oregon report ever having been tested for HIV. Routine HIV testing is important because about 40% of new HIV cases in Oregon are diagnosed late in their infection; the leading reason people give for not getting tested earlier is that they didn't think they were at risk.

HIV diagnoses by year, Oregon and U.S.

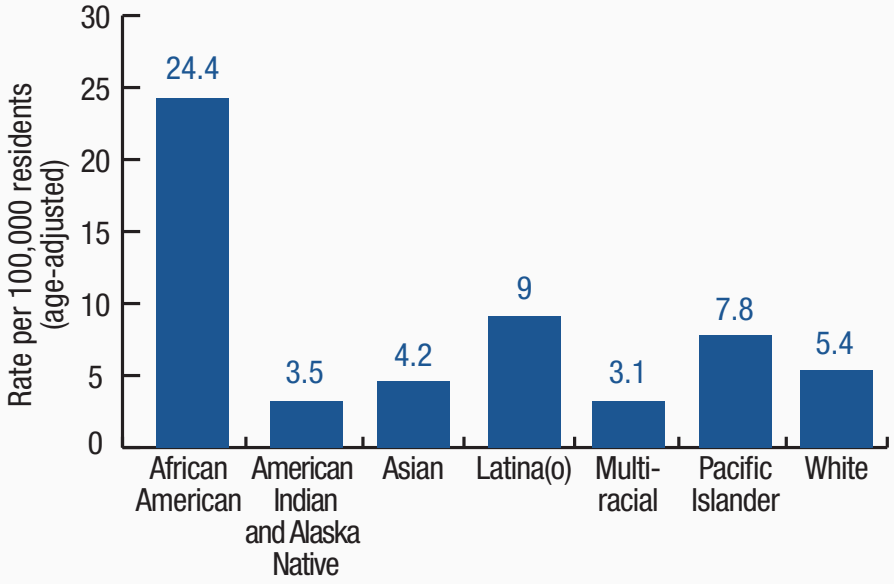


Source: Oregon Reportable Diseases Database, Oregon and U.S.

Disparities in HIV and Other Sexually Transmitted Infections

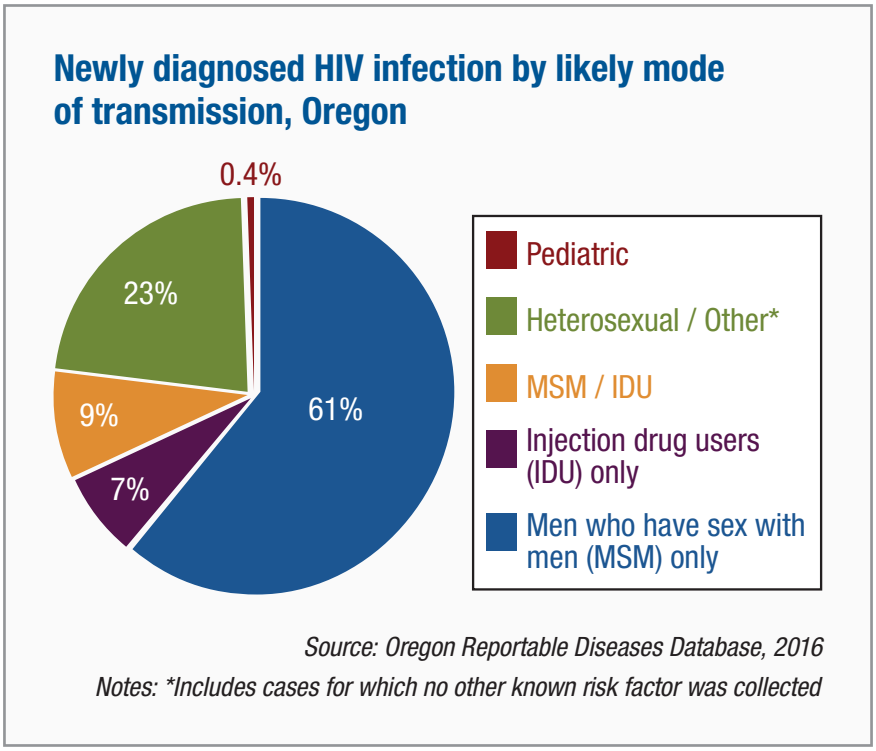
Risk of new HIV infection is higher among African Americans and Latina(o) than among non-Latina(o) Whites.

HIV diagnoses by race and ethnicity, Oregon

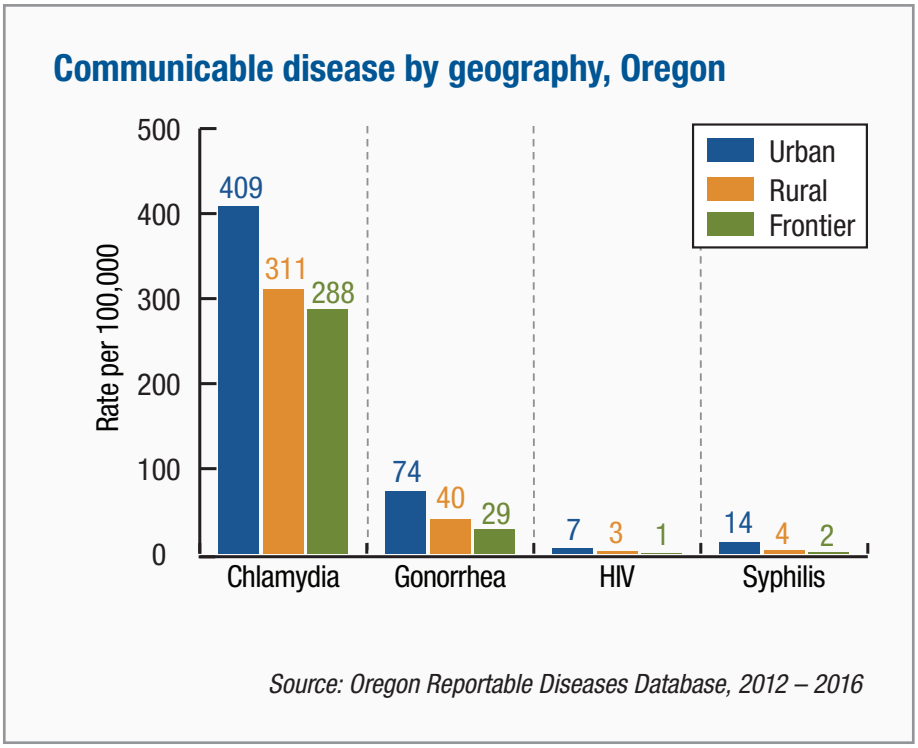


Source: Oregon Reportable Diseases Database, 2012 – 2016 (average)

Men who have sex with men are at increased risk for HIV infection.



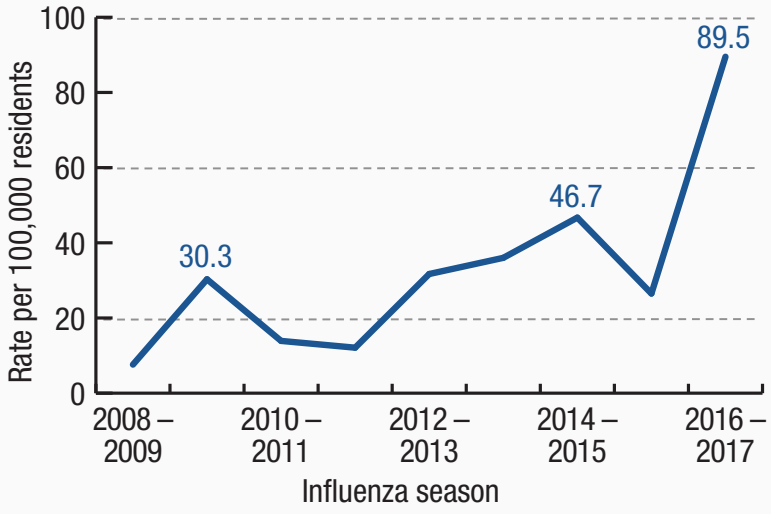
Rates of sexually transmitted infections are highest in urban areas, followed by rural and frontier areas.



Respiratory

The 2016 – 2017 flu season was the most severe flu season in Oregon since surveillance began on flu hospitalizations in 2005. There were 1,602 flu-related hospitalizations in the Portland tri-county area, and two-thirds of people hospitalized were older than 65 years. The severity of a flu season varies due to differences in strains from season to season and whether the vaccine matches the strain. Infants, people older than 65 years, and people with chronic diseases are at highest risk for severe disease.

Influenza hospitalizations by season, Clackamas, Multnomah, and Washington counties

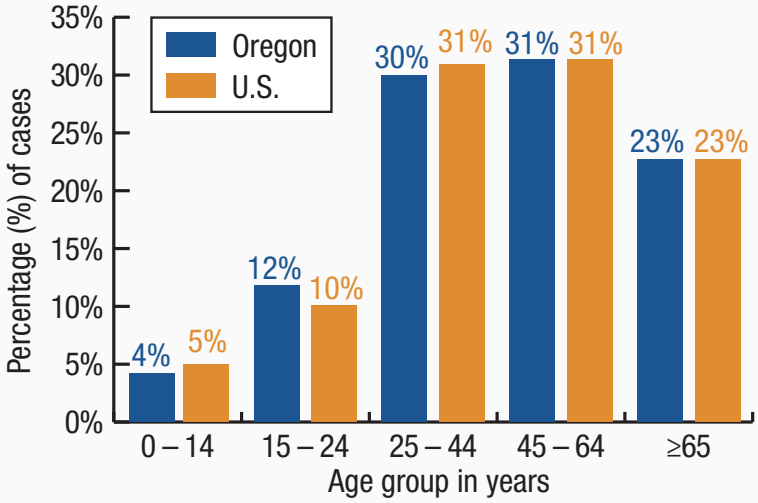


Source: Oregon Emerging Infections Program

Tuberculosis

Mycobacterium tuberculosis (TB) infects 30% of the world's population, and TB disease is the most common infectious cause of death worldwide. Fortunately, TB disease is relatively uncommon in Oregon. During 2016, 70 cases were reported in Oregon; this was not a significant change from 2014 (77 cases) or 2015 (76). TB disproportionately affects people who are homeless, incarcerated, or who were born outside of the United States.

Tuberculosis disease by age group, Oregon and U.S.

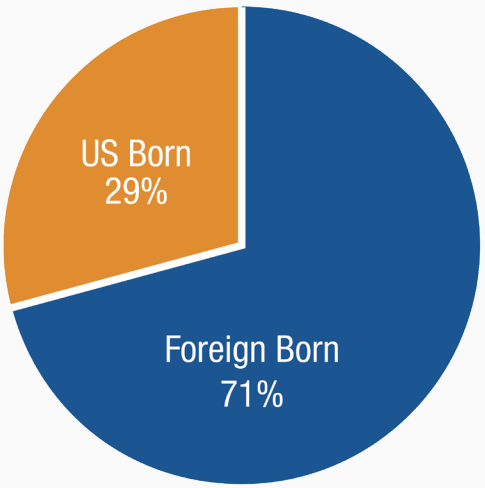


Source: Oregon Reportable Diseases Database, 2012 – 2016

Notes: The U.S. age distribution was for 2011 – 2015

TB incidence varies considerably by race and ethnicity. Many people acquire the infection in countries other than the United States, either because they were born overseas or became infected while traveling overseas.

Tuberculosis disease by country of birth, Oregon

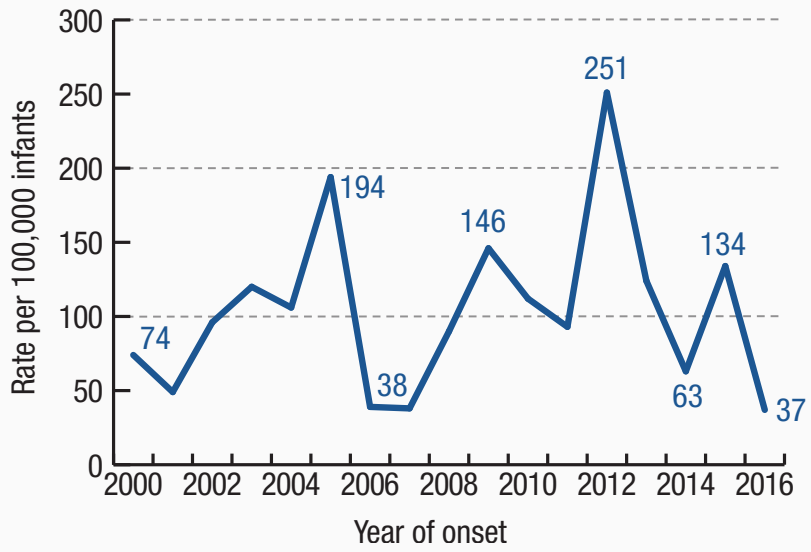


Source: Oregon Reportable Diseases Database, 2012 – 2016

Vaccine-preventable diseases

Vaccination has dramatically reduced communicable disease in the United States. However, concern over vaccines and access to health care keep immunization coverage below optimal levels and allow preventable outbreaks to occur. Since 2012, Oregon has had outbreaks of vaccine-preventable diseases including pertussis, meningococcal disease, mumps, influenza, and chicken pox.

Pertussis among infants less than 1 year old by year, Oregon



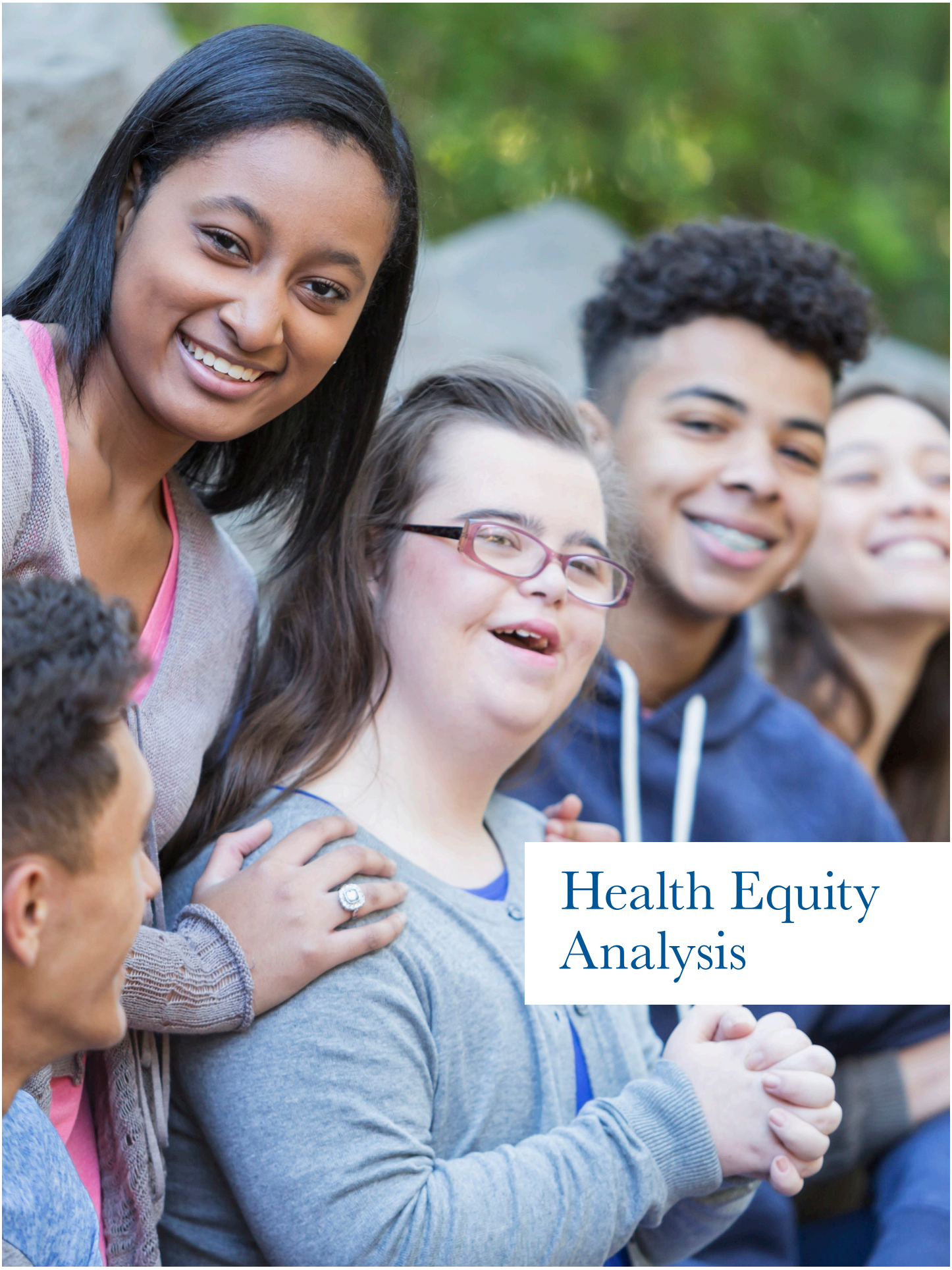
Source: Oregon Reportable Diseases Database

Pertussis, or whooping cough, is a highly contagious disease involving the respiratory tract. It is caused by a bacterium that is found in the mouth, nose, and throat of an infected person. Pertussis can occur at any age. Pertussis has consistently been higher among infants than all other age groups. Infants with pertussis are also the most likely to suffer complications and death.

Meningococcal disease is a rare, potentially life-threatening illness. It occurs when bacteria invade the body, causing infections of fluids that line the brain and spinal cord (meningitis) or bloodstream (meningococcemia or sepsis). The disease is serious and can be fatal if not treated right away. In 2015, 27 cases of Meningococcal disease were reported in Oregon, for an incidence rate of 0.67 per 100,000 persons. This was 20% higher than the average annual incidence rate in Oregon from 2010 to 2014 (0.56/100,000). This increase is likely explained by an outbreak of meningococcal serogroup B at a large public university in Oregon in 2015.

Mumps is a contagious disease that is caused by a virus. Mumps typically starts with fever, headache, muscle aches, tiredness, and loss of appetite. Most people will then experience swelling that causes puffy cheeks and a tender, swollen jaw. The number of mumps cases in Oregon has ballooned from three cases in 2013 to 67 cases in 2017. The recent outbreaks appear to be the result of a combination of factors: vaccine effectiveness, waning immunity, and intensity of exposure. Cases have occurred among Pacific Islanders, in a middle school, and among middle- and high-school wrestlers. Outbreaks can still occur in highly-vaccinated communities, particularly in close-contact settings. Two doses of the vaccine are 88% effective at protecting against mumps; one dose is 78% effective. High vaccination coverage helps limit the number, duration, and spread of mumps cases in a community. Mumps remains endemic*, and vaccination is the best way to prevent it.

* An endemic refers to the constant presence and/or usual prevalence of a disease in a population within a geographic area.



Health Equity Analysis

Health Equity Analysis

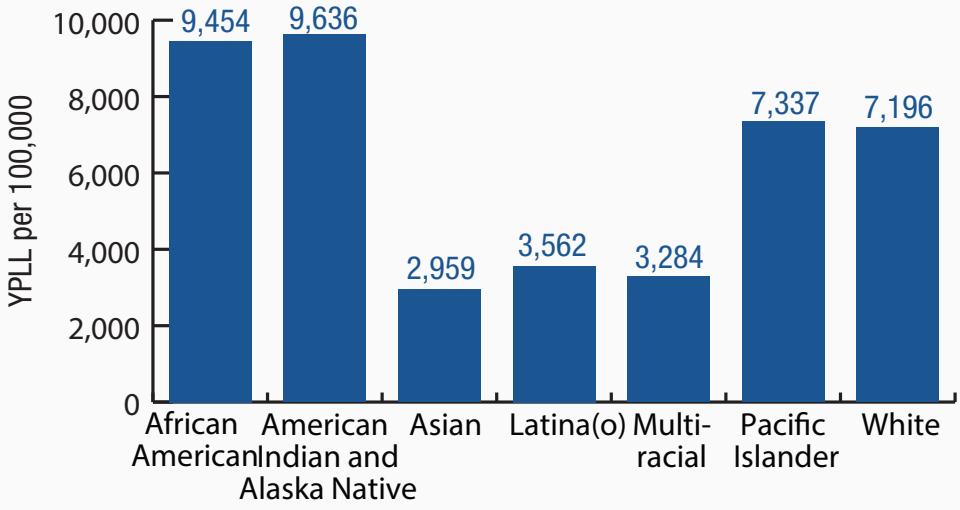
People of color

As Oregon becomes a more racially and ethnically diverse state, addressing health inequities related to race and ethnicity becomes more important. Racial and ethnic categories reflect social constructs rather than biology or genetics. The categories are intended to collect information on the race and ethnicity of the broader Oregon population; however, because the categories often combine people into a larger group, they may obscure important health disparities of subgroups (i.e., "African American" does not distinguish between a person with African roots whose family has been in the US for several generations from a newly-arrived African immigrant).

Mortality

In Oregon, African Americans and American Indians and Alaska Natives had higher Years of Potential Life Lost (YPLL) than did Whites. Asians and Latina(o)s had lower YPLL than did Whites. By specific causes of death contributing to the disparities in YPLL, African Americans and American Indians and Alaska Natives had the highest YPLL rates of deaths from unintentional injuries, homicides, and diabetes, Whites had the highest rates from suicide, and African Americans had the highest YPLL rate from heart disease.

Years of potential life lost (YPLL) before age 75 by race and ethnicity, Oregon

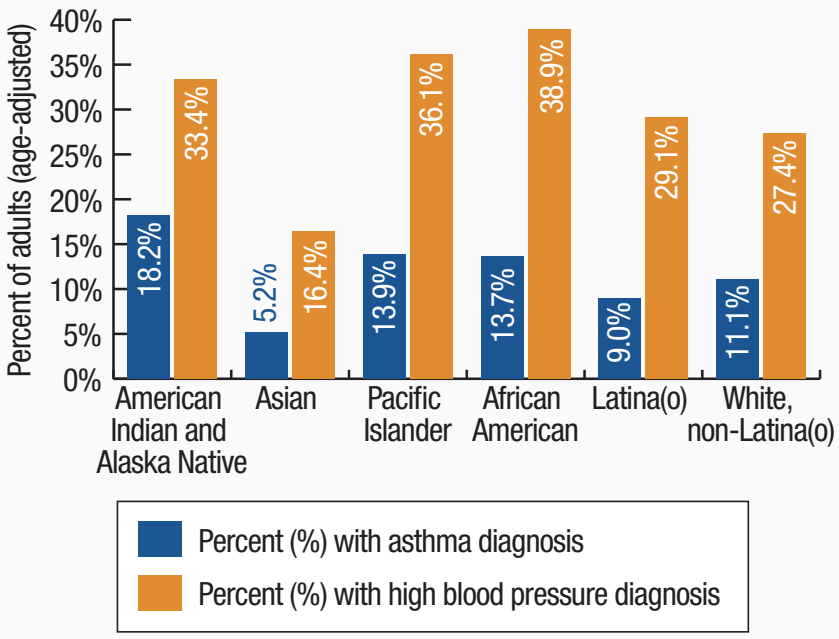


Source: Oregon Death Certificate Data, 2014 – 2016

Chronic conditions

The prevalence of chronic conditions varies by race and ethnicity in Oregon. American Indians and Alaska Natives have the highest prevalence of asthma, and African Americans, Pacific Islanders, and American Indians and Alaska Natives have the highest prevalence of high blood pressure. Diagnosed diabetes prevalence is highest among Latina(o)s and Pacific Islanders. Pacific Islanders and American Indians and Alaska Natives have the highest prevalence of obesity.

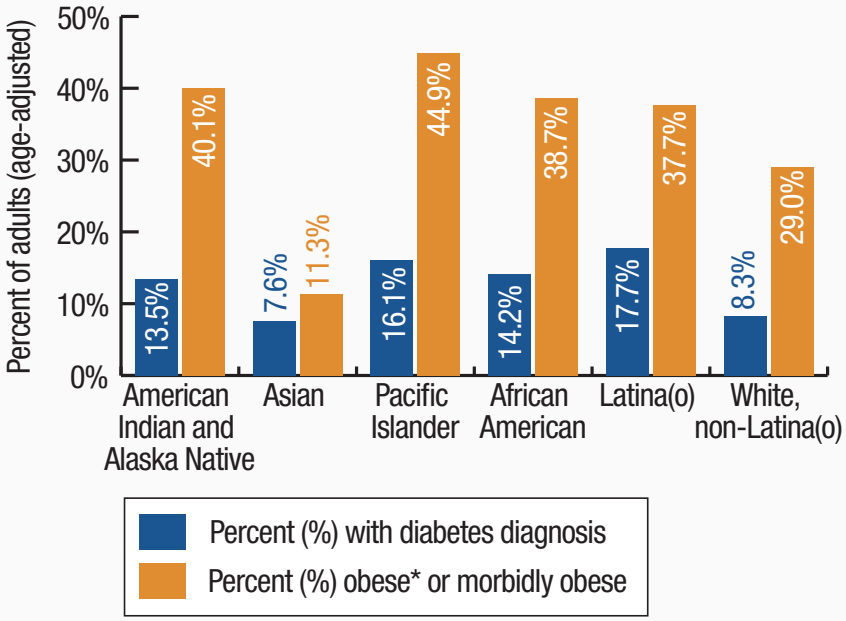
Chronic conditions among adults by race and ethnicity, Oregon



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), Preliminary race reporting data file, 2015 – 2016

* Body Mass Index (BMI) ≥ 30. BMI = kg/m2 where kg is a person's weight in kilograms and m is a person's height in meters.

Chronic conditions among adults by race and ethnicity, Oregon

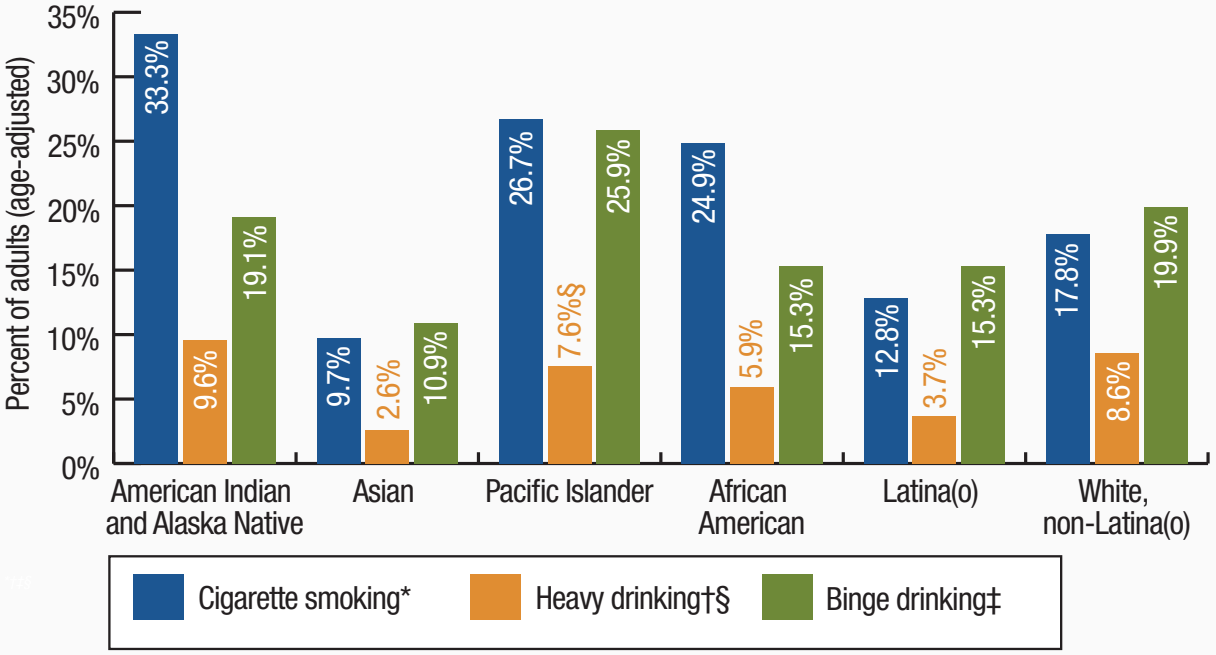


Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), Preliminary race reporting, 2015 – 2016

Health behaviors

The behavioral factors that increase the risk of many chronic diseases include: smoking, lack of physical activity and poor nutrition, and alcohol/substance use. American Indians and Alaska Natives had the highest prevalence of smoking, whereas Pacific Islanders, Whites, and American Indians and Alaska Natives had the highest prevalence of binge drinking.

Health behaviors among adults by race and ethnicity, Oregon



Source: Oregon Behavioral Risk Factor Surveillance System (BRFSS), Preliminary race reporting data file, 2015 – 2016

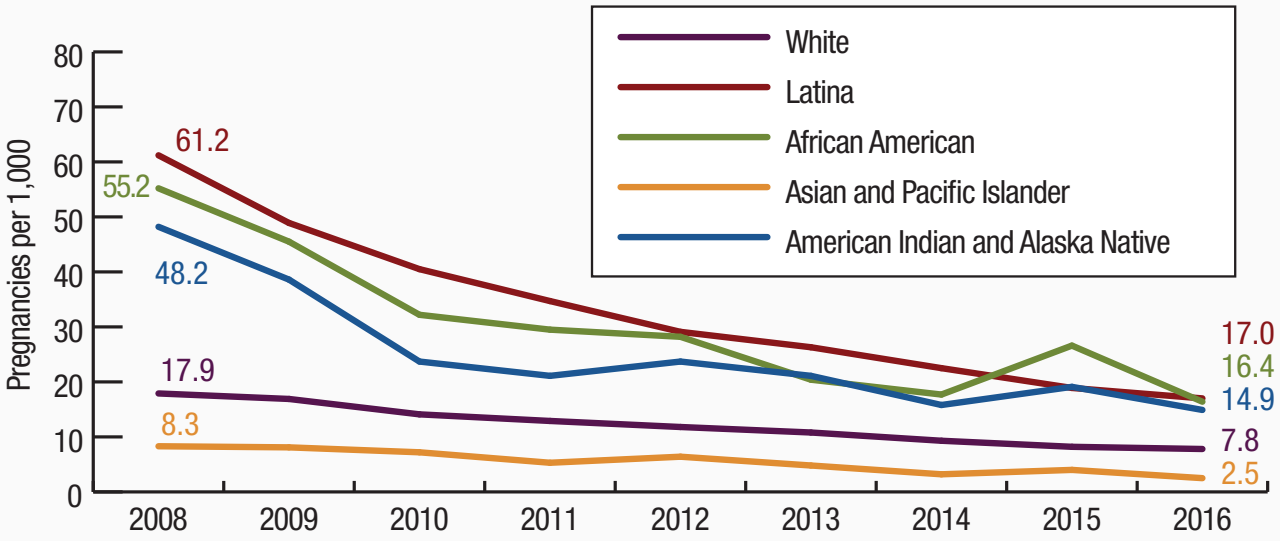
* People who have smoked 100 cigarettes in their lifetime and currently smoke every day or some days.
† Men having more than two drinks per day and women having more than one drink per day in the past 30 days
‡ Drinking ≥ 5 drinks for men or ≥ 4 drinks for women on at least 1 occasion in the past 30 days
§ Indicates Pacific Islander estimate is flagged for reliability and should be interpreted with caution.

Teen pregnancy

Monitoring teen pregnancy is important for several reasons. Many of these pregnancies may be unintended. Young women who become pregnant may delay onset of prenatal care risking their own health as well as that of the fetus. Many young women may drop out of school or not graduate high school because of social stigma and lack of accommodation for the baby. Graduating high school is an important indicator of long-term economic stability, an important social determinant of health.

In Oregon, teen pregnancy varies by race and ethnicity: The highest rates are among African American, American Indian and Alaska Native, and Latina teens. The good news is that teen pregnancy rates in all racial and ethnic groups have been decreasing steadily since 2008.

Teen pregnancy (age 15 – 17 years) by race and ethnicity, Oregon

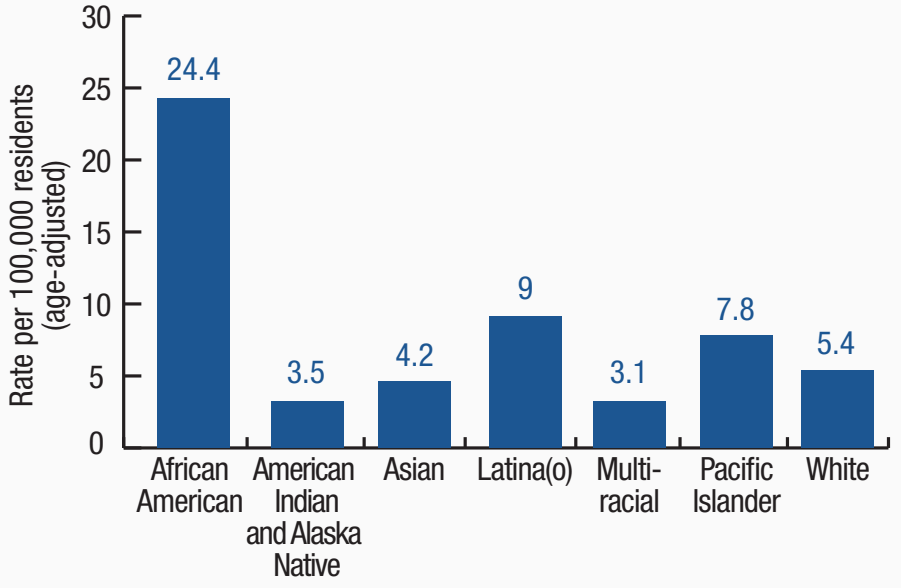


Source: Oregon Vital Statistics and National Center for Health Statistics

Communicable diseases

New HIV diagnoses were highest among African Americans in Oregon.

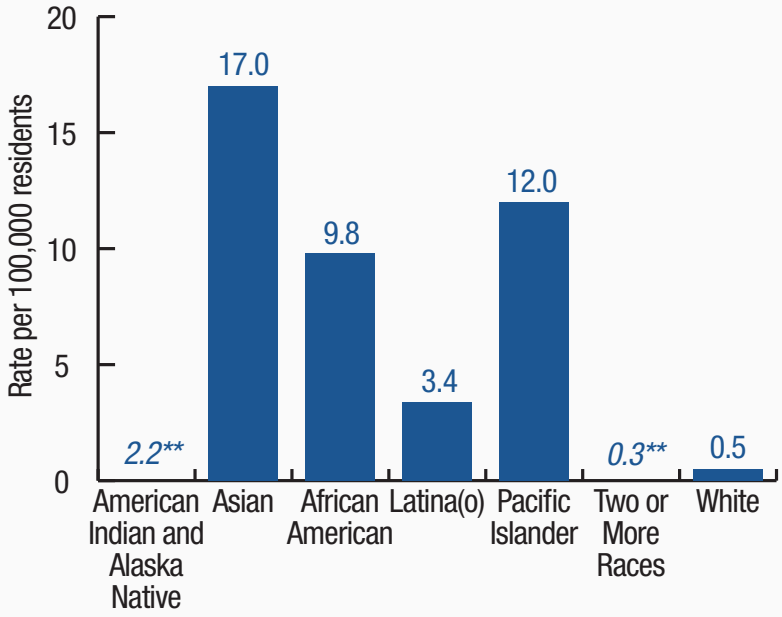
HIV diagnoses by race and ethnicity, Oregon



Source: Oregon Reportable Diseases Database, 2012 – 2016

TB rates were higher among Asians, African Americans, Latina(o)s, and Pacific Islanders, compared to Whites.

Tuberculosis diagnosis by race and ethnicity, Oregon



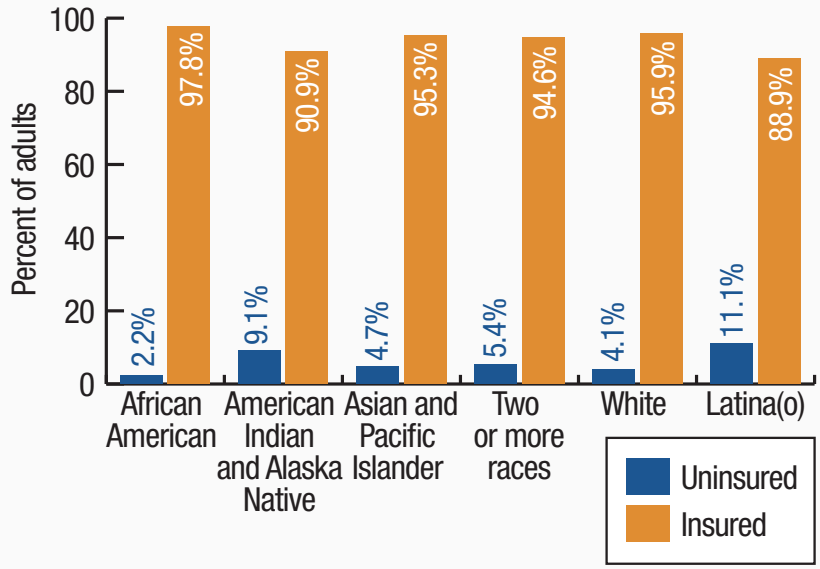
Source: HIV/STD/TB Prevention Program, 2012 – 2016

***Rates and percentages based on 5 or fewer events are unreliable and are shown in italics*

Access to clinical preventive services

Health insurance coverage is lowest among American Indians and Alaska Natives and Latina(o)s.

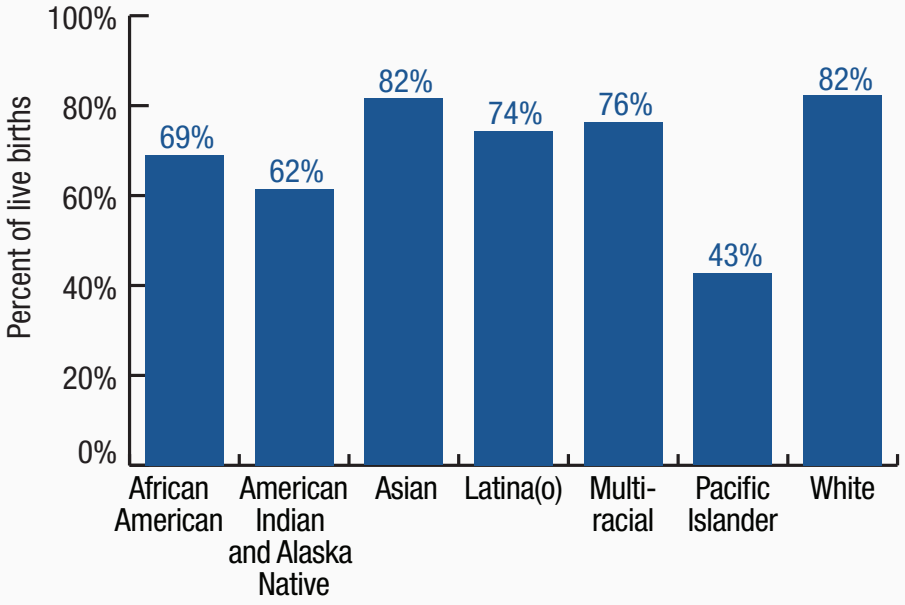
Uninsured by race and ethnicity, Oregon



Source: Oregon Health Insurance Survey, 2012 – 2016

Relative to Whites and Asians, prenatal care during the first trimester is lower among the other racial and ethnic groups in Oregon.

Prenatal care in the 1st trimester by race and ethnicity, Oregon



Source: Oregon Birth Certificate Data, 2016

People with disabilities

Knowledge of disparities experienced by people with disabilities – especially children and youth – is limited by multiple factors. First, the term "disability" is often associated with older age, as evidenced by the frequent combination of public services for disabled and elderly populations. Second, disability is often treated as an outcome of injury or poor health as opposed to one of many characteristics that shape the way people interact with their environment. Third, what little research is available often ignores diversity among people with disabilities – contrasting individuals with disabilities as a homogenous group against individuals without disabilities.

Overall, 24% of Oregon adults and 30% of Oregon youth report living with one or more disabilities. Furthermore, 19% of Oregon children between the age of birth to 17 years had a special health care need, defined as needing specialized therapies, treatments, counseling, medications, or services. The specific types of disability reported among adults and youth are shown in the table below.

Disability population estimates among adults and 11th graders, Oregon

Disability	Adults	Youth
Deaf or Hard of hearing	5%	2%
Blind or Low vision	3%	5%
Cognitive difficulties	12%	24%
Mobility issues	12%	3%
Difficulty with self-care	3%	1%
Difficulty with independent living	6%	9%
Any disability (one or more)	24%	30%

Source: Oregon BRFSS, 2016 and Oregon Healthy Teens, 2017

Social determinants of health

Negative treatment of disabled people and lack of access to conditions that promote health and well-being (e.g., safety, relationships, and health care) impacts health and well-being. Disability varies by socioeconomic status: people with disabilities were less like to have graduated from college, more likely to experience economic disadvantage, and more likely to be food insecure.

Demographics of adults by disability status, Oregon		
Demographics	**Any disability**	**No disability**
College graduate	15% (14 – 17)	32% (31 – 34)
Less than $20,000	35% (32 – 37)	11% (10 – 12)
Economic disadvantage (≤100% FPL/ limited education)	36% (33 – 39)	18% (16 – 19)
Household food insecurity	17% (15 – 29)	4% (4 – 5)

Source: Oregon BRFSS, 2016

Health Status

Adults living with a disability rate their overall general health and mental health as lower than those with no disability. Similarly, youth living with a disability rate their physical and mental health lower than youth with no disability. Adults and youth living with a disability are more likely to smoke than those without a disability. They are also more likely to be living with a chronic disease, such as asthma, diabetes, obesity or high blood pressure.

Overall health status, risk behaviors, and chronic disease prevalence among adults and 11th graders with disabilities, Oregon				
General, physical, and mental health	**Adults, any disability**	**Adults, no disability**	**11th graders, any disability**	**11th graders, no disability**
Good to excellent rating of general (Adults) or physical (Youth) health	57% (55 – 60)	92% (91 – 93)	72% (70 – 74)	88% (87 – 89)
Fair or poor rating of general (Adults) or physical (Youth) health	43% (40 – 45)	8% (7 – 9)	28% (26 – 30)	12% (11 – 13)
Frequent mental distress (14 or more days of poor mental health in the last 30 days)	30% (28 – 33)	7% (6 – 8)	NA	NA
Good to excellent rating of emotional or mental health	NA	NA	37% (35 – 40)	79% (78 – 80)
Fair or poor rating of emotional or mental health	NA	NA	63% (60 – 65)	21% (20 – 22)
Feeling sad or hopeless for 2 or more weeks in past 12 months	NA	NA	58% (56 – 61)	21% (19 – 22)
Suicide attempt in the last 12 months	NA	NA	16% (14 – 17)	3% (2 – 3)

Overall health status, risk behaviors, and chronic disease prevalence among adults and 11th graders with disabilities, Oregon				
General, physical, and mental health	**Adults, any disability**	**Adults, no disability**	**11th graders, any disability**	**11th graders, no disability**
Poor physical or mental health limiting daily activity (15 or more days where activity was limited in the last 30 days)	27% (25 – 30)	2% (2 – 3)	NA	NA
Risk and protective factors	**Adults, any disability**	**Adults, no disability**	**11th graders, any disability**	**11th graders, no disability**
Binge drinking	14% (12 – 16)	18% (16 – 19)	18% (16 – 20)	12% (11 – 14)
Current cigarette smoking	26% (23 – 28)	13% (12 – 14)	12% (10 – 13)	6% (4 – 8)
Met CDC fruit and vegetable consumption recommendations (2015 BRFSS, 2017 OHT)	14% (12 – 17)	22% (20 – 24)	18% (16 – 20)	19% (18 – 21)
Met CDC recommendations for physical activity* (2015 BRFSS, 2015 OHT)	13% (11 – 16)	26% (24 – 28)	18% (17 – 20)	26% (24 – 27)
Meets Positive Youth Development benchmark	NA	NA	35% (32 – 37)	68% (66 – 70)
Chronic conditions	**Adults, any disability**	**Adults, no disability**	**11th graders, any disability**	**11th graders, no disability**
Arthritis	51% (49 – 54)	19% (18 – 21)	NA	NA
Asthma	19% (17 – 21)	8% (7 – 8)	17% (15 – 19)	10% (9 – 11)
Diabetes	19% (18 – 21)	6% (6 – 7)	NA	NA
Cardiovascular disease	19% (17 – 21)	5% (4 – 5)	NA	NA
Obese or morbidly obese	40% (37 – 42)	26% (24 – 27)	16% (15 – 18)	13% (12 – 14)
High blood pressure	46% (43 – 50)	25% (23 – 27)	NA	NA

*Source: Oregon BRFSS, 2016 and Oregon Healthy Teens, 2017 **

Note: High blood pressure is from 2015

* Adults: "Moderately active for greater than or equal to (>=) 150 minutes per week, or vigorously active for >=75 minutes per week (or equivalent combination), and participate in muscle strengthening activities on >=2 days per week"

Youth: "60 minutes of aerobic physical activity each day"

Adults and youth living with a disability report experiences of sexual and physical abuse more often than those without a disability.

Abuse among adults and youth with a disability	Adults, any disability	Adults, no disability	11th graders, any disability	11th graders, no disability
Sexually abused during childhood	12% (9 – 15)	4% (3 – 5)	15% (13 – 16)	4% (4 – 5)
Physically abused by parents during childhood	36% (31 – 40)	17% (15 – 20)	34% (32 – 36)	16% (15 – 18)

Source: Oregon BRFSS, 2016 and Oregon Healthy Teens, 2017

Access to clinical preventive services

People with a disability have less access to health care services than those without a disability.

Access to health care services among adults and 11th graders with a disability, Oregon				
Health care access	**Adults, any disability**	**Adults, no disability**	**11th graders, any disability**	**11th graders, no disability**
Report barriers to accessing health care due to cost in the last 12 months	19% (17 – 22)	9% (8 – 10)	N/A	N/A
Fair or poor rating of general (Adults) or physical (11th graders) health	43% (40 – 45)	8% (7 – 9)	28% (26 – 30)	12% (11 – 13)
Frequent mental distress (14 or more days of poor mental health in the last 30 days)	30% (28 – 33)	7% (6 – 8)	N/A	N/A
Good to excellent rating of emotional or mental health	N/A	N/A	37% (35 – 40)	79% (78 – 80)
Visited doctor or nurse practitioner for check-up when not sick in past 12 months	73% (71 – 76)	62% (61 – 64)	60% (58 – 62)	64% (62 – 65)
Had teeth cleaned in past 12 months	59% (56 – 62)	70% (68 – 71)	68% (66 – 70)	77% (75 – 78)

Source: Oregon BRFSS, 2016 and Oregon Healthy Teens, 2017

People with low income and/or limited education

Socioeconomic status (SES) is well-recognized as an important determinant of health. Those with lower SES suffer disproportionately from many health disparities. For this report, OHA-PHD focuses on Oregonians who are economically disadvantaged – for adults, this is defined as those living at or below 100% of the federal poverty level and/or those who have not completed high school; for youth, this is defined as those who participate in free or reduced price lunch (FRPL) at school. In 2016 in Oregon, 19% of adults lived at or below the federal poverty limit and/or did not complete high school; in 2017, 41% of 8th graders, and 38% of 11th graders reported participating in the FRPL at school.

Social determinants of health

Adult Oregonians living at or below the federal poverty limit and/or have not completed high school tend to have higher levels of disability status and higher levels of food insecurity than those of more economic means.

Education, disability and food insecurity among low socio-economic status (SES) adults, Oregon

Demographics	≤100% federal poverty and/or incomplete HS	>100% federal poverty and/or complete HS
College graduate	4% (3 – 5)	34% (33 – 36)
Yes – reports one or more disabilities	41% (37 – 45)	21% (20 – 22)
Yes – household food insecurity	16% (14 – 19)	5% (4 – 6)

Source: Oregon 2016 BRFSS

Youth receiving FRPL were also more likely to report disabilities and household food insecurity than their counterparts not receiving FRPL.

Disability and food insecurity among youth receiving free or reduced price lunch (FRPL), Oregon				
Demographics	**11th graders FRPL – Yes**	**11th graders FRPL – No**	**8th graders FRPL – Yes**	**8th graders FRPL – No**
Yes – reports one or more disabilities	36% (34 – 39)	27% (25 – 28)	NA	NA
Household Food Insecurity	24% (22 – 26)	13% (12 – 15)	20% (18 – 21)	10% (8 – 11)

Source: Oregon Healthy Teens, 2017

Health status

Adults living below the federal poverty limit and/or who have not completed high school were less likely to report good to excellent general health and more likely to report fair to poor general health than those with higher income and education. In addition, they were more than twice as likely to report frequent mental distress and that poor physical or mental health limited their daily activities.

Overall health status among low socio-economic status (SES) adults, Oregon		
Demographics	**≤100% federal poverty and/or incomplete HS**	**>100% federal poverty and/or complete HS**
Good or excellent general health	66% (63 – 70)	88% (87 – 89)
Fair to poor general health	34% (30 – 37)	12% (11 – 13)
Frequent mental distress (>14 days in last 30)	23% (20 – 27)	10% (9 – 11)
Poor physical or mental health limiting daily activity (>15 days in last 30)	16% (13 – 19)	7% (6 – 7)

Source: Oregon BRFSS, 2016

Similarly, both 8th and 11th grade youth receiving free or reduced lunch were less likely to report good to excellent physical health and more likely to report fair to poor physical health than counterparts not receiving FRPL. Those receiving FRPL were also likely to report poorer mental health and more likely to report a suicide attempt than their counterparts not receiving FRPL.

Overall physical and emotional health status among youth receiving free or reduced price lunch (FRPL), Oregon				
Demographics	**11th Grade FRPL – Yes**	**11th Grade FRPL – No**	**8th Grade FRPL – Yes**	**8th Grade FRPL – No**
Good to excellent physical health	78% (76 – 80)	87% (86 – 88)	84% (83 – 85)	89% (88 – 90)
Fair to poor physical health	22% (20 – 24)	13% (12 – 14)	16% (15 – 17)	11% (10 – 12)
Good to excellent mental health	62% (60 – 65)	69% (67 – 71)	72% (70 – 75)	78% (76 – 80)
Feeling sad or hopeless for >2 weeks in last 12 months	36% (33 – 38)	30% (28 – 32)	34% (32 – 36)	25% (24 – 27)
Suicide attempt in last 12 months	9% (7 – 10)	6% (5 – 6)	11% (9 – 12)	7% (6 – 8)

Source: Oregon Healthy Teens, 2017

Child abuse

Economically disadvantaged adults and youth in Oregon reported higher levels of physical abuse and sexual abuse during childhood.

Abuse experienced by low-income/incomplete-high-school adults and youth receiving free or reduced price lunch (FRPL), Oregon				
Demographics	**Adults, ≤100% federal poverty and/or incomplete HS**	**Adults, >100% federal poverty and/or complete HS**	**11th Grade, FRPL – Yes**	**11th Grade, FRPL – No**
Physically abused by parents during childhood	32% (26 – 38)	20% (18 – 23)	25% (23 – 28)	20% (18 – 21)
Sexually abused by adult or someone >5 years older	13% (9 – 18)	4% (3 – 6)	10% (9 – 12)	6% (5 – 6)

Source: Oregon BRFSS, 2016 and Oregon Healthy Teens, 2017

Chronic conditions

The prevalence of chronic conditions varied by economic status for adults. Those who did not complete high school and/or are living below the federal poverty limit report having a higher prevalence of asthma, diabetes, obesity, and cardiovascular disease.

Chronic conditions among low-income/incomplete-high-school adults, Oregon		
Chronic disease	**≤100% federal poverty and/or incomplete HS**	**>100% federal poverty and/or complete HS**
Asthma	14% (12 – 17)	9% (9 – 10)
Diabetes	13% (11 – 15)	9% (8 – 10)
Cardiovascular disease	13% (10 – 15)	7% (7 – 8)
Obese or morbidly obese	35% (32 – 39)	28% (27 – 30)

Source: Oregon BRFSS, 2016

Health behaviors

The behavioral factors that increase the risk of many chronic diseases include: smoking, lack of physical activity and poor nutrition, and alcohol/ substance use. These varied by economic status. While smoking was higher among adults with low income/limited education, binge drinking and physical activity were higher among adults with more income/education.

Health behaviors among low-income/incomplete-high-school adults, Oregon		
Heath behavior	**≤100% federal poverty and/or incomplete HS**	**>100% federal poverty and/or complete HS**
Binge drinking	15% (12 – 18)	18% (17 – 19)
Current cigarette smoking	33% (29 – 37)	13% (12 – 14)
Met CDC physical activity recommendations (2015 BRFSS)	17% (13 – 21)	25% (23 – 27)

Source: Oregon BRFSS, 2016

Many of these disparities were also seen among youth. Both 8th and 11th graders receiving FRPL were more likely to smoke and less likely to meet positive youth development benchmarks.

Health behaviors among youth receiving free or reduced price lunch (FRPL), Oregon				
Demographics	**11th Grade, FRPL – Yes**	**11th Grade, FRPL – No**	**8th Grade, FRPL – Yes**	**8th Grade, FRPL – No**
Current smoker	9% (7 – 12)	7% (5 – 8)	4% (3 – 5)	2% (2 – 3)
Meets positive youth development	51% (48 – 54)	63% (61 – 65)	50% (48 – 52)	63% (61 – 65)

Source: Oregon Healthy Teens, 2017

Youth with low income are also more likely to be obese.

Chronic conditions among youth receiving free or reduced price lunch (FRPL), Oregon				
Demographics	**11th Grade, FRPL – Yes**	**11th Grade, FRPL – No**	**8th Grade, FRPL – Yes**	**8th Grade, FRPL – No**
Obese	18% (17 – 20)	11% (10 – 12)	15% (14 – 17)	8% (7 – 9)

Source: Oregon Healthy Teens, 2017

Access to clinical preventive services

Access to health care services among low-income/incomplete high school adults, Oregon		
Health Care Access	**≤100% federal poverty and/or incomplete HS**	**>100% federal poverty and/or complete HS**
Have medical insurance coverage	82% (79 – 85)	94% (93 – 95)
Cost barriers to accessing health care in past 12 months	18% (15 – 21)	9% (8 – 10)
Have a usual health care provider	72% (68 – 75)	81% (80 – 83)
Have teeth cleaned in past 12 months	48% (44 – 52)	72% (71 – 74)

Source: Oregon BRFSS, 2016

Youth receiving FRPL are more likely than those who do not receive FRPL to have unmet physical and emotional health care needs and less likely to have seen a doctor or had their teeth cleaned.

Access to health care services among youth receiving free or reduced price lunch (FRPL), Oregon				
Demographics	**11th Grade, FRPL – Yes**	**11th Grade, FRPL – No**	**8th Grade, FRPL – Yes**	**8th Grade, FRPL – No**
Unmet physical health care needs	22% (21 – 24)	15% (14 – 16)	24% (22 – 27)	17% (16 – 19)
Unmet emotional health care needs	24% (22 – 26)	22% (20 – 23)	20% (18 – 22)	18% (16 – 19)
Visited a doctor or practitioner for checkup	60% (58 – 62)	65% (63 – 67)	60% (58 – 62)	66% (64 – 67)
Had teeth cleaned past 12 months	67% (65 – 69)	80% (78 – 82)	66% (64 – 68)	84% (82 – 85)

Source: Oregon Healthy Teens, 2017

Women with advanced educational attainment were more likely to access prenatal care and less likely to smoke during pregnancy.

Prenatal care by educational attainment among moms, Oregon				
Demographics	**< High school**	**High school diploma/ GED**	**Some college**	**College degree**
Prenatal care began 1st trimester	65% (63 – 67)	74% (72 – 75)	79% (78 – 81)	88% (87 – 90)
Adequate prenatal care (>5 visits / care initiated by 2nd trimester)	87% (85 – 90)	92% (90 – 94)	94% (93 – 96)	97% (96 – 99)
Mom smoked during pregnancy	20% (19 – 21)	16% (15 – 17)	11% (11 – 12)	2% (1 – 2)

Source: Birth certificates, Center for Health Statistics, Public Health Division, 2016

The majority of deliveries among teen moms were paid for by Medicaid.

Insurance payer among births to mothers under 18, Oregon			
Demographics	**Medicaid/ OHP**	**Private insurance**	**Self-pay**
Births to moms 15 – 17 years by payment method	76% (68 – 84)	22% (18 – 26)	0.6% (0.1 – 2)**

Source: Birth certificates, Center for Health Statistics, Public Health Division, 2016
*** This rate is based on five or fewer events and should be interpreted with caution.*

People who identify as lesbian, gay, bisexual, or gender non-conforming

There are limited data about the health status and health needs of people who identify as lesbian, gay, bisexual or transgender (LGBT). In 2011, the Institute of Medicine issued a report stating: "Researchers need more data about the demographics of [LGBT] populations, improved methods for collecting and analyzing data, and an increased participation of sexual and gender minorities in research."

The U.S. Census Bureau does not collect sexual or gender identity data on individuals.* Data on Oregonians who identify as LGBT come from surveys: primarily, the adult Behavior Risk Factor Surveillance System (BRFSS), and in youth, the Oregon Healthy Teens (OHT) survey. In 2017, the OHT answer categories for gender included transgender, gender fluid, and other nonbinary answers. These surveys indicate that 4% of adult men, 6% of adult women, 8% of 11th grade boys, and 15% of 11th grade girls in Oregon identify as LGB or questioning. About 6% of 11th graders reported nonbinary or multiple gender answers, and only 0.3% responded that they did not understand the question. Among gender non-conforming youth, 64% identify as LGB or questioning.

* However, Census does generate state-level preferred estimates for same-sex couples. These data are, by definition, an undercount of LGB people and tell us nothing about the number of transgender people, but show that there are about 650,000 same-sex couples in the U.S. (5.5/1,000 households); in Oregon, there are about 12,000 same-sex couples (7.7/1,000 households).

Sexual orientation among adults and 11th graders, Oregon					
Sexual Orientation	**Adult, men**	**Adult, women**	**11th grade, boys**	**11th grade, girls**	**11th grade gender non-conforming**
Heterosexual	96%	94%	92%	85%	36%
Lesbian and Gay	2%	2%	2%	1%	9%
Bisexual	2%	4%	4%	11%	15%
Questioning**	NA	NA	2%	3%	40%

Source: Oregon BRFSS, 2013 – 2016 and Oregon Healthy Teens, 2017
*** For youth, "Questioning" includes those who answered "not sure" as well as "something else."*

A 2016 report from the Williams Institute used BRFSS data from other states to generate national and state-level estimates for the transgender adult population, finding that 0.6% of U.S. adults (about 1.4 million individuals) and 0.65% Oregon adults (about 20,000) identify as transgender. In the 2017 OHT, 0.9% of 11th graders identified as transgender.

Additional data on LGBT, and nonbinary/gender non-conforming adults in the Portland metropolitan area were gathered in a 2009 survey*, called Speak Out, conducted with more than 800 individuals who self-identified as LGBT, queer, gender queer, or intersex. Although it used a convenience sample, the large number of individuals who participated and the multiple sexual orientation and gender options that were available make it a helpful supplementary data source.

Existing data show that LGBT individuals report a number of risk factors for poor health; some of these are similar to heterosexual and gender binary individuals, while others appear to be elevated among LGBT individuals. Like other minority communities in the U.S. and Oregon, mental health issues and experiences of violence and trauma are prevalent among LGBT individuals, and rates appear to be higher than among non-LGBT people.

* https://multco.us/sites/default/files/health/documents/speakout_survey_2009.pdf

Disparities in mental health and experiences of childhood abuse among adults

Adult Oregonians identifying as bisexual reported more frequent mental distress than their lesbian or gay and straight counterparts (by gender). Women who identify as bisexual and men who identify as gay were most likely to report physical and sexual abuse during childhood.*

Abuse experienced by gay and bisexual identified adults, Oregon

Type of abuse	Male, gay	Male, bisexual	Male, straight	Female, lesbian	Female, bisexual	Female, straight
Frequent mental distress (>14 days in last 30)	15% (11 – 20)	21% (15 – 28)	11% (10 – 11)	23% (18 – 30)	32% (27 – 38)	14% (13 – 15)
Physically abused during childhood	42% (29 – 55)	30% (18 – 46)	21% (20 – 23)	29% (18 – 43)	43% (32 – 54)	22% (20 – 24)
Sexually abused during childhood	27% (16 – 41)	20% (11 – 35)**	6% (6 – 8)	32% (20 – 46)	40% (30 – 51)	17% (16 – 18)

Source: Oregon BRFSS, 2013 – 2016

*** Estimate may be statistically unreliable and should be interpreted with caution.*

Among Speak Out Survey respondents, there were high rates of diagnosed mental health conditions like depression (56%), anxiety (50%), and post-traumatic stress (21%) among respondents overall, and transgender respondents reported significantly higher rates of depression (72%) compared to other participants. Notably, participants who received more social support growing up were less likely to report depression. Similar to BRFSS findings, experiences of violence, including intimate partner violence and childhood abuse, were also prevalent among Speak Out participants.

Disparities in mental health, bullying, and experiences of violence among youth

Among 11th graders, significantly fewer LGB youth reported good to excellent emotional health, and significantly more reported feelings of hopelessness and suicide attempts. LGB youth were also far more likely to experience violence, bullying, physical and sexual abuse, and unmet needs for mental health care. These large differences between heterosexual and non-heterosexual youth exist for both boys and girls, as well as gender non-conforming youth.

* These patterns remained whether data were age-adjusted or not.

Emotional health, bullying, violence, and abuse among gay and bisexual identified 11th graders, Oregon						
Demographics	**Boys, gay or bisexual**	**Boys, straight**	**Girls, lesbian or bisexual**	**Girls, straight**	**Gender non-con-forming, LGB**	**Gender non-con-forming, straight**
Mental health						
Good to excellent emotional health	47% (38 – 55)	79% (77 – 81)	30% (26 – 36)	64% (62 – 67)	29% (21 – 39)	63% (54 – 71)
Positive youth development benchmark	43% (36 – 52)	65% (62 – 69)	33% (28 – 39)	60% (56 – 64)	30% (20 – 43)	47% (37 – 57)
Feeling hopeless >2 weeks in past year	44% (34 – 55)	20% (18 – 22)	62% (57 – 66)	35% (33 – 39)	71% (57 – 81)	35% (27 – 43)
Suicide attempt in past year	13% (7 – 22)	3% (3 – 4)	22% (18 – 26)	6% (5 – 8)	22% (14 – 33)	10%** (5 – 21)
Unmet mental health care needs	36% (26 – 46)	11% (10 – 13)	51% (44 – 57)	25% (23 – 28)	60% (50 – 69)	18% (11 – 28)
Bullying						
Bullied at school past 30 days	33% (25 – 43)	14% (12 – 15)	39% (34 – 45)	22% (20 – 24)	43% (31 – 56)	26% (16 – 38)
Cyberbullied past 30 days	15% (10 – 22)	7% (6 – 8)	18% (14 – 24)	13% (11 – 14)	21% (14 – 31)	16% (9 – 27)
Violence						
Hit or slapped by girlfriend or boyfriend	4%** (2 – 7)	3% (2 – 4)	7% (5 – 11)	3% (3 – 4)	7%** (3 – 15)	6%** (3 – 13)
Pressured to have sex	9% (5 – 14)	4% (3 – 5)	35% (31 – 40)	20% (18 – 22)	32% (20 – 47)	9% (6 – 15)
Abuse						
Hit or hurt by parent or adult in home	32% (24 – 41)	18% (16 – 20)	39% (33 – 44)	19% (17 – 21)	47% (36 – 59)	34% (25 – 45)
Sexual contact with adult	9% (6 – 14)	2% (2 – 3)	23% (17 – 30)	9% (8 – 11)	19% (11 – 32)	6%** (3 – 11)

Source: Oregon Healthy Teens, 2017

*** Estimate may be statistically unreliable and should be interpreted with caution.*

As noted, data on transgender or gender non-conforming youth in Oregon were first collected in 2017. The 2015 – 2016 California Health Interview Survey, which collected data from 1,600 households, found that 27% of California youth ages 12 – 17 (almost 800,000 youth) identified as gender non-conforming. The survey found that gender non-conforming youth were significantly more likely to experience psychological distress compared to gender-conforming peers but found no differences in lifetime suicidal thoughts or suicide attempts between the two groups.

The California findings related to suicide differ from previous research. The California study co-authors suggest that the variation may be due to sample size limitations or may reflect the state's supportive policies for gender non-conforming people. California and Oregon are among the 16 states that prohibit discrimination based on gender identity or gender expression.

The 2017 OHT survey results show a smaller proportion of youth identifying as gender non-conforming than in the California study. The Oregon data also indicate that when both gender and sexual orientation are considered, the pattern for gender non-conforming youth is most similar to that of girls: LGB girls and LGB gender non-conforming youth have a higher prevalence for mental health, bullying and violence indicators than their straight counterparts. In addition, for many of these indicators, LGB girls and gender non-conforming youth fare worse than either straight or gay and bisexual boys.

People who live in rural or frontier areas

As in much of the United States, health disparities exist between populations that live in urban, rural and frontier areas. In this report, these areas are determined at the zip code or county level (depending on availability of data): urban less than 10 miles from a population center greater than 40,000; rural greater than 10 miles from a population center greater than 40,000; and frontier = density of less than 6 per square mile. In 2016 in Oregon, 59% of adults lived in urban areas, 33% in rural and 3% in frontier.

Social determinants of health

Oregonians living in rural and frontier areas tend to have lower levels of education and experience more economic disadvantage than those living in urban areas. A higher percentage of youth living in rural and frontier areas participate in the free and reduced lunch program. Adults living in rural and frontier areas are more likely to be living with a disability than those living in urban areas.

Educational outcomes, income, disability, and food insecurity among adults by geography, Oregon			
Demographics	**Urban**	**Rural**	**Frontier**
College graduate	34% (33 – 36)	19% (17 – 20)	16% (12 – 21)
Less than $20,000	15% (14 – 16)	19% (17 – 21)	19% (13 – 26)
Economic disadvantage (≤100% FPL/limited education)	19% (18 – 21)	26% (24 – 29)	30% (20 – 42)
Yes – reports one or more disabilities	23% (22 – 25)	29% (27 – 31)	34% (25 – 44)
Yes – household food insecurity	7% (7 – 9)	7% (6 – 8)	9% (5 – 15)

Source: Oregon BRFSS, 2016

Disability and food insecurity among 11th graders receiving free or reduced price lunch (FRPL), by geography, Oregon			
Demographics	**11th Grade, urban**	**11th Grade, rural**	**11th Grade, frontier**
Yes – FRPL participant	37% (32 – 42)	46% (38 – 53)	59% (55 – 62)
Yes – reports one or more disabilities	30% (28 – 32)	32% (30 – 35)	28% (24 – 33)
Yes – Household food insecurity	17% (16 – 19)	19% (17 – 20)	16% (12 – 20)

Source: Oregon Healthy Teens, 2017

Mortality

People living in rural and frontier areas are dying at an earlier age than people living in urban areas, as demonstrated by higher rates of years of potential life lost before age 75 years.

Years of potential life lost before age 75 by geography, Oregon			
Demographics	**Urban**	**Rural**	**Frontier**
YPLL before age 75 per 100,000 (95% CIs)	5,948 (5,920 – 5,975)	8,437 (8,371 – 8,503)	8,187 (7,993 – 8,381)

Source: Oregon Death Certificate data and National Center for Health Statistics, 2016

By specific cause of death, suicide and unintentional injury death rates were highest in frontier areas, followed by rural and urban.

Suicide and unintentional injury death rates among adults by geography, Oregon			
Demographics	**Urban**	**Rural**	**Frontier**
Suicide and unintended injuries rate per 100,000 (95% CIs)	17 (15 – 18)	26 (23 – 30)	27 (18 – 40)
Unintentional injuries** (95% CIs)	48 (45 – 50)	64 (59 – 70)	70 (54 – 89)

Source: Oregon Death Certificate data and National Center for Health Statistics, 2016
***Includes falls, motor vehicle crashes, poisoning, suffocation, drowning, fires, firearms, and other mechanisms of accidental injury*

Chronic conditions

The prevalence of chronic conditions varied by urban, rural and frontier areas in Oregon. People living in rural and frontier areas had higher rates of arthritis, diabetes, cardiovascular disease, obesity, and high blood pressure than those in urban areas.

Chronic conditions among adults by geography, Oregon

Chronic conditions	Urban	Rural	Frontier
Arthritis	24% (23 – 26)	32% (30 – 34)	36% (28 – 44)
Diabetes	8% (7 – 9)	12% (11 – 14)	9% (5 – 14)
Cardiovascular disease	7% (6 – 8)	10% (9 – 12)	15% (10 – 23)
High blood pressure	27% (25 – 28)	37% (34 – 39)	43% (33 – 54)
Obese or morbidly obese	27% (26 – 29)	33% (31 – 35)	29% (22 – 38)

Source: Oregon BRFSS, 2016
Note: High blood pressure data is from 2015

Health behaviors

The behavioral factors that increase the risk of many chronic diseases include: smoking, lack of physical activity and poor nutrition, and alcohol/substance use. While binge drinking was highest in urban areas, smoking was highest in frontier areas.

Health behaviors among adults by geography, Oregon

Health behavior	Urban	Rural	Frontier
Binge drinking	18% (16 – 19)	15% (13 – 16)	12% (7 – 18)
Current cigarette smoking	14% (13 – 16)	19% (17 – 21)	23% (15 – 35)

Source: Oregon BRFSS, 2016

Communicable diseases

Rates of sexually transmitted infections were highest in urban areas, followed by rural and frontier.

Sexually transmitted infections per 100,000 adults by geography, Oregon			
Demographics	**Urban**	**Rural**	**Frontier**
Chlamydia	409 (405 – 412)	311 (305 – 316)	288 (272 – 303)
Gonorrhea	74 (72 – 75)	40 (38 – 42)	29 (24 – 33)
HIV	7 (6 – 7)	3 (2 – 3)	1 (0.5 – 3)
Syphilis	14 (13 – 14)	4 (3 – 5)	2 (1 – 3)

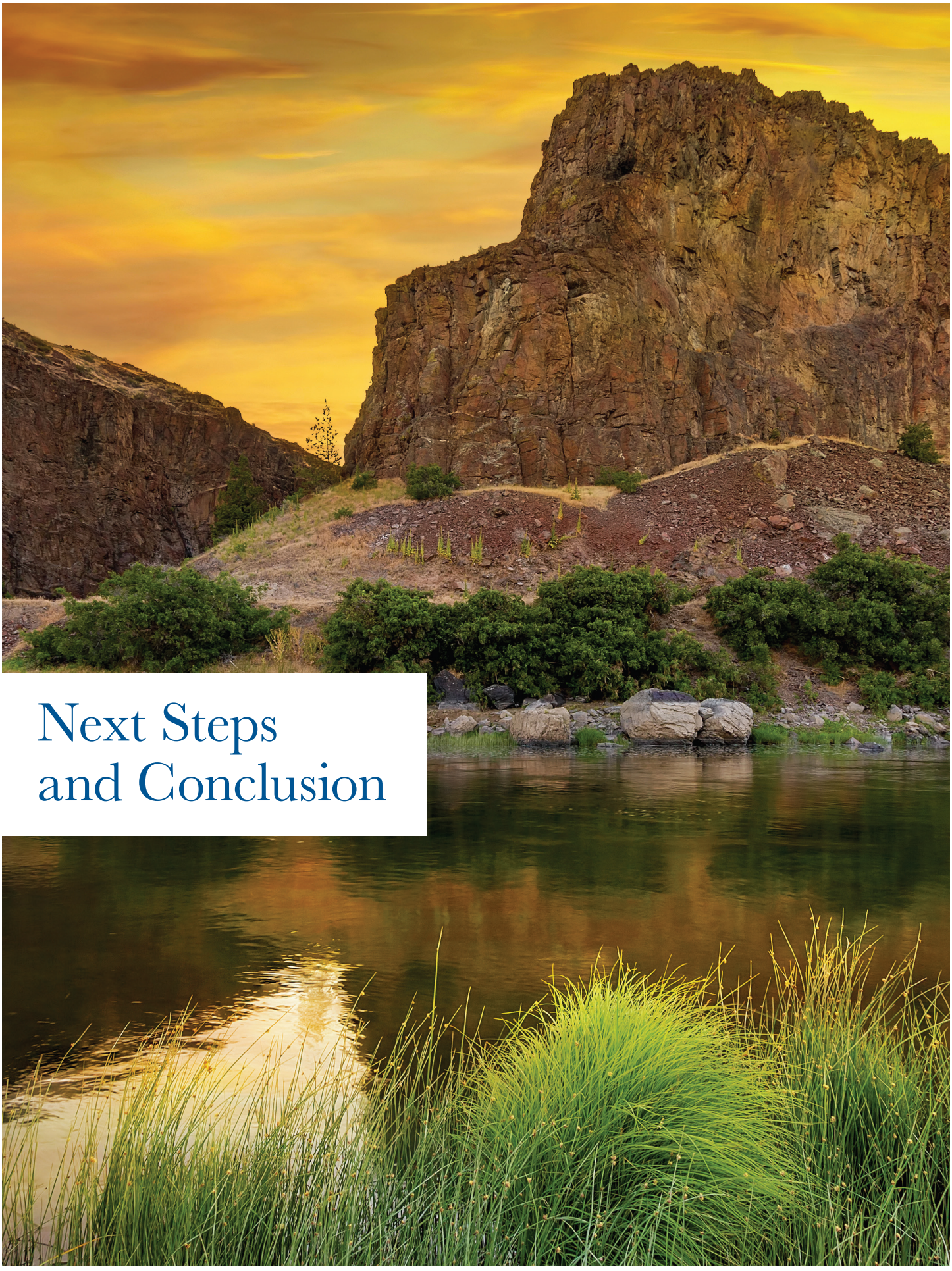
Source: Oregon Reportable Diseases Database, 2016

Access to clinical preventive services

Medical insurance coverage was similar among Oregon adults living in all areas, while those living in frontier areas were the least likely to have a usual health care provider. Those living in urban areas were more likely to have had their teeth cleaned than those living in rural and frontier areas.

Access to health care services among adults by geography, Oregon			
Health Care Access	**Urban**	**Rural**	**Frontier**
Have medical insurance coverage	92% (90 – 93)	91% (89 – 92)	91% (84 – 95)
Cost barriers to accessing health care in past 12 months	11% (10 – 12)	11% (9 – 12)	17% (9 – 29)
Have a usual health care provider	79% (78 – 81)	79% (77 – 81)	74% (64 – 82)
Have teeth cleaned in past 12 months	70% (69 – 72)	63% (61 – 65)	59% (50 – 68)

Source: Oregon BRFSS, 2016



Next Steps and Conclusion

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Next Steps

To develop the 2018 SHA, OHA-PHD used the Mobilizing Action through Planning and Partnership (MAPP) framework, as noted in the Introduction. The SHA was completed over the first three phases of this MAPP framework.

Next, the SHA will be used to develop the 2020 – 2024 State Health Improvement Plan (SHIP) (healthoregon.org/2020ship). The SHIP, in turn, will be developed and implemented over the second three phases of the MAPP framework. Using the data-driven portrait of health in Oregon that is captured in the SHA, a steering committee will work with communities to identify which strategic priorities the SHIP should address. As the advisory body for Oregon's governmental public health system, the Public Health Advisory Board (PHAB) (https://bit.ly/2J8q46R) will contribute to and oversee the SHIP.

Conclusion

When it comes to population health, Oregon has many strengths but also faces significant challenges to achieving lifelong health for everyone. The 2018 SHA represents an important step in developing a comprehensive understanding of the health of our state. While many reports on specific diseases and risk behaviors exist, the SHA is unique as a compilation of the most important indicators of health in a single report. The SHA lays the groundwork for prioritizing efforts to improve the health of people in Oregon in the next SHIP.

Improving the overall health of Oregon is not a task for the public health or health care systems alone; rather, it will require state and local public health authorities to work with social service, transportation, planning, education, and economic development agencies; private business leaders, not-for-profit organizations, academic institutions, policymakers, tribal officials, and the public to address Oregon's health challenges.

The Oregon Health Policy Board's Action Plan for Health (https://bit.ly/2zovVVU), which reflects the SHIP goals for population health in Oregon, calls for a public-health approach that uses evidence-based approaches to work across these sectors to address the social determinants of health and health equity. Health, after all, is everybody's business.

With this 2018 SHA, and the Oregon Legislature's support for public health modernization, the stage is now set for the 2020 – 2024 SHIP to effectively address the health needs of people in Oregon. Through collective effort and sustained engagement with communities across the state, Oregon can become a place where everyone achieves optimal health across the lifespan, regardless of race, ethnicity, ability, gender, sexual orientation, socioeconomic status, nationality, or geography.

Primary Data Sources

Abortion Records (https://bit.ly/2KZnipa): The Center for Health Statistics collects data on all induced abortions performed in Oregon. These data are used primarily to calculate teen pregnancy rates as the sum of births and abortions.

Limitations: The data constitute events associated with the place of occurrence rather than the "residence data" used in estimating births because many abortions obtained out of state by Oregon residents are not reported to Oregon's Center for Health Statistics.

Air Quality System (AQS) Monitoring Data (https://www.epa.gov/aqs): contains ambient air pollution data collected by the Environmental Protection Agency (EPA) and state, local, and tribal air-pollution-control agencies from thousands of monitors. AQS also contains meteorological data, descriptive information about each monitoring station (including its geographic location and its operator), and data quality assurance/quality control information.

Limitations: There are gaps in Oregon's monitoring network, particularly in large populated areas where there are not enough fine particulate (PM2.5) monitors.

ALERT Immunization Registry (https://bit.ly/2J7h7KW): ALERT is a statewide immunization information system, developed to achieve complete and timely immunization of all children ages 0 to 18 years. ALERT collects data from public and private health care providers who administer the immunizations.

Limitations: ALERT is based on mandatory reporting from pharmacists and for state-supplied vaccines; otherwise, reporting is voluntary. Data completeness is high but may vary by subpopulation, age, or region. High data capture for 0 – 18 and increasing capture among adult population. SES, race, and ethnicity are not commonly reported by immunization providers.

American Community Survey (ACS) (https://www.census.gov/programs-surveys/acs/): The ACS is an ongoing survey of the Census Bureau that provides data every year from a percentage of the population.

Limitations: People without legal immigration status are likely under-represented.

Behavioral Risk Factor Surveillance System (BRFSS) (https://bit.ly/2m2354a): The BRFSS is a random digit-dialed telephone survey that has been conducted continuously among non-institutionalized Oregon adults since 1988. The objective of the BRFSS is to collect uniform, state-specific data on preventive health practices and risk

behaviors that are linked to chronic diseases, injuries, and preventable infectious diseases in the adult population. Factors assessed by the BRFSS include tobacco use, physical activity, dietary practices, safety-belt use, and use of cancer screening services, among others.

In order to increase the sample size of adults from American Indian and Alaska Native, African American, Asian and Pacific Islander subpopulations in Oregon, periodic oversample surveys have been conducted in the BRFSS survey administration. The oversample data are combined with annual data and weighted to better reflect these populations. The most recent oversample was conducted between 2015 and 2017. Preliminary estimates 2015 – 2016 from that project are included in the SHA, but those estimates may change when 2017 data are included. When age-adjusted rates are calculated, the 2000 U.S. population is used as the standard.

Limitations: BRFSS is limited to non-institutionalized adult Oregon residents with a land line and/or cell phone service. Declining response rates for both landline and cell phones are an ongoing concern. BRFSS is not as representative of adults who are homeless, who do not speak English or Spanish, who are institutionalized or incarcerated, or who have limited access to phone service.

Bureau of Labor Statistics (https://www.bls.gov/home.htm): Federal source for employment and labor statistics.

Cardiac Arrest Registry to Enhance Survival (CARES) (https://mycares.net/sitepages/aboutcares.jsp): CARES was developed to help communities determine standard outcome measures for out-of-hospital cardiac arrest that occurs locally, allowing for quality improvement efforts to improve care and increase survival. CARES is a secure, Web-based data management system into which participating communities enter local data and generate their own reports. Communities can compare their EMS system performance to de-identified aggregate statistics at the local, state, or national level and discover promising practices that could improve emergency cardiac care.

CDC Wonder (https://wonder.cdc.gov/): A database that provides data collected by the National Center for Health Statistics (NCHS) for statistical reporting and analysis of deaths from specific diseases.

Department of Corrections (https://bit.ly/2N2xhYq): Data on the incarcerated population in Oregon are available from the Oregon Department of Corrections, Research and Evaluation Unit. The Research and Evaluation Unit provides information about offender populations, program performance, and policy impact.

Drinking Water Data Online (https://yourwater.oregon.gov/): Drinking Water Data Online provides information about public water systems in Oregon, including coliform testing, chemical testing, contacts, violations, enforcements, public notices, and basic system information.

Limitations: Approximately 23% of Oregonians rely on domestic wells, or private wells, as their primary source of potable water. Private well owners are not obligated to

report results.

Environmental Public Health Tracking (EPHT) (https://epht.oregon.gov/Index.aspx): EPHT maintains a public data portal where users can query health outcomes, environmental quality, and environmental justice indicators by geography.

Limitations: EPHT depends on other programs or agencies making data available to publish on its data portal. A major limitation of keeping this surveillance system up to date is the availability of OIS resources. The current system uses out-of-date technology, and the platform is unstable and prone to bugs. OIS resources are costly and time-consuming.

Health Care Workforce Reporting Program (https://bit.ly/2NDhi3T): The Health Care Workforce Reporting Program was created to collaborate with health-profession licensing boards to collect health care workforce data via the boards' licensing renewal process.

Map the Meal Gap, Feeding America (http://map.feedingamerica.org/): Map the Meal Gap generates two types of community-level data: 1) county-level food insecurity and estimates of food insecurity among children, by income categories and 2) an estimate of the food-budget shortfalls that food-insecure people experience.

Lead-poisoning database (https://bit.ly/2J7niyu): The lead-poisoning database provides a listing of blood-lead test results.

Limitations: Reporting of all blood-lead test results is mandatory. However, labs and providers may lack of awareness of reporting requirements. Non-compliance with reporting rules also occurs. Race and ethnicity are frequently missed; blood-lead test results are required but not always shared.

National Healthcare Safety Network (NHSN) (https://www.cdc.gov/nhsn/index.html): The CDC's National Healthcare Safety Network is the nation's most widely-used system for tracking health care-associated infections. NHSN provides facilities, states, regions, and the nation with data needed to identify problem areas, measure the progress of prevention efforts, and ultimately eliminate health-care-associated infections.

National Survey of Children's Health (NSCH) (http://www.childhealthdata.org/learn/NSCH): The National Survey of Children's Health provides rich data on multiple, intersecting aspects of children's lives – including physical and mental health, access to quality health care, and the child's family, neighborhood, school, and social context.

Oregon Violent Death Reporting System (ORVDRS) (https://bit.ly/2zo95O7): The Oregon Violent Death Reporting System (ORVDRS) is a statewide, active public-health-surveillance system that collects detailed information on all homicides, suicides, deaths of undetermined intent, deaths resulting from legal intervention, and deaths related to unintentional firearm injuries. The goals of this system are to generate public health information on violent deaths and to work with partners to develop prevention strategies.

Limitations: It is a challenge to capture all of the details and circumstances surrounding a violent death because of the lack of standardized questionnaires and investigation protocols, limited witnesses, and witnesses who might not recognize some mental-health problems among people who died by suicide. Data are collected and abstracted from multiple agencies, making it difficult to collect all data and requiring a lot of time to abstract data.

Oregon Department of Education (ODE) (https://bit.ly/2KLCtTO): The Oregon Department of Education provides data on a variety of topics including assessments, career and technical education, annual performance progress reports, and report cards by school and district.

Oregon Emerging Infections Program (https://bit.ly/2ueafWs): The Oregon Emerging Infections Program provides population-based surveillance for infections important to public health. These surveillance data are used to generate reliable estimates of the incidence of these infections and provide the starting point for further exploration of risk factors, spectrum of disease, and better strategies for prevention and control.

Oregon Health Insurance Survey (OHIS) (https://bit.ly/2NDqLbK): The Oregon Health Insurance Survey is an important source of information about health care coverage in the state. The survey provides detailed information about the effects of health-system reform on health care coverage, access to care, and use of coverage.

Limitations: Survey data provides contextual information around health care in the state. It is not as reliable for program enrollment counts as administrative data. It is not an annual source of data, but it is conducted every two years. Another limitation is bias in the survey from the look-back period and response bias due to respondents answering for other members of their household.

Oregon Healthy Teens Survey (OHT) (https://bit.ly/2KX0R3V): OHT is Oregon's key source for monitoring the health and well-being of adolescents. An anonymous and voluntary research-based survey, OHT is conducted among 8th and 11th graders statewide. The OHT survey incorporates two youth surveys that preceded it, the YRBS and the Student Drug Use Survey. The survey assessed behavioral risk factors among Oregon high school students (grades 9 through 12) and includes questions about safe driving and bicycling, weapon carrying and violence, tobacco and alcohol use, other drug use, sexual activity and pregnancy, eating behaviors, nutrition, physical activity, and access to health care, including use of school-based health centers.

Limitations: The survey samples 8th and 11th graders in public schools. Sampling frame excludes virtual/online schools, charter schools outside of a public school district, those without a brick-and-mortar presence, alternative/non-traditional schools with non-standard hours (evenings, weekends), rehabilitation services, etc. Some districts (Beaverton, Salem-Keizer, and those in Josephine County) historically do not participate in the OHT Survey. Responses are missing from adolescents who are not in school.

Hospital Discharge Index (http://www.oregon.gov/oha/hpa/analytics/pages/index.aspx): The hospital inpatient-discharge dataset, available from OHA's Office of Health Analytics, includes patient demographics, admission and discharge information, characteristics of the treatment provided, and the nature of each discharge from Oregon hospitals.

Oregon Reportable Disease Database (ORPHEUS) (https://bit.ly/2m1soTQ): Orpheus is an integrated electronic disease-surveillance system intended for local and state public health epidemiologists and disease investigators to efficiently manage communicable disease reports.

Limitations: The Oregon Reportable Disease database includes cases of diagnosed disease. This requires that the patient develop symptoms, seek medical care, acquire a laboratory test, which then gets electronically reported. The various reportable diseases may be under-counted if the patient doesn't seek care, or no laboratory test was obtained.

Oregon SMILE Survey (https://bit.ly/2m33ByE): This survey is an assessment that presents the findings of oral screenings of students in first, second and third grades attending Oregon public schools. The survey is conducted every five years; the first survey was conducted in 2002. Using national Basic Screening Survey (BSS) criteria recommended by the CDC and Prevention and the Association of State and Territorial Dental Directors, specially-trained dental hygienists performed a brief and simple visual screening of each child's mouth. In addition, parents were invited to complete a questionnaire that included questions about the child's age, race and ethnicity, participation in the federal Free or Reduced Price Lunch (FRPL) Program, language spoken at home, gender, medical insurance, dental insurance, and time since last dental visit.

Limitations: Lowest level of analysis is regional. Frequency is limited by budget constraints to every five years. Age ranges are limited to six- to nine-year-olds. Grade, age, sex, and language spoken at home largely obtained by children directly. Race and ethnicity are identified by screeners.

Oregon State Cancer Registry (OSCaR) (https://bit.ly/2KTjXIf): The Oregon State Cancer Registry (OSCaR) is a population-based reporting system that collects and analyzes information about cancer cases occurring in Oregon. Reportable cases include all cancers except specific forms of common, curable skin cancer and in situ cervical cancers.

Limitations: It requires approximately two years to compile cancer data for a given year of diagnosis, which results in a two-year delay in data reporting. OSCaR does not conduct follow-up of reported patients, which results in incomplete information for some cases. Only includes data on those seeking care; lacks data on cancer prevalence.

Oregon Youth Authority (https://bit.ly/2NBVFRC): The Oregon Youth Authority provides statewide and county-specific data describing admissions to and releases from juvenile detention facilities.

Point-in-Time Count (https://bit.ly/2NDhSi5): The Point-in-Time Count attempts to count sheltered and unsheltered homeless people to provide a snapshot of homelessness. The count occurs every two years during the last ten days of January. Along with the total number of sheltered and unsheltered homeless people, information is gathered on a wide range of characteristics of the homeless population such as age, gender, race, ethnicity, veteran status, and disability status. Estimates are available at the county and state level.

Safe Drinking Water Information System (SDWIS) (https://bit.ly/2txhFpA): SDWIS is an EPA-provided database for managing public drinking-water-quality data.

Limitations: Concentration data is available for 91 currently regulated drinking water contaminants, reported by about 3,400 public water suppliers.

Approximately 23% of Oregonians rely on domestic wells, or private wells, as their primary source of potable water. Private well owners are not obligated to report results.

Vital Statistics (https://bit.ly/2KZnipa): Oregon law requires birth certificates for all live births. The Center for Health Statistics registers only those vital events occurring in Oregon. However, information on births that occur out of state to Oregon residents is also reported through an interstate exchange agreement. Data may be tabulated by residence (where the person lived) or by occurrence (where the event occurred). When age-adjusted rates are calculated, the 2000 U.S. population is used as the standard.

The SHA also uses information collected from death certificates. These data are used to examine trends in mortality and causes of death. Variables in the death certificate database include cause of death; decedent's identifying information; date and place of death; occupation of the decedent; whether the death was related to tobacco use; education of decedent; marital status of decedent; and county, place, and date of injury (if applicable).

Limitations: Limited to information on U.S. standard Certificate of Birth and that is Oregon-specific required by law.

Pregnancy Risk Assessment Monitoring System (PRAMS) (https://bit.ly/2KMss93): PRAMS is a population-based surveillance system that collects data on maternal attitudes and experiences prior to, during, and immediately after pregnancy for a sample of Oregon women. The sample data are analyzed in a way that allows findings to be applied to all Oregon women who have recently had a baby. PRAMS-2 is conducted when the child reaches two years old.

Limitations: To be PRAMS-eligible, the mother has to be Oregon resident who gave birth in Oregon. In cases of multiple births, the mother is only included in the sampling frame once. Mothers who have multiple births more than triplets are not included. If a baby will be adopted, then the mother is excluded from the sampling frame. Over sample by race and ethnicity; response rates 45% to 70%.

Uniform Crime Reporting Statistics (UCR) (https://www.ucrdatatool.gov/): The UCR Program collects statistics on violent crime (murder and manslaughter, rape, robbery, and aggravated assault) and property crime (burglary, larceny-theft, and motor vehicle theft).

Water Fluoridation Reporting System (WFRS) (https://www.cdc.gov/fluoridation/data-tools/reporting-system.html): Online tool that helps states manage the quality of their water fluoridation programs. WFRS information is also the basis for national surveillance reports that describe the percentage of the U.S. population on community water systems who receive optimally-fluoridated drinking water. The system was developed by CDC in partnership with the Association of State and Territorial Dental Directors (ASTDD).

Appendix A: Community Health Assessment Themes

Community health assessments conducted by CCOs, local public health authorities, and hospitals were also reviewed. By and large, themes identified in community assessments were also identified within statewide assessment efforts. Links to local assessments and health improvement plans are available at https://bit.ly/2u7yWVp and may be useful for other agencies working to address key health issues in Oregon.

Region	Date and Source	Themes
Eastern Oregon (Baker, Gilliam, Grant, Harney, Klamath, Lake, Malheur, Morrow, Sherman, Umatilla, Union, Wallowa, Wheeler)	2015 (Healthy Klamath) 2016 (Eastern Oregon CCO)	• Maternal and child health • Social determinants of health • Built environment • Mental health • Oral health • Social determinants of health • Access to services • Obesity • Tobacco use • Alcohol and drug use
NW Coastal (Clatsop, Columbia, Tillamook)	2014 (Columbia Pacific CCO)	• Alcohol and drug addiction • Obesity • High cost of care/lack of insurance
Portland Metro (Washington, Multnomah, Clackamas)	2016 (Health Share CCO) 2016 (FamilyCare CCO) 2016 (Health Share/ FamilyCare CCO)	• Social determinants of health (housing, unemployment, etc.) • Alcohol and drug use • Healthy eating • Access to care • Health equity
Central Willamette (Linn, Benton, Lincoln)	2015 (Intercommunity Health Network CCO)	• Access to health care (includes housing and culturally-appropriate services) • Behavioral health • Child health (includes injuries, breastfeeding) • Chronic disease (includes asthma, physical activity/healthy eating, and tobacco use and exposure) • Maternal health (includes unplanned pregnancies, pre-conception/pre-natal care, postpartum care/support)

Region	Date and Source	Themes
Southern Oregon (Curry, Josephine, Jackson, Coos, Douglas)	2013 (Western Oregon Advanced Health/All Care CCOs) 2013 (PrimaryHealth/AllCare CCO) 2013 (Jackson Care CCO/ AllCare CCO/PrimaryHealth 2013 (Umpqua Health Alliance) 2013 (Western Oregon Advanced Health)	• Access to quality health services • Mental health and addictions • Obesity, healthy eating, active living • Aging issues • Oral health • Vision health • Management of chronic illnesses • Falls prevention • Maternal and child health • Tobacco use • Social determinants of health (housing, education, transportation, poverty) • Health literacy
Lane	2015 (Trillium CCO)	• Alcohol and drug abuse • Housing • Access to health care • Vulnerable populations • Access to healthy food • Mental health • Poverty and homelessness
Polk, Marion	2013 (Willamette Valley Community Health CCO)	• Access to care • Prevention/screening/treatment for people with history of trauma • Children with special needs • Homelessness • Transportation
Yamhill	2014 (Yamhill CCO)	• Chronic conditions • Oral health • Increasing capacity and innovation • Behavioral health
Central Oregon (Crook, Deschutes, Jefferson)	2016 (Central Oregon Health Council)	• Behavioral health (identification and awareness, substance use, and chronic pain) • Cardiovascular disease • Diabetes • Oral health • Reproductive and maternal child health • Social determinants of health (education and health, housing)

Region	Date and Source	Themes
Columbia River Gorge (Hood River, Wasco)	2016 (Pacific Source Columbia Gorge CCO)	• Food and housing security • Lack of insurance • Oral health • Transportation • Poverty • Impact of trauma • Child health needs

Appendix B: State Population Health Indicators

Social Determinants of Health

Topic	Indicator	Data Source
Economics	Income inequality	American Community Survey
	Unemployment rates	Bureau of Labor Statistics
	Poverty	American Community Survey
Education	Chronic school absenteeism	Oregon Department of Education, Oregon Healthy Teens Survey
	Educational attainment	Oregon Department of Education, American Community Survey
Food Insecurity	Food insecurity	Map the Meal Gap
Housing	Rent burden	American Community Survey
	Homelessness	Oregon Housing and Community Services Point-in-Time Count and Oregon Department of Education
Safety/Crime	Violent crime	Uniform Crime Reporting Statistics
	Intimate partner violence	Oregon Violent Death Reporting System
Trauma and resiliency	ACEs among children and adults	Behavioral Risk Factor Surveillance System and National Survey of Children's Health
Incarceration	Incarceration	Oregon Department of Corrections and Oregon Youth Authority
Language	Linguistic isolation	American Community Survey
Social cohesion	Residential segregation	American Community Survey
Caregivers	Caregiver health	Behavioral Risk Factor Surveillance System

Environmental Health

Topic	Indicator	Data Source
Natural Environment	Air quality	Air Quality System Monitoring Data
Built Environment	Drinking water	Safe Drinking Water Information System
	Childhood lead exposure	Oregon Lead Poisoning Prevention Program
	Water fluoridation	CDC Water Fluoridation Reporting System
	Active transportation	American Community Survey
	Secondhand smoke	Behavioral Risk Factor Surveillance System and Oregon Healthy Teens Survey
Occupational Health	Work-related injury and illness	Bureau of Labor Statistics
	Work-related deaths	Bureau of Labor Statistics
	Adult lead exposure	Oregon Lead Poisoning Prevention Program

Prevention and Health Promotion

Topic	Indicator	Data Source
Overall Health	Overall health	Behavioral Risk Factor Surveillance System
Maternal and Child health	Infant breastfeeding	Pregnancy Risk Assessment Monitoring System
	Infant mortality	Linked Birth and Death Certificates
	Flourishing	National Survey of Children's Health
	Teen pregnancy and birth	Birth Certificates and Abortion Records
Diet and Physical Activity	Physical inactivity	Behavioral Risk Factor Surveillance System and Oregon Healthy Teens Survey
	Soda consumption	Behavioral Risk Factor Surveillance System and Oregon Healthy Teens Survey
	Obesity prevalence	Behavioral Risk Factor Surveillance System, Oregon Healthy Teens Survey, and National Survey of Children's Health
Tobacco, Alcohol and Drugs	Binge drinking	Behavioral Risk Factor Surveillance System and Oregon Healthy Teen Survey
	Marijuana use	Behavioral Risk Factor Surveillance System and Oregon Healthy Teens Survey
	Tobacco use	Behavioral Risk Factor Surveillance System and Oregon Healthy Teens Survey
	Alcohol-related deaths	Death Certificates
	All drug-related overdose deaths	Death Certificates
	Opioid overdose deaths	Death Certificates

Topic	Indicator	Data Source
Mental Health	Suicide	Death Certificates
	Mental health	Behavioral Risk Factor Surveillance System and Oregon Healthy Teens Survey
Chronic Disease	Lung cancer	Oregon State Cancer Registry
	Heart disease	Hospital Discharge Data
	Asthma	Hospital Discharge Data
	Diabetes	Behavioral Risk Factor Surveillance System
Older adults	Falls among adults	Death Certificates and Hospital Discharge Data
Other causes of death	Firearm-related death	Death Certificates
	Motor vehicle occupant death	Death Certificates
	Premature death	Death Certificates
	Leading causes of death	Death Certificates

Access to Clinical Preventive Services

Topic	Indicator	Data Source
Health care providers per capita	Health care providers per capita	Office of Health Analytics Health Care Workforce Reporting Program
Health Insurance	Insurance status	Oregon Health Insurance Survey
Preventive Services	Colorectal screening	Behavioral Risk Factor Surveillance System and Oregon State Cancer Registry
	Dental visits	National Survey of Children's Health
	Prenatal care	Birth Certificates
	Childhood developmental screening	National Survey of Children's Health
	Effective contraceptive use	Behavioral Risk Factor Surveillance System
	Immunizations	ALERT Immunization Information System
Emergency Medical Services	Out-of-hospital cardiac arrest	Cardiac Arrest Registry to Enhance Survival (CARES)

Communicable Disease

Topic	Indicator	Data Source
Food-borne	E. coli	ORPHEUS
Health care-acquired	Clostridium difficile	National Healthcare Safety Network
Hepatitis	Hepatitis C deaths	Death Certificates
HIV/AIDS	HIV incidence	ORPHEUS
Sexually Transmitted Infections	Syphilis	ORPHEUS
	Gonorrhea	ORPHEUS
Respiratory	Influenza	Emerging Infections Program
Tuberculosis	Tuberculosis	ORPHEUS
Vaccine-preventable	Pertussis	ORPHEUS

Oregon Health Authority

PUBLIC HEALTH DIVISION
Office of the State Public Health Director

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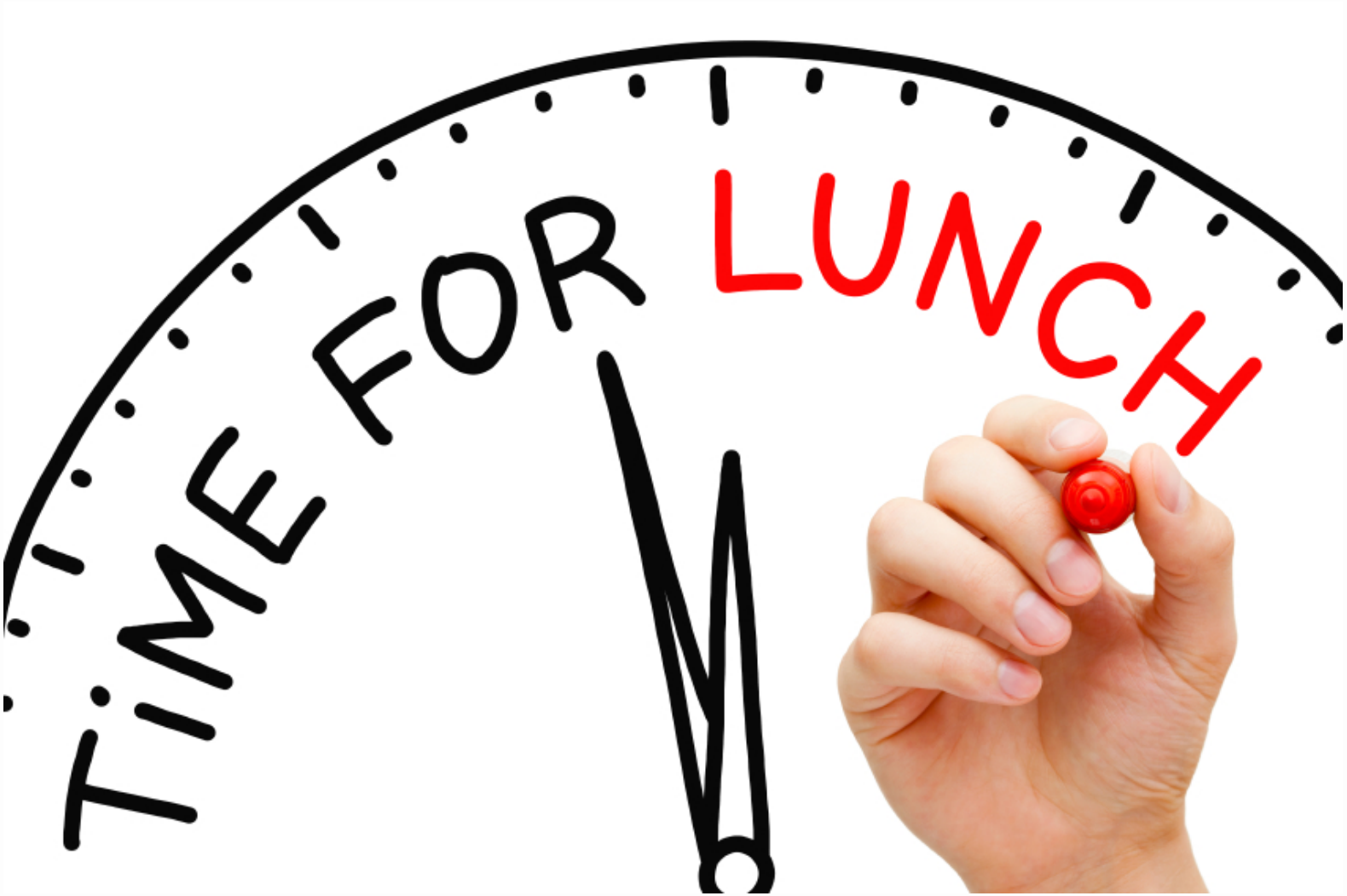
OHA 8186 (07/2018)

Identify strategic issues

- What issues must be addressed in order to achieve the vision?
- What disparities exist?
- What are the consequences of not addressing this issue?


TIME FOR LUNCH

Public Comment

Finalize strategic issues

- What issues must be addressed in order to achieve the vision?
- What disparities exist?
- What are the consequences of not addressing this issue?

Meeting Evaluation & Next Steps

Next Steps & Final Thoughts

-+/Delta on meeting

-Doodle poll will be sent out to schedule Partnership meeting #3 (February, 2019)

-Communities will prioritize the strategic issues. PartnerSHIP members can:

- Support mini-grantees by sharing information and attending events
- Disseminate surveys to your networks
- Identify other community groups who would like to provide input