American Indian & Alaska Native
Community Health Profile
OREGON

NORTHWEST PORTLAND AREA
INDIAN HEALTH BOARD
Indian Leadership for Indian Health

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Mission

The Northwest Portland Area Indian Health (NPAIHB) is a Tribally owned and operated non-profit organization serving the 43 federally recognized Tribes in the states of Idaho, Oregon, and Washington. Led by our Board of Directors, NPAIHB's mission is to "eliminate health disparities and improve the quality of life of American Indians and Alaska Natives by supporting Northwest Tribes in their delivery of culturally appropriate, high-quality health programs and services."

Acknowledgments

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Introduction

American Indians and Alaska Natives in the Pacific Northwest represent a vibrant array of cultures, histories, and resilient communities. Despite this vibrancy, they have endured centuries of colonization and broken promises, which continue to profoundly affect the health and well-being of Northwest Tribes. Shifting this narrative requires valid and reliable data. Unfortunately, Northwest Tribes have far too often faced significant challenges in accessing data, being accurately represented within datasets, and finding comprehensive indicators that reflect the full scope of their communities' experiences.

This report offers an overview of health conditions affecting American Indians and Alaska Natives at the statewide level in Oregon. Tribal leaders, staff, and communities can leverage this data to

- identify health priorities
- apply for grants
- guide program planning & resource allocation
- inform policy development
- prioritize research aimed at closing data gaps
- design targeted & culturally relevant interventions
- track health outcomes over time

Although this report addresses some issues related to data accessibility and exclusion of Indigenous people from data, further research and data collection are needed to explore protective factors within Tribal communities. These factors, which promote resilience and well-being, are essential for providing a fuller understanding of the strengths and lived experiences of Northwest Tribes.

While American Indians and Alaska Natives have demonstrated resilience for centuries, it is time they are seen as more than just resilient – they should be allowed to thrive and define their identities on their own terms, beyond the narrative of survival. One hope of this report is to help provide data that Tribal leaders, staff, and communities can use to continue to push for this shift.

Methodology

The Northwest Tribal Epidemiology Center (NWTEC) strives to use the most reliable and up-to-date data and methods available during analysis. However, these data and methods may change over time. As a result, some information in this report, such as rate estimates, may differ from other reports produced by NWTEC. These differences usually stem from updates in datasets or changes in population numbers used to calculate rates.

A unique aspect of NWTEC reports is the process of correcting for racial misclassification of American Indians and Alaska Natives (AI/AN). Through NWTEC's Improving Data and Enhancing Access (IDEA-NW) Project, the Northwest Tribal Registry is frequently linked with state datasets in order to identify Native individuals who may have been misclassified as a different race or ethnicity. AI/AN is also defined as AI/AN alone or in combination with another race or ethnicity. Because of this process and definition of AI/AN, the data in this report may differ from data published by state or federal agencies that do not make these race corrections or utilize the same definition of AI/AN.

To provide a comparison group, Non-Hispanic Whites (NHW) were included because they make up the majority of the population. Depending on data sources, the definition of White may include Non-Hispanic and Hispanic because of data limitations and is defined as White.

When possible, rates were adjusted for age using the US Standard 2000 population. Population numbers from 2000-2009 (intercensal bridged race estimates) and 2010-2020 (postcensal bridged race estimates) were used to calculate rates.

When applicable, 95% confidence intervals (CI) were included as lines around the top of column/bar graphs and as dotted lines on trend graphs to show the precision of rate estimates. However, due to small population sizes of some groups, the rates presented here may be less stable, as shown by wider confidence intervals. This means some changes in rate estimates may not represent true differences, so caution should be used when interpreting the data.

Methodology (continued)

For trends over time, the figures in this report display a 3-year rolling average along the horizontal axis. This means that each data point represents the average of three years to ensure greater statistical stability. For example, a data point may be labeled "2010-2013", or simply as the last year (2013) for space purposes.

In some cases, data was suppressed due to data sharing policies with state or federal partners, along with the need to protect individual privacy and confidentiality. Additionally, gender-related data was limited, as there wasn't enough information to include identities beyond male and female, such as Two-Spirit, non-binary, and transgender individuals. One hope for the future is that state and federal surveillance systems will invest more resources in collecting data on people outside the gender binary to better support their health and well-being.

Data sources in this report include the following:

- The U.S. Census Bureau conducts the Decennial Census every 10 years and the American Community Survey annually to gather information on population distribution, social, and economic factors.

- The Centers for Disease Control and Prevention (CDC) collects communicable disease surveillance data and CDC's National Center for HIV, Viral Hepatitis, Sexually Transmitted Diseases, & Tuberculosis Prevention has developed an interactive tool called AtlasPlus that provides customizable tables on communicable diseases.

- CDC's Behavioral Risk Factor Surveillance System (BRFSS) is an annual telephone survey that provides data on health-related conditions and behaviors.

- The Oregon State Cancer Registry includes information on demographics, cancer site incidence, and stage at diagnosis. This data source was linked to the Northwest Tribal Registry to correct race misclassification among AI/AN Oregon residents.

- Oregon death certificate data contain demographics and cause of death information of Oregon residents. This data source was linked to the Northwest Tribal Registry to correct race misclassification among AI/AN Oregon residents.

Oregon State Demographics

Demographics provide information on the age, gender, and geographic distribution of a population. Demographics also include data on social and economic factors that influence people's health, including income levels, educational attainment, and employment status. This information can be an empowering asset to Tribal and urban Indian communities for making informed decisions about their communities and understanding and addressing disparities.

American Indian/Alaska Natives (AI/AN) comprise about 4.4% of the population in the Northwestern states of Idaho, Oregon, and Washington. AI/AN in the Northwest are noticeably different from the general and Non-Hispanic White (NHW) populations. This section describes key demographic characteristics of AI/AN in Oregon and includes data on age distribution, geographic distribution, educational attainment, and economic indicators from the U.S. Census Bureau.

Population

Census Population Estimates

In 2020, there were 185,726 AI/AN living in Oregon. AI/AN represented about **4.4%** of the total state population (Table 1.1).

Table 1.1. Population by Race and Sex, 2020

	Female		Male		Total	
	Population	%	Population	%	Population	%
AI/AN	94,581	4.4	91,145	4.3	185,726	4.4
NHW	1,536,320	71.8	1,450,523	69.2	3,036,158	71.7
Other Races	508,855	23.8	555,832	26.5	1,015,372	24.0
All Races	2,139,756	100.0	2,097,500	100.0	4,237,256	100.0

Data Source: U.S. Census Bureau, 2020. Data Notes: Data are from the Decennial Census Table P12. AI/AN include people who identify as AI/AN alone or in combination with other races of both Hispanic and non-Hispanic ethnicity

Age Distribution

Fig. 1.1. Age distribution of AI/AN by sex, 2021

Fig. 1.2. Age distribution by sex for NHW, 2021
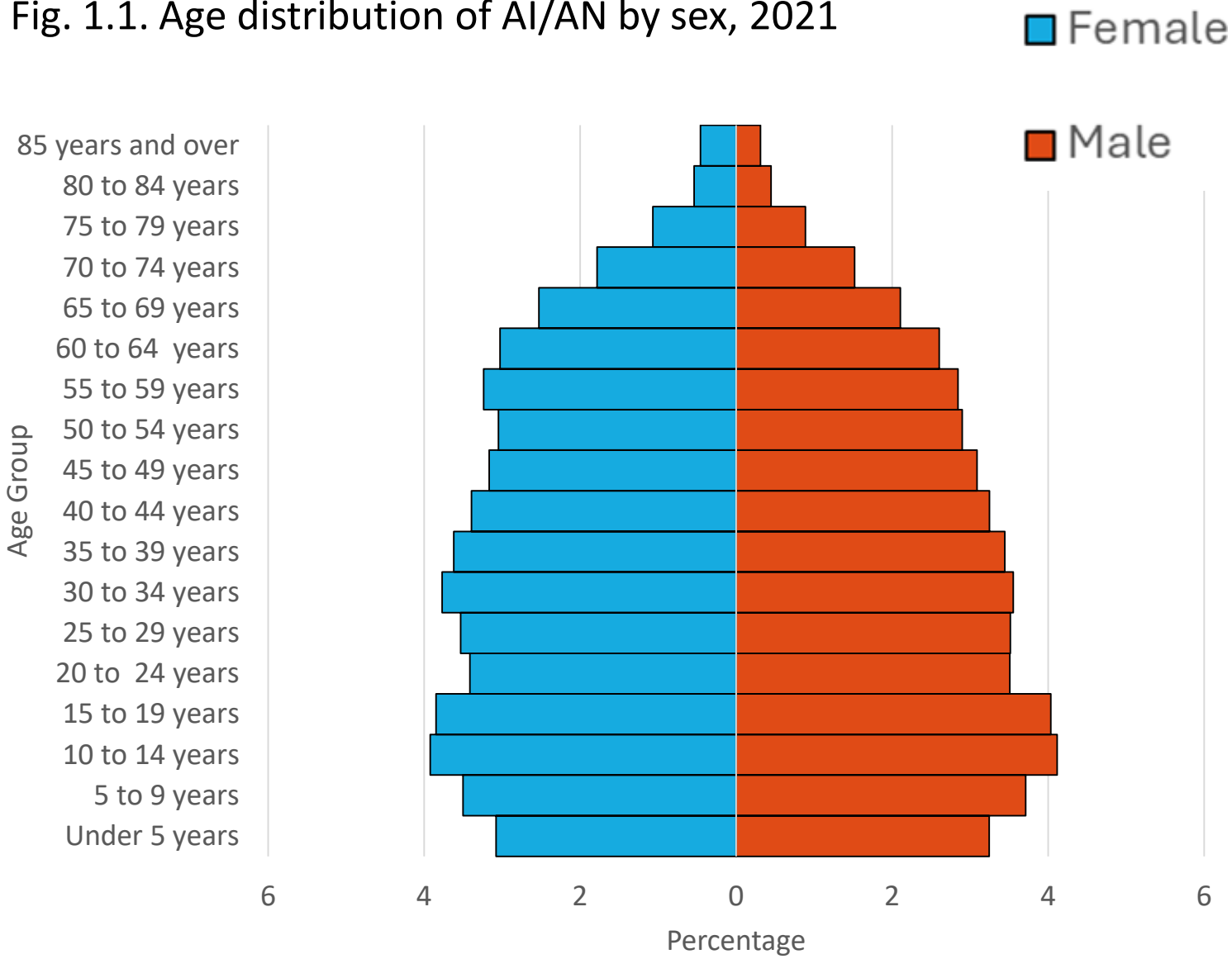
AI/AN in Oregon **are younger** than NHW in the state. In 2021, the median age for AI/AN was 32.7 years, which was 12.0 years younger than the median age for NHW (44.7 years).

A larger proportion of the AI/AN population is in the younger age groups, representing a **growing** population.

Data Source: U.S. Census Bureau, 2021. Data Notes: Data are from American Community Survey 5-year Estimates Table B01002. AI/AN include people who identify as AI/AN alone or in combination with other races of both Hispanic and non-Hispanic ethnicity.
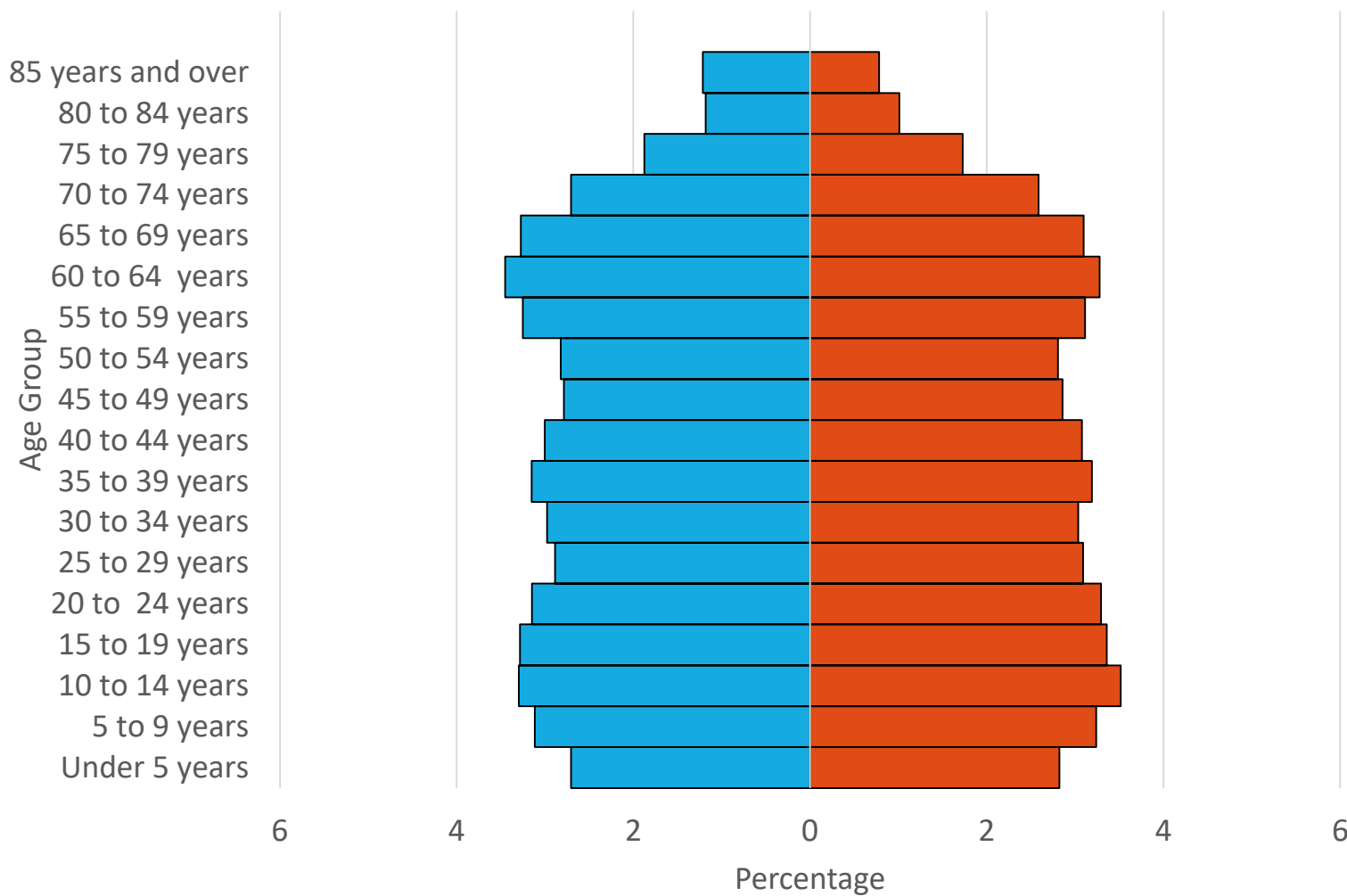
Educational Attainment

A higher proportion of AI/AN reported having a less than high school education and some college while a lower proportion obtained post-secondary educational degrees (e.g. Associate's, Bachelor's Master's, etc.) compared to NHW, highlighting a need to support AI/AN students entering and succeeding in college.

Fig. 1.3. Highest level of educational attainment by race & sex, 2021
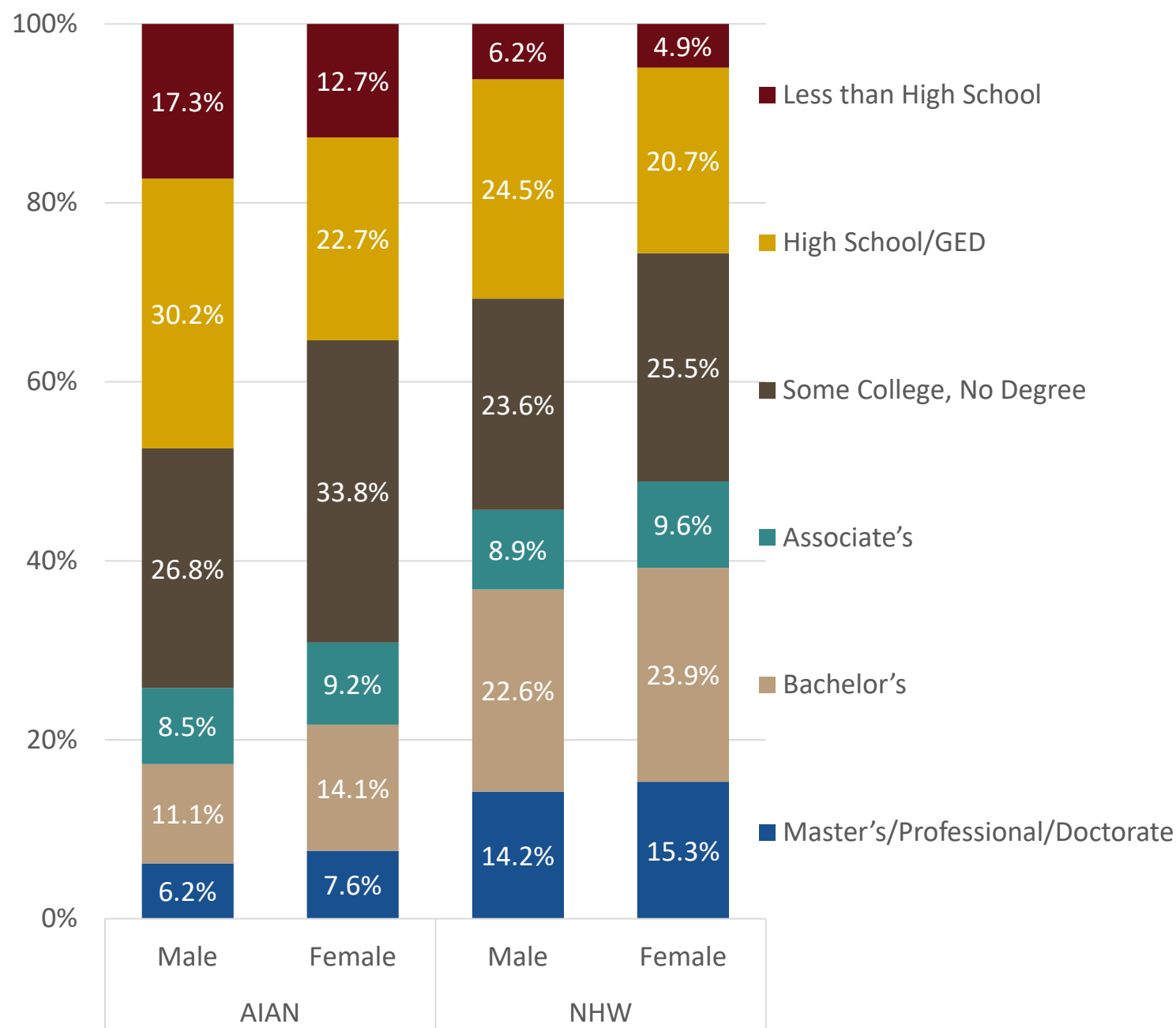
Compared to NHW, a higher percentage of AI/AN did not complete high school. About **30.2% of AI/AN males** and **22.7% of AI/AN females** had a high school diploma or GED as their highest degree of education, while less than 24.5% of NHW males and 20.7% of NHW females had this level of educational attainment.

AI/AN were more likely than NHW to have some college education but no degree. NHW females were most likely to have attained a post-secondary degree (48.8%), followed by NHW males (45.7%), AI/AN females (30.9%), and AI/AN males (25.8%).

Data Source: U.S. Census Bureau, 2021. Data Notes: Data are from American Community Survey 5-year Estimates Table B15002. AI/AN include people who identify as AI/AN alone or in combination with other races of both Hispanic and non-Hispanic ethnicity.

Economic Indicators

On average in 2021, AI/AN earned $17,000 less median household income compared to NHW

Table 1.2. Economic Indicators by Race, 2021

Economic Indicator	AI/AN	NHW
Median Household Income	$53,922	$70,922
Percent of Families in Poverty	14.7	6.3
Percent of People in Poverty	18.9	11.2
Percent of Children in Poverty	20.3	10.9
Percent Unemployed	9.0	5.4
Receives Food Stamp Benefits	29.3	13.5

AI/AN families, individuals, and children were nearly **twice as likely** to live in poverty than NHW in Oregon. From 2017-2021, almost 9.0% of AI/AN were unemployed, and 29.3% received food stamp benefits compared to 13.5% of NHW.

Data Source: U.S. Census Bureau, 2021. Data Notes: Data are from American Community Survey 5-year Estimates Table B17001, B17006, B22001, B23025. AI/AN include people who identify as AI/AN alone or in combination with other races of both Hispanic and non-Hispanic ethnicity

Chronic Diseases in Oregon

Chronic diseases, such as heart disease and diabetes, are the leading causes of death and disability in the United States.[1] The Centers for Disease Control and Prevention suggests that many preventable chronic diseases are caused by common risk behaviors: smoking, poor nutrition, physical inactivity, and excessive alcohol use. Some communities are at higher risk due to conditions where they are born, live, work, and age – these factors are known as social determinants of health. Social determinants of health can positively or negatively influence opportunities to make healthy choices and receive adequate medical care.

A shift in disease prevalence has occurred from predominately acute illness to chronic illness as adults 65 and older comprise a larger proportion of the AI/AN population than ever before.[2] The Indian Health Service reports diabetes, cardiovascular disease, and Alzheimer's disease and related dementias have emerged as the leading causes of morbidity and mortality among aging AI/AN.[3] In 2020, about 28.5% of AI/AN people ages 18 and above reported regular chronic pain, whereas, among White 23.4% reported chronic pain.[4]

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1. About Chronic Diseases | Chronic Disease. Centers for Disease Control and Prevention. Accessed June 20, 2024. https://www.cdc.gov/chronic-disease/about/index.html.

2. Manson SM, Buchwald DS. Aging and Health of American Indians and Alaska Natives: Contributions from the Native Investigator Development Program. J Aging Health. 2021 Aug-Sep;33(7-8_suppl):3S-9S. doi: 10.1177/08982643211014399. PMID: 34167345; PMCID: PMC8627114.

3. Indian Health Service. (2019). Disparities [fact sheet]. https://www.ihs.gov/newsroom/factsheets/disparities/

4. National Center for Health Statistics. Percentage of regularly experienced chronic pain for adults aged 18 and over (95% confidence intervals), United States, 2020. National Health Interview Survey. Generated interactively: Jul 29 2024 from https://wwwn.cdc.gov/NHISDataQueryTool/SHS_adult/index.html

Chronic Diseases in Oregon

The Northwest Portland Area Indian Health Board is committed to addressing these existing health disparities and to closing the health outcome gap between AI/AN and other racial-ethnic groups. Programs such as the Western Tribal Diabetes Project empower tribal communities to utilize diabetes data at the local level to track the Indian Health Service Standards of Care for Patients with Type 2 Diabetes, ensure patients receive timely care, improve case management, identify gaps in care, and better address program planning.

Oregon death certificate data provide information on cause of death for Oregon residents who died in Oregon. This report is produced using the Oregon death certificates from 2000 to 2020, which summarizes the burden of chronic conditions like stroke, diabetes, cardiovascular and heart diseases among AI/AN population in Oregon. These records were linked to the Northwest Tribal Registry to correct for race misclassification among American Indian/ Alaska Native (AI/AN) Oregon residents. The data were limited to AI/AN and Non-Hispanic White (NHW) deaths. Mortality rates are age-adjusted and reported as per 100,000 persons.
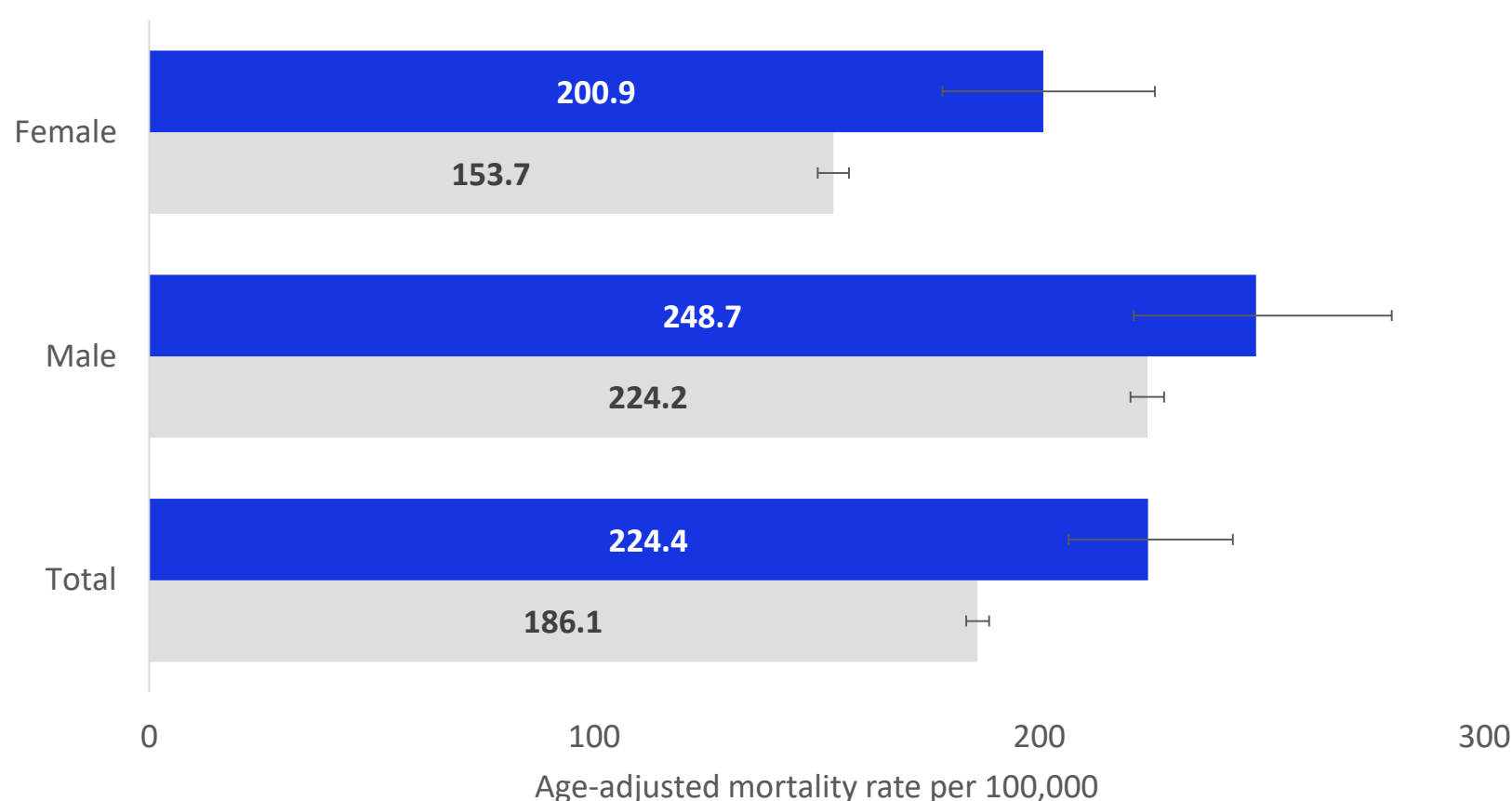
CHRONIC DISEASES

Cardiovascular Disease (CVD)

CVD is the term for all types of diseases that affect
the function of the heart or blood vessels.

AI/AN females had a **31% higher** CVD mortality rate compared to **NHW** females.

AI/AN males had an **11% higher** CVD mortality rate compared to **NHW** males.

AI/AN people experienced **21% higher** CVD mortality rates compared to **NHW** people.

Fig. 2.1. CVD mortality, **AI/AN** & NHW, by sex, 2016-2020

	Rate
Female (AI/AN)	200.9
Female (NHW)	153.7
Male (AI/AN)	248.7
Male (NHW)	224.2
Total (AI/AN)	224.4
Total (NHW)	186.1

Age-adjusted mortality rate per 100,000

NPAIHB's IDEA-NW project works to address racial misclassification of AI/AN people by correcting inaccurate race information in health datasets. Without race correction, 82 CVD deaths among AI/AN would not have been represented from 2016-2020. This would have resulted in AI/AN rates incorrectly lowered by up to 14%.
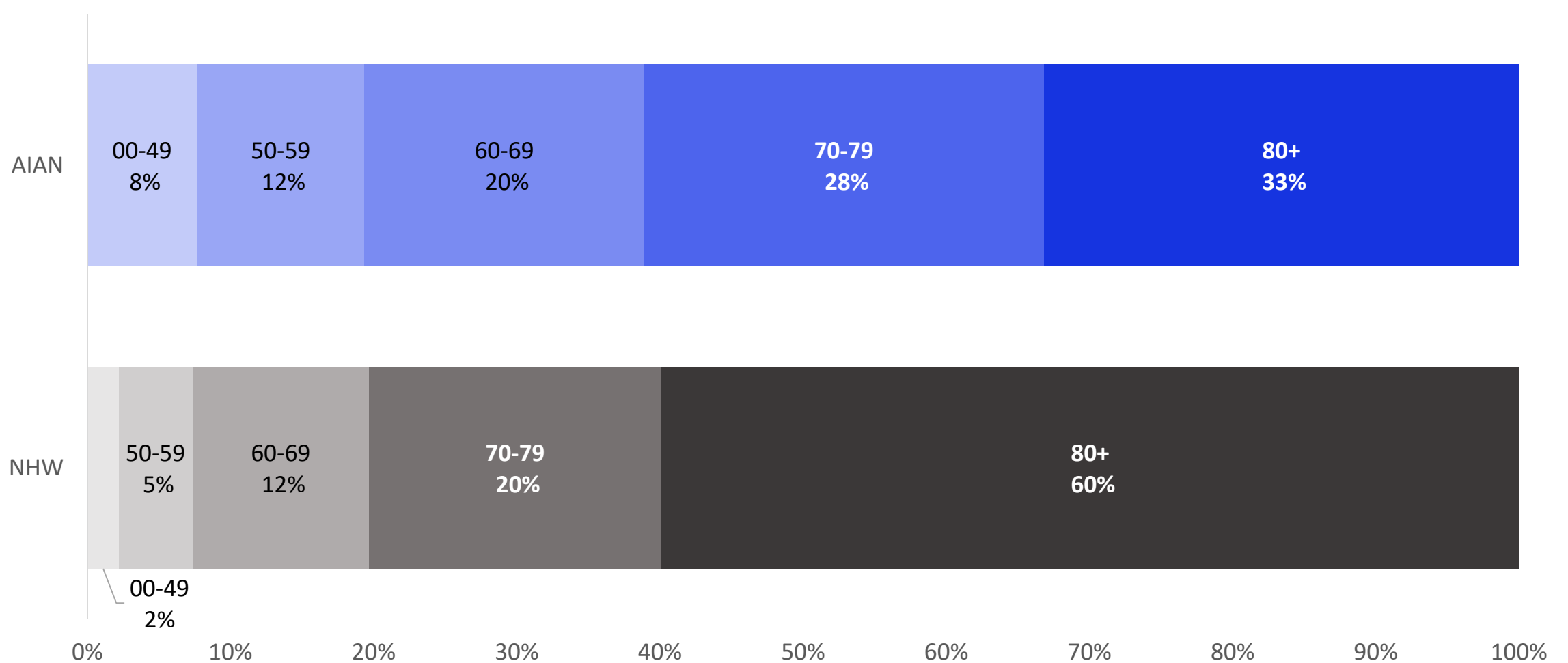
Data Source: Oregon Death Certificates, 2016-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

CHRONIC DISEASES
Cardiovascular Disease (CVD)

AI/AN died from CVD at a **younger age** than NHW in Oregon. Only **33%** of CVD related deaths occurred among AI/AN individuals 80+ years old compared to **60%** of NHW CVD deaths.

Fig. 2.2. Percentage of CVD mortality, AI/AN & NHW, by age group, 2016-2020

AIAN	00-49 8%	50-59 12%	60-69 20%	70-79 28%	80+ 33%
NHW	50-59 5%	60-69 12%	70-79 20%	80+ 60%	

00-49
2%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
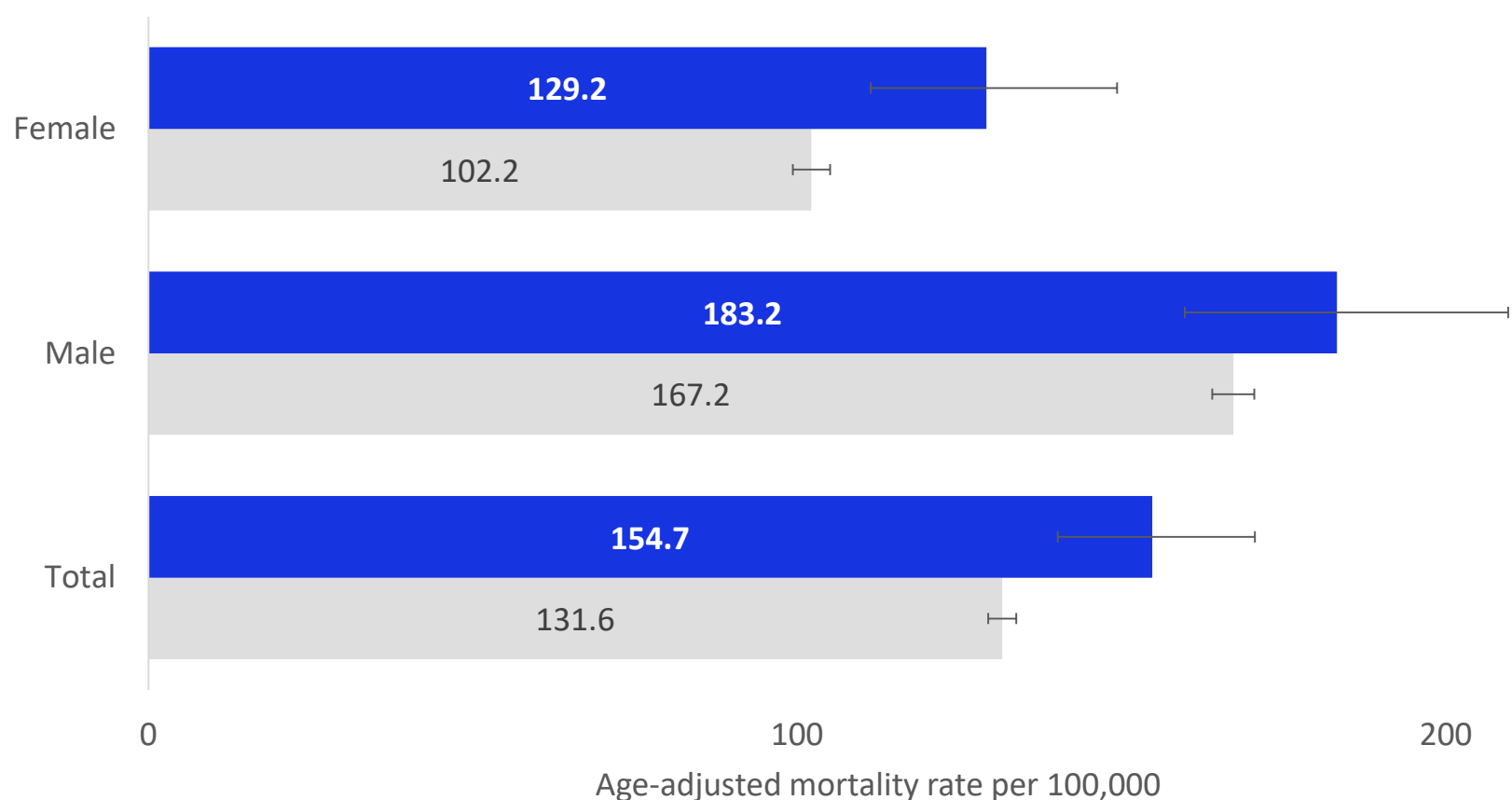
CHRONIC DISEASES

Heart Disease

Heart disease is a phrase for a variety of conditions that affect the heart's structure and function. All heart diseases are CVDs, but not all CVDs are heart disease.

Overall, **AI/AN** had **18% greater** heart disease mortality rate than **NHW**.

Among **AI/AN** and **NHW**, males faced **elevated** heart disease mortality rates compared to females (**183.2** compared to **129.2** per 100,000 people).
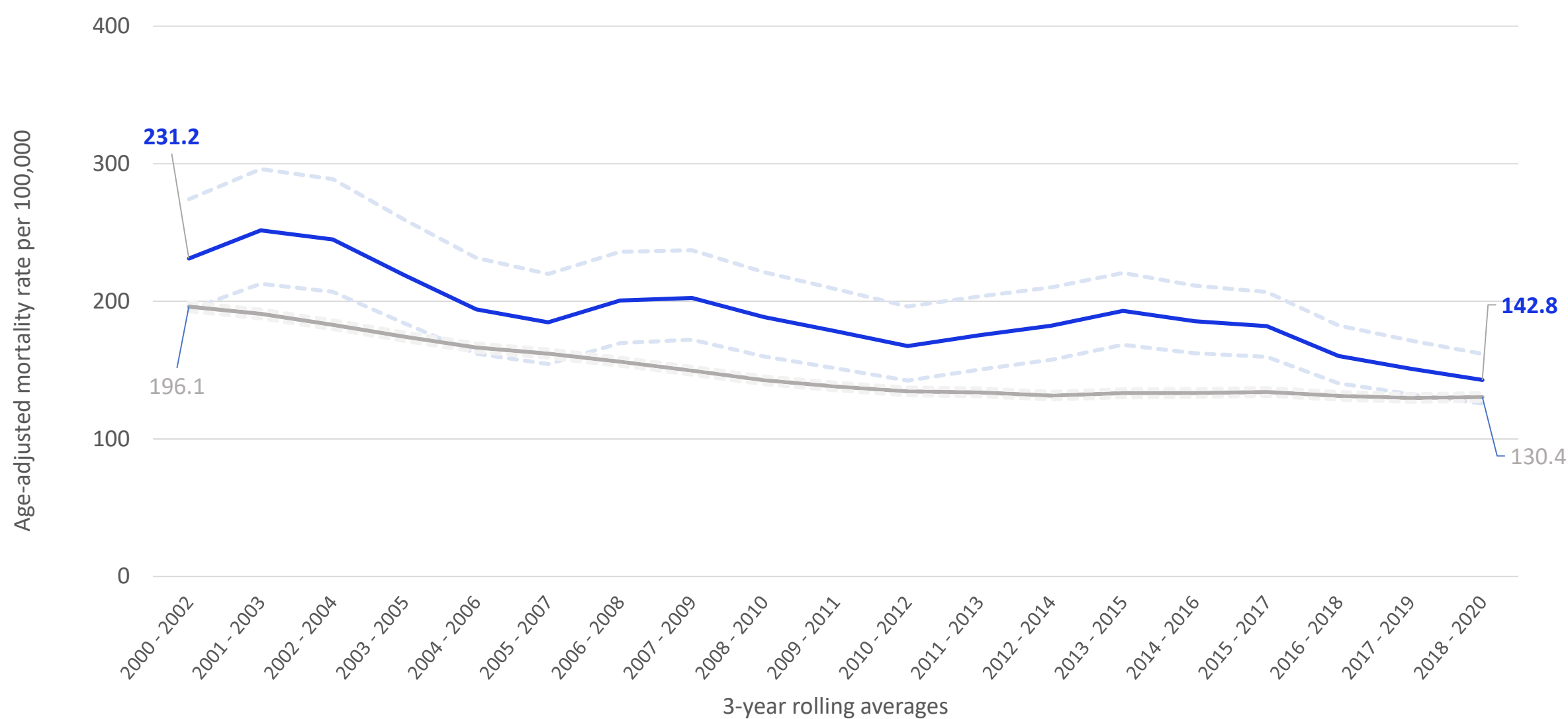
Fig. 2.3. Heart disease mortality, AI/AN & NHW, by sex, 2016-2020

	AI/AN	NHW
Female	129.2	102.2
Male	183.2	167.2
Total	154.7	131.6

Age-adjusted mortality rate per 100,000

CHRONIC DISEASES

Heart Disease

Over the past two decades, heart disease mortality has decreased among **AI/AN** by **38%**. However, the death rate among **AI/AN** remains consistently higher than the rate among **NHW**, by 1.1 to 1.4 times.

Fig. 2.4. Heart disease mortality rates, **AI/AN** & **NHW**, 2000-2020

Y-axis: Age-adjusted mortality rate per 100,000

AI/AN: 231.2 (2000-2002) → 142.8 (2018-2020)
NHW: 196.1 (2000-2002) → 130.4 (2018-2020)

X-axis: 3-year rolling averages (2000-2002 through 2018-2020)

CHRONIC DISEASES
Stroke

Stroke can occur when blood flow to the brain is blocked
or there is sudden bleeding in the brain.

Fig. 2.5. Stroke mortality, AI/AN & NHW, by sex, 2016-2020

Stroke mortality rates were consistent across sexes. Overall, **AI/AN** people had **33% higher** stroke mortality than **NHW** in this period.
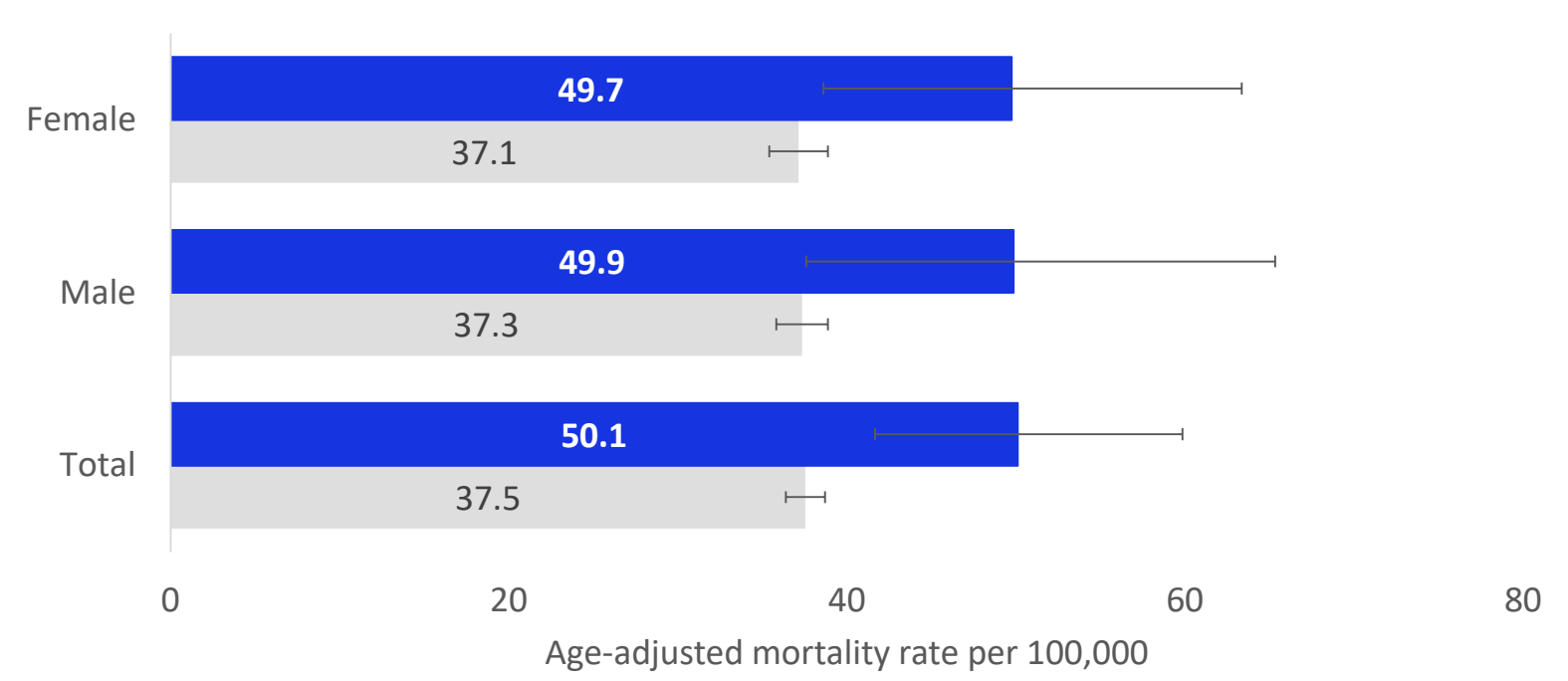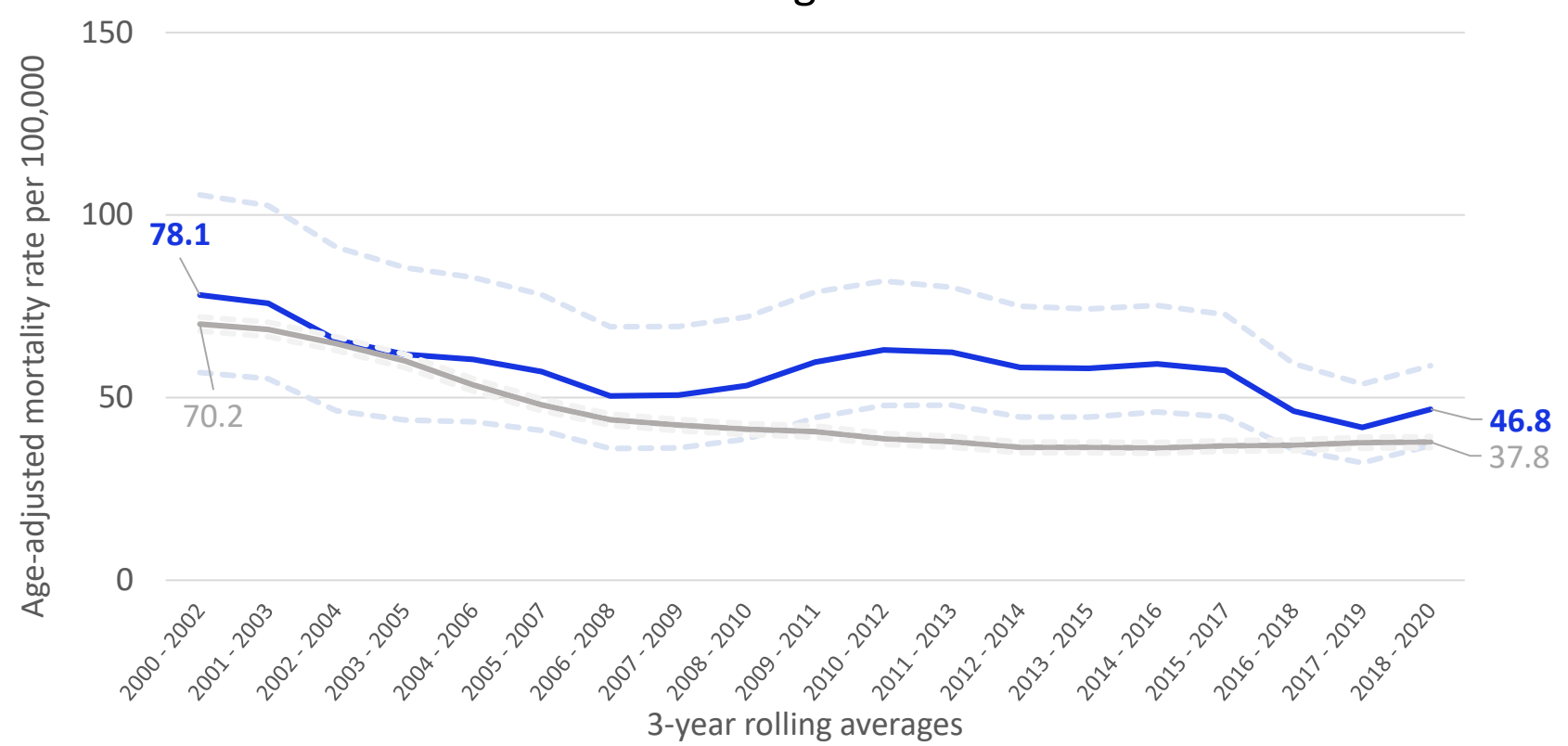

Fig. 2.6. Stroke mortality, AI/AN & NHW, 2000-2020, 3-year rolling average

The stroke mortality rate among
AI/AN **decreased by 40%** from 2000 to 2020

Data Source: Oregon Death Certificates, 2000-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW
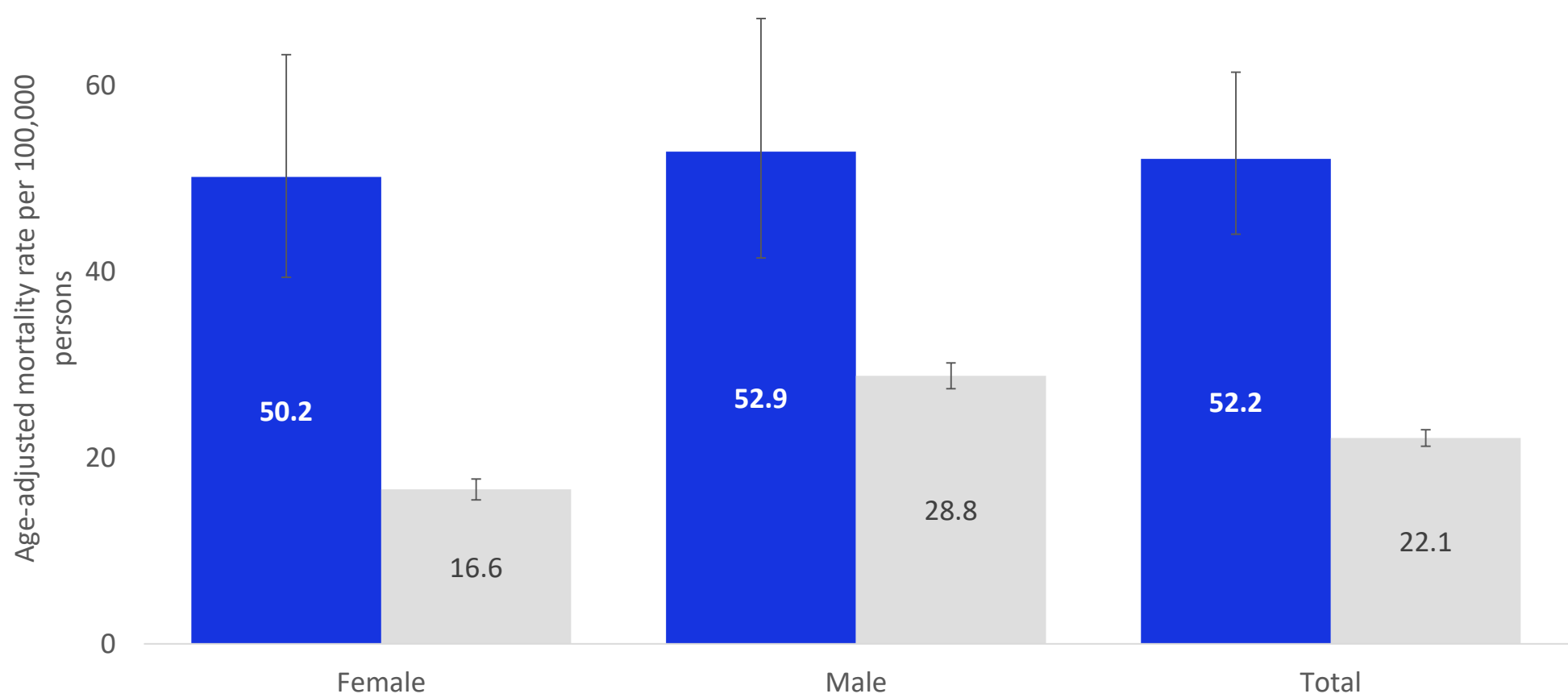
CHRONIC DISEASES

Diabetes

Diabetes is a chronic health condition that affects how the body processes glucose, a sugar that is the body's main source of energy.
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Fig. 2.7. Diabetes mortality rates, **AI/AN** & NHW, by sex, 2016-2020

AI/AN people experienced a diabetes mortality rate over **twice** the rate of NHW people.

Among **AI/AN females**, the diabetes mortality rate was **3 times** the NHW female diabetes mortality. Among **AI/AN males**, the diabetes mortality rate was **twice** the NHW male rate.

Data Source: Oregon Death Certificates, 2016-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

CHRONIC DISEASES
Diabetes

Over the past two decades, diabetes mortality has fluctuated among **AI/AN** but stayed consistent among **NHW**. The mortality rate among **AI/AN** has remained around **twice as high** compared to the rates among **NHW**.

Fig. 2.8. Diabetes mortality rates, **AI/AN** & **NHW**, 2000-2020
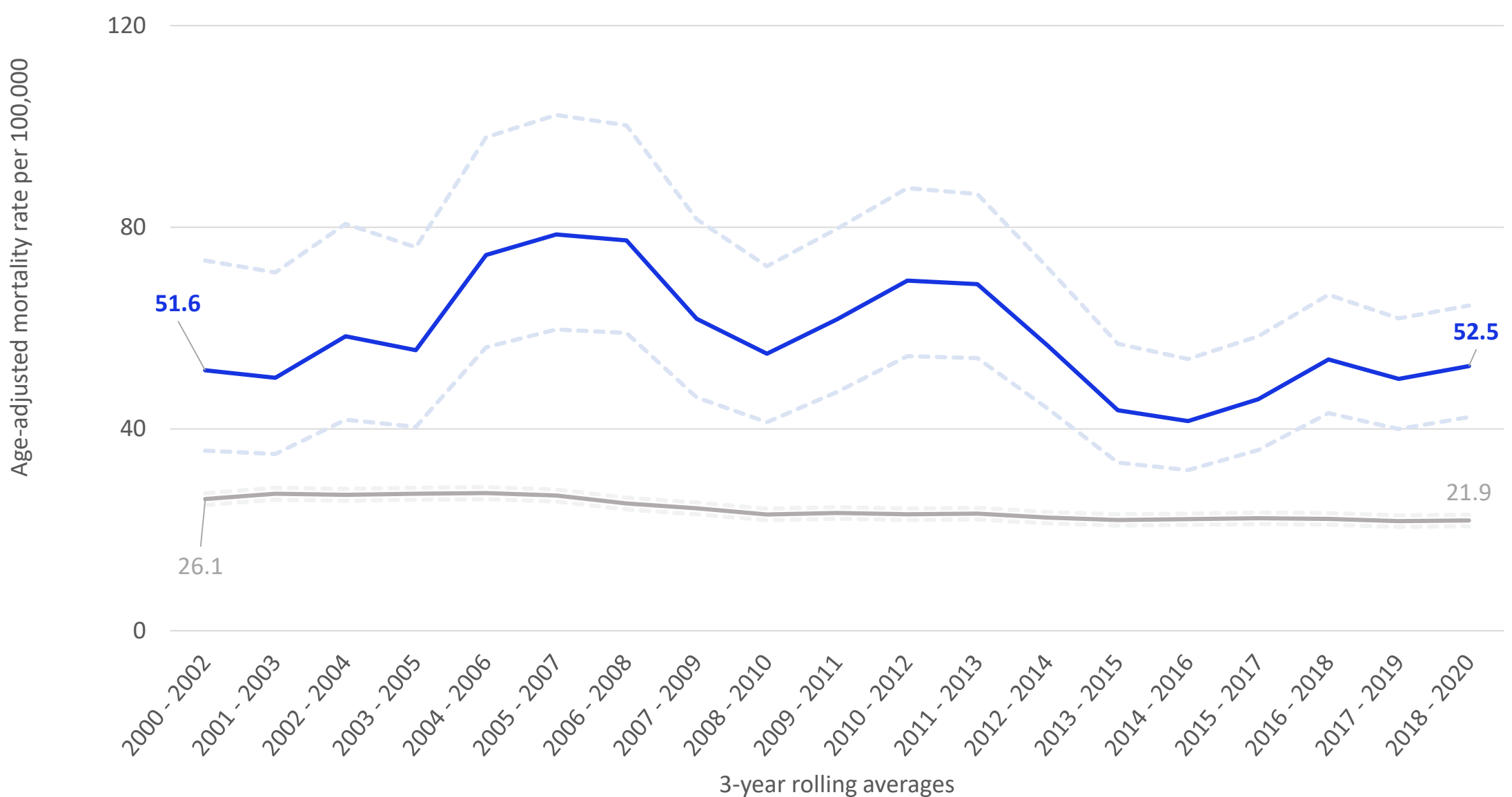
Age-adjusted mortality rate per 100,000

51.6

52.5

21.9

26.1

3-year rolling averages

Data Source: Oregon Death Certificates, 2000-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

Cancer in Oregon

Cancer, a genetic disease altering the normal growth and spread of cells in the body, is among the leading causes of death worldwide. There are over 100 different cancers with breast, lung and bronchus, prostate, and colorectal cancers making up nearly half of all new cases nationally.[5] Though the diverse disease has many presentations and several causes still unknown, some factors are associated with a higher risk of cancer, including age, excessive alcohol and commercial tobacco consumption, sunlight and radiation exposure, obesity, and exposure to some infectious agents.[6]

Nationally, Native populations display unique cancer patters because of cultural norms, environmental influences, lifestyle factors, and history of institutionalized racism. Many Native languages do not have a word for *cancer;* in some tribal communities, cancer has only recently been openly discussed. In the Pacific Northwest and nationally, AI/ANs are more likely to report no usual source of health care than other racial groups.[7] Several of these risk factors could contribute to a documented unequal national burden of cancer on Native communities, with cancer rates significantly higher in the AI/AN population than in the non-Hispanic White (NHW) population for lung cancer, colorectal cancer, kidney cancer, liver cancer, stomach cancer, and myeloma.[8] Nationally aggregated data, however, masks the regional differences in cancer trends. This profile provides a snapshot of the cancer story for AI/AN living in Oregon.

The Northwest Tribal Comprehensive Cancer Program (NTCCP) has existed for over 20 years and was the first CDC funded Tribal Comprehensive Cancer Project. NTCCP offers resources to 43 Tribes in Oregon, Washington, and Idaho and hosts coalition meetings twice a year to bring Tribal community members who work on Cancer Prevention and Control together. We offer four work groups on prevention, screening, data, and survivorship and also provide technical assistance, cancer materials, updated cancer data, cancer mini-grants, Kiki the large inflatable colon, trainings, and support on identifying speakers and resources. NTCCP can help Tribal programs and communities identify cancer prevention and treatment resources.

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5. National Cancer Institute. (2024). *Cancer Stat Facts: Common Cancer Sites*. SEER. https://seer.cancer.gov/statfacts/

6. *What is cancer?*. National Cancer Institute. (2024). https://www.cancer.gov/about-cancer/understanding/what-is-cancer

7. Centers for Disease Control and Prevention (CDC): Behavioral Risk Factor Surveillance System Survey Data [Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, [2016-2020]]

8. Melkonian, S. et al. (2019). Disparities in cancer incidence and trends among American Indians and Alaska Natives in the United States, 2010–2015. *Cancer Epidemiology, Biomarkers & Prevention*, *28*(10), 1604–1611. https://doi.org/10.1158/1055-9965.epi-19-0288
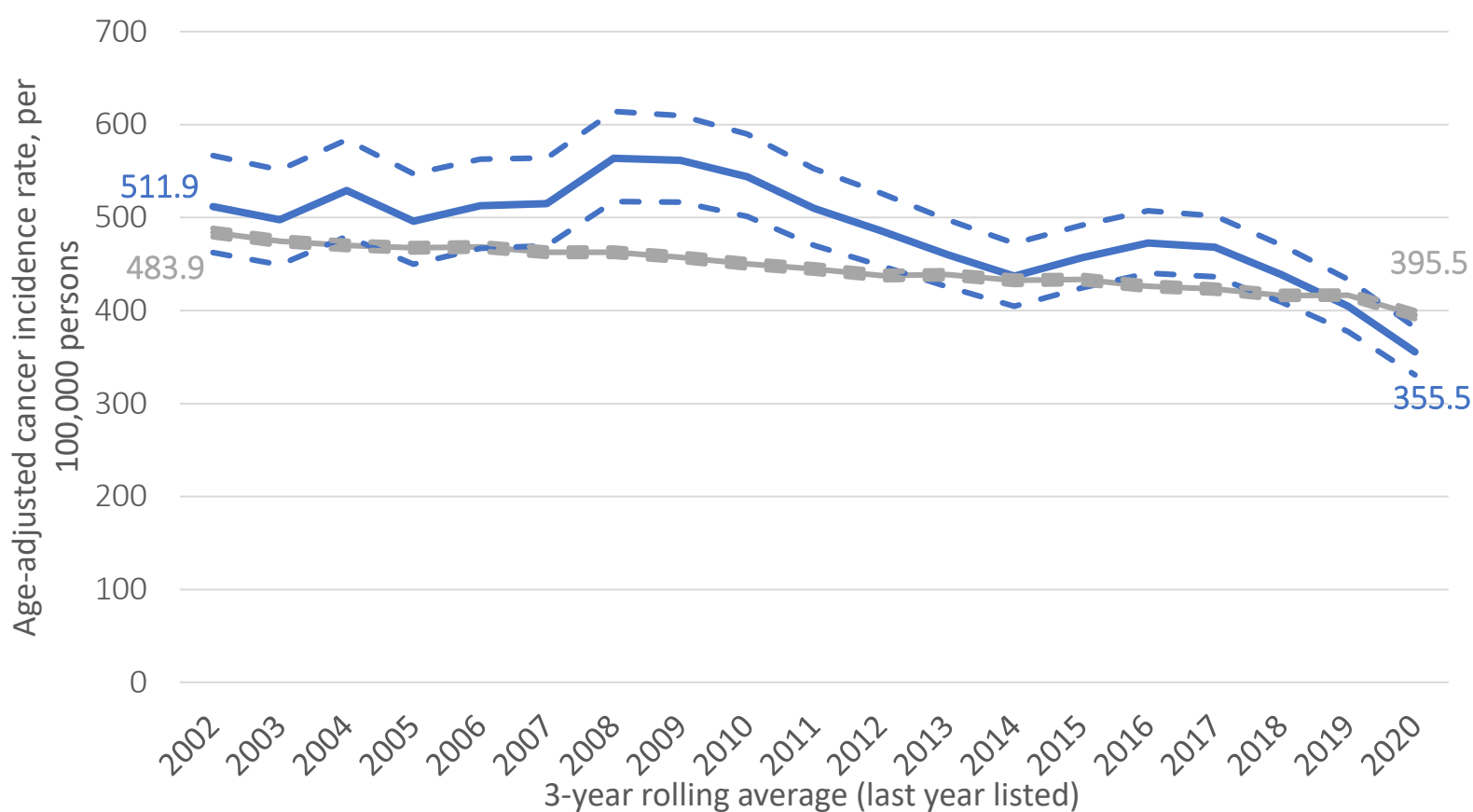
CANCER
All-site incidence

Cancer incidence measures the number of new diagnoses in a population during a specific time period. From 2016 – 2020, the rate of new cancers in **AI/AN** was **389.3 cases per 100,000 persons**, compared to **405.0** among **NHW** (not shown).

Fig. 3.1. Incidence rate of invasive cancer in **AI/AN** & **NHW** per 100,000 persons, 2000 - 2020

The rate of all-site cancer incidence has **decreased 30.6%** among **AI/AN** in the last 20 years. The incidence rate among **NHW** **decreased 18%.**

Cancer incidence has **decreased** more among **AI/AN males and females** since 2010 than among **NHW males and females.**

Fig. 3.2. Rate of newly-diagnosed invasive cancers in **AI/AN** & **NHW** males and females, 2006-2010 and **2016-2020*** (per 100,000 persons)
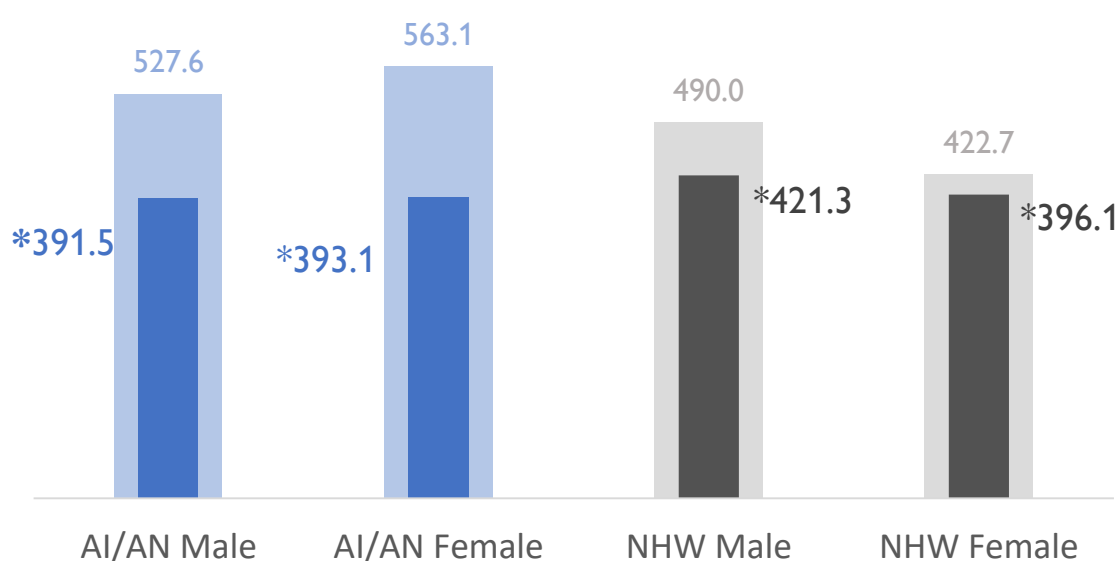
Data Source: Oregon State Cancer Registry, 2000-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

CANCER
All-site mortality

Cancer mortality measures the number of cancer deaths in a population during a specific time period. The rate of cancer mortality in **AI/AN** in 2016-2020 was **185.6 deaths per 100,00 persons**, compared to **142.3** among **NHW**.

Though cancer mortality rates have decreased since 2000, a disparity in mortality between **AI/AN** and **NHW** remains.

Fig. 3.3. Mortality rate of invasive cancer in **AI/AN** & **NHW** per 100,000 persons, 2000 - 2020
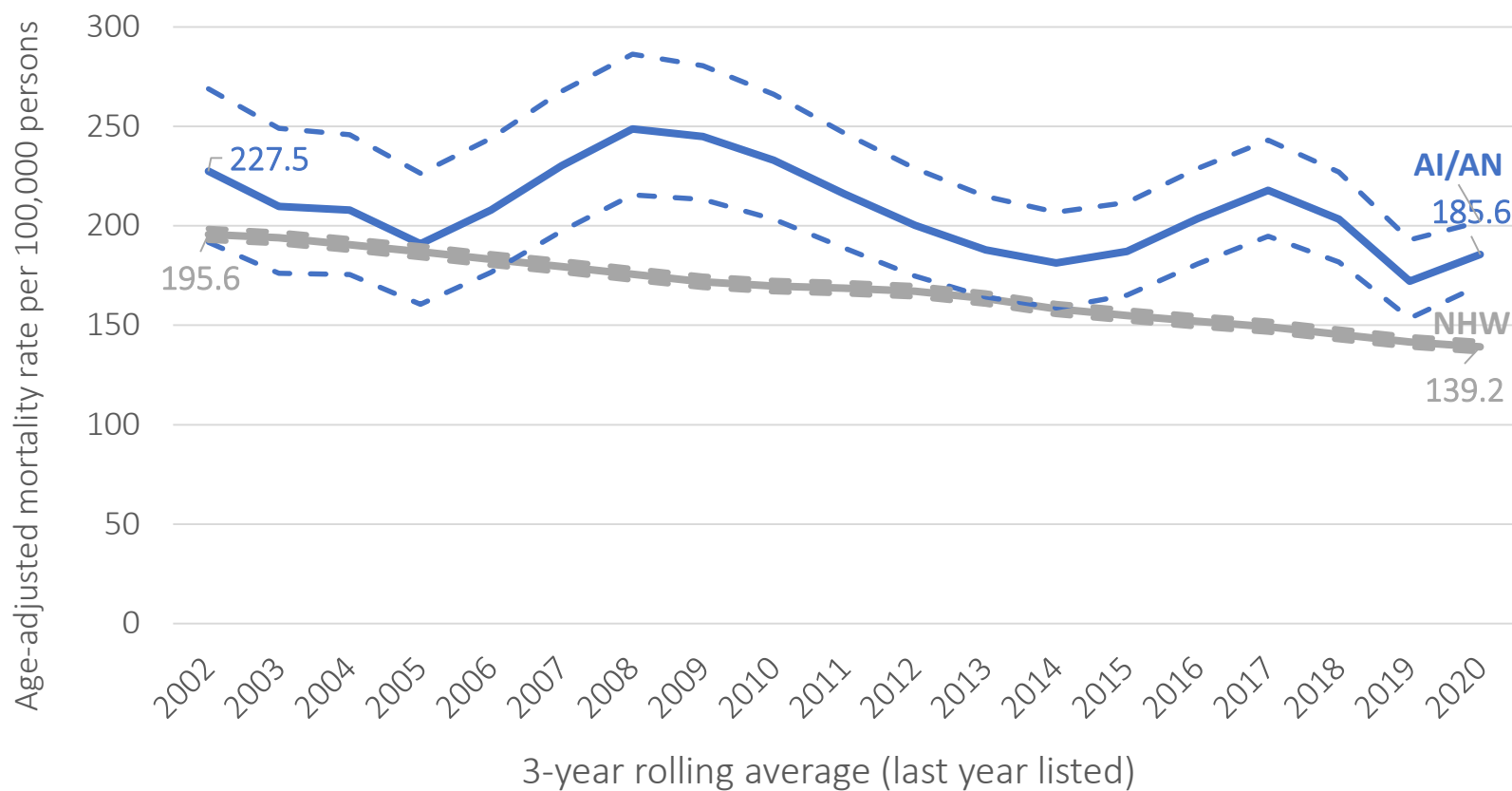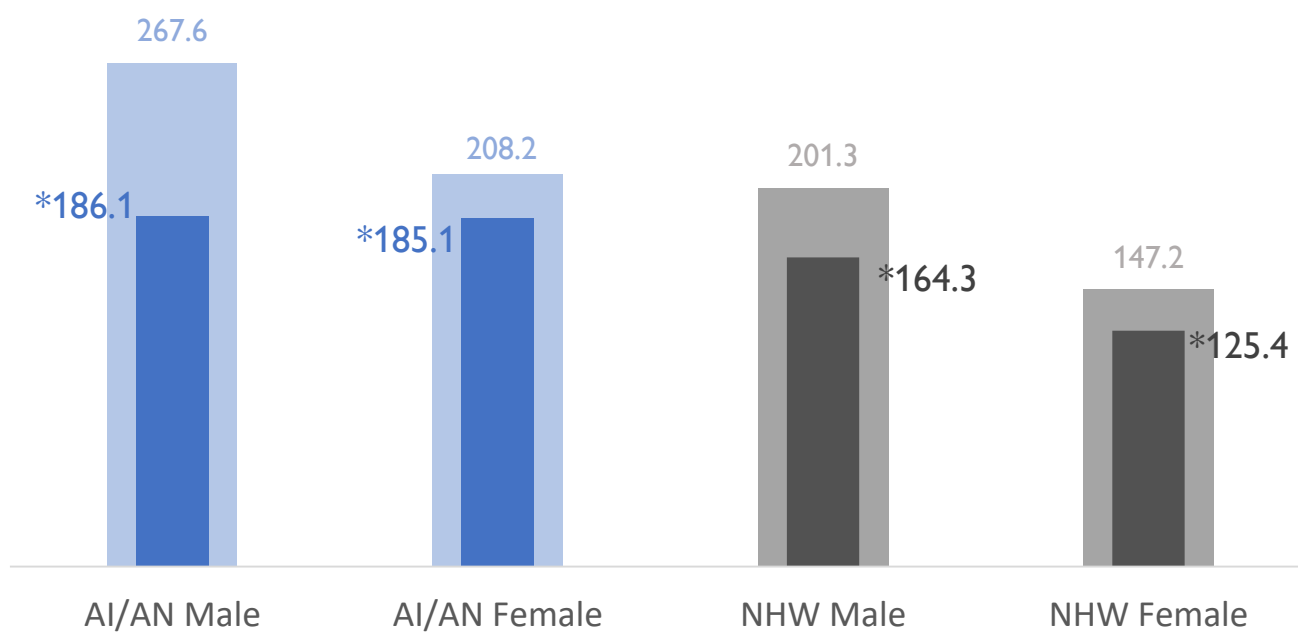

227.5
195.6
AI/AN
185.6
NHW
139.2

Age-adjusted mortality rate per 100,000 persons

2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

3-year rolling average (last year listed)

Fig. 3.4. Rate of cancer-related mortality in **AI/AN** & **NHW** males and females, 2006-2010 & **2016-2020*** (per 100,000 persons)

267.6
*186.1
208.2
*185.1
201.3
*164.3
147.2
*125.4

AI/AN Male | AI/AN Female | NHW Male | NHW Female

AI/AN males and females still experience **higher** rates of cancer mortality compared to their **NHW** counterparts.

Data Source: Oregon Death Certificates, 2000-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

NPAIHB

CANCER

Top 5 cancer sites among AI/AN:
Incidence

Nearly half of all new cancers diagnosed in **AI/AN women** are breast, lung & bronchial, or blood cancer. Just over half of new cancers diagnosed in **AI/AN men** are represented by the top 5 cancer sites.

AI/AN women are diagnosed with breast and endometrial cancers at a **lower** rate than their **NHW** counterparts.

Fig. 3.5. Age-adjusted incidence rates by cancer site for **AI/AN** & **NHW** women (rate per 100,000), 2016-2020
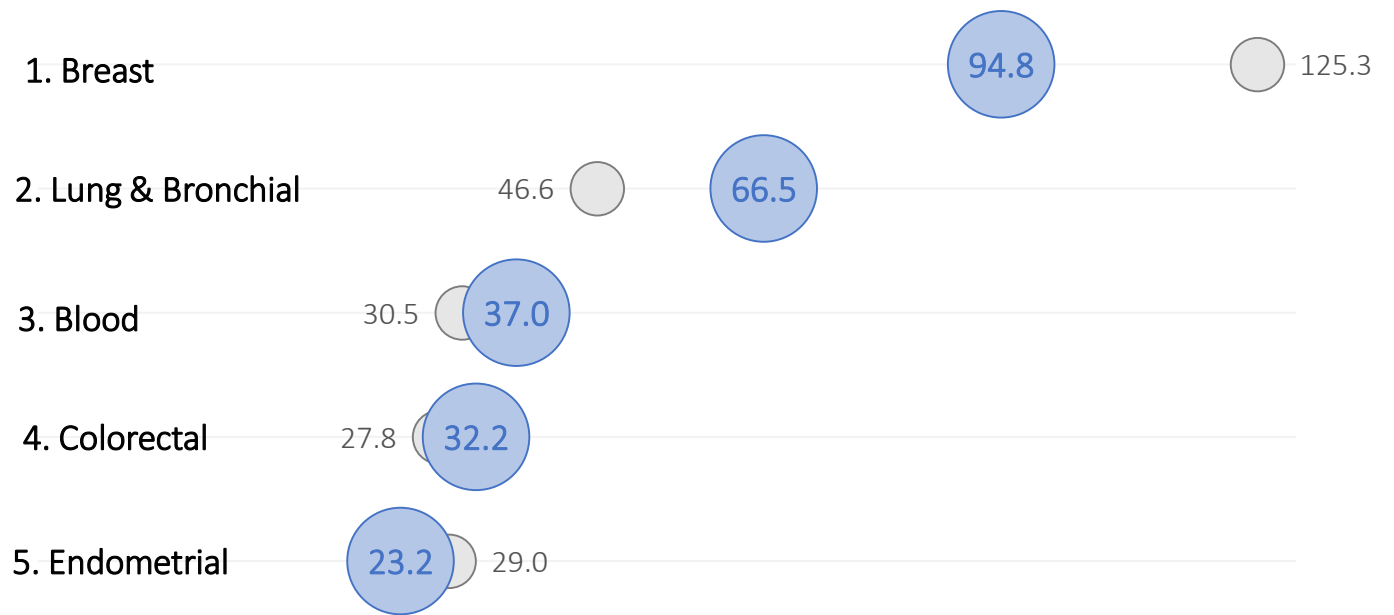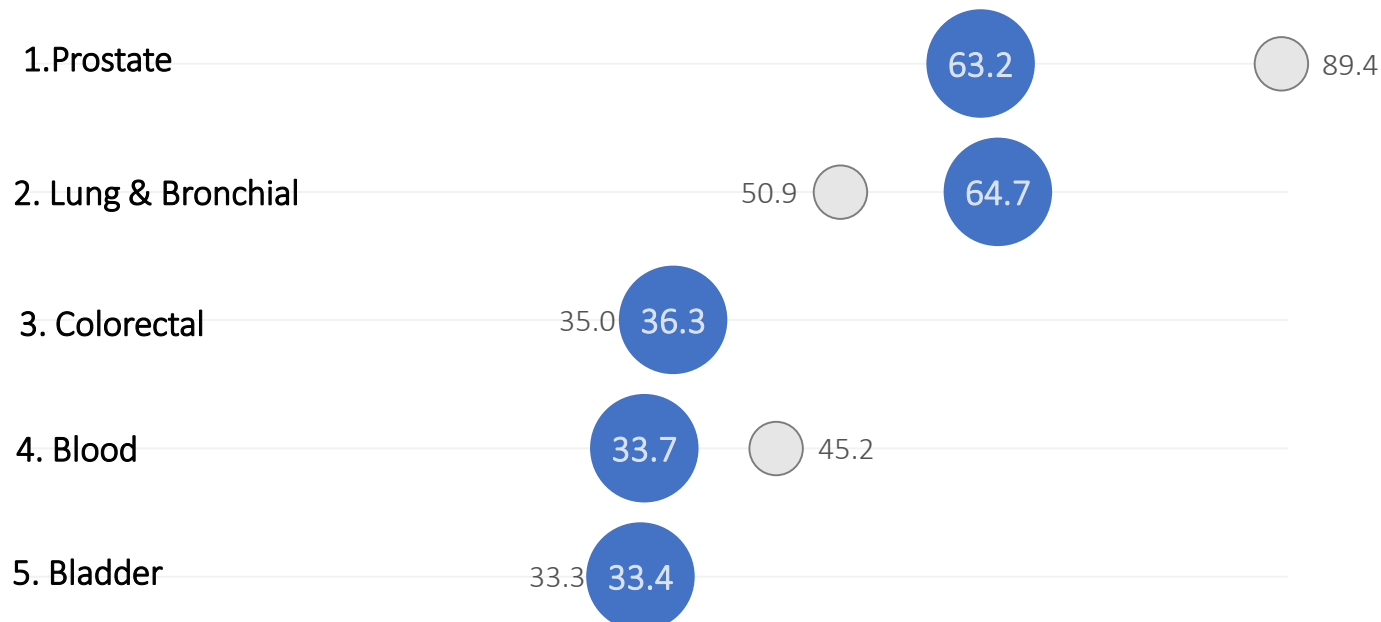
	AI/AN	NHW
1. Breast	94.8	125.3
2. Lung & Bronchial	66.5	46.6
3. Blood	37.0	30.5
4. Colorectal	32.2	27.8
5. Endometrial	23.2	29.0

Fig. 3.6. Age-adjusted incidence rates by cancer site for **AI/AN** & **NHW** men (rate per 100,000), 2016-2020

	AI/AN	NHW
1. Prostate	63.2	89.4
2. Lung & Bronchial	64.7	50.9
3. Colorectal	36.3	35.0
4. Blood	33.7	45.2
5. Bladder	33.4	33.3

AI/AN men have **lower** rates of prostate and blood cancer incidence compared to their **NHW** counterparts.

Rankings based on proportion of cancer patients diagnosed, not age-adjusted rate

Data Source: Oregon State Cancer Registry, 2016-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

CANCER

Top 5 cancer sites among AI/AN:
Mortality

For both **AI/AN men** and **women**, lung & bronchial cancer drives mortality. From 2016-2020, 116 Native deaths in Oregon were attributable to lung cancer, for a mortality rate of **48.3 deaths per 100,00 persons** (not shown).

In the top 5 cancer-related causes of death, **AI/AN women** experience **higher** rates of mortality than NHW women.

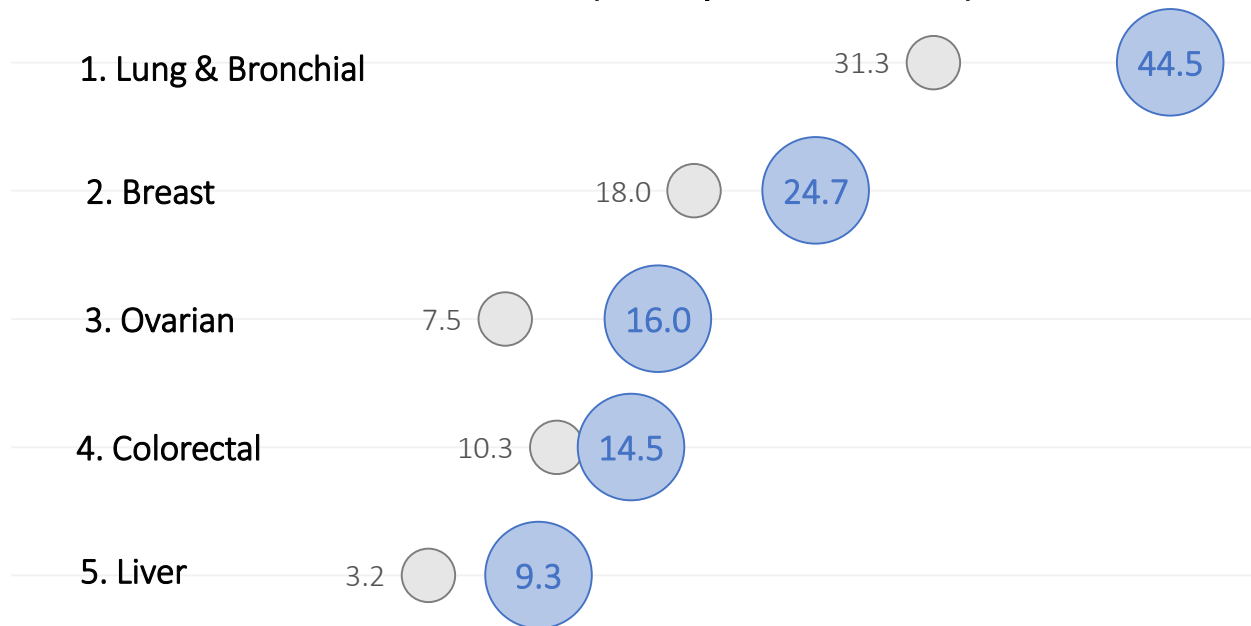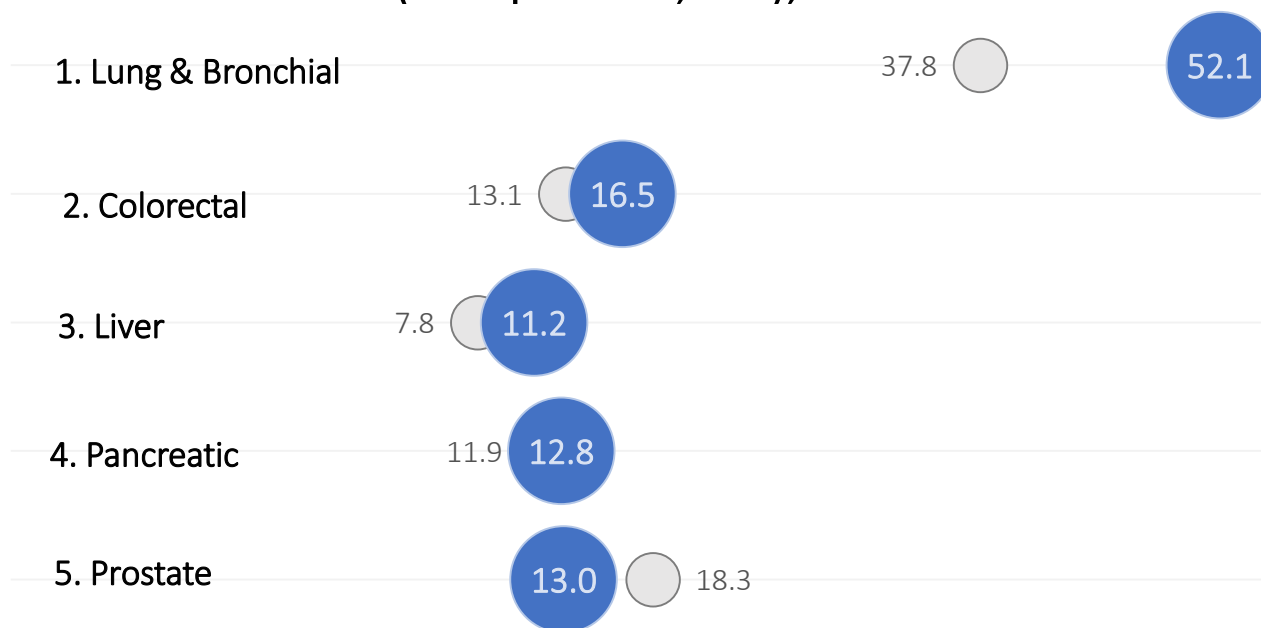Fig. 3.7. Age-adjusted mortality rates by cancer site for **AI/AN** & NHW women (rate per 100,000), 2016-2020

Cancer Site	NHW	AI/AN
1. Lung & Bronchial	31.3	44.5
2. Breast	18.0	24.7
3. Ovarian	7.5	16.0
4. Colorectal	10.3	14.5
5. Liver	3.2	9.3

Fig. 3.8. Age-adjusted mortality rates by cancer site for **AI/AN** & NHW men (rate per 100,000), 2016-2020

Cancer Site	NHW	AI/AN
1. Lung & Bronchial	37.8	52.1
2. Colorectal	13.1	16.5
3. Liver	7.8	11.2
4. Pancreatic	11.9	12.8
5. Prostate	18.3	13.0

AI/AN men have a **38% higher** mortality rate due to lung & bronchial cancer compared to their NHW counterparts.

*Data Source: Oregon Death Certificates, 2016-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW*

NPAIHB

CANCER
Breast Cancer (Female)

Breast cancer is the most commonly diagnosed cancer among both AI/AN and NHW women in Oregon. With the help of regular screening for women over the age of 40, many cases can be detected early and properly treated.
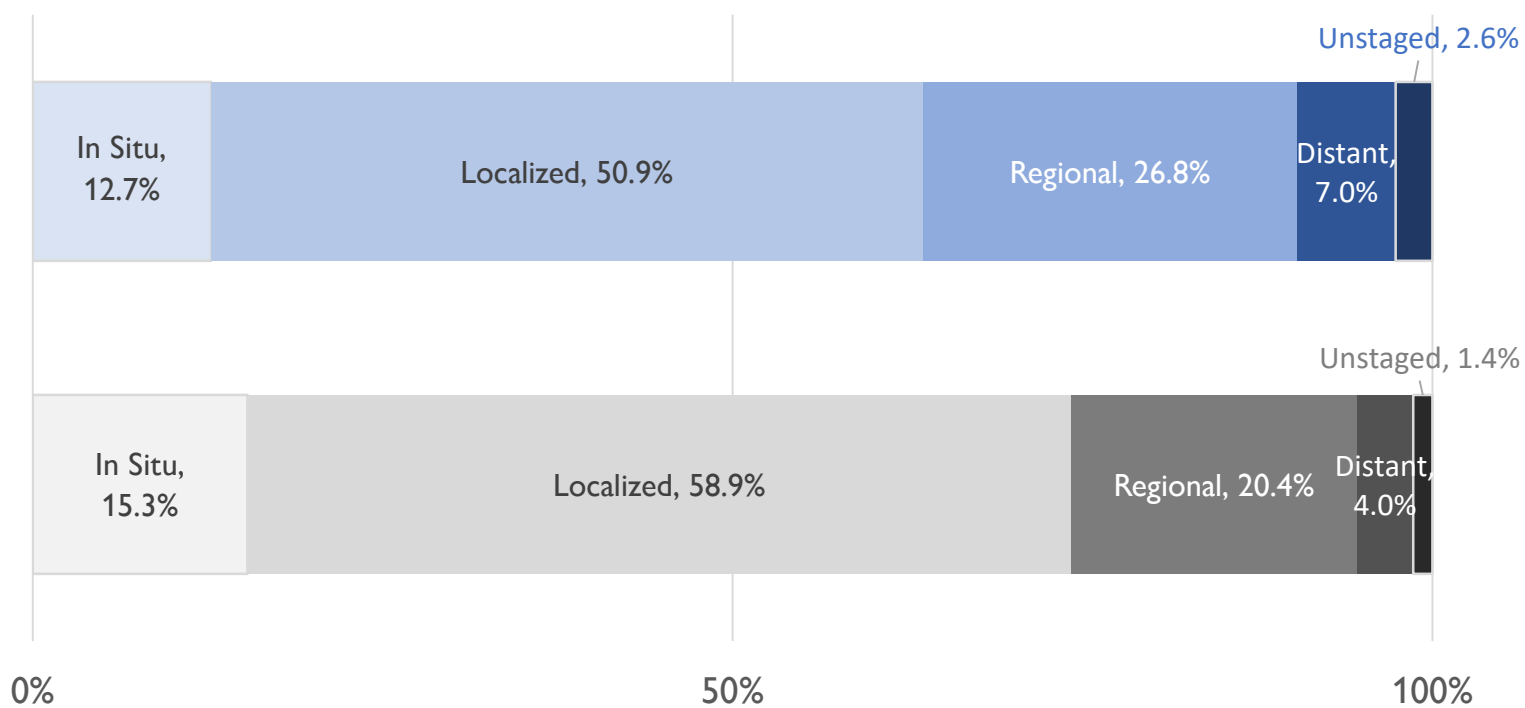
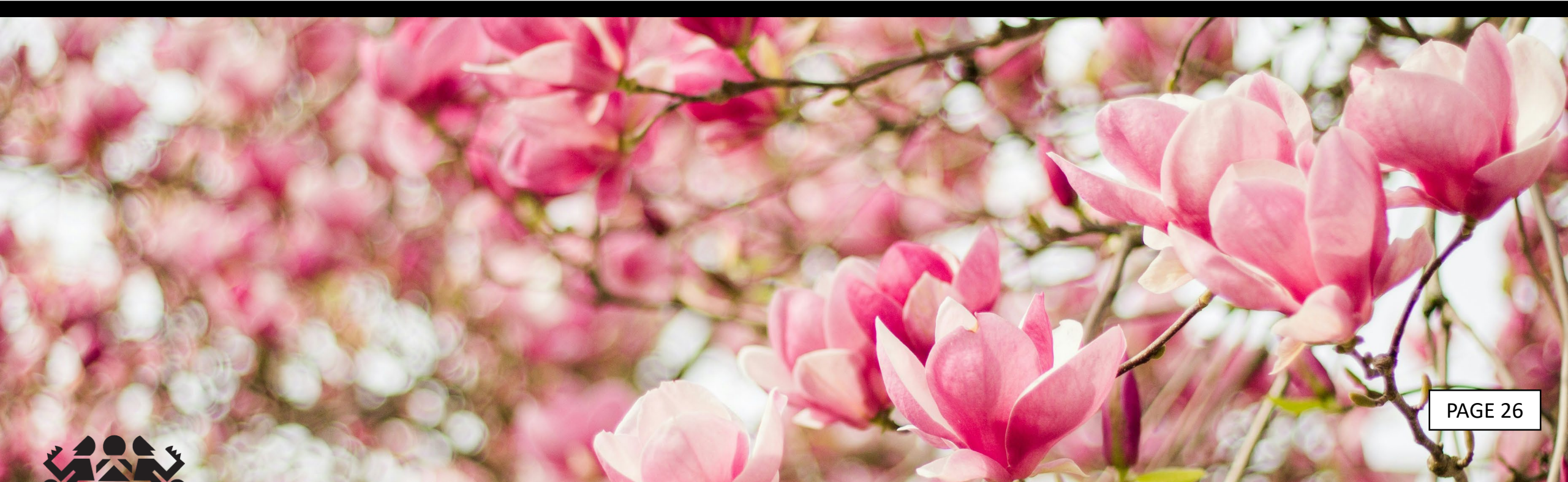Fig. 3.9. Age-adjusted incidence rate of breast cancer in AI/AN & NHW women, 2011-2015 and 2016-2020 (per 100,000)

126.0
124.1

125.3

94.8

2011-2015   2016-2020
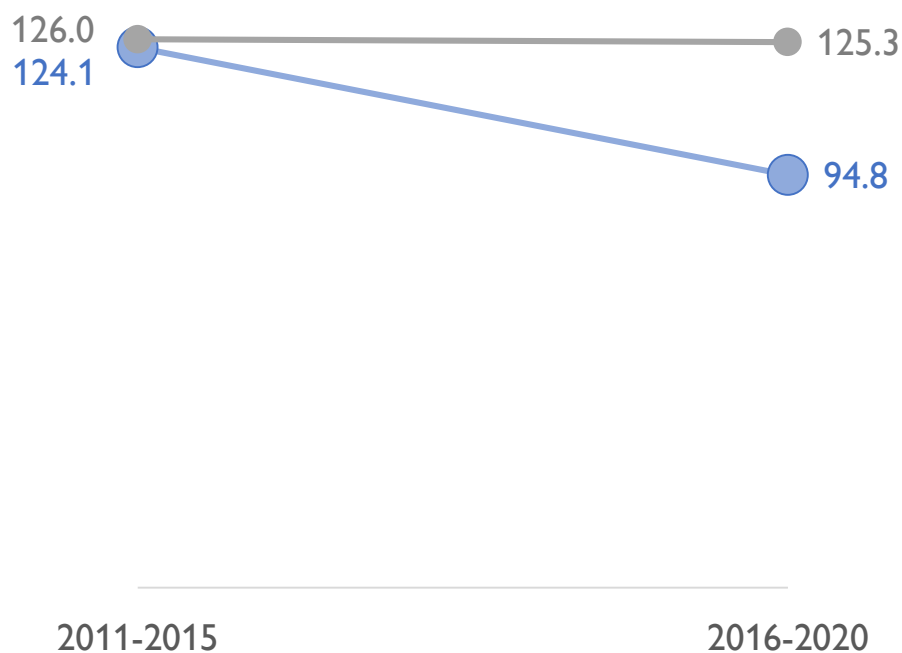
In the early 2010's NHW women and AI/AN women had similar rates of newly diagnosed breast cancer. In recent years, the rate among AI/AN women has **decreased by 23.6%**

63.6% of breast cancer cases in AI/AN women are diagnosed at an **early stage** (in situ or localized), compared to **74.2%** of breast cancer cases in NHW women.

Fig. 3.10. Breast cancer stage at diagnosis for AI/AN & NHW women, all ages, 2016-2020

Unstaged, 2.6%

| In Situ, 12.7% | Localized, 50.9% | Regional, 26.8% | Distant, 7.0% |

Unstaged, 1.4%

| In Situ, 15.3% | Localized, 58.9% | Regional, 20.4% | Distant, 4.0% |

0%   50%   100%

Data Source: Oregon State Cancer Registry, 2011-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW
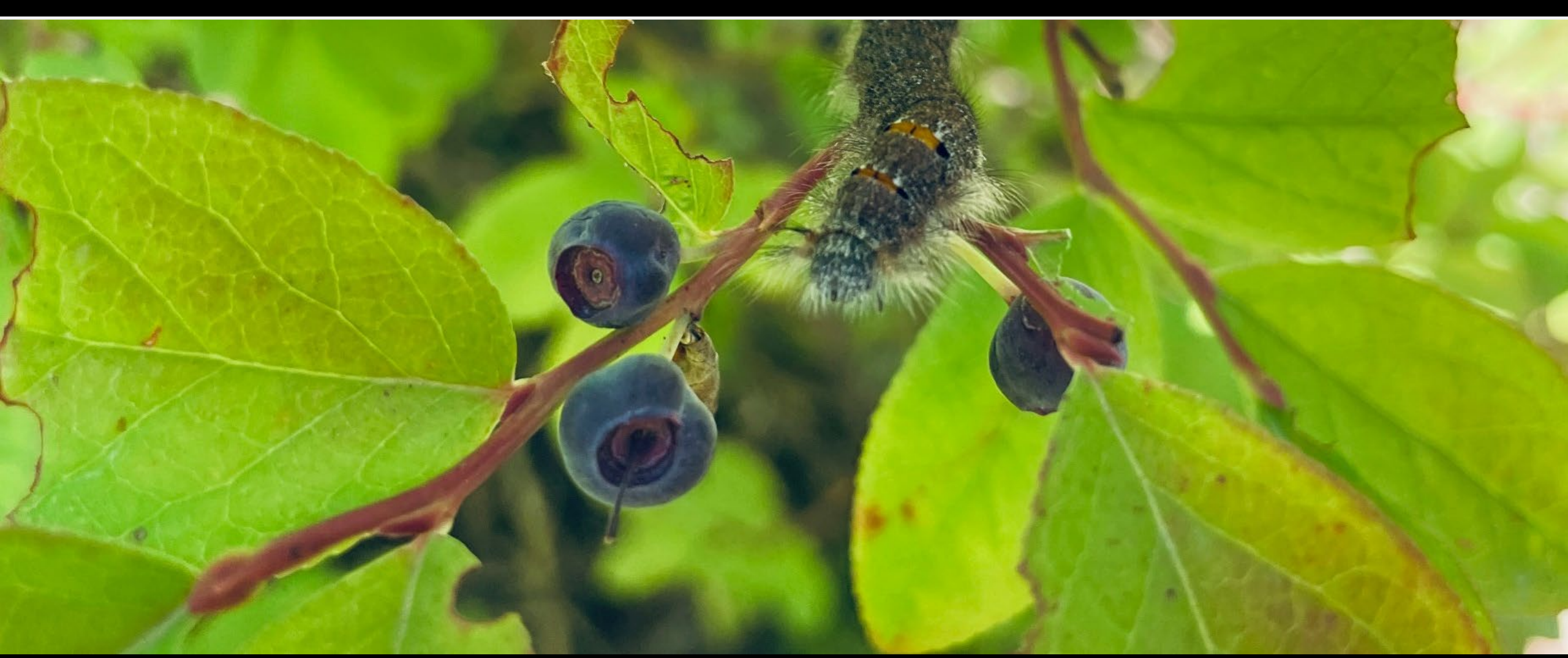
CANCER

Prostate Cancer

There has been **little change** in the incidence rate of prostate cancer among **AI/AN men** in Oregon, though the rate of incidence among **NHW men** has **decreased** since 2011.

Fig. 3.11. Age-adjusted incidence rate of prostate cancer in **AI/AN** & **NHW** men, 2011-2015 & 2016-2020 (per 100,000)
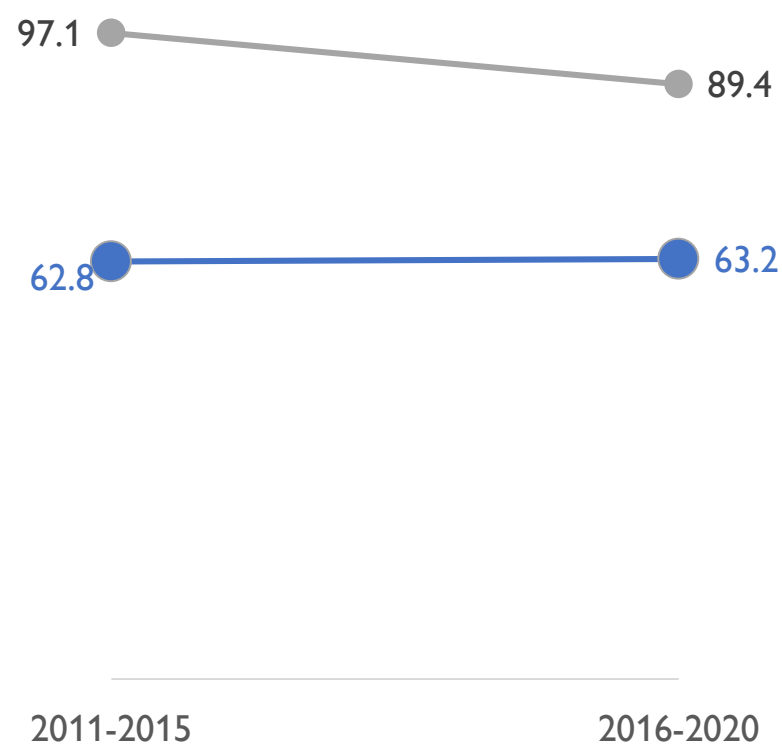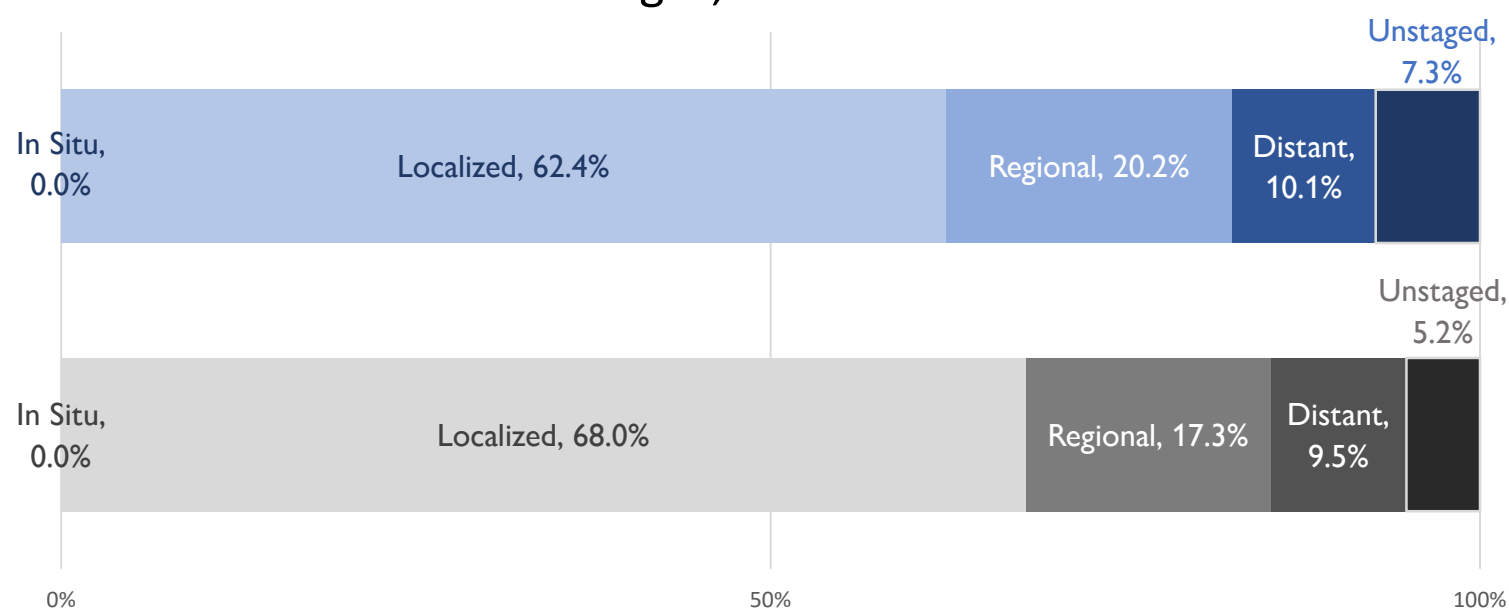

97.1 — 89.4

62.8 — 63.2

2011-2015   2016-2020

Fig. 3.12. Prostate cancer stage at diagnosis for **AI/AN** & **NHW** men, all ages, 2016-2020

In Situ, 0.0% | Localized, 62.4% | Regional, 20.2% | Distant, 10.1% | Unstaged, 7.3%

In Situ, 0.0% | Localized, 68.0% | Regional, 17.3% | Distant, 9.5% | Unstaged, 5.2%

0%   50%   100%

In **AI/AN** and **NHW** men, **over 60%** of prostate cancer cases are being diagnosed at an early stage (in situ or localized).

Data Source: Oregon State Cancer Registry, 2011-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

CANCER
Cervical Cancer (Female)

Cervical cancer is linked with Human Papilloma Virus (HPV), making it one of the few cancers that can be protected against through vaccination.

In Oregon, **AI/AN women** with cervical cancer are being **diagnosed later** (regional or distant stage) than **NHW women**.

Fig 3.13. Cervical cancer stage at diagnosis for AI/AN & NHW women, all ages, 2016-2020

Unstaged, 0.0%
In Situ, 0.0% | Localized, 38.5% | Regional, 38.5% | Distant, 23.1%

Unstaged, 4.9%
In Situ, 2.8% | Localized, 51.2% | Regional, 29.1% | Distant, 12.0%

0%   50%   100%

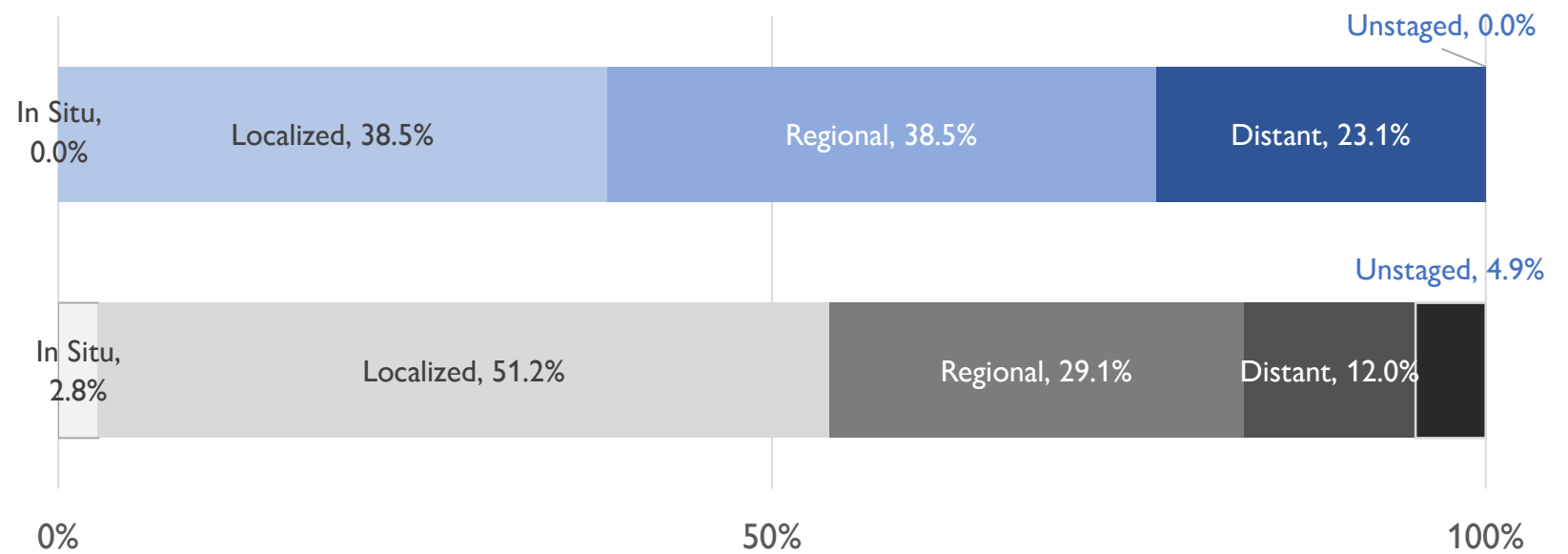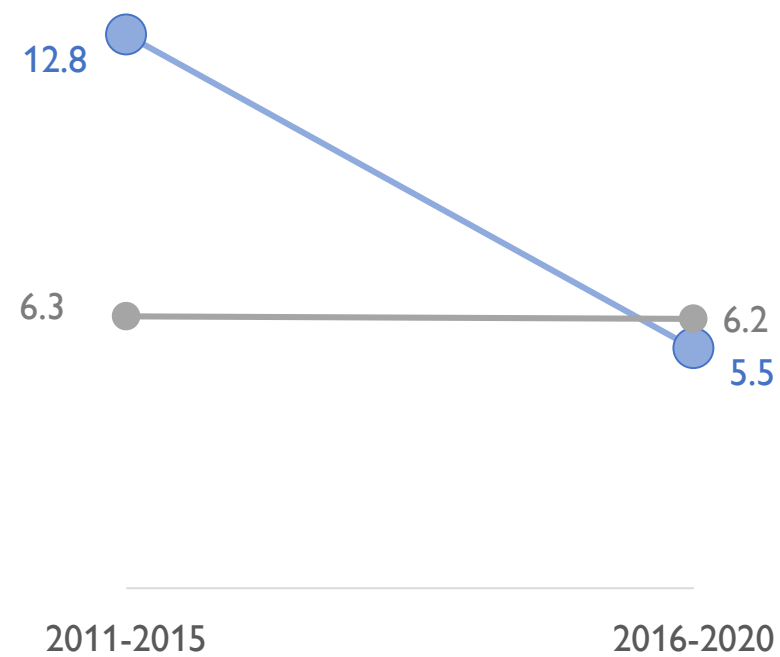The rate of newly diagnosed cervical cancer cases among **AI/AN women** in Oregon **more than halved** between the early 2010's and the late 2010's.

Fig. 3.14. Age-adjusted incidence rate of cervical cancer in AI/AN & NHW women, 2011-2015 & 2016-2020 (rate per 100,000)

12.8

6.3   6.2
             5.5

2011-2015   2016-2020

Data Source: Oregon State Cancer Registry, 2011-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

NPAIHB

CANCER
Colorectal Cancer

For **AI/AN** men and women, colorectal cancer is one of the most frequently diagnosed cancers. Use of tools like colonoscopies, sigmoidoscopies, fecal occult blood tests and DNA stool tests can help detect cases early and reduce mortality. While these tools are available, it is common for symptoms to not show during its early stages, which can lead to delayed screening.
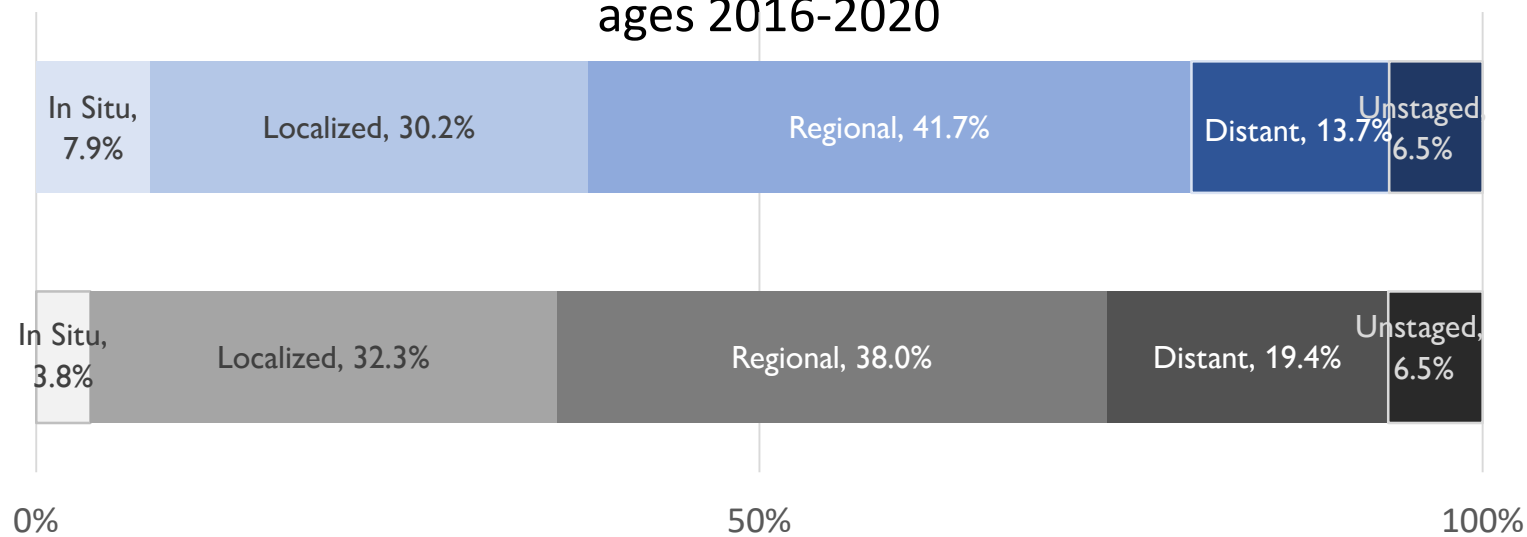
The rate of newly diagnosed cases of colorectal cancer in Oregon **AI/AN** has **fallen** in recent years, while the incidence rate in **NHW** has **remained stable**.

Fig. 3.15. Age-adjusted incidence rate of colorectal cancer in **AI/AN** & **NHW**, 2011-2015 and 2016-2020 (per 100,000)

46.3

34.4

33.6

31.3

2011-2015   2016-2020
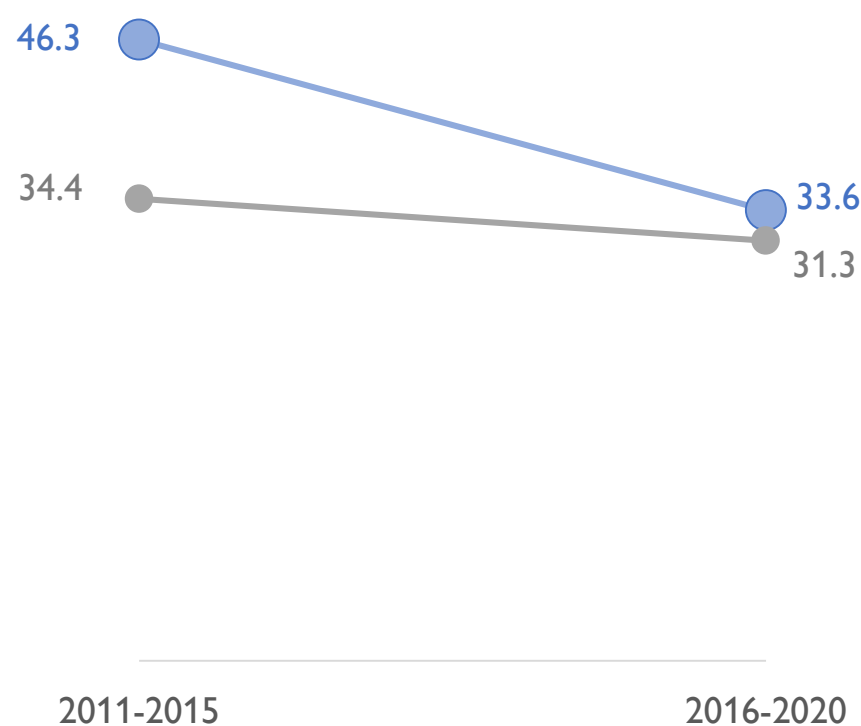
Over half of the staged cases in **AI/AN** and **NHW** colorectal cancer patients were diagnosed "late stage" (regional or distant)

Fig 3.16. Colorectal cancer stage at diagnosis for **AI/AN** & **NHW**, all ages 2016-2020

In Situ, 7.9%	Localized, 30.2%	Regional, 41.7%	Distant, 13.7%	Unstaged, 6.5%

In Situ, 3.8%	Localized, 32.3%	Regional, 38.0%	Distant, 19.4%	Unstaged, 6.5%

0%   50%   100%

Data Source: Oregon State Cancer Registry, 2011-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

Communicable Diseases in Oregon

Communicable diseases are illnesses that are spread from person to person by bacteria and viruses. Communicable diseases spread in various ways: through the air, skin-to-skin contact, contact with bodily fluids, insect bites, or from contaminated foods or surfaces. Communicable disease prevention requires both structural interventions, such as epidemiologic tracking and vaccine development, and personal interventions, such as masking or staying home when ill.[9] American Indian and Alaska Native individuals face higher rates for many communicable diseases and greater risks of severe complications.[10]

COVID-19, influenza, and pneumonia are highly contagious communicable diseases that spread through the air and primarily cause respiratory symptoms. Severe cases may result in hospitalization or death. Vaccines are available to reduce the risk of severe illness and are particularly important for Elders and immunocompromised individuals.[11]

Sexually transmitted infections (STIs) are typically transmitted from person to person through sexual contact, though some can be transmitted from mother to child during pregnancy/birth. STIs such as gonorrhea, chlamydia, and syphilis may have few to no symptoms (asymptomatic) and thus routine screening for sexually active persons is a vital part of sexual health to treat and stop the spread of the infection. All three conditions are treatable, but if left untreated, can cause serious long-term complications to a person's health.

_____

9. Edemekong, P. F., & Huang, B. (2017). Epidemiology of prevention of communicable diseases.

10. Holman, R. C., Folkema, A. M., Singleton, R. J., Redd, J. T., Christensen, K. Y., Steiner, C. A., ... & Cheek, J. E. (2011). Disparities in infectious disease hospitalizations for American Indian/Alaska Native people. Public Health Reports, 126(4), 508-521.

11. Canadian Lung Association. (2020). Flu, Pneumonia and COVID-19 at a Glance. Retrieved July 2024 from https://www.lung.ca/sites/default/files/LungAssociation_FactSheet_WhatIsIt_EN.pdf.

HIV is a virus that impacts the immune system and can be passed from person to person through sexual contact, injection drug use, or from mother to child through pregnancy or breastfeeding. While there is currently no cure for HIV, consistent use of antiretroviral (ARV) medications can suppress HIV viral load within the body, rendering the virus untransmissible to others and reduce the risk of severe outcomes caused by the virus; and from progressing to stage 3 (AIDS).[12]

STI incidence rates in this report are crude rates and rely on **CDC surveillance data** obtained through **AtlasPlus**. AtlasPlus is an interactive tool that gives users the ability to create customized tables on communicable diseases. AtlasPlus does not provide categories for multi-race American Indian and Alaska Natives or for non-Hispanic White. For this reason, data derived from AtlasPlus compare <u>AI/AN (including Hispanic) and White (including Hispanic) race groups</u>.

Oregon **death certificate** data provide information on the cause of death for those who died within the state of Oregon. This analysis utilized communicable disease data (**COVID-19, influenza and pneumonia**) from Oregon death certificates from 2018-2020. These records were linked to the Northwest Tribal Registry to correct for race misclassification among American Indian/ Alaska Native (AI/AN) Oregon residents. The data were limited to AI/AN and Non-Hispanic White (NHW) deaths.

12. U.S. Department of Health & Human Services. (2023). Ending the HIV Epidemic. https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview

COMMUNICABLE DISEASE

COVID-19

COVID-19 is a respiratory disease that can be very contagious and spread quickly. While most experience mild symptoms, COVID-19 can damage the lungs and respiratory system causing severe illness or death.[13] Older individuals and immunocompromised are more at risk of severe COVID-19 illness.

Fig. 4.1. COVID-19 mortality rate, AI/AN & NHW, by sex, 2020

The AI/AN COVID-19 mortality rate was **higher** than the NHW mortality rate across both males and females

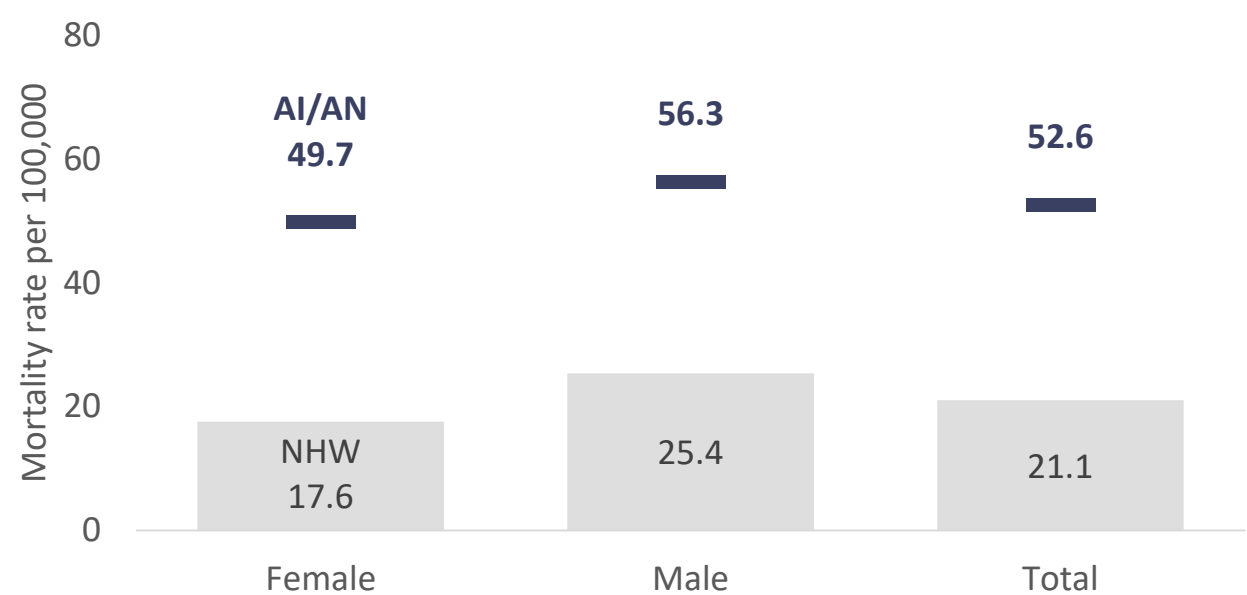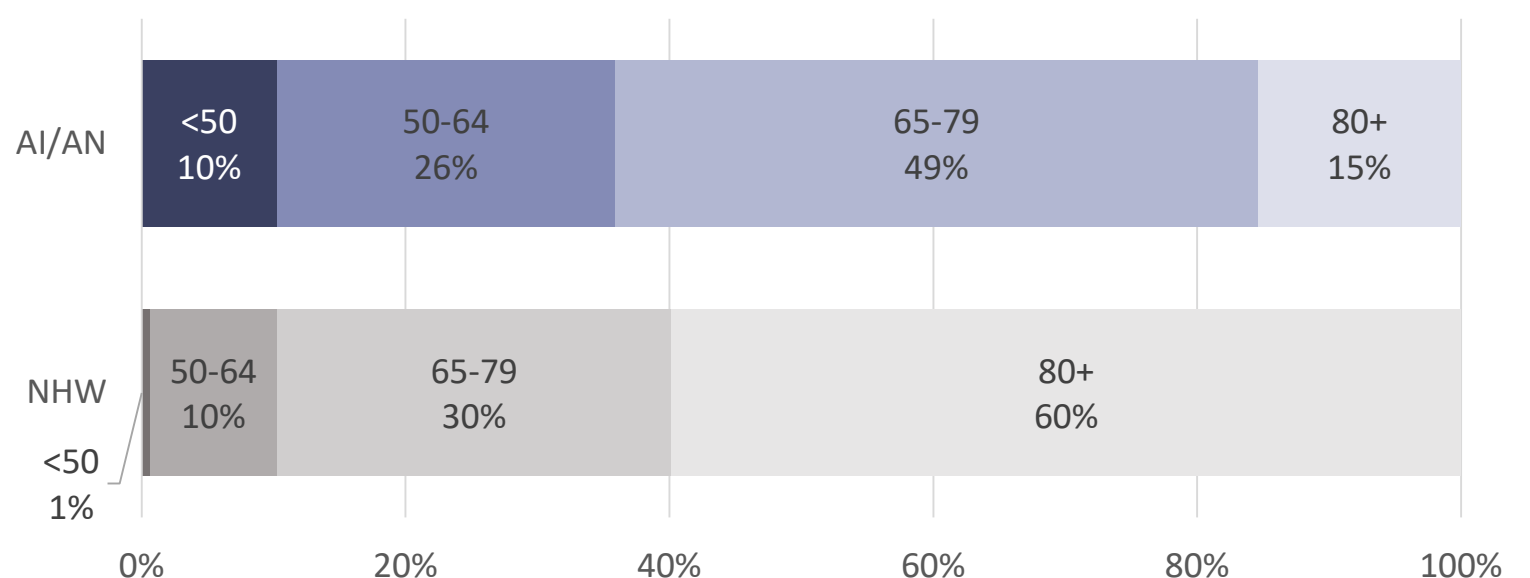Fig. 4.2. COVID-19 mortality proportions, AI/AN & NHW, by age categories, 2020

A **higher** proportion of COVID-19 deaths occurred in **younger age groups** for AI/AN compared to NHW

Data Source: Oregon Death Certificates, 2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

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13. Centers for Disease Control and Prevention. (2024). About COVID-19. Retrieved July 2024 from https://www.cdc.gov/covid/about/index.html.

COMMUNICABLE DISEASE

Influenza

Influenza is a respiratory infection caused by the *influenza virus* and can spread quickly from person to person, particularly within the fall and winter months.
Older individuals and immunocompromised are more at risk of severe influenza complications.

The **AI/AN** influenza mortality rate was **higher** than the **NHW** mortality rate across both males and females

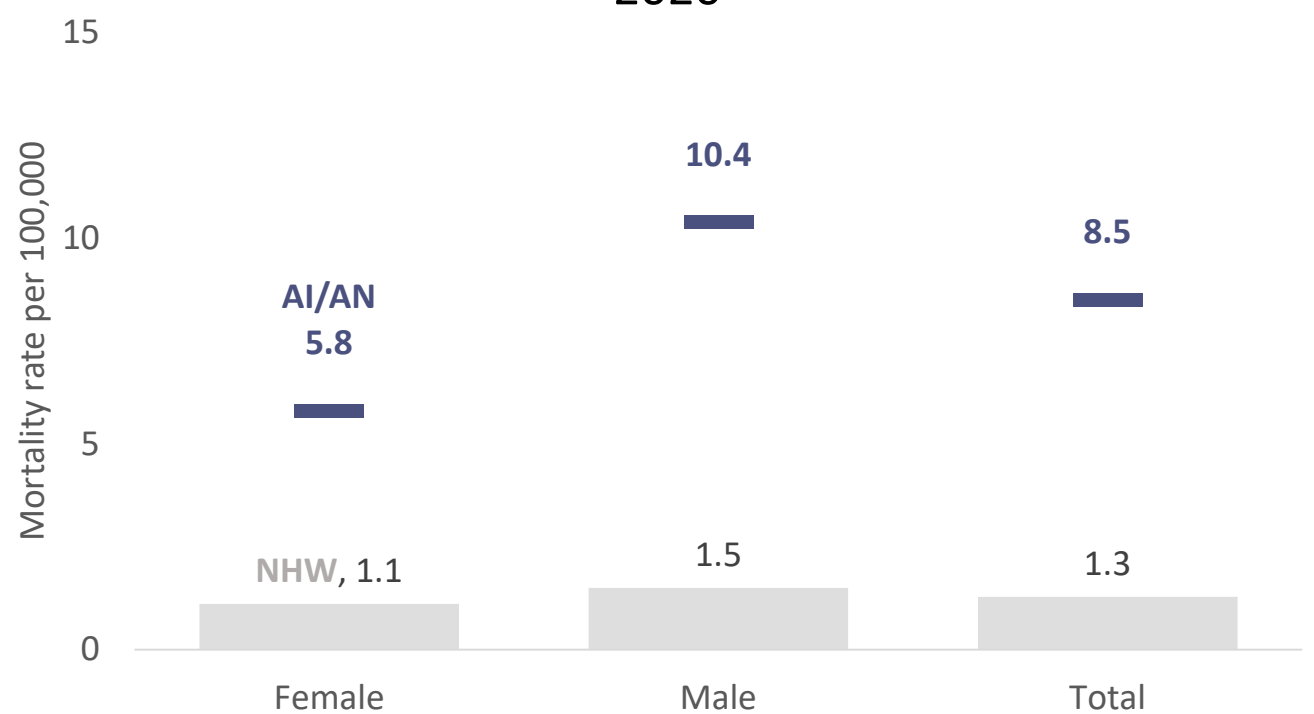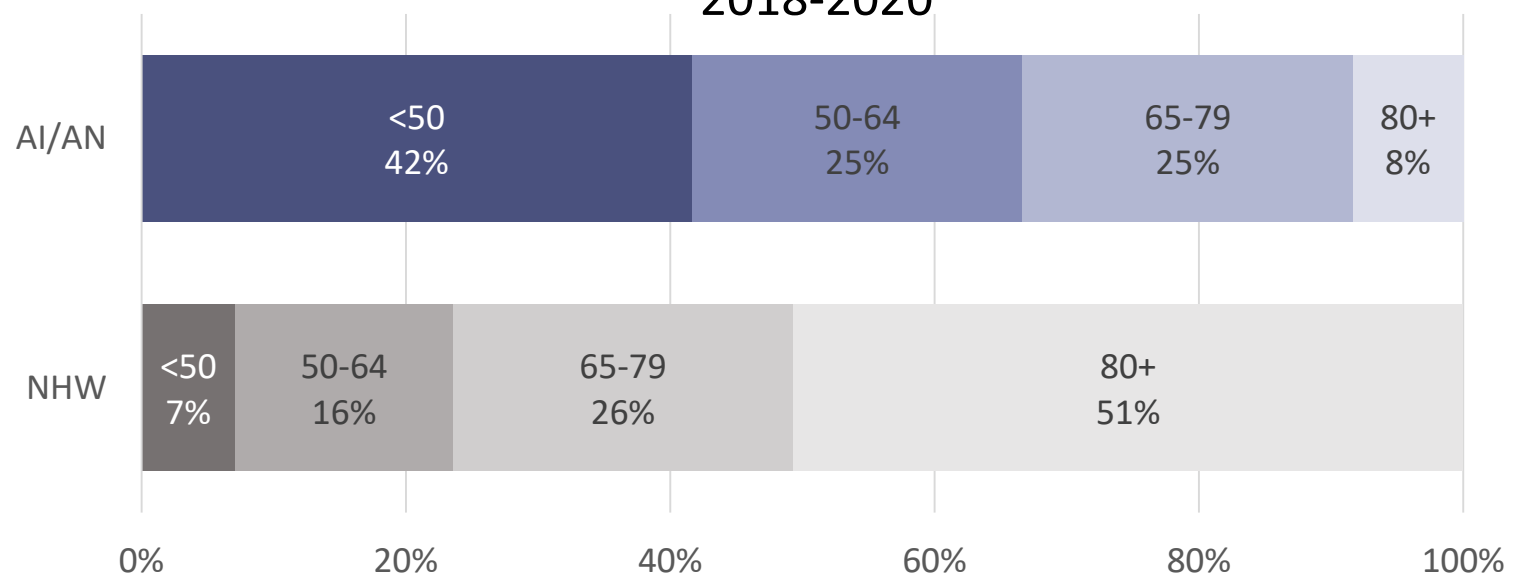Fig. 4.3. Influenza mortality rate, **AI/AN** & **NHW**, by sex, 2018-2020

The majority of influenza deaths for **AI/AN** occurred among the **<50** age group compared to the **80+** age group for **NHW**

Fig. 4.4. Influenza mortality proportions, **AI/AN** & **NHW**, by age categories, 2018-2020

Data Source: Oregon Death Certificates, 2018-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

COMMUNICABLE DISEASE

Pneumonia

Pneumonia is an infection that causes the lungs to swell and fill with fluid. It is mostly spread from person to person by bacteria and viruses but can also be caused by fungi and parasites.[14]
Some forms of pneumonia resolve on their own while others require medical treatment. Older individuals and immunocompromised are more at risk of severe pneumonia complications.

Fig. 4.5. Pneumonia mortality rate, **AI/AN** & **NHW**, by sex, 2018-2020

The **AI/AN** pneumonia mortality rate was **higher** than the **NHW** mortality rate for females, but not for males
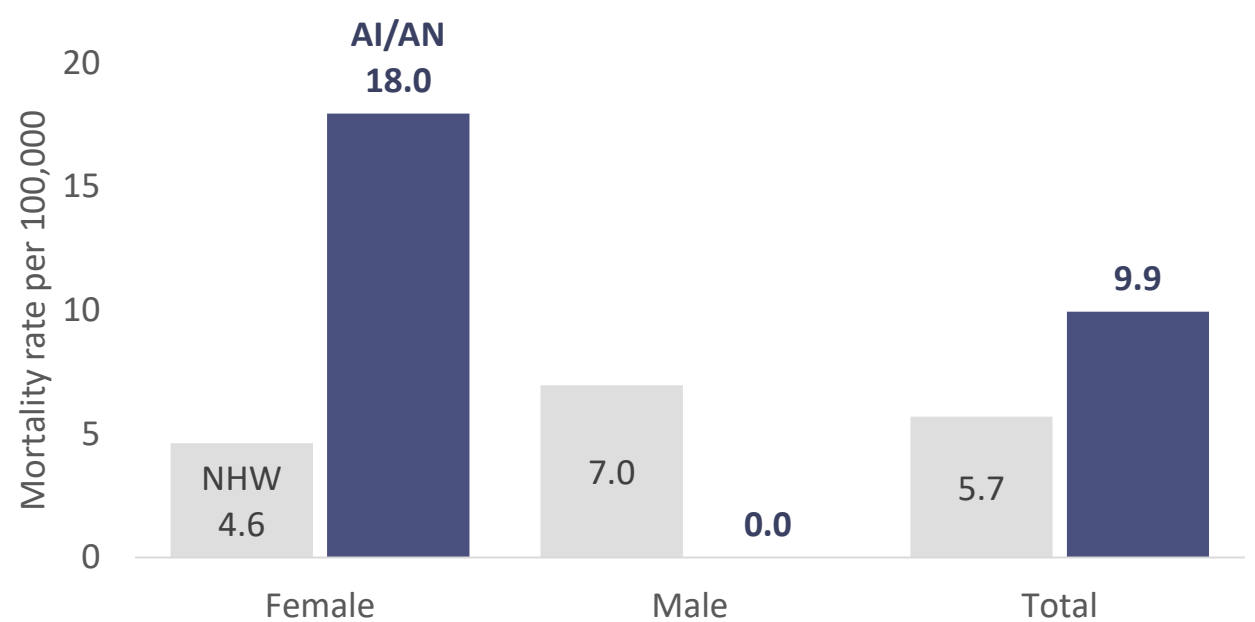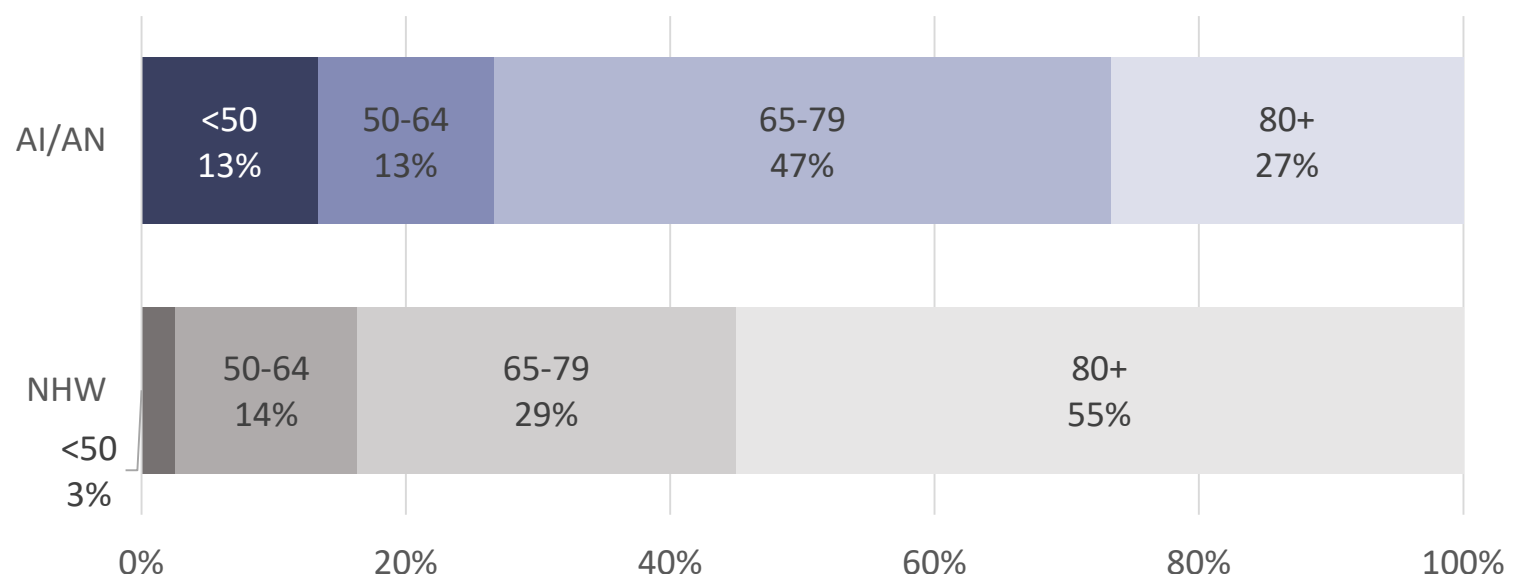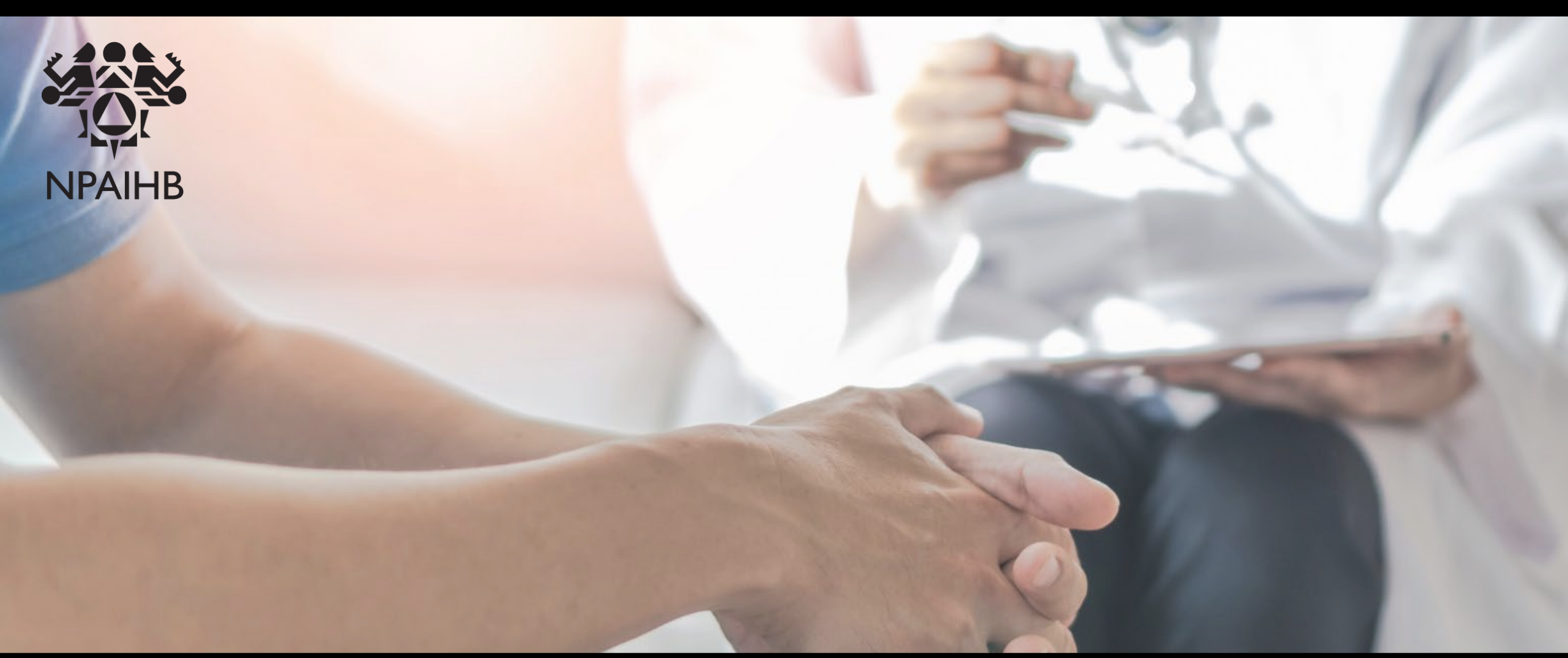

Fig. 4.6. Pneumonia mortality proportions, **AI/AN** & **NHW**, by age categories, 2018-2020

Most pneumonia deaths for **AI/AN** occurred among the **65-79** age group compared to the **80+** age group for **NHW**

Data Source: Oregon Death Certificates, 2018-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

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14. Centers for Disease Control and Prevention. (2024). About Pneumonia. Retrieved July 2024 from https://www.cdc.gov/pneumonia/about/index.html.
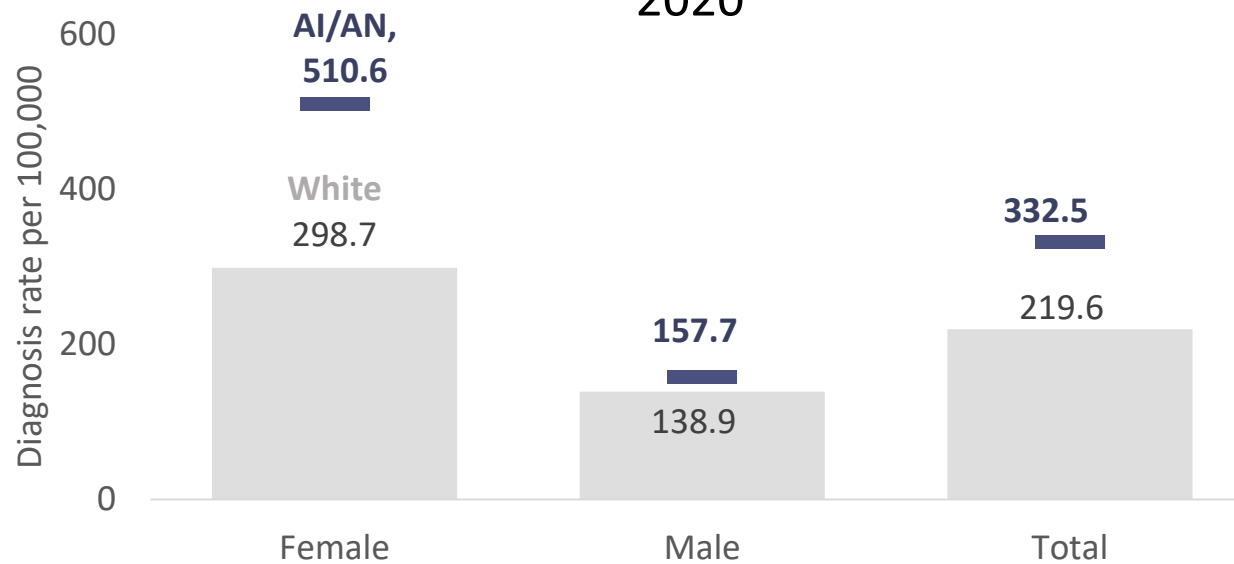
COMMUNICABLE DISEASE

Chlamydia

Chlamydia is one of the most common STIs. Women have a greater risk of developing serious health complications if chlamydia is left untreated.[15] Untreated chlamydia in women is also associated with pre-term birth, as well as conjunctivitis and pneumonia in infants.
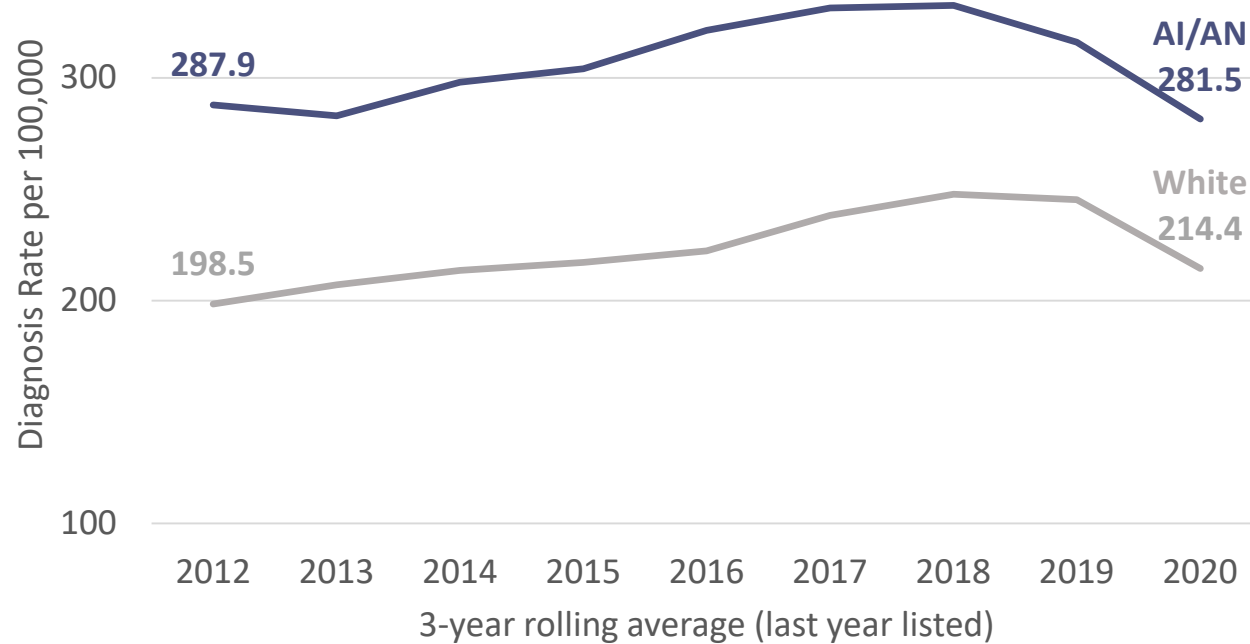
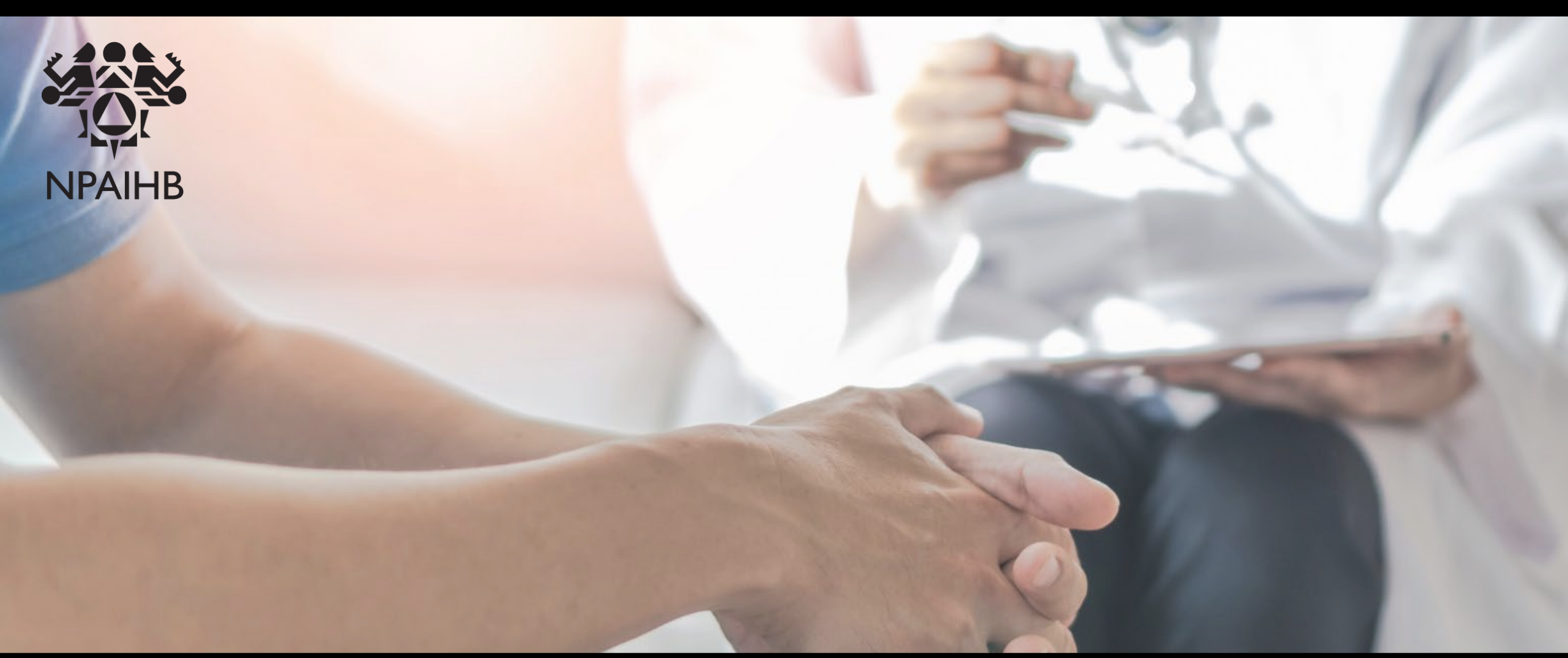Chlamydia diagnosis rates were **higher** among male and female AI/AN than White

Fig. 4.7. Chlamydia diagnosis rate, AI/AN & White, by sex, 2010-2020

Chlamydia diagnosis rates remained **higher** among AI/AN across this period

Fig. 4.8. Chlamydia diagnosis rate, AI/AN & White, 2010-2020

Data Source: Atlas Plus, Oregon 2010-2020

15. Centers for Disease Control and Prevention. (2024). About Chlamydia. Retrieved July 2024 from https://www.cdc.gov/chlamydia/about/index.html.
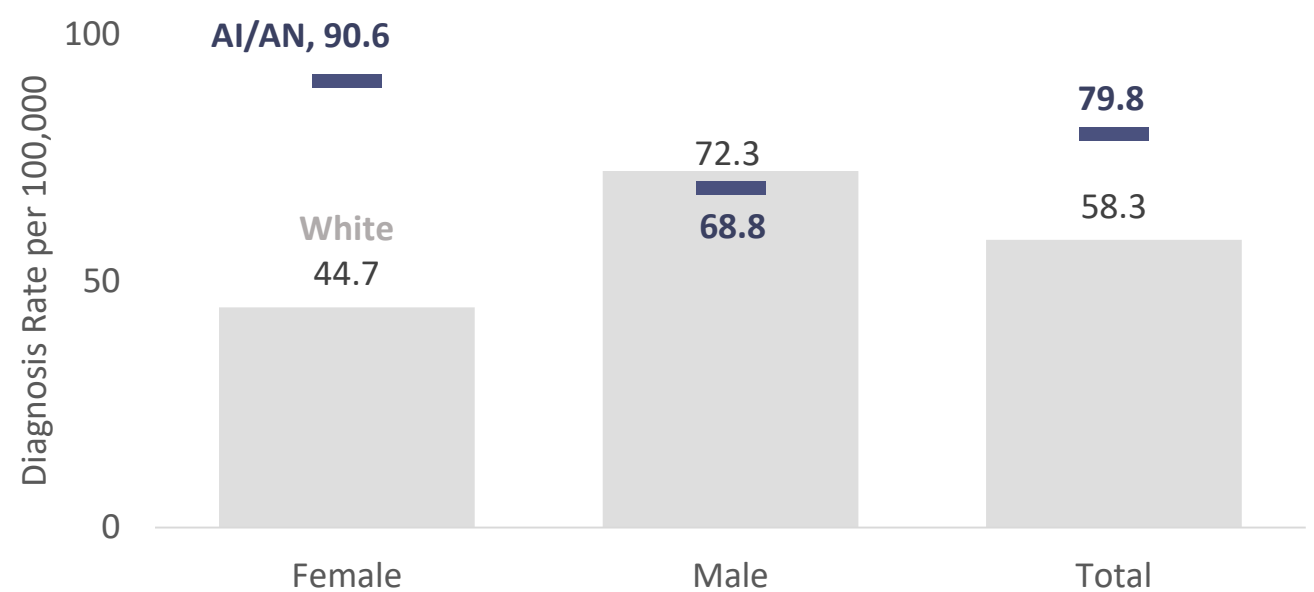
COMMUNICABLE DISEASE

Gonorrhea

Many people with gonorrhea are asymptomatic, though symptoms include urethral discharge for men and vaginal discharge and bleeding between menstrual cycles for women.[16]
If left untreated, gonorrhea can cause serious health complications for men and women, and for the infants of mothers with an untreated infection.
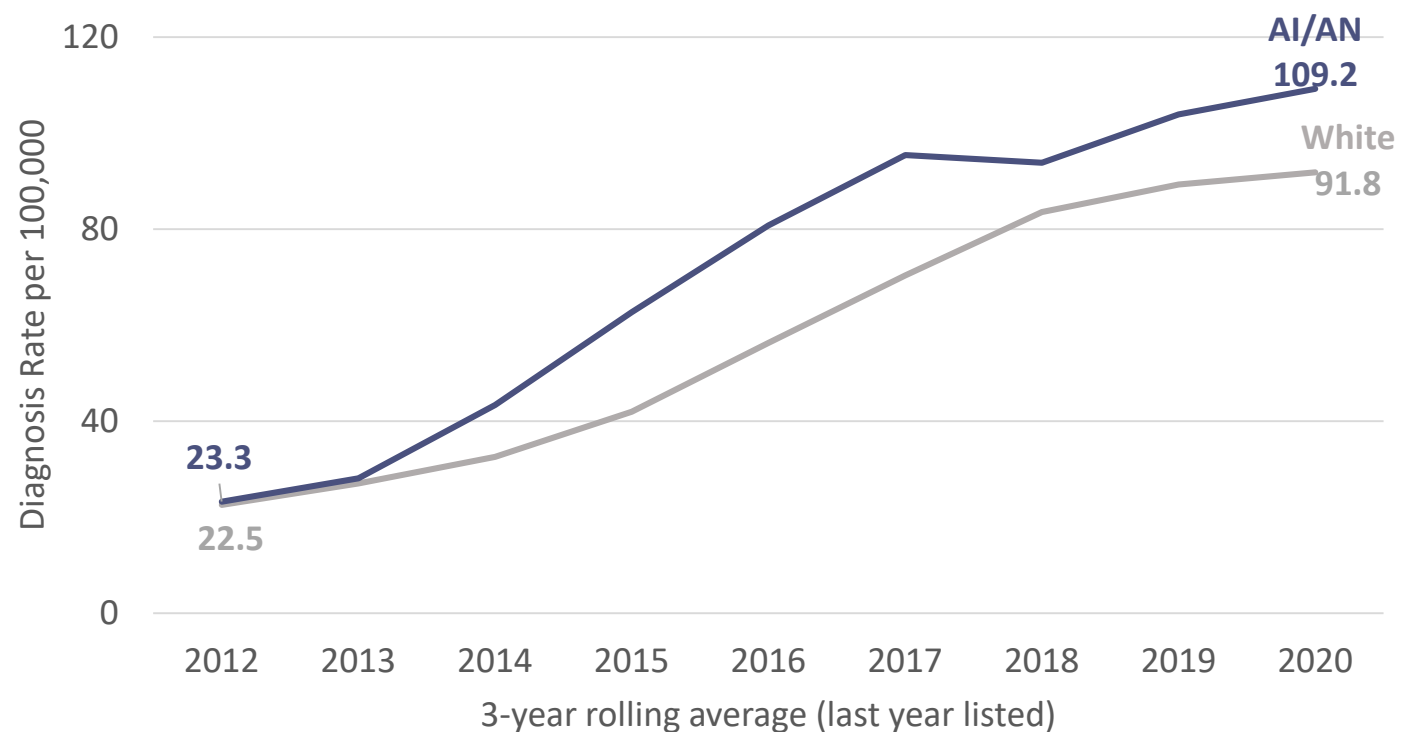
Gonorrhea diagnosis rates were **higher** among female **AI/AN** than female **White**
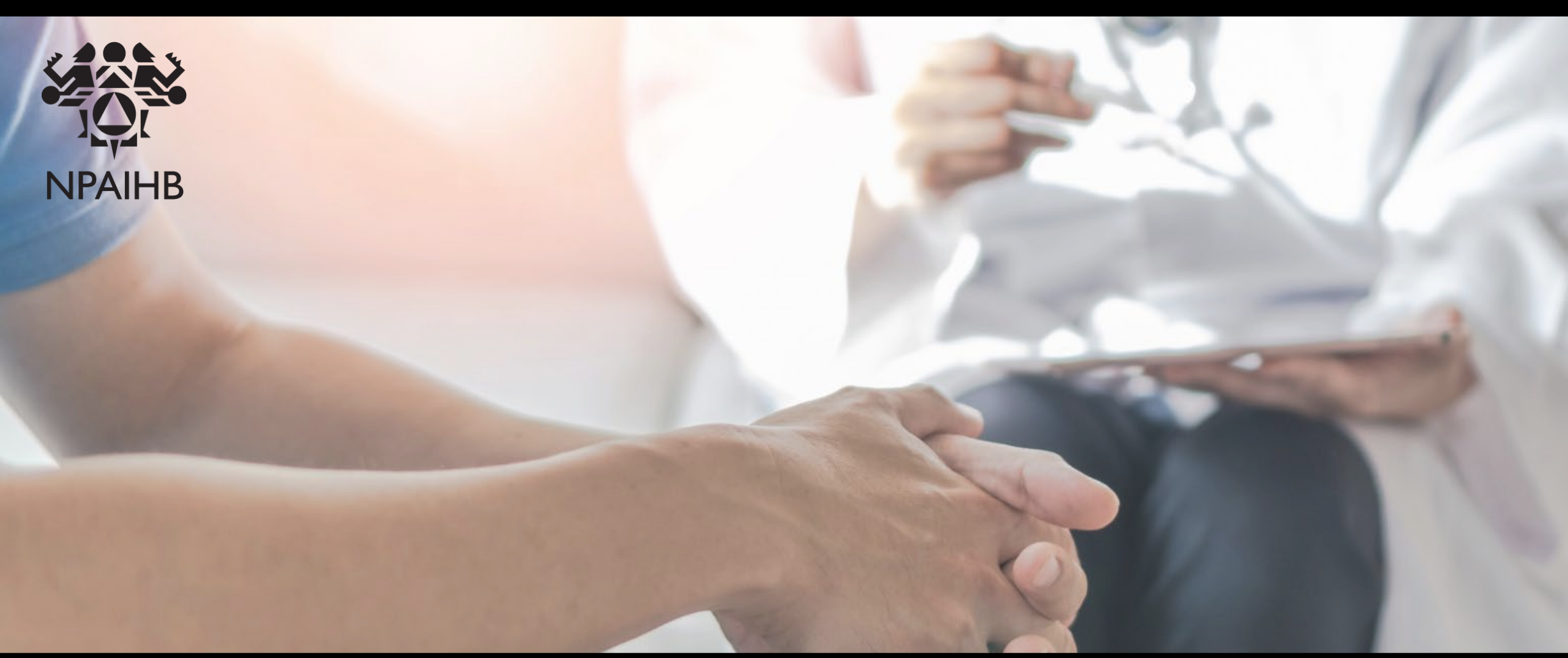
Fig. 4.9. Gonorrhea diagnosis rate, **AI/AN** & **White**, by sex, 2010-2020

- AI/AN, 90.6
- 79.8
- 72.3
- 68.8
- 58.3
- White 44.7

Y-axis: Diagnosis Rate per 100,000 (0, 50, 100)
X-axis: Female, Male, Total

Gonorrhea diagnosis rates remained **higher** among **AI/AN** across this period

Fig. 4.10. Gonorrhea diagnosis rate among **AI/AN** & **White**, 2010-2020

- AI/AN 109.2
- White 91.8
- 23.3
- 22.5

Y-axis: Diagnosis Rate per 100,000 (0, 40, 80, 120)
X-axis: 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020
3-year rolling average (last year listed)

Data Source: Atlas Plus, Oregon 2010-2020

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16. Centers for Disease Control and Prevention. (2024). About Gonorrhea. Retrieved July 2024 from https://www.cdc.gov/gonorrhea/about/index.html

COMMUNICABLE DISEASE

Syphilis

Syphilis can have a myriad of symptoms, from painless chancres (genital ulcers) to neuro and ocular syphilis that can occur at any stage of syphilis infection.[17]

Syphilis symptoms often get missed or misdiagnosed, and therefore, the infection can go unnoticed for many months or even years without proper screening.

Syphilis rates were higher among female **AI/AN** than female **White**, but similar overall between the total populations of **AI/AN** and **White**

Fig. 4.11. Syphilis diagnosis rate, **AI/AN** & **White**, by sex, 2010-2020
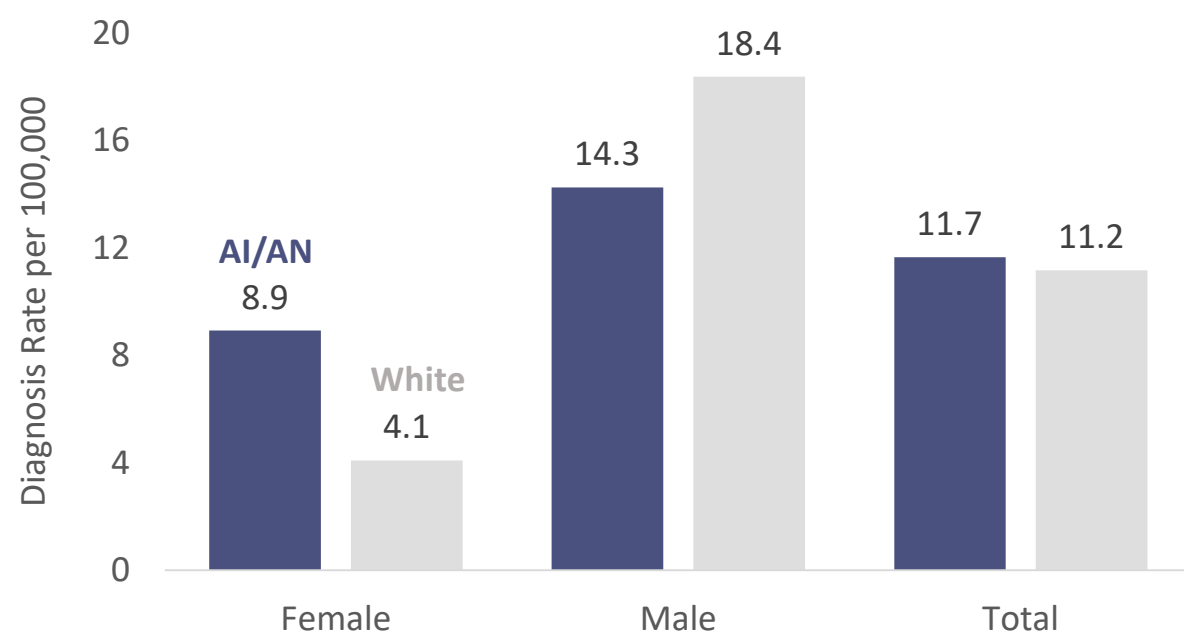
Syphilis rates among **AI/AN** surpassed the rates of **Whites** but were lower during the earlier period

Fig. 4.12. Syphilis diagnosis rate, **AI/AN** & **White**, 2010-2020

Data Source: AtlasPlus, Oregon 2010-2020
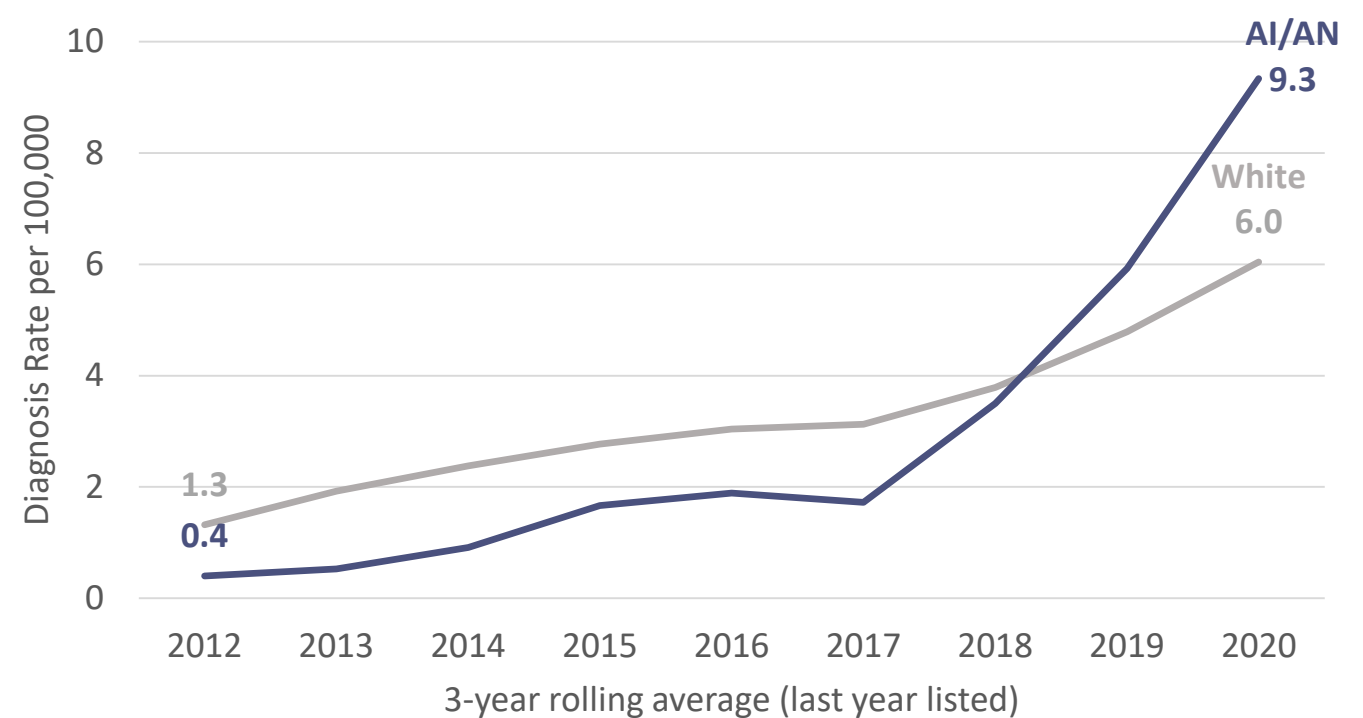
17. Centers for Disease Control and Prevention. (2024). About Syphilis. Retrieved July 2024 from https://www.cdc.gov/syphilis/about/index.html.

COMMUNICABLE DISEASE

Human Immunodeficiency Viruses (HIV)

HIV is a virus that impacts the immune system and can be passed from person to person through sexual contact, injection drug use, or from mother to child through pregnancy or breastfeeding.[18]

HIV can be prevented through the proper use of condoms, pre-exposure prophylaxis (PrEP) & post-exposure prophylaxis (PEP), and never sharing needles or syringes.

New HIV diagnosis rates among male **White** were **nearly 2.4 times** that among male **AI/AN**

Fig. 4.13. New HIV diagnosis rate, **AI/AN** & **White**, by sex, 2010-2020
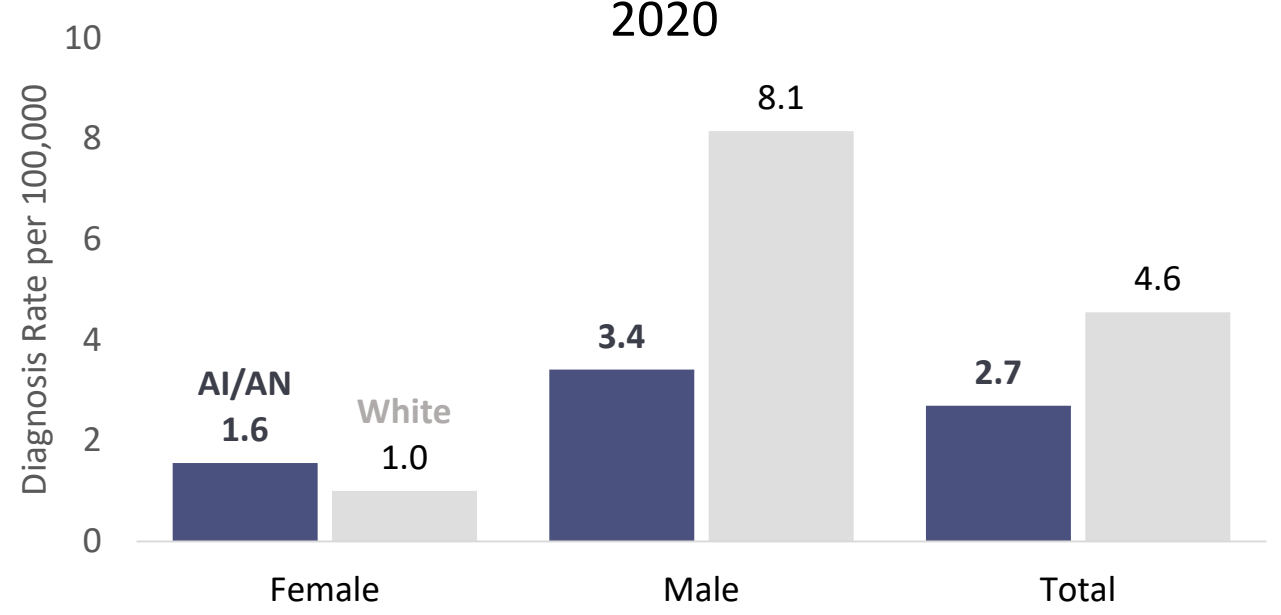
Fig. 4.14. New HIV diagnosis rate, **AI/AN** & **White**, 2010-2020

3-year rolling average (last year listed)
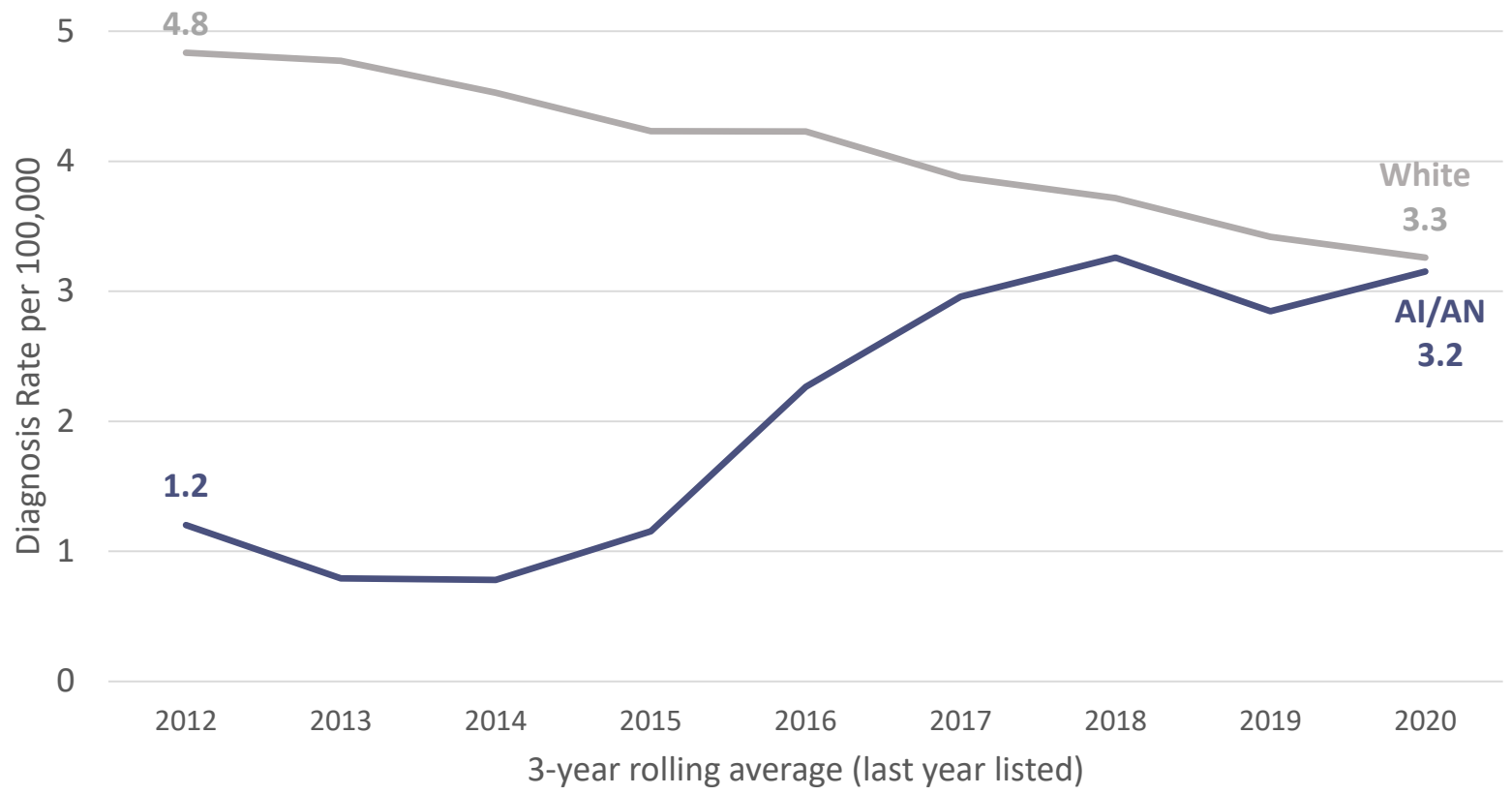
HIV diagnosis rates remained **lower** among **AI/AN** across this aggregated period

Data Source: Atlas Plus, Oregon 2010-2020

18. Centers for Disease Control and Prevention. (2024). About HIV. Retrieved July 2024 from https://www.cdc.gov/hiv/about/index.html.

Substance Use in Oregon

Substance use disorders can impair an individual's ability to carry out daily activities, work, maintain relationships, maintain mental health, and connect with the community. Furthermore, substance use is often associated with health issues, including lung or heart disease, stroke, cancer, or mental health conditions. Specific drugs have their own impacts, methamphetamine use can cause severe dental problems, and inhalants may damage or destroy nerve cells.[19]

In 2020-2021, an average of 178,000 deaths per year were attributed to excessive alcohol use among the total US population; a 29% increase from 2016-2017. [20] Moreover, in 2020, there were approximately 93,655 deaths due to drug overdose in the United States. Approximately, 70,029 of these deaths involved an opioid.[21] CDC Vital Signs reports from data in 25 states and the District of Columbia, it was estimated that there was a 39% increase in overdose death rates for American Indian/Alaska Natives (AI/AN) from 2019 to 2020. This was the second largest increase among different racial/ethnic groups, behind Black Americans who experienced a 44% increase.[22]

The Northwest Portland Area Indian Health Board is committed to addressing these disparities and to closing the health outcome gap between AI/AN and other racial-ethnic groups. Programs, such as Tribal Opioid Response (TOR), aim to assist NW Tribes in developing and implementing a complex and comprehensive opioid response, including increasing awareness of and preventing substance use disorder.

19. NIDA. Addiction and Health. National Institute on Drug Abuse website. https://nida.nih.gov/publications/drugs-brains-behavior-science-addiction/addiction-health. Published March 22, 2022. Accessed June 28, 2024.
20. Centers for Disease Control and Prevention, National Center for Health Statistics. https://www.cdc.gov/alcohol/features/excessive-alcohol-deaths.html. Published April 16, 2024. Accessed June 28, 2024.
21. Centers for Disease Control and Prevention, National Center for Health Statistics. cdc.gov/nchs/pressroom/nchs_press_releases/2022/202205.htm. Published May 11, 2022. Accessed June 28, 2024.
22. Centers for Disease Control and Prevention, Newsroom. https://www.cdc.gov/media/releases/2022/s0719-overdose-rates-vs.html. Published July 18, 2022. Access June 28, 2024.

SUBSTANCE USE
Alcohol Induced Deaths

Alcohol induced deaths include deaths attributed to chronic conditions developed by drinking alcohol over time as well as instances of binge drinking or drinking too much on one occasion.

AI/AN people had an alcohol induced death rate **2.8 times** that of the NHW rate. **AI/AN males** had the **highest** alcohol induced death rates compared to AI/AN females and NHW males.

Figure 5.1. Alcohol induced death rate, AI/AN & NHW by sex, 2016-2020

Across all age groups shown, **AI/AN** had **higher** alcohol death rates compared to their NHW counterparts. **AI/AN** age **50+** had the highest alcohol death rates.

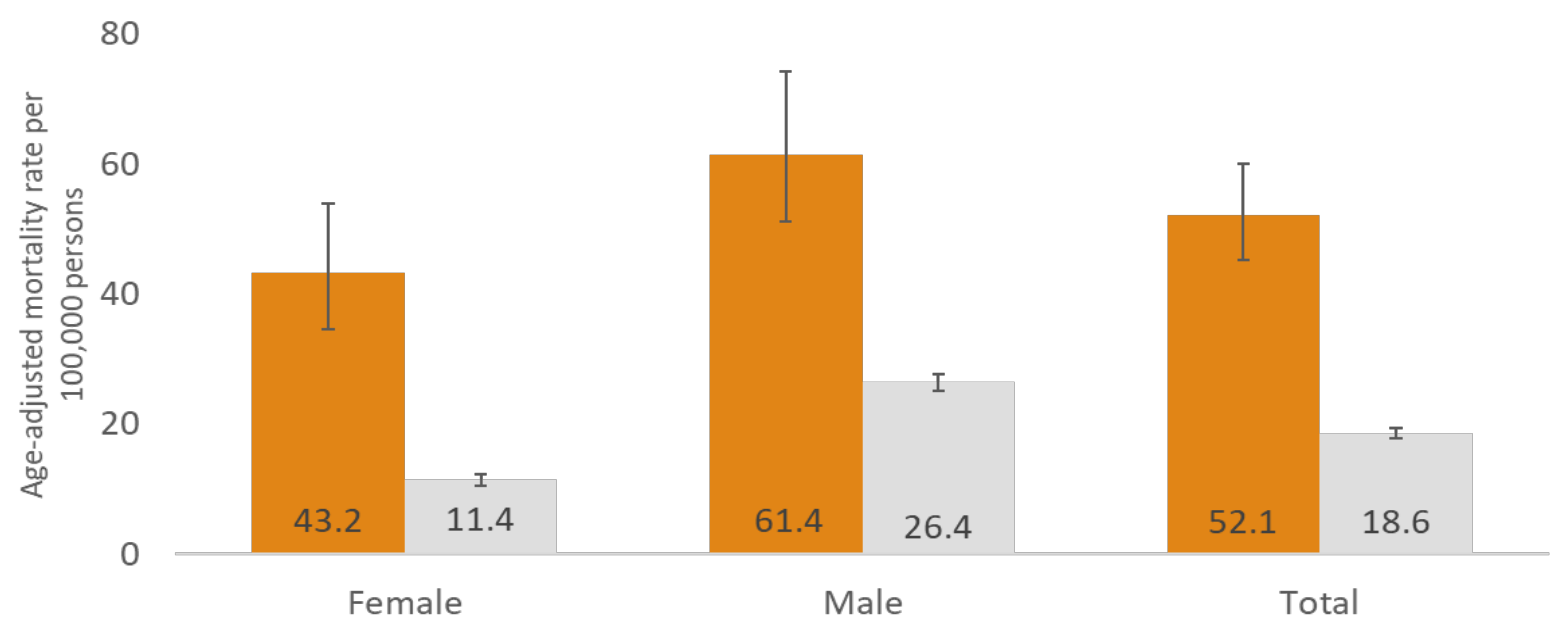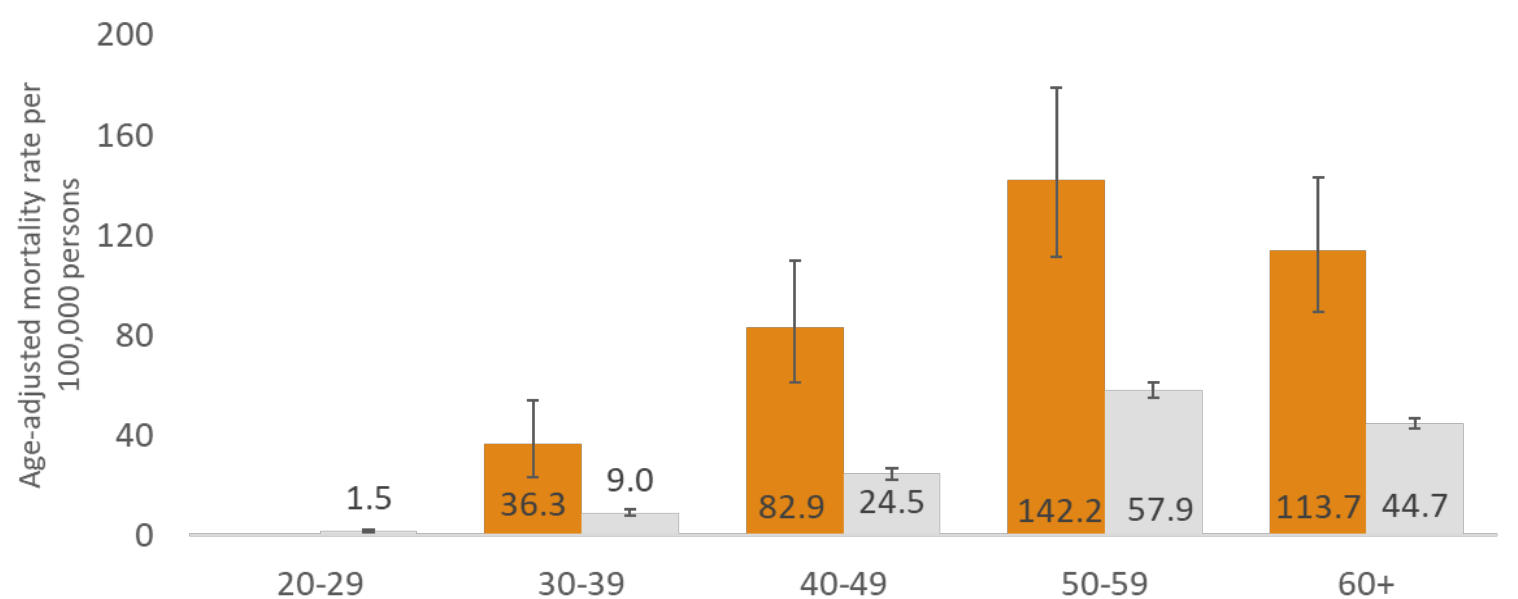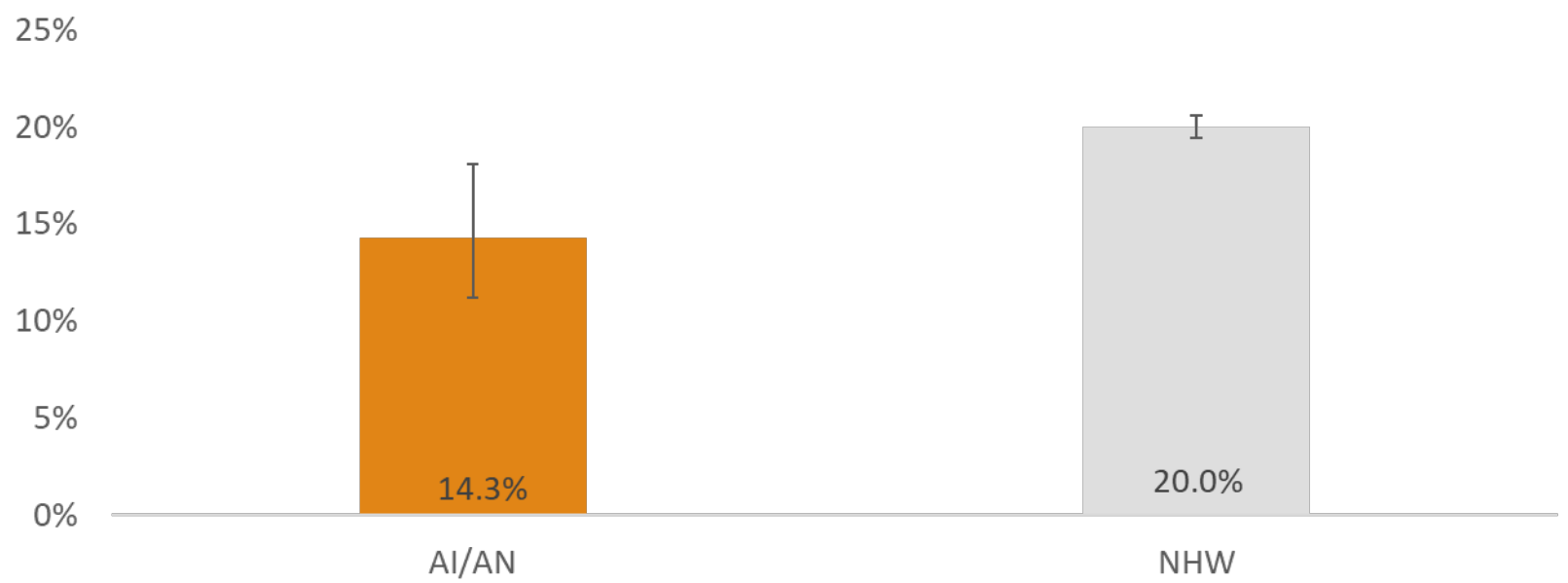Figure 5.2. Alcohol induced death rate, AI/AN & NHW by age, 2016-2020

SUBSTANCE USE
Self-Reported Alcohol Use

Binge-drinking is defined as 4+ drinks for women and 5+ for men on a single occasion. Heavy alcohol consumption is defined as 8+ drinks for women and 15+ for men per week.

Among Oregon adults, a **smaller** proportion of non-Hispanic **AI/AN** self-reported binge-drinking compared to **NHW** adults.

Figure 5.3. Proportion of self-reported binge drinking, **AI/AN** & **NHW**, 2016-2019

A **smaller** proportion of non-Hispanic **AI/AN** adults in Oregon reported heavy alcohol consumption compared to **NHW**.

Figure 5.4. Proportion of self-reported heavy alcohol consumption, **AI/AN** & **NHW**, 2016-2019

Data Source: Behavioral Risk Factor Surveillance System (BRFSS) 2016-2019. Oregon State Public Health Division, Oregon Public Health Assessment Tool (OPHAT), September 2024.

SUBSTANCE USE
Drug Overdose Deaths

Drug overdose deaths include overdose deaths caused by or including, opioids, psychostimulants, cocaine and benzodiazepine, among other possible drugs.

The drug overdose death rates among **AI/AN** were **nearly two times** that of the rate among their **NHW** counterparts.

Figure 5.5. Drug overdose death rate, **AI/AN** & **NHW** by sex, 2016-2020
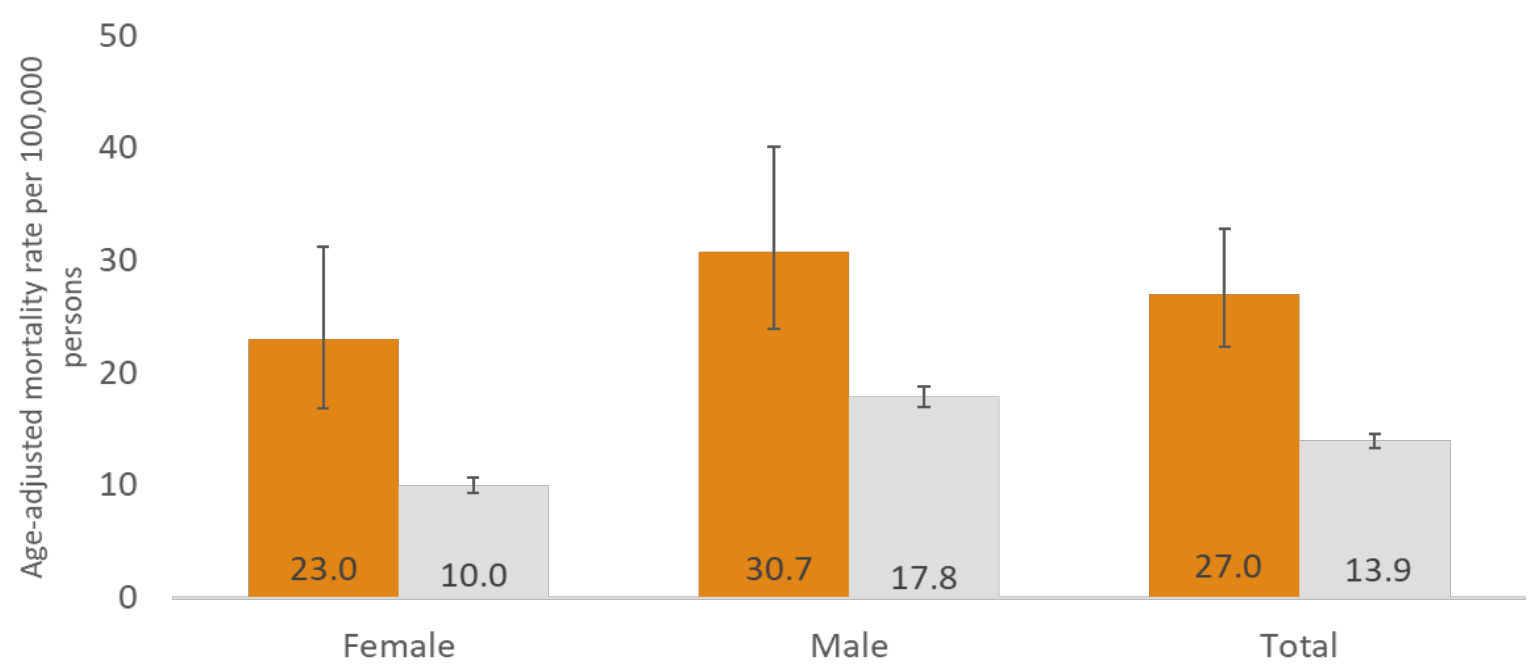
AI/AN age **30-39** & **40-49** had a drug overdose death rate **more than two times** that of their **NHW** counterparts.

Figure 5.6. Drug overdose death rate, **AI/AN** & **NHW** by age, 2016-2020
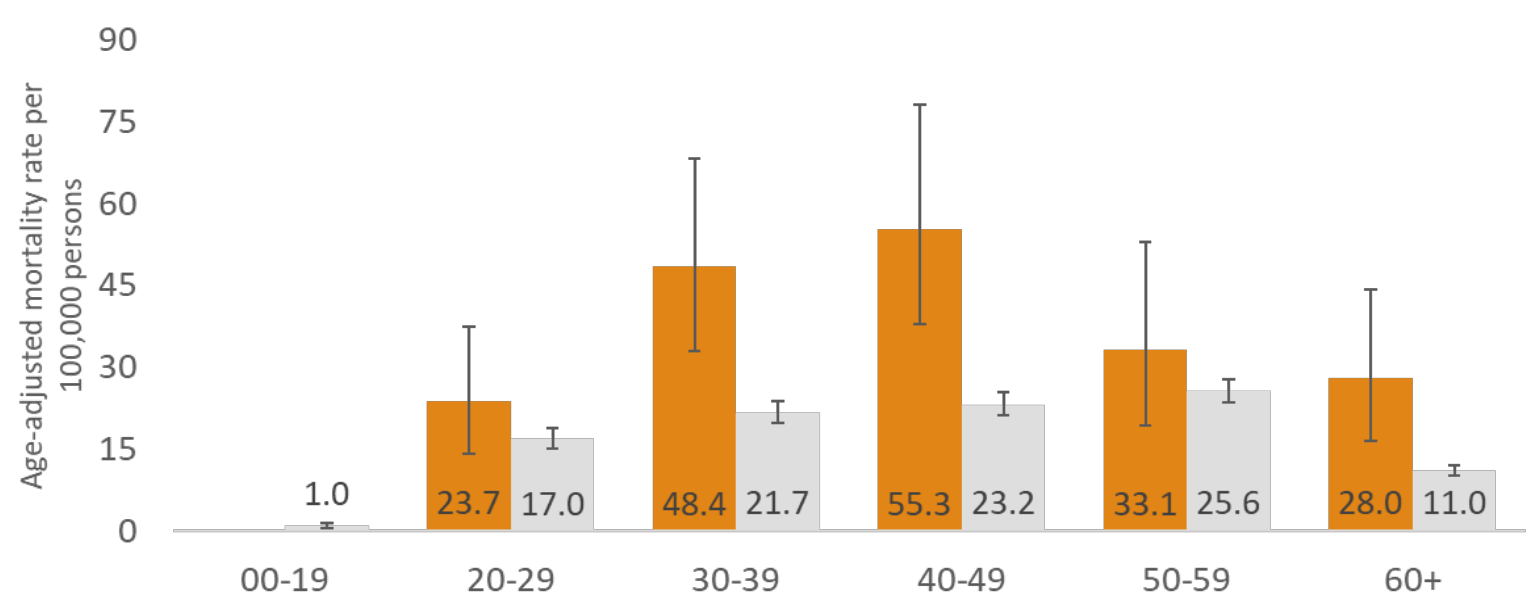
SUBSTANCE USE
Drug Overdose Deaths

Among the **AI/AN** population of Oregon, the drug overdose death rate remained steady from 2011-2013 to 2015-2017, then started to increase. In 2018-2020, the drug overdose death rate among **AI/AN** was approximately **2.2 times** that of the **NHW** drug overdose death rate.

Figure 5.7. Drug overdose death rates, **AI/AN** & **NHW**, 2011-2020
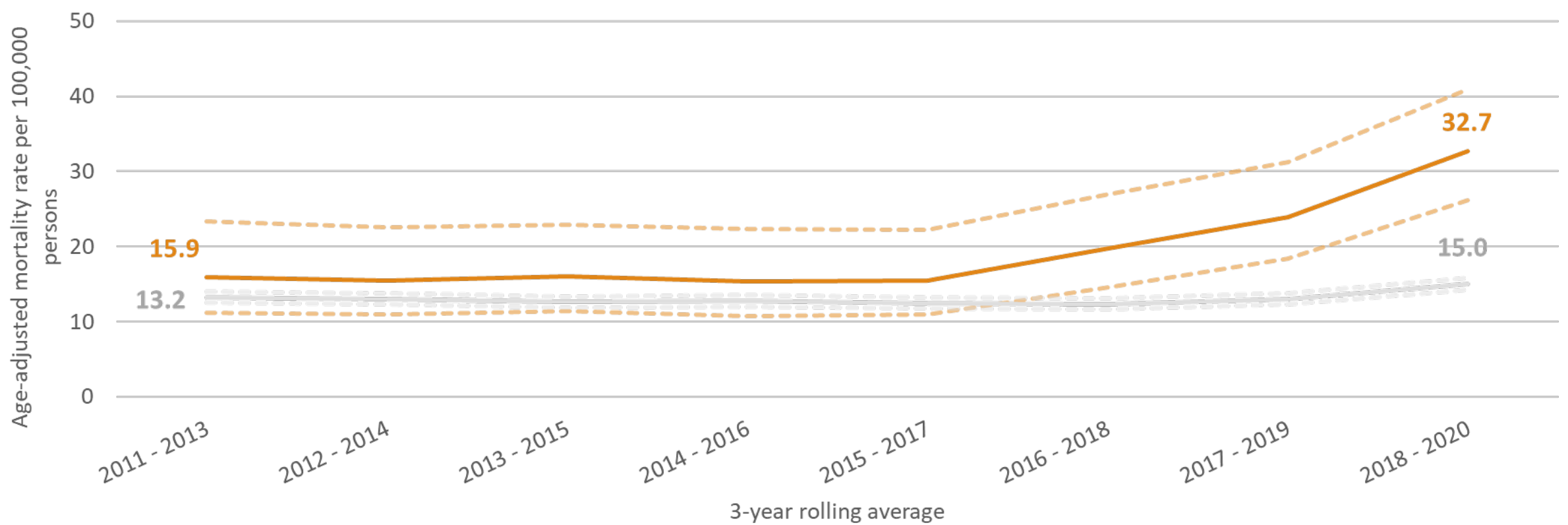
From 2011 to 2020, without race correction, this report would have excluded 30 drug overdose deaths. This would have resulted in AI/AN **rates being incorrectly lower by up to 56%**.

Data Source: Oregon Death Certificates, 2011-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

SUBSTANCE USE

Drug Overdose—Polysubstance Use

The largest percentage of drug overdose deaths was attributed to an opioid alone (35%). Additionally, 32% of drug overdose deaths were due to multiple drugs, and another 23% were caused by psychostimulants (alone).

Figure 5.8. Percentage of drug type listed as cause of death among AI/AN, 2016-2020
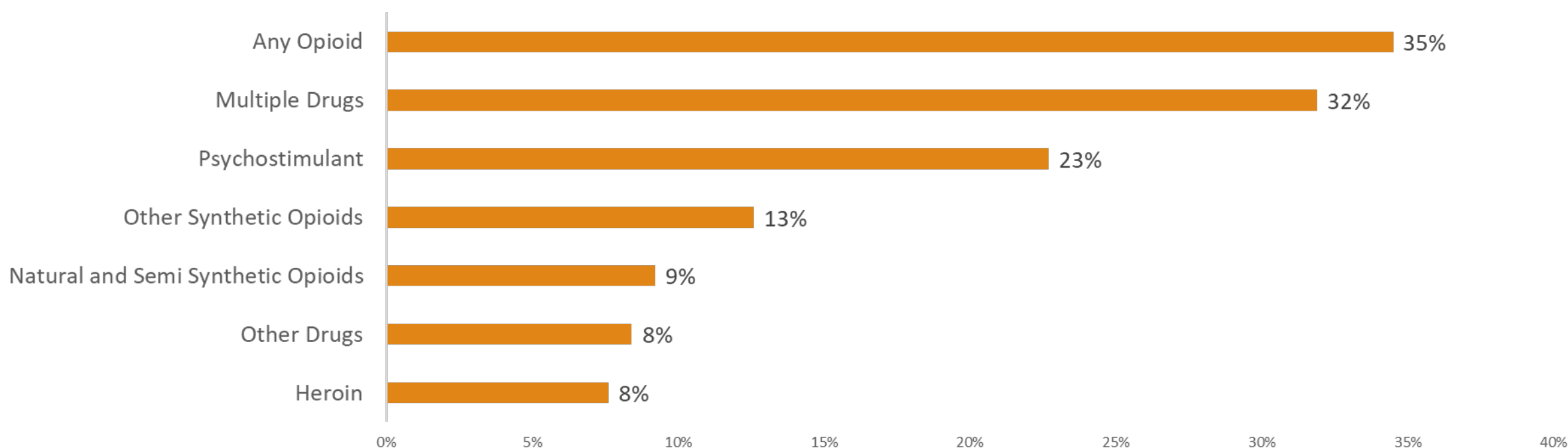
Of the 32% of drug overdoses among AI/AN from 2016-2020 that involved multiple substances:

- 47% of methamphetamine overdoses also included an opioid
- 27% of opioid overdoses included another opioid
- 10% of opioid overdoses also included a benzodiazepine

Definitions:

- Any opioid includes other synthetic opioids (primarily fentanyl), heroin, methadone and natural/semi-synthetic opioids (hydrocodone, oxycodone, etc).

- Psychostimulant primarily includes methamphetamine.

- Other represents instances where a drug was not specified.

SUBSTANCE USE

Opioid Overdose

Opioid overdose includes all overdoses caused by a synthetic opioid (primarily fentanyl), all natural and semi-synthetic opioids (hydrocodone, oxycodone, etc), methadone, and heroin.

Overall, the **AI/AN** population had an opioid overdose death rate **two times** that of the **NHW** population.

Figure 5.9. Opioid overdose death rate, **AI/AN** & **NHW** by sex, 2016-2020

	Female	Male	Total
AI/AN	13.4	21.4	17.7
NHW	6.2	11.2	8.7
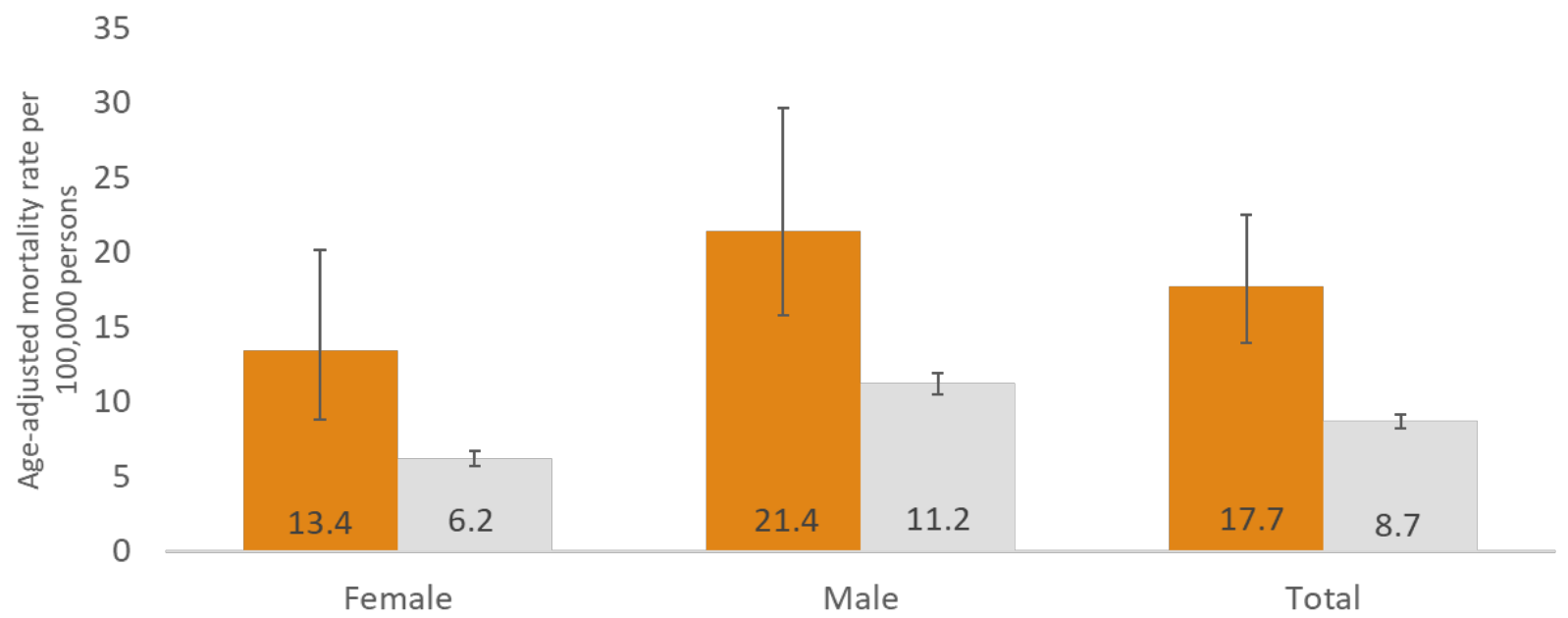
AI/AN aged **40-49** had a **higher** rate of opioid overdose deaths compared to their **NHW** counterparts.

Figure 5.10. Opioid overdose death rate, **AI/AN** & **NHW** by age, 2016-2020
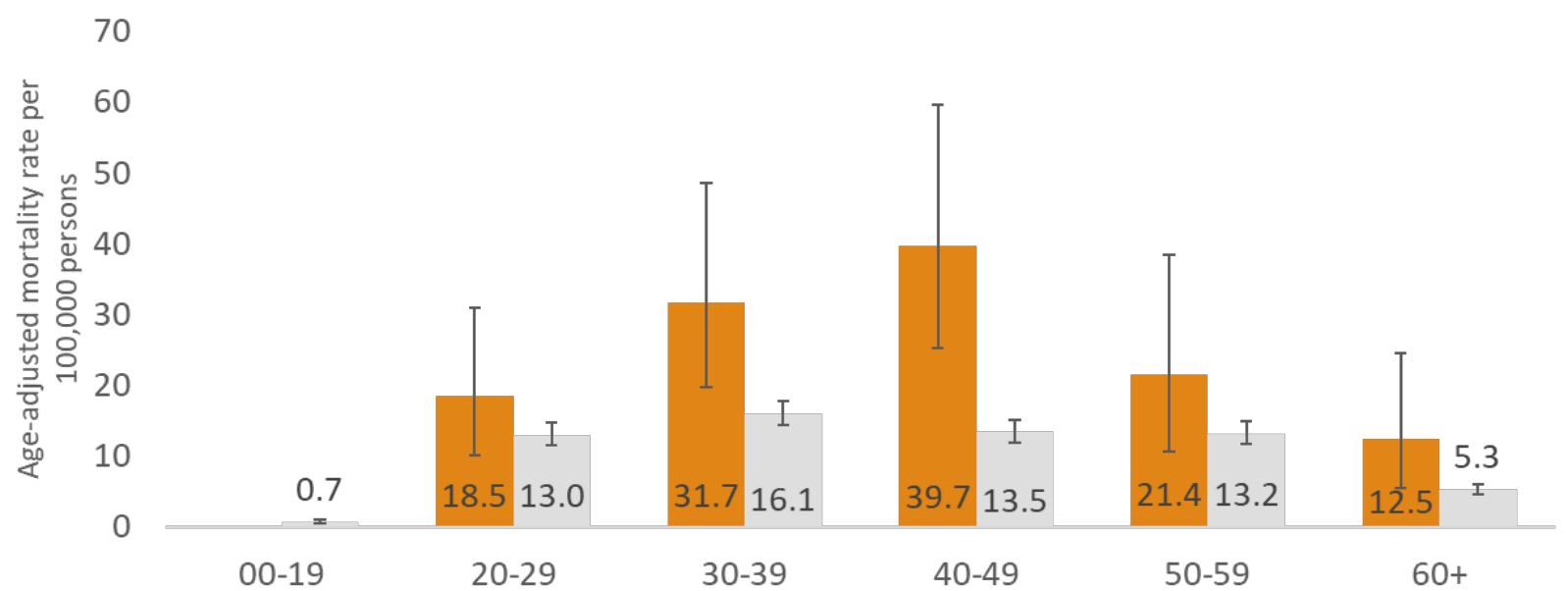
	00-19	20-29	30-39	40-49	50-59	60+
AI/AN		18.5	31.7	39.7	21.4	12.5
NHW	0.7	13.0	16.1	13.5	13.2	5.3

Data Source: Oregon Death Certificates, 2016-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

Injury & Violence in Oregon

Generally, injuries are separated into two categories: unintentional injuries, which result from events such as motor vehicle crashes, falls, accidental poisoning, or drowning; and intentional injuries, which are caused deliberately by one person to another or to themselves, such as physical abuse, homicide, or suicide. Injury and violence can have both short-term impacts, like missing work or financial strain, and long-term consequences, such as ongoing chronic pain or even trauma that can affect future generations.

Health disparities are exacerbated for American Indians and Alaska Natives, especially with injury and violence disproportionately impacting Native communities. Nationally, in 2020, unintentional injuries were the leading cause of death for American Indians and Alaska Natives ages 1-9 and 15-34, with suicide as the leading cause of death for those 10-14 years of age and homicide as the third leading cause of death for ages 1-24.[23]

The Northwest Portland Area Indian Health Board (NPAIHB) is committed to addressing these disparities and to closing the health outcome gap between American Indian/Alaska Native (AI/AN) and other racial-ethnic groups. Programs, such as Tribal Health: Reaching out InVolves Everyone (THRIVE), aim to improve the health and well-being of AI/AN communities through programmatic assistance, suicide prevention trainings such as QPR (Question Persuade Refer), and resources, such as the Caring Text Message Intervention Campaign.

This section includes analysis of **Oregon death certificate data**, which provides information on demographics and health outcomes of Oregon residents. This analysis utilized data from 2004-2020 and focuses on **suicide, homicide, and unintentional injury**. These records were linked to the Northwest Tribal Registry to correct for race misclassification among AI/AN Idaho residents by NPAIHB's IDEA-NW. The data were limited to AI/AN and Non-Hispanic White (NHW) deaths.

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23. WISQARS Leading Causes of Death Visualization Tool. Centers for Disease Control and Prevention. Accessed June 27, 2024. https://wisqars.cdc.gov/lcd/.

INJURY & VIOLENCE
Suicide

Suicide is defined as a death due to intentional self-harm.

During 2016-2020, the suicide rate was approximately **16% higher** for **AI/AN** than **NHW**. Among **AI/AN**, the rate of suicide among males was **2.7 times** that of females.

Figure 6.1. Suicide mortality, **AI/AN** & **NHW**, by sex, 2016-2020
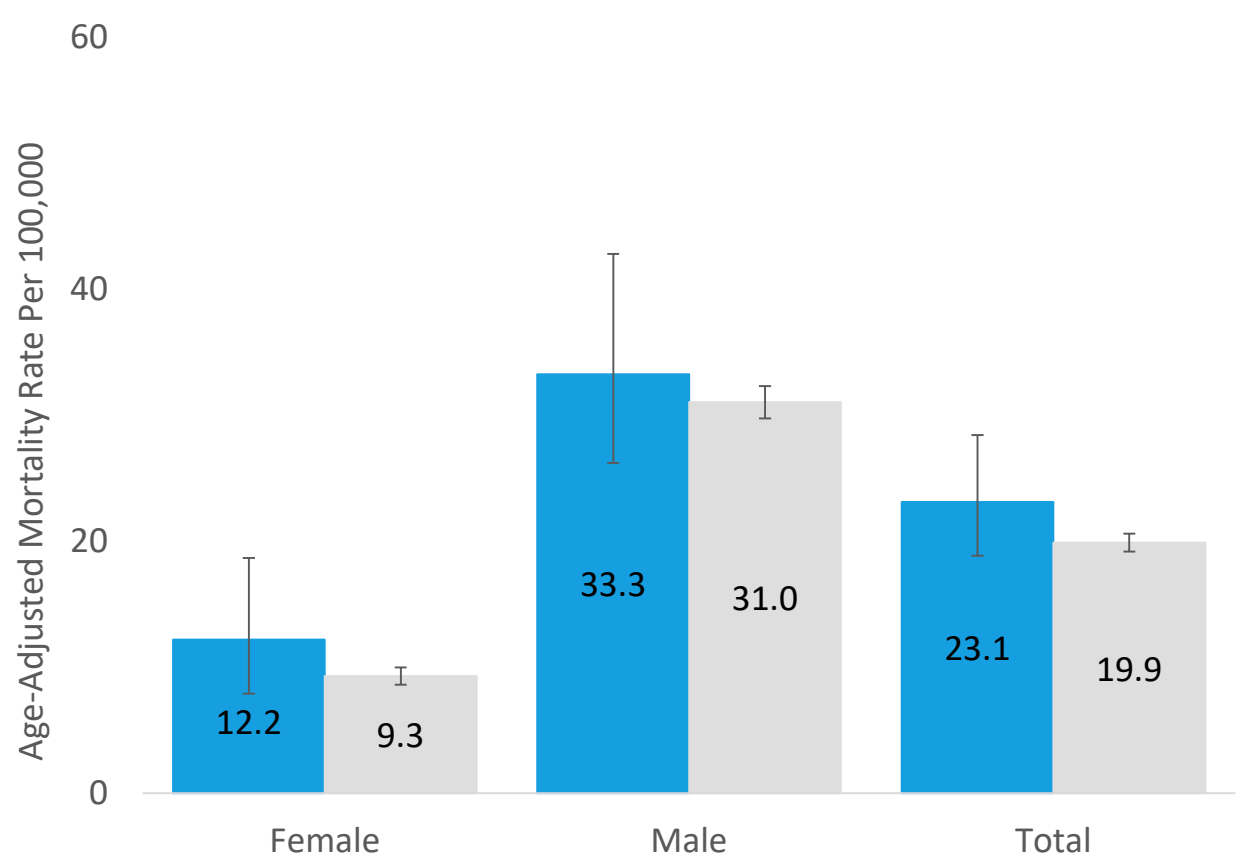
Figure 6.2. Percentage of suicide deaths, **AI/AN** & **NHW**, by age, 2016-2020
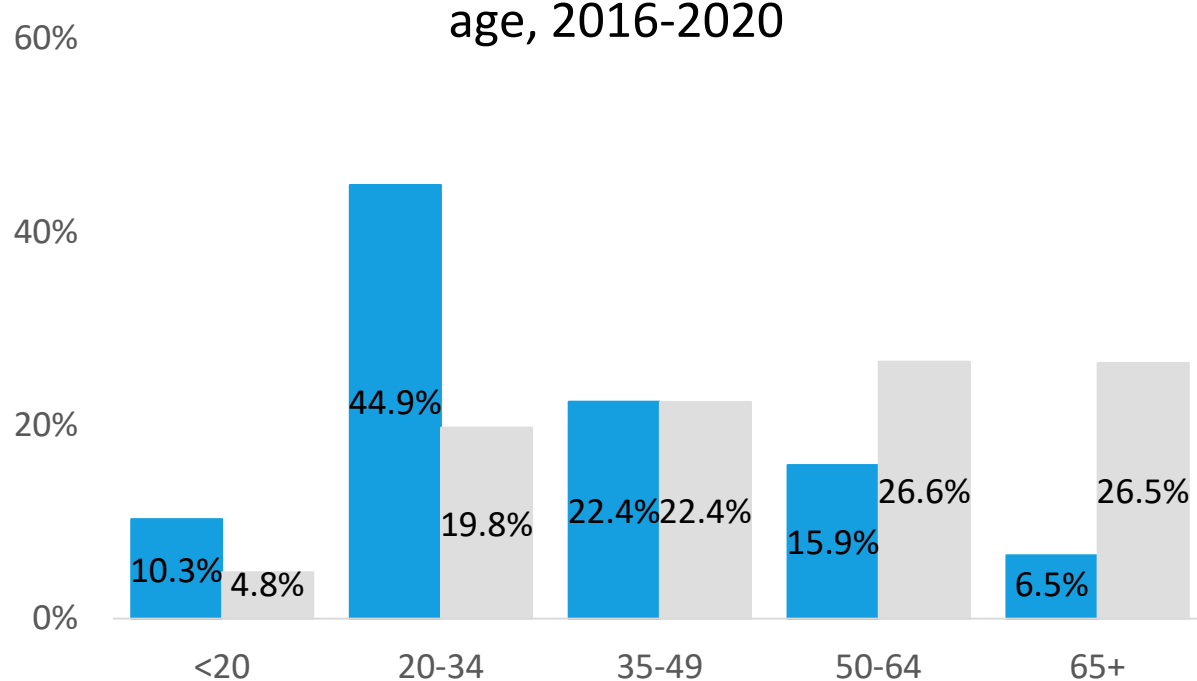
Almost half of suicides among **AI/AN** occurred in the **20-34** age group, while the highest proportion of suicides among **NHW** was in the **50-64 and 65+** age groups.

Data Source: Oregon Death Certificates, 2016-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

INJURY & VIOLENCE

Suicide

From 2006-2020, the suicide rate among **AI/AN** **increased** throughout time. The suicide rate among **NHW** also **slightly rose** with time.

Figure 6.3. Suicide mortality, **AI/AN** & **NHW**, 2006-2020, 3-year rolling average
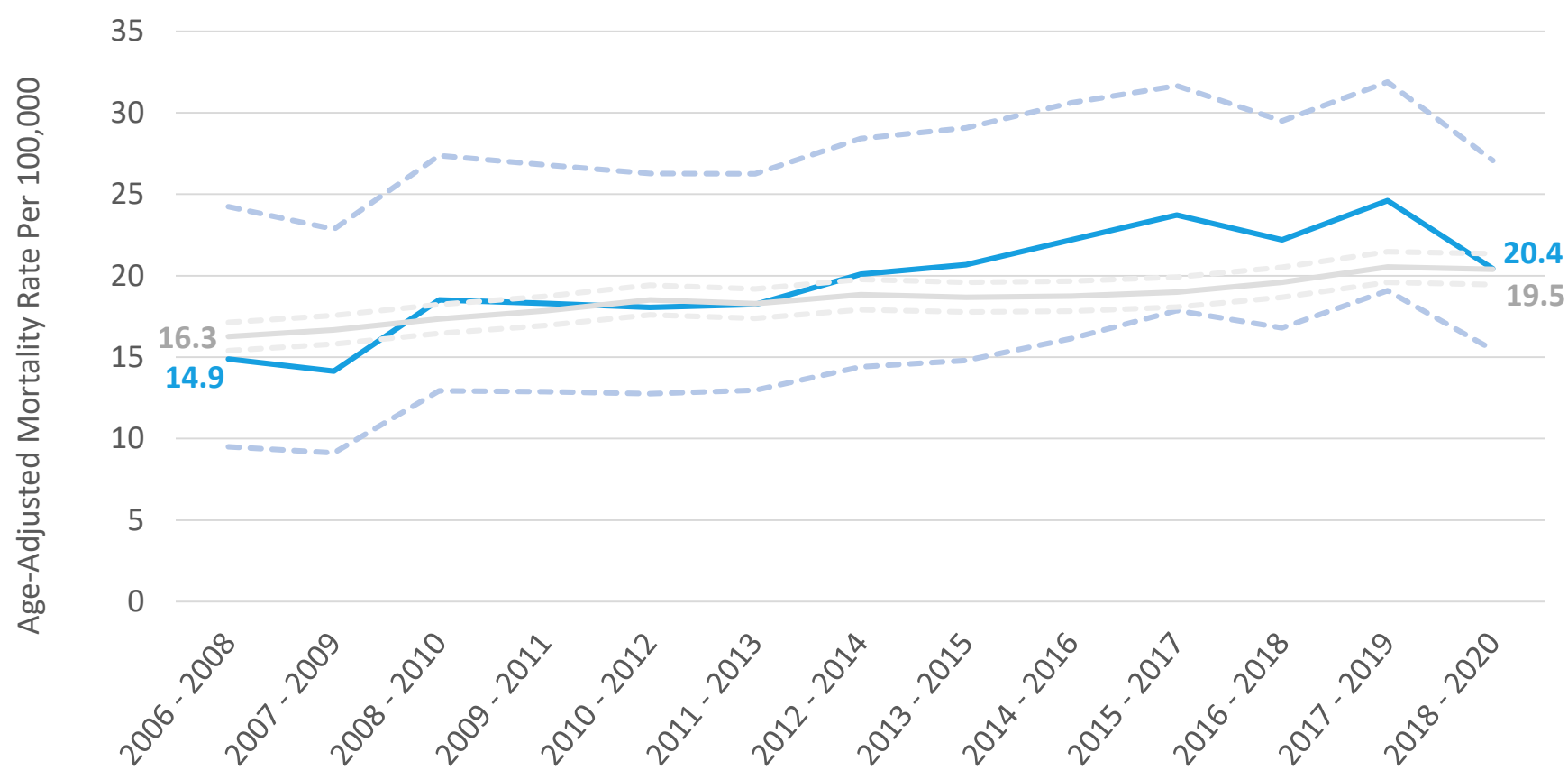
If you or someone you know is having a mental health emergency, please dial 988 to reach the Suicide & Crisis Lifeline, or text "Native" to 741741 for free 24/7 support from the Crisis Text Line.

Data Source: Oregon Death Certificates, 2006-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

INJURY & VIOLENCE
Homicide

Homicide is defined as a death due to assault or attack from one person to another.

During 2016-2020, the homicide rate for **AI/AN** was **2.4 times** that of **NHW**. The homicide rate was **higher for males** among both **AI/AN** and **NHW.**

The highest proportion of homicides occurred in the **20-34** age group for **AI/AN** and the **35-49 and 50-64** age groups for **NHW**.

Figure 6.4. Homicide mortality, **AI/AN** & **NHW**, by sex, 2016-2020

Age-Adjusted Mortality Rate Per 100,000

	Female	Male	Total
AI/AN	4.1	9.4	6.8
NHW	1.4	3.3	2.4
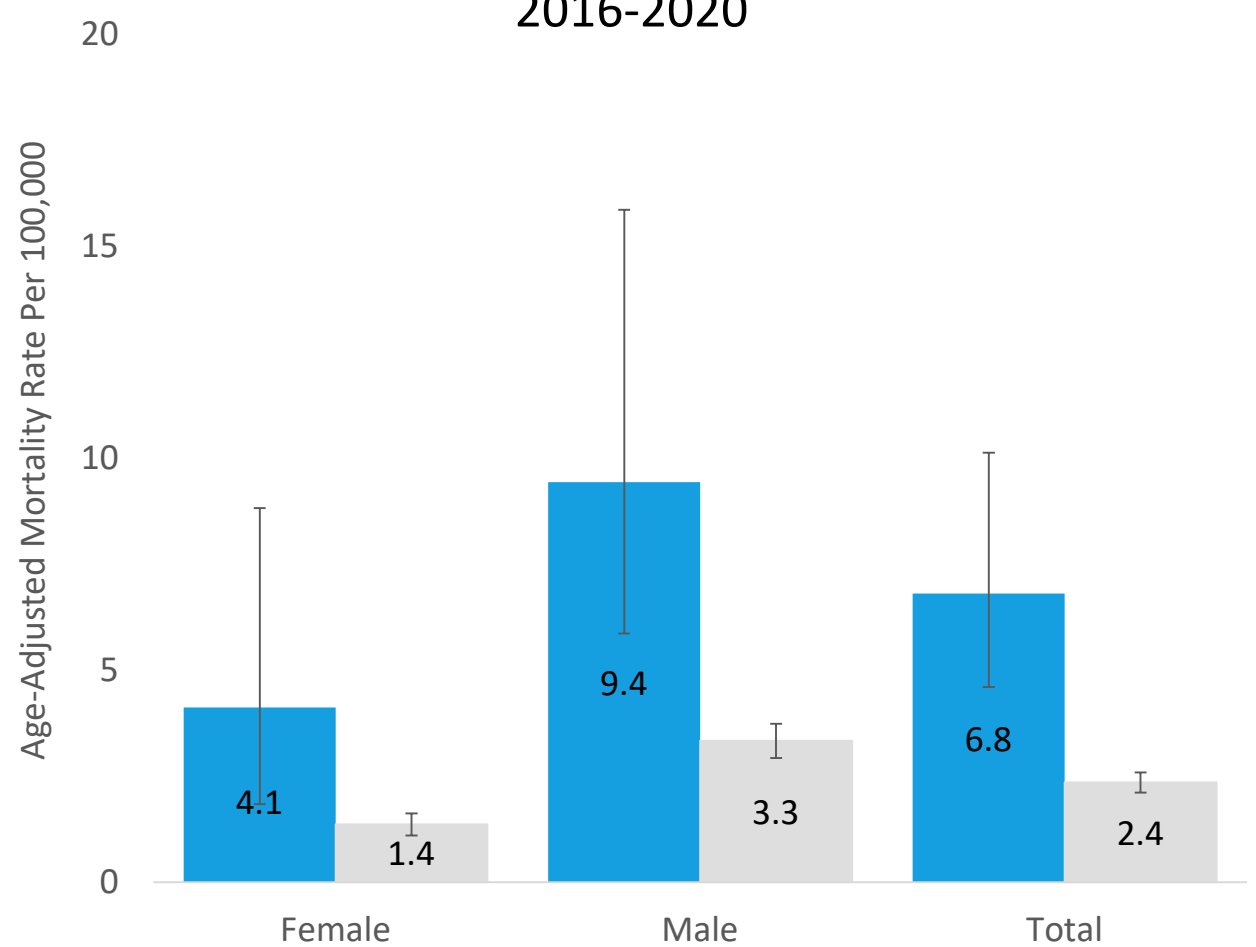
Missing and Murdered Indigenous Women and People (MMIWP) is a crisis that organizations such as the National Missing and Unidentified Persons System (NamUS) (https://namus.nij.ojp.gov/) and Strong Hearts Native Helpline (https://strongheartshelpline.org/) help to address.

Data Source: Oregon Death Certificates, 2016-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

INJURY & VIOLENCE
Unintentional Injury

Unintentional injury is defined as a death due to an accident, such as a poisoning from a toxic substance, motor-vehicle accident, drowning, firearm incident, or fall.

The unintentional injury death rate was **50% higher** for **AI/AN** than for **NHW**.

Figure 6.5. Unintentional injury mortality, **AI/AN** & **NHW**, by sex, 2016-2020

Y-axis: Age-Adjusted Mortality Rate Per 100,000

	Female	Male	Total
AI/AN	53.4	83.9	68.8
NHW	31.2	59.6	45.0
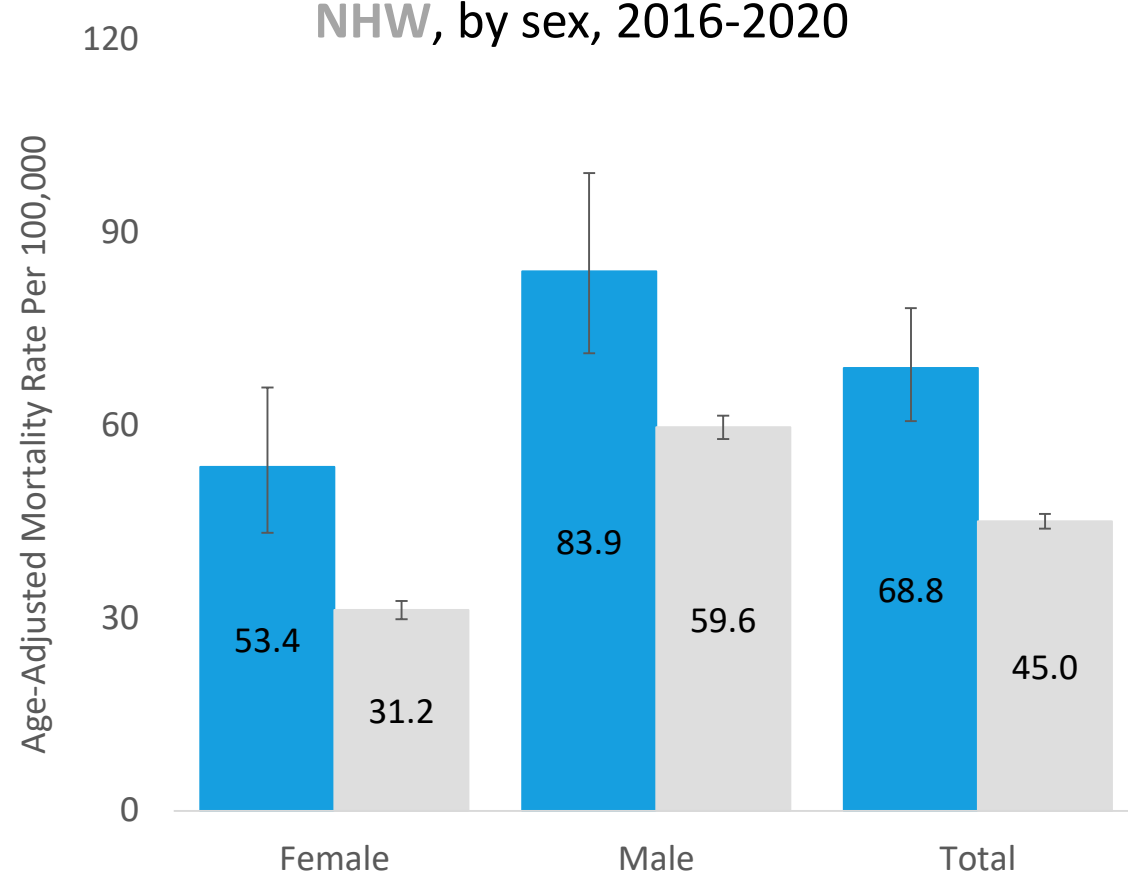
Figure 6.6. Percentage of unintentional injury deaths, **AI/AN** & **NHW**, by age, 2016-2020

Age	AI/AN	NHW
<20	5.3%	3.3%
20-34	26.8%	12.1%
35-49	25.7%	14.0%
50-64	21.8%	18.2%
65+	20.4%	52.5%
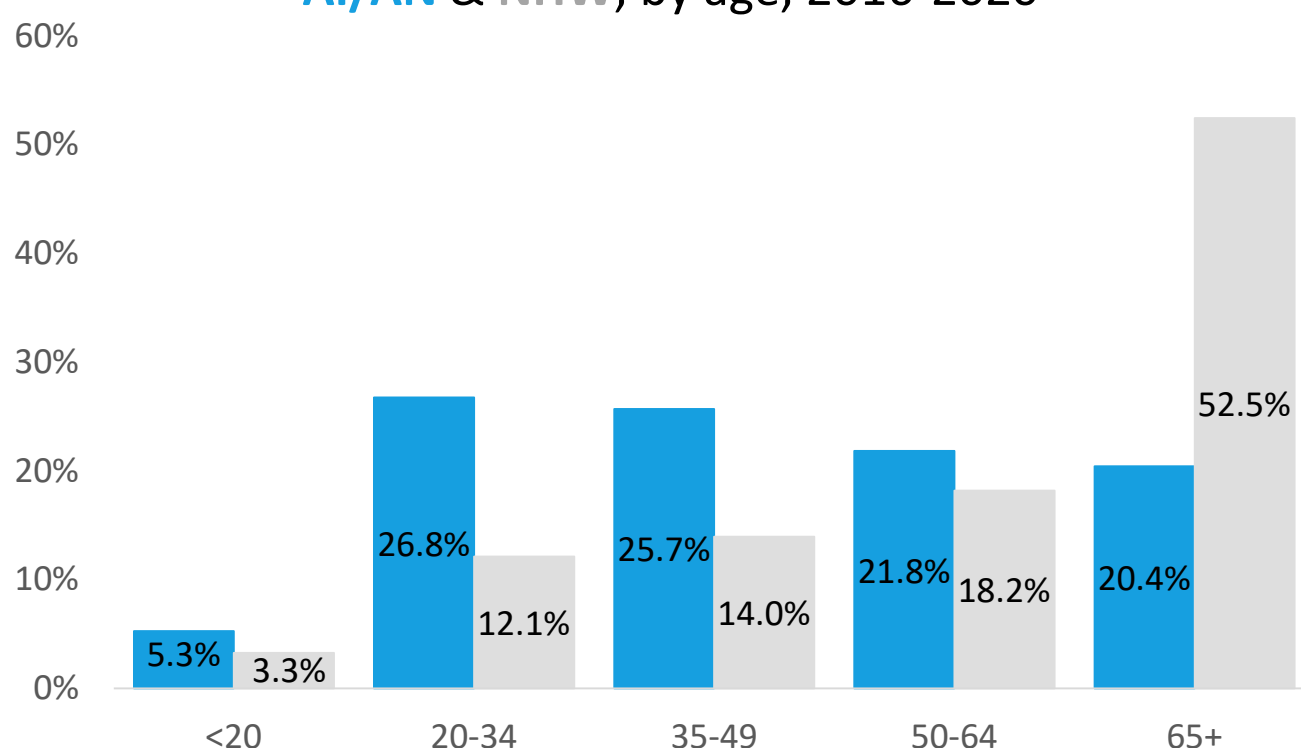
The proportion of deaths due to unintentional injuries was highest for the **20-34 and 35-49** age groups among **AI/AN** and the **65+** age group among **NHW**.

Data Source: Oregon Death Certificates, 2016-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

INJURY & VIOLENCE

Unintentional Injury

During 2016-2020, the highest proportion of unintentional injury deaths was attributed to **poisonings** among **AI/AN** and **falls** among **NHW**.

Figure 6.7. Percentage of unintentional injury mortality by cause, **AI/AN** & **NHW**, 2016-2020
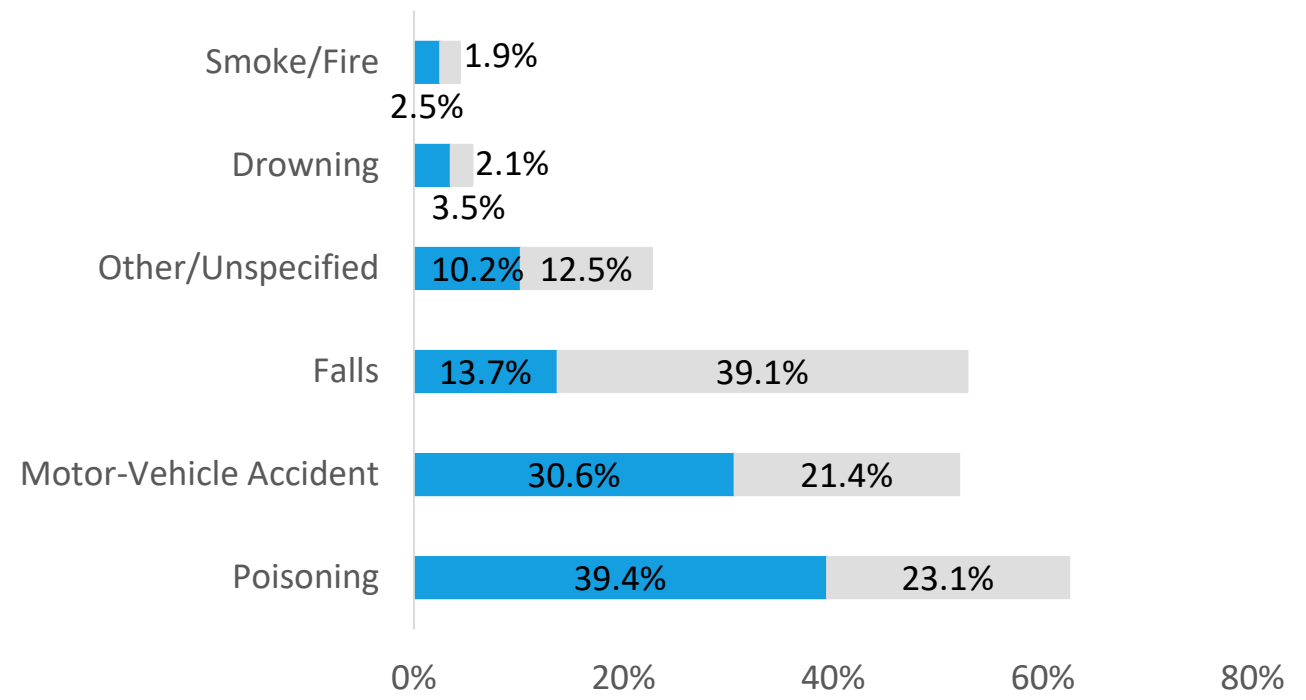
Cause	AI/AN	NHW
Smoke/Fire	1.9%	2.5%
Drowning	2.1%	3.5%
Other/Unspecified	10.2%	12.5%
Falls	13.7%	39.1%
Motor-Vehicle Accident	30.6%	21.4%
Poisoning	39.4%	23.1%

NPAIHB's IDEA-NW project works to address racial misclassification of AI/AN people by correcting inaccurate race information in health datasets. Without race correction, 51 unintentional injury deaths among AI/AN from 2016 to 2020 would not have been represented. This would have resulted in AI/AN rates incorrectly lower by up to 22%.

Data Source: Oregon Death Certificates, 2016-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

INJURY & VIOLENCE

Unintentional Injury

From 2004-2020, the unintentional injury death rate **increased overall for both AI/AN** and **NHW**; however, the rate for **AI/AN** **remained higher than** **NHW** throughout the period**.**

Figure 6.8. Unintentional injury mortality, **AI/AN** & **NHW**, 2006-2020

INJURY & VIOLENCE

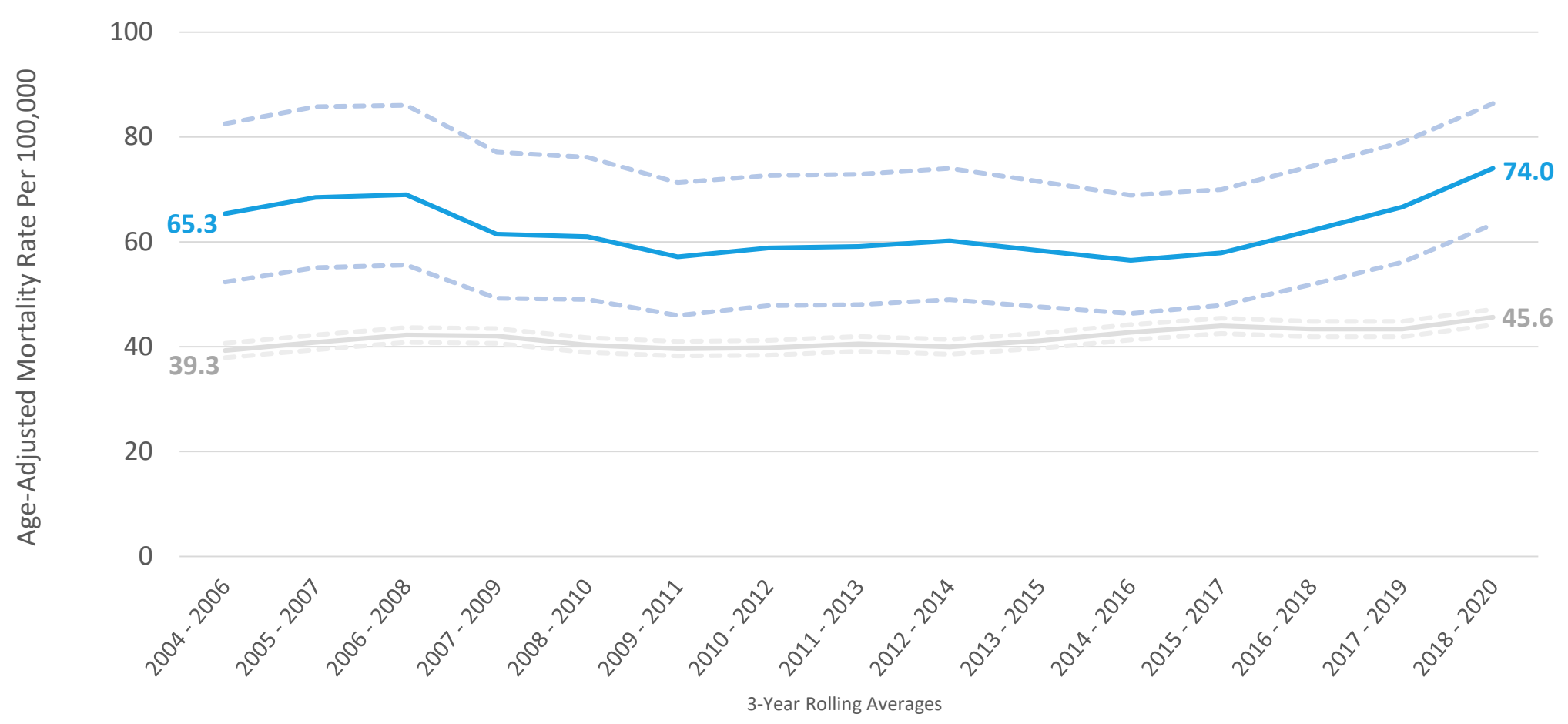Unintentional Injury:
Motor-Vehicle Accidents

Motor-vehicle accident mortality is defined as an unintentional death that involved a motor-vehicle, which includes being struck by a motor-vehicle or being inside one.

During 2016-2020, the motor-vehicle accident mortality rate was **77% higher** for **AI/AN** compared to **NHW**. **AI/AN** males had **nearly double** the mortality rate of **NHW** males.

Figure 6.9. Motor-vehicle accident mortality, **AI/AN** & **NHW**, by sex, 2016-2020
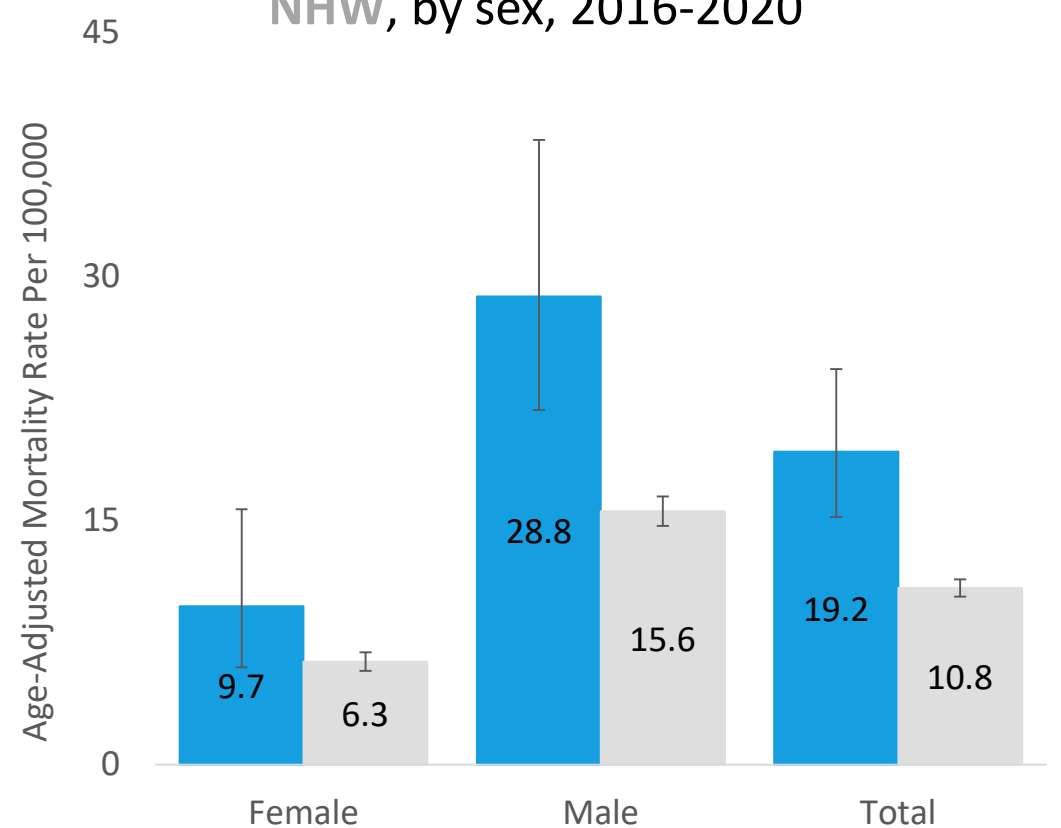
Figure 6.10. Percentage of motor-vehicle accident deaths, **AI/AN** & **NHW**, by age, 2016-2020
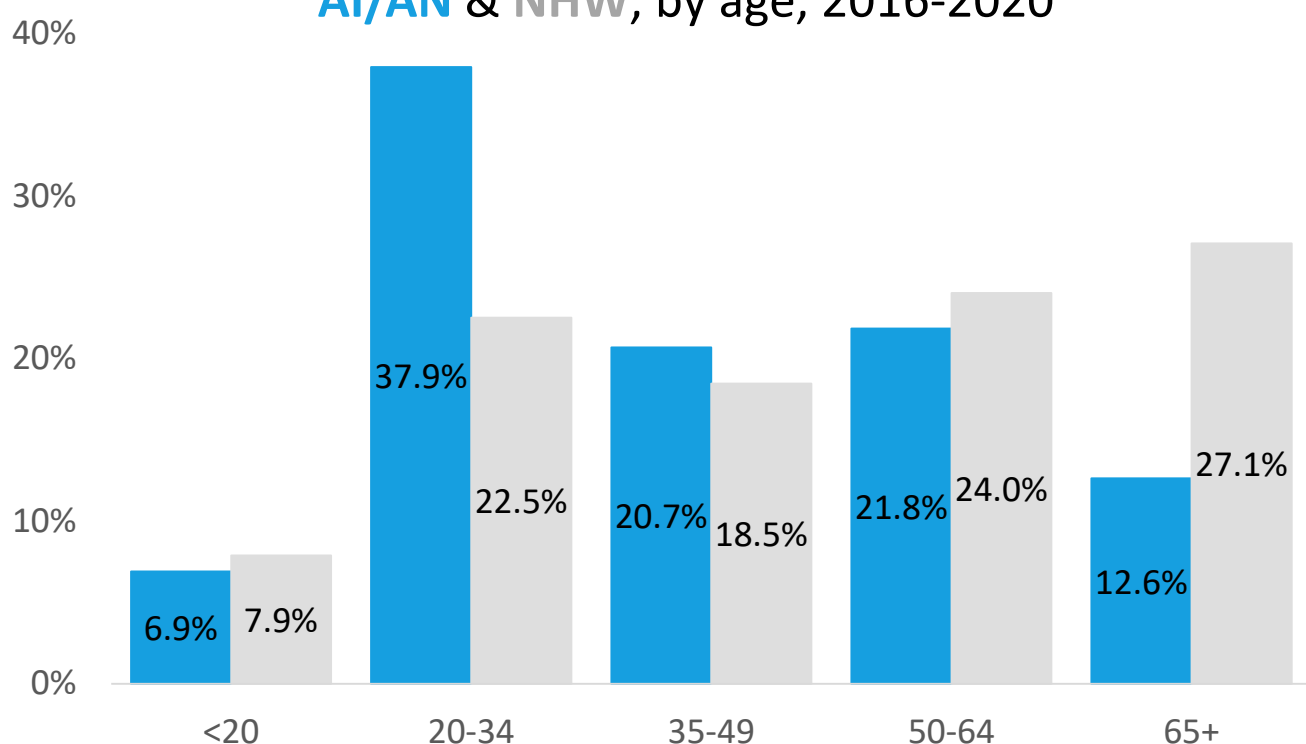
The highest proportion of motor-vehicle deaths occurred in the **20-34** age group among **AI/AN** and in the **65+** age group among **NHW**.

INJURY & VIOLENCE

Unintentional Injury: Motor-Vehicle Accidents

From 2004-2020, the mortality rate due to motor-vehicle accidents **decreased overall** for **AI/AN** with some fluctuations throughout the period, similarly to **NHW**; however, the rate for **AI/AN** was estimated to be **higher** than **NHW** throughout the period.

Figure 6.11. Motor-vehicle accident mortality, **AI/AN** & **NHW**, 2004-2020, 3-year rolling average
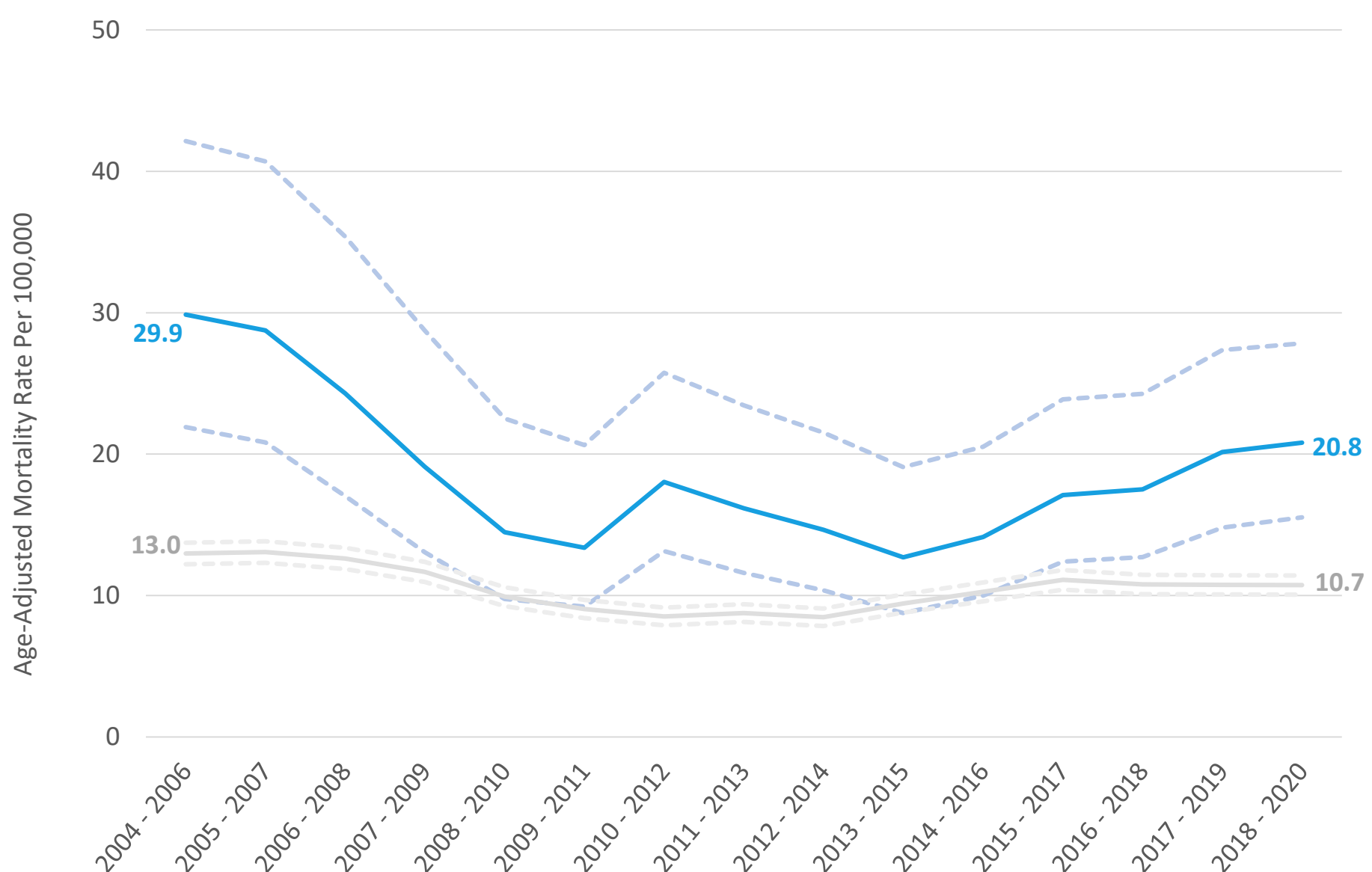
Data Source: Oregon Death Certificates, 2004-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW

INJURY & VIOLENCE
Unintentional Injury: Falls

A fall occurs when a person unintentionally drops down to the ground or a lower level. Falls can lead to broken bones or head injuries.

The mortality rate due to falls was **similar** among **AI/AN** (14.0 deaths per 100,000 people) and **NHW** (14.5 deaths per 100,000 people).

Figure 6.12. Falls mortality, **AI/AN** & **NHW**, by sex, 2016-2020
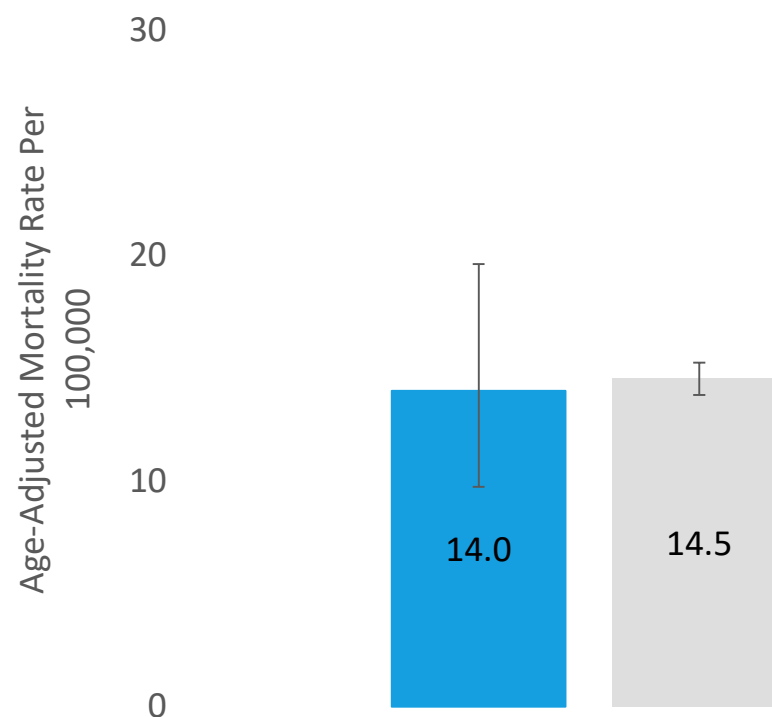
The rate of falls-related deaths was **higher for females** for **AI/AN** and **males for NHW**. The majority of falls occurred among the **65+** age group for both **AI/AN** and **NHW** (not shown).

SUPPLEMENT: Maternal & Child Health in Oregon

Maternal and child health indicators speak to the lived experiences of mothers, infants and families— and can often point to life-long implications for the health of children. Beyond the present generation, maternal outcomes can also have a significant effect on the well-being of subsequent generations of pregnant people, children, and communities.

While the United States has seen improvement in many maternal and child health indicators in recent decades, pregnant people living in the United States continue to experience higher rates of preterm birth, infant mortality and maternal mortality in comparison to nations of similar GDP (gross domestic product) and healthcare resources. Furthermore, racial and ethnic disparities are exacerbated for American Indians and Alaska Natives, populations who continue to face serious maternal health burdens.

The Northwest Portland Area Indian Health Board is committed to addressing these disparities and to closing the health outcome gap between AI/AN and other racial-ethnic groups. By narrowing in specifically on maternal and child health indicators, we aim to improve the health and well-being of AI/AN pregnant people, children, and communities, and preserve the health of future generations.

Oregon birth certificate data provide information on maternal and infant health, maternal demographics and pregnancy risk factors of Oregon residents who gave birth in Oregon. This analysis utilized data from Oregon birth certificates from 2018-2020. These records were linked to the Northwest Tribal Registry to correct for race misclassification among American Indian/ Alaska Native (AI/AN) Oregon residents. The data were limited to AI/AN and Non-Hispanic White (NHW) births.

Across 2018-2020, the Oregon birth rate (births per 1,000 population) was 9.6 for the AI/AN population compared to 8.4 for NHW. The AI/AN fertility rate (births per 1,000 women age 15-44) was 44.5 for the AI/AN population and 45.8 for the NHW population.

MATERNAL & CHILD HEALTH
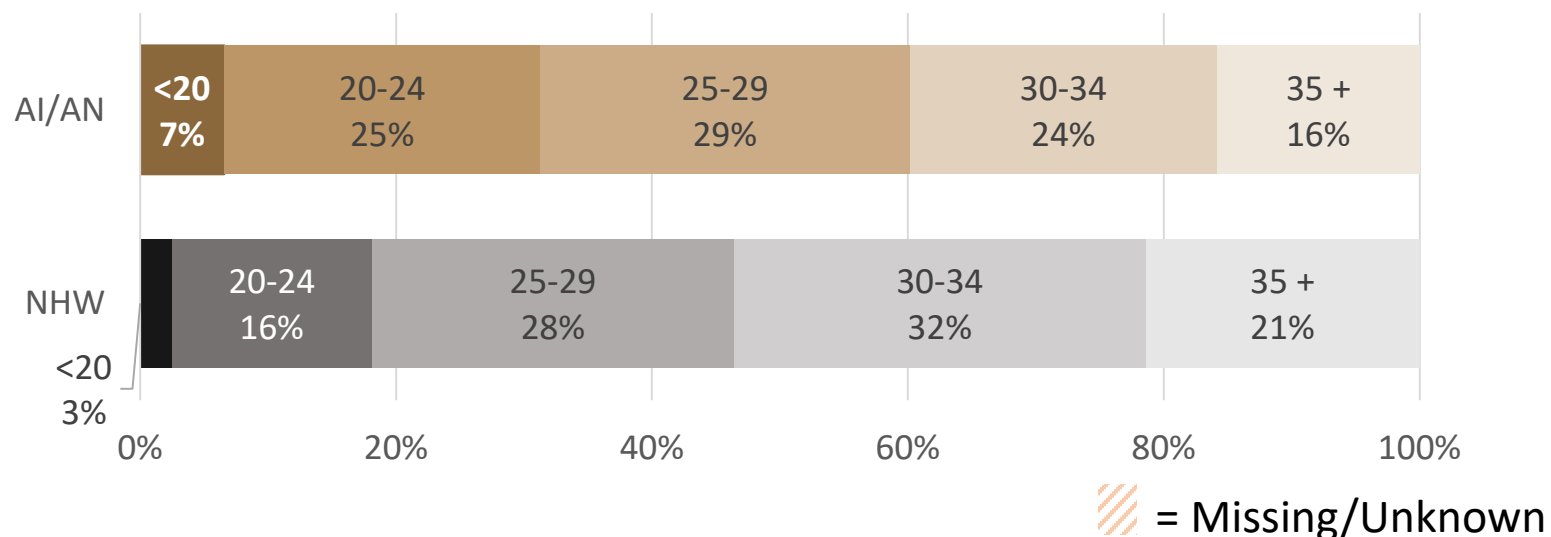Maternal Demographics

AI/AN pregnant people faced greater socioeconomic barriers to healthy pregnancy.

Pregnancy under the age of 20 and above the age of 35 is associated with **increased risk of pregnancy complications**, including poor fetal growth, preeclampsia, and pre-term birth.

AI/AN pregnant people were **2 times** more likely to be under the age of 20 at time of delivery than NHW pregnant people.

Figure 7.1. Age at time of delivery, AI/AN & NHW, 2018-2020

AI/AN	**<20 7%**	20-24 25%	25-29 29%	30-34 24%	35 + 16%
NHW	<20 3%	20-24 16%	25-29 28%	30-34 32%	35 + 21%

0%   20%   40%   60%   80%   100%

▨ = Missing/Unknown

AI/AN pregnant people were **nearly 3 times** more likely to not have a high school diploma or GED at time of delivery.

Figure 7.2. Educational Attainment of mother at time of delivery, AI/AN & NHW, 2018-2020

AI/AN	**No diploma 18%**	High school grad 30%	Some college 37%	Bachelors degree or higher 14%
NHW	No diploma 7%	High school grad 21%	Some college 33%	Bachelors degree or higher 38%

0%   20%   40%   60%   80%   100%

48% of **AI/AN** pregnant people received WIC support during pregnancy in comparison to **30%** of **NHW** pregnant people (not shown).
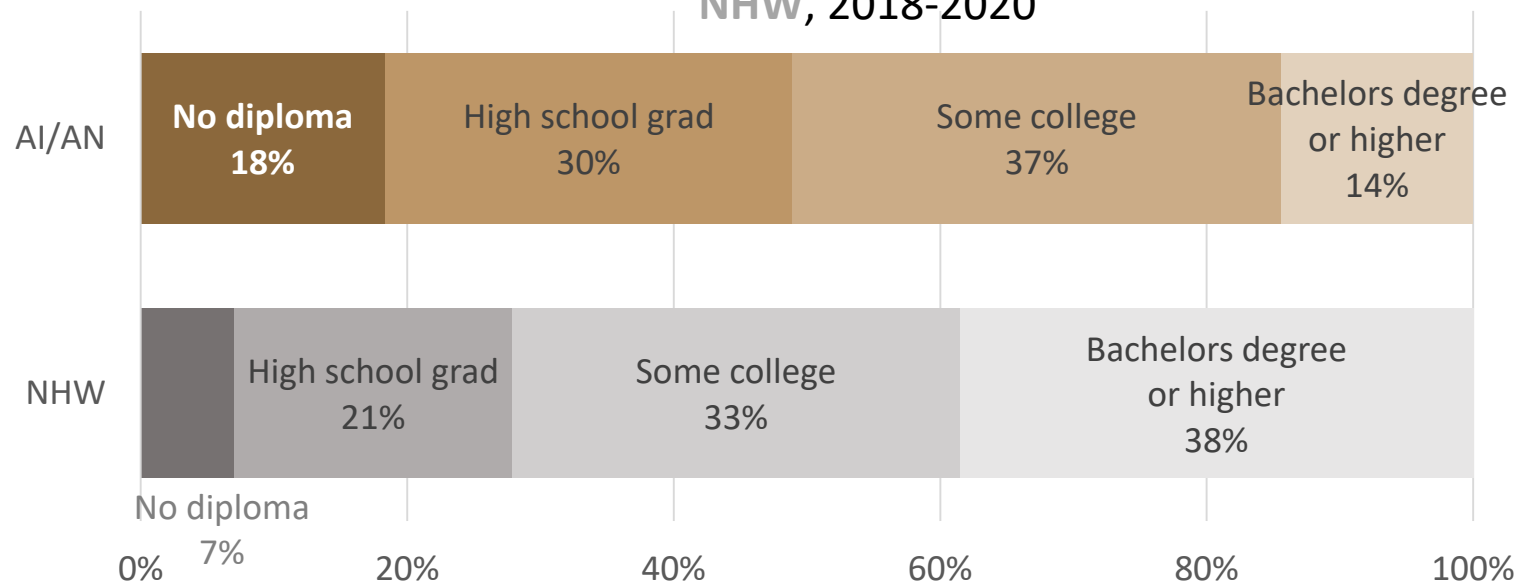
Data Source: Oregon Birth Certificates, 2018-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW
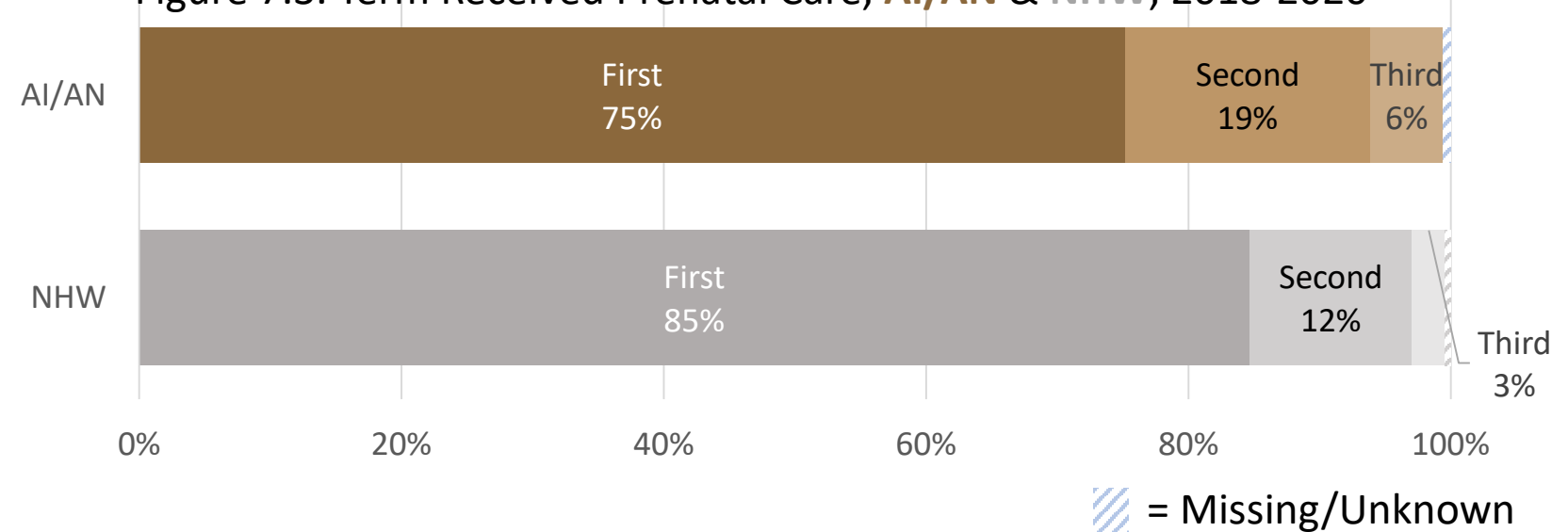
MATERNAL & CHILD HEALTH

Prenatal care adequacy

AI/AN pregnant people were **2 times** more likely than **NHW** pregnant people to receive no prenatal care during pregnancy.

Starting prenatal care early in pregnancy increases the chances of a health pregnancy by decreasing the risk of preterm delivery and low birthweight.

Among those who received prenatal care, **AI/AN** pregnant people were less likely to receive prenatal care in the first trimester.

Figure 7.3. Term Received Prenatal Care, **AI/AN** & **NHW**, 2018-2020

AI/AN	First 75%	Second 19%	Third 6%
NHW	First 85%	Second 12%	Third 3%

0%   20%   40%   60%   80%   100%

◩ = Missing/Unknown

The adequacy of received care score compares the received number of prenatal visits to the expected number of visits for a pregnancy of that length.

AI/AN pregnant people were more likely than **NHW** pregnant people to receive inadequate prenatal care.

Figure 7.4. Adequacy of Prenatal Care, **AI/AN** & **NHW**, 2018-2020

AI/AN	Inadequate 16%	Intermediate 34%	Adequate 38%	Adequate + 11%
NHW	Inadequate 8%	Intermediate 34%	Adequate 46%	Adequate + 11%

0%   20%   40%   60%   80%   100%

MATERNAL & CHILD HEALTH

Pregnancy Risk Factors

AI/AN pregnant people were more likely to have health complications before and during pregnancy.

Having a high BMI during pregnancy increases the risk of gestational diabetes and hypertension for the pregnant person, as well as miscarriage and stillbirth.

AI/AN pregnant people were more likely than **NHW** pregnant people to be obese.

Figure 7.5. BMI of mother at time of delivery, **AI/AN** & **NHW**, 2018-2020

AI/AN	Healthy weight 37%	Overweight 26%	Obese 36%
NHW	Healthy weight 49%	Overweight 24%	Obese 26%

0%   20%   40%   60%   80%   100%

= Missing/Unknown

Hypertension during pregnancy increases the risk of eclampsia and preterm birth. Diabetes puts the mother and infant at risk of complications.
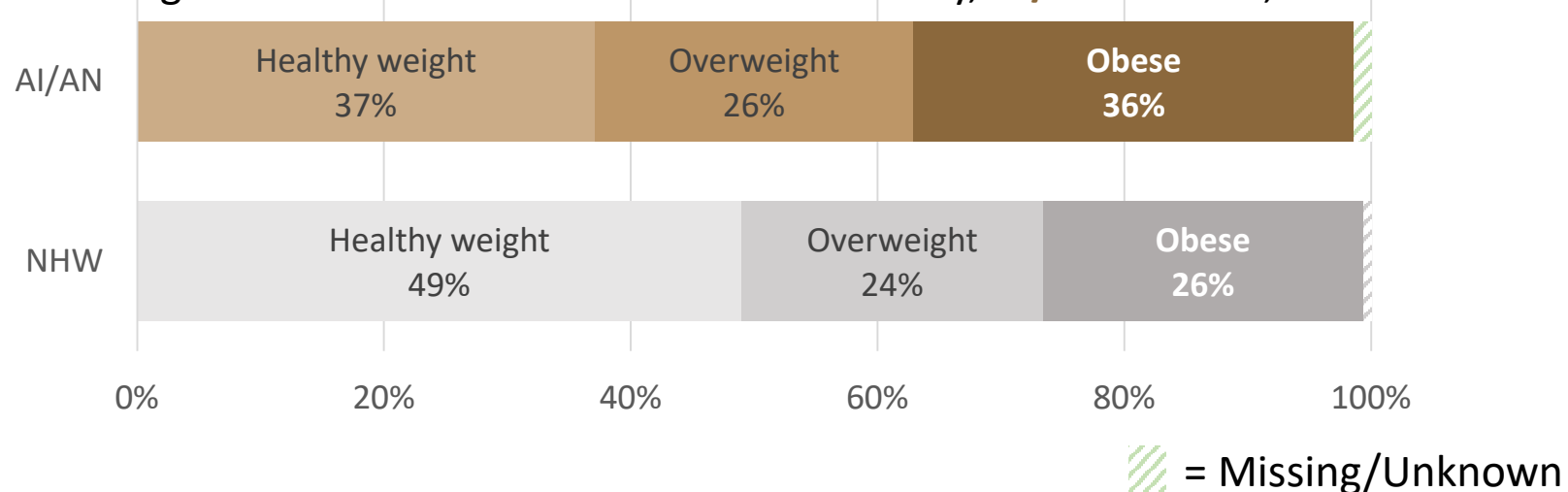
AI/AN pregnant people faced a marginally higher risk of gestational hypertension and gestational diabetes.

Figure 7.6. Hypertension and diabetes status of mother, **AI/AN** & **NHW**, 2018-2020

15%

10%   11%   10%

AI/AN
3%

5%   1%

NHW, 3%   10%   8%
0%   1%
Prepregnancy   Prepregnancy   Gestational   Gestational
hypertension   diaebetes   hypertension   diabetes

MATERNAL & CHILD HEALTH

Smoking during pregnancy

AI/AN pregnant people used commercial tobacco at higher rates than NHW pregnant people.

Smoking before pregnancy increases the risk of miscarriage, low birth weight and preterm birth.

19%

of **AI/AN** pregnant people smoked in the three months before pregnancy, in comparison to **11%** of **NHW** pregnant people (not shown).

AI/AN pregnant people smoked cigarettes at higher rates than **NHW** pregnant people across pregnancy.

Figure 7.7. Smoking during pregnancy, **AI/AN** & **NHW**, 2018-2020

Smoking during pregnancy is associated with numerous pregnancy risks including poor fetal growth, preterm birth and stillbirth.

14%   13%   12%
                              AI/AN

9%   8%   7%
                              NHW

First trimester   Second trimester   Third trimester

MATERNAL & CHILD HEALTH

Infant health

Very preterm births occur before 32 weeks of gestation, while preterm births occur between 32 and 34 weeks. Preterm infants are at a higher risk of medical complications.
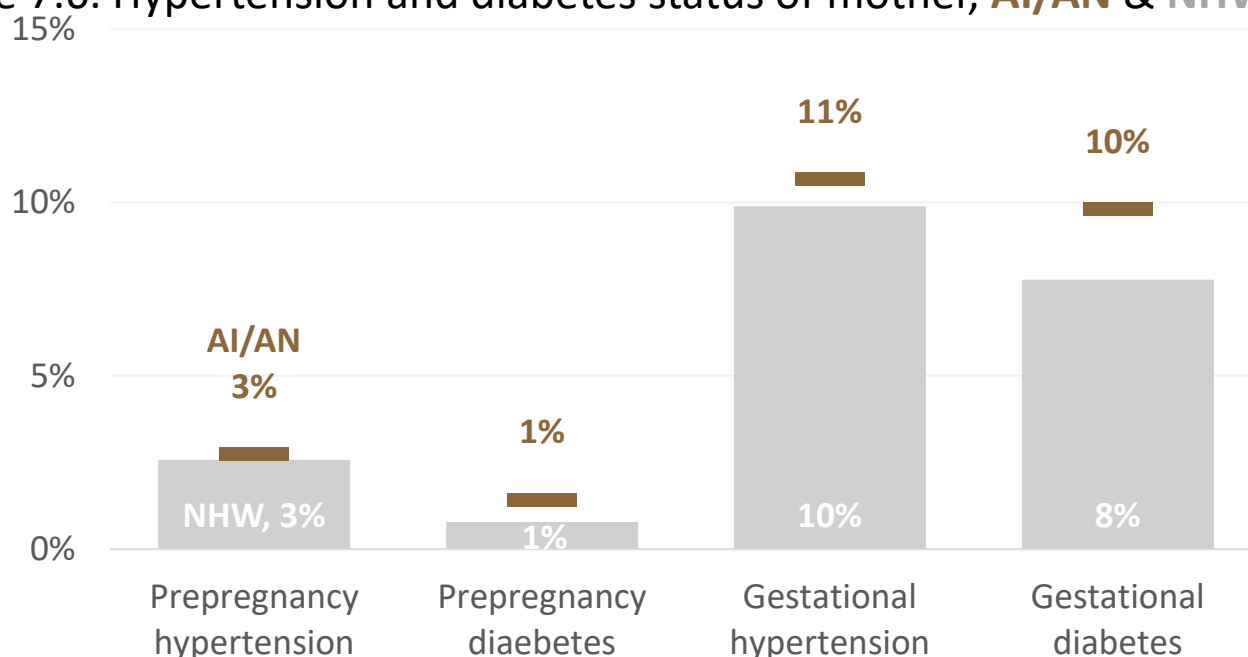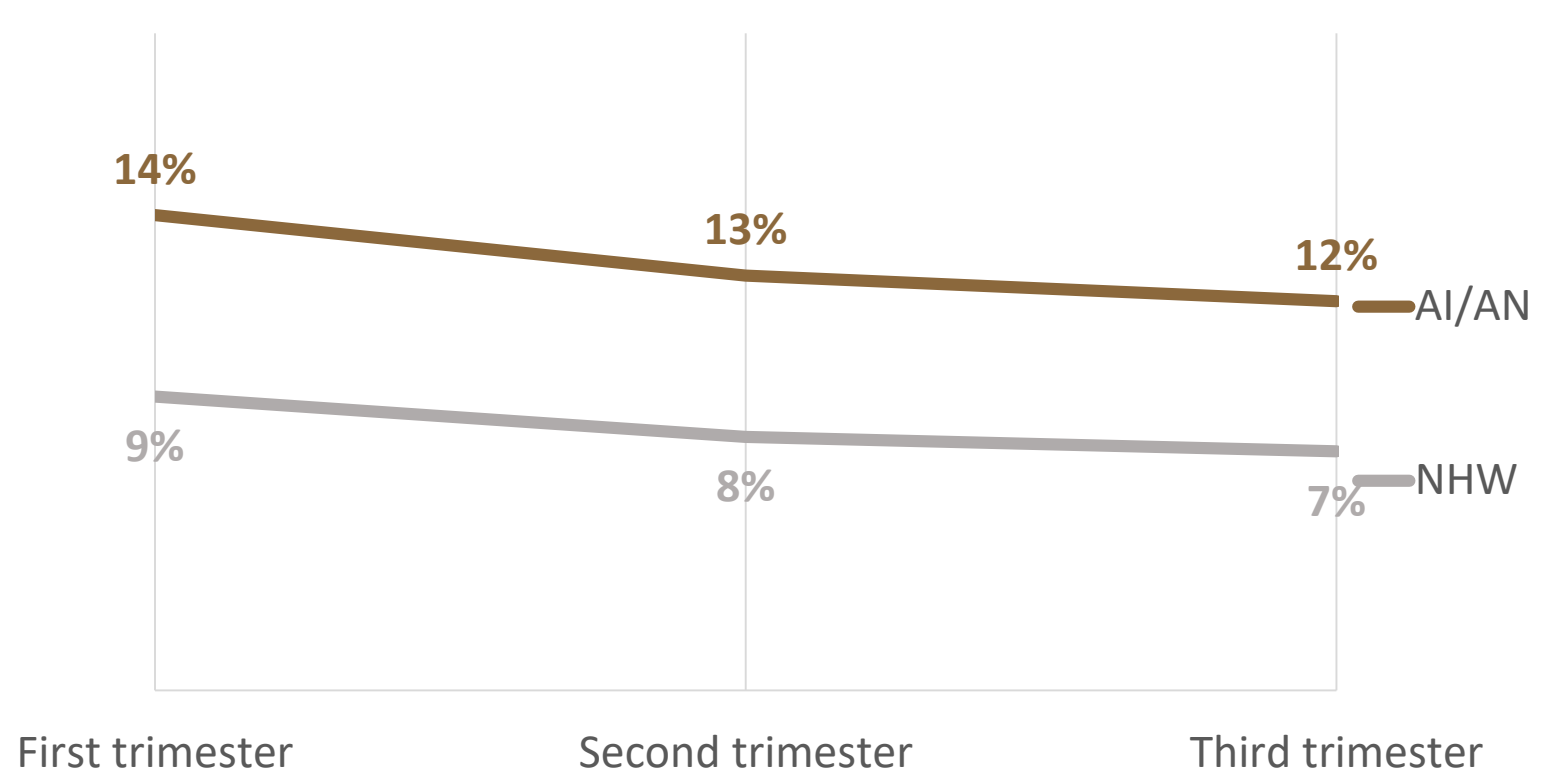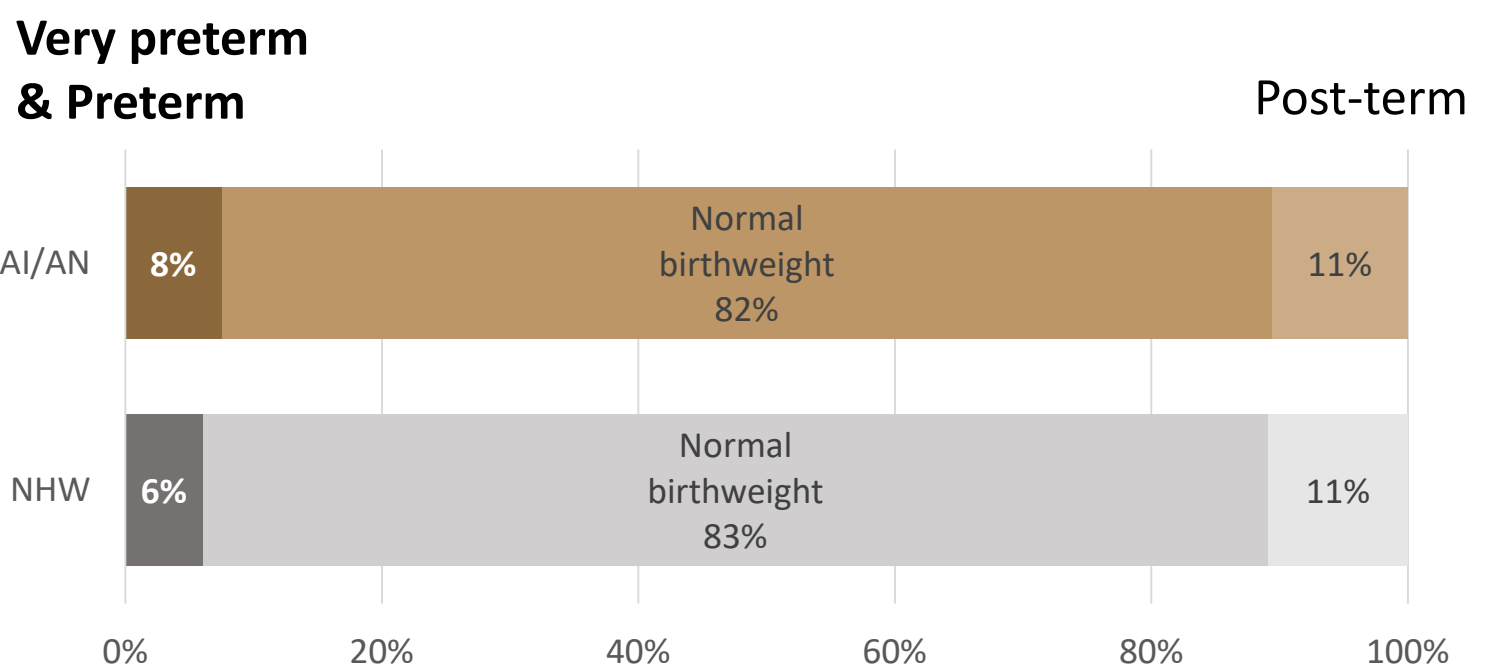
AI/AN pregnant people were more likely than **NHW** pregnant people to give birth preterm.

Figure 7.8. Term at time of Delivery, **AI/AN** & **NHW**, 2018-2020

Very preterm & Preterm   Post-term

AI/AN	**8%**	Normal birthweight 82%	11%
NHW	**6%**	Normal birthweight 83%	11%

0% 20% 40% 60% 80% 100%

Infants with very low or very high birth weights are at an increased risk of mortality and may face various health complications as they develop.

AI/AN pregnant people were more likely than **NHW** pregnant people to give birth low and very low weight babies.

Figure 7.9. Birthweight, **AI/AN** & **NHW**, 2018-2020

Low & very low birthweight   High birthweight

AI/AN	**10%**	Full term 89%	1%
NHW	**8%**	92%	1%

0% 20% 40% 60% 80% 100%

Data Source: Oregon Birth Certificates, 2018-2020, corrected for AI/AN racial misclassification by NPAIHB's IDEA-NW