Joe Lombardo
Governor

Richard Whitley, MS
Director

DEPARTMENT OF HEALTH AND HUMAN SERVICES

NEVADA DIVISION of PUBLIC and BEHAVIORAL HEALTH

Cody L. Phinney, MPH
Administrator

Ihsan Azzam, Ph.D., M.D.
Chief Medical Officer

February 25, 2025

Diane Thornton, Acting Director
Legislative Counsel Bureau
401 South Carson Street
Carson City, Nevada 89701

Dear Director Thornton,

Please see the attached 2024 Obesity Annual Report prepared by the Nevada Division of Public and Behavioral Health (DPBH). The Annual Obesity Report contains reporting requirements for both NRS 439.521 and NRS 392.420. While reporting requirements are separate according to NRS, they are combined in the Annual Obesity Report to give additional context when evaluating the health of Nevadans and the efforts of the Division in addressing food security, wellness efforts, and public health initiatives.

Per NRS 439.521, the attached report includes the current obesity rates in the State; obesity concerning specific demographics; actions taken by the DPBH regarding obesity; and the State's goals regarding obesity rates.

The 2024 Obesity Annual Report is also submitted to Clark, Washoe, and Elko county Superintendents and the Chief Medical Officer within DBPH since height and weight are collected and measured every other year per NRS 392.420 (11).

Please refer any questions or concerns to Lori Taylor at l.taylor@health.nv.gov .

Sincerely,

Cody L. Phinney, MPH
Administrator
Division of Public and Behavioral Health

NEVADA DIVISION of PUBLIC and BEHAVIORAL HEALTH

NEVADA OBESITY 2024 ANNUAL REPORT

State of Nevada

Department of Health and Human Services

Division of Public and Behavioral Health

Chronic Disease Prevention and Health Promotion Section

Wellness and Prevention Program

Joe Lombardo
Governor
State of Nevada

Richard Whitley, MS
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ACKNOWLEDGMENTS

This report was developed by the Nevada Department of Health and Human Services (DHHS), Division of Public and Behavioral Health (DPBH), with contributions from the Chronic Disease Prevention and Health Promotion (CDPHP) Section and the DHHS Office of Analytics (OOA).

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INTRODUCTION

The Division of Public and Behavioral Health (DPBH) prepares and submits an Annual Obesity Report in compliance with Nevada Revised Statutes (NRS) 439.521. The statute requires a detailed, written examination of current obesity rates in the state, including demographic-specific data, actions taken by the DPBH to address obesity, and Nevada's goals and achievements in reducing obesity prevalence.

DPBH is also required to submit a report per NRS 392.420 on the collection of height and weight data from school districts with populations exceeding 100,000. Currently those counties are Clark and Washoe. While other school districts are not mandated to participate, they may do so voluntarily, and the data are analyzed in this report. The collection of the height and weight data are mandated every other year for 4th and 7th grade students. Data for other grades may be provided to the Office of Analytics by previous legislative mandates and/or voluntarily and the data are analyzed in this report.

The purpose of height and weight assessments in schools is to determine the prevalence of students who may be at risk for health conditions related to weight. Along with supporting statewide wellness, food security, and public health initiatives, this data is relied upon by local health authorities, state programs, and private organizations to meet federal grant requirements and secure funding for programs that support health initiatives in Nevada.

Together, NRS 439.521 and NRS 392.420 provide a dual framework for the Annual Obesity Report, integrating statewide obesity trends with a focus on height and weight data collection. This detailed approach ensures a nuanced understanding of obesity's impact in Nevada, guiding evidence-based policy decisions, supporting public health initiatives, and addressing health disparities throughout the state.

DATA OVERVIEW

The Annual Obesity Report relies on multiple high-quality data sources to provide a comprehensive analysis of obesity trends in Nevada. These sources include national, state,

and local level data, which allows for the analysis of obesity prevalence across various demographics and geographic regions.

Data Sources and Limitations

National Health and Nutrition Examination Survey (NHANES)

NHANES serves as the source of national obesity in this report.[1,2] It examines a nationally representative sample of Americans aged two (2) years and older by combining physical examinations with interviews. This survey is conducted continuously and reported in biennial cycles.

Limitations: Delays in reporting; limited data availability post-2020 due to disruptions caused by the COVID-19 pandemic.

Behavioral Risk Factor Surveillance System (BRFSS)

BRFSS is the source of state-level prevalence data for obesity among adults aged 18 years and older.[3] This annual telephone-based survey collects information on obesity, risk factors for chronic diseases, and other leading causes of death.

Limitations: Data are self-reported, which can lead to biases in height and weight measurements. Additionally, prevalence estimates for racial and ethnic groups are not always available for all subpopulations.

Youth Risk Behavior Surveillance System (YRBSS)

YRBSS provides state-level data on the prevalence of obesity among youth aged 14 to 18 years old.[4] Conducted biennially in odd-numbered years, this school-based survey collects information on a variety of health behaviors, including obesity among 9th to 12th grade students in public and private schools.

Limitations: Height and weight data are self-reported and is limited to students who attend school, excluding youth who are homeschooled or not enrolled.

NRS 392.420 Height and Weight Data Collection

Mandated biennially, NRS 392.420 requires height and weight data collected from 4th and 7th grade students in Clark County and Washoe County school districts with voluntary contributions from other districts.

Limitations: Data collection depends on standardized equipment, trained staff, and sustainable funding. Voluntary participation may lead to incomplete statewide representation.

Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

WIC serves as the source of childhood obesity data for children under the age of five (5).[5] It collects data continuously to assess nutrition characteristics and weight status among low-income children.

Limitations: Height and weight data are collected only from children participating in the WIC program, excluding those who do not meet income eligibility (185% of the Federal Poverty Guidelines) or those who are eligible but choose not to participate in the program (approximately, 50% of the eligible population).

Nevada Kindergarten Health Survey (KHS)

The KHS collects information about the overall health and weight status of Nevada's kindergarten students annually.[6] This survey provides critical insights into the health of young children across the state, helping to identify trends in childhood obesity and related risk factors.

Limitations: Data are self-reported by parents or guardians and limited to children attending public kindergarten, excluding those in private schools, home schooled, or not enrolled.

Nevada Central Cancer Registry (NCCR)

The NCCR provides long-term data on cancer cases in Nevada, including Body Mass Index (BMI) data for certain cases. Updated annually, this data source highlights the relationship between obesity and cancer, offering valuable insights into the role of obesity as a risk factor for cancer outcomes.

Limitations: BMI data are not consistently available for all cancer cases, potentially limiting the scope of analysis.

National Center for Health Statistics (NCHS)

NCHS provides mortality data used to assess the impact of obesity-related deaths in Nevada. This source offers critical insights into the long-term health consequences of obesity by analyzing death records and cause-specific mortality trends.

Limitations: Obesity may be underreported as a contributing factor in mortality records, and variations in cause-of-death reporting may affect data accuracy.

BACKGROUND

In 1948, the World Health Organization (WHO) recognized obesity as a disease in the International Classification of Diseases (ICD)[7] and more recently, the American Medical Association (AMA) recognized obesity as a disease requiring treatment and prevention efforts.[8] According to NRS 0.038,[9] obesity is “a chronic disease characterized by an abnormal and unhealthy accumulation of body fat which, statistically, correlates with premature mortality, hypertension, heart disease, diabetes, cancer, and other health conditions."

Body Mass Index (BMI) is a widely used measure to classify weight status and is calculated by dividing a person’s weight in kilograms by the square of their height in meters (kg/ m^2). The BMI classifications for adults are as follows:

- Underweight: Less than 18.5 kg/m^2
- Healthy weight: 18.5 to less than 25 kg/m^2

- Overweight: 25 to less than 30 kg/m^2
- Obesity: 30 kg/m^2 or greater

For children, BMI is compared to other children in the United States (U.S.) of the same age and sex to determine a "BMI age-and-sex-specific percentile," also known as BMI-percentile. The classifications are:

- Underweight: Less than the 5th percentile
- Healthy weight: 5th to less than the 85th percentile
- Overweight: 85th to less than the 95th percentile
- Obesity: 95th percentile or greater

It is important to note, BMI values do not diagnose a person's body fat content or health conditions; health care providers are the only qualified individuals to determine body fat content and weight-related health conditions. Additionally, BMI numbers are only one (1) of many public health screening or surveillance tools for planning, implementing, and evaluating public health practice.[10]

Impacts of the COVID-19 Pandemic

The COVID-19 pandemic exacerbated the obesity crisis, creating significant disruptions in daily life and health behaviors.[11] The uncertainty of quarantine, social isolation, and social distancing presented unique challenges leading to increased stress and anxiety for many.[12] A 2022 study published in *Diabetes & Metabolic Syndrome: Clinical Research and Reviews* estimated that nearly half (48%) of U.S. adults gained weight during the pandemic, most likely due to increased depression and anxiety symptoms.[11]

Among individuals and families facing food insecurity, the consumption of ultra-processed foods increased due to limited financial resources and accessibility.[13] Furthermore, research shows that food insecurity leads to significant stress, which in turn influences eating behaviors—people often consume what is available when they can, typically opting for

calorie-dense, highly processed foods.[14] This pattern is linked to increased weight gain, obesity, and type 2 diabetes.[15]

In addition to dietary changes, reports showed a decline in physical activity during the pandemic, further contributing to weight gain.[16] A 2021 report by the American Psychological Association found that 61% of adults experienced undesired weight changes, with 42% gaining more weight than they intended.[12] The long-term physical and mental health impacts of these changes are expected to persist for years.[12]

At the peak of the crisis, Nevada's food security partners observed an unprecedented rise in demand for food and nutrition services, driven by widespread unemployment, limited resources, and social distancing measures. DPBH increased programming efforts and funding to help mitigate these issues and address food insecurity.

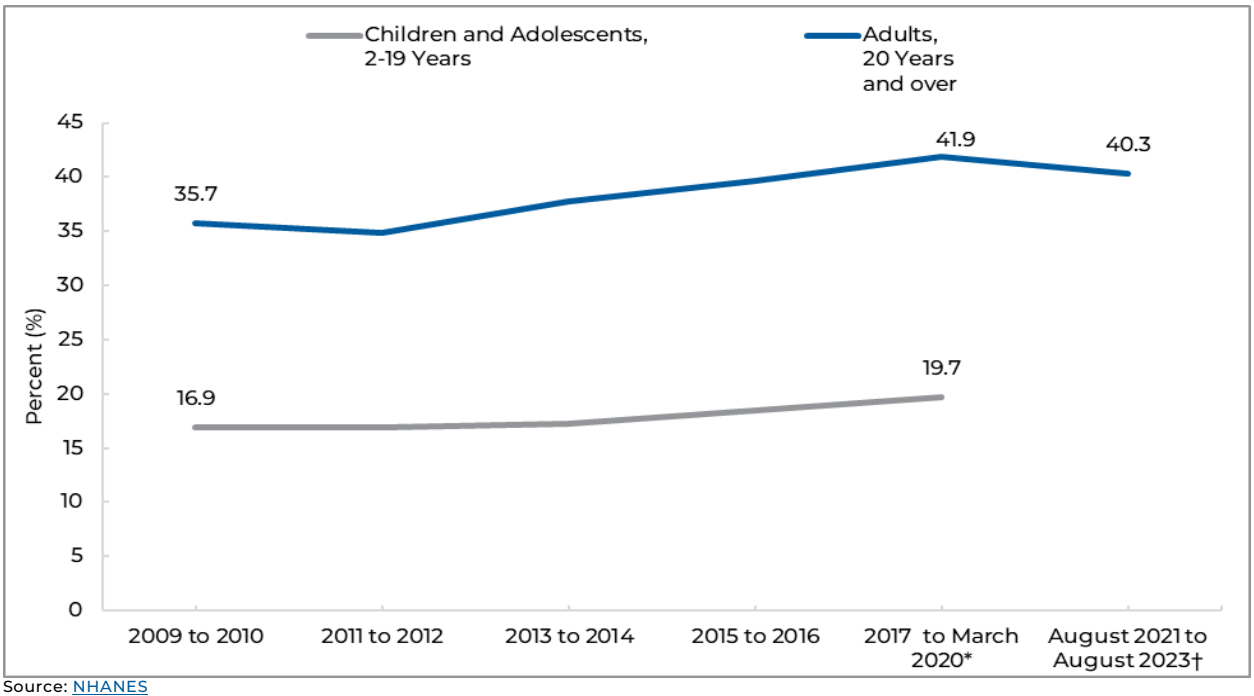
FINDINGS ON OBESITY

Adult and Childhood Obesity in the United States (U.S.)

Half of U.S. adults are projected to have obesity by 2030, and 60% of today's children are predicted to have obesity by age 35.[17] Long term data from NHANES reveals a persistent increase in obesity prevalence across the U.S., underscoring the urgency of addressing this growing public health challenge.

Figure 1 illustrates these trends, showcasing the prevalence of obesity among children and adolescents (ages 2–19) and adults (ages 20 and over) in the U.S. from 2009 to 2023. Childhood obesity increased steadily over the period, rising from 16.9% in 2009–2010 to 19.7% in 2017–2020. Among adults, obesity rates rose consistently, increasing from 35.7% in 2009-2010 to 41.9% in 2017-2020, before slightly declining to 40.3% in the most recent reporting period (August 2021 to August 2023).

Figure 1. Prevalence of Childhood and Adult Obesity: U.S., 2009 to 2010 – August 2021 to August 2023

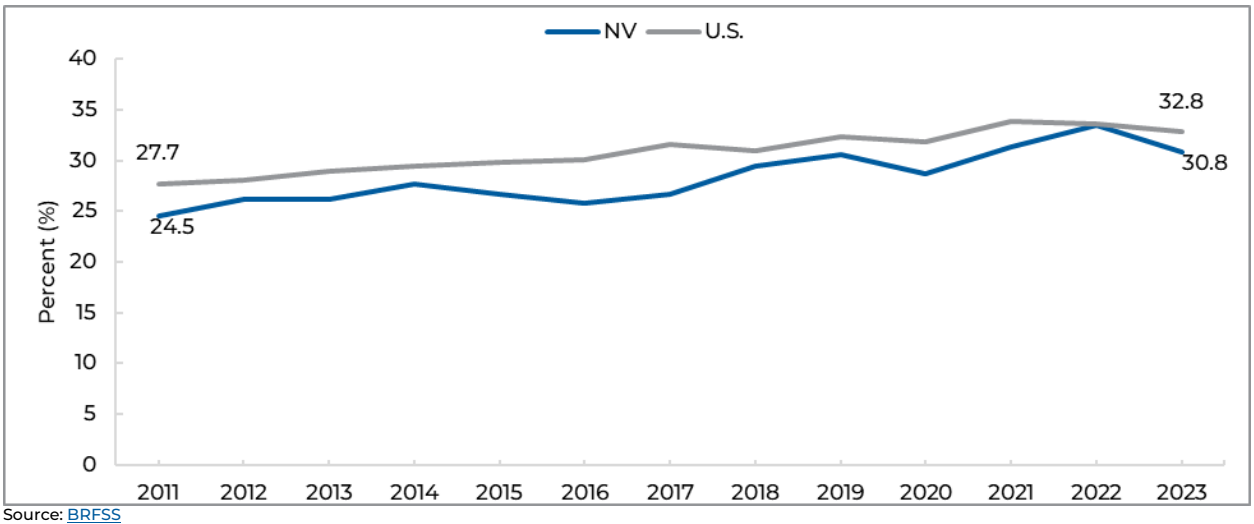


Source: NHANES
* Data from the partial 2019–2020 cycle (March 2020) were combined with 2017–2018 data for nationally representative estimates.
† Data not available for children and adolescents.

Adult Obesity in Nevada

Figure 2 presents the prevalence of obesity among adults in Nevada and the U.S. from 2011 to 2023. In 2023, Nevada's adult obesity rate was 30.8%, slightly below the national rate of 32.8%. While Nevada's obesity rate has increased by 25.7% since 2011, there was a notable decline from 33.5% in 2022 to 30.8% in 2023, marking the first decrease in recent years.

Figure 2. Prevalence of Adult Obesity: NV and U.S., 2011 – 2023

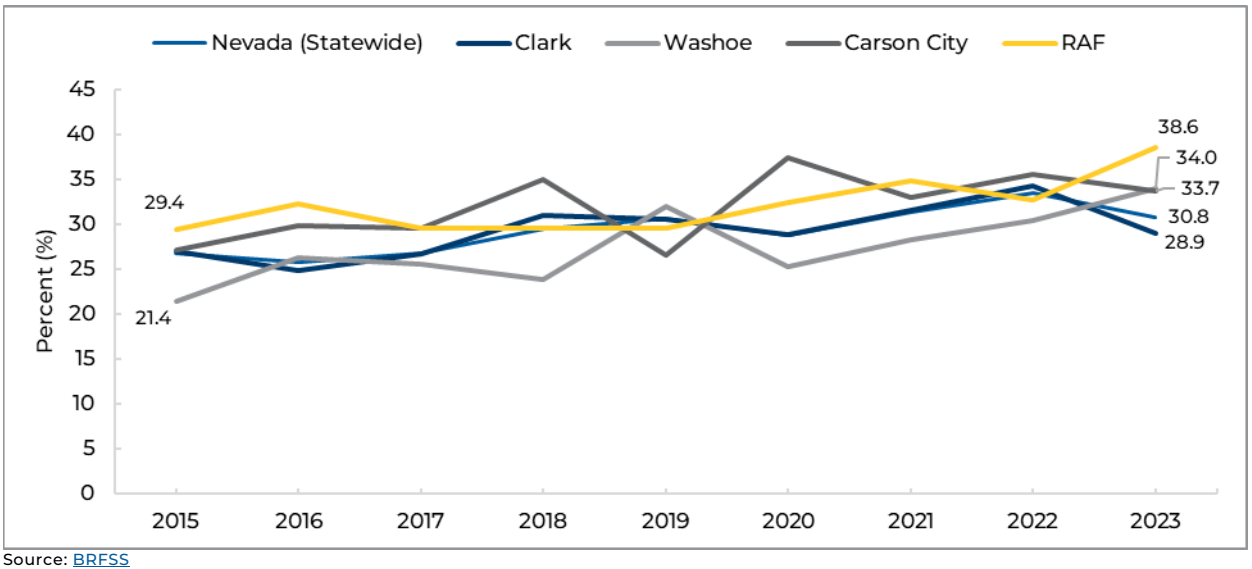


Source: BRFSS

Figure 3 displays the prevalence of adult obesity by region, including Nevada (Statewide), Clark County, Washoe County, Carson City, and the combined Rural and Frontier (RAF) counties. Among the regions, the RAF counties reported the highest obesity rate at 38.6%, followed by Washoe County (34.0%), Carson City (33.7%), and Clark County (28.9%). Long-term trends indicate a general increase in obesity rates across all regions since 2011. Notably, RAF counties experienced the largest rise, from 29.4% in 2015 to 38.6% in 2023, a 31.3% increase.

The RAF counties—Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Lyon, Mineral, Nye, Pershing, Storey, and White Pine—are grouped together due to low population density and unique socio-economic and health care challenges, ensuring a more stable analysis of obesity trends.

Figure 3. Prevalence of Adult Obesity, by Region: NV, 2015 – 2023

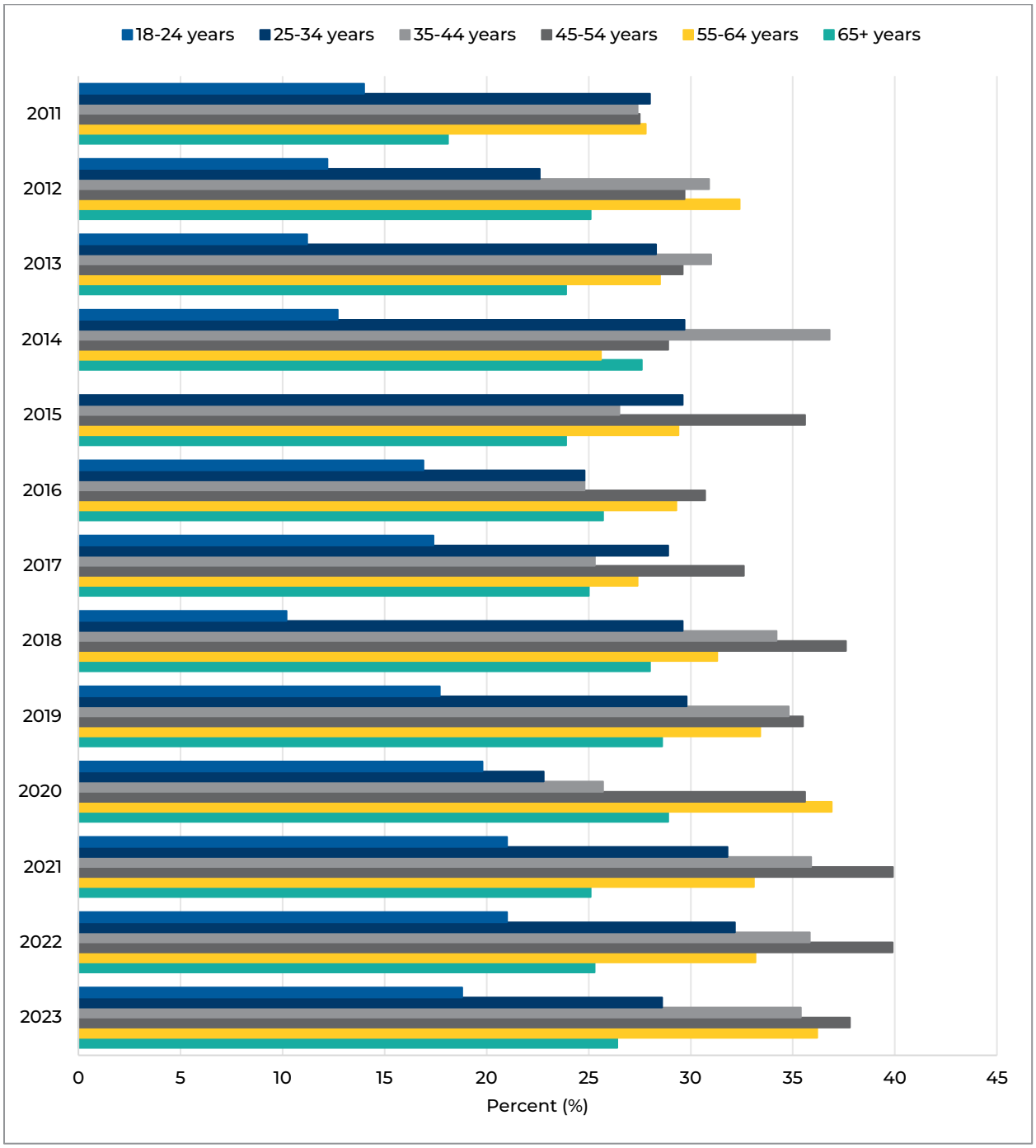


Source: BRFSS

Figure 4 presents the prevalence of adult obesity in Nevada by age group from 2011 to 2023. In 2023, the highest obesity rate was observed among 45-54 years (37.8%), followed by 55-64 years (36.2%) and 35-44 years (35.4%). Among older adults, individuals 65 and older had a lower obesity rate at 26.4%. Overall, younger adults had the lowest prevalence, with 28.6% among those aged 25-34 years and 18.8% among those aged 18-24 years.

Over the years, obesity rates have generally increased across all age groups, particularly among middle-aged adults. Notably, individuals aged 25-34 years saw a decline in obesity from 32.2% in 2022 to 28.6% in 2023, while those aged 18-24 years experienced a similar decrease from 21.0% to 18.8%. In contrast, older age groups have demonstrated relatively stable or increasing trends, with adults aged 55-64 years showing little fluctuation in prevalence over the past decade. These findings suggest that while obesity remains a concern across all age groups, middle-aged adults continue to experience the highest rates of obesity in Nevada.

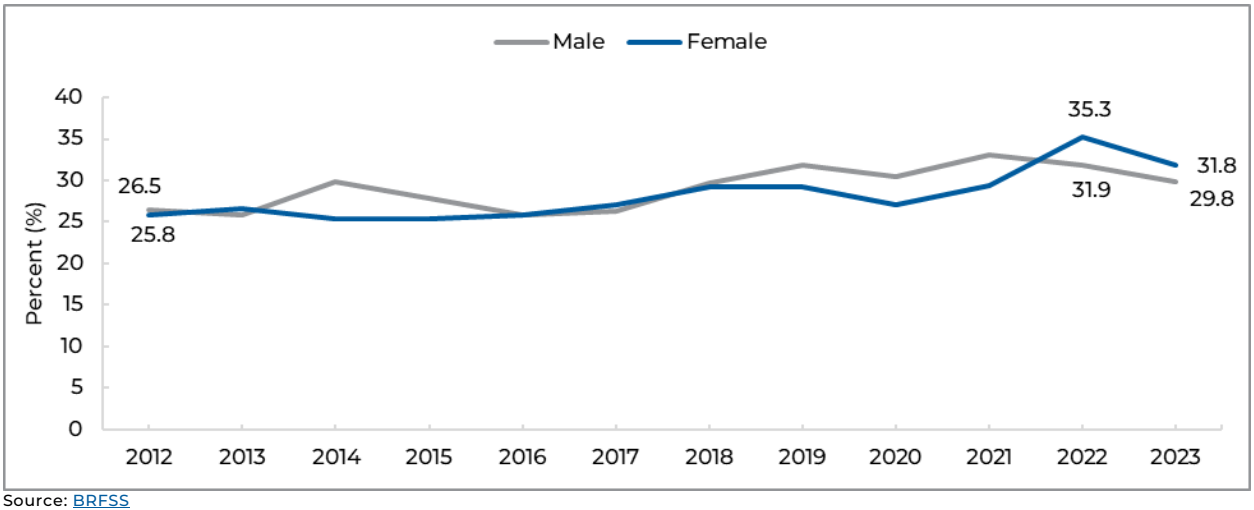
Figure 4. Prevalence of Adult Obesity, by Age Group: NV, 2011 – 2023



Source: BRFSS
Note: Missing bars indicate data not available.

Figure 5 showcases the prevalence of adult obesity by sex in Nevada from 2012 to 2023. In 2023, the obesity rate was 31.8% for females and 29.8% for males. Although both have shown an overall increasing trend since 2012, this marks a decrease from 2022, when obesity rates were 35.3% for females and 31.9% for males.

Figure 5. Prevalence of Adult Obesity, by Sex: NV, 2012 - 2023

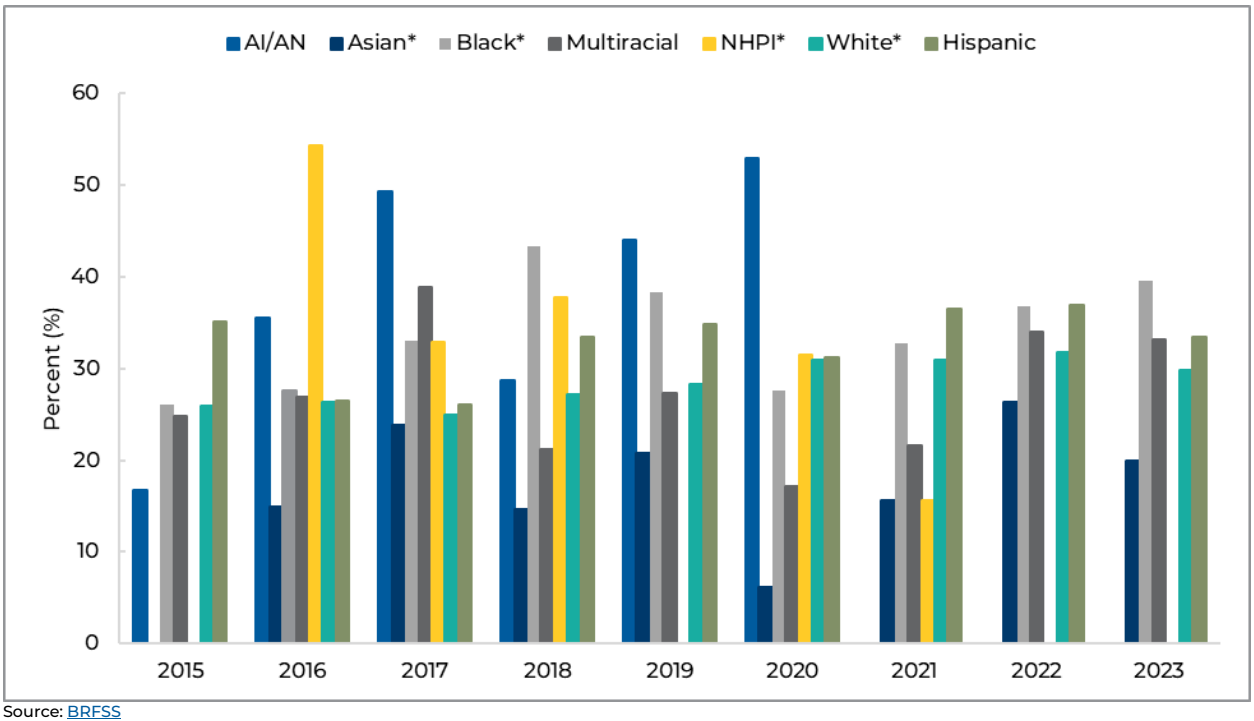


Source: BRFSS

Figure 6 highlights the prevalence of adult obesity by race/ethnicity in Nevada from 2015 to 2023. In 2023, the highest adult obesity prevalence was observed among Black adults (39.6%), followed by Multiracial (33.2%) and Hispanic (33.4%) adults. The lowest rates were among White (29.9%) and Asian (20.0%) adults. Due to small sample sizes, obesity rates for American Indian/Alaska Native (AI/AN) and Native Hawaiian/Pacific Islander (NHPI) were suppressed.

Over time, obesity rates have increased across most racial and ethnic groups, with Black adults seeing the most consistent rise. Hispanic and Multiracial adults experienced more fluctuations but remained among the groups with the highest prevalence. White adults saw a gradual increase before leveling off in recent years, while Asian adults consistently had the lowest rates.

Figure 6. Prevalence of Adult Obesity, by Race/Ethnicity: NV, 2015 – 2023

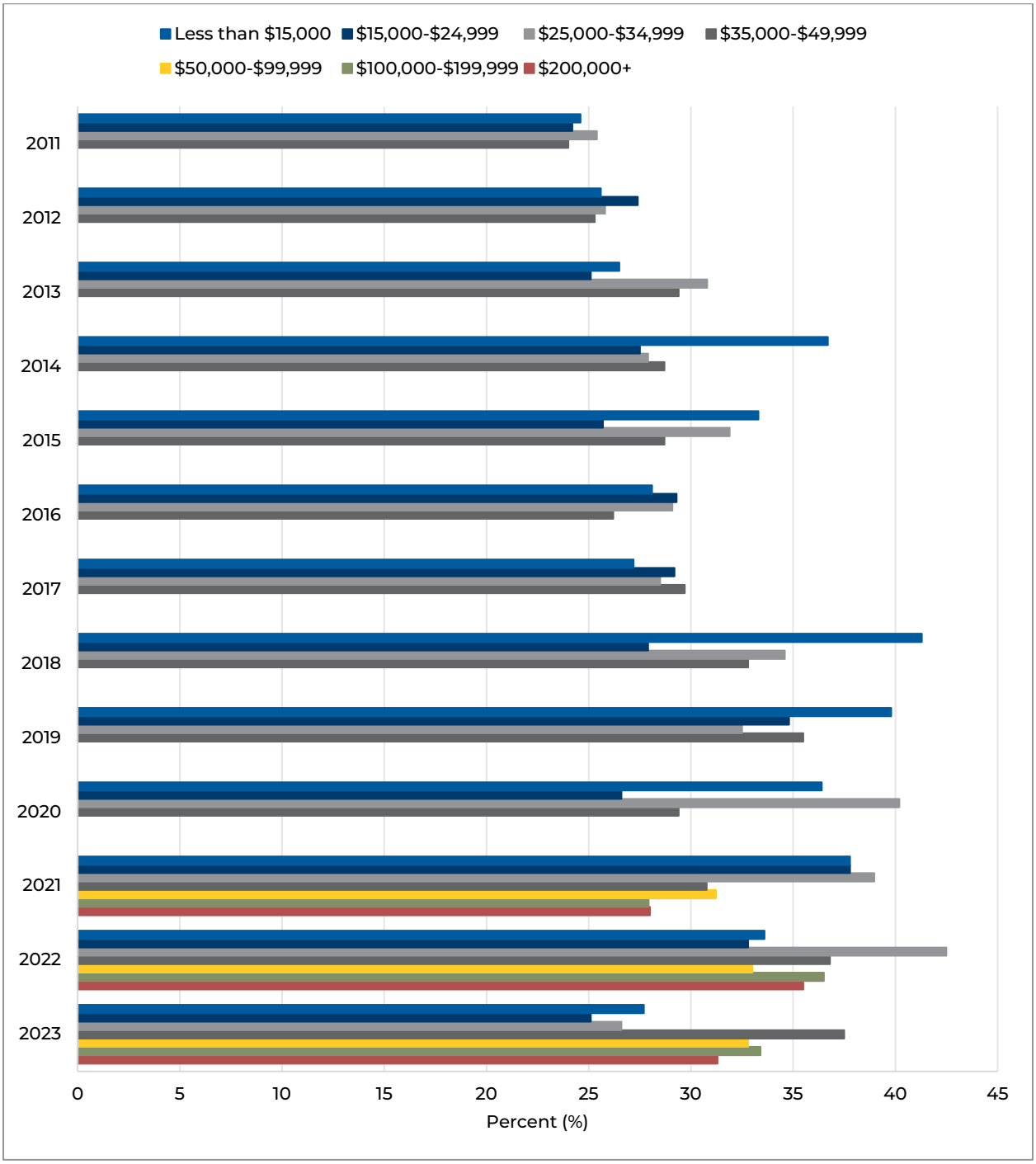


Source: BRFSS
* non-Hispanic
Note: Missing bars indicate values were suppressed due to small sample sizes.

Figure 7 shows the prevalence of adult obesity in Nevada by income level from 2011 to 2023. In 2023, obesity varied across income groups, with the highest rate observed among individuals earning $35,000–$49,999 (37.5%), followed by those earning $100,000–$199,999 (33.4%) and $50,000–$99,999 (32.8%). Conversely, individuals earning between $15,000–$24,999 (25.1%) and $25,000–$34,999 (26.6%) had the lowest obesity prevalence.

Over the years, fluctuations in obesity prevalence have been observed across all income groups. Notably, the obesity rate among those earning less than $15,000 has declined from a peak of 41.3% in 2018 to 27.7% in 2023. Similarly, individuals earning $25,000–$34,999 experienced a sharp decline from 42.5% in 2022 to 26.6% in 2023.

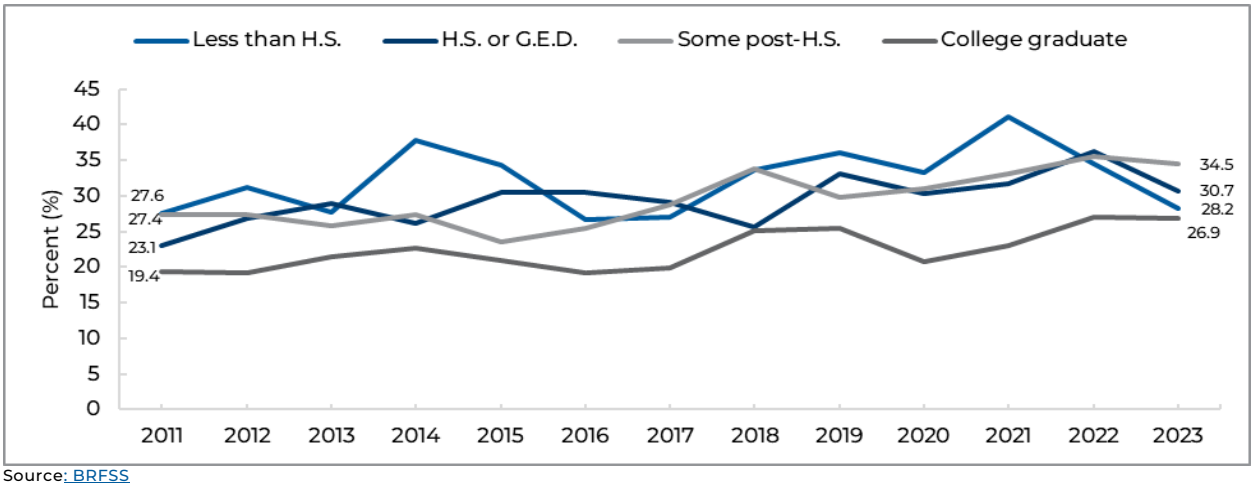
Figure 7. Prevalence of Adult Obesity, by Income: NV, 2011 – 2023



Source: BRFSS
Note: Missing bars indicate values were not reported.

Figure 8 exhibits the prevalence of adult obesity in Nevada by educational attainment from 2011 to 2023. In 2023, the highest obesity prevalence was observed among individuals with some post-high school (H.S.) education (34.5%), followed by those with a H.S. diploma or General Educational Development (G.E.D.) (30.7%) and individuals with less than a H.S. education (28.2%). The lowest prevalence was among college graduates (26.9%).

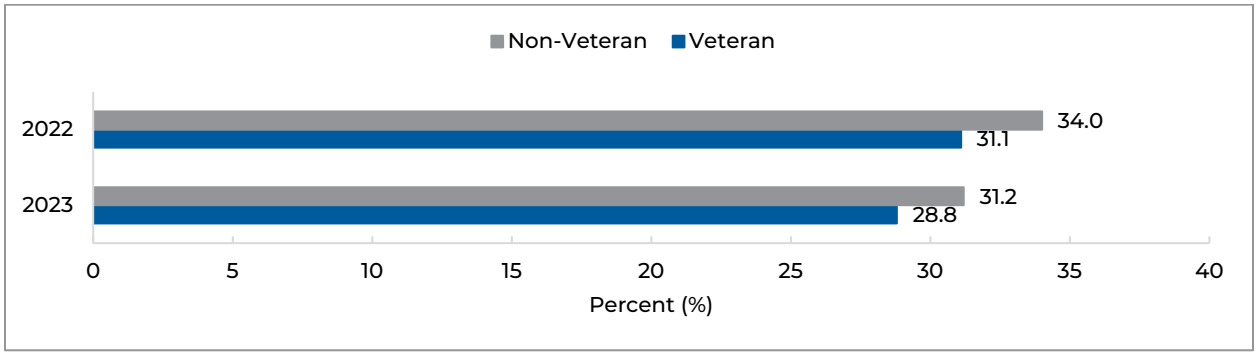
Figure 8. Prevalence of Adult Obesity, by Education: NV, 2011 – 2023



Source: BRFSS

Figure 9 demonstrates the prevalence of adult obesity in Nevada by veteran status from 2022 and 2023. In 2023, the obesity rate among veterans was 28.8%, while the rate among non-veterans was 31.2%.

Figure 9. Prevalence of Adult Obesity, by Veteran Status: NV, 2022 and 2023



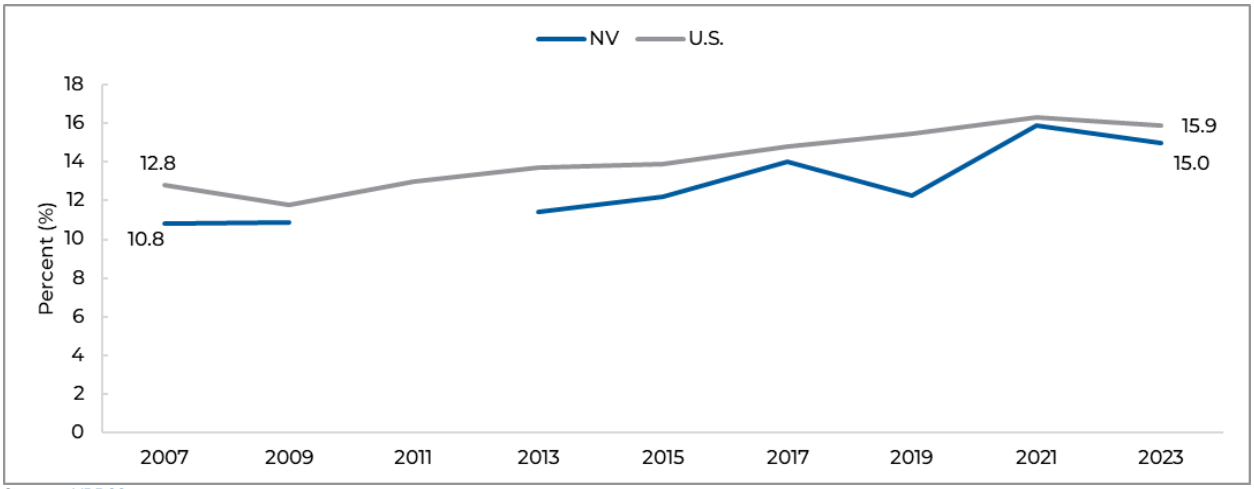
Source: BRFSS

Youth Obesity in Nevada

Figure 10 illustrates the prevalence of obesity among youth aged 14 to 18 in Nevada and the U.S. from 2007 to 2023. In 2023, the obesity rate among Nevada youth was 15.0%, slightly lower than the national rate of 15.9%.

Over the 16-year period, both state and national trends indicate a gradual increase in youth obesity, with periodic fluctuations. In Nevada, rates rose steadily before the pandemic, followed by a sharp increase in 2021. While obesity prevalence declined slightly in 2023, it remains higher than pre-pandemic levels, highlighting the lasting impact of COVID-19 on youth health.

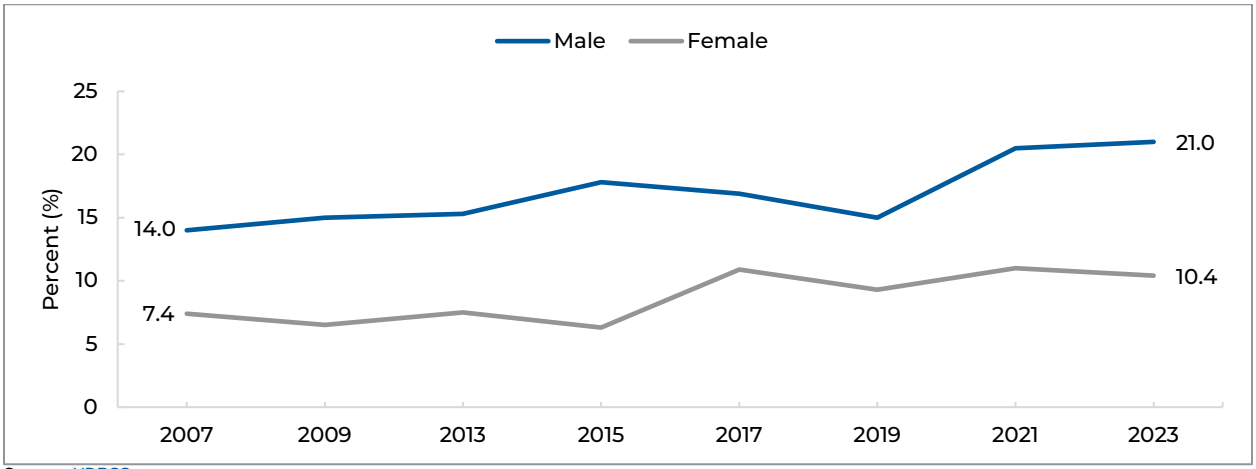
Figure 10. Prevalence of Obesity in Youth Aged 14 to 18: NV and U.S., 2007 – 2023



Source: YRBSS
Note: Nevada data for 2011 is unavailable.

Figure 11 presents the prevalence of obesity among high school students by sex from 2007 to 2023. Male students consistently reported higher obesity rates than female students throughout the period. In 2023, the prevalence of obesity was 21.0% among males and 10.4% among females. Since 2007, obesity prevalence increased by 50.0% for males and 40.5% for females, highlighting a persistent disparity between sexes.

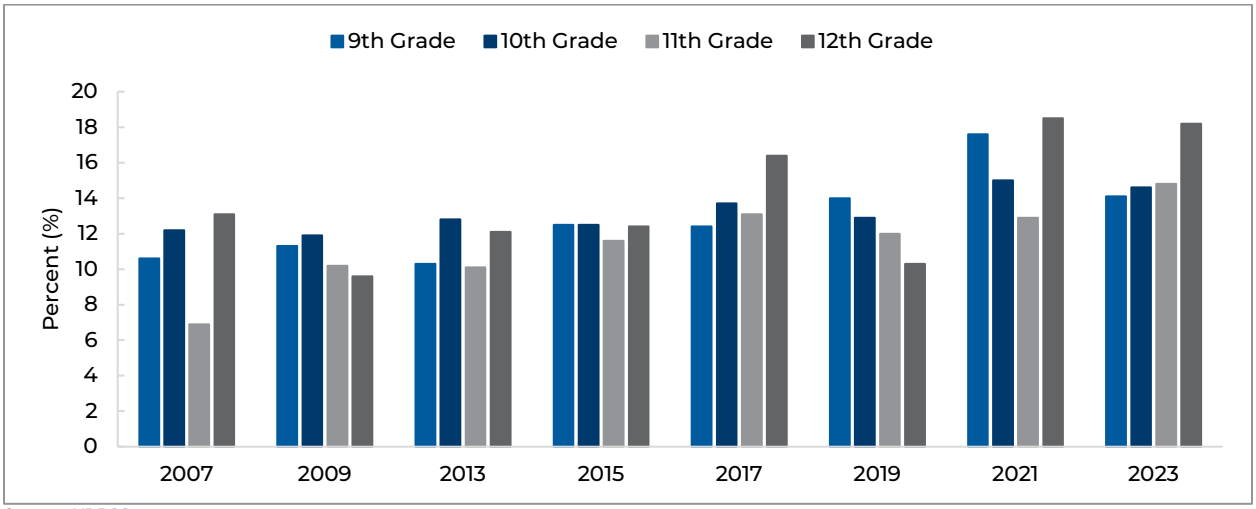
Figure 11. Prevalence of Obesity in Youth Aged 14 to 18, by Sex: NV, 2007 – 2023



Source: YRBSS

Figure 12 reveals the prevalence of youth obesity by grade level in Nevada from 2007 to 2023. In 2023, 12th graders had the highest obesity prevalence at 18.2%, followed by 11th graders (14.8%), 10th graders (14.6%), and 9th graders (14.1%). From 2019 (pre-COVID) to 2023 (post), obesity prevalence increased across all grade levels. The largest rise was among 12th graders, up 76.7% from 10.3% to 18.2%, followed by an increase of 23.3% among 11th graders, from 12.0% to 14.8%.

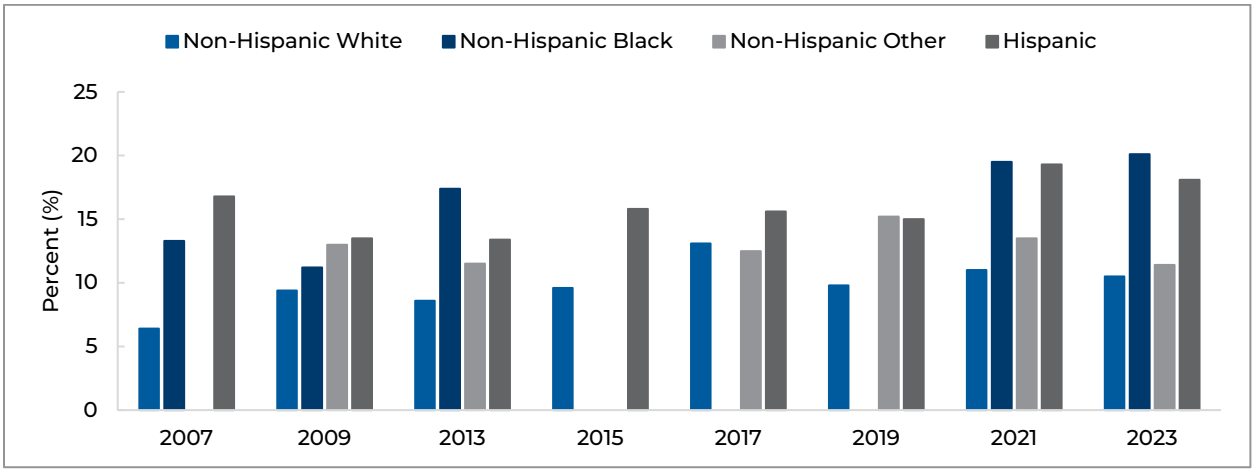
Figure 12. Prevalence of Youth Obesity, by Grade Level: NV, 2007 – 2023



Source: YRBSS

Figure 13 summarizes the prevalence of obesity among youth aged 14 to 18 by race and ethnicity in Nevada from 2007 to 2023. In 2023, the highest prevalence of obesity was among Non-Hispanic Black youth (20.1%) and the lowest among Non-Hispanic White youth (10.5%).

Figure 13. Prevalence of Obesity in Youth Aged 14 to 18, by Race/Ethnicity: NV, 2007 – 2023



Source: YRBSS
Note: Missing bars indicate data not available.

Youth Obesity in Schools (Height and Weight Data Collection)

As outlined in NRS 392.420, height and weight data collection are mandated every other school year (SY) for 4th and 7th graders in school districts with populations exceeding 100,000, which includes Clark County School District (CCSD) and Washoe County School District (WCSD). During non-mandated years, school districts may voluntarily provide data to support ongoing public health monitoring.

For the 2022–2023 SY, which was not a mandated collection period, CCSD, WCSD, and Elko County School District (ECSD) voluntarily provided height and weight data. Additionally, 10th grade students participated voluntarily. This data will be included in the current analysis, offering a broader understanding of childhood obesity trends beyond the required reporting years.

Table 1 outlines the mandated and voluntary collection periods, along with the corresponding **Obesity Annual Reports** where this data will be analyzed.

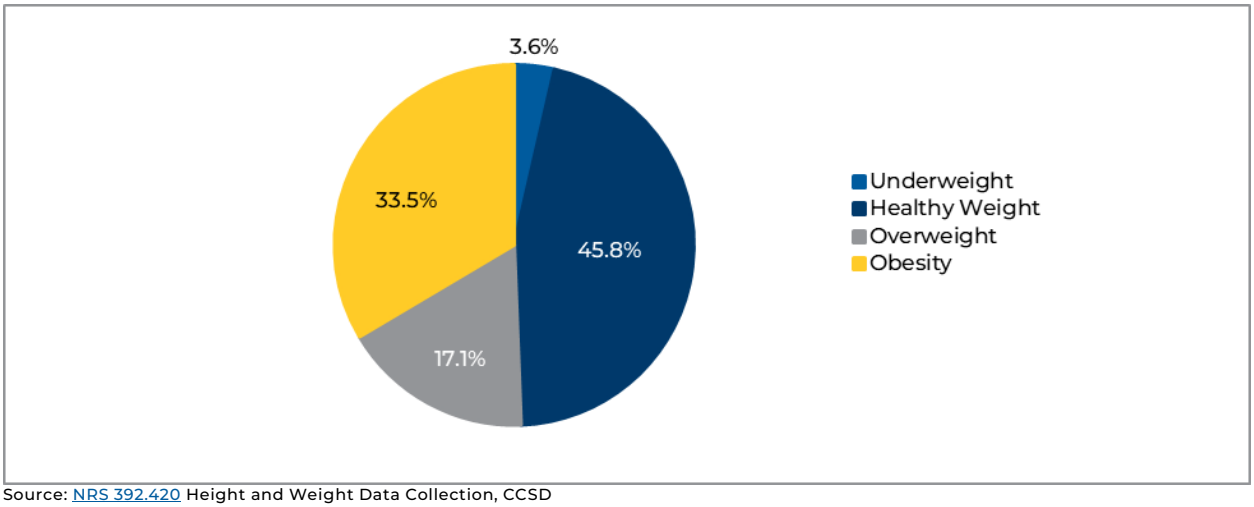
Table 1. Height and Weight Data Collection Periods Requirements

School Year	Timeline	Collection Period?	Year of Annual Obesity Report
2022	August 2022-June 2023	No	Data provided voluntarily may be analyzed in 2023 and/or 2024 report
2023	August 2023-June 2024	Yes	2025
2024	August 2024-June 2025	No	Data provided voluntarily may be analyzed in 2026 and/or 2027 report
2025	August 2025-June 2026	Yes	2027
2026	August 2026-June 2027	No	Data provided voluntarily may be analyzed in 2028 and/or 2029 report
2027	August 2027-June 2028	Yes	2029
2028	August 2028-June 2029	No	Data provided voluntarily may be analyzed in 2029 and/or 2030 report
2029	August 2029-June 3030	Yes	2031

Clark County School District (CCSD)

Figure 14 visualizes the distribution of BMI categories among youth in grades 4th, 7th, and 10th for the 2022–2023 SY. In this district, 33.5% were classified as having obesity, 17.1% as overweight, 45.8% as having a healthy weight, and 3.6% as underweight.

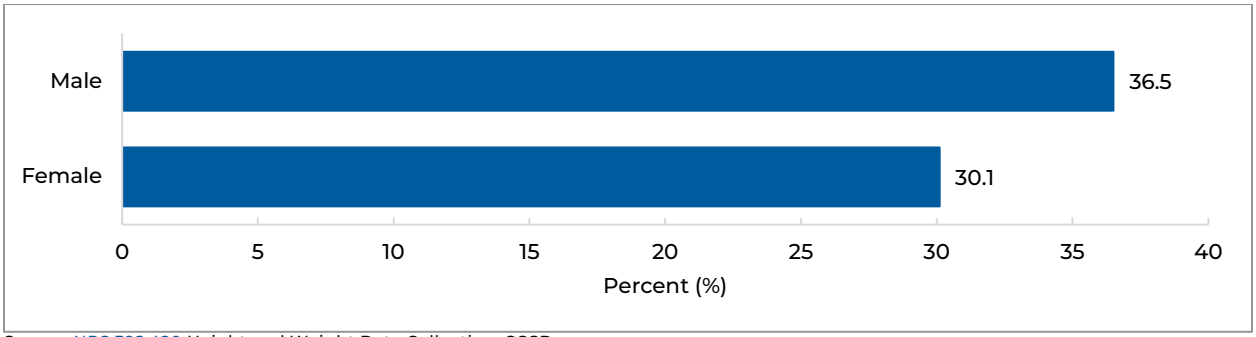
Figure 14. Distribution of BMI Categories Among Youth in Grades 4th, 7th, and 10th: CCSD, SY 2022 – 2023



Source: NRS 392.420 Height and Weight Data Collection, CCSD

Figure 15 presents the prevalence of obesity among youth in grades 4th, 7th, and 10th by sex for 2022–2023 SY. Males had a higher obesity prevalence at 36.5%, compared to 30.1% for females.

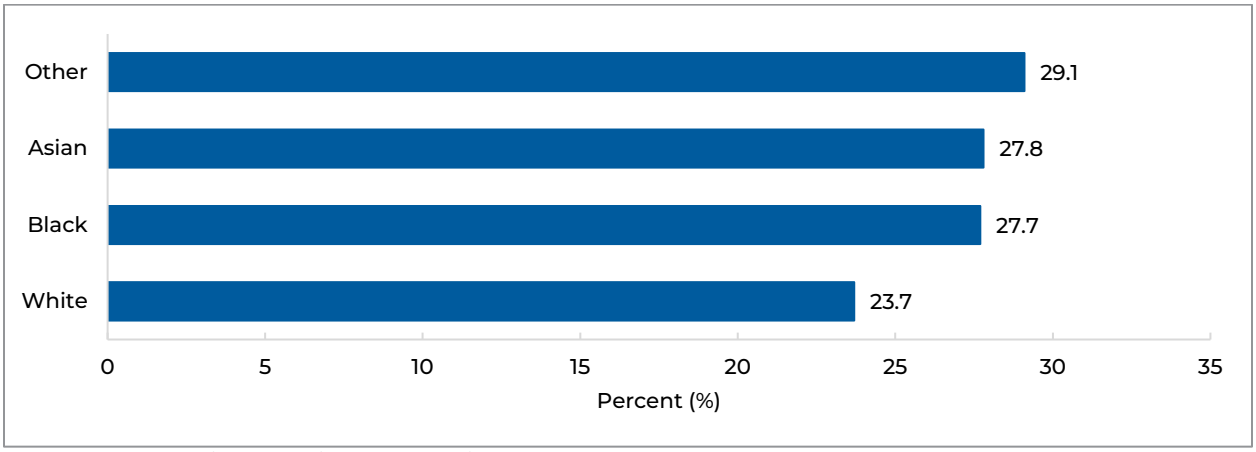
Figure 15. Prevalence of Obesity Among Youth in Grades 4th, 7th, and 10th, by Sex: CCSD, SY 2022 – 2023



Source: NRS 392.420 Height and Weight Data Collection, CCSD

Figure 16 compares the prevalence of obesity among youth in grades 4th, 7th, and 10th by race for the 2022–2023 SY in descending order. The highest obesity prevalence was observed among students categorized as Other at 29.1%, followed by Asian students at 27.8%, Black students at 27.7%, and White students at 23.7%.

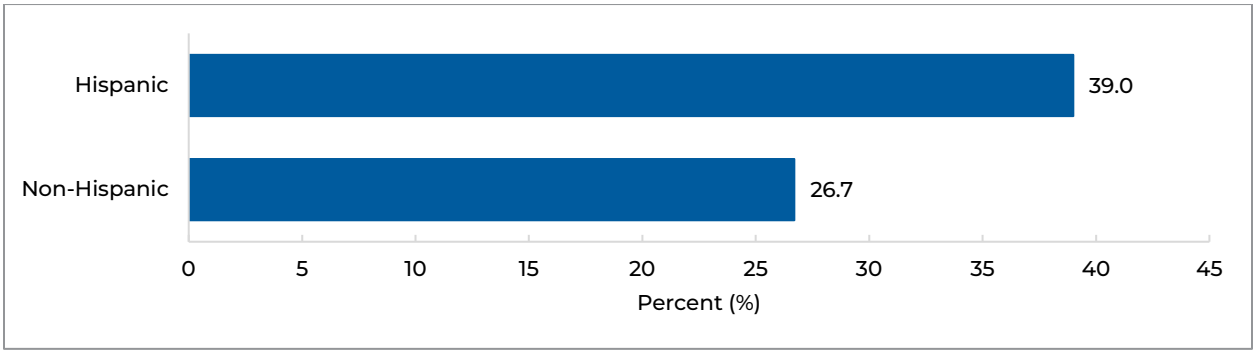
Figure 16. Prevalence of Obesity Among Youth in Grades 4th, 7th, and 10th, by Race: CCSD, SY 2022 – 2023



Source: NRS 392.420 Height and Weight Data Collection, CCSD

Figure 17 presents the prevalence of obesity among youth in grades 4th, 7th, and 10th by ethnicity for the 2022–2023 SY. Hispanic students had a significantly higher obesity prevalence (39.0%) compared to non-Hispanic students (26.7%).

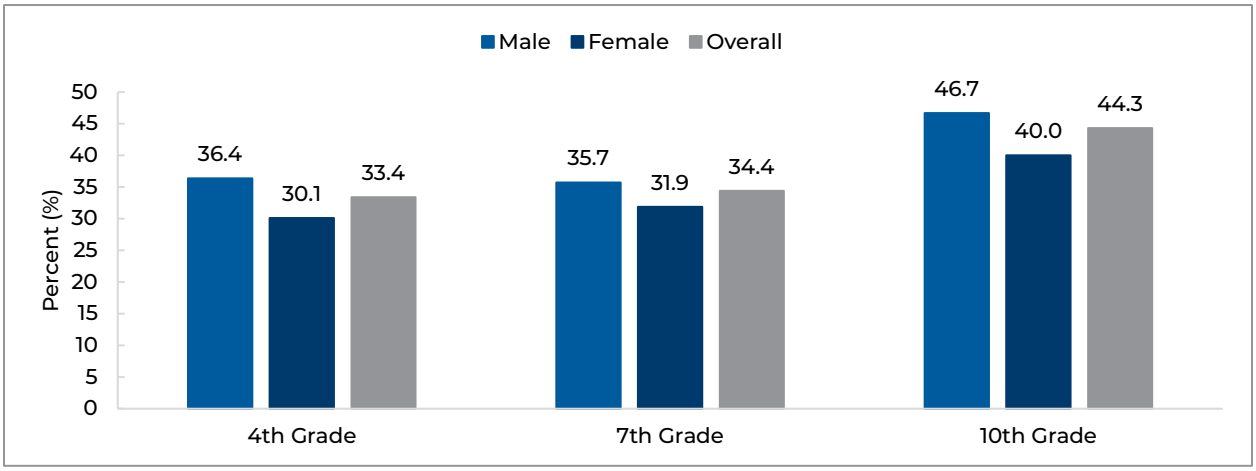
Figure 17. Prevalence of Obesity Among Youth in Grades 4th, 7th, and 10th, by Ethnicity: CCSD, SY 2022 – 2023



Source: NRS 392.420 Height and Weight Data Collection, CCSD

Figure 18 depicts the prevalence of obesity among youth in grades 4th, 7th, and 10th by grade and sex for the 2022–2023 SY. Across all grade levels, males had higher obesity rates than females. The highest obesity prevalence was observed among 10th grade students, with 46.7% of males and 40.0% of females classified as obese, resulting in an overall rate of 44.3%. In 7th grade, the overall obesity rate was 34.4%, with 35.7% of males and 31.9% of females affected. Among 4th graders, the overall prevalence was 33.4%, with 36.4% of males and 30.1% of females classified as obese.

Figure 18. Prevalence of Obesity Among Youth in Grades 4th, 7th, and 10th, by Grade Level and Sex: CCSD, SY 2022 – 2023



Source: NRS 392.420 Height and Weight Data Collection, CCSD

Table 2 provides overweight and obesity prevalence rates among students in grades 4TH, 7TH, and 10TH from SY 2017-2018 to SY 2022-2023, broken down by sex, race, ethnicity, and grade level. Overweight and obesity rates are presented alongside historical data from previous years where available.

Table 2. Percentage of Overweight and Obesity Status Among Youth in Grades 4th, 7th, and 10th: CCSD, SY 2017-2018 to SY 2022-2023

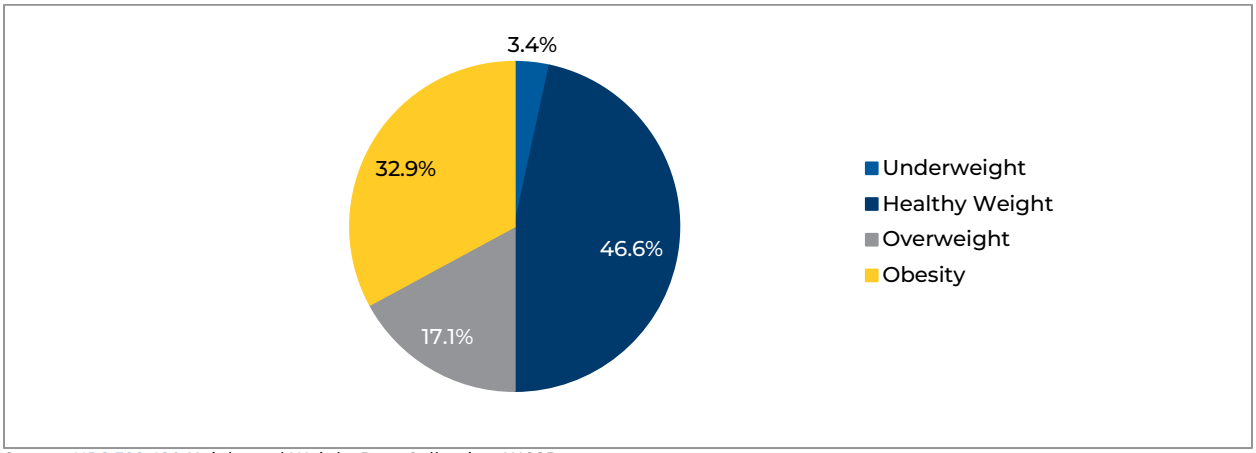
Categories	Overweight Prevalence (%)						Obesity Prevalence (%)					
	17-18	18-19	19-20	20-21	21-22	22-23	17-18	18-19	19-20	20-21	21-22	22-23
Overall	18.1	19.5	~	~	17.1	17.1	24.9	24.2	~	~	33.5	33.5
Male	16.6	18.1	~	~	16.4	16.4	27.1	26.6	~	~	36.5	36.5
Female	20.4	21.0	~	~	17.7	17.9	21.5	21.6	~	~	30.1	30.1
White	16.8	19.9	~	~	15.1	15.1	15.5	14.6	~	~	23.7	23.7
Black	15.5	22.5	~	~	16.7	16.7	23.9	20.6	~	~	27.7	27.7
Asian	14.7	15.2	~	~	11.4	11.4	16.4	19.6	~	~	27.8	27.8
Other	18.5	19.2	~	~	19.1	19.1	26.9	29.2	~	~	29.1	29.1
Hispanic	19.9	19.2	~	~	17.9	17.9	29.8	29.8	~	~	19.2	39.0
Non-Hispanic	19.7	19.7	~	~	16.2	16.2	19.0	19.0	~	~	26.7	26.7
4th	15.7	17.9	~	~	21.4	21.4	20.3	25.2	~	~	33.4	33.4
7th	19.0	21.3	~	~	21.4	21.4	25.6	28.3	~	~	34.4	34.4
10th	20.2	18.4	~	~	15.7	15.7	29.6	16.1	~	~	44.3	44.3

Source: NRS 392.420 Height and Weight Data Collection, CCSD
~ Data not available

Washoe County School District (WCSD)

Figure 19 visualizes the distribution of BMI categories among youth in grades 4th, 7th, and 10th for the 2022-2023 SY. In this district, 32.9% were classified as having obesity, 17.1% as overweight, 46.6% as having a healthy weight, and 3.4% as underweight.

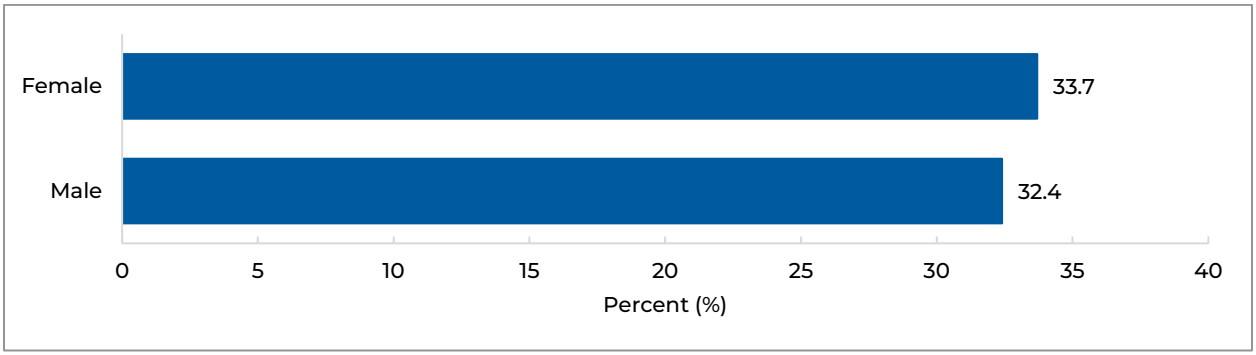
Figure 19. Distribution of BMI Categories Among Youth in Grades 4th, 7th, and 10th: WCSD, SY 2022 – 2023



Source: NRS 392.420 Height and Weight Data Collection, WCSD

Figure 20 presents the prevalence of obesity among youth in grades 4th, 7th, and 10th by sex for SY 2022–2023. The obesity rate was 33.7% for females and 32.4% for males.

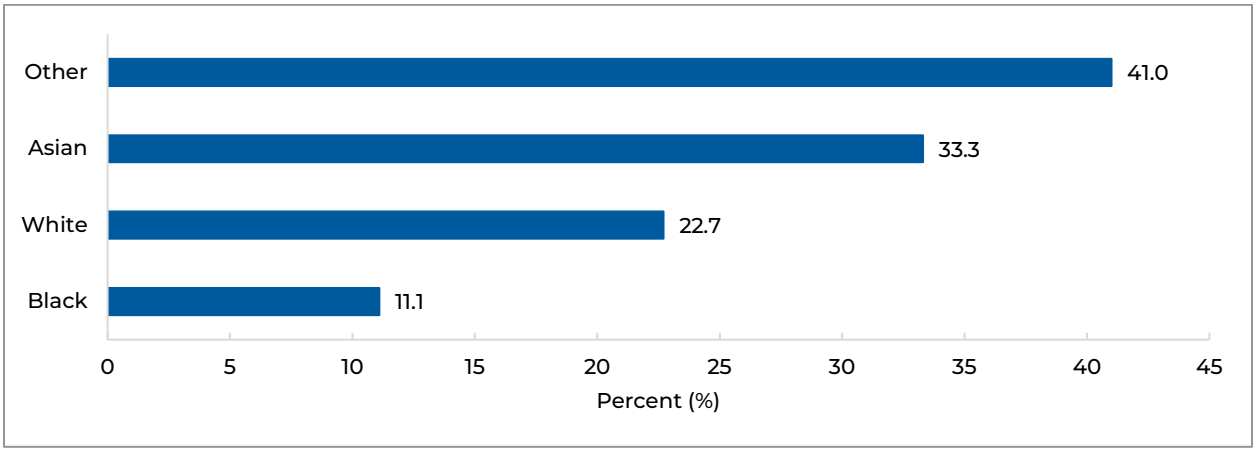
Figure 20. Prevalence of Obesity Among Youth in Grades 4th, 7th, and 10th, by Sex: WCSD, SY 2022 – 2023



Source: NRS 392.420 Height and Weight Data Collection, WCSD

Figure 21 compares the prevalence of obesity among youth in grades 4th, 7th, and 10th by race for the 2022–2023 SY in descending order. Obesity prevalence was highest among students categorized as Other at 41.0%, followed Asian (33.3%), White (22.7%), and Black (11.1%).

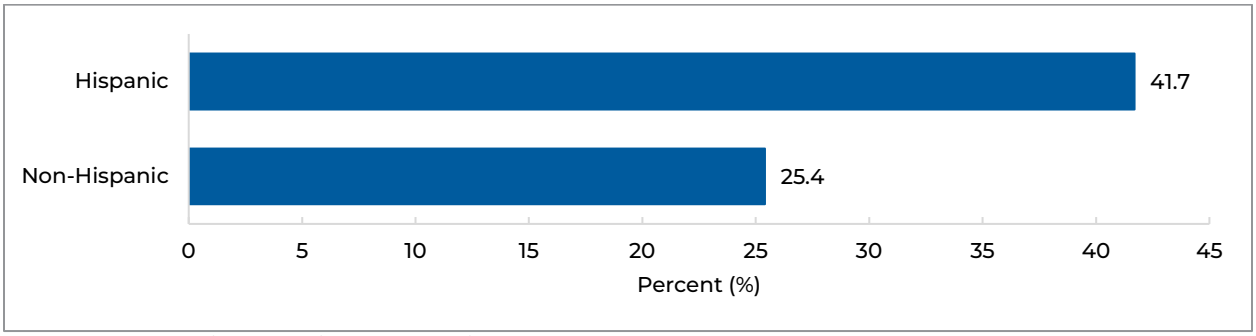
Figure 21. Prevalence of Obesity Among Youth in Grades 4th, 7th, and 10th, by Race: WCSD, SY 2022 – 2023



Source: NRS 392.420 Height and Weight Data Collection, WCSD

Figure 22 presents the prevalence of obesity among youth in grades 4th, 7th, and 10th by ethnicity for the 2022–2023 SY. Obesity prevalence was higher among Hispanic students at 41.7% compared to non-Hispanic students at 25.4%.

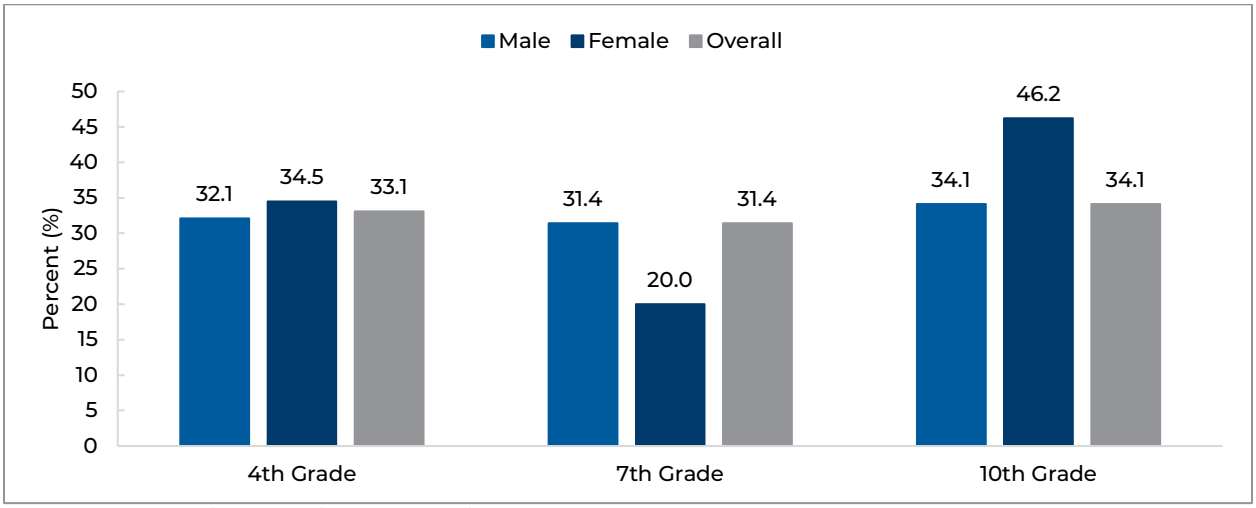
Figure 22. Prevalence of Obesity Among Youth in Grades 4th, 7th, and 10th, by Ethnicity: WCSD, SY 2022 – 2023



Source: NRS 392.420 Height and Weight Data Collection, WCSD

Figure 23 depicts the prevalence of obesity among youth in grades 4th, 7th, and 10th by grade and sex for the 2022–2023 SY. The highest obesity prevalence was observed among 10th-grade students, with 46.2% of females and 34.1% of males classified as obese, resulting in an overall rate of 34.1%. In 7th grade, the overall obesity rate was 31.4%, with 31.4% of males and 20.0% of females affected. Among 4th graders, the overall prevalence was 33.1%, with 34.5% of females and 32.1% of males classified as obese.

Figure 23. Prevalence of Obesity Among Youth in Grades 4th, 7th, and 10th, by Grade Level and Sex: WCSD, SY 2022 – 2023



Source: NRS 392.420 Height and Weight Data Collection, WCSD

Table 3 provides overweight and obesity prevalence rates among students in grades 4th, 7th, and 10th from SY 2017-2018 to SY 2022-2023, categorized by sex, race, ethnicity, and grade level. Overweight and obesity rates are presented alongside historical data from previous years where available.

Table 3. Prevalence of Overweight and Obesity Status Among Youth in Grades 4th, 7th, and 10th: WCSD, SY 2017-2018 to SY 2022-2023

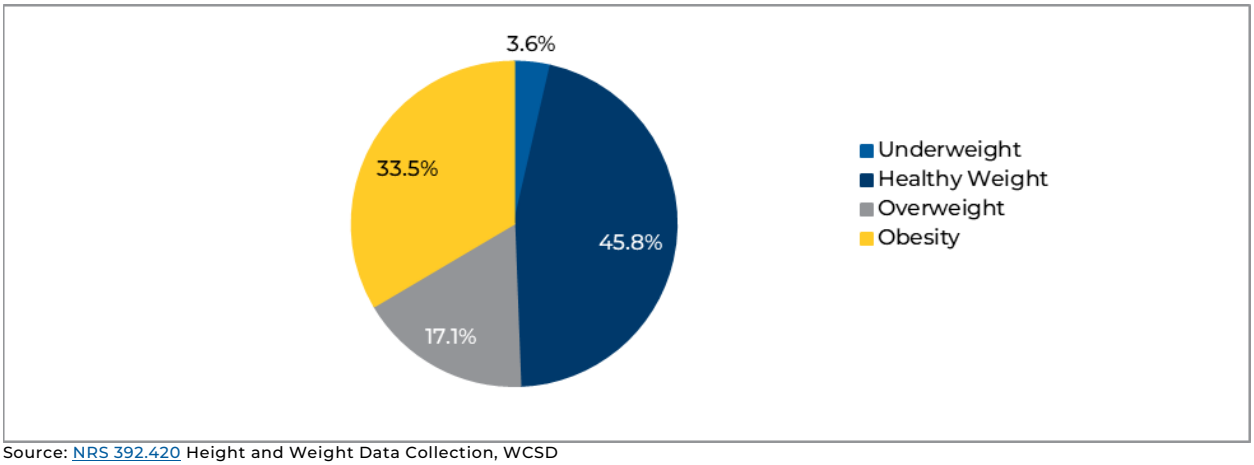
Categories	Overweight Prevalence (%)						Obesity Prevalence (%)					
	17-18	18-19	19-20	20-21	21-22	22-23	17-18	18-19	19-20	20-21	21-22	22-23
Overall	21.1	17.7	14.5	16.1	17.3	17.1	17.2	19	19.5	17.8	23.7	32.9
Male	19.9	18.5	14.5	15.4	16.6	16.2	14	21.5	20.8	19.3	27.2	32.4
Female	22.2	16.9	14.4	17	18	18.6	20.4	16.4	17.9	15.8	19.9	33.7
White	~	14.9	10.5	14.7	14.4	19.3	~	12.4	13.8	12.8	14.2	22.7
Black	~	24.4	14.3	9.3	20.4	11.1	~	21.1	26.2	9.3	32.6	11.1
Asian	~	14.7	21.9	11.8	16.1	0.0	~	16.8	14.1	13.7	19.8	33.3
Other	~	20.3	16.8	17.9	18	16.4	~	25.2	23.5	22.9	27.4	41
Hispanic	~	20.9	16.1	18.3	19.8	14.8	~	26.6	23.8	22.7	32.1	41.7
Non-Hispanic	~	15.6	13	14.4	32.1	19	~	14	15.6	14.2	17.5	25.4
4th	17.9	14	13.7	19.3	16.4	18	30.1	20.6	11.5	25.6	23.3	33.1
7th	20	19.4	16.9	18.1	18.3	19.6	20.9	22.5	23.1	18.4	24.1	31.4
10th	22.8	17.1	13.1	13.3	25	11.1	10.8	14.2	19.2	14.2	20.8	34.1

Source: NRS 392.420 Height and Weight Data Collection, WCSD
~ Data not available

Elko County School District (ECSD)

Figure 24 visualizes the distribution of BMI categories among youth in grades 4th, 7th, and 10th for the 2022-2023 school year. In this district, 33.5% were classified as having obesity, 17.1% as overweight, 45.8% as having a healthy weight, and 3.6% as underweight.

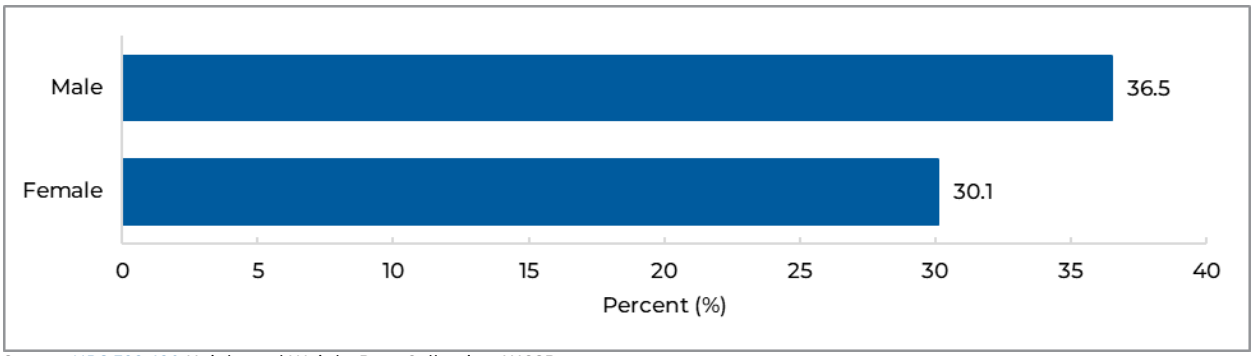
Figure 24. Distribution of BMI Categories Among Youth in Grades 4th, 7th, and 10th: ECSD, SY 2022 – 2023



Source: NRS 392.420 Height and Weight Data Collection, WCSD

Figure 25 presents the prevalence of obesity among youth in grades 4th, 7th, and 10th by sex for the 2022-2023 SY. Obesity prevalence was higher among males at 36.5% compared to 30.1% among females.

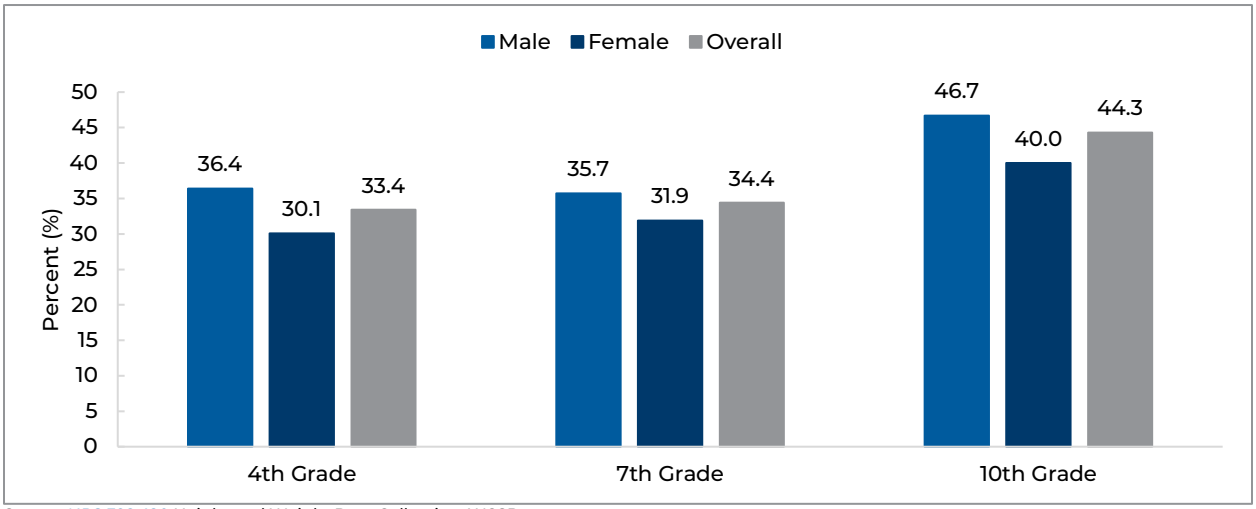
Figure 25. Prevalence of Obesity Among Youth in Grades 4th, 7th, and 10th, by Sex: ECSD, SY 2022 – 2023



Source: NRS 392.420 Height and Weight Data Collection, WCSD

Figure 26 visualizes the prevalence of obesity among youth in grades 4th, 7th, and 10th by grade and sex for the 2022–2023 school year. The highest obesity prevalence was observed among 10th grade students, with 46.7% of males and 40.0% of females classified as obese, resulting in an overall rate of 44.3%. In 7th grade, the overall obesity rate was 34.4%, with 35.7% of males and 31.9% of females affected. Among 4th graders, the overall prevalence was 33.4%, with 36.4% of males and 30.1% of females classified as obese.

Figure 26. Prevalence of Obesity Among Youth in Grades 4th, 7th, and 10th, by Grade Level and Sex: ECSD, SY 2022 – 2023



Source: NRS 392.420 Height and Weight Data Collection, WCSD

Childhood Obesity in Nevada

Women, Infants, and Children (WIC)

Weight-for-Length (WT/LT) is the recommended measure for assessing weight status in children under two (2) years old, while BMI is used for children aged two (2) years and older. In Nevada, height and weight data from children enrolled in the WIC program, which primarily serves families with low income and breastfeeding women and families with children below the age of five (5), is used to help assess childhood obesity status. While WIC data does not represent all children aged 0–5 in Nevada, it provides a reliable indicator of obesity trends among children who participate supplemental nutrition programs like WIC that provide nutritious foods, nutrition education, and breastfeeding education/support.

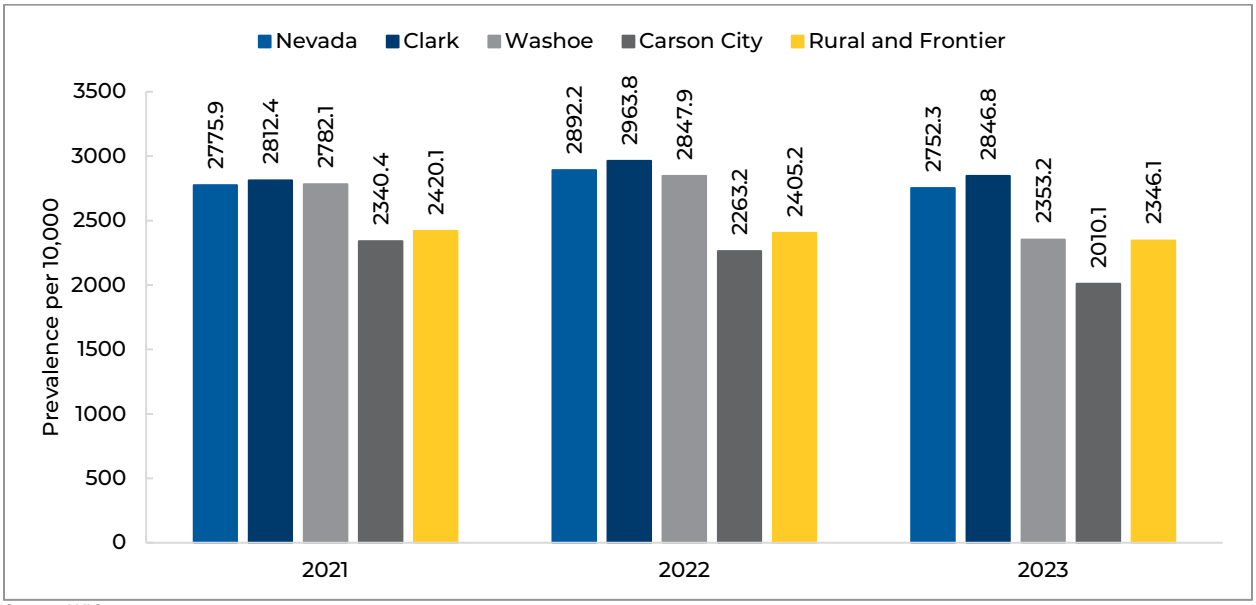
Data Note: The methodology for calculating obesity prevalence among WIC-enrolled children has changed in this report. The current analysis identifies children with obesity using Risk Codes 113 and 115, which flag participants based on BMI-for-age and Weight-for-Length percentiles. Due to this change, direct comparisons with past reports should be interpreted with caution.

- Risk Code 113: Obese Children 2-5 Years of Age: ≥ 24 months and ≥ 95th percentile BMI
- Risk Code 115: High Weight-for-Length: Birth – 24 months ≥ 98th percentile

Figure 27 presents the prevalence of high WT/LT among WIC-enrolled infants aged 0-24 months in Nevada from 2021 to 2023. In 2023, the statewide prevalence was 2,752.3 per 10,000 population. Clark County experienced the highest prevalence (2846.8), while Carson City experienced the lowest (2010.1).

Overall, prevalence peaked in 2022 before slightly declining in 2023 across most regions. Despite this decrease, rates remained elevated compared to 2021. Clark County consistently reported the highest prevalence throughout the period, while Carson City saw the most notable decline in 2023.

Figure 27. Prevalence of High WT/LT Among WIC-Enrolled Children Aged 0-24 Months (Risk Code 115), by Region: NV, 2021-2023

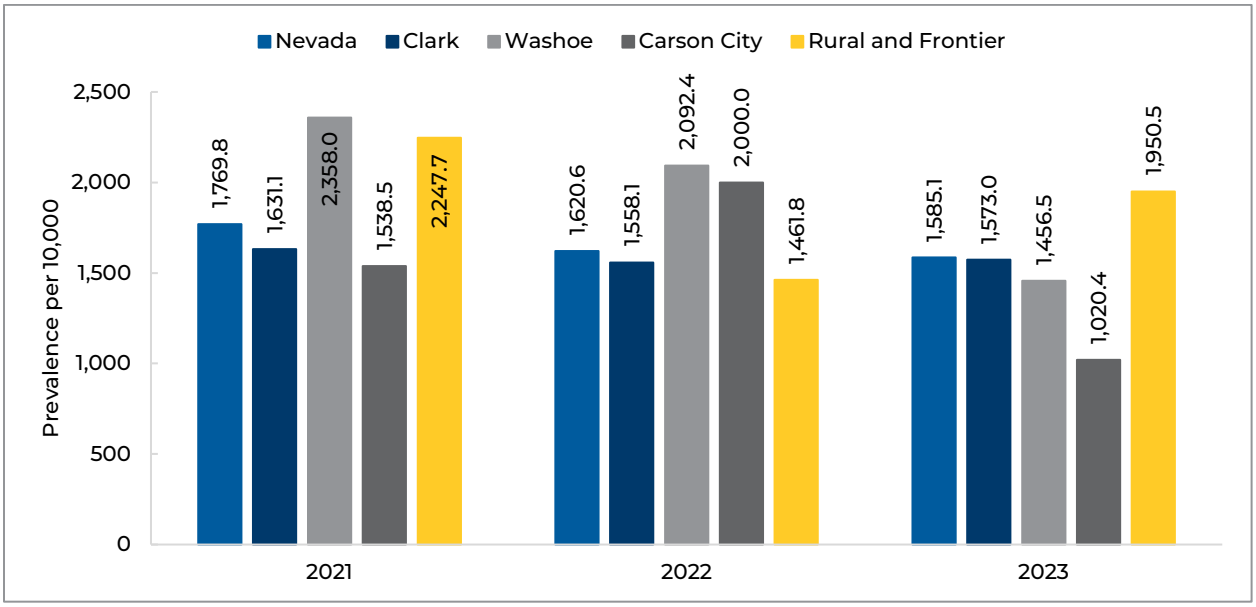


Source: WIC

Figure 28 presents the prevalence of obesity among WIC-enrolled children aged 2-5 years in Nevada from 2021 to 2023. In 2023, the statewide prevalence was 1,585.1 per 10,000 population. Rural and frontier counties had the highest prevalence (1,950.5), while Carson City had the lowest (1,020.4).

Within the three (3) year period, obesity prevalence decreased across all regions since 2021. Washoe County saw the largest decline, dropping from 2,358.0 in 2021 to 1,456.5 in 2023, while Clark County remained relatively stable. Carson City experienced a sharp increase in 2022 before falling to its lowest level in 2023.

Figure 28. Prevalence of Obesity Among WIC Enrolled Children Aged 2 to 5 Years (Risk Code 113), by Region: NV, 2021-2023



Source: WIC

Kindergarten Health Survey (KHS)

The KHS is conducted annually to assess the weight status and overall health of kindergarten students in Nevada. The survey provides valuable data on childhood obesity trends and related health factors, supporting statewide public health initiatives. While KHS data does not represent all kindergarten-aged children in Nevada, as it is limited to public

school students and relies on parent-reported information, it serves as a key indicator of obesity trends among young children entering the school system.

Table 4 provides the distribution of BMI categories among kindergarten students in Nevada from the 2015–2016 to 2022–2023 school years. This data offers insights into weight status trends among young children, helping to identify shifts in underweight, healthy weight, overweight, and obesity prevalence over time.

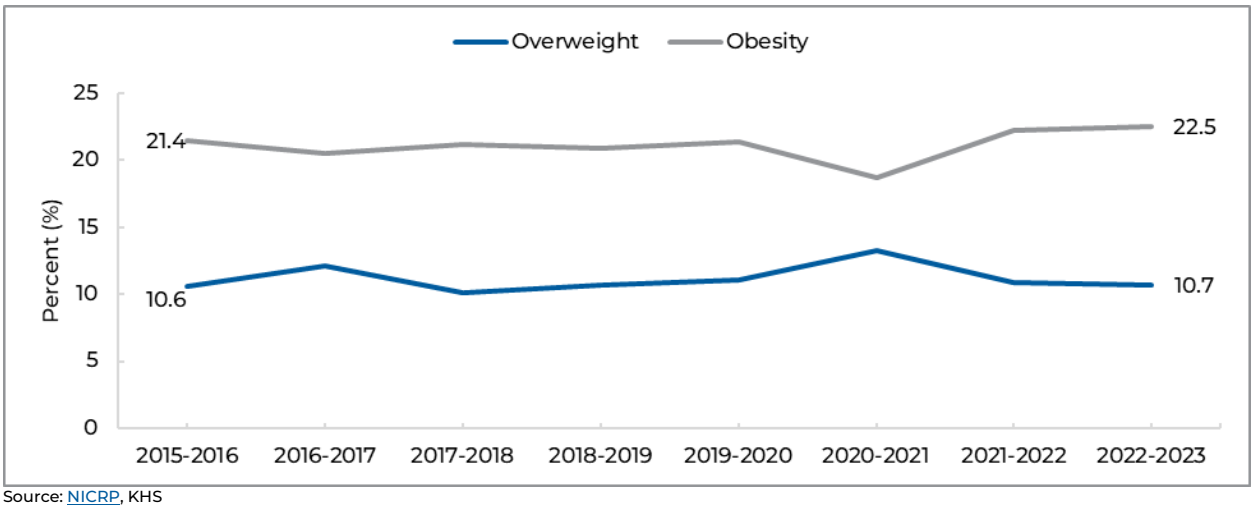
Table 4. Distribution of BMI Categories Among Kindergartners': NV, SY 2015-2016 to SY 2022-2023

School Year	Underweight (%)	Healthy Weight (%)	Overweight (%)	Obesity (%)
2015–2016	15.5	52.5	10.6	21.4
2016–2017	16.8	50.7	12.1	20.5
2017–2018	17.1	51.6	10.1	21.2
2018–2019	17.2	51.2	10.7	20.9
2019–2020	17.3	50.3	11.1	21.3
2020–2021	19.5	48.6	13.2	18.7
2021–2022	16.2	50.7	10.9	22.2
2022-2023	15.6	51.3	10.7	22.5

Source: NICRP, KHS

Figure 29 traces changes in overweight and obesity among kindergarteners from the 2015–2016 to the 2022–2023 school year. In 2022–2023, self-reported height and weight data indicate that 33.2% of kindergarteners had excess body weight, with 22.5% classified as having obesity and 10.7% as overweight. Over the past eight school years, obesity prevalence among KHS participants has remained relatively stable, fluctuating between 21.4% in 2015–2016 and 22.5% in 2022–2023. However, these trends contrast with national and state obesity patterns observed in NHANES and WIC data (Figures 1, 27, and 28). Given the self-reported nature of KHS data, these trends should be interpreted with caution when assessing long-term obesity prevalence in Nevada's young children.

Figure 29. Prevalence of Overweight and Obesity Status Among Kindergarteners': NV, 2015-2016 to 2022-2023



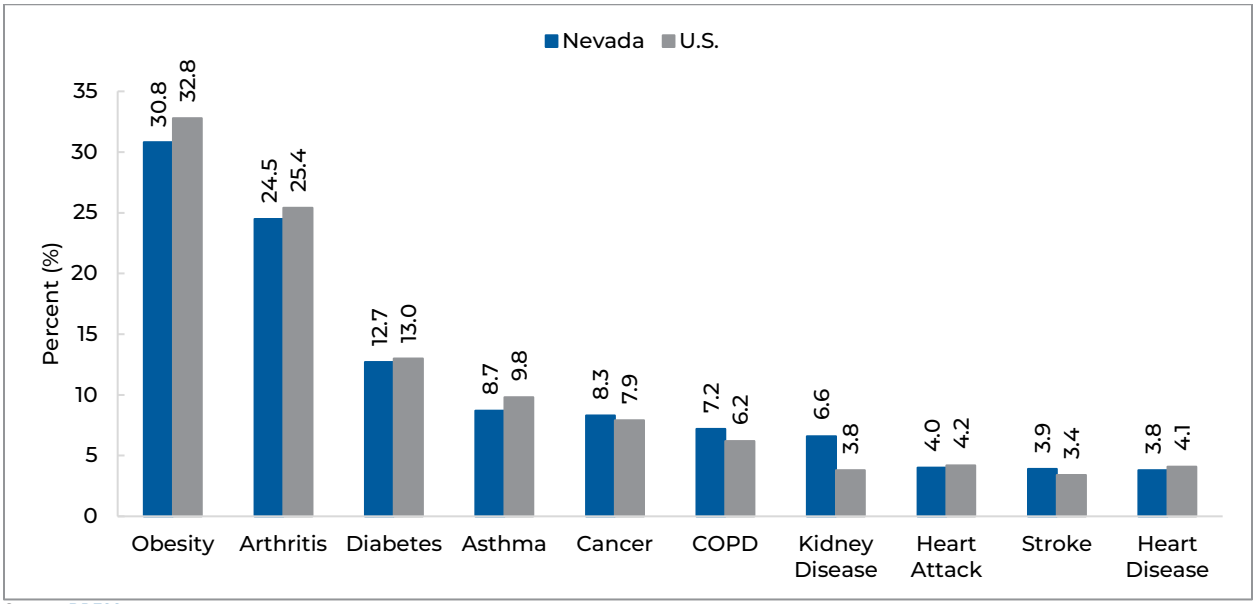
Source: NICRP, KHS

OBESITY AND CHRONIC DISEASES

Obesity is a major risk factor for multiple chronic conditions, including cardiovascular disease, type 2 diabetes, and certain cancers.[18] The Centers for Disease Control (CDC) estimates that six (6) out of ten (10) Americans have a chronic disease, and four (4) out of ten (10) have two (2) or more chronic conditions.[19] Additionally, in 2022, eight (8) of the ten (10) leading causes of death in the U.S. were chronic diseases.[20] Addressing obesity through public health interventions remains critical to improving overall health outcomes in Nevada.

Figure 30 compares the prevalence of obesity to other chronic diseases in Nevada and the U.S. In 2023, obesity remained one of the most prevalent conditions, affecting 30.8% of adults—higher than heart disease (3.8%), stroke (3.9%), heart attack (4.0%), kidney disease (6.6%), chronic obstructive pulmonary disorder (COPD) (7.2%), cancer (8.3%), asthma (8.7%), diabetes (12.7%), and arthritis (24.5%). Nationally, obesity prevalence was 32.8%, highlighting its widespread impact across the U.S.

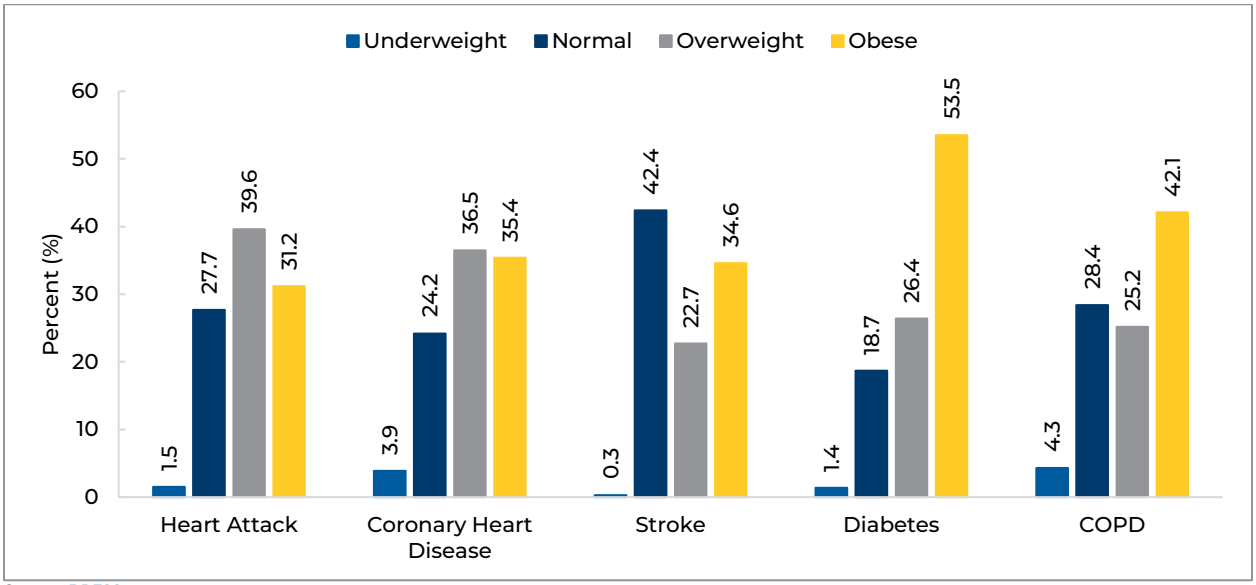
Figure 30. Prevalence of Chronic Diseases: NV and U.S., 2023



Source: BRFSS

Figure 31 presents the distribution of BMI categories among individuals diagnosed with major chronic diseases. In 2023, diabetes had the highest proportion of individuals classified as obese at 53.5%, followed by COPD (42.1%), coronary heart disease (35.4%), stroke (34.6%), and heart attack (31.2%). The overweight category also accounted for a significant proportion of individuals with chronic diseases, particularly among those with heart attack (39.6%) and coronary heart disease (36.5%).

Figure 31. BMI Distribution of Chronic Diseases: NV, 2023



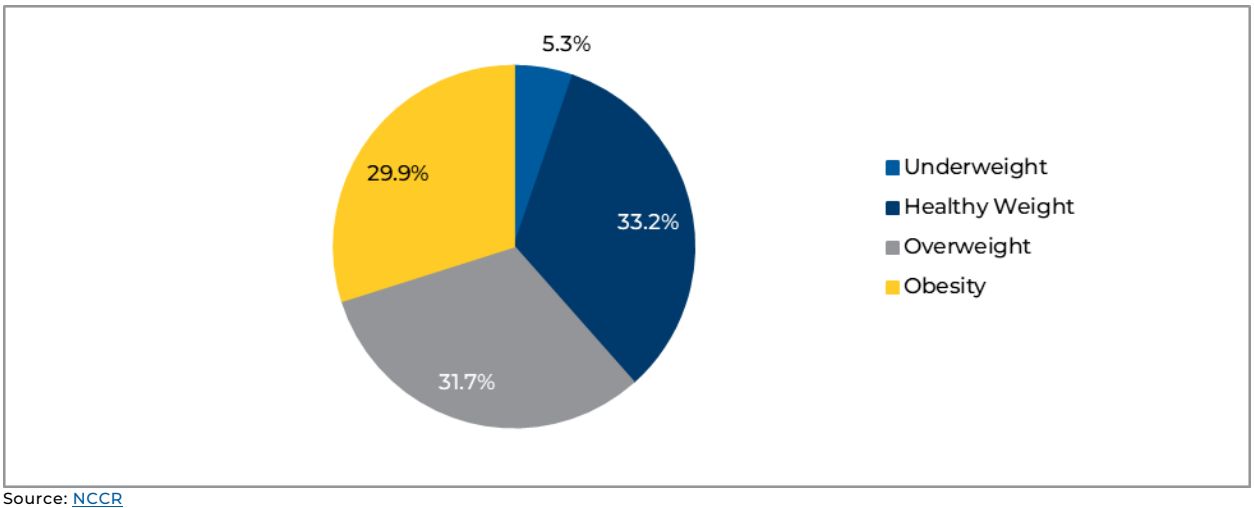
Source: BRFSS

Obesity and Cancer Cases Reporting Height and Weight Data

The Centers for Disease Control and Prevention (CDC), American Cancer Society, National Cancer Institute, and the North American Association of Central Cancer Registries indicate being overweight or having obesity increases the risk of getting at least 13 types of cancer.[21]

Figure 32 captures the prevalence of Cancer Cases by BMI categories in Nevada from 1984 to 2021. Approximately 62% of the cancer cases were overweight (31.7%) or had obesity (29.9%).

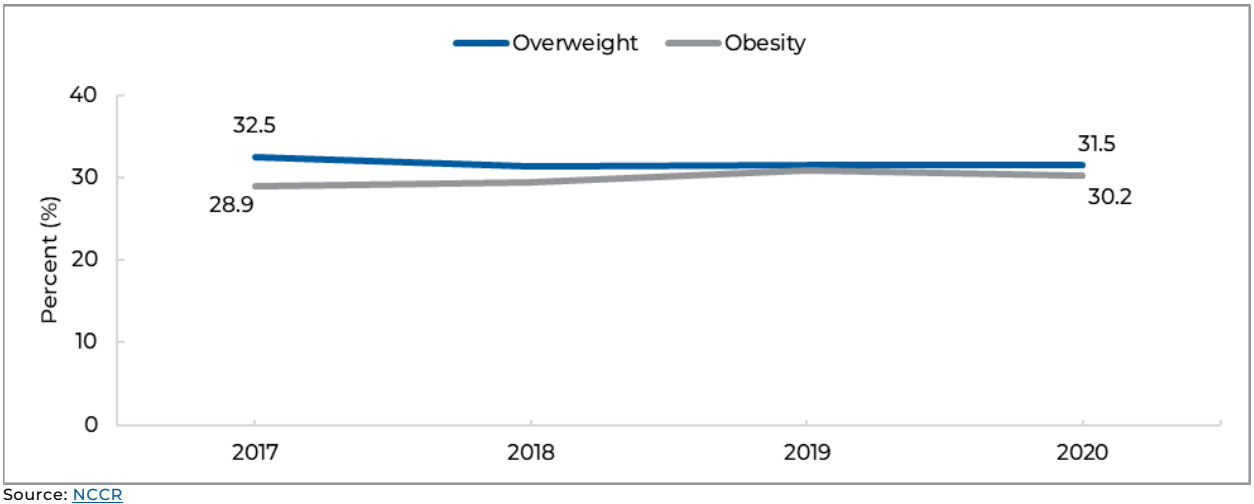
Figure 32. Prevalence of Cancer Cases, by BMI Categories: NV, 1984 - 2021



Source: NCCR

Figure 33 tracks the changes in the prevalence of overweight and obesity among cancer cases in Nevada from 2017 to 2020. Over this four-year period, the prevalence of overweight remained relatively stable, decreasing slightly from 32.5% in 2017 to 31.5% in 2020. In contrast, obesity among cancer cases who reported height and weight increased modestly by 5%, rising from 28.9% in 2017 to 30.2% in 2020.

Figure 33. Prevalence of Overweight and Obesity Status Among Cancer Cases: NV, 2017 - 2020



Source: NCCR

Table 5 lists cancer cases that reported height and weight data, ranked by obesity prevalence from highest to lowest. Corpus uteri and uterine cancer cases had the highest obesity prevalence at 58.2%, followed by thyroid gland (42.5%), melanoma of the skin (38.0%), kidney and renal pelvis (36.2%), and breast cancer (34.0%). When considering overweight and obesity combined, corpus uteri and uterine cancer cases had the highest proportion, with 77.9% of cases classified as overweight or obese. Other cancers with high combined prevalence include thyroid gland (71.7%), melanoma of the skin (72.6%), kidney and renal pelvis (71.6%), and breast cancer (67.2%).

Table 5. Distribution of BMI Categories, by Cancer Site: NV, 1984-2020

Cancer Site	Underweight (%)	Healthy Weight (%)	Overweight (%)	Obesity (%)
Corpus Uteri and Uterus NOS	0.9	21.1	19.7	58.2
Thyroid Gland	2.8	25.5	29.2	42.5
Melanoma of the Skin	2.6	24.8	34.6	38.0
Kidney and Renal Pelvis	3.1	24.9	35.8	36.2
Breast	2.9	29.9	33.2	34.0
Brain & Other CNS, Benign and Uncertain	5.3	29.7	32.4	32.6
Cervix Uteri	5.6	33.9	28.3	32.2
Myeloma	5.8	31.1	32.6	30.5
Connective, Subcutaneous, and Other Soft Tissues, including Heart	12.5	37.5	19.6	30.4
Prostate	1.9	29.8	38.7	29.6
Urinary Bladder	2.3	30.6	38.2	28.9
Colorectal	6.0	36.1	29.9	28.1
All other sites	7.1	35.3	30.2	27.5
Leukemia	9.7	37.0	26.2	27.1
Ovary	6.0	40.4	26.8	26.8
Non-Hodgkin Lymphoma	4.8	35.0	33.9	26.3
Esophagus	11.3	44.4	20.0	24.4
Stomach	6.4	36.5	33.3	23.8
Pancreas	7.3	41.7	27.6	23.4
Lung and Bronchus	9.0	37.4	30.2	23.4
Liver and Intrahepatic Bile Ducts	4.9	37.6	35.3	22.2
Lip, Oral Cavity, and Pharynx	6.3	41.7	30.7	21.3
Hodgkin Lymphoma	8.0	46.0	26.0	20.0
Larynx	12.5	41.7	33.3	12.5

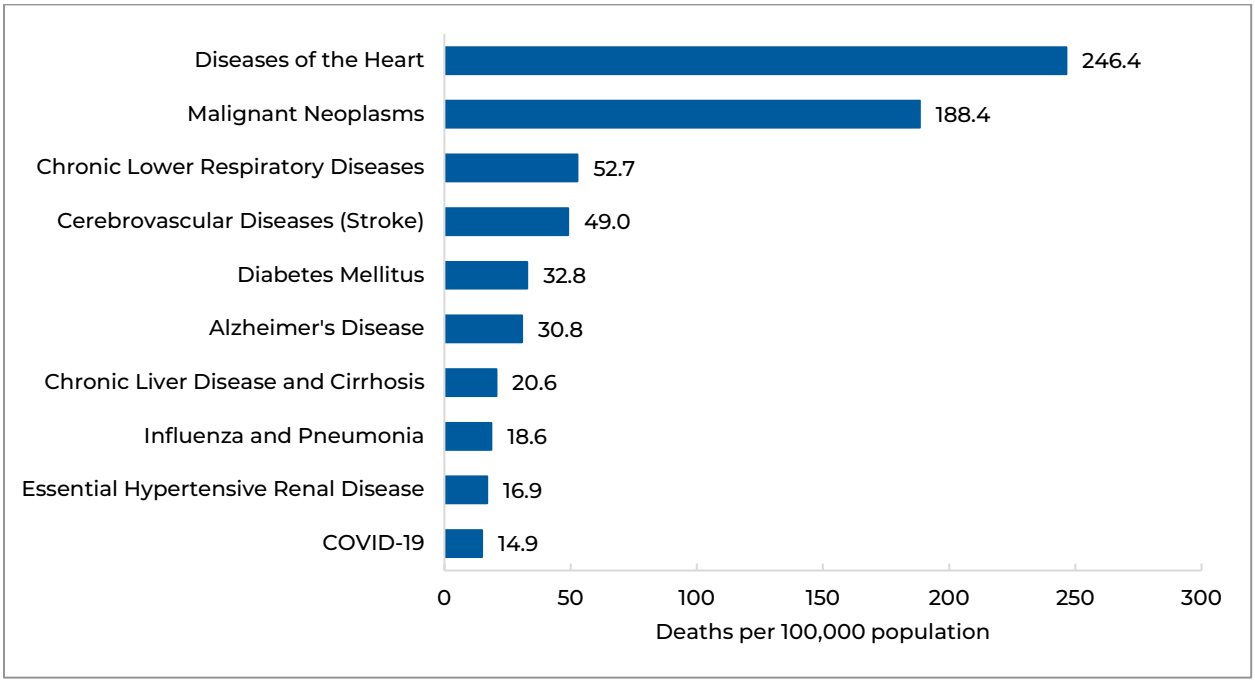
Source: NCCR

Chronic Disease Mortality

Figure 34 presents the age-adjusted death rates for the 10 leading causes of death in Nevada in 2023. Diseases of the heart remained the leading cause of mortality, with a rate of 246.4 per 100,000 population, followed by malignant neoplasms (188.4) and chronic lower respiratory diseases (52.7). Cerebrovascular diseases (stroke) and diabetes mellitus ranked fourth and fifth, with rates of 49.0 and 32.8.

Obesity is a significant risk factor for many of these conditions, particularly heart disease, stroke, diabetes, and certain cancers. The persistence of high mortality rates for these chronic diseases underscores the continued impact of obesity and its associated comorbidities on public health in Nevada. Additionally, while COVID-19 mortality has declined, with an age-adjusted death rate of 14.9 per 100,000 in 2023, its interaction with obesity, diabetes, and other chronic diseases remains a critical consideration for health outcomes.

Figure 34. Age-Adjusted Death Rates for the 10 Leading Chronic Diseases: NV, 2023



Source: NCHS

SUMMARY OF FINDINGS

Summary of Adult Obesity

Since 2011, adult obesity in Nevada has steadily increased, peaking at 33.5% in 2022 before slightly declining to 30.8% in 2023. Rural and Frontier (RAF) counties consistently reported the highest obesity prevalence, reaching 38.6% in 2023, followed by Washoe County (34.0%) and Carson City (33.7%), while Clark County (28.9%) remained below the state average.

In 2023, obesity was slightly more prevalent among women (31.8%) than men (29.8%). The highest obesity rates were observed among adults aged 45-54 (37.8%), individuals with some post-high school education (34.5%), and those earning $35,000-$49,999 (37.5%). Racial disparities persist, with the highest prevalence among Black (39.6%) and Multiracial (33.2%) adults, while Asian adults (20.0%) had the lowest rates. Additionally, veterans (28.8%) had a lower obesity prevalence compared to non-veterans (31.2%). Notably, obesity rates declined among younger adults, with the 18-24 and 25-34 age groups experiencing decreases from 21.0% to 18.8% and from 32.2% to 28.6%, respectively, contributing to the overall decline in adult obesity from 2022 to 2023.

Summary of Youth Obesity

Since 2007, the prevalence of youth obesity in Nevada has shown an overall upward trend, reaching its highest recorded rate of 15.9% in 2021 before slightly declining to 15.0% in 2023. Obesity prevalence varied by grade level, with 12th graders having the highest rate (18.2%) in 2023, followed by 11th graders (14.8%), 10th graders (14.6%), and 9th graders (14.1%).

Racial disparities were also evident, with the highest obesity prevalence observed among Non-Hispanic Black youth (20.1%) and Hispanic youth (18.1%), while Non-Hispanic White youth (10.5%) had the lowest prevalence.

Summary of Youth Obesity in Schools

In the 2022-2023 school year, 33.5% of CCSD students were obese, with higher rates among males (36.5%) than females (30.1%). Hispanic students (39.0%) had the highest prevalence

compared to non-Hispanic students (26.7%). Among racial groups, obesity prevalence was highest among students categorized as Other (29.1%), followed by Asian (27.8%), Black (27.7%), and White (23.7%). By grade level, obesity increased with age, peaking in 10th grade (44.3%), with males (46.7%) having a higher prevalence than females (40.0%).
In the 2022-2023 school year, 32.9% of WCSD students were obese, with slightly higher rates among females (33.7%) than males (32.4%). Hispanic students (41.7%) had the highest prevalence compared to non-Hispanic students (25.4%). Among racial groups, obesity prevalence was highest among students categorized as "Other" (41.0%), followed by Asian (33.3%), White (22.7%), and Black (11.1%). By grade level, obesity peaked in 10th grade (34.1%), with females (46.2%) having a higher prevalence than males (34.1%).

In the 2022-2023 school year, 33.5% of Elko County School District students were obese, with higher rates among males (36.5%) than females (30.1%). By grade level, obesity prevalence increased with age, reaching the highest level in 10th grade (44.3%), with males (46.7%) having a higher prevalence than females (40.0%).

Summary of Childhood Obesity

Since 2018, early childhood WT/LT percentile classifications in Nevada have shown an increasing trend. Among infants and toddlers (0-24 months), the prevalence of high WT/LT increased from 4.4% in 2018 to 5.5% in 2022, with Clark County consistently reporting higher rates than the state average. For children aged 2-5 years, obesity prevalence peaked at 12.9% in 2022, with Carson City (13.4%) and RAF counties (13.5%) reporting the highest rates.

Data from the Nevada KHS show that obesity among kindergarteners increased slightly from 22.2% in 2021-2022 to 22.5% in 2022-2023, continuing an upward trend observed in recent years.

OPPORTUNITIES FOR ACTION AND RECOMMENDATIONS

Obesity is a multifactorial chronic, often progressive, disease associated with an increase in morbidity and mortality. The etiology of an individual being overweight or obese is complex

because of its association as being a risk factor for other chronic diseases. For example, sociodemographic (race/ethnicity), economic, and environmental factors such as food advertising, access to healthy food, and physical activity all influence the prevalence of obesity. In addition, the main measurement tool of BMI does not distinguish between excess fat, muscle, or bone mass, nor does it provide any indication of the distribution of fat. For example, single measures like BMI values do not fully explain why obesity prevalence is slightly higher in the $50,000-$99,999 income group (32.8%) compared to the Less than $15,000 income group (27.7%), despite differences in socioeconomic factors. While higher-income groups may have greater access to health care and nutritional resources, other variables such as food environments, stress, and lifestyle factors contribute to obesity risk across all income levels. Consequently, to understand the complexity of obesity, supplemental measurement indicators in addition to BMI are needed to help guide, plan, coordinate, and implement wellness and prevention interventions in the State of Nevada. There continues to be a need to define the nature and extent of the burden of obesity in Nevada communities. It is necessary to examine how obesity contributes to inequalities and how societal inequities contribute to BMI categories including obesity and overweight statuses.

Raising awareness of obesity as a chronic disease requires focused health promotion, education, and awareness campaigns to support the adoption of preventive strategies.[22] Primary prevention efforts—such as improving nutrition, promoting physical activity, and encouraging breastfeeding in early care and education programs—are essential in reducing risk factors for chronic disease, including obesity.[23] Thus, focused primary prevention strategies should be part of statewide initiatives when planning and implementing chronic diseases programs. Nevada ranks among the states with lowest rates in preventable hospitalizations (26st) and dental (39st) visits[24,25], while chronic disease-preventing behaviors such as eating nutritious meals and maintaining a physically activity routine, are among the worst (43rd) in the nation.[26] Such a landscape encourages the state to embrace statewide partnerships and address access gaps.

Health care is one of the most common areas where weight stigmatization occurs.[27]

Implementing strategies within interprofessional teams can help with the recognition of the multifaceted nature of obesity and its impact on health.[28] Weight stigma needs to be addressed early on and continuously throughout health care education and practice, by teaching the genetic and socioenvironmental determinants of weight, and explicitly discussing the sources, stigma reduction in health care: increased education, causal information and controllability, empathy evoking, weight-inclusive approach, and mixed methodology.

Children with obesity are more likely to develop obesity as adults[29] and because of this, it should be priority to ensure every child in Nevada has a healthy weight and good metabolic health. There are programs like WIC, which provides nutritious food to low-income women, infants, and children, but could be more effective if all eligible children and women participated. There is also the Supplemental Nutrition Assistance Program (SNAP) that helps to provide food resources to food insecure individuals. However, currently individuals who are on SNAP consume higher amounts of ultra-processed foods as well as sugar sweetened beverages (SSB's) compared to non-eligible individuals.[30] The DPBH focuses on increasing healthy eating among SNAP participants through promotion of the Supplemental Nutrition Program Education (SNAP-ED). SNAP-ED uses evidence-based, public health projects, and interventions to help SNAP eligible families and individuals learn to eat healthy, move more, and make the most of their monthly SNAP benefits.

Furthermore, among states, Nevada ranks 50th for physical activity in children (ages 6-17).[31] Potential strategies for increasing physical activity may include connecting more activity-friendly routes to everyday destinations and implementing comprehensive school physical activity programs.[32] Overall, federal programs like WIC, SNAP, and SNAP-ED help to increase food security, promote a healthier diet, and provide nutrition education to children and adults in the state.[33] Interagency collaboration and efforts to increase participation in these federal nutrition programs to prevent and reduce obesity are ongoing.

Without addressing the underlying factors of obesity, the predicted trends of disease and economic costs will continue to escalate at the individual and population levels.[34] However,

the State of Nevada has the potential to significantly reduce these burdens through interventions in health care, education, urban planning, and food systems. These efforts require active participation of all relevant state, local, and private programs and leaders across the state.

ACTIONS TAKEN BY AND GOALS OF THE DIVISION OF PUBLIC AND BEHAVIORAL HEALTH

Goals to consider are for Nevada residents to have access to and opportunities for healthier eating and active living. Healthy decisions and behaviors are influenced by a range of multiple factors and making healthier option easy may require multiple layers of intervention and partnership. Additionally, continuing efforts to build and strengthen a comprehensive wellness and prevention program and prevent risk factors for obesity through community partnerships and primary prevention strategies remains vital. The Wellness and Prevention Program (WPP) continues to focus on wellness initiatives and implements primary prevention strategies statewide.

In 2024, WPP continued to partnership with local health districts and obesity prevention subject matter expert to promote and market the Healthy Eating and Active Living Nevada (HealNV), otherwise known as NV 5-2-1-0 Program (five (5) or more servings of fruits and vegetables, two (2) hours or less of recreational screen time, one (1) hour or more of physical activity, and zero (0) sugary drinks). The NV 5-2-1-0 Program is a community engagement initiative designed to increase chronic disease prevention behaviors. It is modeled after the Maine Health Let's Go! Program, an evidence-based initiative launched in 2006 that has since been adopted nationwide and in Canadian health.[35,36] Since its development, Maine has observed improvements in children's health behaviors, reinforcing the program's role as a call to action for lifestyle changes in communities. The NV 5-2-1-0 Program asks Nevadans to make "small changes" for "big results" in health.

The 5-2-1-0 Program aims to deliver a cohesive wellness message across multiple settings—where community members live, work, study, play, and seek medical care—while

promoting policy and environmental changes that make healthy choices easier. In state fiscal year 2024, the priority was to integrate 5-2-1-0 messaging into health care settings, ensuring that respectful conversations about weight status and chronic disease prevention behaviors become a standard component of clinical practice in Nevada. Additionally, WPP continues efforts to enhance public outreach by updating the HealNV.com website and expanding social media engagement through YouTube, LinkedIn, and Facebook to boost awareness, promote a healthier Nevada, provide accessible health resources, and drive broader adoption and implementation of NV 5-2-1-0. The WPP also partnered with the Office of Food Security (OFS) to promote 5-2-1-0 initiatives statewide through food bank and pantries statewide along with the Public Health AmeriCorps program.

The WPP reviewed the Standard Operating Procedures for Collecting and Reporting Students' Height and Weight in Nevada Schools (SOP) with the Department of Education in collaboration with the nursing staff.[37] The goal of the SOP is to provide training and assistance to school nurses, teachers, and licensed educational personnel in measuring the height and weight of students. Updates to the SOP are anticipated in 2025 to reflect the necessary changes needed to improve data height and weight data collection in schools. Students and their families continued to be referred to their health care providers who have the training to treat and manage individuals who are overweight or obese.

The WPP collaborated with the University of Nevada, Reno Extension, the Nevada Department of Agriculture, and the Children's Cabinet to increase Children and Adult Care Food Program (CACFP). Through this collaboration the Geographic Information System (GIS) map was finalized. GIS mapping is to guide outreach and promotion of the CACFP and identify potential Early Care and Education (ECE) providers, CACFP sponsors, food deserts, high-poverty areas, and where to focus resources.

WPP continued to collaborate with the Center for Chronic Disease Prevention (CDC), Nemours, and the University of Nevada, Reno - Extension. Through this collaboration, statewide ECE providers are provided knowledge, tools, and resources to develop and install fruit and vegetable gardens for young children as a vehicle for learning. The goal is to

give every child in Nevada's ECE system access to activities that teach and promote healthy behaviors, such as gardening and cooking educational programs.

The WPP continued a statewide partnership strategy with the Nevada Obesity Collaborative. This collaborative is a statewide working group of community members across multiple private and public sectors whose singular goal is to reduce obesity and related comorbidities.

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APPENDIX

Figure Tables

Data Table for Figure 1. Prevalence of Childhood and Adult Obesity: U.S., 2009 to 2010 – August 2021 to August 2023

Time Period	Children and Adolescents (2-19 Years, %)	Adults (20 Years and Over, %)
2009 to 2010	16.9	35.7
2011 to 2012	16.9	34.9
2013 to 2014	17.2	37.7
2015 to 2016	18.5	39.6
2017 to March 2020*	19.7	41.9
August 2021 to August 2023	~	40.3

Source: NHANES
* Data from the partial 2019–2020 cycle (March 2020) were combined with 2017–2018 data for nationally representative estimates.
~ Data not available

Data Table for Figure 2. Prevalence of Adult Obesity: NV and U.S., 2011 – 2023

Year	NV (%)	U.S. (%)
2011	24.5	27.7
2012	26.2	28.1
2013	26.2	28.9
2014	27.7	29.5
2015	26.7	29.8
2016	25.8	30.1
2017	26.7	31.6
2018	29.5	30.9
2019	30.6	32.4
2020	28.7	31.9
2021	31.3	33.9
2022	33.5	33.6
2023	30.8	32.8

Source: BRFSS

Data Table for Figure 3. Prevalence of Adult Obesity, by Region: NV, 2015 – 2023

Year	Nevada (%)	Clark (%)	Washoe (%)	Carson City (%)	RAF (%)
2015	26.7	27.0	21.4	27.1	29.4
2016	25.8	24.8	26.3	29.8	32.3
2017	26.7	26.7	25.5	29.5	29.6
2018	29.5	30.9	23.8	34.9	29.5
2019	30.6	30.6	31.9	26.6	29.5
2020	28.7	28.8	25.2	37.4	32.4
2021	31.3	31.6	28.2	32.9	34.8
2022	33.5	34.3	30.4	35.6	32.7
2023	30.8	28.9	34.0	33.7	38.6

Source: BRFSS
RAF indicates Rural and Frontier Counties

Data Table for Figure 4. Prevalence of Adult Obesity, by Age Group: NV, 2011 – 2023

Year	18-24 years (%)	25-34 years (%)	35-44 years (%)	45-54 years (%)	55-64 years (%)	65+ years (%)
2011	14.0	28.0	27.4	27.5	27.8	18.1
2012	12.2	22.6	30.9	29.7	32.4	25.1
2013	11.2	28.3	31.0	29.6	28.5	23.9
2014	12.7	29.7	36.8	28.9	25.6	27.6
2015	~	29.6	26.5	35.6	29.4	23.9
2016	16.9	24.8	24.8	30.7	29.3	25.7
2017	17.4	28.9	25.3	32.6	27.4	25.0
2018	10.2	29.6	34.2	37.6	31.3	28.0
2019	17.7	29.8	34.8	35.5	33.4	28.6
2020	19.8	22.8	25.7	35.6	36.9	28.9
2021	21.0	31.8	35.9	39.9	33.1	25.1
2022	21.0	32.2	35.8	39.9	33.2	25.3
2023	18.8	28.6	35.4	37.8	36.2	26.4

Source: BRFSS
~ Data not available

Data Table for Figure 5. Prevalence of Adult Obesity, by Sex: NV, 2012 - 2023

Year	Male (%)	Female (%)
2012	26.5	25.8
2013	25.9	26.6
2014	29.9	25.4
2015	27.9	25.4
2016	25.8	25.8
2017	26.3	27.1
2018	29.7	29.2
2019	31.9	29.2
2020	30.4	27.0
2021	33.1	29.4
2022	31.9	35.3

Source: BRFSS

Data Table for Figure 6. Prevalence of Adult Obesity, by Race/Ethnicity: NV, 2015 – 2023

Year	AI/AN (%)	Asian* (%)	Black* (%)	Multiracial (%)	NHPI* (%)	White* (%)	Hispanic (%)
2015	16.8	~	26.1	24.8	~	25.9	35.2
2016	35.6	14.9	27.6	26.9	54.4	26.3	26.5
2017	49.4	23.9	33.0	38.9	32.9	25.0	26.1
2018	28.7	14.6	43.4	21.2	37.8	27.2	33.5
2019	44.0	20.8	38.3	27.4	~	28.3	34.9
2020	52.9	6.2	27.6	17.2	31.5	31.0	31.2
2021	~	15.6	32.7	21.6	15.6	31.0	36.5
2022	~	26.4	36.8	34.0	~	31.8	36.9
2023	~	20.0	39.6	33.2	~	29.9	33.4

Source: BRFSS
* non-Hispanic
~ indicates values suppressed due to small sample sizes.
AI/AN: American Indian/Alaska Native
NHPI: Native Hawaiian/Pacific Islander

Data Table for Figure 7. Prevalence of Adult Obesity, by Income: NV, 2011 – 2023

Year	Less than $15,000 (%)	$15,000-$24,999 (%)	$25,000-$34,999 (%)	$35,000-$49,999 (%)	$50,000-$99,999 (%)	$100,000-$199,999 (%)	$200,000+ (%)
2011	24.6	24.2	25.4	24.0	~	~	~
2012	25.6	27.4	25.8	25.3	~	~	~
2013	26.5	25.1	30.8	29.4	~	~	~
2014	36.7	27.5	27.9	28.7	~	~	~
2015	33.3	25.7	31.9	28.7	~	~	~
2016	28.1	29.3	29.1	26.2	~	~	~
2017	27.2	29.2	28.5	29.7	~	~	~
2018	41.3	27.9	34.6	32.8	~	~	~
2019	39.8	34.8	32.5	35.5	~	~	~
2020	36.4	26.6	40.2	29.4	~	~	~
2021	37.8	37.8	39.0	30.8	31.2	27.9	28.0
2022	33.6	32.8	42.5	36.8	33.0	36.5	35.5
2023	27.7	25.1	26.6	37.5	32.8	33.4	31.3

Source: BRFSS
~ indicates values were not reported

Data Table for Figure 8. Prevalence of Adult Obesity, by Education: NV, 2011 – 2023

Year	Less than H.S. (%)	H.S. or G.E.D. (%)	Some post-H.S. (%)	College graduate (%)
2011	27.6	23.1	27.4	19.4
2012	31.2	26.8	27.3	19.2
2013	27.7	29.0	25.8	21.4
2014	37.8	26.2	27.4	22.6
2015	34.4	30.6	23.5	20.9
2016	26.6	30.6	25.5	19.2
2017	27.0	29.1	28.8	19.9
2018	33.6	25.6	33.9	25.2
2019	36.0	33.2	29.9	25.5
2020	33.3	30.4	31.0	20.8
2021	41.2	31.7	33.1	23.1
2022	34.6	36.2	35.6	27.0
2023	28.2	30.7	34.5	26.9

Source: BRFSS

Data Table for Figure 10. Prevalence of Obesity in Youth Aged 14 to 18: NV and U.S., 2007 – 2023

Year	NV (%)	U.S. (%)
2007	10.8	12.8
2009	10.9	11.8
2011	~	13.0
2013	11.4	13.7
2015	12.2	13.9
2017	14.0	14.8
2019	12.3	15.5
2021	15.9	16.3
2023	15.0	15.9

Source: BRFSS
~ Data not available

Data Table for Figure 11. Prevalence of Obesity in Youth Aged 14 to 18, by Sex: NV, 2007 – 2023

Year	Male (%)	Female (%)
2007	14.0	7.4
2009	15.0	6.5
2013	15.3	7.5
2015	17.8	6.3
2017	16.9	10.9
2019	15.0	9.3
2021	20.5	11.0
2023	21.0	10.4

Source: YRBSS

Data Table for Figure 12. Prevalence of Youth Obesity, by Grade Level: NV, 2007 – 2023

Year	9th Grade (%)	10th Grade (%)	11th Grade (%)	12th Grade (%)
2007	10.6	12.2	6.9	13.1
2009	11.3	11.9	10.2	9.6
2013	10.3	12.8	10.1	12.1
2015	12.5	12.5	11.6	12.4
2017	12.4	13.7	13.1	16.4
2019	14.0	12.9	12.0	10.3
2021	17.6	15.0	12.9	18.5
2023	14.1	14.6	14.8	18.2

Source: YRBSS

Data Table for Figure 13. Prevalence of Obesity in Youth Aged 14 to 18, by Race/Ethnicity: NV, 2007 – 2023

Year	Non-Hispanic White (%)	Non-Hispanic Black (%)	Non-Hispanic Other (%)	Hispanic (%)
2007	6.4	13.3	~	16.8
2009	9.4	11.2	13.0	13.5
2013	8.6	17.4	11.5	13.4
2015	9.6	~	~	15.8
2017	13.1	~	12.5	15.6
2019	9.8	~	15.2	15.0
2021	11.0	19.5	13.5	19.3
2023	10.5	20.1	11.4	18.1

Source: YRBSS
~ Data not available