Steve Sisolak
Governor

Richard Whitley, MS
Director

DEPARTMENT OF
HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC AND BEHAVIORAL HEALTH
Helping people. It's who we are and what we do.

Lisa Sherych
Administrator

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

March 8, 2021

Director Brenda Erdoes
Legislative Counsel Bureau
401 S. Carson St
Carson City, NV 89701

Dear Director Erdoes:

Pursuant to Nevada Revised Statutes 439.521, the Nevada Division of Public and Behavioral Health (DPBH) shall prepare and submit an annual report on obesity on or before March 15 of each year to the Director of the Legislative Counsel Bureau for transmittal to the Nevada Legislature.

The 2020 DPBH Obesity Annual Report is attached for your review. Please contact Laura Urban, Food Security and Wellness Manager, at lurban@health.nv.gov with any questions or concerns.

Thank you, your time is very much appreciated.

Respectfully,

Laura Urban

Laura Urban, DPBH Office of Food Security

4150 Technology Way, Suite 300 ● Carson City, Nevada 89706
775-684-4200 ● Fax 775-687-7570 ● dpbh.nv.gov

Steve Sisolak
Governor

Richard Whitley, MS
Director

DEPARTMENT OF HEALTH AND HUMAN SERVICES

DIVISION OF PUBLIC AND BEHAVIORAL HEALTH

Helping people. It's who we are and what we do.

Lisa Sherych
Administrator

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

Annual Obesity Report 2020

State of Nevada

Division of Public and Behavioral Health

Table of Contents

Background 3
Adult Obesity 3
Child Obesity 3
Nevada Obesity Overview 4
Adult Obesity 4
Child Obesity 4
Nevada Obesity Prevention and Control Program 5
Overview 5
Funding 5
Program Initiatives 6
Early Childhood Obesity Prevention 6
Healthy Vending 7
DPBH Worksite Wellness 7
Conclusion 7

Background

The Body Mass Index (BMI) determining individual obesity status is a standard measurement for adults and children in America. An adult is considered obese if their BMI is $\geq$ 30, and child obesity is calculated and determined by the Centers for Disease Control and Prevention (CDC) Growth Chart Percentile Range.[i] Obesity affects 42 percent of adults and 19 percent of children, putting people at risk for chronic diseases such as diabetes, heart disease, and some cancers. Over a quarter of all Americans 17 to 24 years are too heavy to join the military. Health care spending in the US increased 4.6 percent to reach $3.8 trillion in 2019. In 2019, there was an increase in national health spending for hospital care, physician and clinical services, and retail purchases of prescription drugs—which together accounted for 61 percent. Reduced productivity, unemployment, and direct healthcare costs are among the main economic repercussions of obesity.[ii]

Adult Obesity

Prevalence of adult obesity in America increases significantly each year, currently at 42.4 percent. The CDC's Adult Obesity Prevalence Maps demonstrate 12 states now have adult obesity prevalence at or above 35 percent (Alabama, Arkansas, Indiana, Kansas, Kentucky, Louisiana, Michigan, Mississippi, Oklahoma, South Carolina, Tennessee, and West Virginia), up from nine states in 2018.[iii] As well as increased risk for chronic disease (i.e. cardiovascular disease (CVD), diabetes mellites, certain types of cancer, etc.), obese adults are at risk for other health conditions, including psychosocial issues, sleep apnea and breathing problems, and body pain. Studies show obese individuals are subject to lower quality life and are negatively impacted by criticisms from others, causing anxiety and depression.[iv, v]

Long-standing systemic health and social inequities, known as Social Determinants of Health (SDOH), have put many people from racial and ethnic minority groups at increased risk of severe illness from COVID-19, for which obesity is among greatest risks.[vi] Nationally, non-Hispanic Black adults had the highest prevalence of self-reported obesity (39.8 percent), followed by Hispanic adults (33.8 percent), and non-Hispanic White adults (29.9 percent).[iii] Obesity worsens outcomes from COVID-19 infection and may triple the risk of hospitalization.[vii]

Child Obesity

The prevalence of obesity among US youth aged two (2) to19 was 18.5 percent in 2015-2016.[x] Obesity can affect all aspects of children and adolescents including psychological and cardiovascular health, and overall physical health.[viii] Children with obesity are more likely to have CVD, increased risk of impaired glucose tolerance and type 2 diabetes, breathing problems such as asthma and sleep apnea, joint and musculoskeletal problems, fatty liver disease, gallstones, and gastro-esophageal reflux such as heartburn. Social problems can occur such as, anxiety and depression, low self-esteem, bullying and stigma.[ix] Obese children are also more likely to become obese adults.[ix] According to the 2017 CDC's National Center for Health Statistics (NCHS) Data Brief, the prevalence of obesity among non-Hispanic black (22.0 percent) and Hispanic (25.8 percent) youth is higher than among both non-Hispanic white (14.1 percent) and non-Hispanic Asian youth (11 percent).[x]

The US Department of Agriculture (USDA) 2020-2025 Dietary Guidelines for Americans recommends persons consume fruits and vegetables to reduce risk of diet-related chronic diseases. The Youth Behavior Surveillance System (YRBS) monitors prevalence of youth health behaviors such as fruit and vegetable consumption. Analyzed data from 2017, found the median frequencies of fruit and vegetable consumption nationally, among adolescents, low as 0.9 times per day.[xi]

Nevada Obesity Overview

Adult Obesity

In 2019, 37.2 percent of Nevada adults were considered overweight and 30.6 percent were considered obese. .**Error! Bookmark not defined.**[Error! Bookmark not defined.] Nevada adult obesity is steadily in creasing. Between 2016 and 2019, adult obesity in Nevada has increased nearly five (5) percent (25.8 ≥ 30.6), narrowing the margin of normal weight people by six (6) percent (35.9 ≥ 29.9).[xii] Obese adults demonstrate a greater risk for a multitude of comorbidities, including heart disease, chronic lower respiratory disease, diabetes mellites, and hypertension, all of which are associated with leading causes of death in Nevada.[xiii] Poor nutrition and inactivity contribute to obesity risk. Behavioral Risk Factor Surveillance System (BRFSS) data show higher rates of overweight/obese Nevadans among Hispanics (36.5 percent), non-Hispanic Blacks (35.8 percent), non-Hispanic Whites (33.2 percent). Additionally, 43.4 percent of Nevada adults surveyed consumed fruit less than one (1) time per day and 25.2 percent consumed vegetables less than one (1) time per day.**Error! Bookmark not defined.** BRFSS data also show about one half of Nevada adults surveyed d o not participate in any form of physical activity.[v]

Child Obesity

Among children entering kindergarten in Fall 2019, 11.1 percent were considered overweight, and approximately one-fifth (21.3 percent) were obese.[xiv] Nevada Rural/Frontier Counties were home to the greatest percentage of obese children (23.2 percent), Clark County (21.2 percent) as compared to Washoe County (20.4 percent). Trends in BMI scores across racial/ethnic groups indicate African American/Blacks and Native American/Alaskan Natives (>30.6 - 18.5 percent), and Hispanic (29.9 percent) children are more likely to be obese than Caucasian (16.9 percent) children. Children physically active less often (zero (0)-three (3) days per week) were more likely to be obese, compared to children more physically active (four (4)-seven (7) days per week).[xiv]

The CDC plays a key role in tracking data on the burden of obesity and its related racial and ethnic disparities. Among other factors, the risk of adult obesity is greater among adults considered obese as children, and racial and ethnic disparities exist by the age of two (2). Growth trajectories modeling today's children show over one half (59 percent of today's children and 57 percent of children aged two (2)-19) will have obesity at age 35. Early feeding patterns, including how babies are fed and how caregivers use food in response to an infant's mood, affect acute growth, future eating patterns, and the risk of obesity. Similarly, family and caregiver modeling of healthy behaviors, food offerings, and active playtime, as well as characteristics of neighborhoods such as walkability and traffic volume, may affect children's nutrition and physical activity habits.[xv]

In 2018-19, a representative sample of randomly selected fourth, seventh, and tenth grade classroom students in Washoe and Clark Counties, based on height and weight (BMI) data, show 58.9 percent of students in the healthy weight category, and 41.1 percent in unhealthy weight categories. Table one (1) below demonstrates frequency and percent totals of the representative samples.

Table 1. Fourth, Seventh and Tenth Grade Student BMI Data

2018-2019 Fourth, Seventh, and Tenth Grade Student BMI		
	Clark and Washoe County Overall	
BMI Category*	**Frequency**	**Percent of Total**
Underweight	139	2.5%
Healthy Weight	3,283	58.9%
Overweight	1,014	18.2%
Obese	1,137	20.4%
Total	**5,573**	**100%**

**Based on US Centers for Disease Control and Prevention (CDC) youth BMI percentiles*

Obesity during childhood can have harmful effects on the body including greater risk for CVD, insulin resistance and diabetes mellitus, respiratory and joint problems, gastrointestinal issues, anxiety, and psychological disorders.[xvi] Research demonstrates 70 percent of obese children ages five (5) to 17 years have at least one (1) risk factor for CVD, and 39 percent could have two (2) or more, in childhood.[xvii]

Nevada Obesity Prevention and Control Program

Overview

The Nevada Obesity Prevention and Control Program (OPCP), housed within the Division of Public and Behavioral Health (DPBH) Bureau of Child, Family and Community Wellness (CFCW), focuses on implementing evidence-based strategies to create a culture of obesity prevention by changing obesity-related behaviors thereby curtailing/reducing child and adult obesity in Nevada. Strategies include altering the physical and social environment to:

- increase physical activity opportunities and patterns;
- enhance healthy eating options and standards;
- break up and decrease sedentary time engagement (particularly screen/media time);
- promote breastfeeding support for appropriate age groups; and,
- encourage adequate amounts of sleep.

Funding

Nevada OPCP efforts are 100 percent federally funded through leveraging the CDC Preventive Health and Health Services Block Grant (PHHSBG) and the U.S. Department of Agriculture (USDA) Supplemental Nutrition Assistance Program-Education (SNAP-Ed). Nevada receives PHHSBG funds to provide support for public health needs and programs which are under- or

unfunded. The PHHSBG is distributed in two (2) year grant cycles and is renewable depending upon federal allocations. SNAP-Ed is a federally-funded grant program supporting evidence-based nutrition education and obesity prevention interventions and projects for persons eligible for SNAP through complementary direct education, multi-level interventions, and community and public health approaches to improve eating habits.[xviii]

Program Initiatives

Nevada OPCP currently focuses on:

1. Promoting and increasing physical activity in Early Care and Education Centers (ECEs), worksites, and communities;
2. Enhancing healthy eating options and standards in ECEs and worksites;
3. Developing strategies to divide and decrease sedentary time in ECEs and worksites;
4. Promoting breastfeeding support in ECEs and worksites; and,
5. Collaborating with local and state partners for the promotion of key behaviors related to obesity prevention and reduction for all Nevadans.

Early Childhood Obesity Prevention

Nevada OPCP facilitates early childhood obesity prevention initiatives by working with a multitude of state and local partners, including the University of Nevada Las Vegas (UNLV) Nevada Institute for Children's Research and Policy (NICRP). The NICRP oversees maintaining and convening the Early Childhood Obesity Prevention Steering Committee, comprised of various cross-sector members including representation from other State agencies, local health authorities, University Nevada Reno (UNR) Extension, Children's Advocacy Alliance, Nevada Minority Health and Equity Coalition, and the Children's Cabinet. Throughout 2019, The NICRP and Steering Committee members addressed activities outlined in the Nevada State Early Childhood (0-8 years) Prevention Three (3) Year Plan (2017-2020). The Early Childhood Obesity Prevention Steering Committee activities included statewide alignment of childcare food safety/sanitation regulations to ensure disseminated information contained the same evidence-based best practices for the childcare healthy eating environment, and planning and development measures to align and maximize Nevada regulation in areas of nutrition, infant feeding, and physical activity (including screen time exposure) relevant to the Achieving a State of Healthy Weight (ASHW) Caring for Our Children (CFOC) child care and early education standards.[xix] Throughout FY2021, the NICRP will lead and coordinate revision of the Nevada Early Childhood Prevention Three (3) Year Plan, updating goals, activities, and priorities in addressing early childhood obesity spanning the next five (5) years (2021-2025).

The *2018 Child and Adult Care Food Program (CACFP) ECE Gap Analysis* was finalized in January 2019. The OPCP continues efforts to address the issues and barriers identified in the *CACFP ECE Gap Analysis* to increase ECE center participation in the CACFP. A series of five (5) CACFP ECE Factsheets were developed in collaboration with the Nevada Department of Agriculture (NDA) Food and Nutrition Division's Nutrition Professionals, and Nevada Early Childhood Prevention Steering Committee members to reduce misconceptions to CACFP participation and simplify the application process for licensed child care centers.

The data represented in the *CACFP ECE Gap Analysis* will continue to guide FY2021 OPCP programmatic initiatives.

Healthy Vending

In addition to early childhood obesity prevention efforts, the OPCP convenes a Nevada Healthy Vending Workgroup consisting of members from the OPCP, Washoe County Health District (WCHD), Southern Nevada Health District (SNHD), and Department of Employment Training and Rehabilitation (DETR) Business Enterprises of Nevada (BEN) Program. The Nevada *Nutrition Standards Policy* approved by DETR-BEN in 2017 remains pending review by the U.S. Department of Education. Once approved, the DETR-BEN Nutrition Standards Policy will affect food and beverage quality for all vending in Nevada's County and State, and Government buildings.

The COVID-19 pandemic limitations significantly impacted vending practices and access throughout the state due to shut-down and minimal staffing in the workplace. Many sites have closed due to significant halt in sales and possible exposure to COVID-19. The Nevada Healthy Vending Workgroup will convene in June 2021 to determine status and next steps of ongoing vending practices.

DPBH Worksite Wellness

The OPCP also coordinates and implements Worksite Wellness initiatives to encourage healthy behaviors in the workplace among Department of Health and Human Services (DHHS) employees. Achievements included coordination of annual wellness challenges held in the past four (4) years. Although there were limitations due to the COVID-19 pandemic and the current remote working environment, the fourth annual 2020 Spring Wellness Challenge was planned, developed, and hosted by the DPBH Worksite Wellness Program. The challenge occurred in April and May 2020 and included 374 registered DHHS participants who received weekly newsletters, healthy tips, and recipes. The challenge was designed to encourage employees to eat better and increase their physical activity even while working from home due to the COVID-19 pandemic. All feedback and comments regarding the challenge were positive. In addition, the fifth annual 2020 Holiday Challenge was held November 16, 2020 through December 31, 2020 and included 167 DHHS registered participants. Participants set personal goals to help maintain weight during the holidays and received weekly newsletters with tips, strategies, and recipes to navigate the calorie-rich holiday season. Additionally, the DHHS *Nevada Resilience Project* materials and resources were included in the holiday challenge distribution for employees and their families to support those experiencing struggles and challenges due to limitations, loss, and impact of COVID-19.

Conclusion

The state of obesity in Nevada continues to increase in both children and adults. By continuing efforts to emphasize the importance of behavior modification, i.e. increasing healthy eating and physical activity, and decreasing screen/media time in children and throughout adulthood is critical to reducing the state of obesity.[xx] The OPCP will continue to address obesity prevalence in Nevada by maintaining and enhancing existing statewide partnerships, engaging additional key

stakeholders, breaking through barriers, and promoting healthy behaviors that encourage healthful environments.

---

[i] https://www.cdc.gov/obesity/childhood/defining.html
[ii] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5401682/
[iii] https://www.cdc.gov/brfss/brfssprevalence/index.html
[iv] https://www.cdc.gov/obesity/data/prevalence-maps.html
[v] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4500922/
[vi] https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html
[vii] https://www.cdc.gov/obesity/data/obesity-and-covid-19.html
[viii] https://pubmed.ncbi.nlm.nih.gov/16138930/
[ix] https://www.cdc.gov/obesity/childhood/causes.html
[x] https://www.cdc.gov/obesity/data/childhood.html
[xi] https://www.cdc.gov/mmwr/volumes/70/wr/pdfs/mm7003a1-H.pdf
[xii] https://www.cdc.gov/brfss/brfssprevalence/index.html
[xiii] https://www.cdc.gov/nchs/pressroom/states/nevada/nevada.htm
[xiv] https://nic.unlv.edu/files/KHS%20Year%2012%20Report%2011.04.20%20Final.pdf
[xiv] https://nifa.usda.gov/program/supplemental-nutrition-education-program-education-snap-ed
[xv] https://www.cdc.gov/pcd/issues/2019/18_0579.htm
[xvi] https://www.cdc.gov/obesity/childhood/causes.html
[xvii] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5575877/; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2690549/
[xviii] https://nifa.usda.gov/program/supplemental-nutrition-education-program-education-snap-ed
[xix] file:///S:/CFCW/Chronic%20Disease%20Section/Office%20of%20Food%20Security%20and%20Wellness/Obesity%20Prevention/Additional%20Projects/CFOC/ASHW.2017Rpt_7.23.18.pdf
[xx] https://www.cdc.gov/healthyweight/children/index.html