Mississippi Obesity Action Plan

The Vision, Goal and Call to Action

2018



This plan was developed in accordance with MS Code § 41-3-201 (2014), which mandates the submission of an Annual Obesity Action Plan by the Mississippi State Department of Health.

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STRATEGIC PLAN

The Strategic Plan includes action plan objectives, vision, mission, and purpose of the Obesity Action Plan. It serves as a roadmap for the development, planning, and implementation of obesity prevention strategies.

ACTION PLAN OBJECTIVES

Strengthen awareness of obesity in Mississippi

Build momentum for action and involvement

Demonstrate obesity prevention strategies that accentuate policy and systematic changes

Vision: We envision all Mississippians having equal opportunity to live happy and healthy lives.

Mission: Reduce the stigma and prevalence of obesity in Mississippi.

Purpose: The purpose of the plan is to increase obesity awareness and efforts with the hopes of increased partnerships and innovative solutions and create a collaborative impact to sustain statewide efforts.

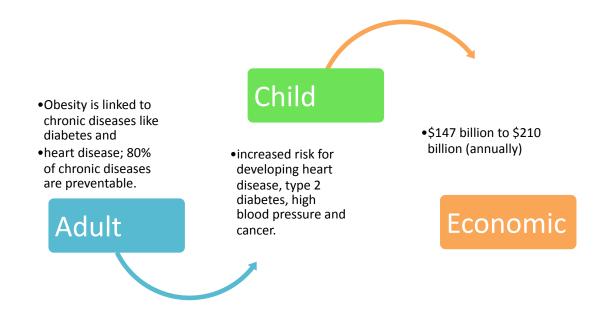


Connecting the Dots to Improve Health



The Mississippi Obesity Action Plan calls for every Mississippian to take a stand and join the movement through policy and systematic change to prevent obesity and sustain the efforts for generations to come. Every person working at any domain level is encouraged to be a part of the obesity prevention effort because it takes everyone to make a difference and see the desired change and impact. Government officials, communities, healthcare workers, and coalitions have been specifically targeted for the purposes of greater influence to meet each action plan objective and strategy and gain a stronger partnership base. It is our goal to create a movement for change because just like the puzzle, we all play a significant role in combating the obesity epidemic in our state. The Mississippi Obesity Action Plan calls for a collaborative effort.

The Public Health Challenge



A. The Scope of Obesity in Mississippi

According to the Centers for Disease Control and Prevention (CDC), more than half of all Americans live with a preventable chronic disease and many such diseases are related to obesity, poor nutrition and physical inactivity. Mississippi (MS) at 37.3% has the second highest rate of adult obesity in the nation preceded by West Virginia (37.7%) (Behavioral Risk Factor Surveillance System (BRFSS), 2016). Adult obesity in MS has increased dramatically, up from 23.7% in 2000 and from 15.0% in 1990; and is expected to increase significantly in the next 20 years (State of Obesity: Better Policies for a Healthier America, Aug 2017). F as in Fat: How Obesity Threatens America's Future, a report from Trust for America's Health and the Robert Wood Johnson Foundation, suggests MS's obesity rate could reach 66.7% by 2030 (2012).

According to the 2015 BRFSS survey, many MS adults are overweight or obese and are not practicing healthy behaviors. Figure 1 demonstrates risk factors and their comparisons between MS and the U.S. for obesity.

Did not achieve the recommended amount of 84.7 physical activity per week 51.2 Consume fruit less than one time per day 31.2 Consume vegetables less than one time per day 38.7 MS Have been told they have high cholesterol US 42.4 Have been told they have high blood pressure 30.9 Have been told they have diabetes 0 100 10 20 30 40 50 60 70 80 90 **Percent**

Figure 1: Mississippi and United States Adult Prevalence Comparisons of Obesity Risk Factors, BRFSS, 2015

Source: 2015 Mississippi BRFSS

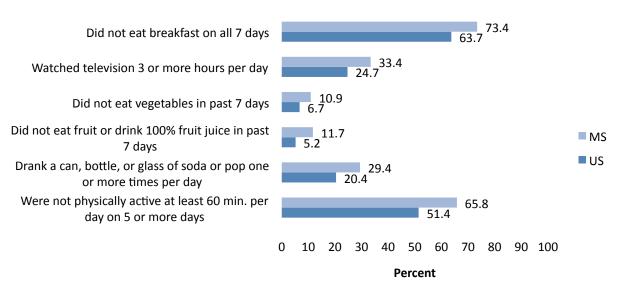
Obesity in MS affects children (ages 2 to 5 years) and youth (ages 6 to 17 years). However, MS does not have a statewide data monitoring system to track overall population trends in childhood obesity. In 2015, data from the Supplemental Nutrition Program for Women, Infants and Children (WIC) showed the prevalence of obesity in children aged 2 to 5 years is a staggering 31.1%. The Child and Youth Prevalence of Obesity Surveys (CAYPOS, 2015) also revealed that over 40% of school-aged children and youth in MS are either overweight or obese. Table 1 describes the obesity epidemic among this population.

Table 1: Prevalence of Overweight and Obese Students from Kindergarten to 12th Grade, Mississippi 2015

	All Grades (K-12)	Elementary (K-5)	Middle School (6-8)	High School (9-12)
% Overweight	18.2	17.8	18.8	18.5
% Obese	25.2	22.6	27.3	28.2
% Overweight or Obese (Combined)	43.4	40.4	46.1	46.7

High rates of obesity cause great concern because overweight/obese children and youth have an increased likelihood of becoming overweight/obese adults. The 2015 Youth Risk Behavior Surveillance System (YRBSS) reveals that younger Mississippians are engaging in unhealthy lifestyles. The prevalence of obesity risk behaviors among the youth influences the widespread obesity and chronic conditions within the adult population. Figure 2 demonstrates the prevalence of unhealthy behaviors among the youth in MS.

Figure 2: Mississippi and United States Youth Prevalence Comparisons of Obesity Risk Factors, YRBSS, 2015



Overweight and obese children are at an increased risk for developing heart disease, type 2 diabetes, high blood pressure and cancer. Additionally, they suffer disproportionately from health conditions such as sleep apnea, asthma, and psychosocial effects' including decreased self esteem, negative body image and depression (*National Conference of State Legislatures, Childhood Obesity Legislation,* 2013). According to the *Still Too Fat Fight* report, childhood obesity is a national security issue, with 1 out of 4 young adults unable to serve in the military due to excess body weight (2012). "Because of the increasing rates of obesity, unhealthy eating habits and physical inactivity, we may see the first generation that will be less healthy and have

a shorter life expectancy than their parents," -Richard H. Carmona, M.D., M.P.H., F.A.C.S, former U.S. Surgeon General, 2004.

Equally important is the fact that obesity is compounded by the state's high rate of child poverty, low rate of family educational attainment and historical social and political challenges. Likewise among adults, the prevalence of overweight and obesity prevalence is coupled with other demographic and socio-economic indicators such as gender, race and income which create disadvantages that increase the risk of early onset of chronic diseases and health conditions (i.e. coronary heart disease, hypertension, type 2 diabetes, stroke, cancer, arthritis, dyslipidemia and depression).



Because the root of obesity is complex, occurring at varying economic, social, environmental and individual levels in MS and the US in general; multiple strategies are needed for successful prevention efforts. National, state and local policy, systems and environmental change strategies that promote and support healthy eating, active living and smoke free air on the population level are considered ideal and sustainable. These strategies make the healthy choice the easy choice, as well as engage and mobilize multiple partner sectors including government agencies, businesses, communities, schools, childcare, healthcare and worksites. Table 2 represents the relationship of socio-demographic and economic indicators and rates of obesity.

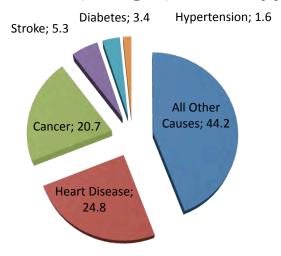
Table 2: Obesity Prevalence among Mississippi					
Adults – 2016 BRFSS					
	_	Obesity Percent			
Overall		37.3			
By gender	Female	39.3			
	Male	35.2			
By race	White	32.4			
	Black	46.8			
	<\$15,000	41.2			
	\$15,000-\$24,999	41.9			
By income	\$25,000-\$34,999	36.5			
	\$35,000-\$49,999	35.8			
	\$50,000+	35.5			
	Less than high school	34.1			
By education	High school or G.E.D.	38.3			
	Some post high school	40.8			
	College graduate	32.0			
	18-24 years old	19.9			
	25-34 years old	38.3			
By age	35-44 years old	47.5			
	45-54 years old	45.6			
	55-64 years old	39.9			
	65+ years old	31.1			

Source: 2016 Mississippi BRFSS

In MS, over half of all deaths were attributed to chronic diseases in 2016 (MS State Department of Health Vital Statistics). Of the 31,788 Mississippians who died, 56% died from the following chronic diseases:

- 24.8% died from heart disease
- 20.7% died from cancer
- 5.4% died from stroke
- 3.4% died from diabetes mellitus
- 1.6% died from hypertension

Causes of Death (All Ages), Mississippi, 2016



Source: Mississippi State Department of Health. (2017). Mississippi Statistically Automated Health Resource System. Note: Percentages may not add to be 100% due to rounding.

A report from *F* as in Fat: How Obesity Threatens America's Future suggests over the next 20 years, Mississippi's obesity rate could contribute to 415,353 new cases of type 2 diabetes; 814,504 new cases of coronary heart disease and stroke; 751,568 new cases of hypertension; 487,642 new cases of arthritis and 111,069 new cases of obesity related cancer (2012).

OBESITY and DIABETES

According to the University of Mississippi Medical Center, diabetes in the past 20 years has risen to become one of America's most prevalent chronic diseases and its link to obesity is undeniable. The good news is diabetes is largely controllable if obesity can be controlled. However, the obesity epidemic increasingly drives the rates of type 2 diabetes, which is the most common form of the disease. About 26 million people in the U.S. have diabetes, up from about 17 million a decade ago. As obesity rates increase in children, it puts them at higher risk of developing type 2 diabetes as adults. Obese children and adolescents are more likely to have pre-diabetes, a condition in which blood glucose levels put the person at high risk for developing diabetes.

According to CDC's national pre-diabetes estimate, the actual pre-diabetes prevalence in Mississippi could be above 30% potentially positioning over 600,000-700,000 Mississippians on the path to develop diabetes. Mississippi's diabetes prevalence among adults is expected to continue to increase as its obesity prevalence increases (www.cdc.gov/brfss).



OBESITY AND CANCER

Overweight and obesity are associated with increased risk of 13 types of cancer. The identified cancers associated with overweight and obesity, according to the International Agency for Research on Cancer (IARC) includes: meningioma, multiple myeloma, adenocarcinoma of the esophagus, and cancers of the thyroid, postmenopausal breast, gallbladder, stomach, liver, pancreas, kidney, ovaries, uterus, colon and rectum (colorectal) (CDC, 2017). According to the Vital Signs report by the Centers for Disease Control and Prevention (CDC), in 2014, these cancers accounted for about 40 percent of all cancers diagnosed in the United States. Overall, the rate of new cancer cases has decreased since the 1990s, but increases in overweight- and obesity-related cancers are likely slowing this progress.

About 630,000 people in the U.S. were diagnosed with a cancer associated with overweight and obesity in 2014. Nearly 2 in 3 diagnosis occurred in adults 50- to 74-years-old. The rate of obesity-related cancers, not including colorectal cancer, has increased by 7 percent between 2005 and 2014. The rates of non-obesity related cancers declined during that time. In 2013-2014, about 2 out of 3 adults in the U.S. were overweight (defined as having a body mass index of 25-29.9 kg/m²) or had obesity (having a body mass index of 30 kg/m² and higher). The body mass index (BMI) is a person's weight (in kilograms) divided by the square of the person's height (in meters). (CDC, 2017)



Source: Centers for Disease Control and Prevention

OBESITY and HEART DISEASE

According to the American Heart Association report (Feb 2017), the burden of cardiovascular disease is growing faster than our ability to combat it due to the obesity epidemic, poor diet, high blood pressure and a dramatic rise in Type 2 diabetes- all major risk factors for heart disease and stroke. Obesity alone dramatically increases a person's risk of heart disease, even if that person does not have other risk factors for heart disease. But the link goes deeper. For people with known risks for heart disease – including high blood pressure, high cholesterol, tobacco use and uncontrolled diabetes – the burden obesity adds makes heart disease all the more likely (UMMC, 2017). According to the Cleveland Clinic, obesity and overweight are linked to several factors that increase one's risk for cardiovascular disease (coronary artery disease and stroke):

- High blood lipids, especially high triglycerides, LDL cholesterol, and total cholesterol and low HDL cholesterol
- High blood pressure
- Impaired glucose tolerance or type-2 (also called adult onset) diabetes
- Metabolic syndrome

Obesity and overweight are also linked to hypertension and an enlarged left ventricle (left ventricular hypertrophy), increasing risk for heart failure (Cleveland Clinic, 2017). Additionally, obesity is a major factor in raising one's blood cholesterol levels. High cholesterol contributes to the buildup of plaque in the arteries, a major cause of heart attacks (American Heart Association, 2017). Another well documented complication of obesity is sleep apnea. Symptoms include a complaint of daytime sleepiness, snoring at night and instances where patients may "stop" breathing. This disease has significant consequences to the heart and places patients at higher risk for heart failure, high blood pressure and sudden rhythm disturbances (Obesity Action Coalition, 2017).

B. Financial Impact of Obesity

Health care costs range from \$147 billion to \$210 billion annually or 21% of the total national health care spending. Per capita, medical cost for individuals with obesity is \$2,741 higher than those of normal weight. Researchers at the Harvard School of Public Health estimate that if obesity trends continue, obesity related medical costs could rise by \$43 to \$66 billion each year in the U.S. by 2030 (*The Medical Care Cost of Obesity: An Instrumental Variables Approach, 2010*).

Obese adults have an increased rate of absenteeism due to illness over normal weight employees. A 2010 study conducted by Duke University reported that the cost of obesity among U.S. full-time employees is an estimated \$73.1 billion dollars. In determining this estimate, three investigative factors were considered: employee medical expenditures, lost productivity on the job due to health problems (presenteeism), and absence from work (absenteeism). According to the study, presenteeism accounted for as much as 56% in the case of female employees and 68% in the case of male workers with respect to medical expenditures and loss of productivity.

Yarborough et al. (2018) and Kleinman, Abouzaid, Andersen, Wang, and Powers (2014) recently discussed the connection between employee obesity and loss of productivity in the workplace. A 2007 analysis conducted by Duke University Medical Center showed that obesity also increased employers' costs associated with workers' compensation claims—for example, the cost of workers' compensation insurance, which all employers are required to carry. Also, the analysis found that obese employees filed twice the number of workers' compensation claims and lost thirteen times more work days from injuries and illness than non-obese workers.

According to the MS Center for Obesity Research, there is a 40% increase in medical costs per year in an obese person over a non-obese person. In 2008, MS spent \$925 million in health care costs directly related to obesity. If this trend continues; it is estimated that obesity related health care costs will be \$3.9 billion in 2018 (Retrieved from: https://www.umc.edu/Administration/Centers and Institutes/Mississippi Center for Obesity

Research/Obesity in Mississippi.aspx). If body mass index (BMI) were lowered by 5%, MS could save 6.9% in health care costs, which would equate to savings of \$6.12 trillion by 2030 (*F as in Fat: How Obesity Threatens America's Future, 2011*). The number of MS residents that would be spared from developing new cases of major obesity-related diseases includes:

- 86,347 people could be spared from type 2 diabetes,
- 66,897 from coronary heart disease and stroke,
- 56,741 from hypertension,
- 35,176 from arthritis, and
- 4,795 from obesity-related cancer

C. Benefits of Implementation

Research and case studies from around the world provide convincing evidence that health promotion is effective. Health promotion strategies can develop and change lifestyles and have an impact on the social, economic and environmental conditions that determine health.

According to the CDC, by fostering transparency and public accountability in health promotion, individuals can derive economic benefits from improved health that includes:

- Increased well-being, self-image, and self-esteem,
- Improved coping skills with stress or other factors affecting health,
- Improved health status,
- Lower costs for acute health issues,
- Increased access to health promotion resources and social support, and
- Improved job satisfaction

In 2011, the American Heart Association published a review that concluded that most cardiovascular disease can be prevented or delayed with a combination of direct medical care and community based prevention programs and policies. The key finding of this review found the following:

- Every \$1 spent on building biking trails and walking paths could save approximately
 \$3 in medical expenses.
- Every \$1 spent in wellness programs, companies could save \$3.27 in medical costs and \$2.73 in absenteeism costs.
- Interventions to help improve nutrition and activity showed improvements in just one year and had a return of \$1.17 for every \$1 spent.
- Participants in community-based programs who focused on improving nutrition and increasing physical activity had a 58% reduction in the incidence of type 2 diabetes compared with drug therapy, which had a 31% reduction.

Per CDC, community efforts should focus on healthy eating and physical activity in multiple settings to undo the obesity epidemic. These settings include hospitals, early care and education, worksites, schools, and food service.

It is also proven that time and money spent on employee health is a worthwhile investment. A healthier workplace can help control healthcare costs as, over time, costly serious illnesses are prevented and existing ones are better managed. Workplace wellness increases overall employee productivity, as well as employee satisfaction and retention (Investing in Health, 2008).

The MSDH obesity efforts are coordinated through the Division of Nutrition, Physical Activity, and Obesity (DNPAO) within the Office of Preventive Health. The DNPAO is funded solely by a grant from CDC and was established to increase nutrition quality and physical activity levels among adults and children, in addition to decreasing the prevalence of obesity in MS. While the program is appreciative of the funds it receives from CDC, it is limited to implementing only the activities outlined in the CDC approved work plan. To address other identified needs for obesity prevention and management across the state, program staff must rely on partners who may or may not have the resources to meet these needs.

D. Coordination of Efforts

Partnerships and collaboration are crucial to building capacity and leveraging resources towards prevention and control of obesity in MS. The CDC not only encourages collaboration, but has made it a key strategy in many funding opportunity announcements. The MSDH, Division of Nutrition, Physical Activity and Obesity (DNPAO) has forged partnerships internally and at the local, regional, state and national levels to successfully implement obesity strategies and activities. Internal collaborations, within MSDH, include the Heart Disease and Stroke Prevention Program; Diabetes Prevention and Control Program; MS Delta Health Collaborative; State Employee Worksite Wellness Program; Comprehensive Cancer Control and Prevention; Coordinated Chronic Disease Prevention and Health Promotion; Women, Infants and Children (WIC); Injury and Violence Prevention; Office of Health Data and Research; Vital Records/Statistics; Office of Tobacco Control; Health Equity Department; Child Care Licensure; Nutrition Services and Communications. Coordination across these programs includes the utilization and sharing of staff and resources to manage, control and/or prevent obesity and its complications. Externally, the DNPAO collaborates with the MS Department of Education (MDE), MS Department of Finance and Administration (MDFA) and the MS Department of Rehabilitation Services (MDRS) to implement healthy nutrition, vending and physical activity policies.

The Mississippi State Department of Health, DNPAO also partners with the Office of Women, Infants and Children (WIC) program and other state agency worksite wellness champions to assist with implementing a lactation room policy within their agencies in accordance with federal law. WIC and DNPAO partner with the Mississippi Breastfeeding Coalition, Mississippi Perinatal Quality Collaborative and national partners to increase access to breastfeeding friendly environments throughout MS.

The DNPAO partners with the Blue Cross and Blue Shield State and School Employees' Health Insurance Plan which is managed by the Office of Insurance in the MDFA to implement the State Employee Wellness Program. In partnership with the MDRS, DNPAO established a healthy catering and vending initiative to be encouraged and adopted within worksites. The

MDRS organizes the vendors, who are members of the MS Randolph-Sheppard Blind Vendors Association (MRSBVA), which manages food service operations in state owned facilities. These operations include full-service cafeterias, snack bars and food and drink vending machines. The Mississippi Blind Vendors Association has converted over ninety-five percent of all state agency vending machines to include *Fit Pick* snack selections, a vending machine program that helps consumers make healthier choices, as well as distribution of educational materials to all state worksite wellness champions which aid in the campaign promotion process.

The MSDH DNPAO promotes physical activity and nutrition among early care and education programs by continuing to partner with MSDH Division of Child Care Facilities Licensure and Nutrition Services, the MS Department of Education's Office of Child Nutrition, and the MS Department of Human Services' Office of Early Childhood Care and Development. Early care and education providers have been trained on The Nutrition and Physical Activity Self-Assessment for Child Care (NAP SACC) and additional evidence based trainings. In addition, DNPAO collaborated with the Mississippi Child Care Facilities Licensure to revise child care center regulations pertaining to physical activity and nutrition policies according to national standards.

The DNPAO will continue to collaborate with The Partnership for a Healthy Mississippi and the Mississippi Food Policy Council to assist with establishing and strengthening policies for increased access to healthy foods and beverages. The MSDH DNPAO currently partners with Alcorn State University (ASU) Cooperative Extension Program, the Health and Wellness Coalition, and other key stakeholders to implement nutrition activities that include developing cooperatives to support the establishment of farmer's markets; and acquiring, building, preserving, and protecting community gardens across the state to increase access to healthy foods in schools, communities, and worksites. Furthermore, MSDH is partnering with the MS Department of Agriculture and Office of WIC to increase farmers' markets in food deserts by assisting with building infrastructure for communities to develop and sustain farmers' markets.

The MSDH partners with the MDE to implement evidence-based coordinated school health efforts that promote physical activity and healthy eating. The MSDH Safe Routes to School

program within the Division of Injury and Violence Prevention promotes safe walking and biking to and from school and implements shared use agreements between school districts and communities across the state. The MSDH and MDE have also coordinated efforts to provide professional development to school staff, technical assistance and mini-grant opportunities to schools to support successful implementation of a healthy school nutrition and physical education and physical activity environment.

Bridging the Gap

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E. Obesity Action Plan

Goal 1

Improve state and local capacity and support to address physical activity and healthy eating across the lifespan in MS.

Strategy 1-1: The Division of Nutrition, Physical Activity, and Obesity will coordinate the following programs and activities to increase physical activity and healthy eating in MS.

- Encourage counties and municipalities to establish and coordinate Health and Wellness Coalitions that coordinate and implement programs and activities in their communities.
- > Provide the coalitions with needed resources and technical assistance.
- Secure funds for MSDH to provide physical activity incentive grants to schools and communities.
- > Promote public and private partnerships to increase access to healthy eating and physical activity programs.
- ➤ Encourage development, maintenance, redevelopment and equitable access to public green spaces, including parks, community gardens, greenbelts, and trails, as well as recreational facilities in all neighborhoods that increase the opportunity for physical activity for all community members.
- Adopt and implement "walkable" community policies and build paths and trails with optimal trees and green space to provide safe and convenient travel options for walking, bicycling, or using assistive devices such as wheelchairs.
- ➤ Develop a state mandate for insurers to provide incentives for maintaining a healthy body weight and include screening, treatment, and obesity preventive services in routine clinical practice and quality assessment measures.
- Provide technical assistance and funds to schools and communities to establish shared use agreements.

Strategy 1-2: The Division of Nutrition, Physical Activity, and Obesity will assess needs and develop and disseminate resources to aid state and local decision makers.

- ➤ Conduct a comprehensive, statewide "needs assessment" for public investment in new or improved facilities for physical activity, such as pedestrian walkways, off and on road bike trails and parks; education programs and materials for schools and communities and access to healthy food options in workplaces, schools, neighborhoods, and communities.
- ➤ Develop searchable online guides on all available public and private obesity prevention and treatment programs in MS and regularly update these guides. Include local wellness policies developed by local education agencies that comply with Federal Law, as well as obesity prevention programs and resources made available by food companies and related organizations.
- ➤ Encourage state agencies to pursue available grant funds and equipment donations to support initiatives.
- Increase available resources (e.g. marketing campaigns, education materials, funding) to initiate opportunities for increased physical activity in the communities and

- schools. Revise and support existing legislation to focus on the promotion of physical activity.
- ➤ Develop and disseminate resources (e.g. education materials, nutrition and physical activity supplies) targeted specifically to child care providers that promote and support physical activity and healthy eating.

Strategy 1-3: Introduce, modify and utilize health-promoting food and beverage retailing and distribution policies.

- ➤ Recommend legislation to direct state and local tax and financial incentives such as flexible financing or tax credits, streamlined permitting processes and zoning strategies, as well as cross-sectoral collaborations to enhance the quality of local food environments; particularly in low-income communities.
- ➤ Link incentives to public health goals in ways that give priority to stores that also commit to health-promoting retail strategies (e.g., through placement, promotion, and pricing).

Strategy 1-4: Promote physical activity in early care and education (ECE) settings and include obesity prevention in professional development for ECE personnel and staff.

- ➤ Provide recommendations and sponsor seminars and training for preschool providers about effective methods to promote physical activity during the program day.
- ➤ Include preschool programs in wellness policies and programs developed by local educational agencies.
- ➤ Provide technical assistance for the development of physical activity action plans and wellness policies.
- ➤ Provide targeted conferences and training sessions for ECE teachers and administrators on obesity prevention.
- ➤ Provide in-service school programs to educate teachers and auxiliary staff about overweight and obesity.
- Recognize ECEs that have policies and practices that promote obesity prevention.

Goal 2

Develop an intergenerational, culturally sensitive public awareness campaign on preventing obesity through healthy choices and physical activity.

Strategy 2:1 Create and deliver a statewide public awareness campaign that is culturally competent, target at risk population and frames a universal prevention message.

- Actively engage a broad array of stakeholders in the design and dissemination of the campaign.
- ➤ Enlist support for the campaign from local media, businesses, community groups, and healthcare professional organizations.
- ➤ Develop and distribute a series of television, radio, and print public service announcements and materials for the campaign.
- ➤ Deliver the common prevention message to Mississippi's diverse populations, particularly those at high risk of obesity, in a manner that addresses cultural

- perceptions by developing culturally competent and linguistically appropriate key messages.
- Conduct an ongoing evaluation of the effectiveness of the media campaign.

Strategy 2-2: Increase involvement of healthcare professionals in obesity prevention activities across all ages, ethnic and socio-economic groups.

- Encourage healthcare professionals to routinely track BMI and discuss the results with patients.
- Provide healthcare professionals with materials and resources for distribution, such as CDC guidelines, charts, tracking tools, and protocols, to guide decision making for obesity prevention.
- ➤ Develop community-wide health campaigns or add a nutrition and physical activity component to existing events and recruit healthcare systems and providers as cosponsors.

Strategy 2-3: Increase knowledge in communities regarding the obesity epidemic; height and weight standards, nutrition choices for healthy eating by distributing and/or developing educational materials on healthy behaviors and obesity prevention for the general public.

- Educate Mississippians on the basic causes of obesity.
- Develop public service announcements.
- > Educate consumers and providers on how to read and interpret food labels.
- > Convene community meetings in senior centers, medical centers, hospitals, community colleges and universities.
- Form a speaker's bureau of fitness and nutrition experts and other healthcare professionals.
- Develop a "Train the Trainers" program to support the speaker's bureau.

Goal 3

Increase workplace awareness of the obesity issue and increase the number of worksites that have environments that support wellness, including weight management, healthy food choices, physical activity, and lactation support.

Strategy 3-1: Increase the number of healthy food choices available to employees in all appropriate worksite venues.

- ➤ Promote healthy food choices in employee cafeterias by providing sample menus and recipes.
- Offer trainings on healthy food preparation practices to cafeteria employees.
- Encourage cafeterias to focus on product, price and placement of healthy food choices.
- ➤ Encourage the adoption of healthy catering guidelines for food served in staff meetings and agency sponsored events.

Strategy 3-2: Increase the number of agencies that encourage physical activity.

- ➤ Encourage employers to provide extended breaks and lunch hours in order to permit employees to engage in physical activity.
- ➤ Encourage partnerships with companies that supply exercise equipment and devices; such as pedometers.
- ➤ Encourage worksites to provide employees with subsidized or reduced rate memberships in gyms, health clubs, community recreation centers, or wellness days off.
- Encourage worksites to make available opportunities such as on-site facilities, gyms, stair wells, walking trails, walking routes, etc. for physical activity.

Strategy 3-3: Increase the number of worksites that offer lactation support programs for employees.

- Encourage worksites to comply with legislation for facilities that support breastfeeding employees to express and store milk.
- Provide grants, fiscal incentives, and other recognition for worksites that make alterations to accommodate breastfeeding employees or on-site child care facilities.
- Increase the proportion of medical providers who counsel women about the importance of breastfeeding.
- Increase support for the development and implementation of approved baby cafes in the state.
- Increase number of CLC (Certified Lactation Counselors) through quarterly workshops and trainings

Goal 4

Increase support for the promotion of healthy eating and physical activity within Mississippi's healthcare system and among health care professionals.

Strategy 4-1: Educate healthcare professionals on etiology and physiology of obesity in order to recognize, prevent and treat obesity.

- ➤ Encourage healthcare professionals to adopt standards of practice (evidence-based or consensus guidelines) for prevention, screening, diagnosis and treatment of overweight and/or obese children, adolescents and adults that will help them to achieve and maintain a healthy weight, avoid obesity-related complications, and reduce the psychosocial consequences of obesity*.
- Provide physicians and other healthcare professionals with regular continuing education on preventing, recognizing and treating obesity.
- ➤ Develop regionally based resource directories to facilitate referrals to professionals for prevention and treatment of obesity.

For more information on the role of healthcare professionals in obesity, see the 2013 AHA/ACC/TOS Guidelines for the Management of Overweight and Obesity in Adults.

Strategy 4-2: Increase the support in the healthcare setting for new mothers to begin breastfeeding upon delivery and to continue breastfeeding exclusively for six months.

Assess and monitor hospital policies and practices related to breastfeeding initiation.

- ➤ Provide incentives and/or recognition to hospitals with the highest exclusive breastfeeding rates per socio-demographic population, as well as to hospitals that observe the "Ten Steps to Successful Breastfeeding" practices.
- ➤ Monitor hospital activities that promote breastfeeding such as documentation of breastfeeding care and referral to community lactation.
- ➤ Provide healthcare professionals with educational workshops that focus on the benefits of exclusive breastfeeding for the first 6 months and continued breastfeeding for the first year and beyond.
- ➤ Develop and distribute materials that promote exclusive breastfeeding for the first 6 months and continued breastfeeding for the first year and beyond for distribution by physicians' offices and other primary healthcare settings.

Strategy 4-3: Increase the number of insurers and other third party payers that cover medical and other services that prevent and treat obesity.

- ➤ Educate payers and policy makers on the etiology and physiology of obesity with a focus on the health consequences so that obesity is viewed as a priority health issue.
- > Support reimbursement for nutrition counseling as a preventive measure and as a treatment for obesity.
- Educate providers regarding the treatment for obesity which will result in cost savings, as well as the recognition that reimbursement for obesity prevention and education services increases the likelihood of individuals maintaining a healthy weight.

Expected Outcomes

- 1. Increased awareness among Mississippians of the burden of obesity.
- 2. Increased number of stakeholders engaged in coordinated effort to impact obesity in Mississippi.
- 3. Increased access to healthy foods and beverages.
- 4. Increased intake of fruits, vegetables and whole grains.
- 5. Increased access to places for adults and children to participate in physical activity.
- 6. Increased participation in physical activity among adults and children.
- 7. Increased number of healthcare providers aware of obesity prevention treatment guidelines and activities.

Benchmarks (Healthy People 2020)

- 1. Increase the proportion of adults who are at a healthy weight.
- 2. Reduce the proportion of adults who are obese.
- 3. Reduce the proportion of adults who engage in no leisure time activity.
- 4. Increase the proportion of adults who engage in aerobic physical activity of at least moderate intensity for at least 150 minutes/week, or 75 minutes/week of vigorous intensity, or an equivalent combination.
- 5. Increase the number of States that have State-level policies that incentivize food retail outlets to provide foods that are encouraged by the Dietary Guidelines for Americans.

- 6. Increase focus of school as target area
- 7. Increase the proportion of mothers who exclusively breastfeed their babies in early postpartum and at 6 months to 60%, and increase the proportion of mothers who breastfeed at one year of age to 25%

F. Budget

To adequately address obesity in Mississippi, a greater investment is required to facilitate a lasting impact. The obesity action plan focuses on three priorities which includes healthy eating, physical activity and healthy weight. The goal of this action plan is to provide high-level strategies that focus on changing behaviors that often lead to overweight or obesity. The strategies and goals highlighted in the obesity action plan are intended to outline key examples of best and promising strategies for reducing overweight and obesity in Mississippi, while encouraging collaboration, coordination and the maximization and utilization of resources. The funding requested will allow MSDH to begin to close identified gaps in staff and data and build a greater capacity to define and adequately address obesity and other chronic diseases across the state.

Goal 1 \$3,000,000

Improve state and local capacity and support to address physical activity and healthy eating across the lifespan in MS.

- A. Funding will support implementation efforts related to the Obesity Action Plan including education, training, coalition building, and systems change.
- B. The Obesity Action Plan includes supporting local communities and coalitions to implement evidence-based interventions, conducting trainings, collecting data and developing and maintaining a web-based obesity resource directory which would be available to providers and the public. Small grants and incentives for partners, schools, and local communities will be a critical feature of this goal.

Goal 2 \$2,100,000

Develop an intergenerational, culturally sensitive public awareness campaign on preventing obesity through healthy choices and physical activity.

- A. Develop statewide obesity health communication and marketing campaigns including a special focus on education and marketing to at-risk populations.
- B. Provide outreach and information to Mississippians on obesity prevention and develop a "train the trainers" program to support a speaker's bureau.

Goal 3 \$1,500,000

Increase workplace awareness of the obesity issue and increase the number of worksites that have environments that support wellness, including weight management, healthy food choices, physical activity, and lactation support.

A. Provide education, training and incentives to worksites that have environments that support obesity prevention.

Goal 4 \$2,600,000

Increase support for the promotion of healthy eating and physical activity within Mississippi's healthcare system and among health care professionals.

- A. Work with health care providers to implement systems of referral for obesity prevention.
- B. Provide outreach and information to healthcare providers regarding obesity prevention.
- C. Provide incentives to hospitals that support breastfeeding practices.
- D. Develop education materials that promote exclusive breastfeeding.

Goal 5 \$750,000

Assure a sustainable obesity prevention infrastructure and workforce.

A. Funding for obesity personnel to include a nurse, registered dietitian, physical activity specialist, obesity coordinator, and evaluator.

Total \$9,950,000

HOW CAN YOU GET INVOLVED?





Check out our full state health improvement plan at msdh.ms.gov – Let us know if there are any strategies or activities in the plan that you would like to help with.



method for interested parties and communities to



