

**Obesity and Public Policy:  
Legislation Passed by States,  
1999 to 2003**

**April 2004**

Interim Report to the Sunflower Foundation  
on Project 02-103-20  
KHI/R 04-2

Anthony Wellever  
Amanda Reichard, Ph.D.  
Marc Velasco



**KANSAS HEALTH INSTITUTE**

212 SW Eighth Avenue, Suite 300  
Topeka, Kansas 66603-3936  
Telephone (785) 233-5443  
[www.khi.org](http://www.khi.org)



The Kansas Health Institute is an independent, nonprofit health policy and research organization based in Topeka, Kansas.

Established in 1995 with a multi-year grant from the Kansas Health Foundation, the Kansas Health Institute conducts research and policy analysis on issues that affect the health of Kansans.

Copyright© Kansas Health Institute 2004.  
Materials may be reprinted with written permission.

# TABLE OF CONTENTS

<b>Executive Summary</b> .....	4
<b>Preface</b> .....	7
<b>The Health and Economic Burden of Obesity</b> .....	8
<b>Causes of Obesity</b> .....	12
Poor Nutrition .....	12
Lack of Physical Activity .....	13
<b>Obesity in Children</b> .....	15
<b>Public Opinion and Policy</b> .....	18
Public Opinion .....	18
Public Policy .....	20
<b>Policy Options</b> .....	22
Commemorative or Advisory Resolutions .....	23
Advisory Commissions and Studies.....	24
Insurance Regulation.....	24
School Food Programs and Policies.....	25
Nutrition Education .....	26
Physical Education and Children’s Physical Activity .....	26
Adult Physical Activity .....	28
Other Policies.....	29
<b>Summary</b> .....	30
<b>References</b> .....	31
<b>Appendix</b> .....	34

## EXECUTIVE SUMMARY

Obesity is currently second only to smoking as the leading cause of preventable deaths in the United States, but obesity-related deaths are expected to overtake smoking-related deaths by 2005. Public health experts project that 500,000 Americans will die in 2005 from diseases associated with obesity.

### Prevalence

In the last two decades, the rate of obesity in the United States doubled from 15.1 percent in 1976–1980 to 30.9 percent in 1999–2000, prompting the U.S. Surgeon General in 2001 to call the prevalence of obesity an epidemic. Between 1992 and 2001, the rate of obesity in Kansas increased from 13 percent to 22 percent. Today in Kansas, almost one in four persons is considered obese, and more than six of every ten adult Kansans is considered overweight.

### Obesity-related Chronic Disease and Medical Costs

Obesity is a risk factor for many chronic diseases including diabetes, heart disease and some cancers. On average, non-elderly obese people have annual health care expenditures that are more than one-third greater than people of normal weight. In Kansas, the cost of obesity-attributable medical expenditures totals \$657 million per year; at least \$143 million of that amount is paid by the Medicaid program. Nationally about six percent of all medical costs are attributable to obesity. If current prevalence trends continue, one dollar out of every five spent on health care in the year 2020 will be spent on obesity-related treatments.

Future growth in medical spending on obesity is a special problem for Medicaid. One recent study predicted a substantial increase in obesity-related disability among young (under 50 years of age) people. A second study suggested that if current obesity trends continue, disability rates for those 50–69 years of age will increase by one percent per year more than if there were no further weight gain. Because the Medicaid program eventually covers most people with long-term disabilities, it will pay for much of the care provided to these people.

## Causes and Solutions

The physiological causes of obesity are known and simple. People gain weight when they consume more calories in the form of food and drink than they expend in their physical activities. Everything else about obesity is more complex. An individual's weight is determined by a combination of genetic, metabolic, behavioral, environmental, cultural and socioeconomic influences. Because of the multi-factorial nature of obesity, policy solutions to reduce its prevalence are not immediately evident.

According to recent survey research, most Americans acknowledge that obesity is a serious health concern, but are ambivalent about the role that government should play in fighting obesity. They support initiatives such as improving awareness through media campaigns and requiring restaurants to list nutritional information on their menus, but oppose special taxes on junk food. Most Americans overwhelmingly favor government involvement in fighting childhood obesity. Large majorities support healthier school lunches, more physical education and efforts to educate students and parents about the importance of exercise and healthy eating.

These sentiments were also reflected in an analysis by the Kansas Health Institute (KHI) of policy relative to obesity and physical activity passed by state legislatures in the period 1999 through 2003. During the period, 30 state legislatures passed a total of 79 bills that directly targeted obesity or the increase in physical activity. (See table for a summary of each of the bills.) KHI grouped the legislation into eight categories:

- 1) Commemorative or advisory resolutions
- 2) Advisory commissions and studies
- 3) Insurance regulation
- 4) School food programs
- 5) Nutrition education
- 6) Physical education and physical activity of children
- 7) Adult physical activity
- 8) Other policies

This study focuses exclusively on obesity-related laws passed by state legislatures. State legislation, however, is not the only avenue of public policy open to those who want to reduce the prevalence of obesity in Kansas. The federal government, state government administrators, communities, school boards, employers and others around the nation have also focused their attention on population-based initiatives to address the obesity epidemic. These other players in the policy environment will be the focus of the next paper in this project.

## **PREFACE**

This paper is part of a larger project to trace recent efforts to combat obesity by population-based public policies, and it focuses exclusively on legislation passed by states in the five-year period 1999–2003. The complete report, which will be published in May 2004, will focus on population-based initiatives including those of state government administrators, communities, school boards and employers, and it will discuss legislation that was introduced but not adopted.

This project is one of several projects funded by the Sunflower Foundation to help reduce the prevalence of obesity in Kansas. The interpretations and opinions expressed in this report are solely those of the authors and do not necessarily reflect the opinions of the Sunflower Foundation.

The authors would like to acknowledge the contribution of Laura Loyacono, KHI Vice President for Public Affairs, to the final draft of this paper.

## THE HEALTH AND ECONOMIC BURDEN OF OBESITY

Eleven years ago, two prominent public health experts wrote that obesity is second only to smoking as the leading cause of preventable death in the United States (McGinnis and Foege, 1993). Since then, the percentage of Kansans who are obese<sup>1</sup> has increased by approximately 75 percent. Current projections suggest that obesity will overtake smoking as the leading cause of preventable death by 2005 (Mokdad, Marks, Stroup, and Gerberding, 2004).

The U.S. Surgeon General has called obesity a public health concern of epidemic proportions (U.S. Department of Health and Human Services, 2001). Obesity increases one's risk for many diseases, including heart disease, hypertension, diabetes, gallbladder disease, arthritis and some forms of cancer. Obese, non-smoking females at or after age 40 have a life expectancy that is about 7.1 years shorter than non-obese women. The life expectancy of non-smoking, obese males in the same age cohort is cut by 5.8 years<sup>2</sup> (Peeters, Barendregt, Willekens, et al., 2003). Obesity is also dangerous for younger adults. Severely obese (a BMI over 45) white men age 20 to 30 years live about 13 years less than they would be expected to live, and severely obese white women can expect to live eight fewer years (Fontaine, Redden, Wang, et al., 2003). (For example, a BMI of 45 would equal a weight of 262 pounds for a person who is 5-feet, 4-inches tall.) Being overweight or obese also affects the health of generations unborn: a recent study showed that compared to normal-weight women, those who were obese or overweight before pregnancy faced double the risk of having babies with heart defects and multiple birth defects (Watkins, 2003).

Ultimately, the cost of obesity to Americans is measured in chronic disease and death, but we also need to be aware of the role obesity plays in the growth of medical expenditures. One study (Sturm, 2002) estimated that non-elderly obese adults have 36 percent higher average medical expenditures and 77 percent greater average medication costs than those of normal weight. A recent study estimated obesity-attributable medical expenses at the state level, making separate

---

<sup>1</sup> Obesity is usually measured by body mass index (BMI). BMI is calculated by the following formula:  $BMI = [(weight \text{ in pounds} / height \text{ in inches}) / height \text{ in inches}] \times 703$ . A person with a BMI over 30.0 is considered "obese." A person with a BMI of greater than 25.0 but less than 30.0 is considered "overweight." Because muscle weighs more than fat, some who fall into this category may be "overweight," but are not considered "over fat" regardless of BMI. BMI is used to monitor the population-at-large to detect health risks.

<sup>2</sup> These life expectancies were calculated using data from the Framingham Heart Study, which followed patients from 1948 to 1990.



estimates for Medicare and Medicaid (Finkelstein, Fiebelkorn and Wang, 2004). Approximately one-half of all obesity-related medical expenditures are attributable to Medicare and Medicaid patients. This is so because the prevalence of obesity is higher for Medicare and Medicaid enrollees than the general public, i.e., higher rates of obesity are associated with greater age and lower income. Table 1 presents self-reported obesity prevalence data for Kansas and the United States for the period 1998–2000. The prevalence estimate of obesity in Kansas is slightly below the U.S. average.

**Table 1**  
**Adult Obesity Prevalence (BMI  $\geq$ 30), 1998–2000**

	Kansas	United States
Total population	19.6%	20.0%
Medicare population	19.8%	20.7%
Medicaid population	28.4%	29.6%

*Source: Finkelstein, Fiebelkorn and Wang, 2004*

Approximately six percent of total adult medical expenditures in the United States are attributable to obesity. Obesity accounts for approximately seven percent of Medicare expenditures and eleven percent of Medicaid expenditures for adults. The financial burden of obesity on states varies. Table 2 presents an estimate in 2003 dollars of annual obesity-attributable medical expenditures for Kansas and the United States. When people are asked their weight, they often under-report their true weight, therefore, these prevalence and expenditure estimates may be conservative.

Medicaid spending on obesity-related illnesses is approximately 22 percent of all obesity-related medical expenditures in Kansas, an estimate substantially lower than the national average (Finkelstein, Fiebelkorn and Wang, 2004). This estimate was made by pooling three years of Kansas-specific data. Even using this technique to increase the sample size, there were fewer than 20 observations in the Kansas obese Medicaid sample. With such a small sample, there is likely to be substantial variation around this estimate. Given the combination of under-reporting weight and the estimation error that may have resulted due to sample size, the estimate of obesity-attributed Medicaid expenditures in Kansas may be low.

**Table 2**  
**Estimated Adult Obesity-attributed Medical Expenditures,**  
**1998–2000 (millions of dollars)**

	Kansas		United States	
	Dollars	% of Total	Dollars	% of Total
Total population	\$657	100	\$75,051	100
Medicare population	\$138	21	\$17,701	24
Medicaid population	\$143	22	\$21,329	28

*Source: Finkelstein, Fiebelkorn and Wang, 2004*

The future costs related to obesity for Medicare and Medicaid can be expected to rise substantially. Researchers from the Rand Corporation examined data from 36,000 households from 1984 to 1996 and found increases in the rate of disability<sup>3</sup> of 54 percent among people in their 30s, 31 percent among people in their 40s, and 13 percent among people in their 50s (Lakdawalla, Bhattacharya, and Goldman, 2004). Two obesity-related conditions, diabetes and musculoskeletal problems such as chronic back pain, are common causes of disability among the younger (age 30 to 50) groups. The authors predicted that the rise in disability among younger people could lead to future nursing home populations that are 10 to 25 percent larger and Medicare expenditures that are 10 to 15 percent higher than they would have been without the increase in disability. Because state Medicaid programs pay a substantial proportion of nursing home cost, the obesity-related costs to the program can be expected to rise sharply (Hellmich, 2004).

On September 16, 2003, U.S. Health and Human Services Secretary Tommy Thompson released a report identifying the economic toll that preventable disease takes on business. The report found the following:

- Obesity-related health problems cost U.S. businesses an estimated \$13 billion in 1994, including about \$8 billion in health insurance costs, \$2.4 billion for sick leave, \$1.8 billion for life insurance, and nearly \$1 billion for disability insurance.
- Average annual health expenditures for people with diabetes are about \$13,243 per person, compared to \$2,650 per person without diabetes. Approximately 80 percent of people with diabetes are overweight or obese.

<sup>3</sup> People were considered “disabled” if they could not perform activities of daily living, such as dressing themselves, or if they had limited ability to perform routines tasks such as shopping.

The effect of chronic, preventable diseases caused by obesity on the profitability, productivity and competitiveness of U.S. businesses is great. As large as Secretary Thompson's estimates are, they are likely understated. Note that the cost estimates in Secretary Thompson's report are drawn from data that are almost a decade old. Between that time and the present, the number of overweight and obese people has grown greatly *at the same time* that the costs of medical services and health insurance increased at startling rates. Not only is the number of overweight and obese people in the workforce greater today than in 1994, the cost to treat each one is greater. These two forces working in tandem compound the cost of obesity to American businesses.

Some of the rewards of weight loss to individuals and society are immediate. In the short term, weight loss as modest as 5 to 15 percent of excess total body weight reduces risk factors for cardiovascular disease and diabetes. Lower blood pressure and blood sugar and improved lipid levels accompany weight loss. Reductions in risk and improvements in functional status should translate into better health and fewer medical expenditures. In order to realize this savings, however, it is necessary not only for the currently obese population to lose weight, but for the dramatic increase in the incidence (i.e., new cases) of obesity to fall sharply. One obesity expert has likened weight-loss in the current environment to walking backwards on a moving walkway. Unless one walks faster than the walkway is moving, one remains in the same place or loses ground. Only when the walkway slows (i.e., the rates of obesity growth decline) is it possible to gain ground in the opposite direction (Rulis, 2004).

## CAUSES OF OBESITY

Obesity is caused by many factors working in concert. An individual's weight is determined by a combination of genetic, metabolic, behavioral, environmental, cultural, and socioeconomic influences. In short, obesity results when an individual consumes more calories in the form of food and drink than his or her body can efficiently expend. Typically (but not exclusively), obesity is caused by excessive caloric intake, inadequate physical activity or both. Behavioral and environmental factors are large contributors to obesity and offer the greatest opportunity for treatment and prevention.

### Poor Nutrition

In 1997, the average American consumed 15 percent more calories per day than in 1984. Several environmental and social changes have helped fuel greater caloric consumption, such as greater reliance on meals prepared away from home for working families; “super-sizing” of food portions by restaurants and food stores; availability of inexpensive foods high in sugar and fat; and poor availability of fresh fruits and vegetables in some communities and neighborhoods.

Throughout much of human development, we have lived with food scarcity. As a result, humans are predisposed to eat whenever food is available. For most Americans today, food is not merely available, it is reliably abundant. And yet many of us act as if it were not, snacking at work and during recreation in addition to regular meals. Food, however, is not available to all Americans when they want it. Each year in Kansas, approximately 105,000 households struggle to obtain enough food to eat, and 38,000 households have at least one member who goes hungry (LaClair and Berry, 2003). Though it may seem counter-intuitive, food insecurity may actually promote obesity. One study described a phenomenon it called the food-stamp cycle: “overeating by food-insecure families when food is plentiful, i.e., when food stamps or money for food is available, followed by a short period of involuntary food restriction, followed by overeating, could be a pattern that results in gradual weight gain over time” (Townsend, Peerson, Love, et al., 2001).

Another factor in the food insecurity-obesity linkage is the types of foods consumed by low-income people. Energy dense foods composed of refined grains, added sugars and fats (for

example, pasta, snack foods and soft drinks) tend to be less expensive than lean meats, fish, fruits and fresh vegetables. “Prices and incomes affect food choices, dietary habits, and diet quality,” (Drewnowski, and Specter, 2004). Energy dense foods also tend to be more readily available than other foods in some inner-city and rural areas.

### **Lack of Physical Activity**

Consuming larger portions of high-fat, high-calorie foods without a corresponding increase in physical activity to burn away the extra calories results in weight gain. Americans are becoming less physically active: according to the Centers for Disease Control and Prevention (CDC) three in ten adults get too little exercise and four in ten get no exercise at all.

Sedentary lifestyles are perpetuated by factors such as urban sprawl, an automobile-dominated culture, television, computers, fear of crime, lack of leisure time for recreation and long commutes to work and school. As a result, most adults and children fail to achieve a minimum of either 20 minutes of strenuous activity three days per week or 30 minutes of moderate activity five days per week, as recommended by the U.S. Department of Agriculture. While some might consider the lack of physical activity purely a personal choice, there is also an environmental component. Walking, a primary form of physical activity in most cultures, is difficult in many urban and some rural settings:

A common denominator of modern sprawling communities is that nothing is within easy walking distance of anything else. Houses are far from any services, stores, or businesses; wide, high-speed roads are perceived as dangerous and unpleasant for walking; and businesses are surrounded by vast parking lots (McCann and Ewing, 2003).

The effect of physical activity on reducing obesity is clear, but regular physical activity has many more benefits. It is associated with enhanced health and reduced risk of all-cause mortality. Regular physical activity improves aerobic (cardio-respiratory) capacity, muscular strength, body agility and coordination, and metabolic functioning, exemplified by improvements in bone density, lipid profiles, insulin levels, and immune function (CDC Task Force on Community Preventive Services, 2002). In older people, exercise

promotes greater strength, agility, and coordination, which improves balance and helps to prevent falls and bone fractures, a major cause of disability in older adults.

## OBESITY IN CHILDREN

A 2003 study found that, despite many favorable indicators of child health, American children's *overall health* has declined steadily since 1975. Most of the decline can be attributed to obesity (Land, 2003). According to the Child Well-Being Index, children's overall health improved slightly between 1975 and 1991, and then began a steady decline. Between 1980 and 2002, the proportion of children ages 6 to 19 who were obese tripled from five percent to 15 percent. In addition, 15 percent of children ages 6 to 19 who are not currently overweight are at risk of becoming obese (Ogden, Flegal, Carroll, and Johnson, 2002). Table 3 shows the prevalence of children who are overweight<sup>4</sup> at three time periods for two age groups of children.

---

**Table 3**  
**Prevalence of Overweight Children**  
**(95th percentile of body mass index)**

---

<b>Years</b>	<b>Ages 6 to 11</b>	<b>Ages 12 to 19</b>
1999 to 2000	15.3%	15.5%
1988 to 1994	11.0%	11.0%
1976 to 1980	7.0%	5.0%

---

*Source: CDC; American Obesity Association, 2002*

The causes of child and adolescent obesity mirror those of the adult population. They include lack of regular exercise; high frequency of television watching and computer usage; low family income; over-consumption of high-calorie foods; lack of recreational facilities; and over-exposure to advertising that promotes high calorie foods. Genetics also plays a role: children of obese or overweight parents have a greater risk of becoming obese. Overweight children do not necessarily grow up to be overweight adults, but the odds are not in their favor. Seventy percent of overweight children 10 to 13 years of age will be overweight or obese as adults (Squires, 1998), and overweight children who become obese as adults tend to be severely so (Dietz, 2004).

---

<sup>4</sup> CDC avoids using the word "obesity" for children and adolescents. Calculating body mass index (BMI) is the first step in identifying children who are overweight. CDC uses cutoff criteria based on the 2000 CDC BMI-for-age-growth charts for the United States. Based on current recommendations of expert committees, children with BMI values at or above the 95th percentile of the sex-specific BMI growth charts are categorized as overweight.

A primary health risk for obese children is the onset of type 2 diabetes. Until recently only one to two percent of children contracted type 2 diabetes. The condition was so rare among children that it was referred to as “adult-onset diabetes.” Recent reports indicate that as many as 8 percent to 45 percent of newly diagnosed cases of diabetes in children are for type 2 diabetes (American Diabetes Association, 2000). (The large variation in reported percentages occurs because of ethnic and racial difference in the populations studied and sampling strategies.) Virtually all children diagnosed with type 2 diabetes are overweight or obese. Most commonly, children diagnosed with type 2 diabetes are over the age of ten and are in middle to late puberty, however, some cases have been diagnosed in children as young as six. Some researchers suggest that because of the novelty of type 2 diabetes in children, up to 24 percent of children having type 2 diabetes are misdiagnosed as having type 1.

The chronic complications of type 2 diabetes include kidney failure, blindness, heart attacks and limb amputations. Prior to the increased incidence of type 2 diabetes in children, type 2 diabetes had been a disease diagnosed most commonly in people over 50. The complications unfolded over 10 to 20 years as aging adults learned to live with their diabetes. The early onset of type 2 diabetes in children and adolescents presents a shocking vision of the future in which young adults in their 20s and 30s fall victim to blindness, amputations and other causes of premature disability. Greater longevity among the elderly and the aging of the baby-boom generation will combine to place strains on the long-term care system. This new population of young adults disabled by diabetes complications will be added to the demand for services causing an even greater financial burden on Medicare and Medicaid (Navitsky, 2001 presentation; American Diabetes Association, 2000; Squires, 1998).

Many parents under-estimate the health risks of excessive weight to their children. When asked what they believe to be the greatest risk to their children’s long-term health and quality of life, only 5.6 percent said “being overweight or obese” (American Obesity Association, 2003). Many parents have difficulty establishing and maintaining behaviors in their children that are associated with obesity prevention. This is especially true when parents themselves are overweight or obese and patterns of behavior are imbedded in the culture of the family. Since children’s nutritional habits



and physical activity behaviors are formed at home and in school, these two institutions must work in concert to prevent obesity in children.

## PUBLIC OPINION AND POLICY

Given the magnitude of the problem, why have policymakers been slow to act in adopting policies to address obesity? The answer is complicated. Because of the multi-factorial nature of obesity, policy solutions are not immediately evident. Experts cannot say conclusively what happened around 1985 to cause the spike in obesity prevalence (Hill and Peters, 2001).<sup>5</sup> Most of the interventions that are being implemented, such as mandating health insurance coverage for obesity treatment and prevention, have not been fully evaluated. Although the media has taken notice of the obesity epidemic—especially since the Surgeon General’s call to action in late 2001—much of the reporting focuses on the individual consequences of obesity and “designer” diets rather than on policy implications. Finally, because recognition of the obesity epidemic is relatively new, only now are the health and economic consequences being felt and studied (Oliver and Lee, 2002).

### Public Opinion

Successful policies depend in large part on the attitudes and behaviors of the public. Public opinion influences the saliency of issues and then supports or rejects policies once they are passed into law. Therefore, where the American public stands on obesity-related questions will substantially influence policy. Our review of the literature uncovered two nationwide public opinion polls on obesity. The first, conducted by Oliver and Lee (2002), collected data by a telephone survey in April and May of 2001. The researchers sought to answer two key questions: 1) what are Americans’ attitudes about obesity and 2) what determines support for obesity policies? In short, they found:

In regard to the first question, we find that most Americans are still not concerned with obesity, are less likely to support obesity-related policies, such as taxing snack foods, and do not approve of treating obesity as any other physical disability. Most Americans continue to understand obesity as a case of individual moral failure

---

<sup>5</sup> Two economic explanations have been offered. The first suggests that technological change has given rise to the growth in obesity by stimulating intake of calories (i.e., lowering the cost and availability of food) at the same time as discouraging spending these calories on physical activity (i.e., the growth of labor-saving devices). This theory suggests that, in the long run, obesity is self-limiting (Philipson and Posner, 1999). The other suggests that innovations in food technology and distribution have lowered the time cost of food production (as well as the prices of food), stimulating both consumption of food generally (eating at more times throughout the day), and consumption of specific foods, which may be, on balance, less healthful. (Cutler, Glaeser and Shapiro, 2003).

rather than see it as the result of the food environment or genetics. In answer to the second question, we find that, contrary to conventional models of public opinion, individual partisanship, ideology, or demographic traits are not very good determinants of public attitudes on obesity (Oliver and Lee, p. 3).

If obesity is viewed as the result of individual behavior rather than genetics or the environment, there will be little support for public policies that target obesity treatment and prevention, especially if those policies come at the expense of the general population. To increase support for obesity-related activities, it is necessary first to change public opinion in such a way as to improve the public's understanding of the collective causes and consequences of obesity. Attitudes about obesity at the time of this poll were decidedly apolitical. It is not known whether the issue will remain free of ideology.

The second study surveyed 1,002 Americans age 18 and older May 28 through June 1, 2003 (Lake, Snell, Perry and Associates, 2003). This survey found:

- Most Americans acknowledge that obesity is a serious health concern and know that obesity increases the risk of high blood pressure, heart disease and diabetes.
- Americans are ambivalent about the role that government should play in fighting obesity. Most support improving awareness through media campaigns. Six in ten support requiring restaurants to list nutritional information on their menus. However, the majority oppose special taxes on junk food.
- Most Americans favor government involvement in fighting childhood obesity. Large majorities support healthier school lunches, more physical education, and efforts to educate students and parents about the importance of exercise and healthy eating. Three quarters say they would support measures like these even if it meant increasing their taxes.

In the two years between the two surveys, a slight shift occurred toward favoring government intervention in certain circumstances. However, answers to the underlying question did not move sufficiently to create a groundswell of enthusiasm for government interaction. In response to the question "Some people say obesity is a private issue people need to deal with on their own. Others

say it is a public health issue that society needs to help solve. Which comes close to how you feel?” 48 percent said obesity was “a private issue people need to deal with on their own” and 47 percent said “a public health issue that society needs to help solve.” Only five percent did not know or had no opinion.

## Public Policy

Policymakers—and public health leaders—face the following dilemma: obesity will consume increasingly large amounts of money and harm the population’s health, but population-level interventions have not been tested for their effectiveness, and even if they were, substantial parts of the voting public may reject the interventions as too intrusive. In his *Call to Action*, Surgeon General Satcher recognized this dilemma, and called for commitment to five overarching principles:

- Promote the recognition of overweight and obesity as major public health problems.
- Assist Americans in balancing healthful eating with regular physical activity to achieve and maintain a healthy or healthier body weight.
- Identify effective and culturally appropriate interventions to prevent and treat overweight and obesity.
- Encourage environmental changes that help prevent overweight and obesity.
- Develop and enhance public-private partnerships to help implement this vision (U.S. Department of Health and Human Services, 2001, p. v).

Implicitly, these principles declare what we know about obesity: it is a health hazard; it is prevented by good nutrition and physical activity; environment plays a role in obesity and obesity prevention; and effective actions to combat obesity must take place at various levels. But they also acknowledge what we do not know about obesity: which interventions work best. The five principles were incorporated into a framework for action called CARE: Communication, Action, Research, and Evaluation. Surgeon General Satcher described each of the components of CARE:

- **Communications:** Provision of information and tools to motivate and empower decision-makers at the government, organizational, community, family, and individual levels who will create changes in the prevention and prevalence of overweight and obesity.

- **Action:** Interventions and activities that assist decision-makers in preventing and decreasing overweight and obesity, individually and collectively.
- **Research and Evaluation:** Investigations to better understand the causes of obesity and overweight, to assess the effectiveness of interventions, and to develop new communication and action strategies.

Policymakers interested in obesity have several options available to them, including communicating the dangers of obesity to the general public, experimenting with and evaluating interventions, or delaying action until proven interventions are documented. The latter course may seem more efficient, as replicating a program that has known benefits is cheaper and yields a faster return on investment. The choice between action and delay is not that clear, however. Even though more information is needed, we already know a great deal about obesity. Many of the proposed interventions will likely reduce the prevalence of obesity. The search for interventions is not so much a search for ones that work, but for ones that work best. Therefore, delay in implementing interventions comes with opportunity costs: even less effective interventions might prevent some people from becoming obese and encourage others to lose weight. These outcomes may save future expenditures. The cumulative savings of admittedly less effective interventions implemented today may be greater than those of a more effective intervention implemented tomorrow.

## POLICY OPTIONS

Between 1999 and 2003, thirty state legislatures adopted policies that either target obesity directly or attempt to increase physical activity.<sup>6</sup> Excluding tax-related bills,<sup>7</sup> we identified 79 separate policy initiatives passed by state legislatures during the period. The policy interventions implemented to date to reduce the prevalence of obesity in the United States can be grouped into eight categories: 1) commemorative or advisory resolutions; 2) advisory commissions and studies; 3) insurance regulation, 4) school food programs; 5) nutrition education; 6) physical education and physical activity of children; 7) adult physical activity; and 8) other policies. Three of the eight deal primarily with children—school food programs, nutrition education, and physical education, but children also benefit from the other five policy interventions.

Table 4 lists the number of obesity-related bills passed in the five years, 1999–2003. Since the Surgeon General’s call to action in 2001, the number of obesity-related laws has increased substantially. Sixty-three percent of the bills passed during the five-year period related to obesity were passed in 2002 and 2003. The greatest number (n=22) of bills passed had to do with improving school-based physical education. Approximately 20 percent (n=16) of all bills passed instructed the state department of health or a newly created commission to study the topic of obesity or some aspect of it and to make recommendations to the legislature. The third most frequent state action (n=13) was the passage of resolutions encouraging citizens to lose weight and become more active, urging state agencies to undertake obesity-related programming, or proclaiming an obesity prevention-related day, week or month. Fewer bills targeted general physical activity and school food programs. Insurance regulations, generally mandating that surgical procedures endorsed by the National Institutes of Health for the treatment of morbid obesity be offered, were passed in three states.

---

<sup>6</sup> An explanation of the method used to gather this data may be found in the Appendix.

<sup>7</sup> Tax-related bills were not included in this count, because their intent was not always clear. Most of the tax laws were amendments to the state tax code. Tax rates on food vary greatly from state to state. For example some place sales tax on food prepared and/or consumed away from home and sweetened beverages at a higher rates than sales tax on other foods. Others do not tax food purchases of any sort, or exclude grocery store purchases, but not restaurant purchases. The justification for increasing tax rates on certain food items or adding food items to the taxable category was not stated in most cases. None of the tax revenues from these sources were earmarked for obesity programs or programs to enhance physical activity.

In the sections below, each of the seven specific legislative intervention strategies is defined. Based on a Kansas Health Institute research project that is in process, we present information on when and where these legislative actions were adopted. Following the explanation of the specific categories is a group called “other policies,” which lists legislation that did not fit the other categories. While many bills were introduced, only legislation that passed is included in this study.

**Table 4**  
**Number of Obesity-related Bills Passed 1999–2003,**  
**by Category**

Category	1999	2000	2001	2002	2003	Total
Commemorative or advisory resolutions	3	0	1	4	5	13
Advisory commissions and studies	3	0	5	3	5	16
Insurance regulation	0	1	1	0	1	3
School food programs	0	0	1	1	6	8
Nutrition education	0	0	0	3	1	4
Physical education/children’s physical activity	2	1	5	8	6	22
Adult physical activity	0	0	3	4	1	8
Other policies	1	0	2	1	1	5
<b>Total</b>	<b>8</b>	<b>2</b>	<b>17</b>	<b>24</b>	<b>26</b>	<b>79</b>

*Source: Kansas Health Institute, 2004*

### **Commemorative or Advisory Resolutions**

Legislative resolutions “are used to express the formal determination or sentiment of both houses of the legislature” (Kansas Legislative Research Department, 1998). In some cases, resolutions are used to encourage specific action, both within the legislature, for example, the Colorado joint resolution calling for members of the General Assembly to participate in the “Colorado on the Move” program. In other cases resolutions urge action among the citizenry, such as in Florida, where a resolution urged increased education of the citizens of the state regarding awareness, prevention and treatment of obesity as a major health concern. Resolutions also proclaim the beginning of new programs (Nebraska’s Commencement of Pick Your Path to Health) and recognition of new observances (California Fitness Month, Florida’s Child Nutrition Day). While not legally enforceable, resolutions offer legislatures a way to help build a constituency for future policies.

The states that have passed resolutions relative to obesity and physical activity are Arkansas, California, Colorado, Florida, Idaho, Montana, Nebraska and Rhode Island.

### **Advisory Commissions and Studies**

The second most common legislative action pertaining to obesity has been commissioning studies and establishing task forces to assess the extent of the obesity epidemic and to suggest policies and programs for future consideration. Like resolutions, legislation calling for policy analysis draws attention to the issue of obesity and helps clarify its dimension in a particular state. The requested analysis can be broad in nature, for example, several states called for a general study on obesity. Or requests for studies can be narrow, for example, Texas required interim study on nutrition and health in public schools; Georgia called for a study on physical activity in Georgia schools; Mississippi asked for a study of tax incentives for worksites that promote activities to reduce obesity. Some legislatures, Tennessee, Alabama and Illinois, for example, assign the policy analysis to the state department of health. But several others, including Louisiana, Maine, Oklahoma and Mississippi, create special commissions, councils, task forces or committees to study the issue. One such commission, the Mississippi Council on Obesity Prevention and Management, created in 2001, had its charter extended until July 1, 2006, and the Louisiana Council on Obesity was extended indefinitely.

To date, 13 states—Alabama, Georgia, Hawaii, Illinois, Louisiana, Maine, Mississippi, New Mexico, New York, Oklahoma, Tennessee and Texas—have called for studies. Some of the legislatures that received obesity studies and recommendations have not passed subsequent obesity-related legislation. Others have used their reports as springboards to future legislation.

### **Insurance Regulation**

Is obesity a disease? Those who believe it is argue that new scientific evidence clearly establishes that obesity is a discrete medical condition that independently affects health. If obesity were generally recognized as a disease, insurance companies could be forced to cover millions of Americans who need treatment for weight problems, and recognition could also spur approval of new diet drugs and other therapeutic technologies. Opponents say that obesity is a risk factor for disease, like smoking or high cholesterol, and not a disease in itself. The two largest public health



insurance programs, Medicare and Medicaid, are currently examining this issue. Since many insurers follow the lead of Medicare and Medicaid in coverage and financing policies, the decision of the Centers for Medicare and Medicaid Services (CMS) will greatly influence coverage for services related to obesity. CMS commissioned a study from the Agency for Healthcare Research and Quality (AHRQ) on whether to classify obesity as a disease and, if so, what types of treatments have been demonstrated effective. AHRQ delivered its report to CMS in September 2003, but no decision has been reached yet by CMS (Stein, 2003).

Three states, Indiana, Maryland and Virginia, have mandated insurers to offer coverage for gastric bypass surgery for morbid obesity in line with clinical guidelines recognized by the National Institutes of Health (NIH).

### **School Food Programs and Policies**

During the school year, most elementary school children consume one of their daily meals at school, and some eat two of their meals at school (breakfast and lunch). Schools, therefore, have become targets for youth obesity prevention. Activities center on providing nutritious meals and restricting the sale and consumption of sweetened, usually carbonated, beverages and snack foods, typically sold in vending machines.

Policies affecting foods sold in school vending machines—sometimes referred to as “competitive foods”—vary depending on grade level. Research suggests that good eating habits developed early in life carry over as children age. Accordingly, most of the legislation that has passed relative to food in schools bans or places restrictions on the availability and content of vending machines in elementary schools. In Arkansas, access to vending machines in middle schools is also restricted, and in California carbonated beverage vending machine sales in middle schools are scheduled to cease in 2005. Starting in 2007, California will prohibit carbonated beverage sales in high schools.

Because most schools are governed by local school boards, most state policy either encourages school boards and parents to take a more active role in assuring that nutritious food is made available in schools, or removes existing barriers to their ability to do so. Mississippi allows school

boards to establish local school health and physical education advisory councils to ensure that local community values are represented in health and physical education classes. Presumably, these advisory councils will provide guidance about nutrition education and the foods made available at school. In California, schools are prohibited from contracting for the advertising or sale of carbonated beverages unless a policy is adopted after a public hearing.

The U.S. Department of Agriculture makes recommendations for school meal nutritional content, but many independent school districts do not comply with the federal guidelines. Because this paper focuses exclusively on state legislative actions, these federal initiatives to improve nutrition and reduce childhood obesity will not be discussed here. The role of the federal government and school districts will be discussed in our subsequent paper.

In an effort to increase consumption of fruits and vegetables—five or more servings a day is recommended by the U.S. Department of Agriculture—California passed two bills. One bill encourages schools and child development programs (i.e., pre-schools and childcare centers) to provide fresh fruits and vegetables to students on a daily basis. The other requests the “appropriate agencies” and the California School Food Service Association to collaborate on the development of a nutritionally sound optional vegetarian school lunch program.

## **Nutrition Education**

California has been the most active state in terms of passing legislation related to nutrition education. In 2002, California required the department of education to incorporate nutrition education into health curricula, and authorized nutrition education in after-school education enrichment programs. In 2003, the California Legislature specified that nutrition education may include related topics such as obesity and diabetes. Only one other state, Colorado, has passed nutrition education legislation. In 2002, the Colorado House of Representatives passed a resolution supporting effective school nutrition programs that promote long-term health.

## **Physical Education and Children’s Physical Activity**

Today’s youth are the most inactive generation in history. In part, this is caused by the reduction or elimination of school physical education programs. While only Illinois requires daily

physical education for students in grades K to 12, legislation related to physical education in schools and increases in physical activity of children was the most common category of obesity-related legislation passed between 1999 and 2003. States vary in the ability of their legislatures to mandate school curricula. In some states, power to set school curricula devolves to local school districts. Even if state legislatures do have authority to set curricula, physical education can be crowded out to make way for standardized test preparation and reduced funding for “non-core” curriculum.

The legislation passed falls into five distinct categories:

- ***Legislation mandating expansion of physical education:*** Four states (Arkansas, Arizona, New Mexico and Texas) expanded school physical education (PE) programming. Two of the states specified the grades and the length of time for PE training. One allowed tobacco settlement funds to be used for after-school physical activity programs, and the other allocated money at the state level for school-based programs that promote child physical activity.
- ***Regulations to assure that schools comply with physical education requirements:*** Two states (Arkansas and California) require the state department of education to report the number of hours of physical education provided by school districts in compliance with state regulations. Texas requires school districts to make their PE policies available for public inspection (students are required by law to engage in at least 135 minutes of physical activity per week). Presumably, compliance with the law in Texas will be enforced by parents and other child advocates.
- ***Requirements that state agencies work together to establish physical education and physical activity guidelines and standards:*** Laws enacted in California, Louisiana, Mississippi, New Jersey and New Mexico direct a state agency (usually the department of education) to work internally and with others to provide model PE programming, physical activity standards, and assistance to teachers in implementing quality PE programs.
- ***Planning for infrastructure to promote physical activity:*** Legislative activity focusing on city design and transportation planning aims to increase physical activity by removing barriers and creating incentives. Florida, Delaware and New

Mexico created programs to increase construction of and make safer pedestrian walkways and bicycle paths to encourage children to walk or bike to school. These programs administered by the state department of transportation go by names such as “Safe Paths to School” or “Safe Routes to School.” Oregon requires city and county governments to work with school districts to identify barriers and hazards to children walking or biking to school. Florida also passed a “small school” law. In theory, small schools will serve a smaller area, thus encouraging children to walk or bike to school.

- ***Resolutions encouraging local boards and others to promote physical activity in schools:*** Between 2001 and 2003, five states passed resolutions urging state educators to take action: California, Hawaii, Illinois, Indiana, and Nevada. These resolutions were not reported in the category of “resolutions” above, because they all deal with improving PE programming or expanding physical activity in schools. In each case, schools or the state department of education are encouraged to recognize the relationship of physical activity and physical fitness to overall child well-being.

## **Adult Physical Activity**

In recognition that public development and land use policies have contributed to obesity among citizens, several states have sought to reduce the problem through policy. Virginia called upon its transportation board to develop and update a statewide pedestrian policy; Washington State required that all future plans for the state’s transportation system include plans for increased access and safety for bicycles and pedestrians on common roadways. Arkansas developed a program called “Great Strides” which provided funding to rural communities to establish one-half to one-mile “walking parks.” Virginia attempted to remove barriers or perceived barriers from the construction of infrastructure improvements. Its legislature passed a bill stating that funding and undertaking a pedestrian and/or bicycle project apart from a highway project is not prohibited.

Maryland is helping to pay for infrastructure to promote physical activity by funding 25 percent of the cost of a sidewalk or bike path constructed in a “designated priority funding area.” In Arkansas, the legislature prompted state employees to set a good example for other workers in the

state, through a House resolution requesting the directors of all state agencies to design and implement physical activity programs as a regular part of the workday. California also signaled its interest in integrating health improvement activities into the workplace through creation of a Task Force on Youth and Workplace Wellness in 2001 to promote fitness and health in schools and workplaces.

### **Other Policies**

Five bills that were adopted between 1999 and 2003 relative to obesity and physical activity could not be easily assigned to one of the seven categories listed above. Among them were the establishment of a Childhood Obesity Prevention Program within a state department of health (New York); Establishment of a competitive grant program by the department of education to start or expand instructional school gardens (California); allowing physicians to prescribe a variety of drugs including some controlled substances for the purpose of weight reduction or to control obesity (Indiana); allocation of state money to fund public and professional education in regard to obesity and to provide anti-obesity drugs not covered by Medicaid to low-income persons (New Mexico); and the promulgation of a coordinated health plan to each school district designed to prevent obesity, cardiovascular disease, and type 2 diabetes in elementary school students (Texas).

## SUMMARY

Obesity is a clear and present danger to the public's health. It is a complex condition influenced by genetic, metabolic, behavioral, environmental, cultural, and socioeconomic factors. Some environments, such as schools, may unwittingly promote the consumption of empty calories by their competitive food policies. In other environments, such as inner-cities and isolated rural areas, there may be no food stores accessible that sell fresh fruits and vegetables. In still other environments, such as suburbs and rural areas, there may be no sidewalks, walking trails, or bike paths that encourage people to walk or bicycle instead of using their cars. The environment and some of the other factors that influence obesity can be altered positively by public policies that target the population as a whole rather than individuals. Legislatures in thirty-one states have recognized this fact and have begun to take action. The actions they have taken to date do not represent the full spectrum of possibilities. But they are a start.

This paper focused exclusively on obesity-related laws passed by state legislatures in the last five years. State legislation, however, is not the only avenue of public policy open to those who want to reduce the prevalence of obesity in Kansas. State government administrators, communities, school boards and employers around the nation also have focused their attention on population-based initiatives to limit and control the obesity epidemic. They will be the focus of the next paper in this project.

## REFERENCES

- American Diabetes Association. (2000). Type 2 Diabetes in Children and Adolescents. *Diabetes Care*, 23(3), 381–389.
- American Obesity Association. (2003). *Childhood Obesity: Prevention*. Retrieved January 15, 2003, from [www.obesity.org/subs/childhood/prevention.shtml](http://www.obesity.org/subs/childhood/prevention.shtml)
- CDC Taskforce on Community Preventive Services. (2002). Recommendations to Increase Physical Activity in Communities. *American Journal of Preventive Medicine*, 22(4S), 67–72.
- Cutler, D. M., Glaeser, E. L., & Shapiro, J. M. (2003). Why Have Americans Become More Obese? *Journal of Economic Perspectives*, 17(3), 93–118.
- Dietz, W. (2004, January 20). Presentation to Kansas House Health and Human Services Committee and Senate Public Health and Welfare Committee.
- Drewnowski, A., & Specter, S. E. (2004). Poverty and Obesity: The Role of Energy Density and Energy Costs. *American Journal of Clinical Nutrition*, 79, 6–16.
- Finkelstein, E. A., Fiebelkorn, I. C., & Wang, G. (2004). State-Level Estimates of Annual Medical Expenditures Attributable to Obesity. *Obesity Research*, 12(1), 18–24.
- Finkelstein, E. A., Fiebelkorn, I. C., & Wang, G. (2003). National Medical Spending Attributable to Overweight and Obesity: How Much, and Who is Paying? *Health Affairs Web Exclusive W3-219–226*. Compiled in *Health Affairs Web Exclusives, January-June 2003*, pp. W3-219–228.
- Fontaine, K. R., Redden, D. T., Wang, C., Westfall, A. O. & Allison, D. B. (2003). Years of Life Lost to Obesity. *Journal of the American Medical Association*, 289(2), 187–193.
- Hellmich, N. (2004, January 9). Study Ties Obesity to Increases in Diabetes. *USA Today*.
- Hill, J., & Peters, J. (2001). Environmental Contributions to the Obesity Epidemic. *Science*, 280, 1371–1382.
- LaClair, B., & Berry, M. (2003). *Hunger in the Heartland: Household Food Insecurity in Kansas, 1995 to 2000*. Brochure. Topeka, KS: Kansas Health Institute.
- Lakdawalla, D., Bhattacharya, J., & Goldman, D.P. (2004). Are the Young Becoming More Disabled? *Health Affairs*, 23(1), 168–176.
- Lake, Snell, Perry and Associates. (2003, June 11). *Obesity as a Public Health Issue: A Look at Solutions*. Presentation by David Blumenthal, Harvard Forums on Health, Interfaculty Program for Health Improvement. Harvard University.

- Land, K. (2003, June 6). *How Are Our Children Doing? Results from the Child Well-Being Index*. Presentation, Science and Policy Briefing, Federation of Behavioral, Psychological and Cognitive Sciences. Washington, D.C.
- Kansas Legislative Research Department. (1998). *Legislative Procedure in Kansas*. Topeka, KS.
- McCann, B. A., & Ewing, R. (2003). *Measuring the Health Effects of Sprawl: A National Analysis of Physical Activity, Obesity, and Chronic Disease*. Washington, D.C.: Smart Growth America.
- McGinnis, J. M., & Foege, W. H. (1993). Actual Causes of Death in the United States. *Journal of the American Medical Association*, 282(16), 1530–1538.
- Mokdad, A. H., Marks, J. S., Stroup, D. F., & Gerberding, J. L. (2004). Actual Cause of Death in the United States, 2000. *Journal of the American Medical Association*, 291(10), 1238–1245.
- Navitsky, J. (2001, April 30). *The Increasing Threat of Type II Diabetes in Obese Children and Adolescents*. Presentation, University of Connecticut Health Center.
- Ogden, C. L., Flegal, K. M., Carroll, M. D., & Johnson, C. L. (2002). Prevalence and Trends in Overweight Among U.S. Children and Adolescents. *Journal of the American Medical Association*, 288, 1728–1732.
- Oliver, J. E., & Lee, T. (2002). *Public Opinion and the Politics of America's Obesity Epidemic*. Kennedy School of Government Working Paper No. RWP02-017. Cambridge, MA: Harvard University.
- Peeters, A., Barendregt, J. J., Willekens, F., Makkenbach, J. P., Al Mamun, A., & Bonneux, L. (2003). Obesity in Adulthood and its Consequences for Life Expectancy: A life-Table Analysis. *Annals of Internal Medicine*, 138, 24–32.
- Philipson, T. J., & Posner, R. A. (1999). The Long-Run Growth in Obesity as a Function of Technological Change. NBER Working Paper No. 7423.
- Rulis, A. (2004, January 29). *Obesity: Strategies to Combat the Epidemic*. Presentation, National Health Policy Conference 2004. Washington, D.C.
- Squires, S. (1998, November 3). Obesity-Linked Diabetes Rising in Children. *The Washington Post*.
- Stein, R. (2003, November 10). Is Obesity a Disease? *The Washington Post*.
- Strum, R. (2002). The Effects of Obesity, Smoking, and Drinking on Medical Problems and Costs. *Health Affairs*, 21(2), 245–252.
- Townsend, M. S., Peerson, J., Love, B., Achterberg, C., & Murphy, S. P. (2001). Food Insecurity is Positively Related to Overweight in Women. *Journal of Nutrition*, 131(6), 1738–1745.



U.S. Department of Health and Human Services. (2001). *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General. Washington, DC: Government Printing Office.

Watkins, M. L., Rasmussen, S. A., Honein, M. A., Botto, L. D., & Moore, C. A. (2003). Maternal Obesity and Risk for Birth Defects. *Pediatrics*, 111(5 Part 2), 1152–1158.

## APPENDIX

### A Note on Methods

Our research design called for us to investigate the obesity-related policies passed by state legislatures during the five-year period between 1999 and 2003. Using standard interview protocols, we first conducted screening interviews with state legislative staff to identify obesity-related legislation passed in the state during the period. If legislation had not been passed, we terminated our exploration of the state. If legislation had been passed, we asked for the name and telephone number of a contact person in the agency responsible for implementing the policy. These state officials were interviewed using a standard interview protocol to obtain information about the passage and implementation (e.g., cost, scope, and timing) of the initiatives. We obtained engrossed bills from the states that had passed legislation. Where possible, we obtained documents, such as final reports, interim reports, and testimony, from the states that established commissions or study committees. These documents were analyzed for crosscutting themes and innovative programs.

## Obesity-related Legislation Passed by States, 1999 to 2003

State	Year Passed	Resolution Number or Statute Location	Description
<b>Commemorative or Advisory Resolutions</b>			
AR	1999	SCR 8	Recommends obesity treatment coverage in the Medicaid program; supports increased funding for school and community-based physical activity and nutrition programs, and for public education on the treatment and prevention of obesity.
FL	1999	SB 2734	Urges the increased education of citizens of the state with regard to the awareness, prevention, and treatment of obesity.
FL	1999	HR 9003	Declares "Child Nutrition Day."
CA	2001	SCR 5	Proclaims "California Fitness Day."
CA	2002	ACR 194	Proclaims "Physical Education and Sports Week" and "Physical Fitness and Sports Month"
CO	2002	HJR 02-1066	Proclaims "Shape Up Across Colorado Week."
NE	2002	LR287	Commencement of "Pick Your Path to Health" and "Focus on Total Fitness" campaign of the Department of Health and Human Services' Office of Women's Health. (5-yr Campaign)
RI	2002	SR2983	Calls attention to the issue of obesity and overweight in Rhode Islanders.
CA	2003	ACR70	Proclaims "YEAH!: Youth Eating & Acting Healthy!: Children's Fitness Week."
CO	2003	SJR03-005	Calls for members of General Assembly to participate in "Colorado on the Move."
CO	2003	SJR03-004	Encourages the people of Colorado to value their personal health by making lifestyle changes to prevent onset of chronic disease. Encourages schools to combat obesity by promoting a healthy diet and exercise. Encourages workplaces to participate in shaping health and well-being of workers.
ID	2003	HCR8	Designates January-March as Obesity Awareness months.
MT	2003	SJR2	Stresses crisis of child obesity & nutrition. Urges school districts to "offer nutritious food and beverage choices" and "encourage children to eat well and be physically active."
<b>Advisory Commissions and Studies</b>			
AL	1999	SJR27	Requests that the state Department of Health conduct studies to create public awareness of and control morbid obesity.
LA	1999	Chap 46 2611	Establishes the Council on Obesity Prevention and Management.
SC	1999	SCR252	Requests that the Department of Health and Environmental Control study the effect of obesity in adults and children.
GA	2001	SR252	Creates the Joint Study Committee on Physical Activity in Georgia schools.
HI	2001	SCR42	Allows the Department of Health and Education to examine the problem of childhood obesity and recommend strategies. Report to legislature (by 2002)
LA	2001	Chapter 616	Eliminates the "sunset" provision of the statute creating the Louisiana Council on Obesity.
MS	2001	Chapter 432	Creates the Mississippi Council on Obesity Prevention and Management Study; requires a report to legislature. Directs the council to study the feasibility of tax incentives for worksites that promote activities to reduce obesity in work force.

## Obesity-related Legislation Passed by States, 1999 to 2003 (continued)

State	Year Passed	Resolution Number or Statute Location	Description
OK	2001	Chapter 104	Creates task force on the promotion of children's health for the purpose of studying obesity and making recommendations to the Legislature.
NY	2002	Chapter 337	Creates the Obesity Prevention Act - Authorizes a study on obesity treatment and prevention programs.
NY	2002	S6725*	Creates the Interagency Council on Physical Activity, Nutrition and Health and a fund to finance its operations.
TN	2002	Chapter 658 of the Pub. Acts of 2002	Creates the Obesity Study and Prevention Act - Directs Department of Health to analyze the effectiveness of existing methods of treatments and prevention of obesity and to explore alternative methods.
IL	2003	Public Act 93-0060	Requires the Department of Public Health to study and report on the effectiveness, feasibility and reception of patients in existing and alternative obesity treatment programs.
ME	2003	Chapter 95	Establishes the Commission to Study Public Health and directs it to research and report on obesity and health costs related to obesity.
MS	2003	Chapter 484	Extends the charter for the Mississippi Council on Obesity, Prevention and Management to July 1, 2006.
NM	2003	SJM 95	Creates a task force to address the growing health problems of young people, including obesity and diabetes and to develop proposed legislation.
TX	2003	Chapter 1175	Required interim study on nutrition and health in public schools.
<b>Insurance Regulation</b>			
IN	2000	IC 27-8-14-1	Requires insurers to cover non-experimental surgical treatments for morbid obesity.
MD	2001	Chapter 493	Requires all insurers to provide coverage for gastric bypass surgery and other surgical methods recognized and approved by NIH to treat morbid obesity.
VA	2003	Chapter 0462	Requires all insurers to provide coverage for gastric bypass surgery and other surgical methods recognized and approved by NIH to treat morbid obesity.
<b>School Food Programs and Policies</b>			
CA	2001	SB19	Prohibits the sale of carbonated beverages in elementary and middle schools and places nutrition standards on foods sold to students at breaks and thru vending machines.
DE	2002	HCR37	Encourages participation in school breakfast and summer lunch program.
AR	2003	Act 1220	Creates the Child Health Advisory Committee to develop nutritional and physical activity standards, and to make recommendations on competitive foods sold through vending machines. Bans vending machines in elementary school starting in 2003-2004 school year; requires body mass index screening in schools.
CA	2003	Chapter 458	Prohibits school boards from entering into exclusive or non-exclusive contracts for advertising or the sale of carbonated beverages unless a policy is adopted after a public hearing.

\* This bill passed both houses but was vetoed by the governor.

## Obesity-related Legislation Passed by States, 1999 to 2003 (continued)

State	Year Passed	Resolution Number or Statute Location	Description
CA	2003	Chapter 62	Directs state agencies and the California school food service association to develop school lunch menu plans that provide optional vegetarian school lunches.
CA	2003	Chapter 415	Sets nutritional standards for food sold in and produced by public schools. Prohibits the sale of carbonated beverages in every elementary school campus beginning 2004. Sales would cease in middle schools 2005 and in high school 2007.
CA	2003	Chapter 879	Encourages schools and child development programs to provide fresh fruits and vegetables to students on a daily basis.
MS	2003	Chap 436	Allows schools boards to establish local school healthy/physical education advisory councils to ensure that local community values are conveyed to health and physical education classes.
<b>Nutrition Education</b>			
CA	2002	CA. Education Code 8990	Requires the Department of Education to incorporate nutrition education into health curriculum.
CA	2002	CA. Education Code 8482.3	Authorizes nutrition education to be provided as part of the educational enrichment component of an after school program.
CO	2002	HR1016	Supports effective school nutrition programs that promote long-term health, life-long learning and overall well-being of children.
CA	2003	Chapter 5505	Specifies that as part of a comprehensive health education program pupils may receive instruction on preventive health care on topics such as obesity and diabetes.
<b>Physical Education and Physical Activity of Children</b>			
NJ	1999	NJ Stat. Ann. 26:1A-37.6	Establishes New Jersey Council for Physical Fitness and Sports, which will assist the Department of Education to develop health, physical fitness and wellness programs for students.
NM	1999	NM Stat. Ann 6-4-10	Allows money from the tobacco settlement fund to be appropriated for public school programs including extracurricular and after-school programs designed to involve students in athletic activities.
IN	2000	HR35	Encourages the Department of Education and local school boards to provide regular fitness programs for all students.
AR	2001	AR Stat. Ann. 6-16-132	Mandates K-9 public schools to require no less than 1 hour/week of PE training and instruction which includes no less than 20 minutes of physical activity 3 times a week.
AZ	2001	Chapter 320 of the Public Acts of 2001	Appropriates \$150,000 over the next two years (FY2001-2003) to fund Department of Health Services for school-based programs for children's physical fitness activities.
IL	2001	HR333	Requests the State Superintendent of Education to determine if all school districts seeking physical education waivers comply with statutory requirements.
OR	2001	OR. Rev. Stat 195.115	Requires city and city governments to work with school districts to identify barriers and hazards to children walking or biking to and from school.

## Obesity-related Legislation Passed by States, 1999 to 2003 (continued)

State	Year Passed	Resolution Number or Statute Location	Description
<b>Physical Education and Physical Activity of Children (continued)</b>			
TX	2001	Chapter 907	Authorizes the State Board of Education to require K-6 school children participate in 30 minutes of daily physical activity.
CA	2002	CA. Education Code 60605.2	Directs the State Board of Education to adopt model content standards for physical education by 2004.
CA	2002	CA Education Code 33352	Requires the Department of Education to document the actual number of minutes of instruction in physical education provided by each school district to determine compliance with the law.
DE	2002	DE Code Ann. tit 17 1021	Authorizes the Department of Transportation to establish and administer a "Safe Routes to School" program using federal funds.
FL	2002	FL Stat. Ann 335.066	Establishes the "Safe Paths to Schools" program in the Department of Transportation to consider planning and construction of bicycle and pedestrian ways for children traveling from neighborhoods to schools, parks, greenways, and trail systems.
FL	2002	FL. Stat. Ann 235.2157	Creates the "Small Schools" law. All new schools must be designed for no more than 500 elementary, 700 middle and 900 high school students. Encourages children who will live close to school to walk and bike to school.
HI	2002	HCR11	Urges the Department of Education to encourage students – especially young girls and women – to increase their physical activity and to increase their calcium intake to reduce incidence of calcium-deficient disease.
MS	2002	MS Code Ann. 37-13-134	Recommends guidelines to school districts for physical education and fitness classes. Requires study of relationship between physical activity and classroom performance.
NM	2002	SJM 17	Requests that the State Department of Public Education work with the Department of Health and others to develop strategies to help teachers implement quality physical education curricula.
AR	2003	Act 1729	Requires each school district to report annual physical education compliance to Department of Education.
CA	2003	Chap 93	Recognizes that schools have an obligation to provide physical education to students and urges schools to comply with those obligations.
LA	2003	Act 814	Provides for the coordination of a health education curriculum by a physical education coordinator at the Department of Education
NM	2003	Chapter 148	Creates the "Safe Routes to School." program to increase and make safer a student's ability to walk or ride a bicycle to school.
NV	2003	SCR12	Encourages school administrators, teachers, and other education personnel involved in pre-K thru 12 to promote nutrition and physical fitness in schools.
TX	2003	Chapter 944	Requires school districts to make available for public inspection policies to ensure elementary students engage in at least 35 minutes of physical activity per week and whether the district has restricted students' access to vending machines.

## Obesity-related Legislation Passed by States, 1999 to 2003 (continued)

State	Year Passed	Resolution Number or Statute Location	Description
<b>Adult Physical Activity</b>			
AR	2001	AR State Ann 20-8-302	Creates the "Great Strides" program, which allocates funding for rural communities to establish _ mile to 1 mile walking parks
AR	2001	HR1054	Requests state agencies to design and implement physical activity programs as a regular part of the workday.
CA	2001	Chapter 111	Establishes CA Task Force on Youth and Workplace Wellness to promote fitness and health in schools and workplaces.
MD	2002	MD Transportation Code Ann 8-630	Provides for state funding of 25% of the cost a sidewalk or bike path constructed in a designated priority funding area.
VA	2002	VA Code 33-1-23.03:001	Requires the Commonwealth Transportation Board to prepare and update a statewide pedestrian policy.
VA	2002	VA. Code 331-223.2:5	Clarifies that funding and undertaking of a pedestrian and/or bicycle project apart from highway projects is not prohibited
WA	2002	Chapter 264 of the Public Auto of 2002	Holds that future plans for the state's transportation system will require increased access and safety for bicycles and pedestrians on common roadways.
CA	2003	Chapter 459	Requires that training of after school program staff includes physical fitness standards.
<b>Other Obesity Legislation</b>			
NM	1999	HB762 (appropriation)	Appropriates \$100,000 for SFY 2000 for public and professional education on the dangers of and treatments for obesity and \$50,000 for anti-obesity drugs not eligible for reimbursement under the Medicaid program for low-income persons in need of treatment for critical or chronic obesity.
IN	2001	SEA126	Allows physicians to prescribe for a patient any amphetamine, sympathomimeticamine drug, or compound designated as a schedule III or schedule IV controlled substance for the purpose of weight reduction or to control obesity under certain conditions.
TX	2001	Chapter 38 38.013	Directs the Department of Education to make available to each school district a coordinated health plan designed to prevent obesity, CV disease, and Type 2 diabetes in elementary school students.
CA	2002	CA Education Code 9000	Requires the Department of Education to make competition grants available for school districts to start or expand instructional school gardens and school garden salad bars with a compost program.
NY	2003	Chapter 604	Establishes the Childhood Obesity Prevention program within Department of Health.