INTRODUCTION

During the past 20 years, the United States has witnessed obesity levels reach epidemic proportions. Nationwide, more than 60 percent of adults and 15 percent of children and adolescents are overweight or obese. Poor nutrition and lack of physical activity have played a critical role in making obesity the second leading cause of death, surpassed only by tobacco. The economic costs of treating overweight and obese individuals in the United States are staggering and amount to more than $100 billion a year. Obesity rates in Pennsylvania have remained consistent with nationwide trends, with rate increases of 92 percent from 1990 to 2002. More than 60 percent of adults and 25 percent of children and adolescents are overweight or obese in Pennsylvania. The health consequences of obesity are devastating; in fact, the United States may potentially witness the first generation of children to not outlive their parents due to obesity-related health conditions such as type 2 diabetes and other related cardiovascular, psychosocial, and medical conditions. Obese and overweight adults are more likely to be diagnosed with diabetes, high blood pressure, high cholesterol, asthma, arthritis, and general poor health. The economic consequences are equally burdensome, with more than $4 billion in direct obesity-related medical expenditures every year in Pennsylvania.

Although obesity trends traverse gender, race, and ethnicity, disparities among these groups still exist. Women have a higher rate of obesity than men, and non-Hispanic Black women have the highest rate of obesity of all groups. Lower income populations also tend to have higher rates of obesity and being overweight than higher income populations. Specific efforts have been made to target minority and low-income populations through educational campaigns and research initiatives.

What Is Obesity?

Obesity and overweight are defined by the body mass index (BMI), which is the measurement of body fat compared to height and weight.

Adults 20 years or older are defined as severely obese with a BMI ≥ 40, obese with a BMI ≥ 30, and overweight with a BMI 25 ≥ 29.99.

Children and adolescents between 6 and 19 years old are defined as overweight with a BMI-for-age at or above the 95th percentile of the Centers for Disease Control and Prevention (CDC) growth charts and at-risk of becoming overweight with a BMI-for-age between the 85th and 95th percentiles.

Shifts in Federal Policy

Since 2001, federal policies on healthy living have focused on advocacy, education, and research. Several pieces of federal legislation treat obesity as a disease and enjoy bipartisan support. For instance, on December 8, 2003, President George W. Bush signed into law the Medicare Prescription Drug Improvement and Modernization Act (MMA) of 2003, which revised Medicare policy coverage to remove language stating that obesity is not an illness and to state that requests for obesity treatment would be reviewed for eligible coverage.

The following is a summary of obesity-related legislation introduced in Congress as of January 2005 for the 109th and 108th Congresses. The overwhelming majority of this legislation has been referred to committee and not yet put to a vote.

In the 109th Congress:

H.R.286 Medicaid Obesity Treatment Act of 2005 was introduced January 6, 2005, by Representative Edolphus Towns (D-N.Y.) to include Medicaid prescription drug coverage to treat obesity. This bill was referred to the House Committee on Energy and Commerce. Previous versions of this bill were introduced during the 107th and 108th Congresses.

H.R.161 Healthy People, Healthy Choices Act of 2005 was introduced January 4, 2005, by Representative Juanita Millender-McDonald (D-Calif.) to authorize the CDC director to conduct minority health programs. This bill was referred to the House Committee on Energy and Commerce. Previous versions of this bill were introduced in the 108th Congress.
In the 108th Congress:

**S.3009** National Food and Agricultural Science Act of 2004 was introduced in November 2004 by Senator Christopher Bond (R-Mo.) to establish a Division of Food and Agricultural Science within the National Science Foundation and authorize funding for improved nutritional research. This bill was referred to the Committee on Agriculture, Nutrition, and Forestry.

**S.2894** Prevention of Childhood Obesity Act was introduced in October 2004 by Senator Ted Kennedy (D-Mass.) to provide for the coordination of federal policies and activities to prevent childhood obesity. This bill was referred to the Committee on Health, Education, Labor, and Pensions.

**S.2558** HeLP (Healthy Lifestyles and Prevention) America Act was introduced in June 2004 by Senator Tom Harkin (D-Iowa) to focus the nation’s healthcare system on prevention, wellness, and self-care. This bill was referred to the Committee on Finance.

**S.2551** Childhood Obesity Reduction Act was introduced in June 2004 by Senator Bill Frist (R-Tenn.) to reward educational institutions for promoting innovative programs designed to reduce and prevent childhood obesity, promote increased physical activity, and improve nutritional choices. This bill was referred to the Committee on Health, Education, Labor, and Pensions. A related bill in the House is **H.R.4941**, the Childhood Obesity Reduction Act. It was introduced in July 2004 by Representative Kay Granger (R-Texas) and referred to the Subcommittee on Education Reform.

**S.2507** Child Nutrition and WIC Reauthorization Act of 2004 was introduced in June 2004 by Senator Thad Cochran (R-Miss.) to provide children with increased access to food and nutrition assistance, to simplify program operations and improve program management, and to re-authorize child nutrition programs. This bill was passed and became Public Law 108-279 in June 2004. A related bill in the House, **H.R.3873**, would amend the Richard B. Russell National School Lunch Act and the Child Nutrition Act of 1966 to provide children with access to food and nutrition assistance, to simplify program operations, to improve children’s nutritional health, and to restore the integrity of child nutrition programs. It was introduced in March 2004 by Representative Michael Castle (R-Del.).

**S.2399** Healthy Lifestyles Act of 2004 was introduced in May 2004 by Senator Peter Fitzgerald (R-Ill.) to establish and implement activities that increase physical activity in schools, work sites, and communities. This bill was referred to the Committee on Health, Education, Labor, and Pensions.

**S.2183** Early Attention to Nutrition Act of 2004 was introduced in March 2004 by Senator Jeff Bingaman (D-N.M.) to create team nutrition networks to promote the nutritional health of school children. This bill was referred to the Committee on Agriculture, Nutrition, and Forestry.

**S.2150** A bill to promote better health for young people through federal matching awards for physical education programs of excellence was introduced in March 2004 by Senator Bill Nelson (D-Fla.). This bill was referred to the Committee on Health, Education, Labor, and Pensions.

**S.2108** Menu Education and Labeling Act was introduced in February 2004 by Senator Tom Harkin (D-Iowa) to provide nutritional content information for restaurant and vending machine foods. This bill was referred to the Committee on Health, Education, Labor, and Pensions. A related bill in the House is **H.R. 3444**, the Menu Education and Labeling Act. It was introduced in November 2003 by Representative Rosa DeLauro (D-Conn.) and was referred to the Subcommittee on Health.

**S.1829** Better Eating for Better Living Act of 2003 was introduced in November 2003 by Senator Jeff Bingaman (D-N.M.) to improve the nutrition and health of children by amending the Richard B. Russell National School Lunch Act and Child Nutrition Act of 1966. This bill was referred to the Committee on Agriculture, Nutrition, and Forestry. A related bill in the House is **H.R.2987**, which would amend the Richard B. Russell National School Lunch Act to improve the nutrition of students served under child nutrition programs. It was introduced in July 2003 by Representative Lynn Woolsey (D-Calif.) and was referred to the Subcommittee on Education Reform.

**S.1428** Commonsense Consumption Act of 2003 was introduced in July 2003 by Senator Mitch McConnell (R-Ky.) to prohibit and dismiss civil actions against manufacturers, food vendors, or trade associations for any injury relating to food consumption such as weight gain, obesity, or other health-related conditions. This bill was referred to the Committee on the Judiciary Subcommittee on Administrative Oversight and the Courts. A related bill in the House is **H.R.339**, the Personal Responsibility in Food Consumption Act, which was introduced in January 2003 by Representative Ric Keller (R-Fla.), passed in the House, and placed on the Senate Legislative Calendar.

**S.1172** Improved Nutrition and Physical Activity (IMPACT) Act was introduced in June 2003 by Senator Bill Frist (R-Tenn.) to provide grants for increased physical activity, improved nutrition, and obesity prevention. This bill was referred to the Subcommittee on Health. A related bill in the House is **H.R.716**, the IMPACT Act. It was introduced in February 2003 by Representative Mary Bono (R-Calif.) and was referred to the Subcommittee on Health.
H.R.2227 Obesity Prevention Act was introduced in May 2003 by Representative Michael Castle (R-Del.) to support innovative school activities that reduce and prevent childhood obesity in school. This bill was referred to the Subcommittee on Education Reform.

H.R.1916 Diabetes Prevention Access and Care Act was introduced in May 2003 by Representative Diana DeGette (D-Colo.) to reduce health disparities and improve diabetes prevention and treatment for racial and ethnic minority groups. This bill was referred to the Subcommittee on Health.

H.R.1470 WISEWOMAN Expansion Act of 2003 was introduced in March 2003 by Representative Rosa DeLauro (D-Conn.) to provide grants to women for preventive health services and to reduce healthcare costs. This bill was referred to the Subcommittee on Health.

H.R.1022 Urban and Rural Disease Prevention and Health Promotion Act was introduced in February 2003 by Representative Bernard Sanders (I-Vt.) to provide financial assistance for disease prevention and health promotion facilities. This bill was referred to the Subcommittee on Workforce Protections.

H.R.811 Student Medical Access Raising Test Scores (SMARTS) Health Act was introduced in February 2003 by Representative Eddie Bernice Johnson (D-Texas) to make demonstration grants to school-based health programs for educational achievement and promotion of health and well-being. This bill was referred to the Subcommittee on 21st Century Competitiveness.

S.18 Right Start Act of 2003 was introduced in January 2003 by Senator Tom Daschle (D-S.D.) to increase the availability of Head Start programs and affordability of quality child care, to reduce child hunger and encourage healthy eating habits, and to facilitate parental involvement. The bill was referred to the Committee on Health, Education, Labor, and Pensions. A related bill in the House is H.R.2363, the Right Start Act of 2003. It was introduced in June 2003 by Representative Rosa DeLauro (D-Conn.) and was referred to the Subcommittee on Department Operations, Oversight, Nutrition, and Forestry.

State Legislation

The American Heart Association has established policy priorities for the Pennsylvania General House Assembly regarding physical education and nutrition. There are currently no regulations regarding the quality and frequency of physical education in Pennsylvania schools. One piece of proposed legislation would establish a state policy for daily physical education in elementary and secondary schools in Pennsylvania that would strive for 150 minutes of physical education per week for grades K–8 and 200 minutes of physical education per week for grades 9–12. The second piece of legislation would increase the percentage of Pennsylvania schools that establish school health advisory councils and model coordinated school health programs.

PANA’s Goals

Goal 1: Serve as a communication clearinghouse and expert resource on nutrition and physical activity

Goal 2: Facilitate the implementation of the Pennsylvania Nutrition and Physical Activity Plan

Goal 3: Conduct statewide surveillance of initiatives and information related to nutrition and physical activity

These councils would address nutrition, physical education, and health policy and would include administrators, classroom teachers, physical education teachers, food service staff, school nurses, and community members.

In 2003, the Pennsylvania Department of Health (PA DOH) developed a state plan titled “Pennsylvania Nutrition and Physical Activity Plan to Prevent Obesity and Related Chronic Diseases” (PaNPA Plan) to influence public policy changes that focus on increased physical activity and better nutrition. To implement and evaluate this plan, the Pennsylvania Advocates for Nutrition and Activity (PANA) was created by the PA DOH and funded by the CDC.

Integral to the PaNPA Plan are established societal and public policy goals for the following three priority areas: community environment and food systems, youth and families, and health care. The following goals have been taken from the PaNPA Plan:

1. Community Environment and Food Systems:
   - Establish transportation policy and infrastructure changes to promote nonmotorized transit
   - Implement urban planning approaches—zoning and land use that promote active community lifestyles

2. Youth and Families:
   - Advocate for policy changes to the Academic Standards for Health, Safety, and Physical Education to mandate daily physical education classes in primary schools in Pennsylvania

3. Health Care:
   - Advocate that insurance companies institute policies requiring BMI assessments
   - Advocate that insurance companies provide payment for prevention of obesity (Healthy People 2010 Objective 1–2)
   - Advocate that insurance companies provide payment for treatment of obesity

The PA DOH has provided financial and technical assistance to local municipalities to assist with the implementation of the state plan’s policy goals.
EDUCATION

Federal Education Initiatives

Department of Health and Human Services (HHS) former Secretary Tommy Thompson adopted a comprehensive strategy to fight obesity that includes a national education campaign and research initiative. The current Bush administration has made a commitment to promote healthy lifestyles through its HealthierUS Initiative, which examines new ways to educate Americans about balancing diets and physical activity. The President’s Council on Physical Fitness and Sports has issued a challenge to reward students who have demonstrated outstanding levels of fitness. The Food and Drug Administration is also working with private and public sector partners to develop a strategy to educate consumers on healthy eating choices with a program called Calories Count.

Partnerships among federal agencies and departments have proven successful in promoting national campaigns for better nutrition and physical activity. The HHS and the U.S. Department of Agriculture (USDA) have created a program called 5-A-Day for Better Health to encourage all Americans to eat five or more servings of fruits and vegetables a day. This program is in response to the Healthy People 2010 objective encouraging Americans to increase their daily consumption of fruits and vegetables. Another partnership between HHS and ABC Radio Networks, Closing the Gap, targets communities of color to help raise awareness of health disparity issues regarding overweight and obesity.

The Centers for Disease Control and Prevention (CDC) has also been actively engaged in several educational outreach campaigns for children and at-risk populations. VERB is a national marketing campaign targeting children ages 9–13 and aiming to increase their physical activity. The Active Community Environments Initiative was developed by the CDC to encourage physical activities such as walking and biking. Through BAM! Body and Mind, the CDC provides online information about making healthy lifestyle choices to children 9–13 years old. This Web site also provides nutrition and physical activity information for teachers to incorporate in their classrooms. KidsWalk-to-School is part of the CDC’s Nutrition and Physical Activity Program. It encourages children to increase their physical activity by walking safely to school. Eat Smart Play Hard is a school nutrition education campaign in 48 states for food stamp recipients.

State Educational Initiatives

As part of the PaNPA Plan, the PA DOH has collaborated with several agencies to develop educational programs such as the Keystone Healthy Zone Campaign, which provides teacher training and classroom materials and rewards schools that promote physical activity and sound nutrition. The Color Me

Healthy Program is a pilot intervention offering age-appropriate educational curricula on the importance of healthy eating and physical activity to childcare centers, family literacy sites, and Head Start sites throughout Pennsylvania. Hike for Health encourages residents to use existing trails throughout the state for physical activity.

In 2002, Highmark Blue Cross/Blue Shield conducted a study that revealed that more than 50 percent of their HMO members in Pennsylvania between birth and age 17 were either overweight or at risk of becoming overweight. As a result, Highmark developed the Childhood Obesity Initiative to prevent and manage the childhood obesity epidemic through collaborative efforts with providers, schools, and communities. Educational materials such as Childhood Obesity Toolkits have been created and disseminated to primary care physicians in addition to identification and intervention protocols for obesity and type 2 diabetes. Obesity forums are being conducted throughout Central and Western Pennsylvania to provide further education and planning to prevent childhood obesity. Partnerships with local hospitals are offering KidShape, a nationally recognized program that encourages families to work together to address childhood obesity. Highmark has also created the Highmark Challenge for Healthier Schools Competition, which provides grants to school programs that promote better nutritional choices and physical activity among children.

Local Educational Initiatives

Pittsburgh’s local philanthropic and nonprofit community has provided support for projects focused on health disparities between minority and low-income populations. In partnership with the Center for Minority Health, the Pittsburgh Foundation has embarked on the African American Health Promotion Campaign, which seeks to improve the health status of local minorities through education and promotion and to identify actionable strategies to address health problems such as cardiovascular disease, hypertension, and diabetes. The Healthy Black Family Project engages individuals in healthy behaviors like getting good nutrition and exercise, as well as participating in support groups or health ministries. The YWCA of Greater Pittsburgh also has collaborated on a community wellness campaign, called Activate Pittsburgh, with such partners as Highmark Blue Cross/Blue Shield, Pennsylvania’s largest health insurer; UPMC, the region’s largest healthcare organization; the Center for Minority Health at Pitt; PNC Financial Services; and the Catholic Diocese of Pittsburgh. Activate Pittsburgh helps youth, adults, and seniors maintain a healthy lifestyle while striving toward their goal of helping low-income communities receive comprehensive health care.
The Allegheny County Medical Society Obesity Task Force has convened regional healthcare providers, insurance carriers, and both private and public sector partners to increase public and professional awareness of the societal and health implications of obesity and to determine measures to most effectively address the problem. The Obesity Task Force has recognized the lack of tools and guidelines available to physicians and medical professionals to appropriately manage obesity with their patients. One tool recently developed by the Allegheny County Medical Society is an educational chart that describes the importance of Body Mass Index and the health implications of body weight. This chart has helped physicians initiate valuable discussion with their patients regarding healthy lifestyles.

The Allegheny County Medical Society also has partnered with WTAE-TV in Healthy 4 Life, a community service project that is designed to improve the health of participants through special programming, news reports, and community outreach events. This partnership was established in response to Pittsburgh being designated as the ninth fattest U.S. city based on a national weight report conducted by the Coalition for Excessive Weight Risk Education in 1997.

Another highly successful regional education initiative is the Jewish Healthcare Foundation’s Working Hearts collaborative. Working Hearts is a coalition of more than 70 community organizations committed to promoting women’s heart health in the Pittsburgh region. Its mission is to organize and motivate women’s networks to change women’s behavior and health outcomes by increasing public awareness of health risks, prevention activities and funding for women’s heart research, education, and treatment. Working Heart’s efforts continue in its 2005 Community Campaign & Challenge.

Finally, the Highmark Childhood Obesity Regional Strategy Committee has formed the Advocacy and Decision-Maker Education Subcommittee. This subcommittee will focus on educating decision makers on the ramifications of the growing childhood obesity epidemic in Pennsylvania. Furthermore, the subcommittee will work to inform key audiences of potential legislative and policy solutions to the challenges presented by childhood obesity in this state.

**RESEARCH Federal Research**

Federal funding for obesity-related research has become an integral component of the surgeon general’s comprehensive strategy to fight obesity. An Obesity Research Task Force and Strategic Plan for Obesity Research have been created within the National Institutes of Health (NIH) to develop interdisciplinary research. Special priority has been given to research with special populations such as children, ethnic minorities, women, and older adults who are at high risk for obesity, as well as to the prevention of obesity through behavioral and environmental approaches to lifestyle modifications. Medical approaches, both pharmacologic and surgical, to effectively and safely prevent or treat obesity are also being researched. Researchers are also exploring the link between obesity and type 2 diabetes, heart disease, and other associated health conditions.

Central to the Strategic Plan for Obesity Research is the transferability of clinical research to community settings. All research strategies receive considerable input from leading obesity researchers and clinicians who are part of the Clinical Obesity Research Panel at the National Institute of Diabetes and Digestive and Kidney Diseases.

**State Research**

The PA DOH and PANA have embarked on an ambitious statewide program, the Growth Screening Program, to track children’s BMI to provide baseline information on childhood obesity rates. Two pilot obesity prevention projects have also been funded in Philadelphia and Brockway, Pa., that test nutrition and physical activity strategies using a participatory model of intervention with schools and communities. During a two-year period, the Brockway Obesity Prevention Project measured weight, height, BMI, and physical activity for fourth- and fifth-grade students to determine the effectiveness of different community interventions. Some of these interventions included designated physical activity days such as Walking Wednesdays, Annual Brockway Bike, and Hike for Health Day. Educational outreach programs also were introduced to the Brockway community by way of cooking demonstrations for students and parents as well as the 5-A-Day campaign with the local supermarket.

The Brockway School was also designated a Keystone Healthy Zone School, which works with PANA to create a plan to provide healthier food choices, opportunities for increased physical activity, and establishment of a school health council that oversees school health programs and builds community support. Although results are currently being evaluated for the Brockway Obesity Prevention Project to determine the effectiveness of the interventions, one clear indicator of success was the tremendous amount of community support and involvement.

**UPMC Weight Management Center**

The UPMC Weight Management Center illustrates the importance of collaboration and interdisciplinary efforts in combating the obesity epidemic. Research and expertise from the following specialty areas within UPMC are used within the center: gastroenterology, pulmonary medicine, preventive cardiology, plastic surgery, endocrinology, clinical nutrition, exercise physiology, sports medicine, complementary medicine, and psychiatry.
Local Research

Universities across the country have received various funding for obesity-related research and projects. With funding from the National Institute of Diabetes and Digestive and Kidney Diseases, the University of Pittsburgh created the Obesity/Nutrition Research Center (ONRC) to facilitate and promote multidisciplinary research focused on the behavioral aspects of obesity and behavioral treatment of this disease. The major focus of the research is the assessment of current obesity treatments on patients throughout the entire age span. Investigators are addressing issues of obesity and nutrition within special populations, examining the effects of gender, racial and ethnic background, and cultural factors, as well as mental illness and other specific diseases. Other clinical trials are directed at cardiovascular disease and diabetes mellitus, two major complications of obesity. Additional departments within the University of Pittsburgh such as the School of Medicine, Graduate School of Public Health, School of Nursing, and School of Education are also involved with obesity-related research.

SUMMARY

Obesity has become a politically viable topic, and southwestern Pennsylvania is poised to make great strides in curbing this epidemic based on the quality of regional medical institutions and community-based collaborations. Sustainable efforts can be achieved through a regional plan that includes complimentary and overlapping strategies in policy, education, and research.

• Collaborations and interventions need to take place within schools, work sites, healthcare settings, and communities.
• Focus needs to be on increased physical activity and better nutrition, including reduced caloric intake and portion control.
• Special attention needs to be placed on groups at high risk for obesity, such as low-income and minority populations.
• Prevention and treatment need to be part of the health management model.
• Partnerships need to be created with growth management agencies and the private sector to encourage healthy community design.
• Policymakers need to be urged to take legislative action on obesity-related policy that has been referred to committees.