## **EXECUTIVE SUMMARY**

Obesity can be classified as a worldwide epidemic, with the United States the undisputed leader in obesity prevalence. It is currently estimated that 97 million adults are overweight or obese in this country alone. With the spread of obesity has come an increasing incidence of cardiovascular disease, type 2 diabetes, hypertension, certain cancers, and other obesity-related morbidities. While genetics can predispose an individual to gain excess weight, the environment must be conducive. There has been an increase in the availability of food, especially high-fat and/or high-calorie food, at the same time that there has been a decrease in the amount of individual physical activity. Simply put, in general more people are consuming more calories than they are using, i.e., their energy consumption is greater than their energy expenditure.

One of the more serious aspects of the obesity epidemic is the dramatic increase in the incidence of overweight among children and adolescents. Using data from the National Health and Nutrition Examination Surveys (NHANES), it appears that overweight prevalence among our nation's children and adolescents doubled between 1980 and 1994. At the beginning of the 1990s, approximately 14% of children in the U.S. were overweight, increasing to about 20% of adolescents. Preliminary findings from the most recent NHANES suggest that childhood overweight continues to increase.

Obesity contributes to numerous and varied comorbid conditions. Complications can occur in many organ systems, ranging from cardiovascular to respiratory to orthopedic and even ophthalmologic. Overweight and obesity are known risk factors for heart disease, diabetes, hypertension, gallbladder disease, osteoarthritis, sleep apnea and other breathing problems, and some cancers (uterine, breast, colorectal, kidney, and gallbladder). In addition, obesity is associated with pregnancy complications, high blood cholesterol, menstrual irregularities, psychological disorders, and increased surgical risk. Social discrimination against obese persons has a strong negative effect on their quality of life.

The economic costs of obesity are tremendous. The National Institutes of Health have estimated the total cost of overweight and obesity to the U.S. economy in 1995 dollars at \$99.2 billion, approximately \$51.6 billion in direct health care costs and \$47.6 billion in indirect costs. Data from the National Health Interview Surveys suggest that nationally 39.3 million workdays are lost annually to obesity-related causes.

The obesity prevalence in West Virginia has been consistently higher than that in the United States as a whole since state-level monitoring began through the Centers for Disease Prevention and Control's (CDC) Behavioral Risk Factor Surveillance System (BRFSS). In 1990, the West Virginia rate of adult obesity was 15.0%, compared with a U.S. rate of 11.6%. By 2000, the state rate was 23.2%, compared with 20.1% nationally. The obesity rate has increased in virtually all of West Virginia's 55 counties over the past decade, with the highest prevalences found in the southern and western portions of the state, as well as the Eastern Panhandle.

Data from the BRFSS surveys show that obese West Virginians are more likely than their healthy weight counterparts to have suffered a heart attack, been diagnosed with hypertension, diabetes, and/or asthma, or been limited in their activities because of back pain. While more likely to be trying to lose weight, the obese are less likely to be physically active or eat a diet including at least five fruits and vegetables a day.

Youth in West Virginia are less active than youth nationwide according to data from the CDC's 1999 Youth Risk Behavior Survey. Those data show that only 38.2% of the state's high school students were enrolled in physical education classes in that year, compared with a national average of 56.1%. Less than half (49.5%) participated on a sports team, while nationally 55.1% of students reported doing so.

Obesity is multifactorial; thus, addressing the burden of obesity cannot be a singular effort. It will take many programs working in collaboration to fully address and intervene effectively upon the behaviors of physical activity and healthy eating. Interventions aimed at the individual are by themselves insufficient to modify and sustain healthy behavior. Environments that support, facilitate, and even require healthy behaviors are necessary for large-scale, long-term change. Passive public health interventions (i.e., policies that alter the food supply or the physical activity environment) yield greater and more sustainable changes in larger populations. Instituting policy and environment changes enables public health to use a population-based approach to behavior change. The key to this approach is using public health's strength in bringing many partners to the table to plan and intervene.

The Bureau for Public Health will be using the *Guidelines for Comprehensive Programs to Promote Healthy Eating and Physical Activity* to develop and implement a comprehensive nutrition and physical activity program, or an Obesity Prevention Program. These guidelines will allow agencies and programs to assess where resources are already in place and working in a particular area or category. As gaps are identified, new resources can be focused on those areas, therefore avoiding duplication of resources and efforts. A statewide obesity prevention partnership is necessary to effectively address the problems of the obesity epidemic in West Virginia.