BRFSS Data Produces Results Across the Nation

Detecting the Obesity Epidemic

Producing Results

BRFSS data detected a national, state-by-state obesity epidemic faster than any national data set by identifying the areas of the country most quickly facing a critical obesity problem. BRFSS maps showing obesity levels in each state demonstrated the dramatic change in obesity and focused national attention on this significant issue.

Public Health Problem

In the United States, obesity has risen at an epidemic rate during the past 20 years, and research indicates that the situation is worsening rather than improving.

Taking Action

Data from the Behavioral Risk Factor Surveillance System (BRFSS) detected a national, state-by-state obesity epidemic faster than any national data set by identifying the areas of the country most quickly facing a critical obesity problem. BRFSS-derived maps were developed that visually demonstrate the dramatic change in the prevalence of obesity and focused national attention on this significant issue. Trend data from BRFSS demonstrated the increasing prevalence of obesity among U.S. adults of both sexes, all ages, all races, and all educational levels. In 1991, four states reported obesity prevalence rates of 15%–19%, and no state reported rates higher than 19%. In 2006, only four states had a prevalence of obesity less than 20%. Twenty-two states had obesity prevalence rates equal or greater than 25%, including two states with obesity rates higher than 30%.

Implications and Impact

States are using BRFSS data to study the obesity trend. Arizona, for example, developed a report describing different aspects of obesity within its borders. The report outlines characteristics associated with overweight and obesity in Arizona's population. The report has been published online and is being used to educate the public, including policy-makers, health professionals, and community leaders, about obesity in their state. Ultimately, the information will enable them to create interventions that target the most vulnerable populations.

BRFSS Data Play a Critical Role in Repackaging a National Fruit & Vegetable Program

Producing Results

BRFSS trend data indicated that the "5 A Day" fruit and vegetable campaign, a 15 year old program to encourage increased consumption of fruits and vegetables, was no longer resonating with the American public. This data was significant in CDC's decision to develop and launch a new program- the "Fruits & Veggies -- More Matters"™ campaign. This new program emphasizes incremental improvements without focusing on the specific number of servings consumed. The More Matters ™ campaign is expected to increase the number of Americans who eat fruits and vegetables more often, leading to a decrease in the burden of numerous conditions across the country,

Public Health Problem

A diet high in fruits and vegetables is associated with a decreased risk for developing chronic diseases and can be beneficial for weight management. Healthy People 2010 health objectives include increasing the proportion of Americans who eat at least 2 fruits and 3 vegetables per day. Unfortunately, less than a third of American adults eat the recommended amounts, a trend that has remained steady for more than a decade.

Taking Action

Behavioral Risk Factor Surveillance System (BRFSS) data have been critical in tracking Americans' consumption of fruits and vegetables. The BRFSS questionnaire has included questions about fruit and vegetable consumption since 1990. According to data from the 2005 BRFSS, only 32.6% of the U.S. adult population consumed fruit 2 or more times per day, and only 27.2% ate vegetables 3 or more times per day. These levels fall far below the Healthy People 2010 objectives of 75% and 50%, respectively. In fact, no state has reached the national objectives, and the national consumption levels have remained the same for fruits and have actually decreased slightly for vegetables.

BRFSS trend data demonstrated that the 15 year old "5 A Day" fruit and vegetable program was not successful at changing people's eating behavior. The data also demonstrated that fruit and vegetable consumption was higher among some populations and lower among others. For instance, Hispanics had the highest prevalence of fruit consumption but the lowest prevalence of vegetable consumption. These data were significant in CDC's decision to launch a new program. The "Fruits & Veggies -- More Matters"™ campaign aims to address the disparities in diet and make fruits and vegetables more accessible and appealing to a wider population. The campaign emphasizes incremental improvements, gradually leading individuals to lead healthier lives, without focusing on the specific number of servings.

Implications and Impact

Without BRFSS data, the CDC could not have judged the effectiveness of the past campaign. The data indicated that the 5 A Day message was not resonating with the American people, and enabled the CDC to develop a campaign with a different focus and targeted interventions. The More Matters ™ campaign is expected to increase the number of Americans who eat fruits and vegetables more often. This will have a positive impact on the prevalence of a variety of conditions across the country, including overweight and obesity, heart disease, high blood pressure, and cancer.

Arkansas

Passing the Clean Indoor Air Act Reduces Exposure to Secondhand Smoke

Producing Results
Information obtained from BRFSS data contributed to the April 2006 enactment of the Arkansas Clean Indoor Air Act, which prohibits smoking in all public places, including bars and restaurants, and in nearly all public and private workplaces. The Act thereby protects workers from secondhand smoke and also ensures that children, senior citizens, and the general public can breathe smoke-free air in the public places they visit.

Public Health Problem
Nonsmokers who are exposed to secondhand smoke at home or at work increase their risk for heart disease by 25–30% and their risk for developing lung cancer risk by 20–30%. There is no risk-free level of exposure to secondhand smoke; even brief exposure can be dangerous.

Taking Action
According to the Behavioral Risk Factor Surveillance System (BRFSS), Arkansas adult current smoking prevalence in 2005 was 23.5%, compared to 20.5% nationwide. Arkansas-specific BRFSS data also showed that public support for smoke-free bans in public places, work areas, businesses and restaurants has been increasing, with 76.9% supporting such a ban in 2005.

Arkansas lawmakers passed the Arkansas Clean Indoor Air Act in April 2006, which prohibits smoking in all public and work places, including bars and restaurants. The Clean Indoor Air Act protects workers in nearly all public and private workplaces from secondhand smoke. It also ensures that children, senior citizens, and the general public can breathe smoke-free air in the public places they visit. Arkansas is the seventeenth state in the nation to pass a smoke-free workplace act.

Implications and Impact
According to the recent Surgeon General's report, "The Health Consequences of Involuntary Exposure to Tobacco Smoke," there is no risk-free level of exposure to secondhand smoke. Eliminating smoking in indoor spaces fully protects nonsmokers from exposure to secondhand smoke. Furthermore, workplace smoking restrictions lead to less smoking among covered workers. The Arkansas Clean Indoor Act, supported by BRFSS data, ensures that many more citizens in Arkansas will lead safer, healthier lives.

Colorado

Arthritis Programs Improve Quality of Life

Producing Results
BRFSS data indicated that one out of every four adults in Colorado suffers from arthritis and that only 21% of people with arthritis receive treatment. These baseline measures established the need for an arthritis program in Colorado, which is now offering self-management, physical activity, and education interventions to people with arthritis.

Public Health Problem
By examining BRFSS data, health officials in Colorado learned that arthritis affects nearly one out of every four adults in their state. These arthritis sufferers are more likely than people without arthritis to be obese and have high cholesterol. They also report twice as many days of poor physical or mental health and twice as many unhealthy days. However, only 21% of people with arthritis reported having their disease treated.

Taking Action
BRFSS data were the catalyst for Colorado to create a statewide arthritis program and indicated areas in which such a program could improve quality of life for people living with arthritis. In collaboration with numerous partners, the Colorado Arthritis Program was developed to offer evidence-based self-management, physical activity, and education intervention. Interventions offered through the program include the Arthritis Foundation Exercise Program, which allows trained instructors to choose from 72 exercises and to use a host of endurance-building activities, games, relaxation techniques, and health education topics; the Arthritis Foundation Aquatics Program, which involves gentle physical activity performed in warm water; and the Chronic Disease Self Management Program, which includes information on self-help principles, the disease process, exercise and fitness, pain management, relaxation, depression, fear, nutrition, doctor-patient relationships, medication, and nontraditional treatments.

Implications and Impact
Without reliable state data, Colorado health officials would have been unaware of the burden of arthritis and the inadequate treatment of people with arthritis. Due to the availability of this data, Colorado's arthritis program provided evidence-based interventions to nearly 10,000 people with arthritis in 2007.

New Mexico

Mandating Colorectal Cancer Screening Coverage to Save Lives

Producing Results
Citing BRFSS data, which showed that colorectal cancer screening rates were significantly better in states with mandatory coverage, New Mexico's Legislature passed a law that now requires health insurance providers to pay for colorectal screening for New Mexico residents age 50 and older.

Public Health Problem
If caught in its early stages, people treated for colorectal cancer have a 5-year relative survival rate of 90%. As many as 60% of deaths from colorectal cancer could be prevented if everyone age 50 and older were screened regularly. Data show that screening for colorectal cancer lags far behind screening for other cancers. Use of screening for colorectal cancer is particularly low among those who lack health insurance, those with no usual source of health care, and those who reported no doctor's visits within the preceding year.

Taking Action
According to BRFSS data, New Mexico's colorectal cancer screening rates are 52.9%, which is below the national median of 57.1%. Citing BRFSS data, which showed that colorectal cancer screening rates were significantly better in states with mandatory coverage, New Mexico's Legislature passed a bill (HB 510) to address one barrier to screening: its cost. The law now requires health insurance providers to cover colorectal screening for New Mexico residents age 50 and older. New Mexico joins 22 other states with mandatory colorectal cancer coverage laws.

Implications and Impact
The availability of BRFSS data that demonstrated the positive impact of mandatory insurance coverage for colorectal cancer screenings prompted legislative change in New Mexico. With New Mexico law mandating that health insurance providers pay for this valuable screening, it can be expected that more of New Mexico's residents will get the recommended screenings, resulting in fewer colorectal cancer deaths overall.

BRFSS Produces Trend Data for Local Areas across the Nation

SMART BRFSS Data Informs Local Level Public Health Planning

Producing Results

SMART BRFSS provides prevalence estimates for 180 MMSAs, and many counties within those areas, from 2002- 2006 BRFSS data, enabling health officials to have access to nationally comparable local data and 5 year trend data for many of these communities.

Public Health Problem

Over time, demand for local data has risen. States, cities, and local communities need data to identify the unique health needs of their own areas. These data can be used to assess needs, to implement plans, and to allocate resources for public health problems at the local level.

Taking Action

In response to the need for local data, beginning in 2002 CDC analyzed BRFSS data for metropolitan and micropolitan statistical areas (MMSAs). "SMART BRFSS" (Selected Metropolitan and Micropolitan Area Risk Trends from the BRFSS) has now yielded prevalence estimates from 2002-2006 BRFSS data for 180 MMSAs, and many counties within those areas. For the first time, health officials have access to local trend data that are comparable across the nation.

Analysis from SMART BRFSS data show that the prevalence of high-risk health behaviors varies substantially among MMSAs. For example, in 2006, the prevalence of no health insurance ranged from 6.2% in the Nassau-Suffolk, New York MMSA to 27.2% in the Wenatchee, Washington MMSA. The prevalence of pneumonia vaccination among adults aged 65 or older ranged from 52.4% in the Miami-Fort Lauderdale-Miami Beach, Florida MMSA to 79.6% in the Billings, Montana MMSA. The prevalence of adults ages 50+ who have ever had a colonoscopy or sigmoidoscopy ranged from 44.9% in the Scottsbluff, Nebraska MMSA to 72.4% in the Barre, Vermont MMSA.

SMART BRFSS data are being cited in state reports, scientific publications, and in the local press. For example, the Clark County, Washington Public Health Department used SMART BRFSS data in an August 2007 press release to help publicize its Tobacco Prevention and Education Program activities. *Bethesda Magazine* featured SMART data in a July/August 2005 article entitled "Clean Bill of Health." The article compared the Bethesda, Maryland metropolitan area with other areas for which SMART data are available and with data for the nation as a whole in order to highlight and examine the many healthy behaviors of its citizens. In addition, *Men's Fitness* magazine, in its most recent report, "America's Fattest Cities 2007," used SMART BRFSS as one of its data sources; the article included information on overweight/obesity, physical activity, and nutrition.

Implications and Impact

SMART BRFSS expands the usefulness of an already widely used surveillance system. SMART data provides state and local public health officials and policy makers with an important tool for public health planning and evaluation.