Center for Health Statistics

New Jersey Behavioral Risk Factor Surveillance System: Summary Report 1991 - 1994

Health Status of New Jersey Adults

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The State of New Jersey currently collects information on the occurrence of birth defects, cancer, and a wide range of infectious diseases. Direct information on the incidence or prevalence of many other major causes of morbidity and mortality in New Jersey is not available, however, and must be inferred from mortality data or extrapolated from national surveys. The New Jersey Behavioral Risk Factor Surveillance System (BRFSS) provides an opportunity to estimate directly the prevalence of other serious health-related conditions among adults in New Jersey. To date, these health-related conditions have included diabetes mellitus, hypertension, hypercholesterolemia, and obesity, as well as health status and disability in general.

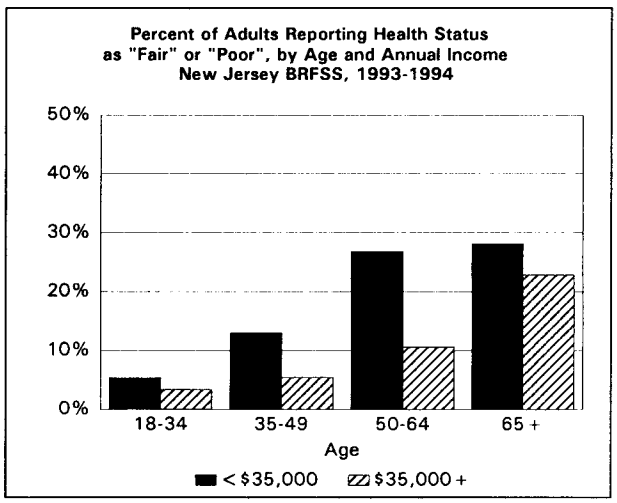
NOTE: The New Jersey Behavioral Risk Factor Surveillance System is part of the national Behavioral Risk Factor Surveillance System, a telephone survey of adults aged 18 years and over. This survey is designed to monitor modifiable risk factors for chronic diseases and other leading causes of death. The survey is a cooperative effort between the national Centers for Disease Control and Prevention and all states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands. It has been in existence since 1984. The New Jersey Department of Health has been participating in the survey on a monthly basis since 1991, conducting approximately 125 interviews per month.

Overall Health Status (1993-1994)

An estimated 9.6% (8.2%-11.0%)* of New Jersey adults consider their overall health to be less than good (i.e., "fair" or "poor"), based on responses to a general health question which was added to the New Jersey BRFSS in 1993. This is less than the median value of 12.7% reported for all participating BRFSS states in 1993[1]. However, the percentage varies substantially by socioeconomic status as well as by age, with self-reported health status consistently lower among those with lower household incomes (Figure 1). For those with a household income under $10,000 per year, the weighted percentage responding "fair" or "poor" was 26.4%, representing more than a quarter of this population. Multivariable analyses suggest that self-perceived health status is also worse in general among adults classified as "Hispanic" or "Black, non-Hispanic", among those with a low level of education, and among those without health insurance, independent of income level.

The mean number of days out of the past month in which activities were limited by poor health, according to the BRFSS survey, was 1.4 (1.2-1.6), comparable to the median value of 1.6 days for all participating states[1]. Among those who would consider themselves to have "fair" or "poor" health, the estimated mean number of days of limited activity in the past month was 6.7 (5.3-8.0). Overall, New Jersey adults experienced an estimated 2.7 (2.4-2.9) days of poor physical health and 2.1 (1.9-2.3) days of poor mental health, on average during the previous month.

FIGURE 1



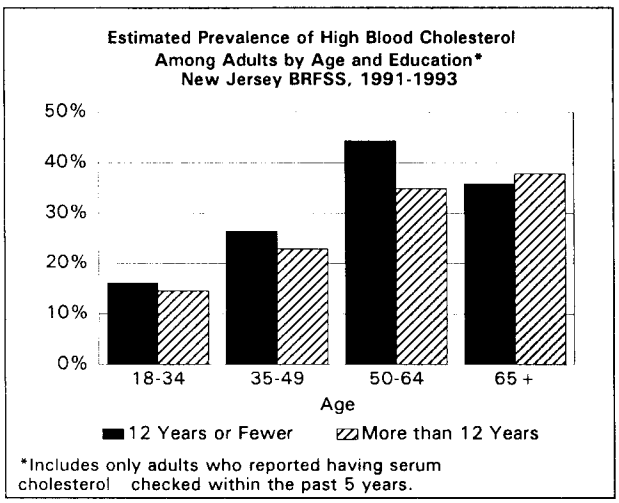
High Blood Cholesterol (1991-1993)

Elevated serum cholesterol levels represent a major risk factor for coronary heart disease (CHD), the leading cause of death in New Jersey as well as the rest of the United States. Although in public health and clinical practice specific serum cholesterol levels are designated

as "high" or "borderline", these labels are somewhat arbitrary, as the risk of CHD appears to lie on a continuum[2].

An estimated 27.0% (25.3%-28.7%) of New Jersey adults who have ever had their serum cholesterol measured were told on at least one occasion that the level was too high, based on responses to the question "Have you ever been told by a doctor or other health professional that your blood cholesterol is high?". Excluding those who have not had their serum cholesterol checked within the past five years, an estimated 28.1% (26.2%-30.1%) have been told that their serum cholesterol was too high. A more conservative estimate, based on the assumption that all respondents who have not been screened have normal cholesterol levels, is 19.2% (17.9%-20.5%), equal to the median value reported for all participating BRFSS states in 1993[1]. However, this estimate varies somewhat by educational status, as well as by age (Figure 2). Across all age groups, the estimated prevalence of diagnosed high serum cholesterol among adults with 12 or fewer years of education is 31.8% (28.7%-34.8%), while among adults with more than 12 years of education it is 25.3% (22.8%-27.9%).

FIGURE 2

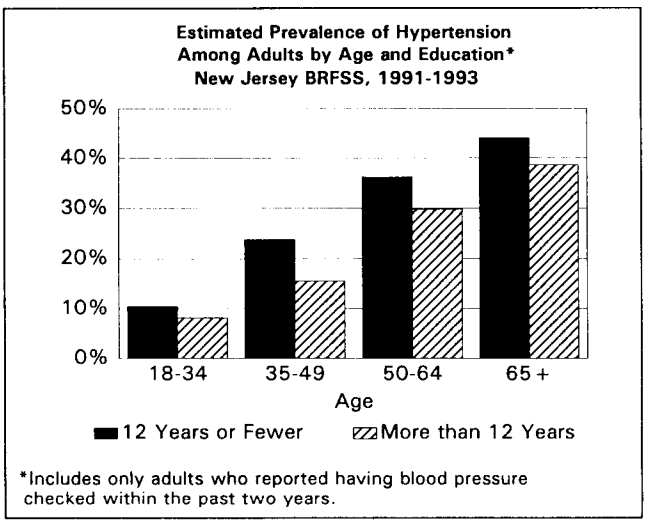


Hypertension (1991-1993)

High blood pressure contributes significantly to the risk of major life-threatening diseases, including heart disease, stroke, kidney failure, and other forms of organ damage. As with serum cholesterol, the risk of complications from high blood pressure appears to follow a continuum[3], so that the actual designation of "hypertension" is somewhat arbitrary.

An estimated 21.2% (19.8%-22.5%) of New Jersey adults have been diagnosed with hypertension, based on responses to the question "Have you ever been told by a doctor, nurse, or other health professional that you have hypertension?". Excluding those who have not had their blood pressure checked within the past two years, an estimated 22.1% (20.7%-23.5%) have been diagnosed with hypertension. This is very close to the median value reported for all participating BRFSS states in 1993[1]. However, this estimate varies greatly by educational status, as well as age and gender (Figure 3). Overall, the estimated prevalence of diagnosed hypertension among adults with 12 or fewer years of education is 27.5% (25.2%-29.8%), while among adults with more than 12 years of education it is 17.8% (16.1%-19.5%). In addition, multivariable analyses suggest that persons who classify themselves as "Black, non-Hispanic" are substantially more likely than other respondents to report a diagnosis of high blood pressure, independent of age, gender, or educational level. Based on data from the 1991 and 1992 surveys, it is estimated that 57.6% (53.3% to 61.9%) of those reporting a diagnosis of hypertension were using anti-hypertensive medications.

FIGURE 3



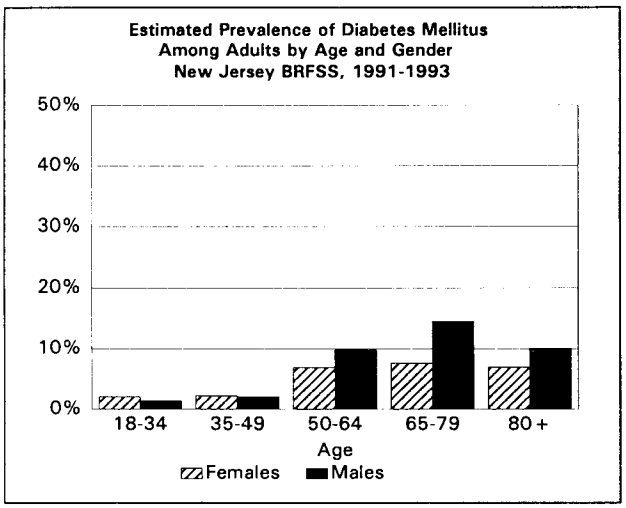
Diabetes Mellitus (1991-1993)

Approximately 2,000 deaths per year among New Jersey residents are directly attributed to diabetes mellitus[4], while the actual number of diabetes-related deaths is probably much higher[5]. In addition, diabetes contributes to the risk of heart disease, blindness, kidney failure, and life-threatening infections which often result in amputation[6].

An estimated 4.5% (3.8%-5.2%) of New Jersey adults have been diagnosed with diabetes mellitus, based on responses to the question "Have you ever been told by a doctor that you have diabetes?" in 1991-1993. This estimate includes women who have had diabetic

symptoms only during pregnancy (i.e., gestational diabetes). Based on results from the BRFSS administered in 1994 (the first year in which gestational diabetes was coded separately), approximately 13.5% (5.1%-21.9%) of diabetics fall in this category. With respect to medication use, 43.9% (36.2%-51.6%) of adult diabetics report the use of oral medications, 24.3% (17.1%-31.4%) report the use of insulin injections, and an additional 5.2% (1.9%-8.4%) report the use of both. The prevalence of diabetes varies greatly by both age and gender, with the overall prevalence estimated from the New Jersey BRFSS reaching a high of 10.6% (8.2%-13.1%) in the 65-79 year age group (Figure 4). It has been estimated that half of all cases in adults are undiagnosed[7].

FIGURE 4

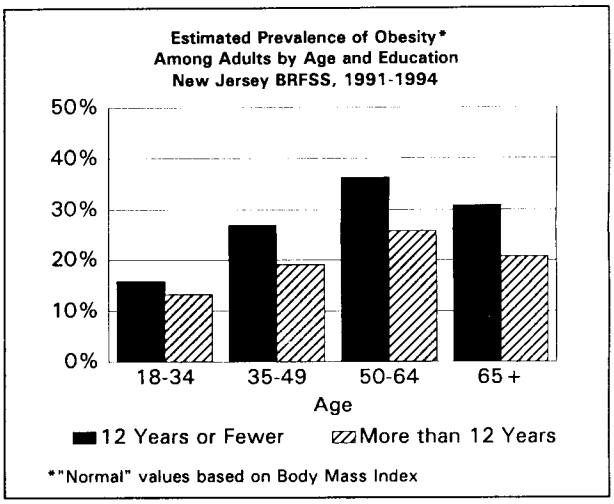


Obesity (1991-1994)

Obesity is strongly associated with the risk of developing all other serious health conditions mentioned in this report[8]. In addition, excessive weight contributes to the risk of morbidity from conditions such as gallbladder disease and arthritis.

An estimated 21.8% (20.6% to 23.0%) of New Jersey adults have an excessive body mass index, based on self-reported height and weight. This value is slightly lower than the median value of 25.5% reported for all participating BRFSS states in 1993[1]. However, the estimated prevalence of obesity as defined by excessive body mass has been consistently increasing over this time period, rising an average of 1.3 percentage points per year from 20.4% in 1991 to 24.2% in 1994. The estimated prevalence of obesity also varies greatly by educational status, as well as age and gender (Figure 5). Overall, the estimated prevalence of obesity based on body mass index among adults with 12 or fewer years of education is 26.2% (24.2% to 28.1%), while among adults with more than 12 years of education, it is 18.2% (16.7% to 19.7%). In addition, persons who classify themselves as "Black, non-Hispanic" were substantially more likely to report excessive values for weight relative to height, independent of age, gender, and educational status, than others. This is consistent with findings for the nation as a whole[9].

FIGURE 5



*Numbers in parentheses represent approximate 95% confidence intervals for the underlying population-based statistics, taking into account the error introduced by sampling. These confidence intervals were calculated from variance estimates generated by the statistical software package SUDAAN[10].

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