

Running the Numbers

A Periodic Feature to Inform North Carolina Healthcare Professionals
About Current Topics in Health Statistics

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Diabetes Prevalence and Risk Factors Among North Carolina Adults: 2001

Diabetes is a serious and increasing problem in North Carolina. The percentage of adults reporting that they have diabetes is very close to the national average; however, the North Carolina percentage has increased from 5.9% in 1990 to 6.7% in 2001.

In the North Carolina Behavioral Risk Factor Surveillance System (BRFSS) survey, respondents are asked, "Have you ever been told by a doctor that you have diabetes?" The possible responses are *Yes*; *Yes, during pregnancy*; and *No*. This report presents results from the 2001 BRFSS survey on the percentage of adults in North Carolina who reported that they had diabetes (excluding diabetes during pregnancy), stratified by selected demographic and other risk factors.

The BRFSS is an ongoing random telephone survey of health conditions and risk factors among noninstitutionalized persons age 18 and older. It is sponsored by the Centers for Disease Control and Prevention (CDC) and is conducted in all US states. During 2001, more than 6,100 surveys were completed in North Carolina. The percentages presented here are weighted to represent the entire adult population of the state. The NC BRFSS survey is managed by the State Center for Health Statistics in the NC Division of Public Health.

Overall in 2001, 6.7% of adult respondents reported that a doctor had told them that they had diabetes, 0.8% reported that they had diabetes during pregnancy, and 92.5% reported that they did not have diabetes. The following results show the **percentages who reported that they had diabetes:**

Male	6.8%	Household income < \$15,000	13.2%
Female	6.7%	\$15,000 - \$24,999	8.7%
		\$25,000 - \$34,999	6.1%
White	5.9%	\$35,000 - \$49,999	4.2%
Black	9.7%	\$50,000 and over	3.8%
Age 18-44	1.5%	Underweight or normal weight	3.6%
Age 45-54	7.4%	Overweight	5.7%
Age 55-64	15.8%	Obese	13.9%
Age 65+	15.0%		
		OVERALL	6.7%
Education < HS	12.1%		
HS or GED	6.6%		
Some college	7.0%		
College grad.	3.5%		

[continued on next page]

From the State Center for Health Statistics
www.schs.state.nc.us/SCHS
North Carolina Department of Health and Human Services

Running the Numbers, cont'd.

Keep in mind that these are simple, descriptive statistics; a higher rate of diabetes in a group indicates only a correlation, not causation. In addition, many of the listed factors are interrelated. For example, one of the reasons that African Americans have a higher prevalence of diabetes may be that they have lower household incomes, on average. The categories with a high prevalence of diabetes could be considered as markers for diabetes. Prevention, educational, and screening programs could be targeted to people in these groups.

In the case of the much higher rates of diabetes among persons who are overweight or obese, some of these people may have had diabetes first, which led to the weight gain. However, obesity is well-recognized as a strong risk factor for the development of diabetes. One recent national study has examined the relationship of obesity and diabetes, using BRFSS data.¹

These results are underestimates of the prevalence of diabetes in North Carolina. Persons without telephones and persons in institutions (such as hospitals or nursing homes) are not included in the BRFSS survey. Also, only diagnosed diabetes is counted. Some estimates indicate that about 35% of all persons with diabetes have not been diagnosed.¹

¹Mokdad AH, Ford ES, Bowman BA, et al. Prevalence of obesity, diabetes, and obesity-related health risk factors, 2001. *JAMA* 2003;289:76-9.