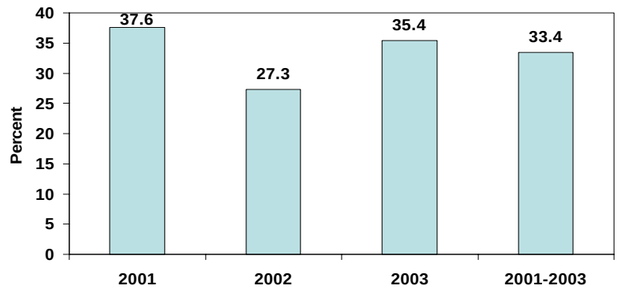
The average number of drinks consumed by diabetic persons on a given day of drinking was not significantly different from that of non-diabetic persons [2.46 drinks (95% CI=1.86-3.06) vs. 2.08 drinks (95% CI=1.98-2.18), respectively; p=.2257].

III. Diabetes Education

Adequate diabetes education and training soon after diagnosis can set the stage for the patient to practice self-management behaviors that will help to maintain a good quality of life and reduce complications. Figure-3 presents a summary of the responses to a question in the BRFSS that asked diabetic participants if they had ever taken a class on how to manage their diabetes. Less than 40% of diabetic respondents in each of the past three years responded positively to this question. Clearly, much improvement needs to occur in this area.

Figure 5-- Percent of diabetic subjects in the USVI who reported that they received diabetes education since being diagnosed, by year of interview.



Data from the Behavioral Risk Factor Surveillance System.

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Virgin Islands Department of Health
Bureau of Health Education
Diabetes Prevention and Control Program
Vol. 2, No.1

RISK FACTORS FOR DIABETES AND ITS COMPLICATIONS IN THE US VIRGIN ISLANDS

Persons with diabetes were no less likely than non-diabetics to restrict the number of drinks consumed when they did drink

This report summarizes data available through the Behavioral Risk Factor Surveillance System (BRFSS) and other sources on risk factors for development of diabetes mellitus and its complications, including physical inactivity, obesity, smoking, alcohol consumption and lack of diabetes education. Since these risk factors are amenable to intervention, they represent a point of emphasis for focused activities of the Virgin Islands Department of Health and other nongovernmental partners to reduce the burden of diabetes mellitus in the USVI.

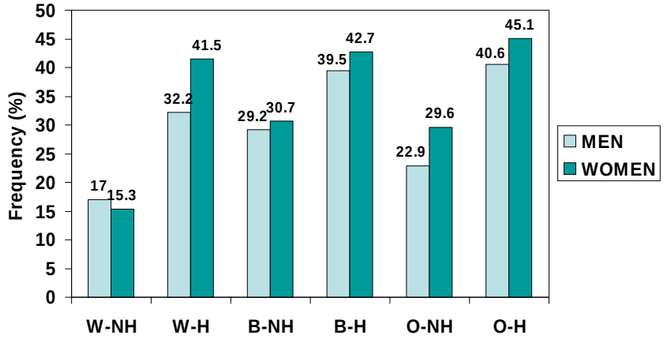
The BRFSS collects information by telephone interview from a population-based sample of Virgin Islands residents age 18 and older. Additional sources of data included Hospital Discharge Reports, reports from Public Health Clinics and when possible data from population-based epidemiological studies.

I. Life Style Factors Associated With Diabetes Risk

Physical Inactivity

Physical inactivity has long been recognized as an independent risk factor for Type 2 diabetes mellitus (1). Physical activity levels tend to decline in proportion to the level of industrialization of a population. An individual's activity pattern is often influenced by type of job, household activities and leisure time physical activity. The BRFSS collects information from respondents about their leisure time physical activities. For the purposes of this report, inactivity is defined as the absence of any leisure time physical activities. Despite the obvious limitations of this method of assessing physical activity, it has been widely used in the literature.

Figure 1-- Frequency Physical Inactivity (Leisure time) By Gender, Race-Ethnicity in the USVI: BRFSS 2003



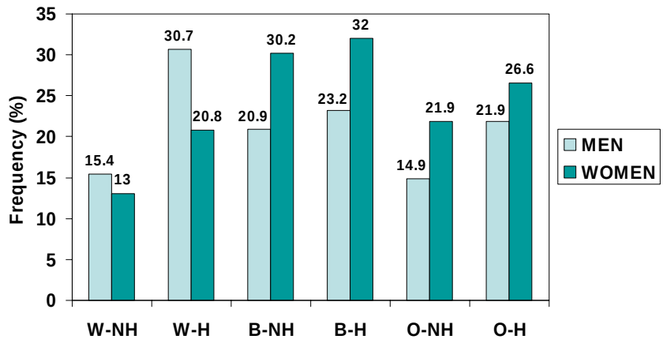
W-NH=White Not Hispanic; W-H=White Hispanic; B-NH=Black Not Hispanic; B-H=Black Hispanic; ONH=Other Race Not Hispanic; OH=Other Race Hispanic.

Figure 1 shows the average level of inactivity in the USVI population by race ethnic group for the three year period 2001-2003. In general women reported higher levels of inactivity than men and other race-ethnic groups tend to report higher levels of inactivity than non-Hispanic Whites.

Obesity

The most recent data from the 2003 BRFSS suggest that 61.8% of all adult Virgin Islanders have a body mass index (BMI) greater than 25 kg/m^2. This means that roughly 6 out of every 10 Virgin Islanders are either overweight or obese. Figure 3 shows BRFSS data on the frequency of obesity (i.e. BMI $\geq$30.0 kg/m^2) according the major race-ethnic groupings in the USVI. These data parallel those presented in Figure 1 for physical inactivity, showing higher levels of obesity among other race-ethnic groups compared to non-Hispanic Whites and higher levels among women compared to men.

Figure 2-- Frequency of Obesity by Gender and Race-Ethnicity in the USVI: BRFSS 2003

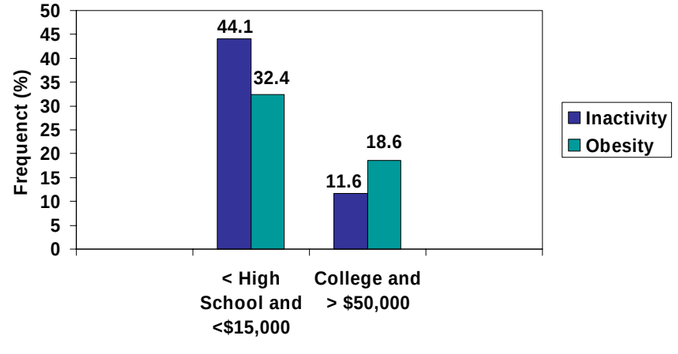


W-NH=White Not Hispanic; W-H=White Hispanic; B-NH=Black Not Hispanic; B-H=Black Hispanic; ONH=Other Race Not Hispanic; OH=Other Race Hispanic.

Socioeconomic Status

The lower levels of inactivity and obesity among non-Hispanic Whites may in part reflect their overall higher socio-economic status. Lifestyle factors associated with diabetes mellitus, such as physical inactivity and obesity, tend to be at higher levels among those who are of lower socioeconomic status. The average of BRFSS data presented in Figure 3 for the years 2001 to 2003 indicate that in the USVI persons who have less high school education and earn less $15,000.00 /yr are 3.8 times more likely to be physically inactive and 74% more likely to be obese than those who have attended college and earn more $50,000.00 /yr.

Figure 3 – Inactivity and Obesity Among USVI Residents by Level of Education and Income: BRFSS 2001-2003.



It is clear from the BRFSS data that public health efforts to increase physical activity levels and reduce obesity in the USVI are needed.

II. Risk Factors for Diabetes Complications

The BRFSS includes information on factors associated with diabetes complications such as personal lifestyle habits like cigarette smoking and alcohol consumption.

Comparing diabetic with non-diabetic respondents in the 2003 BRFSS, the prevalence of smoking was slightly lower among diabetics than the non-diabetic population (6% vs. 10%).

Similarly, a lower percentage of diabetic compared to non-diabetic persons indicated that they drank in the past month (27.8% vs. 53.5%). However one issue of concern is that persons with diabetes were no less likely than non-diabetics to restrict the number of drinks consumed when they did drink

Figure 4 -- Percent of Persons Who Currently Smoke or Drank Alcohol In The Past Month, Among Persons With And Without Diabetes: BRFSS 2003