

Diabetes in Vermont

The Behavioral Risk Factor Surveillance System (BRFSS) reports that approximately 27,500 Vermonters over age 18, (5.8 percent of the Vermont population) had a diagnosis of diabetes in 2003.¹ This is an increase of nearly 7000 adults since 2000 when the rate was 4.4 percent. It is estimated an additional 13,500 Vermonters over age 18 have diabetes but have not been diagnosed yet.

Diabetes Risk Factors

Diabetes is more common among older age groups and people of all ages who are overweight or obese.(Figure 1) Other risk factors include family history and physical inactivity. In 2003, only 51 percent of Vermonters met the requirements for moderate physical activity. Twenty percent were obese (BMI 30+), up from 15 percent reported in 1998.

Mortality and Morbidity

Diabetes was the sixth leading cause of mortality in Vermont in 2002. It was listed as the underlying cause of death for 174 people, a rate of 28.3 deaths per 100,000 Vermonters. In an additional 411 cases diabetes was a contributing cause of death (e.g. cardiovascular disease with diabetes as a comorbidity). Combining all deaths related to diabetes the age-adjusted death rate for males is significantly higher than for females (116 per 100,000 males vs. 76 per 100,000 females).

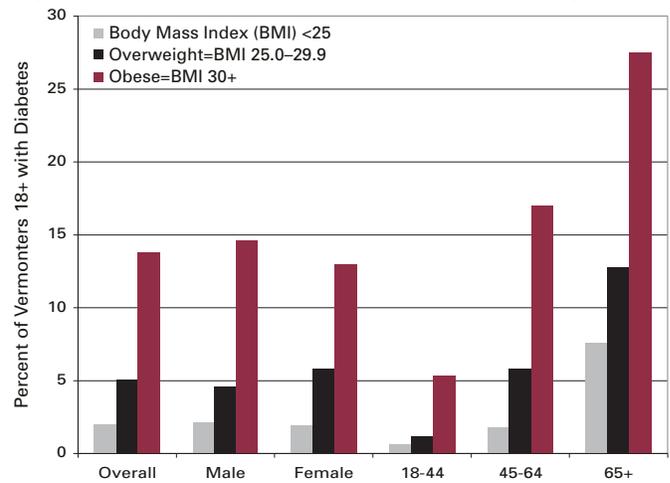
In 2001, there were 1,501 hospital discharges with diabetes listed as one of the causes for hospitalizations per 100,000 Vermonters. As with mortality, male hospitalization rates are higher than those for females (1,700 per 100,000 males compared to 1,354 per 100,000 females).

Diabetes can result in several severe and life threatening complications. Diabetes during pregnancy elevates the risk of maternal hypertensive disorders, greatly increases the risk of fetal macrosomia, and increases the need for cesarean deliveries. In Vermont, 3.1 percent of births in 2002 were to women diagnosed with gestational diabetes, and an additional 0.5 percent of births were to women with pre-pregnancy diabetes. Another complication is impaired circulation and sensation in the extremities, which can ultimately result in amputation. According to the 2001 Hospital Discharge data, there were approximately 200 lower extremity amputations among diabetic Vermonters. Kidney disease is also a complication of diabetes. Approximately 10 out of every 1,000 Vermonters with diabetes have end stage renal disease.²

Diabetes Care

The Department of Health uses the BRFSS to collect data on several measures related to the quality of care received by Vermonters who have diabetes. These measures are detailed in Table 1, with comparisons made to the United States overall rate for white non-Hispanics where applicable.

Figure 1: Diabetes in VT Adults Overall, by Sex, Age & BMI



Source: Vermont Behavioral Risk Factor Surveillance System 2000-2003

Conclusions

As Vermont's population ages and the rate of obesity increases, diabetes is becoming a more important public health problem. Although some of the quality of care measures are approaching goal, enormous challenges remain to reduce complications related to diabetes and to prevent diabetes among susceptible segments of the population.

Continual examination of these and other surveillance data helps determine diabetes program priorities, but it takes collaboration among consumers and diverse community partners to use our collective resources most effectively. The Vermont Department of Health's Diabetes Prevention and Control Program (DPCP) continues to lead these efforts. For more information or to contact the Vermont DPCP call 1-800-464-4343.

References

- ¹ Vermont Behavioral Risk Factor Surveillance System. www.cdc.gov/brfss/
- ² United States Renal Data System. www.usrds.org/

Table 1: Quality of Care Measures for Vermont Diabetics

Indicator (BRFSS)	US (2001 BRFSS)	2000	2001	2002	2003	VT Goals
Had at least one A1C in last 12 months	68	82	91	85	89	95
Had at least two A1C's last 12 months		71	77	63	72	80
At least one foot exam in last 12 months	66	70	75	70	71	80
At least one eye exam in last 12 months	71	80	75	74	68	90
Had a pneumonia vaccination in lifetime		54	62	52	55	70
Had influenza vaccination in last 12 months		65	66	63	69	70
Taken a diabetes education course in lifetime		44	48	44	45	60
Listed general health as good or better		56	56	62	58	60