

In Vermont, data collected from 1999 to 2003 indicates the prevalence of obesity is most common in people between the ages of 55 and 64. However, the state is seeing the highest increase in obesity rates in women aged 18 to 34 (estimated 7% increase) and in men aged 25 to 44 (estimated 4% increase)

and other personal expenses.¹⁶

A 2009 study conducted by the Research Triangle Institute and the Centers for Disease Control and Prevention (CDC) lists the total health care cost associated with obesity in the US at \$147 billion dollars a year, which includes Medicare, Medicaid, and private insurance payments.¹⁷ This represents an increase from 6.5% of total health care spending on obesity in 1998 to 9.1% in 2006.¹⁸ On average, obese Americans incur \$1,429 more per year in medical expenditures compared to their normal weight counterparts.¹⁹

In the US, Medicare pays on average \$95 more for inpatient services, \$693 more for outpatient services, and \$608 more for prescription drugs for a single obese patient. Medicaid pays, on average, \$213 per year more for inpatient services, \$175 more for outpatient services, and \$230 more for prescription drugs. Private insurers annually pay \$443 more for inpatient services, \$398 more for "non-inpatient" services,²⁰ and \$284 more for prescription drugs. In all, for each "obese beneficiary," Medicare pays \$1,723 more, Medicaid pays \$1,021 more, and private insurers pay \$1,140 more per person in annual medical expenses.²¹

Productivity loss due to absenteeism and presenteeism is the most significant cost to employers. Absenteeism is defined as absence from work measured by the annual number of sick days.²² In contrast, presenteeism is time lost at work due to a decrease in productivity8 428.23 Tm0 0 1.7 T

much higher than earlier studies.⁴¹ Cawley and Meyerhoefer utilized an instrumental variable model to control for the possibility that people may have accrued medical costs for injuries that lead to obesity and to control for the biases associated with the self-reporting of weight. The research by Cawley and Meyerhoefer suggests the medical costs are much higher for private insurance. Their study concluded that the cost of obesity per person covered by private insurance was \$2,398. To put this in context for the State of Vermont, the total annual cost of obesity for private insurance after adjusting for inflation was \$190.8 million in 2010 dollars.⁴²

To determine the cost of absenteeism and presenteeism in the workplace for the State of Vermont, we first calculated the number of workers who suffer from obesity. By applying the national average of obesity (23%) to the number of people employed in the state we found the total number of obese workers. In 2006, there were 342,400 people employed in the State of Vermont.⁴³ Assuming, Vermont follows the national trend, we multiplied 23% by the number of Vermonters employed in

Table 2: Total Indirect Annual Obesity Related Costs in 2010 Dollars⁴⁵

	Annual Individual Incremental Cost (in 2009 dollars):	Total Costs for Vermont: (in millions)
Short Term Disability	\$348	\$27.9
Disability Pension Insurance	\$69	\$5.5

Table 3: Total Annual Cost of Obesity for the State of Vermont, Employers, Private Citizens
(In 2010 dollars)

Factors Attributable to the Cost of Obesity:	Total Costs (in millions):	Total Costs Utilizing the IV Approach (in millions):
Medicare	\$43.3	\$43.3
Medicaid (Vermont's share)	\$12.8	
Private Insurance	\$31.4	
Absenteeism & Presenteeism	\$188	\$188
Short Term Disability	\$27.9	\$27.9
Disability Pension Insurance	\$5.5	\$5.5
Premature Mortality	\$294.9	\$294.9
Life Insurance	\$9.7	\$9.7
Gasoline Expenditure	\$1.7	\$1.7
Estimated Total Costs		

*The Instrumental Variable approach did not find a