

Heart Failure in Minnesota

Background Information Prepared for the Health Care Transformation Task Force
by Minnesota Department of Health staff

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Prevalence of Heart Failure

The prevalence of congestive heart failure (CHF) varies substantially by age, as shown in Table 1 below. Overall, an estimated 2.2% of Minnesota adults have CHF, with much higher rates among the elderly (for example, an estimated 12.4% of the population over age 80 has CHF). We estimate that approximately 85,000 Minnesotans have CHF.¹

Table 1: Estimated Prevalence of CHF in Minnesota

Age Group	Prevalence Rate (National)	2007 Minnesota Population	Estimated Number of CHF Cases
20-39	0.2%	1,417,513	2,835
40-59	1.5%	1,530,206	22,953
60-79	5.2%	661,842	34,416
80+	12.4%	199,339	24,718
TOTAL		3,808,900	84,922

Risk Factors

The prevalence of risk factors associated with congestive heart failure is shown over time in Table 2 below. In general, Minnesota's percentage of the population with risk factors for CHF is at a level similar to or below the national average (with the exception of the share of the population that is either overweight or obese). In both the U.S. and Minnesota, the prevalence of several of these risk factors has increased over time; one notable exception to this trend is the share of the adult population that smokes cigarettes.

Table 2: Prevalence of Risk Factors Associated with Congestive Heart Failure

Risk Factor	1998-1999*		2005-2006**	
	United States [†]	Minnesota	United States [†]	Minnesota
Cigarette Smoking	22.9%	18.0%	20.0%	18.3%
High Blood Pressure	24.0	22.0	25.5	21.9
Diabetes	5.4	4.7	7.5	5.7
Overweight or Obese	54.6	59.5	61.6	62.7
Obese	18.3	16.2	25.1	24.7

¹ These estimates were calculated by MDH staff by applying national age-specific prevalence rates to Minnesota population. The national prevalence estimates were obtained from the 1999-2004 National Health and Nutrition Examination Survey (NHANES).

Sources: 1998, 1999, 2005 and 2006 Behavioral Risk Factor Surveillance Surveys (BRFSS).

† Median of US States

Utilization and Cost

At the state level, there is little specific information on utilization and cost related to congestive heart failure. One national estimate that we have adapted to the state level suggests that CHF currently accounts for over \$543 million in direct medical expenditures in Minnesota, with an average per person cost of \$6,398.

Using Minnesota hospital discharge data, we have separately estimated that there were approximately 11,500 preventable hospitalizations for CHF in 2005. These hospitalizations accounted for approximately \$87.6 million in health care expenditures.