

Potential Health Care Cost Savings from Reducing Alcohol Abuse and Illicit Drug Dependence

Prepared for the Health Care Transformation Task Force
By Minnesota Department of Health Staff
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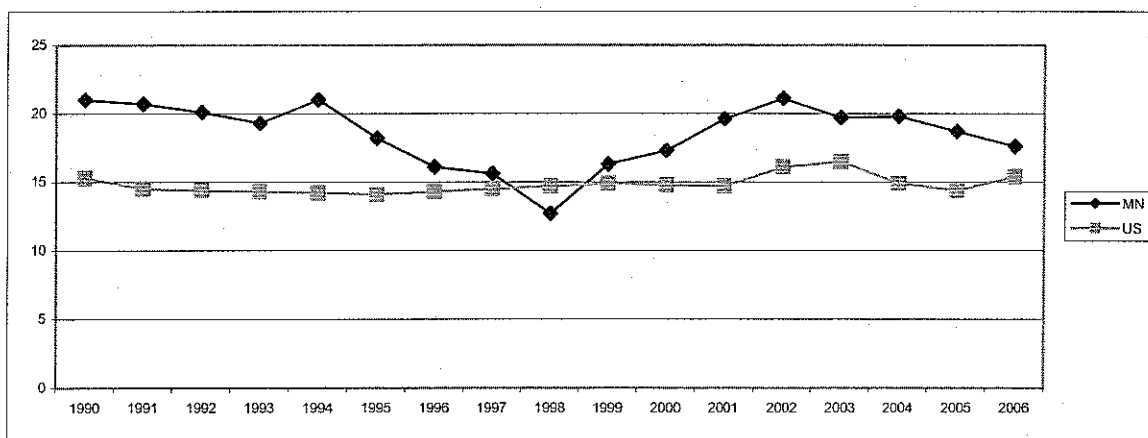
At the November meeting of the Transformation Task Force, staff presented information on the potential savings in the future if “aggressive yet achievable” targets were met for overweight/obesity and smoking. The Task Force asked staff to do additional work to estimate the potential savings from reducing two other risk factors: alcohol and illicit drug abuse.

Alcohol

Binge drinking is associated with many costly health problems. Binge drinking is defined as having five or more alcoholic beverages on an occasion, one or more times in the past 30 days. The estimated excess direct medical costs in 2007 per binge drinker in Minnesota are \$1,339 for adults and \$1,548 for youth¹.

Historically, Minnesota has almost always had a higher adult binge drinking rate than the national average (Figure 1). However, in recent years, the rates have been converging.

Figure 1: Percentage of Minnesota Adults Reporting Binge Drinking Compared to National Average

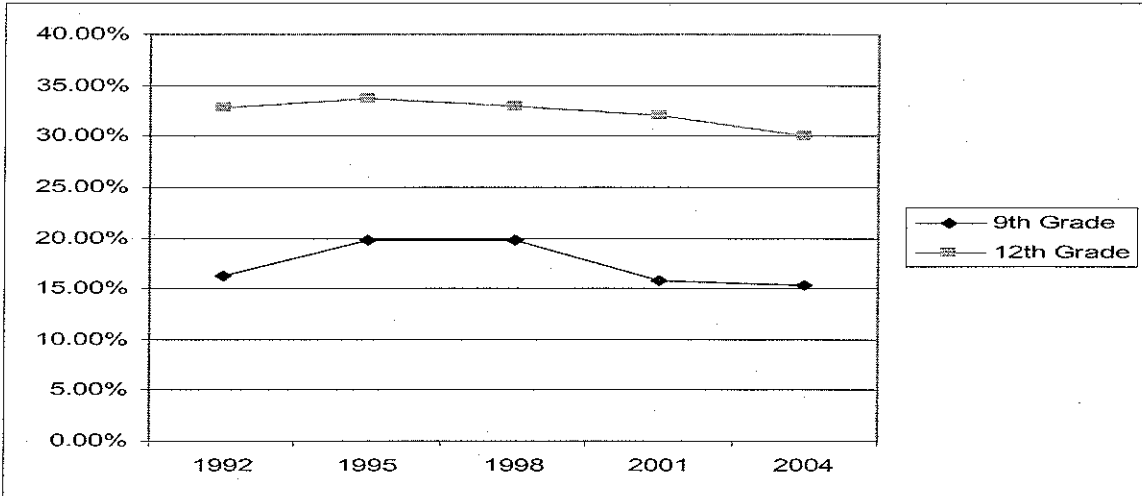


Source: Behavioral Risk Factor Surveillance System

¹ Calculated by the Minnesota Department of Health, Health Economics Program. Sources used: “The Human and Economic Cost of Alcohol Use in Minnesota.” Minnesota Department of Health, January 2004. “Underage Drinking in Minnesota: The Facts” Pacific Institute for Research and Evaluation, October 2006.

Binge drinking is also a problem for youth. According to the 2004 Minnesota Student Survey, over 15% of 9th graders reported binge drinking. The percentage jumps to over 30% for 12th graders. However, the rates of youth binge drinking have been declining over time (Figure 2).

Figure 2: Historical Trend in Minnesota Youth Binge Drinking



Source: Minnesota Student Survey, 2004

For alcohol abuse, we calculated potential savings from achieving the targets shown in Table 1 below. These targets call for the percentage of Minnesota adults and youth who report binge drinking in 2008 and 2009 to decrease according to historical trends. From 2010 to 2013, the target declines by one percentage point per year. This would yield a total reduction in the adult binge drinking rate to a level close to what Minnesota reached in 1998.

Table 1: Binge Drinking Target Levels

	2008	2009	2010	2011	2012	2013
Adult Binge Drinking Target	17.0%	16.7%	15.7%	14.7%	13.7%	12.7%

	2008	2009	2010	2011	2012	2013
9th Grade Binge Drinking Target	15.0%	14.9%	13.9%	12.9%	11.9%	10.9%
12th Grade Binge Drinking Target	29.3%	29.0%	28.0%	27.0%	26.0%	25.0%

If these annual targets were achieved, the potential savings in 2010 would be approximately 0.12% of the estimated annual health care spending in Minnesota, when compared to the baseline projections (Table 2). In 2013 if the binge drinking targets were met, the potential savings would increase to 0.49% of annual spending in that year. If the binge drinking targets are met, the potential cumulative savings from 2008-2013 amount to over \$248 million.

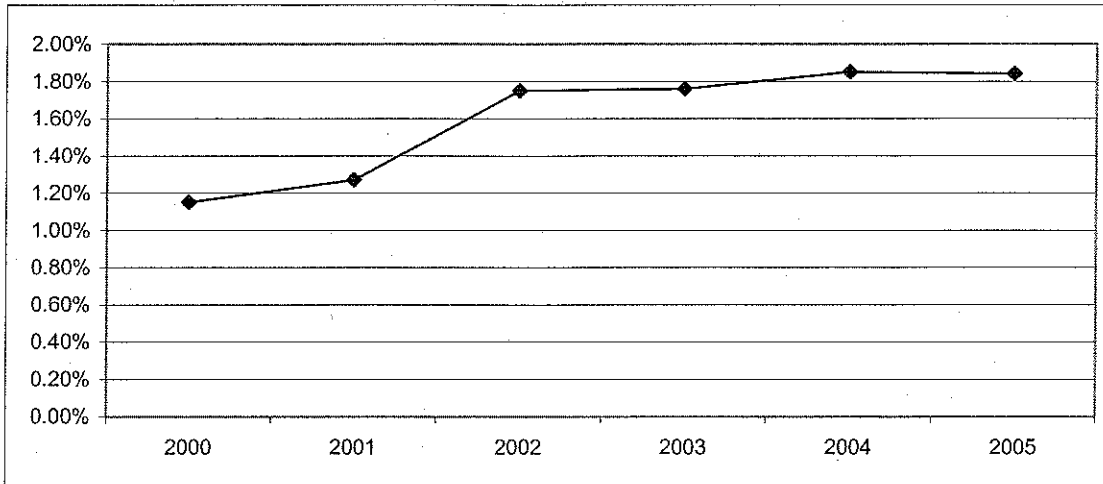
Table 2: Potential Health Care Cost Savings from Meeting Binge Drinking Targets

	Potential Annual Savings (millions)			Annual Savings as % of MN Annual Health Care Spending
	Adult	Youth	Total	
2008	\$0.0	\$0.0	\$0.0	0.00%
2009	\$0.0	\$0.0	\$0.0	0.00%
2010	\$45.9	\$4.6	\$50.5	0.12%
2011	\$98.4	\$9.7	\$108.1	0.25%
2012	\$158.3	\$15.4	\$173.7	0.37%
2013	\$226.6	\$21.7	\$248.3	0.49%

Illicit Drug Dependence

In recent years, the percentage of Minnesotans reporting dependence on illicit drugs has been relatively low, when compared to the national average. Yet, the prevalence of illicit drug dependence in Minnesota has been increasing at a slow rate (Figure 3). The estimated excess direct medical costs in 2007 are \$4,398 per drug abuser in Minnesota.²

Figure 3: Percentage of Minnesotans Reporting Illicit Drug Dependence



Source: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Service Administration

For illicit drug dependence, we calculated potential savings in direct health care costs from achieving the targets shown in Table 3 below. These targets call for stabilizing the rate of growth of illicit drug dependence in 2008 and 2009. From 2010-2013, the target rate of illicit drug dependence would decrease by 0.1% per year.

Table 3: Target Prevalence of Illicit Drug Dependence

	2008	2009	2010	2011	2012	2013
Drug Dependence Target	1.90%	1.90%	1.80%	1.70%	1.60%	1.50%

² Calculated by Minnesota Department of Health, Health Economic Program. Sources used: 2005 State Estimates of Substance Abuse, SAMHSA. "The Economic Costs of Drug Abuse in the U.S." Executive Office of the President, September 2001.

If these annual targets were achieved, the potential savings in 2008 would be approximately 0.02% of the estimated annual health care spending in Minnesota, when compared to the baseline projections (Table 4). In 2013, if the drug target is met, the potential savings would be approximately one-third of one percent of annual spending in that year. If the drug targets are met, the potential cumulative savings from 2008-2013 amount to over \$169 million.

Table 4: Potential Cost Savings from Meeting Drug Dependence Targets

	Potential Annual Savings (millions)	Annual Savings as % of MN Annual Health Care Spending
2008	\$6.3	0.02%
2009	\$13.7	0.04%
2010	\$45.6	0.11%
2011	\$81.5	0.19%
2012	\$122.6	0.26%
2013	\$169.5	0.34%

It may appear that the potential savings from reducing the prevalence of illicit drug dependence are lower than expected. However, the direct health care cost component of the overall cost of drug abuse is approximately 9% of the total of some published estimates.³ The remaining 91% consists primarily of productivity losses (69%), including premature death and incarceration. The “other costs” category (22%) includes the costs of the criminal justice system and social welfare costs. These costs are not included in the measures of potential savings.

³ “The Economic Costs of Drug Abuse in the United States.” Executive Office of the President, Office of National Drug Control Policy. September 2001.