

Milken Institute
An Unhealthy America: The Economic Burden of Chronic Disease
Background Summary Prepared for Transformation Task Force

In “An Unhealthy America”, the Milken Institute estimates potential cost savings for seven chronic diseases: cancer, diabetes, hypertension, stroke, heart disease, pulmonary conditions, and mental disorders. They do this by comparing projections of cost and disease prevalence under “optimistic” and “baseline” scenarios. The optimistic scenarios assume reductions in behavioral risk factors such as smoking and obesity, some improvements in treatment and disease management, and a slowing of healthcare cost growth. These assumptions are outlined in Table 1. Their models also control for the effects of demographic changes.

According to their calculations, Minnesota’s direct medical expenditures for the seven chronic diseases will reach \$16.8 billion in 2023 under the baseline scenario. However, reasonable improvements in preventing and managing chronic diseases could reduce future direct economic costs of disease in Minnesota by 27% or approximately \$4.6 billion. The attached summary provides more information on the Minnesota estimates.

Table 1: Milken Report Baseline and Optimistic Assumptions

	BASELINE (est. rates in 2023)	OPTIMISTIC (est. rates in 2023)	RATIONALE
Health Care Costs	Spending projections consistent with CMS estimates.	Spending projections 0.5% lower than CMS estimates.	Lower average costs reflect a host of factors that could potentially improve the efficiency of care (technology, disease management)
Obesity/Overweight	Obesity rate moderates and plateaus around 2015. Overweight prevalence grows at about half of the historical increase to 43.6% in 2023. Obesity increases to 28.7% in 2023.	Overweight drops to 32.2% and obesity falls to 19.4%.	Changes in unhealthy behaviors, with therapeutic-compound effects, and wellness programs will affect the upward trends in obesity.

Smoking	Declines at the same rate (31%) it fell from 1985 to 2005. Smoking rate at 19%.	Declines at the same rate (50%) it fell from 1965 to 2004. Smoking rate at 15.4%.	
Alcohol Consumption	“At risk” drinkers (two or more drinks per day) remains unchanged at 5.8%.	“At risk” drinkers falls to 4.2%.	Raising awareness of adverse effects will lead to lower alcohol consumption.
Physical Activity	Increase of people engaged in regular exercise to 77.9%.	Increase to 83.3%.	
High Cholesterol	42.2%	31.5%	Increased awareness of diet and nutrition and their impacts on healthy aging.
Air Quality	Air quality worsens steadily to 58.4, based on an index measure that captures fuel demand (higher index levels indicate higher levels of air pollution)	Air pollution increases at a slower pace to 53.5 (index measure)	More environmentally friendly fuel alternatives and/or incentives.
Illicit Drug Use	Number of arrests for drug abuse violations climbs to 0.64% of total population	Number of arrests for drug use reaches 0.57%.	Increased awareness of adverse effects and stricter law enforcement policies.

Source: DeVol, Ross and Armen Bedroussian. *An Unhealthy America: The Economic Burden of Chronic Disease*, Milken Institute, October 2007. Report available at www.milkeninstitute.org.

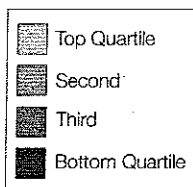
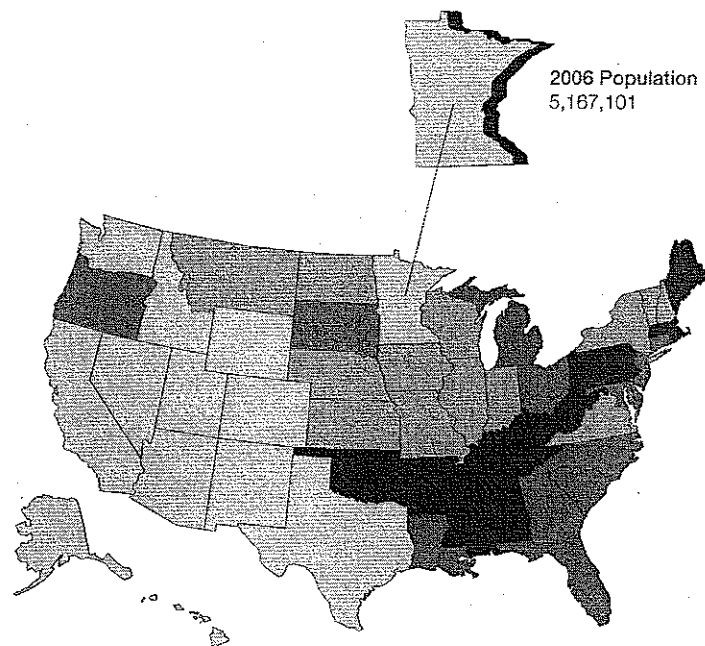
Current Toll on Minnesota TODAY

Over 2.7 million cases of seven common chronic diseases — cancers, diabetes, heart disease, hypertension, stroke, mental disorders, and pulmonary conditions — were reported in Minnesota in 2003. These conditions shorten lives, reduce quality of life, and create considerable burden for caregivers. The following map shows how states compare based on the prevalence of the seven common chronic diseases.

Reported Cases in Minnesota, 2003 (and as % of population*)

Cancers:	175,000	(3.6%)
Diabetes:	163,000	(3.3%)
Heart Disease:	232,000	(4.7%)
Hypertension:	579,000	(11.8%)
Stroke:	42,000	(0.9%)
Mental Disorders:	750,000	(15.2%)
Pulmonary Conditions:	778,000	(15.8%)

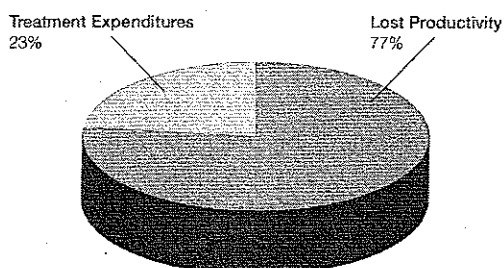
* As % of non-institutionalized population. Number of treated cases based on patient self-reported data from 2003 MEPS. Excludes untreated and undiagnosed cases.



Milken Institute State Chronic Disease Index

States in the top quartile have the lowest rates of seven common chronic diseases.


And while the human cost is enormous, the economic cost also is great. The cost of treating these conditions — without even taking into consideration the many secondary health problems they cause — totaled \$5.3 billion in 2003. These conditions also reduce productivity at the workplace, as ill employees and their caregivers are often forced either to miss work days (absenteeism) or to show up but not perform well (presenteeism). The impact of lost workdays and lower employee productivity resulted in an annual economic loss in Minnesota of \$17.5 billion in 2003.



Economic Impact in Minnesota 2003 (Annual Costs in Billions)

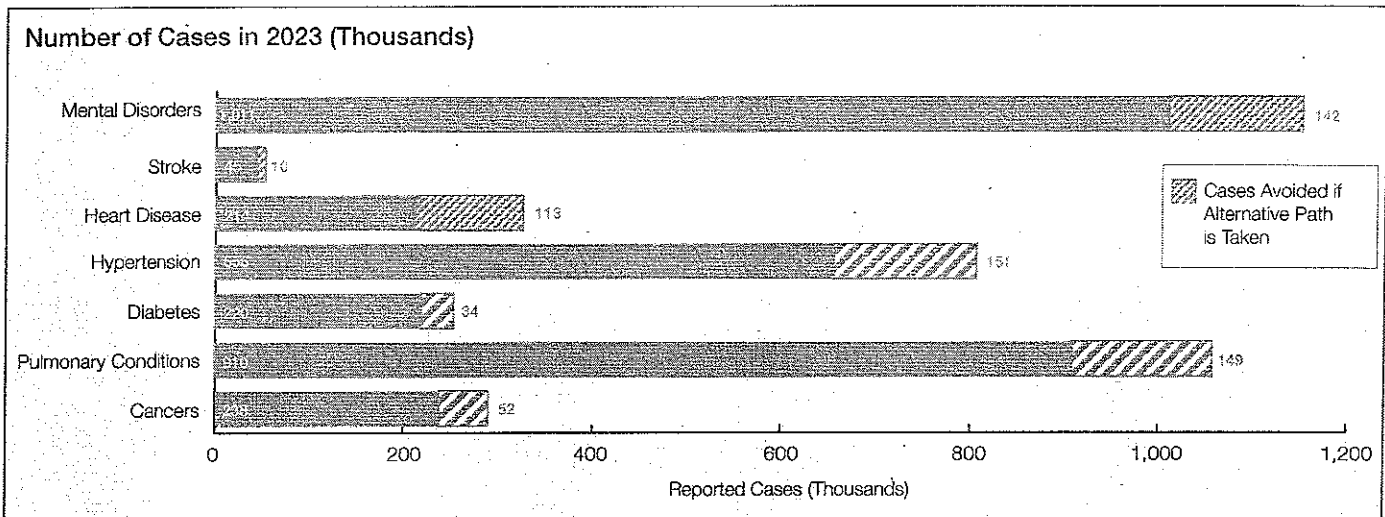
Treatment Expenditures:	\$5.3
Lost Productivity:	\$17.5
Total Costs:	\$22.8

Figures may not sum due to rounding.

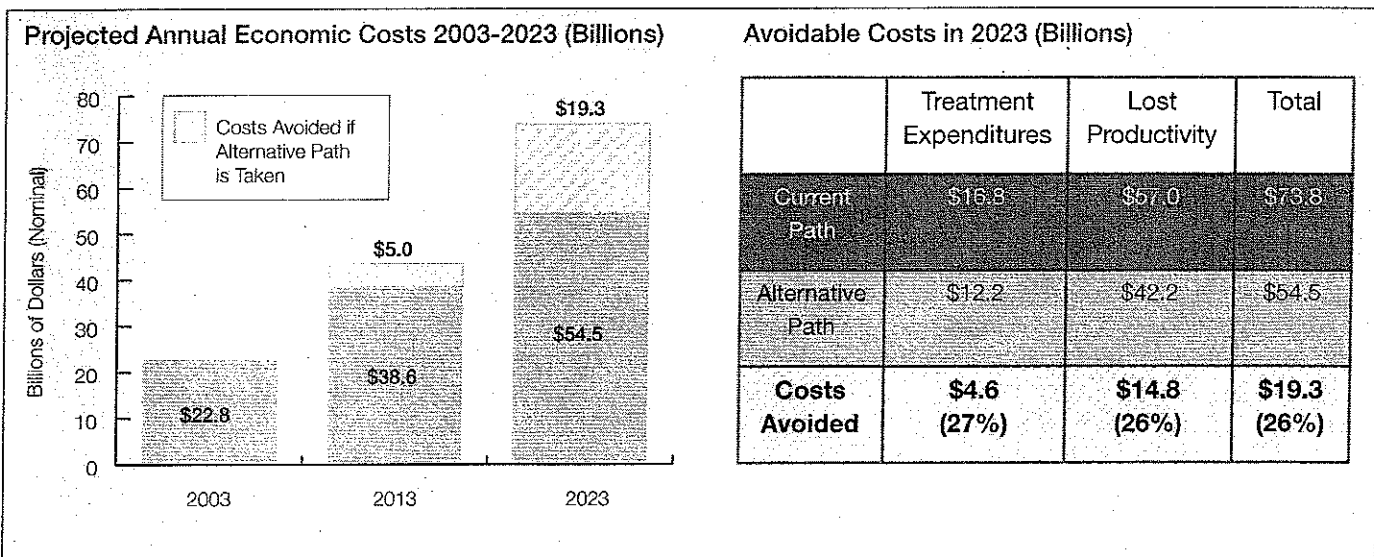
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Two Paths, Two Choices — Chronic Disease in Minnesota TOMORROW

On our current path, Minnesota will experience a dramatic increase in chronic disease in the next 20 years. **But there is an alternative path.** By making reasonable improvements in preventing and managing chronic disease, we can avoid 651,000 cases of chronic conditions in 2023.



Reasonable improvements in preventing and managing chronic disease could reduce future economic costs of disease in Minnesota sharply, by 26% (\$19.3 billion) in 2023. \$14.8 billion of this would come from gains in productivity, and \$4.6 billion would come from reduced treatment spending.



And the impact on economic output *compounds* over time. These improvements in health will increase investments in human and physical capital, driving additional economic growth a generation from now. By 2050, reasonable disease prevention and management efforts could add \$101 billion to the state's economic output, a boost of 18%.

**Real GDP in 2050
(In billions 2003 dollars)**

GDP in 2050, Current Path:	\$575
GDP in 2050, Alternative Path:	\$676
Potential Gain in GDP:	\$101 (18%)

Figures may not sum due to rounding.