



National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP)

National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) Home

Health and Economic Costs of Chronic Diseases

90% of the nation's \$4.1 trillion in annual health care expenditures are for people with chronic and mental health conditions.^{1,2}



Chronic diseases have significant health and economic costs in the United States. [Preventing chronic diseases](#), or managing symptoms when prevention is not possible, can reduce these costs.

Diseases

Heart Disease and Stroke



Nothing kills more Americans than [heart disease](#) and [stroke](#). More than 877,500 Americans die of heart disease or stroke every year—that's one-third of all deaths. These diseases take an economic toll, as well, costing our health care system \$216 billion per year and causing \$147 billion in lost productivity on the job.³

Cancer



Each year in the United States, more than [1.7 million people](#) are diagnosed with [cancer](#), and almost 600,000 die from it, making it the second leading cause of death. The cost of cancer care continues to rise and is expected to reach more than \$240 billion by 2030.⁴

Diabetes

More than 37 million Americans have [diabetes](#), and another 96 million adults in the United States have a condition called prediabetes, which puts them at risk for type 2 diabetes. Diabetes can cause serious complications, including heart disease, kidney failure, and blindness. In 2017, the total estimated cost of diagnosed diabetes was \$327 billion in medical costs and lost productivity.⁵



Obesity



Obesity affects 20% of children and 42% of adults, putting them at risk of chronic diseases such as type 2 diabetes, heart disease, and some cancers. Over 25% of young people 17 to 24 are too heavy to join the US military. Obesity costs the US health care system nearly \$173 billion a year.⁶

Arthritis



Arthritis affects 58.5 million adults in the United States, which is about 1 in 4 adults. It is a leading cause of work disability in the United States, one of the most common chronic conditions, and a common cause of chronic pain. The total cost attributable to arthritis and related conditions was about \$303.5 billion in 2013. Of this amount, nearly \$140 billion was for medical costs and \$164 billion was for indirect costs associated with lost earnings.⁷

Alzheimer's Disease



Alzheimer's disease, a type of dementia, is an irreversible, progressive brain disease that affects about 5.7 million Americans, including 1 in 10 adults aged 65 and older. It is the sixth leading cause of death among all adults and the fifth leading cause for those aged 65 or older. In 2020, the estimated cost of caring for and treating people with Alzheimer's disease was \$305 billion. By 2050, these costs are projected to be more than \$1.1 trillion.⁸

Epilepsy



In the United States, about 3 million adults and 470,000 children and teens younger than 18 have active **epilepsy**—meaning that they have been diagnosed by a doctor, had a recent seizure, or both. Adults with epilepsy report worse mental health, more cognitive impairment, and barriers in social participation compared to adults without epilepsy. In 2016, health care spending for epilepsy was \$8.6 billion in direct costs.⁹

Tooth Decay



Cavities (also called tooth decay) are one of the most common chronic diseases in the United States. One in six children aged 6 to 11 years and one in four adults have untreated cavities. Untreated cavities can cause pain and infections that may lead to problems eating, speaking, and learning. On average, 34 million school hours are lost each year because of unplanned (emergency) dental care, and over \$45 billion is lost in productivity due to dental disease.^{10,11}

Risk Factors

Cigarette Smoking



Cigarette smoking is the leading cause of preventable death and disease in the United States. More than 16 million Americans have at least one disease caused by smoking. This amounts to more than \$240 billion in health care spending that could be reduced every year if we could prevent youth from starting to smoke and help every person who smokes quit.¹²

Physical Inactivity






Not getting enough **physical activity** comes with high health and financial costs. It can lead to heart disease, type 2 diabetes, some cancers, and obesity. Physical inactivity also costs the nation \$117 billion a year for related health care.¹³

Excessive Alcohol Use



Excessive alcohol use is responsible for 140,000 deaths in the United States each year, including 1 in 10 deaths among working-age adults.^{14,15} In 2010, excessive alcohol use cost the US economy \$249 billion, or \$2.05 a drink, and \$2 of every \$5 of these costs were paid by the public.¹⁶ Binge drinking is responsible for over 40% the deaths and three-quarters of the costs due to excessive alcohol use.^{14,16}

References

1. Buttorff C, Ruder T, Bauman M. *Multiple Chronic Conditions in the United States*  [PDF -393kb]  Santa Monica, CA: Rand Corp.; 2017.
2. National Health Expenditure Data: Historical. Center for Medicare & Medicaid Services. December 15, 2021. Accessed May 5, 2022. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical> 
3. Benjamin EJ, Virani SS, Callaway CW, et al. Heart disease and stroke statistics—2018 update: a report from the American Heart Association. *Circulation*. 2018;137:e67–e492.
4. Mariotto AB, Enewold L, Zhao J, Zeruto CA, Yabroff KR. Medical care costs associated with cancer survivorship in the United States. *Cancer Epidemiol Biomarkers Prev*. 2020;29:1304–1312.

5. American Diabetes Association. Economic Costs of Diabetes in the U.S. in 2017. *Diabetes Care* 2018;41(5):917-928. [PubMed abstract](#)  .
6. Ward ZJ, Bleich SN, Long MW, Gortmaker SL (2021) Association of body mass index with health care expenditures in the United States by age and sex. *PLoS ONE* 16(3): e0247307. <https://doi.org/10.1371/journal.pone.0247307> 
7. Murphy LB, Cisternas MG, Pasta DJ, Helmick CG, Yelin EH. Medical expenditures and earnings losses among US adults with arthritis in 2013. *Arthritis Care Res (Hoboken)*. 2018;70(6):869–876.
8. 2020 Alzheimer’s Disease Facts and Figures. Alzheimer’s Impact Movement and Alzheimer’s Association. March 2020. Accessed January 2022. https://www.alz.org/aaic/downloads2020/2020_Facts_and_Figures_Fact_Sheet.pdf  [PDF -134kb] 
9. Dieleman JL, Cao J, Chapin A, et al. US health care spending by payer and health condition, 1996-2016. *JAMA*.2020;323(9):863–884. [PubMed abstract](#)  .
10. Righolt AJ, Jevdjevic M, Marcenes W Listl S. Global-, regional-, and country-level economic impacts of dental diseases. *J Dent Res*. 2018;97(5):501–507. [PubMed abstract](#)  .
11. Naavaal S, Kelekar U. [Hours lost due to planned and unplanned dental visits among US adults](#)  . *Health Behav Policy Rev*. 2018;5(2):66–73.
12. Xu X, Shrestha SS, Trivers KF, Neff L, Armour BS, King BA. U.S. healthcare spending attributable to cigarette smoking in 2014  . *Prev Med*. 2021; 150:106529.
13. US Department of Health and Human Services. *Step It Up! The Surgeon General's Call to Action to Promote Walking and Walkable Communities*. Office of the Surgeon General; 2015.
14. Centers for Disease Control and Prevention (CDC). *Alcohol-Related Disease Impact (ARDI)*. Atlanta, GA: CDC.
15. Stahre M, Roeber J, Kanny D, Brewer RD, Zhang X. [Contribution of excessive alcohol consumption to deaths and years of potential life lost in the United States](#). *Prev Chronic Dis*. 2014;11:130293.
16. Sacks JJ, Gonzales KR, Bouchery EE, Tomedi LE, Brewer RD. [2010 national and state costs of excessive alcohol consumption](#)  . *Am J Prev Med* 2015; 49(5):e73–e79.