October 15, 2023

The Honorable Michael Burgess
United States House of Representatives
Washington, DC 20515

The Honorable Lloyd Smucker
United States House of Representatives
Washington, DC 20515

The Honorable Drew Ferguson
United States House of Representatives
Washington, DC 20515

The Honorable Blake Moore
United States House of Representatives
Washington, DC 20515

The Honorable Buddy Carter
United States House of Representatives
Washington, DC 20515

The Honorable Rudy Yakym
United States House of Representatives
Washington, DC 20515

Dear Representatives Burgess, Arrington, Ferguson, Carter, Smucker, Moore and Yakym:

Thank you for the opportunity to provide feedback to the Health Care Task Force's request for solutions to improve health outcomes and reduce federal healthcare spending in the budget. Our nonprofit, nonpartisan organizations represent the public health, medical and patient advocacy communities. We have a unique perspective on what individuals and families need to prevent disease, cure illness, and manage chronic health conditions. We are united in our long-standing support of the Centers for Disease Control and Prevention (CDC) and its National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) as a key pillar of our nation's public health defense system.

Our organizations, which often come together to support robust and sustained funding for CDC and specifically NCCDPHP, came together to jointly respond to the Task Force's request for information regarding examples of evidence-based, cost-effective preventive health measures and interventions that can reduce long term health costs. The evidence is clear – the public health programs and prevention activities conducted by the CDC are effective and crucial to reducing healthcare costs and decreasing health disparities. The appendix provides several examples of evidence-based, cost-effective chronic disease-focused public health programs or interventions conducted by or through CDC.

It is important to note that many of the public health programs highlighted in the appendix are priorities for individual organizations based on the interests and needs of their specific patient constituencies and may not be championed by all the organizations who contributed to this letter. Such examples were provided by individual organizations to show the implications and expertise that we bring to these critical issues.

Background

The United States has one of the highest costs of healthcare in the world, however, U.S. residents are not achieving better health and often face poorer health outcomes than individuals from other high-income countries.[1,2] In 2021, U.S. healthcare spending reached $4.3 trillion.[3] This averages out to approximately $12,900 per person[4] and by comparison, the average cost of healthcare per person in other high-income countries is almost half as much. Although the COVID-19 pandemic exacerbated trends in rising healthcare costs, the increase in spending began long before the pandemic with healthcare costs accounting for 5% of the nation's GDP in 1960 and has since risen to 18% in 2021.[5]

One reason for these rising healthcare costs is the United States' lack of adequate and consistent funding for the prevention of chronic diseases and conditions and for the promotion of health and well-being. This has also made our nation more vulnerable to severe illness and death from infectious disease given how inextricably linked chronic diseases are with infectious diseases. The lack of prioritized investments in public health ultimately jeopardizes people's economic and personal well-being and is not sustainable for individuals, families, communities, employers, and policymakers.

Efforts to improve the nation's health status and ultimately reduce healthcare spending must include investments in robust public health and prevention efforts outside of clinical settings at the community level. A 2012 Institute of Medicine (now the National Academy of Medicine) report stated clearly that prevention of disease is the "most efficient and effective" way of achieving community health:

[1] Kurani, Nisha, and Cynthia Cox. "What Drives Health Spending in the U.S. Compared to Other Countries." Peterson-KFF Health System Tracker, September 25, 2020. https://www. healthsystemtracker.org/brief/what-driveshealth-spending-in-the-u-s-compared-to-othercountries.

[2] Tikkanen, Roosa, and Melinda K. Abrams. "U.S. Health Care from a Global Perspective, 2019: Higher Spending, Worse Outcomes?" The Commonwealth Fund, January 2020. https://www. commonwealthfund.org/publications/ issue-briefs/2020/jan/us-health-care-globalperspective-2019.

[3] Centers for Medicare and Medicaid Services, *National Health Expenditure Data*, December 2022.

[4] Ibid.

[5] Ibid.

> "Although some clinical care interventions can help to prevent a disease process in an individual, they cannot be used efficiently throughout a population to address pressing community health challenges. Those challenges, such as growing rates of obesity and diabetes, increase health care costs, diminish American productivity and competitiveness, and probably limit the opportunities available to the next generation of Americans because of increasingly poor health. Taking action early and at the level of population, long before diabetes is diagnosed in one obese person, or chronic bronchitis is diagnosed in one smoker, is the most efficient and effective route to disease prevention."[6]

The federal agency best equipped to improve health through public health efforts is CDC. CDC is the nation's leading science-based, data driven organization that protects the public's health through health promotion, infectious disease control and mitigating health threats. It is also a primary source of funding for state, local, tribal and territorial health departments.

Unfortunately, as we saw during the COVID-19 pandemic and during previous public health epidemics, including the 2015-2016 Zika virus, the 2009 H1N1 flu pandemic, and the e-cigarette or vaping use-associated lung injury (EVALI) crisis in 2019: our nation's public health infrastructure and workforce is not funded at levels to sustain it during "normal" times let alone at levels that would enable it to expand to the degree necessary to handle public health crises.

The nation's growing public health needs include curbing the rise in chronic disease prevalence. Chronic diseases represent seven of the 10 leading causes of death[7] and are leading drivers of the nation's $4.3 trillion in annual healthcare costs.[8] Nearly half of all U.S. residents ages 55 or older have two or more chronic health conditions.[9] In addition to annual costs for patients, chronic disease often leads to economic burden in many other ways. For example, in 2017, caregivers of those living with Alzheimer's and other dementias provided an estimated 18.4 billion hours of unpaid care, at an economic value of more than $232 billion.[10] Chronic diseases also often lead to reduced productivity due to disability and absenteeism from work which results in lost economic output and lower incomes for individuals. For instance, in 2016, obesity was associated with $480 billion in direct healthcare costs and $1.24 trillion in indirect work loss costs.[11]

Despite the rising prevalence of chronic diseases, most can be prevented and/or managed through supportive, evidence-based public health programs that facilitate eating well, being physically active, avoiding or quitting tobacco, avoiding excessive drinking, avoiding injury and getting regular health screenings and vaccines. Excluding skin cancers, at least 42% of newly diagnosed cancers in the United States are potentially avoidable, including 19% of cancers caused by smoking and at least 18% caused by

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[6] Committee on Public Health Strategies to Improve Health; Institute of Medicine. For the Public's Health: Investing in a Healthier Future. Washington (DC): National Academies Press (US); 2012 Apr 10. 2, Reforming Public Health and Its Financing. Available from: https://www.ncbi.nlm.nih.gov/books/NBK201015/

[7] Centers for Disease Control and Prevention. Leading causes of death. *Morality in the United States, 2019.*

[8] Buttorff C, Ruder T, Bauman M. *Multiple Chronic Conditions in the United States*. Santa Monica, CA: Rand Corp.; 2017 and National Health Expenditure Data: Historical. Center for Medicare & Medicaid Services. December 15, 2021.

[9] Centers for Disease Control and Prevention. "Percentage of U.S. Adults 55 and over with Chronic Conditions." National Center for Health Statistics. Updated November 6, 2015. https://www.cdc.gov/nchs/health_policy/ adult_chronic_conditions.htm.

[10] Alzheimer's Association. 2018 Alzheimer's Disease Facts and Figures. *Alzheimers Dement* 2018;14(3):367-429. Available at: alz.org/facts

[11] Ding Y, Fan X, Blanchette CM, Smolarz BG, Weng W, Ramasamy A. Economic value of nonsurgical weight loss in adults with obesity. J Manag Care Spec Pharm. 2021 Jan;27(1):37-50. doi: 10.18553/jmcp.2020.20036. Epub 2020 Nov 9. PMID: 33164723; PMCID: PMC10394211.

a combination of excess body weight, alcohol consumption, poor nutrition, and physical inactivity.[12] Additionally, up to 40% of Alzheimer's disease, estimated to cost $1 trillion annually, can be prevented by managing similar risk factors.[13] Public health programs are lifesaving and cost effective: a 2017 systematic review of the return on investment of public health interventions in high-income countries found a median return of 14 to 1.[14] Research shows that CDC-recognized lifestyle change program participants who lost 5-7% of their body weight and added 150 minutes of exercise per week cut their risk of developing type 2 diabetes by up to 58% (71% for people over 60 years old).[15,16]

The CDC plays an unparalleled and indispensable role in addressing chronic disease in the United States, specifically through the NCCDPHP. The CDC's NCCDPHP helps people and communities prevent chronic diseases and promotes health and wellness for all by:

- Measuring the numbers of individuals with chronic diseases or chronic disease risk factors;
- Strengthening health care systems to deliver preventive services and have highly trained health professionals that keep people well, diagnose diseases early, and help manage chronic conditions;
- Improving communities and public settings to make healthy choices convenient and conducting awareness campaigns and trainings to create supportive, safe environments;
- Connecting clinical services to community programs that help people prevent and manage their chronic diseases and conditions; and
- Addressing widening health disparities and advancing health equity.

One of the CDC NCCDPHP's most successful efforts to date in preventing and managing chronic disease is its work on tobacco through the Office on Smoking and Health (OSH) and its "Tips from Former Smokers" campaign. This media campaign has proven to be highly effective in aiding individuals to quit smoking. From 2012 to 2018, CDC estimates that more than 16.4 million people who smoke attempted to quit and approximately one million quit for good because of the Tips campaign.[17] During that timeframe, the Tips campaign also helped prevent an estimated 129,000 early deaths and helped save an estimated $7.3 billion in smoking-related healthcare costs.

While CDC hosts many successful programs through the NCCDPHP, these critical initiatives continue to struggle to reach all states due to lack of overall funding. The 2012 Institute of Medicine (IOM) (now the

[12] American Cancer Society. *Cancer Facts & Figures 2022*. Atlanta: American Cancer Society; 2022.

[13] Livingston, G., Huntley, J., Sommerlad, A., et al. (2020). Dementia Prevention, Intervention, and Care: 2020 report of the Lancet Commission. The Lancet, 396(10248), 413–446. https://doi.org/10.1016/s0140-6736(20)30367-6

[14] Masters R, Anwar E, Collins B, Cookson R, Capewell S. Return on investment of public health interventions: a systematic review. J Epidemiol Community Health 71 (8):827-34, 2017.

[15] Diabetes Prevention Program (DPP) – NIDDK. *National Institute of Diabetes and Digestive and Kidney Diseases,* U.S. Department of Health and Human Services, May 2022, www.niddk.nih.gov/about-niddk/research-areas/diabetes/diabetes-prevention-program-dpp.

[16] National Diabetes Prevention Program – Why Participate. *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 1 Aug. 2023, www.cdc.gov/diabetes/prevention/why-participate.

[17] Murphy-Hoefer R, Davis KC, King BA, Beistle D, Rodes R, Graffunder C. Association between the *Tips From Former Smokers* Campaign and Smoking Cessation Among Adults, United States, 2012–2018. Preventing Chronic Disease 2020;17:200052.

National Academy of Medicine) report included a section entitled "Reforming Public Health and its Financing." [18] Among the IOM's recommendations were:

> "To achieve a more effective national public health effort, the nation will have to change how it allocates health expenditures in general and public health funds specifically. Spending on population-based public health prevention efforts is a very small proportion of overall national health expenditures. The allocation of public health spending also is not commensurate with need or with achieving the greatest value: conditions responsible for the highest preventable burden of disease are considerably underfunded."

With robust investments towards these critical initiatives, NCCDPHP can fulfill its mission by expanding the current patchwork of existing disease-specific programs to all jurisdictions and providing flexible funding to address emerging chronic disease challenges, such as long covid.

Public health programs addressing chronic diseases are crucial components of the United States' healthcare system. By emphasizing prevention, early detection and disease management – CDC's evidence-based public health programs can significantly reduce healthcare costs and keep our nation safe and secure from global and domestic public health threats. As the burden of chronic diseases continues to escalate, investments in public health initiatives become increasingly critical for individual health and the long-term financial sustainability of the nation's healthcare system.

We look forward to working with the Task Force and championing public health efforts to reduce the unsustainable healthcare costs impacting people across the nation.

Sincerely,

Academy of Nutrition and Dietetics
Allergy & Asthma Network
American Cancer Society Cancer Action Network
American Heart Association
American Lung Association
American Public Health Association
Association of State and Territorial Health Officials
Asthma and Allergy Foundation of America
Big Cities Health Coalition
Celiac Disease Foundation
Dravet Syndrome Foundation
Endocrine Society
Epilepsy Foundation
GO2 for Lung Cancer
Good Days
Hereditary Angioedema Association
LUNGevity Foundation
Lupus and Allied Diseases Association, Inc.
National Association of Chronic Disease Directors
National Eczema Association
National Kidney Foundation
National Network of Public Health Institutes
Prevent Blindness
Project Sleep
Restless Legs Syndrome Foundation
The Marfan Foundation
Trust for America's Health
UsAgainstAlzheimer's
wAIHA Warriors
YMCA of the USA

[18] Committee on Public Health Strategies to Improve Health; Institute of Medicine. For the Public's Health: Investing in a Healthier Future. Washington (DC): National Academies Press (US); 2012 Apr 10. 2, Reforming Public Health and Its Financing. Available from: https://www.ncbi.nlm.nih.gov/books/NBK201015/

Appendix: Examples of Evidence-Based, Cost-Effective Preventive Health Measures or Interventions that can Reduce Long Term Health Cost

CDC's Office on Smoking and Health

One of CDC's most successful efforts to date in preventing and managing chronic disease is its work on tobacco through the Office on Smoking and Health (OSH). According to the U.S. Surgeon General, more than 16 million Americans are currently living with cancer, heart disease, chronic obstructive pulmonary disease (COPD) and other diseases caused by tobacco use. Tobacco use kills more than 480,000 individuals in the United States each year. Nearly one in three heart disease deaths and cancer deaths and nearly eight in 10 chronic obstructive pulmonary disease (COPD) deaths are caused by tobacco use. Further, tobacco use is responsible for more than $600 billion in annual healthcare spending and lost productivity.[19,20]

It is undeniable that addressing tobacco use must be a central aspect of any effort to tackle chronic disease. Thankfully, CDC has more than acknowledged as much. CDC's "Tips from Former Smokers" (Tips) media campaign has proven to be highly effective in aiding individuals to quit smoking. From 2012 to 2018, CDC estimates that more than 16.4 million people who smoke attempted to quit and approximately one million quit for good because of the Tips campaign.[21] Additionally, CDC has made great progress through its support of tobacco prevention and cessation programs in states and territories. States and territories are able to use funds from CDC's OSH to help individuals quit smoking, prevent youth tobacco use, reduce secondhand smoke exposure, and reduce disparities associated with tobacco use. With every $1 spent on their tobacco control programs, states can secure up to a $55 return on investment. As just one example, during the 2020 Tips campaign, North Carolina saw 13,037 calls come into its state quitline, an increase of 20%.[22]

CDC is already doing phenomenal work to address tobacco use, yet it could achieve so much more with additional funding. Currently, the Tips campaign is only able to run for part of the year. With additional funding, the Tips campaign could run throughout the entire year and encourage more individuals to make quit attempts. A 2020 study that estimated the budgetary impact of a national year-long antitobacco media campaign found that running a sustained media campaign like Tips would reduce Medicaid spending by $3.6 billion, Medicare spending by $1.37 billion, and private insurer spending by $180 million over 10 years.[23] With additional funds, CDC could also enhance efforts to end youth and young adult tobacco use, including e-cigarette use.

Youth continue to use e-cigarettes at alarming levels. CDC and the FDA's most recent National Youth Tobacco Survey showed that more than 2.5 million middle and high school students reported using e-

[19] 2014 Surgeon General's report: the health consequences of smoking-50 years of progress complete report executive summary. [Feb; 2023]. 2023. https://www.cdc.gov/tobacco/sgr/50th-anniversary/index.htm.
[20] U.S. healthcare spending attributable to cigarette smoking in 2014. Xu X, Shrestha SS, Trivers KF, Neff L, Armour BS, King BA. *Prev Med.* 2021;150:106529.
[21] Murphy-Hoefer R, Davis KC, King BA, Beistle D, Rodes R, Graffunder C. Association between the *Tips From Former Smokers* Campaign and Smoking Cessation Among Adults, United States, 2012–2018. Preventing Chronic Disease 2020;17:200052.
[22] Centers for Disease Control and Prevention. Extinguishing the Tobacco Epidemic in North Carolina. 2021.
[23] Maciosek, Michael V., et al., "Budgetary impact from multiple perspectives of sustained antitobacco national media campaigns to reduce the arms of cigarette smoking," Tobacco Control, April, 2020.

cigarettes in 2022.[24] With more resources, CDC could better equip states to address this epidemic; could educate youth, parents, health professionals, communities, and others about tobacco products and the harms associated with their use; and could identify evidence-based strategies to protect youth and young adults from initiating tobacco use. Finally, with more funding, CDC could strengthen its efforts to assist groups who are disproportionately harmed by tobacco products, including by designing and implementing prevention and cessation programs that are tailored to address their specific needs. While the nation's adult smoking rate has decreased from 21.6% in 2003 to 11.5% in 2021, reductions in smoking have been uneven and certain populations continue to use commercial tobacco products at much higher rates than the national rate.[25] For example, commercial cigarette use remains particularly high among Indigenous Peoples (Native Americans and Alaskan Natives) at 27.1%[26] and LGB adults at 15.3%.[27] Targeted efforts from CDC could enable the agency to meet unique needs and tackle disparities.

CDC's National Asthma Control Program

CDC's National Asthma Control Program (NACP) was created to improve the public health response to help the millions of people with asthma in the U.S. Currently, more than 25 million people across the nation, including 4.2 million children, have asthma.[28,29] Asthma is a leading cause of hospitalizations and school absences among children. It is responsible for $50.3 billion in annual healthcare costs, $3 billion in missed school and workdays and $29 billion in mortality costs.[30] While asthma can impact anyone, the burden of asthma falls disproportionately on Black and Indigenous communities, Puerto Ricans and people of multiple races.[23] Tragically, while most asthma-related deaths can be prevented, over 3,5000 people in the U.S. died from asthma in 2021.[31]

The NACP is vital to asthma education, prevention and research. Since 1999, millions of Americans have benefited from the program and asthma mortality rates decreased by more than 45% from 1999-2018. The goals of NACP include reducing the number of deaths, hospitalizations, emergency department visits, school days, or workdays missed, and reducing limitations on activity due to asthma. While the number of people living with asthma has increased, research shows that people with asthma are better managing their disease. The number of people having asthma attacks decreased by 16% from 2001 to 2018.

The NACP addresses the intersection of public health and healthcare by funding state programs and national organizations, promoting asthma quality measures, and informing policy makers about the

[24] Park-Lee E, Ren C, Cooper M, Cornelius M, Jamal A, Cullen KA. Tobacco Product Use Among Middle and High School Students - United States, 2022. MMWR Morb Mortal Wkly Rep. 2022 Nov 11;71(45):1429-1435. doi: 10.15585/mmwr.mm7145a1. PMID: 36355596; PMCID: PMC9707354.

[25] Centers for Disease Control and Prevention. National Health Interview Survey. Various years.

[26] Cornelius ME, Loretan CG, Wang TW, Jamal A, Homa DM. Tobacco Product Use Among Adults — United States, 2020. MMWR Morb Mortal Wkly Rep 2022;71:397–405. DOI: http://dx.doi.org/10.15585/mmwr.mm7111a1.

[27] Cornelius ME, Loretan CG, Jamal A, et al. Tobacco Product Use Among Adults – United States, 2021. MMWR Morb Mortal Wkly Rep 2023;72:475–483. DOI: http://dx.doi.org/10.15585/mmwr.mm7218a1. (National data around commercial cigarette use is not available for transgender individuals)

[28] National Center for Health Statistics. (2023). *2022 NHIS Adult Summary Health Statistics.* U.S. Department of Health and Human Services. https://data.cdc.gov/d/25m4-6qqq.

[29] National Center for Health Statistics. (2023). *2022 NHIS Child Summary Health Statistics. U.S. Department of Health and Human Services.* https://data.cdc.gov/d/wxz7-ekz9

[30] Nurmagambetov, T., Kuwahara, R., & Garbe, P. (2018). The Economic Burden of Asthma in the United States, 2008–2013. *Annals of the American Thoracic Society*, *15*(3), 348–356. https://doi.org/10.1513/annalsats.201703-259oc

[31] National Center for Health Statistics. *National Vital Statistics System: Underlying Cause of Death 2018-2021.* U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. https://wonder.cdc.gov/ucd-icd10-expanded.html

burden of asthma. The program's return on investment is compelling. For every dollar spent on national and state-level programs, $71 in asthma-related expenditures is saved.[32] This is a strong indicator that this program can help curb the burden of asthma. Currently, the NACP only receives enough dollars to fund 23 states. Funding for additional states would be an important step in decreasing the number of emergency visits, hospitalizations, missed school or workdays, and deaths caused by asthma each year.

CDC's Division of Cancer Prevention and Control

Another example of important work that CDC is engaged in to prevent disease that could benefit from additional resources is the Division of Cancer Prevention and Control (DCPC) under NCCDPHP. Cancer death rates have decreased by nearly 30% in the past two decades, yet, despite this progress, cancer was still the nation's second leading cause of death in 2019.[33] The DCPC spearheads the federal government's efforts to prevent and control cancer and, in doing so, furthers essential work to lower the risk of cancer and cancer death for individuals in the United States.

The DCPC facilitates data collection through the administration of the National Program of Cancer Registries (NPCR). The NPCR supports and collects cancer incidence and death data in 46 states, DC and 3 territories, encompassing 97% of the population. Additional funding can help modernize the current data system to allow larger studies monitoring the burden of disease, disparities, prevention strategies, and treatment efficacy to further improve cancer care, prevention, and early detection.

Cancer screening is a key element of secondary prevention and management as it helps to identify disease early enough to allow for optimal intervention. One instance of the benefits of screening can be seen with lung cancer. Detecting lung cancer in early stages versus late stage is often the difference between life and death. Low-dose computed tomography screening among those at high risk for lung cancer can help detect this disease earlier and has been shown to reduce the lung cancer death rate by up to 20%.[34] Unfortunately, in 2020, only 5.7% of those eligible for screening were ultimately screened for lung cancer.[35] The CDC's National Comprehensive Cancer Control Program (NCCCP) works to reduce the burden of cancer across the entire country, including by working with grantees to coordinate early detection and treatment interventions. Increased CDC funding would allow the NCCCP to help more states implement programs that help to improve access to and utilization of screening, thereby saving lives.

For 30 years the **National Breast and Cervical Cancer Early Detection Program (NBCCEDP)** has decreased disparities in breast and cervical cancer deaths. Through cooperative agreements with states, tribes, and territories, the program provides breast and cervical cancer screenings, diagnostic tests, and treatment referral services to low-income communities. The NBCCEDP is the only nationally organized cancer screening program for breast and cervical cancer for underserved people in the United States, yet the program does not have adequate funding to serve all eligible individuals. Since the program's inception in 1991, NBCCEDP has provided over 15.7 million screening exams to more than 6.1 million eligible people, detecting 75,961 invasive breast cancers and 24,024 premalignant breast lesions, as well

[32] "Environmental Health Playbook: Investing in a Robust Environmental Health System." National Environmental Health Partnership Council report. June 2017. https://apha.org/-/media/fles/pdf/topics/environment/eh_playbook.ashx

[33] Centers for Disease Control and Prevention. An Update on Cancer Deaths in the United States. 2021.

[34] American Lung Association. State of Lung Cancer: Lung Cancer Key Findings. 2021. https://www.lung.org/research/state-of-lung-cancer/key-findings

[35] American Lung Association. State of Lung Cancer: Lung Cancer Key Findings. 2021. https://www.lung.org/research/state-of-lung-cancer/key-findings

as 5,114 invasive cervical cancers, and 235,396 premalignant cervical lesions, of which 39% were high grade.[36] In program year 2022 alone, NBCCEDP provided breast cancer screening and diagnostic services to 263,134 eligible people and diagnosed 2,168 invasive breast cancers. The program also provided cervical cancer screening and diagnostic services to 121,197 eligible people and diagnosed 99 invasive cervical cancers and 5,732 precancerous lesions, of which 35% were high grade.[35] Adequate funding for the NBCCEDP will preserve a critical safety net for those who continue to lack access to lifesaving screening, diagnostic, and treatment services and is an important step toward reducing disparities and advancing health equity in breast and cervical cancer.

Colorectal cancer screening is the most effective way of preventing cancer before it starts and finding it early when it is most treatable. During the screening process, non-cancerous polyps can be removed, preventing them from becoming cancerous. Cancers that are found at an early stage can be treated more easily, leading to greater survival. The **Colorectal Cancer Control Program (CRCCP)** provides grant funding to 20 state health departments, eight universities, and two tribal organizations over a five-year period to help prevent colorectal cancer. The goal of the CRCCP grant work is to increase colorectal cancer screening rates among high-need groups. From 2015 – 2020 the program has served more than 1.3 million patients aged 50 to 75. Clinics that have participated in the program for 2 years have increased their screening rates by 8.2%, those who have participated for 4 years increased screening rates by 12.3%.[37] Without a continued, dedicated federal investment in colorectal cancer prevention and early detection, the United States could experience a reduction in screening leading to increases in preventable colorectal cancer cases and deaths.

In 2023, an estimated 288,300 new cases of **prostate cancer** will be diagnosed in the US and 34,700 men will die from prostate cancer.[38] Some men are at a higher risk of developing prostate cancer than others, including African-American men and men who have a first-degree relative who has been diagnosed with prostate cancer.[39] Black men in the US have among the highest documented prostate cancer rate in the world, and their cancer deaths are one of the greatest mortality disparities in oncology.[40] Prostate cancer survival rates increase when it is detected early; however, there has been a recent increase in diagnosis of men with advanced prostate cancer.[41] Screening can help detect prostate cancer at an early stage often before any signs and symptoms are present and before the disease becomes more advanced and more difficult to treat. CDC provides information to men and providers on the risks of prostate cancer and benefits of prostate cancer screening. CDC conducts research on the best way to communicate informed decision-making for prostate cancer screening and treatment, and enhances prostate cancer data, including the grade and stage of disease, patterns of care and race and ethnicity of men with prostate cancer.

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[36]Centers for Disease Control and Prevention. National Breast and Cervical Cancer Early Detection Program: About the program. Updated March 28, 2023. Accessed October 10, 2023. Retrieved from https://www.cdc.gov/cancer/nbccedp/about.htm.

[37]

[38] American Cancer Society. *Cancer Facts & Figures 2023*. Atlanta: American Cancer Society; 2023.

[39] Wolf, A. M., Wender, R. C., Etzioni, R. B., Thompson, I. M., D'Amico, A. V., Volk, R. J., Brooks, D. D., Dash, C., Guessous, I., Andrews, K., DeSantis, C., Smith, R. A., & American Cancer Society, Prostate Cancer Advisory Committee (2010). American Cancer Society guideline for the early detection of prostate cancer: update 2010. CA: a cancer journal for clinicians, 60(2), 70–98. https://doi.org/10.3322/caac.20066

[40] American Cancer Society. *Cancer Facts & Figures 2023*. Atlanta: American Cancer Society; 2023.

[41] Siegel, R. L., Miller, K. D., Wagle, N. S., & Jemal, A. (2023). Cancer statistics, 2023. CA: a cancer journal for clinicians, 73(1), 17–48. https://doi.org/10.3322/caac.21763.

CDC Epilepsy Program

Epilepsy is a disease or disorder of the brain which causes reoccurring seizures. It is a spectrum disease comprised of many diagnoses including an ever-growing number of rare epilepsies. There are many different types of seizures and varying levels of seizure control.

3.4 million Americans live with active epilepsy including 470,000 children and teenagers.[42] Thirty to forty percent of people with epilepsy live with uncontrolled seizures despite available treatments.[43] Delayed recognition of seizures and inadequate treatment increase a person's risk of subsequent seizures, brain damage, disability, and death. Each year, it is thought that more than 1 in 1,000 people with epilepsy die from Sudden Unexpected Death in Epilepsy (SUDEP)[44] and this number increases drastically to 1 in 150 for people whose epilepsy is not controlled by treatment.[45]

The CDC address the public health challenge of epilepsy through a variety of strategies including: educating about epilepsy generally and working to prevent known risk factors for epilepsy researching; conducting surveillance and data collection to better understand epilepsy and evaluate prevention efforts; and supporting self-management programs. Better awareness about epilepsy, prompt diagnosis and timely and consistent access to epilepsy care and the most effective treatment(s) not only help increase the individual's chance for seizure control and overall wellbeing and independence, but also reduce individual and system spending. Epilepsy and/or seizures impose an annual economic burden of $54 billion on the country.[46] A review of studies has shown that direct, epilepsy-related medical costs associated with uncontrolled epilepsy are 2 to 10 times higher than costs associated with controlled epilepsy.[47]

Epilepsy awareness is helpful for all people and specific subpopulations are sometimes targeted due to their more frequent interactions with people with epilepsy. For example, in FY 22, 9,587 school nurses and 225,270 school personnel were trained on seizure recognition and seizure first aid. To improve care in rural and underserved communities, in collaboration with partner organizations, 1,243 providers have been trained across two ECHO programs: Epilepsy & Neurology for primary providers and Managing Students with Seizures for School Nurses.

Since 2007, CDC's Managing Epilepsy Well (MEW) Network has provided national leadership in developing, testing, and distributing innovative self-management programs, tools, and trainings for epilepsy professionals. These efforts help people with epilepsy better manage their disorder and enhance their quality of life. UPLIFT (Using Practice and Learning to Increase Favorable Thoughts) is an

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[42] Zack MM, Kobau R. National and state estimates of the numbers of adults and children with active epilepsy — United States, 2015. *MMWR*. 2017;66:821–825. DOI: 10.15585/mmwr.mm6631a1.

[43] Kwan, P & Brodie, MJ. Early identification of refractory epilepsy. *N Engl J Med*. 2000;342(5):314-319. DOI: 10.1056/NEJM200002033420503.; Chen, Z., Brodie, M.J. et al. Treatment outcomes in patients with newly diagnosed epilepsy treated with established and new antiepileptic drugs: A 30-year longitudinal cohort study. *JAMA Neurol.* 2018;75(3):279-286. doi:10.1001/jamaneurol.2017.3949.

[44] Thurman DJ, Hesdorffer DC, French JA. Sudden unexpected death in epilepsy: assessing the public health burden. *Epilepsia*. 2014;55(10):1479–1485. doi:10.1111/epi.12666

[45] Tomson, T, Nashef, L & Ryvlin, P. Sudden unexpected death in epilepsy: Current knowledge and future directions. *The Lancet Neurology*. 2008;7(11): 1021-1031. DOI:https://doi.org/10.1016/S1474-4422(08)70202-3.

[46] Moura, LMVR, Karakis, I, Zack, MM, Tian, N, Kobau, R & Howard, D. Drivers of U.S. healthcare spending for persons with seizures and/or epilepsy. *Epilepsia*. 2022;63:2144-2154. DOI: 10.1111/epi.17305.

[47] Begley, C.E. & Durgin, T.L. (2015). The direct cost of epilepsy to the United States: A systematic review of the estimates. *Epilepsia, 56*(9), 1376-87. Retrieved from https://onlinelibrary.wiley.com/doi/full/10.1111/epi.13084.

evidence-based 8-week program delivered through the Internet or by phone to groups of adults who have both epilepsy and depression. Participants learn how to identify and modify their thoughts and how to become aware of and nonreactive to negative thoughts. An effectiveness study found that participants' symptoms of depression decreased, and their knowledge and skills increased after completing the program.[48] Since about half of people who experience seizures report more difficulties with memory than people without seizures, HOBSCOTCH (Home-Based Self-Management and Cognitive Training Changes Lives) is another evidence-based program that is designed to address memory and attention problems among people with epilepsy through a combination of in-person visits and phone calls that provide coaching. An evaluation of this program found that it improved participants' quality of life and some aspects of memory function, specifically attention.[49]

CDC's Division of Diabetes Translation (DDT) – National Diabetes Prevention Program

The Y was instrumental in translating the NIH's Diabetes Prevention Program in community. As a result of the translation, Congress advanced legislation to establish the lifestyle change program to a national program at CDC-now the National Diabetes Prevention Program. Through the program, you can lower your risk of developing type 2 diabetes by as much as 58% (71% if you're over age 60). CDC helped organizations build capacity throughout the US to scale the program. We need to continue to invest in CDC, state health departments and nonprofit organizations like the Y in order to offer this program where people live and work and provide virtual options for this group-based program to reach the greatest number of individuals at risk.

As of March 2023, there are more than 1,800 CDC-recognized organizations offering the National DPP lifestyle change program in-person, online, and through distance learning in all 50 states, the District of Columbia, and freely associated states and territories in the Pacific and Caribbean. (DPRP Dashboard) Nearly 700,000 people have enrolled in CDC's National Diabetes Prevention Program from 2012-2023. (DPRP Dashboard). As of March 2023, 53% of evaluated participants reduced their risk of developing type 2 diabetes by achieving at least one of the three outcomes [5% weight loss (49%); at least 4% weight loss combined with an average of 150 minutes/week of physical activity (35%); or a minimum of 0.2% reduction in A1C (0.3%)]. Investing in lifestyle interventions among people with high risk of developing type 2 diabetes is a cost-efficient use of health care resources.

Lifestyle interventions that follow a Diabetes Prevention Program curriculum (like the National DPP) are very cost effective. Such programs cost $6,212 to gain one year of life with full health (i.e., one quality-adjusted life year (QALY)), which is well below the cost threshold recommended for adopting a health intervention in general ($50,000 per QALY). (2020). Building on their success with the CDC's National Diabetes Prevention Program, in 2012, Y-USA received a Health Care Innovation Award (HCIA) from the CMS Innovation Center, the impetus of the Medicare Diabetes Prevention Program (MDPP), to test expansion of the Diabetes Prevention Program ("DPP") to Medicare beneficiaries at high risk for developing type 2 diabetes. In collaboration with multiple partners, Y-USA and 17 local YMCAs worked over a three-year period to engage nearly 8,000 Medicare beneficiaries in the YMCA's Diabetes Prevention Program ("YMCA's DPP"). The Y not only achieved the attendance and weight loss goals, but the CMS Office of the Actuary certified, based on results and associated data provided by the participating Ys, that expansion of the DPP to Medicare beneficiaries would reduce Medicare spending by $2,650 per senior over 15 months and improve the quality of care without limiting coverage or

[48] Thompson NJ, Reisinger Walker E, Obolensky N, et al. Distance delivery of mindfulness-based cognitive therapy for depression: Project UPLIFT. *Epilepsy Behav*. 2010;19(3):247-254. doi:10.1016/j.yebeh.2010.07.031.

[49] Caller TA, Ferguson RJ, Roth RM, et al. A cognitive behavioral intervention (HOBSCOTCH) improves quality of life and attention in epilepsy. *Epilepsy Behav*. 2016;57(Pt A):111-117. doi:0.1016/j.yebeh.2016.01.024.

benefits. The achievement of program benchmarks and the CMS Actuary's certification led to Secretary Burwell's decision to expand program coverage to Medicare beneficiaries.

CDC's DDT marketing and educational materials have been utilized by nonprofits to help individuals and our communities understand the importance of getting flu vaccines, especially when they are at-risk due to a non-communicable, chronic condition, like diabetes. We know our work to address chronic diseases has a direct impact on communicable disease because the two are inextricably linked. According to CDC, heart disease, diabetes, cancer, chronic obstructive pulmonary disease, chronic kidney disease, and obesity are all conditions that increase the risk for severe illness from COVID-19. In the absence of vaccines, good underlying health is the best way to prevent severe infection and death from communicable diseases. Any efforts to prevent the spread of infectious disease must also include efforts to prevent chronic disease.

The CDC's Division of Nutrition, Physical Activity and Obesity has supported the research behind the effectiveness of the Y's Healthy Weight and Your Child Program, an evidence-based program that empowers 7-to-13-year-olds and their families to live a healthier lifestyle. Since its launch, the program has been delivered in nearly 100 Ys in 32 states across the country. The program's curriculum is adapted from the most widely disseminated and evaluated child weight management program in the world, where research showed a statistically significant reduction in body mass index, waist circumference, sedentary activities and improvements in physical activity and self-esteem at six and 12 months. The family-centered program emphasizes three elements: healthy eating, regular physical activity and behavior change to elicit a positive life-long lifestyle transformation. We must take these life-saving interventions to scale more rapidly. That takes resources, cross agency collaboration, and an understanding of how community-based organizations work and adapt our models to understand how these programs and providers are different than the formal health system.

The Division's State Physical Activity and Nutrition Program (SPAN) funds states to implement evidence-based strategies at state and local levels to improve nutrition and physical activity. Yet, CDC's current funding level can only support 17 states (out of 50 approved but unfunded applications) and no territories. Key SPAN outcomes during the first four years of the current SPAN grant period (October 2018 to August 2022):

- 18,314,483 people have enhanced access to activity friendly routes to more easily reach everyday destinations;
- 2,294,685 children learned about the importance of nutrition and physical activity in early care and education settings;
- 517,100 infants born in hospitals with updated breastfeeding standards;
- 1,462,406 people impacted by new or improved breastfeeding support programs.

CDC's Arthritis Control Program and state health departments have supported nonprofits like the Y to scale evidence-based arthritis control programs like Enhance®Fitness. This program is a proven community-based senior fitness and arthritis management program**.** The Y has scaled the Enhance®Fitness program in 45 states and served more than 40,000 participants. The program helps older adults become more active, energized, and empowered for independent living. Enhance®Fitness has been nationally recognized by the Centers for Disease Control and Prevention, US Department of Health and Human Services, Administration for Community Living, and the National Council on Aging. Studies show:

- 90% participant retention rate

- 13% improvement in social functioning
- 35% improvement in physical functioning
- 53% improvement in depression
- 26% decreased risk of a medical fall
- Fewer hospitalizations and $945 less in health care costs per year than non-participants

The Division for Heart Disease and Stroke Prevention (DHDSP) protects the nation's heart health by providing leadership and direction in the management and prevention of cardiovascular disease (CVD). In almost all states, DHDSP is the sole source for funding to support state, local-and tribal programs to prevent heart attacks and strokes. DHDSP subject matter experts conduct the necessary research that drives quality improvement by identifying and translating best practices to improve the quality of care for hypertension and high cholesterol. The Division has contributed to improved blood pressure control rates within partner health systems, increased access to essential health care especially within rural areas, reduced health care costs by preventing adverse CVD events, modernized chronic disease surveillance, and helped build the infrastructure for state and local heart disease and stroke programs. Specifically:

Over the full 5 years of the DHDSP's last cooperative agreement cycle, participating health centers reported that 61.1% of patients with hypertension achieved control, up 5.8% from baseline levels. While blood pressure control rates had stagnated nationally, from 2018-2021 DHDSP's nationwide program for CVD improved blood pressure control rates increased by 7% among participating health systems. Hypertension is a leading risk factor for heart attack and stroke.

The DHDSP also administers the Paul Coverdell National Acute Stroke Program, which helps improve delivery of and access to high-quality stroke care. Over the past 10 years, stroke has moved from the third to the fifth leading cause of death in the United States; however, it is still a major cause of long-term disability. The Coverdell Program funds state health departments to collect, measure, and track data to improve the quality of care for stroke patients. The program also supports coordinated stroke systems of care that treat patients effectively, from when they have a stroke, through emergency medical services (EMS) transport to the hospital and in-hospital care, through their discharge and recovery.

Since 2005, the Coverdell Program has reached more than 1 million stroke patients in almost 800 hospitals. In 2019, 68% of stroke patients in Coverdell-funded states were admitted to Coverdell-participating hospitals. Coverdell participants have greatly improved the timeliness of life-saving care. Participating hospitals increased the percentage of eligible patients receiving intravenous alteplase (tPA), a drug that dissolves blood clots, within 60 minutes of arriving at the hospital, the national standard. Coverdell patients receiving timely tPA more than doubled, from 26% in 2008 to 69% in 2020. DHDSP's Million Hearts initiative partners to identify approaches to improve quality of care and patient outcomes. This national initiative is co-led by CDC and the Centers for Medicare & Medicaid Services with the aim to reduce one million heart attacks and strokes. A programmatic review estimated that it prevented 135,000 cardiac events from 2012 to 2016, averting $5.6 billion in medical costs by implementing a small set of evidence-based priorities and targets that can improve cardiovascular health. Million Hearts has a deliberate emphasis on several populations, including pregnant and

postpartum people with high blood pressure, people from racial/ethnic minority groups, people with behavioral health issues who use tobacco, people with lower incomes, and people who live in rural areas. Since 2012, the Million Hearts Hypertension Control Challenge has also recognized 133 health care practices and systems for helping at least 70% of their patients achieve blood pressure control. About 108 million American adults—1 in every 2—have hypertension or high blood pressure. Only 1 in 4 people with hypertension has their condition under control.

CDC's Heart Disease and Stroke Program has worked to scale Blood Pressure Self-Monitoring Programs at the community-level to manage hypertension. High blood pressure is often referred to as "The Silent Killer" because there are typically no warning signs or symptoms. High blood pressure is a key, modifiable, risk factor for both heart disease and stroke, which are two of the leading causes of death in the United States. As long-term adherence to lifestyle modifications and medication treatment can be challenging, many studies have focused on the potential of self-monitoring as a tool for blood pressure management. To address these issues, the Y designed and CDC-funded an evidence-based, self-monitoring program aimed to help participants better manage their blood pressure. The program emphasizes that self-monitoring and tracking of individuals' blood pressure can play a significant role in reducing one's blood pressure and improving their quality of life. CDC has supported the **Y's Blood Pressure Self-Monitoring Program,** which is now offered at Ys in 41 states and has helped more than 12,000 participants better manage their blood pressure.