

Public Health Value

Investments in public health improve the lives of many



The Why

During the 20th century (1900 – 1999) advances in public health increased life expectancy in the United States by 25 years compared to just five added years from medical advances alone.¹ Public health is the prevention of disease and injury within populations. Public health is connected to, though distinct from health care, and is focused on population action instead of individual care. Public health can be as simple as getting people to wear seatbelts, stop smoking, decreasing alcohol consumption, or uptake exercising, but takes sustained investment to get community buy-in. Public health interventions can change the trajectory of the health of a population by focusing on prevention – making individuals, communities, states, and nations stronger.

Currently, we spend **\$11,000 per person on medical care** in the United States and only **\$250 per person on public health**. In other words, we spend more money treating preventable chronic conditions versus preventing them. During the 21st century, the **COVID Pandemic** and **Deaths of Despair** (alcohol, suicide, opioids) have significantly eroded life expectancy. For example, the COVID-19 pandemic caused Black American life expectancy to **decrease by 2.9 years** and Latino American life expectancy to *decrease by 3 years*.² Meanwhile death rates for white Americans also increased for those with no college degrees.³ Another layer is equitable health - your zip code can influence your life expectancy by 30 years.^{4,5}

The life expectancy for all Americans has been decreasing since 2014, a reverse trend seen in developed countries across the globe.⁶ It is no surprise that a healthier population will lend itself to a healthier economy in our neighborhoods, communities, and in the world. Public health has long been a focus from our nation's military and thus, society must also both invest and focus on the prevention of disease.⁷ To reverse this erosion of Washingtonians life expectancy we must learn from the past and invest in public health interventions to pave a road for us and future generations. In the 1960s when seatbelts were first required in cars and in the 1980s when people were required to wear them, there was opposition, but look how well that worked out; by taking just a moment each time you get into the car, an **estimated 15,000 lives are saved every year** by seatbelts.⁸

¹ [Ten Great Public Health Achievements -- United States, 1900-1999 \(cdc.gov\)](#)

² [Life Expectancy in the U.S. Declined a Year and Half in 2020 \(cdc.gov\)](#)

³ [Case and Deaton. 2017. Mortality and morbidity in the 21st century. Mortality and morbidity in the 21st century - PMC \(nih.gov\)](#)

⁴ [Life Expectancy by ZIP Code: Where You Live Affects How Long You Live - RWJF](#)

⁵ <https://www.bluezones.com/2020/02/zip-code-effect-your-neighborhood-determines-your-lifespan/#>

⁶ [Life expectancy in the US is falling, but why? | World Economic Forum \(weforum.org\)](#)

⁷ [Why the Military Makes Public Health a Priority - Foreign Policy Research Institute \(fpri.org\)](#)

⁸ [Seat Belts Save Lives | NHTSA](#)

Value

Public health can be difficult to recognize because when it works you don't see the hospitalizations and you don't see the deaths - in essence, we have saved lives before they enter a hospital or need treatment for a disease. When public health works, it is not a headline. Most people operate in their daily lives without noticing that public health *is there* working to prevent diseases and address other public health concerns.

We live in a society where our economic investment is in sick care instead of keeping people healthy. In public health, we have finite resources. Determining, which interventions are the most bang for the buck, we look at many factors including lives saved, net cost, productivity of people at work or school, reduced health care utilization, and reduced pain and disability. The question that should be asked, what more can public health do if it had more resources to invest in innovative ways?



Examples of current value of public health interventions

Prevention and Community Health

Chronic Disease

The Centers for Disease Control and Prevention (CDC) reports that 90 percent of the nation's **\$3.5 trillion** in annual health care expenditures are for people with chronic and mental health conditions.⁹ For example, diabetes accounts for **\$1 out of \$4 dollars spent on health care costs in the U.S.** While many cases of diabetes can be prevented, there are also many proven cost-effective strategies for management of diabetes.¹⁰ Chronic diseases are largely avoidable through preventive care. Data supports cost-saving and cost-effective public health interventions that focus on chronic diseases leading to a healthier population with lower health care spending.¹¹ If the U.S. invested funds in prevention and treatment for the most common chronic diseases, treatment costs have been estimated to **decrease by \$218 billion annually** and reduce the economic impact of disease by **\$1.1 trillion** annually.

Immunization

Without public health the world would still be dealing with smallpox, but thanks to public health coordination and the efforts of vaccinators around the world, smallpox is a disease of the past. Globally, childhood immunizations are one of the most cost-effective (and often cost saving) prevention measures available. The childhood vaccination program in the U.S. is modeled to produce a **net savings of \$295 billion in direct costs and another \$1.38 trillion in societal costs** (while **averting** an estimated **322 million cases, 21 million hospitalization, and 732,000 deaths**) over the course of the lifetime for children born between 1994-2013.¹²

Women, Infants, and Children (WIC) Program

Nationally, more than half of infants and children between 1-4 years of age were eligible for WIC in 2017.¹³ **Almost half of all pregnant women were eligible for WIC in 2017.** Every dollar spent on the WIC program returned more than **double the return on investment.**¹⁴ Modeling the investments in WIC show that with a shift in enrollment by 10% in either direction would have effects on the number of preterm births and cost savings or losses.

⁹ [Health and Economic Costs of Chronic Diseases | CDC](#)

¹⁰ [Cost-Effectiveness of Diabetes Interventions | Power of Prevention \(cdc.gov\)](#)

¹¹ [APHA. Public Health and Chronic Disease; Cost Savings and Return on Investment. chronicdiseasefact_final.ashx \(apha.org\)](#)

¹² [Benefits from Immunization During the Vaccines for Children Program Era — United States, 1994–2013 \(cdc.gov\)](#)

¹³ [National- and State-Level Estimates of WIC Eligibility and WIC Program Reach in 2017, Final Report: Volume I \(azureedge.us\)](#)

¹⁴ [Economic evaluation of California prenatal participation in the Special Supplemental Nutrition Program for Women, Infants and Children \(WIC\) to prevent preterm birth | Elsevier Enhanced Reader](#)



Emergency Response to COVID-19

COVID-19 Immunization

While the death toll for COVID-19 continues to rise, one study finds that COVID vaccines could have **averted 319,000 deaths in the U.S.** if everyone had been vaccinated.¹⁵ Washington state could have prevented 5,299 lives lost to COVID-19. A policy analyst from Forbes estimated that the first 200,000 lives lost to COVID-19 at an astounding societal cost between **\$197 billion and \$1.01 trillion.**¹⁶ An economist added that while the societal costs were likely steeper in the beginning, each additional infection - not death - costs society in the range of \$55,000, but a further reduction has been made in this number as some once critical functions of our world now continue to progress virtually.¹⁷

WA NOTIFY

Washington state's smartphone COVID-19 exposure notification tool released an evaluation with findings that it **saved between 40 and 115 lives** in the first four months of operation.¹⁸

Guided by our principles of **Equity, Innovation, and Engagement**, DOH believes that every community should have the same opportunity to achieve optimal health. Public health is important in prolonging life through prevention efforts so individuals can spend more of their years in good health. To learn more about our efforts or to partner with us, please contact: partnerships@doh.wa.gov.

¹⁵ [Of 1 million COVID deaths, how many could have been averted with vaccines? : Shots - Health News : NPR](#)

¹⁶ [The Social Cost Of The First 200,000 Lives Lost To Covid-19 \(forbes.com\)](#)

¹⁷ [Q&A: Societal Costs of COVID-19 Outweigh Individual Costs \(virginia.edu\)](#)

¹⁸ [Early Epidemiological Evidence of Public Health Value of WA Notify, a Smartphone-based Exposure Notification Tool: Modeling COVID-19 Cases Averted in Washington State | medRxiv](#)