

# Building the Case:

## The Health and Economic Benefits of Public Health

Adapted from: Solet D, Boles M. The Health and Economic Benefits of Public Health Modernization In Oregon. Program Design and Evaluation Services, Multnomah County Health Department and Oregon Public Health Division. Prepared for the Oregon Health Authority Public Health Division. 2016 Sept 6. Available at: [healthoregon.org/modernization](http://healthoregon.org/modernization).

### Introduction

Despite improvements in population health and longevity during the 20th century, the United States lags considerably behind many nations in overall life expectancy and the incidence of preventable diseases and injuries. Experts have made a strong case that **the country's lagging population health status is a result of inadequate investment in public health** strategies that promote health and prevent disease and disability.\*

This document summarizes results of the 2016 Health and Economic Benefits of Public Health Modernization report, prepared for the Oregon Health Authority. The report estimates the recommended additional spending needed to close the gap between what it will cost to fully implement the foundational programs and capabilities of public health modernization, as identified in the Public Health Modernization Assessment Report (Berk, June 2016), and 2016 annual spending on foundational programs and capabilities.

### Low Birthweight

One of the most commonly used indicators to monitor the health of mothers and children is the proportion of infants born weighing less than 2,500 grams, or approximately 5.5 pounds (referred to as the low birthweight rate).

In Oregon, the low birthweight rate was 6.3% in 2013, an 11% increase since 2000. Low birthweight infants are at increased risk for impaired development, infant death, and other long-term disabilities such as cerebral palsy, blindness or other chronic conditions.

**An investment of \$2.4 million in maternal and child health in Oregon's high poverty counties would lead to a 1% decrease in low birthweight rates. This decrease would prevent 96 low birthweight births a year and result in savings of \$30 million of Medicaid costs.**

### Tobacco Prevention

Tobacco use is the leading preventable cause of death, killing more than 7,000 people per year in Oregon. Smoking causes lung cancer, cardiovascular disease, emphysema, and is linked to many other diseases such as diabetes, strokes, and certain types of cancer.

**Tobacco use costs Oregonians \$2.5 billion a year in health care, lost productivity and premature death. The recommended additional spending of \$1.6 million in Oregon would result in an estimated 534 fewer smokers (quitters) annually. The average savings in direct costs of medical care over a lifetime for the 534 former smokers is an estimated \$6.5 million.**

**Increasing the Oregon public health departments' per capita spending by 10% would link to an estimated:**

**15** fewer infant deaths each year

**202** fewer diabetes deaths each year

**88** fewer heart disease deaths each year

**16** fewer cancer deaths each year

## Foodborne Illness

Foodborne pathogens can result in serious health outcomes including hospitalizations, long-lasting chronic health conditions and death. In 2014, there were an estimated 123,000 domestically acquired foodborne illness statewide.

*The burden of these illnesses, including medical costs, loss of productivity and death, is an estimated \$229 million annually. Reducing the economic burden of foodborne illness by 2% would offset the additional spending recommendation of \$3.9 million, annually.*

## Adult Physical Inactivity

In Oregon, 39% of adults do not meet the Centers for Disease Control and Prevention recommended physical activity level and 19% are completely sedentary. Regular physical activity lowers the risk of obesity, some cancers and cardiovascular disease, strengthens bones and muscles, improves mental health and mood, and increases the chance of living longer.

*Annual medical care expenditures in Oregon related to physical inactivity is an estimated \$1.3 billion. Reducing physical inactivity health care costs by less than 1% (.12%) would offset the recommended additional spending of \$1.6 million, annually.*

## Unintended Pregnancy

Unintended pregnancies are unwanted or are mistimed at the time of conception. A woman giving birth from an unintended pregnancy is less likely to seek prenatal care, less likely to breastfeed (which has a protective effect against illness), and has a higher risk of mental health problems, like depression, following birth. In Oregon in 2013, 26% of births were from unintended pregnancies. Women giving birth who are covered by Medicaid are almost twice as likely to have a child that is unintended than women not covered by Medicaid. Unintended pregnancies can be reduced by providing access to the information, services, and resources necessary to ensure that all pregnancies are healthy, well-timed, and intended.

*Total health care cost for births from unintended pregnancy prenatal care, delivery and the infants' first year of life cost Oregon's Medicaid system an estimated \$51.4 million a year. A 5% decrease in births from unintended pregnancies would result in an estimated cost reduction of \$217,000 for non-Medicaid birth delivery hospitalizations and an estimated cost reduction of \$2.6 million in Medicaid-provided prenatal care, delivery, and care in the infants' first year of life.*

## Health Inequity

In Oregon, as in the rest of the nation, there are wide disparities in health outcomes between communities of color and non-Hispanic Whites. Rates of a wide variety of health conditions – such as chronic disease, injuries, HIV diagnoses and infant mortality – are all higher in at least some of these communities. Obesity and smoking are also more common.

*The annual estimated economic burden of health inequity for African Americans, Asians and Hispanics is \$316 million in direct health care costs, \$53 million in indirect cost of illness (productivity loss), \$904 million in premature mortality costs, and \$1.3 billion total in health care, illness and mortality costs. Reducing the economic burden of health inequity by less than 1% (.4%) would offset the recommended additional spending of \$5 million, annually.*