

INVESTING IN CANCER PREVENTION

Population-based measures can prevent cancer at a low cost.

International aid for cancer prevention and control in the world's poorest nations is miniscule. Resources to fight all non-communicable diseases, including cancer, plunged during the global economic crisis, and amounted to a mere 1.2% of the total development assistance for health in 2011.

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Investing in cancer prevention not only saves lives, but the money saved could also pay for important services and institutions.

Facing scarce resources, policymakers must determine how best to invest in their country's future. Investment in health can save costs and facilitate economic growth by increasing productivity. Economic analyses help governments and international donors identify health practices that are not only feasible, but also the best value for money.

① The exact global cost of cancer is unknown, but it is undoubtedly well into the hundreds of billions of dollars per year. In the United States alone, the estimated cost of cancer in 2009, including direct medical costs as well as the cost of lost productivity due to premature death, was US\$216.6 billion per year. The global cost of cancer is expected to increase due to increases in the number of new cancer cases as well as the growing cost of cancer therapies.

② However, a substantial part of this cost can be averted by investing in cancer prevention, early detection, and treatment (see chapter 24—*The Cancer Continuum*). For example, cost-effective strategies to address common cancer risk factors such as tobacco use, alcohol abuse, unhealthy diet and physical inactivity in low- and middle-income countries would cost only US\$2 billion per year, a small amount compared to the costs incurred by the total disease burden. ③ ④ For example, in developing countries, cervical cancer screenings that require little laboratory infrastructure, such as simple visual inspection of the cervix with acetic acid or DNA testing for HPV in cervical cell samples, cost less than US\$500 per year of life saved. In general, cancer prevention is far more cost-effective than treatment.

① **The total cost of cancer in the European Union is more than the entire EU budget.**



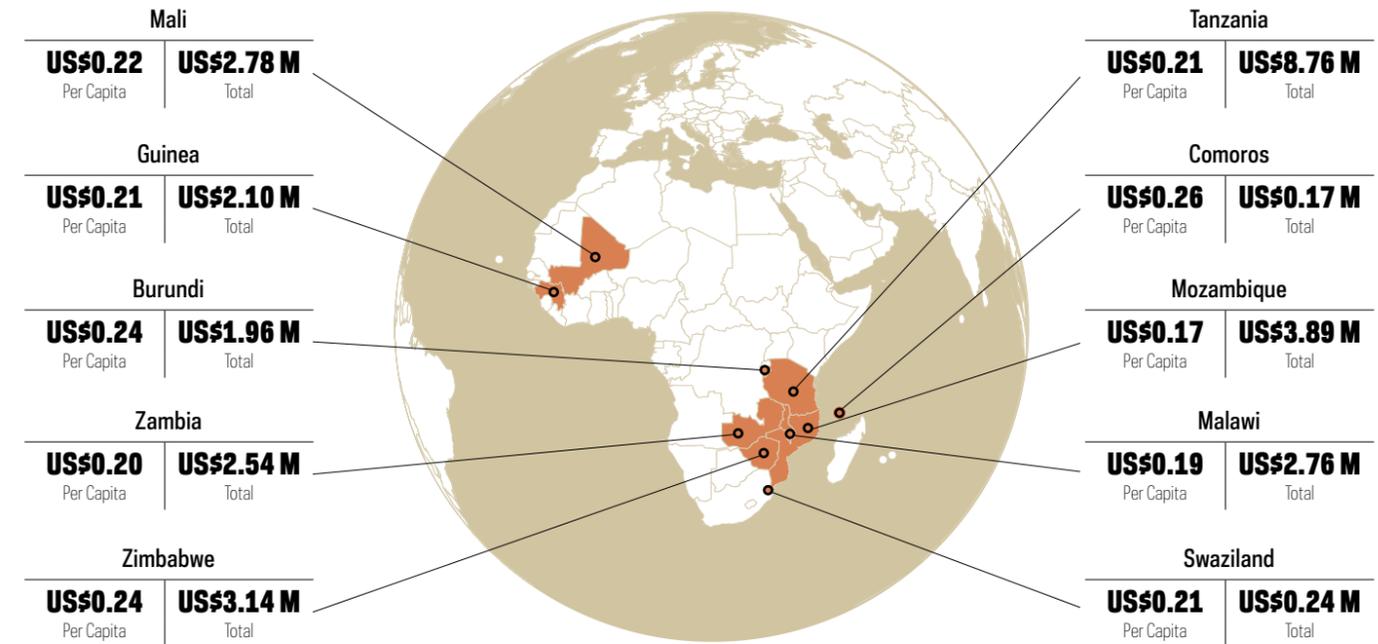
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“It is health that is real wealth, and not pieces of gold and silver.”

— Mahatma Gandhi

③ **Cervical cancer prevention programs are very affordable.**

ESTIMATED ANNUAL AVERAGE COST (IN USD) PER CAPITA AND OVERALL OF A COMPREHENSIVE CERVICAL CANCER PREVENTION PROGRAM IN THE TEN COUNTRIES WITH THE HIGHEST ESTIMATED AGE-STANDARDIZED (WORLD) CERVICAL CANCER MORTALITY RATES IN 2012.

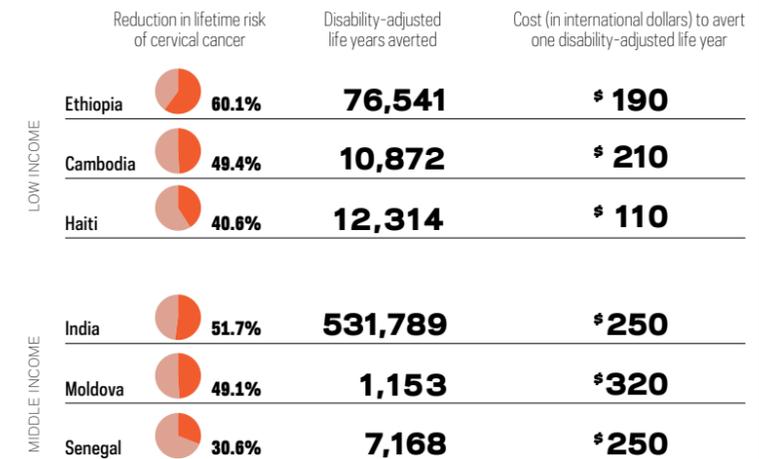


These estimated costs cover primary care outpatient visits for consultation, counseling and procedures, auxiliary care, medicines, and diagnostic and therapeutic procedures.

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Few public health investments provide a greater dividend than HPV vaccination.

COST EFFECTIVENESS OF HPV VACCINATION, THROUGH VACCINATING 70% OF A SINGLE BIRTH COHORT OF 9-YEAR-OLD GIRLS



At a price negotiated by GAVI of approximately US \$5 per dose, HPV vaccination of preadolescent girls will cost less than gross domestic product per capita for one disability-adjusted life year averted, which by WHO standards makes the vaccination intervention very cost-effective.

U.S.
Intervention
COLORECTAL SCREENING
Colonoscopy in population of 50 to 64 year olds

Net Savings
US\$16,853,000,000
until the cohort reaches age 75

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Annual budget for the U.S. National School Lunch Program, which feeds 31 million children from low-income families every day

TAIPEI, CHINA
Intervention
SMOKING CESSATION SERVICES PROGRAM
Counseling and nicotine replacement therapy

Net Savings
US\$224,000,000
over 15 years

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Taipei's annual government budget for environmental protection

AUSTRALIA
Intervention
THE AUSTRALIAN NATIONAL TOBACCO CAMPAIGN
An intensive 6-month mass media anti-smoking campaign

Net Savings
US\$912,000,000
over the remaining lifetime of the 190,000 quitters

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Australia's governmental investment in early childhood education

NETHERLANDS
Intervention
DIETARY ADVICE
Dietitians provide patients with advice about diet and behavior related to health and disease.

Net Savings
US\$2,557,000,000
over 5 years

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Annual government expenditure on foreign affairs and international cooperation in the Netherlands