

Physical inactivity cost the world \$67 billion in 2013 says first ever estimate

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A world-first study has revealed that in 2013, physical inactivity cost \$67.5 billion globally in healthcare expenditure and lost productivity, revealing the enormous economic burden of an increasingly sedentary world.

The study, published today in *The Lancet*, was led by Dr Melody Ding from University of Sydney, leader of the current *Lancet* [physical activity](#) series.

This study provides the first-ever global estimate of the financial cost of physical inactivity by examining the direct health-care cost, productivity losses, and disability-adjusted life years (DALYs) for five major non-communicable diseases attributable to inactivity: coronary heart disease, stroke, type 2 diabetes, breast cancer and colon cancer.

Based on data from 142 countries, representing 93.2 per cent of the world's population, the researchers conservatively estimated that in 2013 the effect of physical inactivity on these diseases and all-cause mortality cost the world economy more than \$67.5 billion.

"Physical inactivity is recognised as a global pandemic that not only leads to diseases and early deaths, but imposes a major burden to the economy," said lead author Dr Melody Ding, Senior Research Fellow from the University's School of Public Health.

"Based on our data, physical inactivity costs the global economy \$67.8

billion in 2013, with Australia footing a bill of more than AUD \$805 million. At a global and individual country level these figures are likely to be an underestimate of the real cost, because of the conservative methodologies used by the team and lack of data in many countries.

Counting the cost of global of inactivity: 2013 (International dollars)

\$67.5bn: Total costs, including \$53.8bn in direct cost (healthcare expenditure) and 13.7bn in indirect costs (productivity losses)
\$31.2bn: Total loss in tax revenue through public healthcare expenditure
\$12.9bn: Total amount in private sector pays for physical inactivity-related diseases (e.g. health insurance companies)
\$9.7bn: Total amount households paid out-of-pocket for physical inactivity-related diseases

Type 2 Diabetes was the costliest disease, accounting for \$37.6bn (70pc) of direct costs.

Counting the cost of global of inactivity in Australia: 2013 (Australian dollars)

AUD\$805m: Total costs, including AUD\$640m in direct costs (healthcare expenditure) and AUD\$165m in indirect costs (loss in productivity)
AUD\$425m: Total loss in tax revenue through public healthcare expenditure
AUD\$91m: Total amount in private sector pays for physical inactivity-related diseases (e.g. health insurance companies)
AUD\$124m: Total amount households paid out-of-pocket for physical inactivity-related diseases

"Our study has shown that the [economic burden](#) of physical inactivity is distributed unequally across regions, and disproportionately with high-income countries bearing a larger proportion of economic burden and

low and middle-income countries having a larger proportion of the disease burden," Dr Ding said.

"Generally, poorer countries don't have their health needs met due to less developed health and economic systems. Ultimately, poor households pay the most in terms of premature death and disease, showing inequalities. As these countries develop economically, so too will the consequent economic burden, if the pandemic of physical inactivity spreads as expected.

"Globally, the economic burden of physical inactivity is projected to increase, particularly in low and middle-income countries, if no action is taken to improve population levels of physical activity.

"It's also important to consider where the economic burden falls, including on the public sector, private sector, and out-of-pocket household expenditures.

"This study provides a better understanding of the true burden of the pandemic of physical inactivity, and provides useful information for policy making, funding allocation and benchmarking in global prevention of non-communicable diseases," she said.

Professor Adrian Bauman, University of Sydney, and member of the Lancet Physical Activity Series Steering Committee said: "This research provides further justification to prioritise promotion of regular physical activity worldwide as part of a comprehensive strategy to reduce non-communicable diseases."

"Increasing physical activity levels in communities is an important investment that governments should consider which could lead to savings in healthcare costs and more productivity in the labour market."

More information: Dr Ding Ding et al, The economic burden of physical inactivity: a global analysis of major non-communicable diseases, *The Lancet* (2016). [DOI: 10.1016/S0140-6736\(16\)30383-X](https://doi.org/10.1016/S0140-6736(16)30383-X)

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