How do we measure the cost of disease?

Ill health costs Australia dearly, both in terms of the human cost of suffering and premature death, and the financial cost of health services.

Two new reports from the AIHW—Australian Burden of Disease Study: impact and causes of illness and death in Australia 2015 and Disease expenditure in Australia—estimate the costs of different types of health conditions.

By looking at both the financial and human cost of diseases and injury, we gain a better understanding of the full impact of diseases.

What do we mean by ‘human cost’?

The human cost of particular diseases can be measured through burden of disease analysis. This looks at the impact of different diseases and injuries on a population and helps us to understand the impact of these conditions in terms of ‘years of healthy life lost’.

Losing healthy years can occur in two ways: through premature death (the fatal burden), or through living with the impacts of a disease (the non-fatal burden). Looking at these two measures together provides an overall understanding of the total burden, or human cost of disease and injury.

It is estimated that 4.8 million years of healthy life were lost due to Australians living with or dying prematurely from disease and injury in 2015.

How much money is spent on health?

The financial cost of preventing and treating ill health is substantial. Australia spent about $170 billion on health in 2015–16—or almost $7,100 per person.

These costs cover a range of health services, including treatment for diseases or conditions (such as medication or surgery), health infrastructure (such as hospital or health clinic buildings), as well as disease prevention strategies (such as national immunisation programs).
Which diseases have the greatest impact?

The two new AIHW reports provide two different lenses through which we can consider the impact of diseases. As a group of diseases, cancer had the greatest human cost, while musculoskeletal conditions were responsible for the most spending.

How should this information be used?

Both measures provide insights into the impact of diseases on our society. By considering multiple sources of data, governments and service providers have better evidence to help them identify priorities and develop policies and strategies to meet the needs of those affected.

It is important to note, however, that diseases and their effects on people, society and the health system are complex. There can be many reasons why a disease may have a large human cost but low health spending—and vice versa.

For example, while reproductive and maternal health is associated with substantial spending through the health system, it does not have a high human cost because the outcome is usually a healthy mother and baby.

In cases where a particular disease has relatively high human cost but low spending, it does not necessarily mean that health spending should be increased. Road transport injuries or smoking related diseases, for example, may be also addressed by investments and responses outside the health system, such as through education, transport, or other social services.

For more information: Australian Burden of Disease Study: impact and causes of illness and death in Australia 2015 and Disease expenditure in Australia on the AIHW website.