

THE GLOBAL BURDEN OF CANCER - THE FACTS

- One out of every two men and one out of every three women will have some type of cancer at some point during their lifetime.¹
- Cancer is one of the leading causes of death in the world and represents a tremendous burden on patients, families and societies.²
- In 2008 there were 12.4 million new cases of cancer diagnosed and 7.6 million deaths from the disease.³
- Based on projections, cancer deaths will continue to rise. By the year 2030 the burden is set to more than double: there will be 26.4 million cancer cases, 17 million deaths and 75 million people living with the disease.³
- More than half of cancer cases and 60% of deaths from cancer occur in less developed countries.⁴
- The lifetime risk of developing cancer is now more than one in three and by 2015 this is expected to rise to one in two.⁵

Cancer - a worldwide snapshot

Cancer is a major public health problem, with significant associated death and disability. It is the second leading cause of death in developed countries and is one of the three leading causes of death for adults in developing countries.

There are over 200 different types of cancer but four cancers: lung cancer, breast cancer, prostate cancer and large bowel cancer account for more than half of all cases.⁵

Of the 12.4 million new cancer cases in 2008, the most common cancers in terms of incidence were lung (1.52 million), breast (1.29 million) and colorectal (1.15 million).⁴

The types of cancer vary around the world and there is significant variation in the risk of different cancers by geographic area. Most of this global variation is due to exposure to known or suspected risk factors related to lifestyle or environment and provides a clear challenge to prevention.

In developed countries, almost as many cancer cases are attributable to an unhealthy diet and inactive lifestyle as to smoking. Although a third of all cancer deaths are linked to cigarette smoking, obesity is associated with colon, breast, uterine, oesophageal and kidney cancer.

The global burden of cancer

Globally, cancer is a major public health burden, accounting for one in eight deaths overall – more than AIDS, tuberculosis and malaria combined.⁶

A substantial number of sufferers experience a significant reduction in their quality of life due to physical pain, mental anguish and economic hardship.

Despite the decline in cancer incidence and mortality rates in many parts of the developed world, rapid growth in the global cancer burden is being fuelled by a continued rise in economically developing countries.⁶ In the USA, for example, the overall cancer incidence rate fell 7.6% between 1992 and 2002, and the overall cancer mortality rate fell 10% between 1991 and 2002. However, these declines were offset by increases in cancer incidence and mortality in low- and middle-income countries.

Worldwide, the number of new cancer cases per year is expected to top 15 million, and the number of deaths could grow to as many as 12 million by 2020. At least 70% of these deaths will be in economically developing countries, where survival rates (20–30%) are often less than half those in the USA and other developed nations (more than 60%).⁶

Prevalence and incidence

Cancer is a leading cause of death worldwide. The disease accounted for 7.9 million deaths (13% of all deaths worldwide) in 2007.⁷ In addition, despite advances in treatment, deaths from cancer are projected to rise, with an estimated 17 million deaths in 2030.³

Cancer predominantly affects the elderly population with approximately 65% of cancers diagnosed in patients over 65 years.⁵ Of the 12.4 million new cancer cases in 2008, the most common cancers in terms of incidence were lung (1.52 million), breast (1.29 million) and colorectal (1.15 million).⁴

Causes of cancer

Importantly, 40% of all cancer cases can be prevented by not smoking, eating a healthy diet and by taking physical exercise. Tobacco use is the single largest preventable cause of cancer and results in many different cancer types, including lung, throat, mouth, pancreatic, bladder, stomach, liver and kidney. Environmental tobacco smoke, or passive smoking, can also cause lung cancer.

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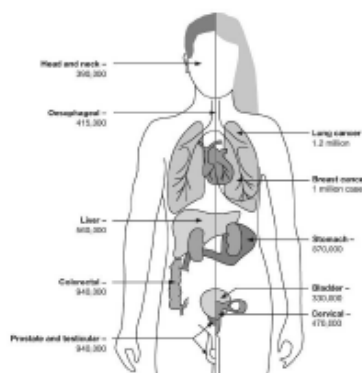
Some cancers are caused by biological carcinogens such as infections by viruses (hepatitis B/C and liver cancer and human papillomavirus [HPV] and cervical cancer) and bacteria (*Helicobacter pylori* and gastric cancer) and parasites (schistosomiasis and bladder cancer).

In addition, excessive alcohol consumption is associated with several cancer types, including head and neck, oesophageal, throat, liver and breast cancer.

Mortality and morbidity

It is estimated that in 2008 there were 7.6 million deaths from cancer.³ In 2008, lung cancer was the most common cause of death (1.31 million deaths), followed by stomach (780 000 deaths) and liver cancer (699 000 deaths).⁴

The table overleaf provides a breakdown of worldwide mortality rates for the top five cancer types.⁷



*Number of new cases annually

Source: World Health Organisation

<http://www.who.int/mediacentre/news/releases/2003/pr27/en/>

Cancer Type	Annual Mortality
Lung	1.3 million
Stomach	803 000
Colorectal	639 000
Liver	610 000
Breast	519 000

The importance of continued research

New advances in the science of oncology and cancer research are increasing our understanding of cancer. This has enabled the development of new anti-cancer agents as well as improvements in diagnostic methods, screening programmes, radiotherapy delivery systems, surgical techniques and supportive/palliative care.

These advances are now leading to improved outcomes for many cancer patients and overall mortality rates are falling.

Boehringer Ingelheim has a long-term commitment to deliver tomorrow's cancer therapies by discovering and developing novel cancer treatment options that combine ground-breaking science with high therapeutic value for cancer patients, physicians and healthcare providers.

References

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