World cancer factsheet

World cancer burden (2008)

Incidence

Cancer is a leading cause of disease worldwide. An estimated 12.7 million new cancer cases occurred in 2008. Lung, female breast, colorectal and stomach cancers accounted for 40% of all diagnosed cases worldwide. In men, lung cancer was the most common cancer (16.5% of all new cases in men). Breast cancer was by far the most common cancer diagnosed in women (23% of all new cases in women). 

Incidence is the number of new cases arising in a given period in a specified population. Often given as an absolute number of cases per year or as a standardised rate per 100,000 (see final page glossary).

Mortality

Cancer is a leading cause of death worldwide, with 7.6 million deaths (around 13% of all deaths) in 2008. Half of all cancer deaths each year are due to lung, stomach, liver, colorectal and female breast cancers.

Mortality is the number of deaths occurring in a given period in a specified population. Often given as an absolute number of deaths per year or as a standardised rate per 100,000.

Notes

The figures presented in this factsheet represent the best available estimates of the global cancer burden but are variable in accuracy, depending on the availability and validity of data in each country. This ranges from small and valid counts of cases and deaths, through estimates based on samples, to estimates based on rates in neighbouring countries.

Authorship


Further detailed information on the global burden of cancer can be found using GLOBOCAN 2008 and other resources on the Cancer Research UK website www.dep.iarc.fr. The Cancer Research UK and IARC worldwide cancer rate is available at crook.info/cancerstats/worl. For information on the Global Initiative for Cancer Registry Development in Low- and Middle-Income Countries, see gicr.info.

References

For general information on cancer see www.iarc.fr or other resources on the Cancer Research UK website www.cruk.org/info/.

International Agency for Research on Cancer

Prevalence

Almost 29 million people diagnosed with cancer within the five years previously were alive at the end of 2008. Most women were after their breast cancer diagnosis (5.2 million), men and women after their colorectal cancer diagnosis (3.1 million), and men after their prostate cancer diagnosis (3.2 million).1,2

The Prevalence of a particular cancer is the number of persons in a defined population who have been diagnosed during a fixed time in the past with that type of cancer, and who are still alive at the end of a given year. Usually given as a number and a proportion per 100,000 persons.

Healthy Years of Life Lost

An estimated 169.5 million years of healthy life were lost globally because of cancer in 2008. Colorectal, lung, female breast and prostate cancers were the main contributors in most regions of the world, explaining 18%-50% of the total healthy years lost.3,4

Healthy life years lost (or Disability Adjusted Years, DALYs) are the sum of years lost to premature mortality (deaths before the age of 80 years for males and 85.2 for females) and the years lived with disability, given as a number or as a standardised rate per 100,000.

World cancer trends

World cancer trends

Approximately 47% of cancer cases and 55% of cancer deaths occur in less developed countries of the world i.e. countries at a low or medium level of development. The Human Development Index (HDI) – see final page glossary for definition)4

“Westernisation” Trends

As low HDI countries become more developed through rapid societal and economic changes, they are likely to become more “westernised”. As such, the pattern of cancer incidence is likely to follow that seen in medium and high HDI settings, with likely declines in cervix uteri and stomach cancer incidence rates, alongside increasing incidence rates of female breast, prostate and colorectal cancers. This “westernisation” effect is a result of infection in reduction-related cancers, outweighed by an increasing burden of cancers more associated with reproductive, dietary and hormonal risk factors.

Projections to 2030

If recent trends in major cancers are seen to continue, the number of new cases of gastric cancer will increase to 22 million new cases each year by 2030. This represents an increase of 75% compared with 2008 (81% in low and middle HDI countries and 69% in high and very high HDI countries).3

Credits

This factsheet would not have been possible without the data collected and available from population-based cancer registries. Knowledge about the cancer burden enables the development, implementation, monitoring and evaluation of cancer strategies that prevent, cure and care. This knowledge is key in setting low and middle-income countries, making cancer control efforts less effective.

Notes


Most commonly diagnosed cancers by region, as a proportion of all cancers

Prevalence 2008

Prostate
111 countries worldwide

Colorectum
25 countries in Eastern Europe, North Africa, Middle East, Asia

Stomach
14 countries in West Africa and Asia

Kaposi Sarcoma
11 countries in East and Southern Africa

Lip, Oral Cavity
Oman, Pakistan, India, Nepal, Sri Lanka, Papua New Guinea

Bladder
Algeria, Egypt, Syria, Iraq

Liver
Mongolia, Laos

Non-Hodgkin Lymphoma
Kuwait

Breast
145 countries worldwide

Cervix
37 countries in South & Central America, West & Southern Africa, Asia

Thyroid
South Korea, Vanuatu

Most prevalent cancer by country – males

Most prevalent cancer by country – females

Incidence 2008

Lung
Breast
Colorectum
Prostate
Liver
Cervix
Stomach
Oesophagus
Kaposi Sarcoma
Lip, Oral Cavity
Bladder
Non-Hodgkin Lymphoma
Malignant Melanoma
Other

Very high HDI

High HDI

Medium HDI

Low HDI

Levels of human development (HDI)

Estimates for all cancers in 2008 by HDI and sex (counts in millions)

<table>
<thead>
<tr>
<th>Level of human development (HDI)</th>
<th>Incidence</th>
<th>Prevalence</th>
<th>Mortality</th>
<th>Healthy years lost</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very high</td>
<td>4.808</td>
<td>38%</td>
<td>13,604</td>
<td>39,276</td>
<td>1,010</td>
</tr>
<tr>
<td>High</td>
<td>1.891</td>
<td>15%</td>
<td>4,385</td>
<td>25,764</td>
<td>922</td>
</tr>
<tr>
<td>Medium</td>
<td>5.708</td>
<td>45%</td>
<td>10,325</td>
<td>4,442</td>
<td>4,442</td>
</tr>
<tr>
<td>Low</td>
<td>0.246</td>
<td>2%</td>
<td>0.479</td>
<td>0.194</td>
<td>0.246</td>
</tr>
<tr>
<td>Worldwide</td>
<td>12.661</td>
<td>28.802</td>
<td>7.564</td>
<td>169.295</td>
<td>6,768</td>
</tr>
</tbody>
</table>

Incidence in 2008

Excluding non-melanoma skin cancers

Based on demographic changes (UN) plus trends in rates of six cancers on the basis of changing annual age-adjusted incidence in 101 cancer registries 1988–2002

Disability-adjusted life years lost (DALYs)

© Copyright August 2012 Cancer Research UK