

Metadata – Cancer incidence

Description	<p>Number of new diagnoses of cancer (excluding non-melanoma skin cancer) detected and registered in a given calendar year</p> <p>Rate of new diagnoses of cancer (excluding non-melanoma skin cancer) registered in a given calendar year per 100,000 population.</p>
Rationale	<p>Cancer is one of the most important disease groups in terms of premature mortality, ill health, and healthcare expenditure. The risk of developing some cancers can be decrease by the adoption of behavioural measures (healthy lifestyle, vaccination). Therefore, its incidence in a defined population is an indicator of the success/failure of health promotion. It is also an indicator of the European Core Health Indicators (ECHI) shortlist [1].</p>
Primary Data source	<p>Belgian Cancer Registry [2]</p>
Indicator source	<p>Belgian Cancer Registry for national and regional incidence rates. WHO-EURO “Health For All” database [3] for international comparisons.</p>
Periodicity	<p>Yearly</p>
Technical definitions	<p>In Belgium, each new diagnose of cancer must be legally registered via a standard registration form. Data are reported to the Belgian Cancer Registry by the health insurances (“mutuelles”), by the hospitals (clinical network) and by the pathologists (pathology network).</p>
Calculations	<p>The unadjusted or crude incidence rate (CR) is calculated by dividing the number of new cases observed during a given time period by the corresponding population time at risk in that time period. The crude rate is expressed as the number of new cases per 100,000 person years.</p> <p>The age-specific incidence rate is the unadjusted incidence rate in a particular 5-year age group and expressed per 100,000 population.</p> <p>The age-adjusted incidence rate is a weighted average of the individual age-specific rates using an external standard population. It is the incidence that would be observed if the population had the age structure of the standard population (European Standard Population), and expressed as the number of new cases per 100,000 population.</p>
Limitations	<p>As some cancers long remain asymptomatic, people are not necessarily aware of being ill, and can live for a while before searching for a diagnosis. This could result in an under-diagnosis of the existing cases for some cancers.</p>
International comparisons	<p>Availability: yes</p> <p>The international comparability of the notification rate is limited, since the national surveillance systems are different between countries. Factors such as underreporting and reporting delay affect the countries figures and their ranking. There are also differences in the way to handle with double registration.</p>

Metadata – Cancer ten-years prevalence

Description	Number of people alive by the end of 2020 who have been diagnosed with cancer (excluding non-melanoma skin cancer) between 2011 and 2020.
Rationale	Estimating the current burden of cancer in Belgium. As cancer prevalence depends on both incidence and survival, and since survival can be very different from one cancer to another, estimating the importance of the current burden of cancer provides relevant information for the public health policies. For instance, cancers with high incidence and low survival (e.g. lung cancer) will have a low prevalence. On the other hand, cancers with high incidence and high survival (e.g. prostate cancer) will have a high prevalence.
Primary Data source	Belgian Cancer Registry [2]
Indicator source	Belgian Burden of Disease study [4]
Periodicity	Yearly
Calculation	<p>Ten-year prevalence data were estimated with an index date of 31st December 2020, representing people living in Belgium who were diagnosed with at least one invasive malignancy in the period from 1st January 2011 to 31st December 2020 and who were still alive at the end of 2020. Persons with more than one malignancy were included as prevalent cases in each cancer type, but were counted only once in analysis regrouping multiple tumour sites.</p> <p>10-year prevalence includes the patients in the 1-year and 5-year prevalence and those who can be considered as 'cured' (or insusceptible) of their disease and in whom the probability of recurrence is low</p>
Limitations	This overall definition must be treated with caution as the interpretation will vary depending on the specific cancer type.
International comparisons	Availability: yes Comparability : limited

References List

1. European Commission. The European Core Health Indicators (ECHI) shortlist. Available from https://ec.europa.eu/health/indicators_data/echi_en
2. Belgian Cancer Registry. Available from <https://kankerregister.org/>
3. Health For All Database. WHO EURO. Available from <https://gateway.euro.who.int/en/datasets/european-health-for-all-database/>
4. Gorasso, V., Silversmit, G., Arbyn, M., Cornez, A., De Pauw, R., De Smedt, D., ... & Speybroeck, N. (2022). The non-fatal burden of cancer in Belgium, 2004–2019: a nationwide registry-based study. *BMC cancer*, 22, 1-10. doi: <https://doi.org/10.1186/s12885-021-09109-4>