

THE GLOBAL BURDEN

Occupational cancer – An overview

- The **economic impact of cancer** is significant and is increasing. The total annual economic cost of cancer in 2010 was estimated at approximately US\$ 1.16 trillionⁱ.
- While cancer is a multifactorial disease and some causal factors are difficult to modify, cancers caused by work are the easiest ones to tackle.
- Between 8 and 16% of all cancers are the result of **exposures at work**ⁱⁱ.
- The major causes of work place killers are cancer (32%), circulatory disease (26%), and accidents (17%)ⁱⁱⁱ.
- 32% of the global **work-related deaths** are associated with cancers^{iv}. In 2015, more than 738,000^{vii} fatal work-related cancers occurred, the highest reported in Asia (430,000 or 65%)^{vii}.
- Cancer is estimated to be the leading cause of work-related deaths **in high income countries including EU (53%)**^{viii}. Cancers has the highest work-related DALY (Years of Life Lost or Years Lived with Disability) in the EU (25%) compared to 12% globally^{ix}.
- **Occupational carcinogens** affect 23% of workers in the EU, 43% in Canada, and 37.6% in Australia^x. In France, two million are regularly exposed to carcinogenic chemicals.
- Work-related health problems result in an **economic loss** of 4–6% of GDP for most countries. Meanwhile, about 70% of workers do not have any insurance to compensate them in case of occupational diseases and injuries^{xi}.
- There are 179 agents (chemicals or exposure circumstances) classified by the IARC as **probable human carcinogens**, and another 285 agents classified as **possible human carcinogens**. A large proportion of these agents are found at work^{xii}.
- Occupational cancer has 3 types of costs namely; **Direct Cost** associated with medical treatment and care, **Indirect Cost** which is the monetary losses associated with time spent away from work, and **Intangible Human Cost** in the form of reduced quality of life, pain, suffering, anxiety and grief. A study to estimate these costs attributed to occupational cancers in EU28 was published in 2017 by the European Trade Union Institute (ETUI). The final report of the study shows that the total cost of cancer registrations recorded in a given year and caused by past occupational exposure to carcinogenic agents is between €270 and €610 billion^{xiii}.
- **The Direct cost estimation** - The global oncology drug spending reached \$107 billion in 2015, an increase from \$90 billion in 2011. It is expected that the worldwide spending on cancer medicines will exceed \$150 billion by 2020^{xiv}.

ⁱ <http://www.who.int/mediacentre/factsheets/fs297/en/>

ⁱⁱ <http://www.hazards.org/cancer/preventionkit/part1.htm>

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^{iv} <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4551060/>

^v https://oshwiki.eu/wiki/Eliminating_occupational_cancer_in_Europe_and_globally

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- ^{vi} <http://www.icohweb.org/site/images/news/pdf/Report%20Global%20Estimates%20of%20Occupational%20Accidents%20and%20Work-related%20Illnesses%202017%20rev1.pdf>
- ^{vii} <http://www.icohweb.org/site/images/news/pdf/Report%20Global%20Estimates%20of%20Occupational%20Accidents%20and%20Work-related%20Illnesses%202017%20rev1.pdf> table 8. Page 15
- ^{viii} https://oshwiki.eu/wiki/Eliminating_occupational_cancer_in_Europe_and_globally
- ^{ix} <https://visualisation.osha.europa.eu/osh-costs#!/> percentage of all work-related DALY
- ^x https://oshwiki.eu/wiki/Eliminating_occupational_cancer_in_Europe_and_globally
- ^{xi} <http://www.who.int/mediacentre/factsheets/fs389/en/>
- ^{xii} <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4551060/>
- ^{xiii} European Trade Union Institute (ETUI) 2017 The cost of Occupational cancer in the EU -28 <file:///C:/Users/elziniy/Downloads/RPA+FOBIG+-+The+Cost+of+Occupational+Cancer++in+the+EU-28+-+November+2017.pdf>
- ^{xiv} <https://www.reuters.com/article/us-health-cancer-spending/global-cancer-drug-spending-to-exceed-150-billion-by-2020-ims-report-idUSKCN0YO0BQ>