

WHO- IARC-WORLD CANCER REPORT 2008

Tobacco Smoking

Summary

Tobacco smoking causes 13 different cancers: lung, oral cavity, nasal cavity and nasal sinuses, pharynx, larynx, oesophagus, stomach, pancreas, liver, urinary bladder, kidney, uterine cervix and myeloid leukaemia. In high-resource countries, tobacco smoking accounts for approximately 30% of all human cancers

Lung cancer has the highest smoking attributable fraction among all cancers induced by smoking. duration of smoking is the strongest determinant of excess lung cancer risk in smokers, with risk increasing proportionally with the number of cigarettes smoked. tobacco smoking raises the excess risk of all histological types of lung cancer

Pooled estimates from a recent meta- analysis of smoking and cancer shows, persuasively, very similar risks of cancer associated with smoking in males and females

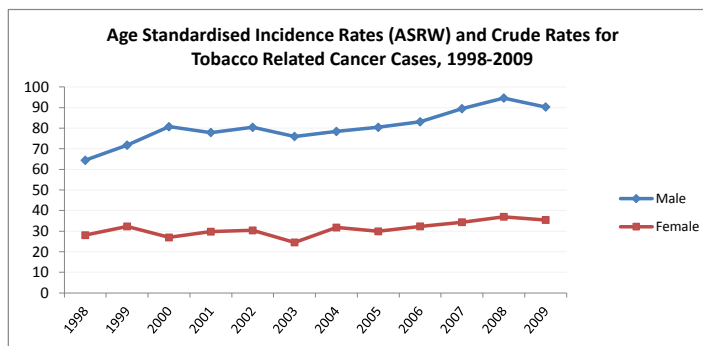
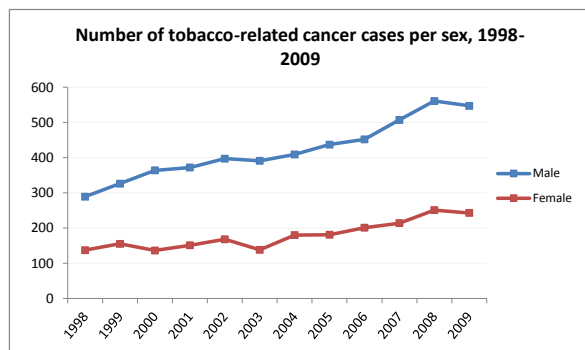
Tobacco smoke is the most common source of carcinogens to human, including polycyclic aromatic hydrocarbons (i.e. benzo[a] pyrene) and tobacco specific nitrosamines (i.e. nnK). the chronic presentation of carcinogens to the airway epithelial cells, through sustained smoking, can lead to molecular lesions which, in the presence of reduced metabolic detoxification, can diminish repair capability, overwhelming cellular defences and leading to lung cancer

About 1.3 billion people smoke globally, making tobacco a major avoidable cause of disease and mortality worldwide. approximately 150 million deaths from tobacco use are projected worldwide for the period 2000–2024 if current smoking patterns persist; this number of deaths will not be much reduced unless a sizeable proportion of adults who are established smokers quit

Summary

| Number of tobacco-related cancer cases per sex, 1998-2009 | | | |
|---|-------------|-------------|-------------|
| Year | Male | Female | Total |
| 1998 | 289 | 137 | 426 |
| 1999 | 326 | 155 | 481 |
| 2000 | 364 | 136 | 500 |
| 2001 | 372 | 151 | 523 |
| 2002 | 397 | 168 | 565 |
| 2003 | 391 | 138 | 529 |
| 2004 | 409 | 180 | 589 |
| 2005 | 437 | 181 | 618 |
| 2006 | 452 | 201 | 653 |
| 2007 | 507 | 214 | 721 |
| 2008 | 561 | 251 | 812 |
| 2009 | 547 | 243 | 790 |
| Total | 5052 | 2155 | 7207 |

| Age Standardised Incidence Rates (ASRW) and Crude Rates for Tobacco Related Cancer Cases, 1998-2009 | | | | |
|---|-----------|-----------|-----------|-----------|
| Year | Male | | Female | |
| | Crude IR* | ASR (W)** | Crude IR* | ASR (W)** |
| 1998 | 85,9 | 64,4 | 39,5 | 28,0 |
| 1999 | 96,0 | 71,7 | 44,2 | 32,3 |
| 2000 | 106,2 | 80,7 | 38,3 | 26,9 |
| 2001 | 107,5 | 77,9 | 42,0 | 29,7 |
| 2002 | 113,4 | 80,4 | 46,2 | 30,3 |
| 2003 | 110,3 | 76,0 | 37,5 | 24,5 |
| 2004 | 113,8 | 78,4 | 48,2 | 31,7 |
| 2005 | 119,9 | 80,4 | 47,7 | 29,9 |
| 2006 | 121,7 | 83,1 | 52,0 | 32,3 |
| 2007 | 133,3 | 89,4 | 54,1 | 34,3 |
| 2008 | 143,9 | 94,6 | 61,7 | 37,0 |
| 2009 | 136,9 | 90,3 | 57,9 | 35,4 |



Excluding In situ cases

Excluding cases of non-residents of the Cyprus Government Controlled Area

Including cases identified by Death Certificates Only

Crude incidence rate (Crude IR):

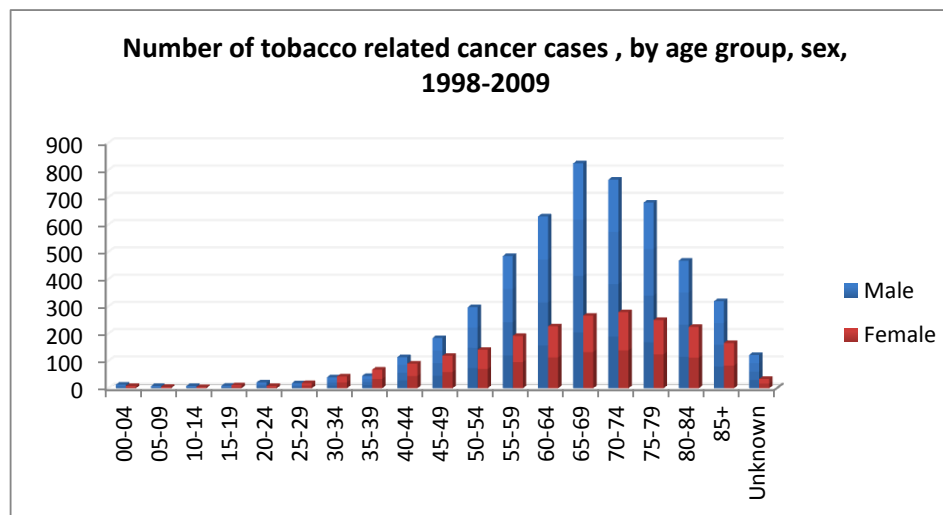
The crude incidence is the rate at which new cases occur in a population during a specific period. This rate is classically expressed as the average number of cases occurring per 100 000 persons each year or 100 000 person-years

Age-standardised incidence rate

The age-standardised rate is a summary of the individual age-specific rates using an external population called a standard population. This is the incidence that would be observed if the population had the age structure of the standard population, and corresponds to the crude incidence rate in the standard population.

***Tobacco related cancers:** C00 (Lip), C01-C02 (Tongue), C03-C06 (Mouth), C07-C08 (Salivary glands), C09 (Tonsil), C10 (Other Oropharynx), C11 (Nasopharynx), C12-C13 (Hypopharynx), C14 (Pharynx unsp.), C15 (Oesophagus), C16 (Stomach), C22 (Liver), C25 (Pancreas), C30-C31 (Nose, sinuses etc.), C32 (Larynx), C33-C34 (Trachea, Bronchus, Lung), C53 (Cervix Uteri), C64 (Kidney), C67 (Bladder), C92-C94 (Myeloid Leukaemia)

| Number of tobacco related cancer cases , by age group, sex, 1998-2009 | | | |
|---|-------------|-------------|-------------|
| Age Group | Male | Female | Total |
| 00-04 | 13 | 8 | 21 |
| 05-09 | 8 | 5 | 13 |
| 10-14 | 8 | 4 | 12 |
| 15-19 | 9 | 11 | 20 |
| 20-24 | 21 | 8 | 29 |
| 25-29 | 18 | 19 | 37 |
| 30-34 | 40 | 43 | 83 |
| 35-39 | 45 | 68 | 113 |
| 40-44 | 114 | 90 | 204 |
| 45-49 | 184 | 119 | 303 |
| 50-54 | 297 | 141 | 438 |
| 55-59 | 485 | 192 | 677 |
| 60-64 | 630 | 227 | 857 |
| 65-69 | 825 | 266 | 1091 |
| 70-74 | 765 | 279 | 1044 |
| 75-79 | 681 | 250 | 931 |
| 80-84 | 468 | 225 | 693 |
| 85+ | 319 | 166 | 485 |
| Unknown | 122 | 34 | 7051 |
| Total | 5052 | 2155 | 7207 |



****Excluding In situ cases**

Excluding cases of non-residents of the Cyprus Government Controlled Area

Including cases identified by Death Certificates Only

***Tobacco related cancers:** C00 (Lip), C01-C02 (Tongue), C03-C06 (Mouth), C07-C08 (Salivary glands), C09 (Tonsil), C10 (Other Oropharynx), C11 (Nasopharynx), C12-C13 (Hypopharynx), C14 (Pharynx unspec.), C15 (Oesophagus), C16 (Stomach), C22 (Liver), C25 (Pancreas), C30-C31 (Nose, sinuses etc.), C32 (Larynx), C33-C34 (Trachea, Bronchus, Lung), C53 (Cervix Uteri), C64 (Kidney), C67 (Bladder), C92-C94 (Myeloid Leukaemia)

**Number of tobacco related cancer cases, by site and sex, 1998-2009***

| Cancer Site | Male | Female | Total |
|-----------------------------------|-------------|-------------|-------------|
| C00 (Lip) | 44 | 13 | 57 |
| C01-C02 (Tongue) | 57 | 36 | 93 |
| C03-C06 (Mouth) | 49 | 30 | 79 |
| C07-C08 (Salivary glands) | 29 | 27 | 56 |
| C09 (Tonsil) | 10 | 4 | 14 |
| C10 (Other Oropharynx) | 12 | 1 | 13 |
| C11 (Nasopharynx) | 33 | 14 | 47 |
| C12-C13 (Hypopharynx) | 7 | 6 | 13 |
| C14 (Pharynx unspec.) | 5 | 4 | 9 |
| C15 (Oesophagus) | 75 | 29 | 104 |
| C16 (Stomach) | 480 | 305 | 785 |
| C22 (Liver) | 259 | 117 | 376 |
| C25 (Pancreas) | 308 | 234 | 542 |
| C30-C31 (Nose, sinuses etc.) | 14 | 10 | 24 |
| C32 (Larynx) | 220 | 22 | 242 |
| C33-C34 (Trachea, Bronchus, Lung) | 1727 | 474 | 2201 |
| C53 (Cervix Uteri) | | 279 | 279 |
| C64 (Kidney) | 298 | 160 | 458 |
| C67 (Bladder) | 1216 | 234 | 1450 |
| C92-C94 (Myeloid Leukaemia) | 209 | 156 | 365 |
| Total | 5052 | 2155 | 7207 |

Excluding In situ cases*Excluding cases of non-residents of the Cyprus Government Controlled Area****Including cases identified by Death Certificates Only**