

REGIONAL DIVERSITY

Cancer in Northern Africa and Central and Western Asia

In this region, lung cancer is the leading cause of cancer death among men, while breast cancer is the leading cause of cancer death among women.

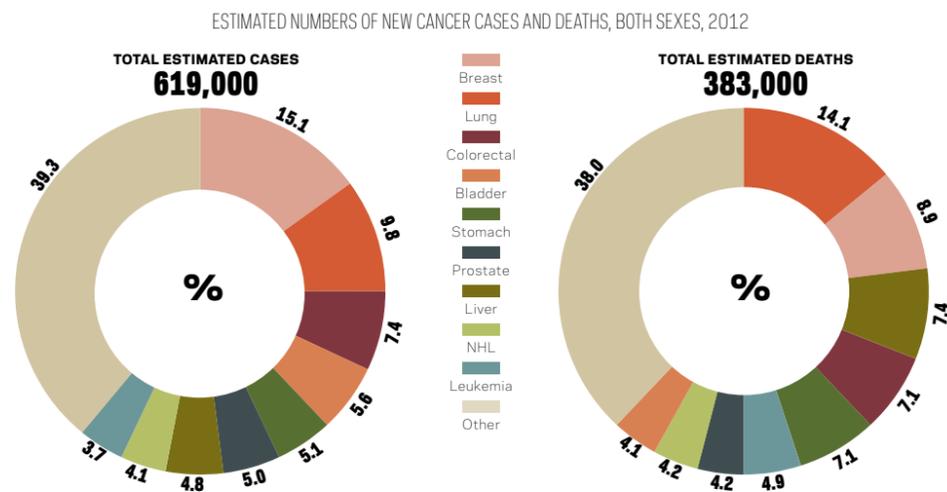
Among the 492 million inhabitants of this region, 619,000 cancer cases and 383,000 cancer deaths occur each year, representing 4% and 5% of the worldwide cancer burden, respectively.

① In 2012, age-standardized rates per 100,000 population for all cancer sites (excluding non-melanoma skin cancers) for men and women were estimated to be 165 and 141 for incidence and 117 and 79 for mortality, respectively. Breast cancer is the most commonly diagnosed cancer in women, followed by colorectal and cervical cancer. In men, the three most commonly diagnosed cancers are lung, prostate, and bladder, and the three leading causes of cancer death are lung, liver, and stomach.

② The region is also characterized by marked variations in the incidence of various cancers, including high esophageal cancer incidence in Turkmenistan, Tajikistan, and Kazakhstan, high bladder cancer incidence in Lebanon, Turkey, Egypt, and several other countries of the region, and high liver cancer in Egypt. This region has some of the lowest cervical cancer rates in the world, although cervical cancer mortality rates have been rising among younger women in some West and Central Asian countries due to lack of effective screening and changing risk factors.

Within the next 20 years, the rapidly increasing population and aging are expected to double the new cancer cases and deaths from cancers; better detection, improved registration and increased prevalence of cancer risk factors will likely raise the numbers further.

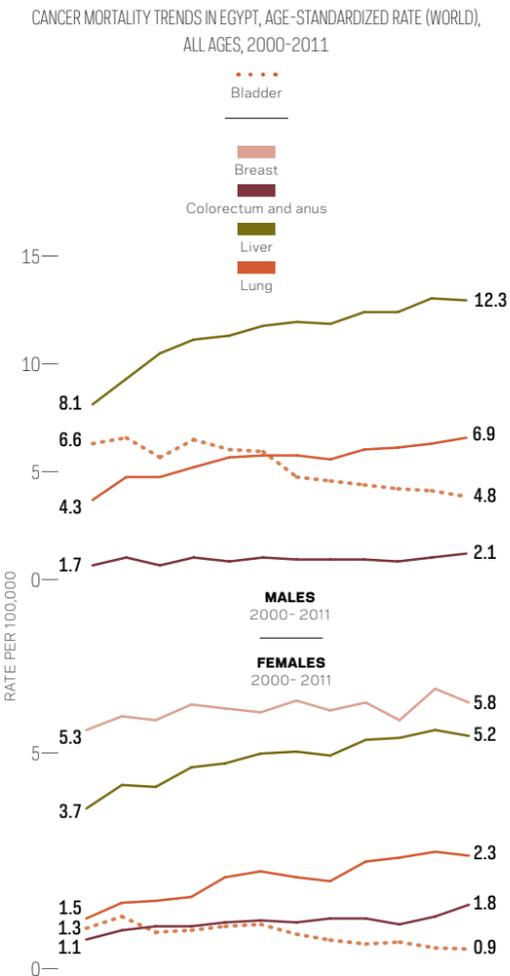
① **Lung and breast cancer are the most common diagnoses and causes of cancer death in this region, although there is substantial inter-regional variation in bladder, esophageal, and liver cancer incidence and mortality.**



③ Tobacco is among the most important of these risk factors. For example, Egypt has shown an increase in mortality from lung cancer.

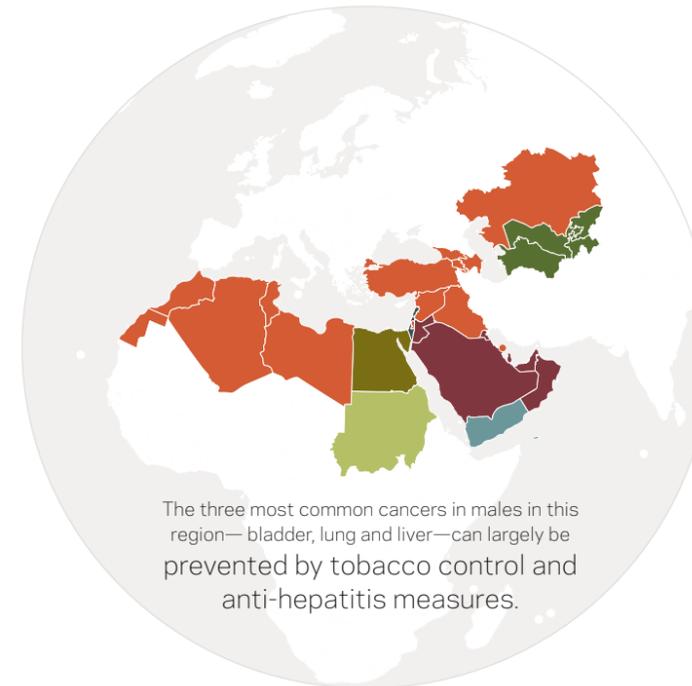
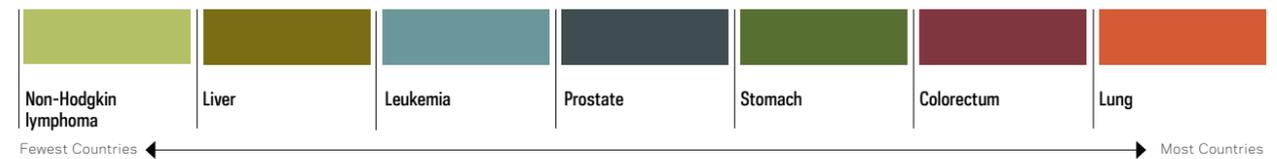
The high liver cancer rate in Egypt is probably related to the high prevalence of chronic hepatitis C virus (HCV) infection, due to HCV-contaminated injection equipment used during mass treatment campaigns against *Schistosoma*; these same campaigns led to a sharp decline in squamous cell cancer of the urinary bladder. Poor nutrition, low fruit and vegetable intake, and drinking beverages at high temperatures have been proposed as possible explanations for the high esophageal cancer rates in Central Asia. Other important risk factors in the region include obesity, unhealthy diet, physical inactivity, air pollution, and increased exposure to industrial and agricultural carcinogens.

③ **While bladder cancer mortality rates are decreasing in Egypt, other cancers are increasing, including colorectal, liver, lung, and breast cancers.**



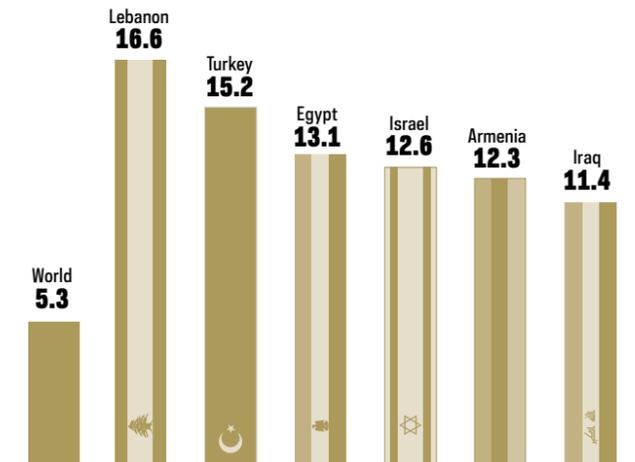
Most commonly diagnosed cancer among males

2012



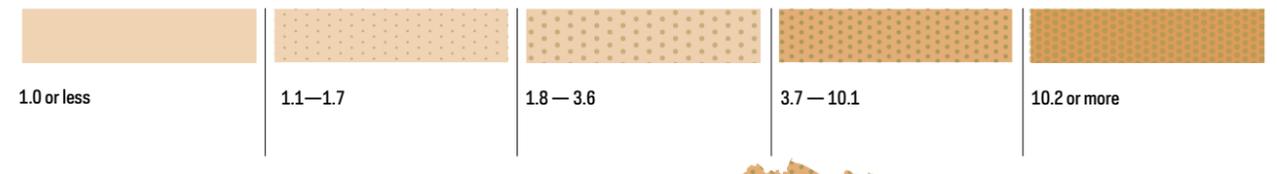
② **Bladder cancer incidence rates are strikingly high in some countries of this region, including Lebanon, Turkey, and Egypt.**

ESTIMATED BLADDER CANCER INCIDENCE, AGE-STANDARDIZED RATE (WORLD), BOTH SEXES, 2012



Esophageal cancer incidence in both sexes

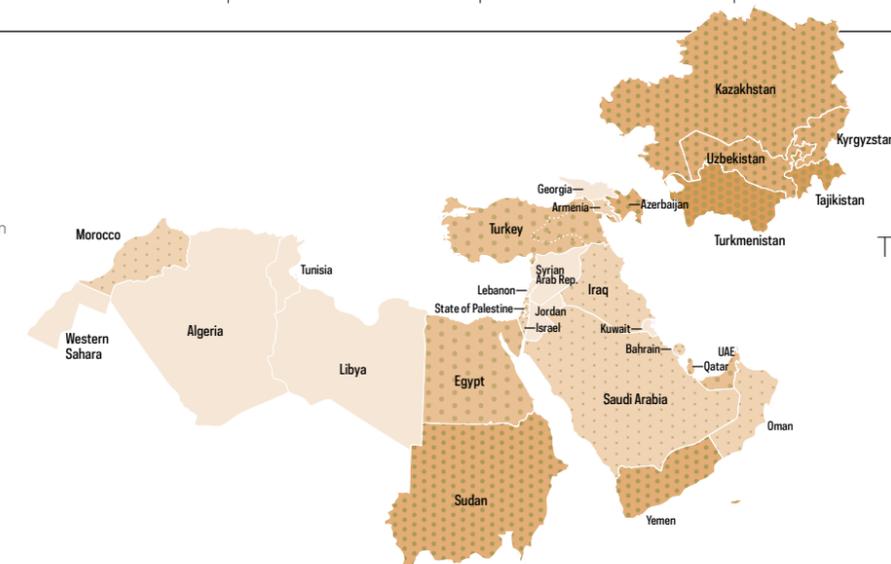
ESTIMATED AGE-STANDARDIZED RATE (WORLD) PER 100,000 POPULATION, 2012



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Early detection of cancer and reliability of diagnoses are improving in the countries in the Gulf Corporation Council because of the availability of modern medical facilities. However, public awareness and education are not yet at a level that can affect diagnosis and control of cancers at the earliest stages.”

—Dr. Robert Brown, Department of Surgery and Cancer, Imperial College London



The “esophageal cancer belt” in this region, which includes Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, and the eastern part of Turkey (indicated by the dotted line), as well as Iran and Afghanistan, has some of the highest esophageal cancer rates in the world.