



The SAGE Encyclopedia of Cancer and Society

China

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With a population of nearly 1.38 billion, China accounts for 19.3 percent of the world population and is the most populous country in the world. Because incidences of cancer often vary between less-developed and developed regions, China faces unique challenges from both domestic and international perspectives. Cancer is the leading cause of death in urban China and the second in rural China (after cerebrovascular disease), accounting for 27.79 percent and 23.62 percent of total deaths, respectively. Compared to other more-developed countries, many of the high-risk factors faced by Chinese people involve lifestyle factors (e.g., smoking). Additionally, the growing industrialization, Westernization of dietary practices, and other unique social determinants (e.g., demographics, ecological, environmental, and cultural variables), and genetic factors have contributed to cancer problems in China. In 2009, the central government announced a ¥850 billion (\$128 billion), three-year health care reform plan aiming to provide affordable and universally available health care by 2020. Some of the reforms include plans to expand the medical insurance system, reimbursing essential therapies and upgrading health care facilities in local communities and rural areas.

Common Cancers and Risk Factors

Patterns in cancer incidences can provide insights into the impacts of lifestyle on cancer development. From 1973 through 1975, the top three deadly cancers were stomach, esophageal, and liver cancers. By 1990 to 1992, the top three were stomach, liver, and lung cancers. A comparison of major cancer sites between the China and the United States showed that China has higher cancer incidence rates in four sites amongst males (i.e., nasopharynx, esophagus, stomach, and liver) and six sites among females (i.e., nasopharynx, esophagus, stomach, liver, gallbladder, and cervix uteri). The cancer trends in China indicate that risk factors for cancer such as the deterioration of the environment and Western lifestyles have increased in China since the 1970s, whereas the aging population became a contributing factor as of the 1990s.

Cancer mortality in China has also been increasing rapidly and continuously since the 1970s, with urban China seeing higher rates than rural China. Currently, lung cancer is the leading cause of cancer deaths in urban areas, followed by digestive tract cancers (liver, gastric, esophageal, and colorectal cancer). In contrast, liver cancer is the leading cause in rural areas, followed by lung cancer and other digestive tract cancers.

Lung cancer increased 465 percent between the 1970s and the 2000s. The World Health Organization (WHO) estimated that, by year 2025, more than 1 million Chinese would be diagnosed with lung cancer each year. A major risk factor of lung cancer is smoking. As the largest tobacco producer and consumer in the world, China now has more than 350 million tobacco smokers, among whom are 15 million regular smokers and 40 million casual smokers between 13 and 18 years old. In recent years, although the smoking rate among males (around 60 percent) has decreased, it has increased among female smokers (around 4 percent), with greater increases among young females.

Liver, stomach, and esophageal cancers are the three next deadliest in China in since the 2000s. China accounts for almost 50 percent of the world's liver cancer cases. Hepatitis B, a causal factor for liver cancer, is highly endemic in China, with a 2006 survey noting an HBsAg carrier rate of 7.18 percent in the overall population (i.e., an estimated 93 million HBV carriers, including 30 million patients with chronic hepatitis B).

Other infectious agents also contribute to high cancer rates in China. For example, *Helicobacter pylori* (*H. pylori*)–induced gastritis is the single strongest risk factor for stomach cancers. In China, several reports have shown that *H. pylori* prevalence rates remain around 60 to 70 percent since the 1990s. In contrast, the infection rate is estimated to be around 25 percent in the West due to improved hygiene and widespread antibiotic use. A randomized clinical trial in Shandong, China, found that a short-term treatment with antibiotics to eradicate *H. pylori* was able to reduce gastric cancer incidents by almost 40 percent during a 15-year period.

Nutritional deficiency is believed to play a major role for esophageal cancer development, especially in high-risk areas in China. Other researchers also found that environmental carcinogens (e.g., nitrate nitrogen),

dietary practice (e.g., drinking tea at high temperatures), and genetic factors contributed to the high incidence rate of esophageal cancer.

Nasopharyngeal cancer (NPC) is extremely common in southern China, accounting for 18 percent of all cancers in China. It is also known as Cantonese cancer because it occurs in about 25 cases per 100,000 in this region, 25 times higher than the rest of the world. Researchers argued that early childhood exposure to Epstein–Barr virus (EBV) infection and salt-preserved fish in southern China pose significant risk factors. Researchers have also suggested genetic susceptibility and shared environmental risk factors together may also contribute to the high incidence rate in southern China.

Organizations and Events on Cancer

Cancer control programs in China focus on prevention, early diagnosis, and treatment. In addition to hospitals that are responsible for general cancer care, nonprofit organizations also play major roles in cancer prevention. The Cancer Foundation of China (CFC) accepts nationwide donations and sponsors public service, education, and cancer research. The Chinese Society of Clinical Oncology (CSCO) focuses on enhancing continuing education in clinical oncology and developing advanced training programs, with targeted services in rural areas.

Similarly, the Chinese Anti-Cancer Association (CACA) is dedicated to the prevention and treatment of cancers by coordinating and supporting professionals across all cancer-related fields. Every two years, CACA hosts the Chinese Conference of Oncology (CCO), China's most comprehensive and influential conference in oncology. In 1995, CACA designated the week of April 15 to be National Cancer Week. Since then, public events aiming to disseminate cancer-related information and knowledge have been held during this week to raise public awareness and to seek public support. The past annual themes included healthy lifestyles, fighting cancer together, food and cancer, caring cancer patients, early detection and treatment, breast cancer, antismoking, among others.

Chinese Media Reports on Cancer

Cancer information is widely broadcasted through mass media in China, with television and newspapers being the most common venues. In urban or suburban areas, the Internet is a common alternative, while in remote areas, radio provides a higher reach. Cancer information presented in mass media includes statistical reports, status reports, cancer trends, the latest cancer treatment and research, and human interest cancer-related stories.

In China, mass media is essential in raising public awareness about health-related issues. For example, cancer village is a social phenomenon first identified through media, resulting in significant shifts in public attitudes and governmental policies. In 2009, Phoenix Weekly had the cover story titled "Hundreds of Places in China With High Carcinogenic Risk," which documented heavily industrialized rural communities that experienced higher cancer rates and cancer-related deaths than the national averages. A so-called China Cancer Village Map was drawn and, together with related stories, spurred great concerns from the government and the public, which in turn promoted more media coverage. After years of research and debates, the Chinese government officially acknowledged the existence of cancer villages in 2013. The public was educated about the issue, and citizen involvement was encouraged. Mass media played a critical role in the process, publicizing these environmental hazards and highlighting China's struggle to balance public health and economic growth.

In China, entertainment education, providing health-related information through films and television programs, remains a powerful form of health outreach. For example, a highly acclaimed Chinese movie in 2008 named *If You Are the One* followed the story of the main character, who was diagnosed with melanoma. He conducts a living funeral for himself before his death and commits suicide by later jumping into the sea. The movie left a huge impression on many audiences and introduced melanoma to the public, motivating a large number

of audiences to visit hospitals to have their moles examined and removed. Media also provided extensive reports from medical experts, dispelling common misconceptions.

Media has also played a significant role in covering Chinese celebrities in the 21st century who have suffered from cancer. A good example is Luo Jing (1961–2009), a famous anchor of the national news program Xinwen Lianbo on CCTV. Luo was diagnosed with lymphoma in 2008 and died the following year. Social media is playing an increasingly important role for cancer education as well. A prominent computer scientist, Li Kaifu, was diagnosed with lymphoma in 2013. He posted a Weibo, the Chinese equivalent of Twitter, announcing his fight against cancer. His story was reported by numerous media outlets and became a popular topic in the public sphere. Stories of celebrities with cancer provide rich resources and opportunities for public awareness and education.

See Also: [Hepatitis B](#); [Lung Cancer, Small Cell](#); [Media](#); [Nasopharyngeal Cancer](#).

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- China
- cancer
- lung cancer
- liver cancer

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Further Readings

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