

# Risk Factors of Cancer

## Introduction

Cancer risk factors include anything that increases a person's chance of getting a disease. Age, sex, family history are non-modifiable risk factors. Other cancer-causing factors may be present in the environment. Life style can affect the exposure to risk factors. For example, consumption of tobacco and alcohol, diet, and exposure to the sun are related to lifestyle. Having a risk factor for cancer means that a person is more likely to develop the disease at some point in their life. However, one or more risk factors doesn't necessarily mean that a person will definitely get cancer. Main risk factor for cancer is age.

## Main environmental risk factors

Smoking accounts for 30% of cancers. Tobacco, diet, chemicals and radiation account for 75% of cancers in USA.

## Lung cancer

Smoking is the most significant risk factor for lung cancer. A lifetime smoker has a 20-30 times higher risk than a non-smoker. Smoking increases the risk of all histological types of lung cancer. Passive exposure to tobacco smoke increases risk by 15-20%. Occupational exposure to asbestos (lung cancer and mesothelioma), metals (nickel, arsenic, cadmium), radon (alpha emitter) and ionising radiation are also significant causes of lung cancer.

## Breast cancer

There is decreased risk if breast feeding and young when pregnant. Alcohol, tobacco and radiation, increase risk. Risk increases with decreasing age at menarche, increasing age at first pregnancy, and increasing age at menopause. Hormonal status- increase risk decreasing age at menarche. Genetic predisposition is a risk factor. The genes associated with breast cancer are BRCA1 and BRCA2. Having one first degree relative increases risk by 80%. Having two first degree relatives increases risk by 300%.

## Colorectal cancer

Risk factors include obesity, lack of physical activity, diet high in animal fat, lack of fibre, adenomatous polyps of colon.

## Stomach cancer

Risk factors are H. Pylori and raw meat (in Japan).

## Liver cancer

Risk factors include chronic hepatitis B and C, contamination of food by aflatoxins (fungi), infection with liver flukes.

## Cervical cancer

Risk factors include persistent Human Papilloma Virus infection and smoking.

## Links

## Related Articles

- Carcinogenicity of Substances and Factors in the Environment

## **Bibliography**

- BENCKO, Vladimir. *Hygiene and Epidemiology : Selected Chapters*. First edition. 2011. ISBN 978-80-246-0793-1.
- KUMAR, Vinay. *Pathological basis of disease*. Eighth edition. 2010. ISBN 978-80-246-0793-1.

## **External links**

- American Cancer Society (<http://www.cancer.org>)