

Types of cancer

There are many types of cancer, each classified by the type of cell that is initially affected. Each type of cancer is named based on the specific cells and tissues where it originates, which helps in understanding its behaviour, treatment, and prognosis.

Type of Cell ¹	Examples ²	Estimated deaths 2024	Causes	Risks	Prevention
Carcinomas: These cancers begin in epithelial cells, which are the cells that line the inside and outside surfaces of the body.	Lung Cancer: Starts in the epithelial cells of the lungs.	8,900 ³	Primarily caused by smoking, but also by exposure to radon gas, asbestos, and other carcinogens. ⁴	Smoking, second hand smoke, exposure to radon gas, asbestos, and family history. ⁵	<ul style="list-style-type: none"> • Avoid smoking: The most significant risk factor. • Avoid second hand smoke: Stay away from environments where people smoke. • Test for radon: Ensure your home is free from radon gas.
	Breast Cancer: Begins in the epithelial cells of the breast ducts or lobules.	3,200 ⁶	Genetic mutations (e.g., BRCA1 and BRCA2), hormonal factors, and lifestyle factors. ⁷	Age, family history, genetic mutations, dense breast tissue, and hormone replacement therapy.	<ul style="list-style-type: none"> • Maintain a healthy weight: Obesity increases the risk. • Limit alcohol: Alcohol consumption is linked to a higher risk. • Breastfeed: If possible, breastfeeding can lower the risk.
	Prostate Cancer: Originates in the epithelial cells of the prostate gland.	3,900 ⁸	Genetic mutations and hormonal changes. ⁹	Age, family history, race (more common in African American men), and diet. ¹⁰	<ul style="list-style-type: none"> • Healthy diet: Eat more fruits and vegetables. • Regular exercise: Helps maintain a healthy weight. • Screening: Discuss prostate cancer screening with your doctor.

1 [Cancer in Australia statistics](#). Cancer Australia, January 2025

2 [Cancer in Australia statistics](#). Cancer Australia, January 2025

3 [Lung cancer in Australia statistics](#). Cancer Australia, February 2025

4 [Lung cancer | Causes, Symptoms & Treatments](#). Cancer Council, February 2025

5 [Lung cancer in Australia statistics](#). Cancer Australia, February 2025

6 [Breast cancer statistics in Australia](#). Breast Cancer Network Australia, September 2024

7 [Breast Cancer Risk Factors](#). Cancer Australia, February 2025

8 [Prostate Cancer in Australia](#). Prostate Cancer Foundation of Australia, August 2024

9 [Prostate cancer | Causes, Symptoms & Treatments](#). Cancer Council, February 2025

10 [Prostate cancer | Causes, Symptoms & Treatments](#). Cancer Council, February 2025

Type of Cell ¹	Examples ²	Estimated deaths 2024	Causes	Risks	Prevention
<i>Carcinomas continued</i>	<p>Colorectal or Bowel Cancer:</p> <p>Starts in the colon or rectum, which are parts of the large intestine.</p>	5,350 ¹¹	Primarily caused by genetic mutations and can be influenced by factors such as a diet high in red and processed meats, inflammatory bowel disease, and certain inherited syndromes. ¹²	Risk increases with age, especially after 50. Family history, lack of physical activity, obesity, smoking, heavy alcohol use, and type 2 diabetes all raise the risk of colorectal cancer.	<ul style="list-style-type: none"> • Regular screenings: Starting at age 45, regular screenings can detect polyps before they become cancerous. • Healthy diet and physical activity: Maintain a healthy weight to reduce risk. • Avoid tobacco and limit alcohol: Avoiding smoking and limiting alcohol intake can lower risk. • Genetic counselling: To assess risk and guide preventive measures.
<p>Leukemias:</p> <p>These cancers begin in the blood-forming tissues of the bone marrow and result in large numbers of abnormal blood cells entering the bloodstream.</p>	<p>Acute Lymphoblastic Leukemia:</p> <p>Starts in early forms of white blood cells called lymphocytes.¹³</p>	2,121 ¹⁴	Genetic mutations in blood-forming cells. ¹⁵	Age (common in children), exposure to radiation, and certain genetic disorders (e.g., Down syndrome).	<ul style="list-style-type: none"> • Avoid radiation: Limit exposure to high-dose radiation. • Healthy lifestyle: Maintain a healthy diet and avoid smoking.¹⁶
	<p>Chronic Myeloid Leukemia:</p> <p>Begins in the bone marrow cells that produce blood cells.¹⁷</p>		Genetic mutation known as the Philadelphia chromosome.	Age, exposure to high-dose radiation, and being male. ¹⁸	

¹¹ [Cancer data in Australia, An overview of colorectal cancer in Australia](#). Australian Institute of Health and Welfare, December 2024

¹² [What's the Difference Between Bowel, Colorectal, Rectal and Colon Cancer?](#). Icon Cancer Centre, 2025

¹³ [Acute lymphoblastic leukaemia \(ALL\)](#). Leukaemia Foundation, May 2024

¹⁴ [Leukaemia in Australia statistics](#). Cancer Australia, September 2024

¹⁵ [Types of leukaemia](#). Cancer Australia, February 2025

¹⁶ [Leukaemia](#). Cancer Council, February 2025

¹⁷ [Chronic myeloid leukaemia \(CML\)](#). Leukaemia Foundation, May 2024

¹⁸ [Types of leukaemia](#). Cancer Australia, February 2025

Type of Cell ¹	Examples ²	Estimated deaths 2024	Causes	Risks	Prevention
Sarcomas: These cancers start in connective or supportive tissues such as bone, cartilage, fat, muscle, or blood vessels.	Osteosarcoma: Begins in bone cells.	500 ¹⁹	Genetic mutations, often related to rapid bone growth. ²⁰	Age (common in teenagers), genetic conditions (e.g., Li-Fraumeni syndrome), and previous radiation therapy.	<ul style="list-style-type: none"> • Avoid radiation exposure: Limit unnecessary radiation, especially in children. • Genetic counselling: For those with a family history of genetic conditions.
	Liposarcoma: Starts in fat cells.		Genetic mutations in fat cells. ²¹	Age (more common in adults), previous radiation therapy, and certain genetic conditions.	
Lymphomas: These cancers start in the cells of the immune system, particularly in the lymphatic system.	Hodgkin Lymphoma: Characterised by the presence of Reed-Sternberg cells.	1,766 ²²	Exact cause unknown, but linked to Epstein-Barr virus (EBV) infection.	Age (bimodal distribution: young adults and older adults), family history, and weakened immune system.	<ul style="list-style-type: none"> • Avoid infections: Protect against infections like Epstein-Barr virus (EBV) and HIV. • Healthy lifestyle: Maintain a healthy diet and avoid smoking.
	Non-Hodgkin Lymphoma: Includes various subtypes like diffuse large B-cell lymphoma. ²³		Genetic mutations in lymphocytes. ²⁴	Age, exposure to certain chemicals, weakened immune system, and certain infections (e.g., HIV, EBV). ²⁵	
Central Nervous System (CNS) Cancers: These cancers begin in the tissues of the brain and spinal cord.	Glioblastoma: An aggressive type of brain cancer.	1,400 ²⁶	Genetic mutations in brain cells.	Age (more common in older adults), exposure to ionizing radiation, and certain genetic syndromes.	<ul style="list-style-type: none"> • Avoid radiation: Limit exposure to ionizing radiation. • Genetic counselling: For those with a family history of genetic conditions.
	Medulloblastoma: A common brain cancer in children.		Genetic mutations in developing brain cells. ²⁷	Age (common in children), genetic syndromes (e.g., Gorlin syndrome), and family history.	

19 [Cancer data in Australia, Overview of cancer in Australia, 2024](#). Australian Institute of Health and Welfare, December 2024

20 [Bone Sarcoma](#). Australia and New Zealand Sarcoma Association

21 [Types of sarcomas](#). Cancer Australia, November 2024

22 [Lymphoma in Australia statistics](#). Cancer Australia, September 2024

23 [Hodgkin lymphoma \(Hodgkin disease\)](#). Mayo Clinic, December 2024

24 [Hodgkin lymphoma](#). Cancer Council, February 2025

25 [Hodgkin Lymphoma, Lymphoma Australia](#)

26 [Cancer data in Australia, Overview of cancer in Australia, 2024](#). Australian Institute of Health and Welfare, December 2024

27 [Brain Tumour / Cancer](#). Brain Foundation, March 2018