

INTRODUCTION TO PUBLIC HEALTH (LCHS 4008)



ASSESSMENT 1: GROUP 1 PRESENTATION



PROGRAMME: CERTIFICATE OF HIGHER EDUCATION
IN HEALTH AND SOCIAL CARE



LECTURER: MS. SALAMI

UNDERSTANDING PROSTATE CANCER:

A Comprehensive Review of Prevention,
Detection and Care

GROUP 1

Asha Kaphle Rana	2527746
Bosede Olumuyiwa	2532179
Erlinda Rull	2526541
Precy Pagtalunan	2532514
Mylene Carandang	2523001
Rumaysa Mohammed Masoud	2438040



Introduction

Cancer is a disease where abnormal cells divide uncontrollably and destroy healthy tissues. Caused by gene mutation, these cells ignore signals to stop dividing or self-destruct. Cancer cells are different than normal cells . Cancer's type depends on the type of cell it started in. Some cancers spread through the blood or circulatory system to other parts of body.

- Prostate cancer is most common in male age over 50.
- In the UK, about 1 in 8 will be diagnosed in their lifetime.
 - For Black man, this lifetime risk increases to 1 in 4.

Risk Factors:

- Age
- Ethnicity
- Family History



PROSTATE CANCER



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Definition

- Walnut sized gland in male, located below the bladder.
- Involve in reproductive and urinary health.
- Uncontrolled growth of cells, most cases grow slowly and are not likely to spread .
- Where they can be treatable even monitored.
- But some can grow more quickly and often presents with no symptoms.

Source: Cancer Research UK

Asha Kaphle Rana(2527746)

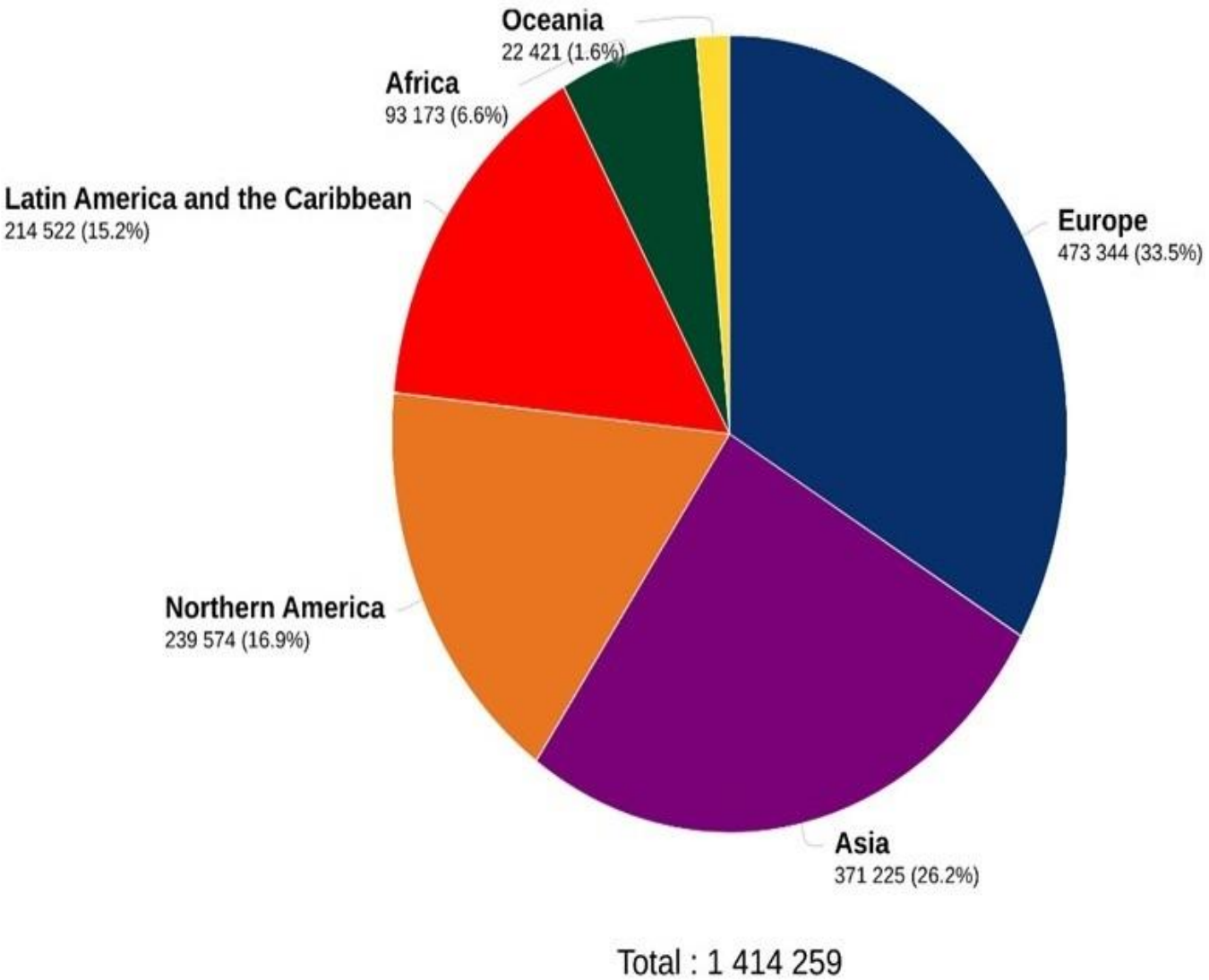
Global and Regional Burden

- **UK:** Incidence rates in England surged by 25% between 2019 and 2023. Survival is high, with nearly 79% of men surviving for ten years or more(**Cancer Research UK**).
- **US:** The American Cancer society estimates 333,830 new cases and 36,320 deaths for 2026. while early-stage 5-year survival is over 99% it drops to 38% if the cancer becomes metastatic(**American cancer society**).
- **Worldwide:** There were over 1.4 million new case globally in 2022, with the highest rates found in US, Brazil, and France(**world cancer Research Fund**).

(World Cancer Research Fund)

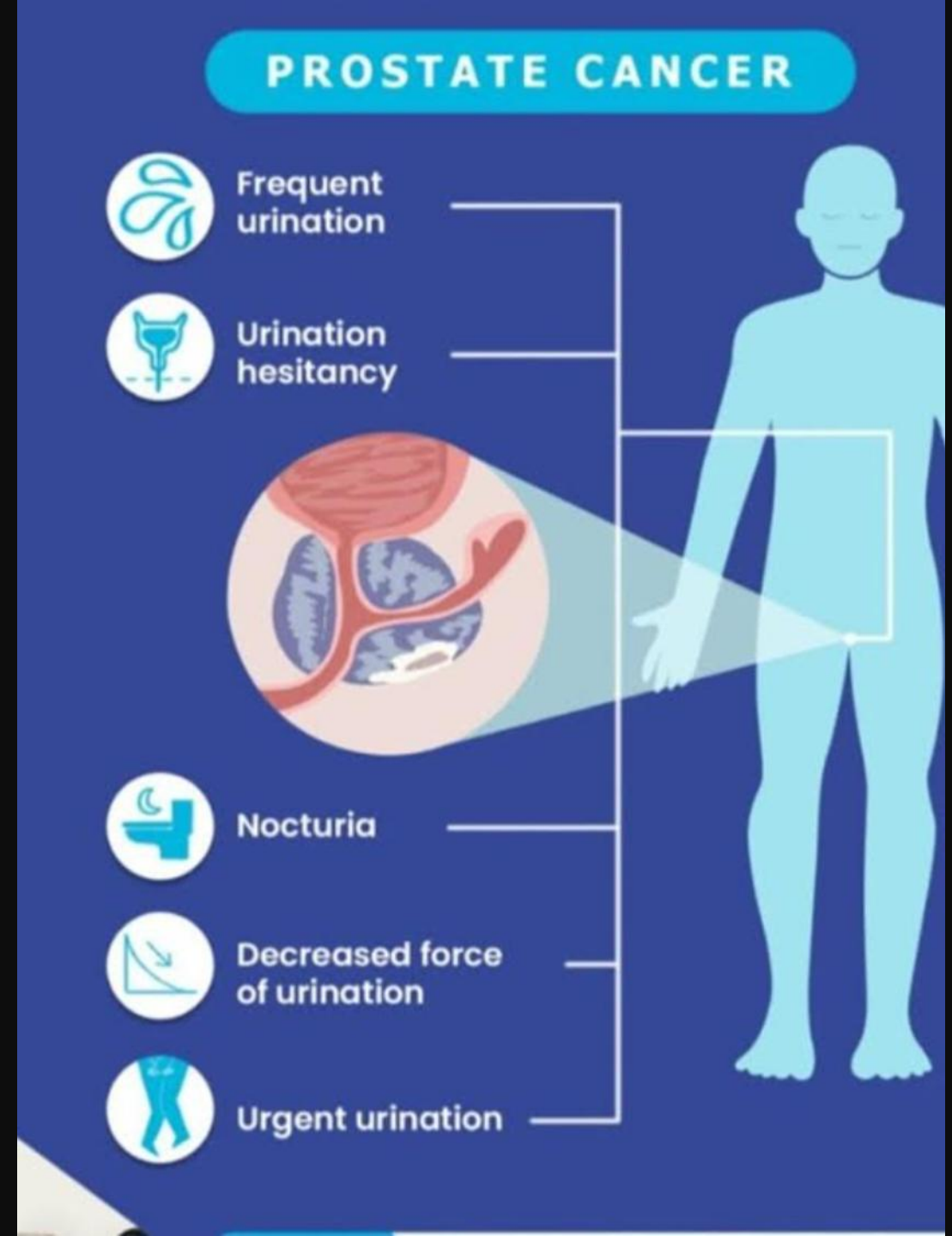
Asha Kaphle Rana 2527746

Estimated number of new cases in 2020, prostate, males, all ages



Sign and Symptoms of Prostate Cancer

- Many men with early prostate cancer have no symptoms. When symptoms do occur, it may include;
- The need to urinate more often, especially at night
- Difficulty in starting to urinate
- Weak or slow urine flow
- Feeling that bladder is not completely empty after urinating
- Sudden urge to urinate
- Blood in urine
- Blood appears in semen
- Difficulty getting and keeping a erection if the cancer has spread
- Pain in lower back, thigh, hips or pelvis.
- Unexplained weight loss
- Tiredness or weakness

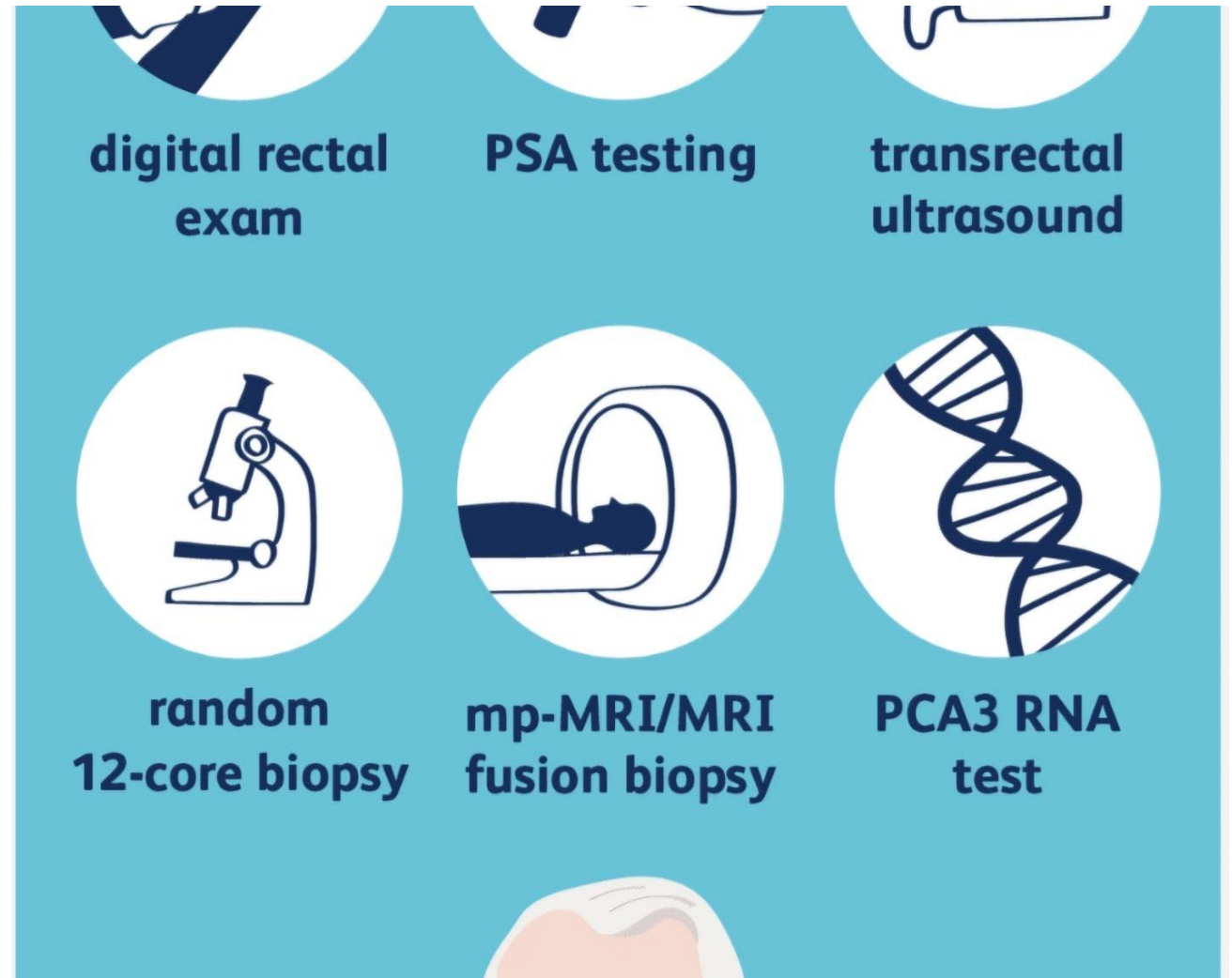


Screening and Diagnosis of Prostate Cancer

•Screening means checking for a disease before symptoms appear.

•When screening is done for prostate cancer, Prostate Specific Antigen (PSA) blood test measures the level of PSA in the blood. A high level may suggest a problem with the prostate

•When conducting a Digital Rectal Examination (DRE), the doctor gently feels the prostate through the rectum to check for any unusual changes.



Diagnosis of Prostate Cancer



If the screening test suggests a problem, further tests such as MRI may be carried out for confirmation.



This takes a detailed picture of the prostate, then a prostate biopsy involves taking a small sample of the prostate tissue is then removed and examined for cancer



The Role of the NHS in Prostate Cancer Care

- Provides **early diagnosis** through GP referrals, PSA blood tests, MRI scans, and biopsies.
- Offers **treatment options** such as surgery, radiotherapy, hormone therapy, and active surveillance.
- Gives access to **specialist nurses and support services**.
- Provides **follow-up care and monitoring** after treatment.
- Supports patients and families with information and emotional support.

<https://onlinelibrary.wiley.com/doi/full/10.1002/tre.12006>

Erlinda Rull 2526541



Impact on Quality of Life

- **Physical effects:** fatigue, urinary problems, and sexual dysfunction.
- **Emotional effects:** anxiety, stress, depression, and fear of recurrence.
- **Social effects:** changes in relationships, work, and daily activities.
- NHS support services help improve wellbeing and independence.
- Early treatment and ongoing care can improve overall quality of life

<https://www.tandfonline.com/doi/full/10.2147/RRU.S243088>

Erlinda Rull 2526541



Government Policy is a course of action or set of guidelines developed by the government to address public issues and achieve specific objectives.

UK Policies : centralised approach to prostate cancer

Canada Policies : Use decentralised system

Canadian Partnership Against Cancer, (2023)



Key Government Policies

NHS Long Term

National Cancer Plan and Cancer Strategy

NICE Guidelines for Prostate Cancer

Faster Diagnosis Standard (FDS)

Equality Act 2010

Global Burden of Disease:(Institute for health Metrics and
Evaluation,2024)

Precy Pagtalunan#2532514

The Government Policies and Recommendation



EQUALITY ACT (2010) Aims to protect people affected by cancer from discrimination in employment, education and access to services, ensuring they received fair treatment and support in society.

Government Policy : (NHS England,2019)

NHS LONG TERM (2019):

This policy support earlier detection of prostate cancer by;

- Diagnosis cancer earlier.
- Increasing access to diagnosis services
- Reducing waiting time for treatment.
- Improving patient outcomes and quality life.

NATIONAL CANCER PLAN and CANCER STRATEGIES.

- This strategies has developed to;
 - Raise awareness of cancer symptoms.
 - Improve screening and diagnosis services.
 - Enhance cancer treatment and care pathways.
 - Reduce in equalities in access to healthcare.

NATIONAL INSTITUTE for HEALTH and CARE (NICE)

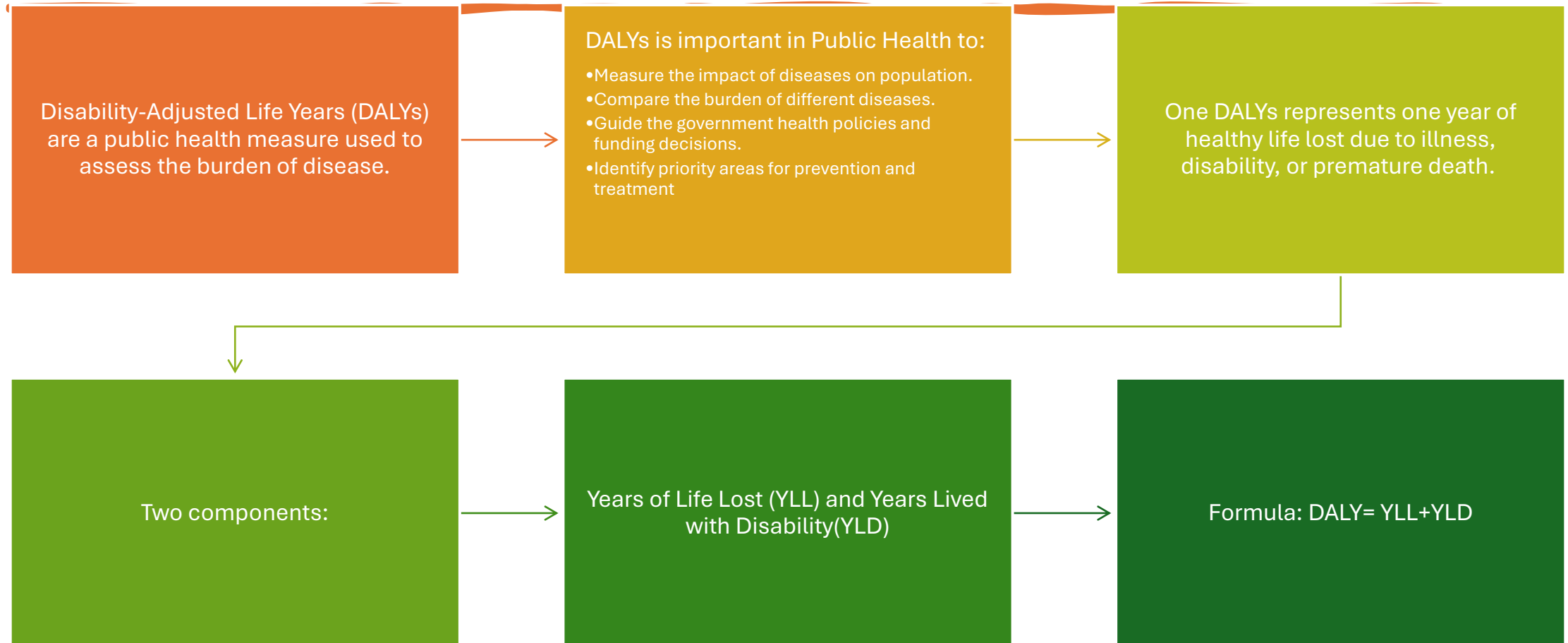
Guidelines for Prostate Cancer provides evidence-based recommendation on;

- Prostate Cancer Diagnosis
- Treatment option.
- Follow up Care.
- Supportive and palliative.

FASTER DIAGNOSIS STANDARD (FDS)

was introduced by NHS England aims to ensure that the patients with suspected cancer received a diagnosis or have cancer ruled out within 28 days of referral.

IMPORTANCE OF Disability-Adjusted Life Years (DALYs)



Case Study

Surveillance

Prostate Cancer Global Impact Worldwide

Key Statistics

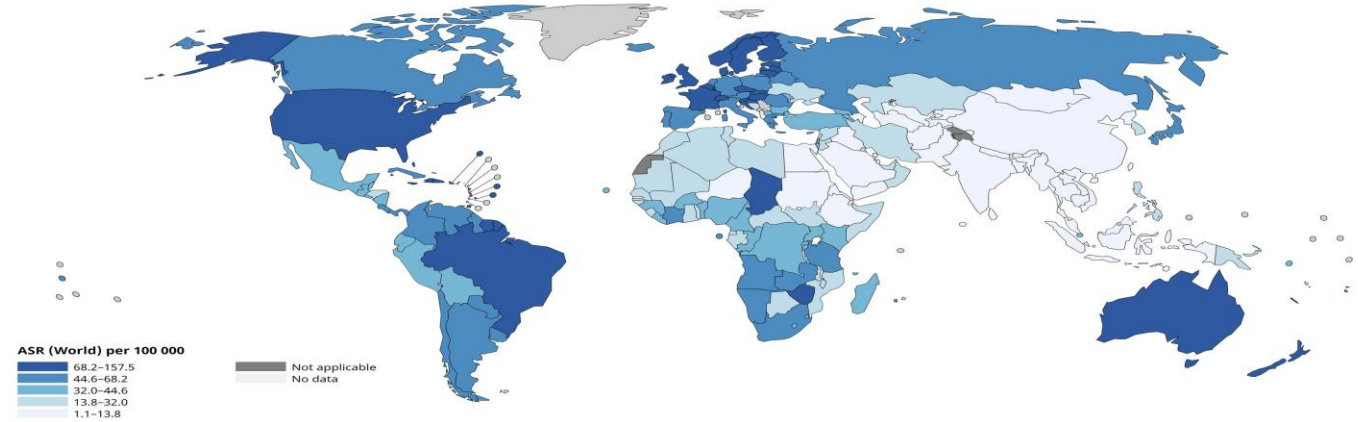
- **1.47 million** new cases Worldwide(2022)
- **397,000** deaths worldwide (2022)
- **2.4 million** projected new cases by 2040
- **712,000** projected deaths by 2040

Prostate cancer a growing global health challenge. Although incidence is highest in developed countries, mortality remains highest in - many low- and middle-income countries due to later diagnosis and limited access to treatment.

Bray et al.(2024), GLOBOCAN 2022

MYLENE CARANDANG 2523001

A Age-standardized rate (world) per 100 000. incidence, males, in 2022
Prostate

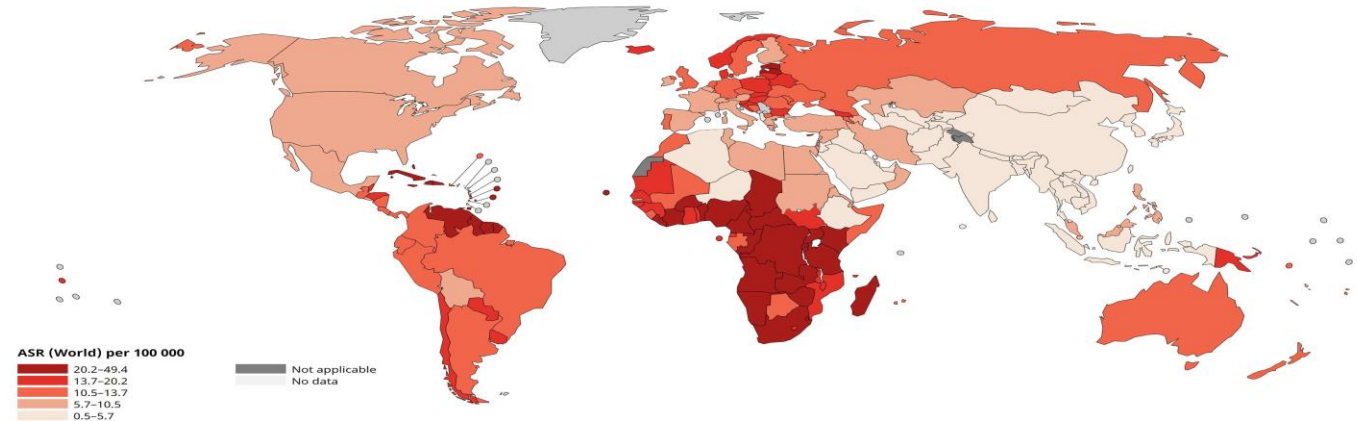


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Cancer TODAY | IARC
<https://gco.iarc.who.int/today>
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B Age-standardized rate (world) per 100 000, mortality, males in 2022
Prostate



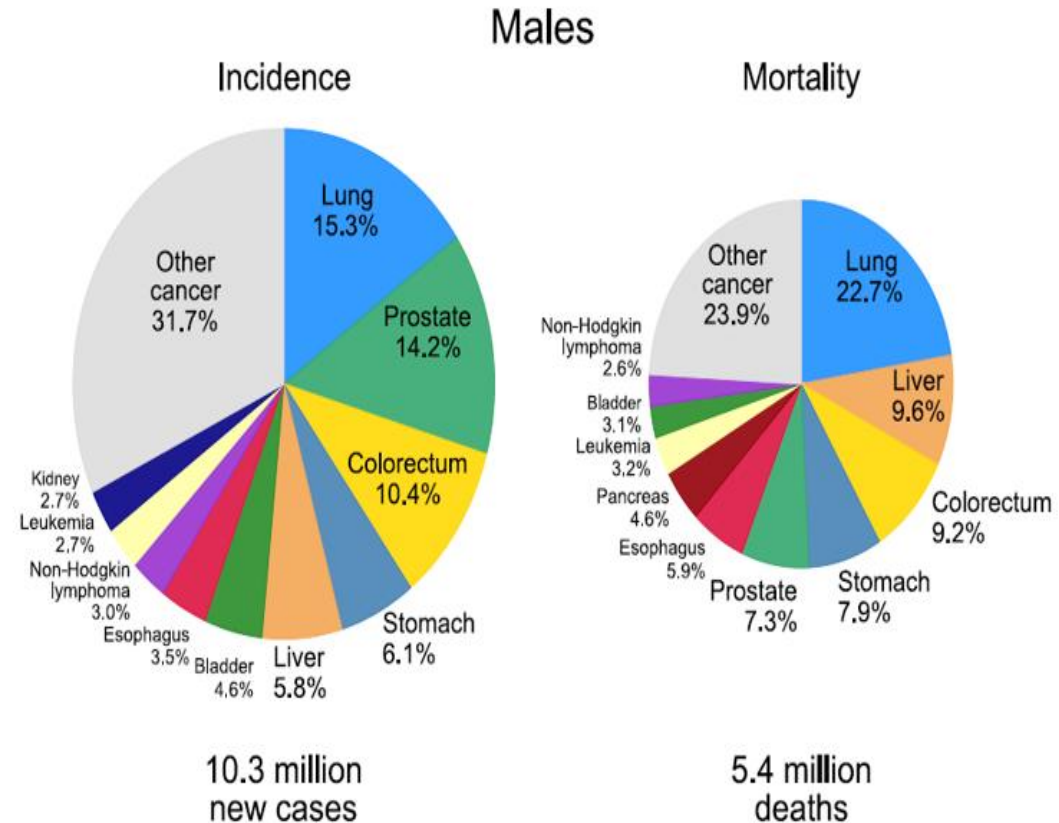
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Cancer TODAY | IARC
<https://gco.iarc.who.int/today>
Data version: Globocan 2022 - 08.02.2024
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International Agency
for Research on Cancer
World Health
Organization

Critical Evaluation

- Prostate cancer is the **second most common diagnosed cancer in men worldwide**, with significant global differences in incidence and mortality.
- In 2022, there were approximately **1.47 million** new cases and **397,000 deaths** globally.
- Prostate cancer causes account for **14.2%** of new cancer case in men, making it the second most common cancer after lung cancer (15.3%).
- Prostate cancer causes **7.3%** of cancer deaths, which is lower than lung cancer (22.7%). This shows many men survive when detected and treated early.
- High- income countries have higher incidence rates due to **greater PSA screening** and earlier detection.
- Low- and middle-income countries experience higher mortality because of **late diagnosis and limited access to treatment**.
- By 2040, new cases are projected to reach **2.4 million**, new cases with deaths increasing **712,000**.
- Improving awareness, earlier diagnosis, and equitable access to healthcare is essential to reduce the global burden of prostate cancer.
- As population age, prostate cancer cases are expected to rise, making early detection and better access to treatment more important than ever.

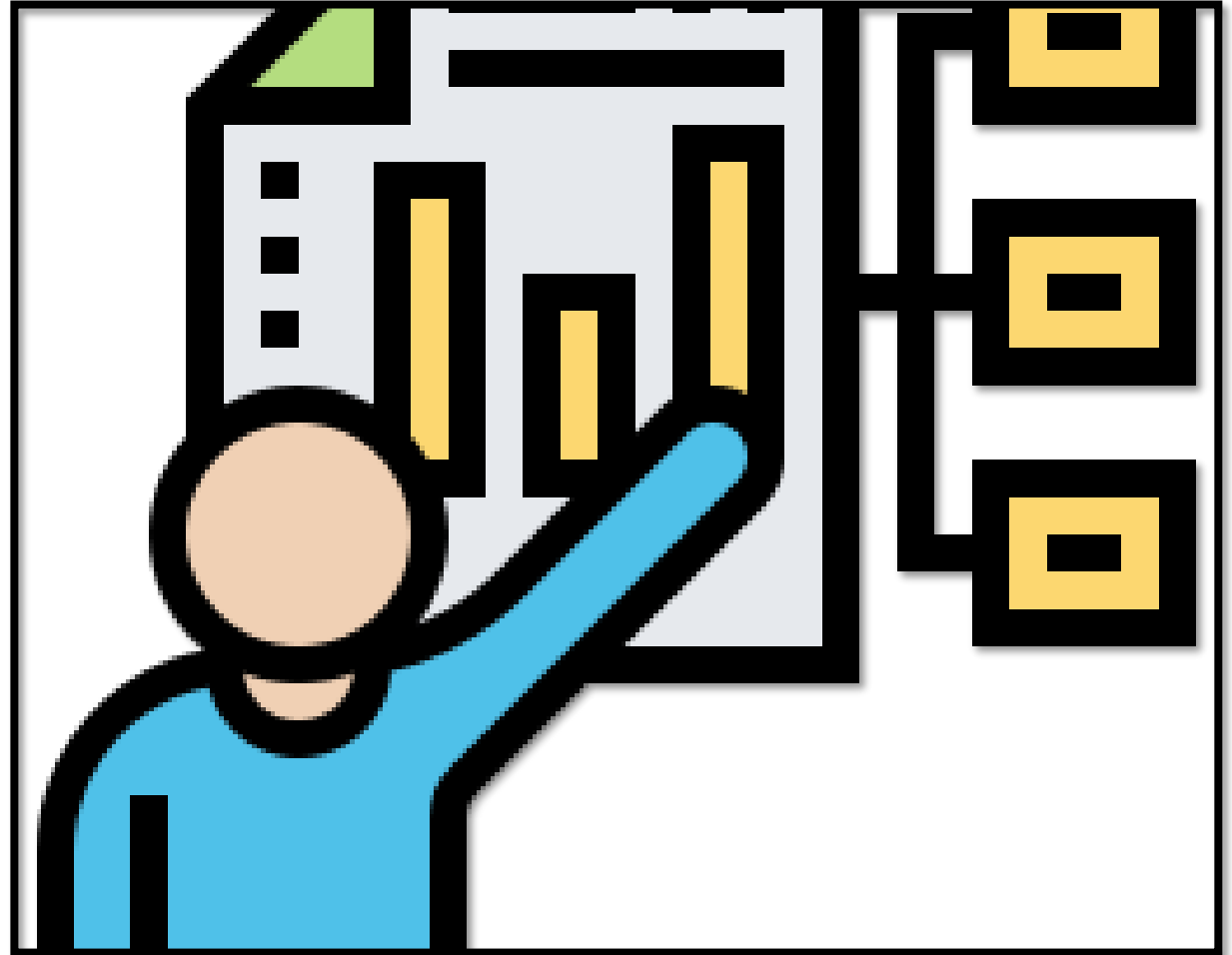


McDowell, S. (2024)

MYLENE CARANDANG 2523001

Conclusion

Prostate cancer is a major health problem that affects millions of men around the world. Although it is one of the most common cancers in men, many people can live longer and have a better quality of life when the disease is found early and treated quickly. Raising awareness about the signs and symptoms, encouraging men to attend screening when appropriate, and providing good healthcare support are all important in improving outcomes. The NHS, government policies, and public health campaigns also play an important role in helping people access information, diagnosis, treatment, and ongoing care. By continuing research, improving healthcare services, and educating the public, we can reduce the impact of prostate cancer and support patients and their families to live healthier lives.



References

Frydenberg, M., Stricker, P.D. and Kaye, K.W., 1997.

Prostate cancer diagnosis and management. *The Lancet*, 349(9066), pp.1681-1687.

Culp, M.B., Soerjomataram, I., Efstathiou, J.A., Bray, F. and Jemal, A., 2020. Recent global patterns in prostate cancer incidence and mortality rates. *European urology*, 77(1), pp.38-52.

Lillard Jr, J.W., Moses, K.A., Mahal, B.A. and George, D.J., 2022. Racial disparities in Black men with prostate cancer: A literature review. *Cancer*, 128(21), pp.3787-3795.

Banerjee, S., 2016. Worldwide prostate cancer epidemiology: differences between regions, races, and awareness programs. *International Journal of Clinical and Experimental Medical Sciences*, 2(1), p.1.

[Asha Kaphle Rana \(252746\)](#)

References

Taylor, J.M., Chen, V.E., Miller, R.C. and Greenberger, B.A., 2020. The impact of prostate cancer treatment on quality of life: a narrative review with a focus on randomized data. *Research and reports in urology*, pp.533-546. <https://www.tandfonline.com/doi/full/10.2147/RRU.S243088>

Padhani, A.R., Gianella, A., Dodhia, V., Moghul, M., McCabe, J., Ashdown, C., Siddiqui, I. and Cross, W., 2025. Transforming Prostate Cancer Management in the United Kingdom: A Roadmap for Optimisation of Patient Care Delivery. *Trends in Urology & Men's Health*, 16(3), p.e12006. <https://onlinelibrary.wiley.com/doi/full/10.1002/tre.12006>

Aggarwal, A., Simcock, R., Price, P., Rachet, B., Lyratzopoulos, G., Walker, K., Spencer, K., Roques, T. and Sullivan, R., 2024. NHS cancer services and systems—ten pressure points a UK cancer control plan needs to address. *The Lancet Oncology*, 25(8), pp.e363-e373. [https://www.thelancet.com/article/S1470-2045\(24\)00345-0/abstract](https://www.thelancet.com/article/S1470-2045(24)00345-0/abstract)

Dodkins, J., Cook, A., Morris, M., Nossiter, J., Prust, S., Waller, S., van der Meulen, J., Aggarwal, A., Clarke, N. and Payne, H.A., 2023. Organisation and delivery of supportive services for patients with prostate cancer in the National Health Service in England and Wales: a national cross-sectional hospital survey and latent class analysis. *BMJ open*, 13(11), p.e071674. <https://bmjopen.bmj.com/content/13/11/e071674.abstract>

Sekhoacha, M., Riet, K., Motloutse, P., Gumuku, L., Adegoke, A. and Mashele, S., 2022. Prostate cancer review: genetics, diagnosis, treatment options, and alternative approaches. *Molecules*, 27(17), p.5730.

<https://www.mdpi.com/1420-3049/27/17/5730>

Reference

NHS (2026) Prostate cancer. Available at: NHS website (Accessed: 10 July 2026).

Nhs.uk

NHS (2026) What is prostate cancer? Available at: NHS information page (Accessed: 10 July 2026).

Nhs.uk

Cancer Research UK (2026) Prostate cancer. Available at: Cancer Research UK website (Accessed: 10 July 2026).

Cancer Research UK

Cancer Research UK (2026) Prostate cancer statistics. Available at: Cancer Research UK statistics page (Accessed: 10 July 2026).

Cancer Research UK

Prostate Cancer UK (2026) About prostate cancer. Available at: Prostate Cancer UK website (Accessed: 10 July 2026).

Prostate Cancer UK

Prostate Cancer UK (2026) Prostate cancer signs and symptoms. Available at: Prostate Cancer UK signs and symptoms page (Accessed: 10 July 2026).

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Reference;

Equality Act 2010 (2010) *Equality act 2010*. London: The Stationary Office. Available at: <https://www.legislation.gov.uk/ukpga/2010/15/contents>

Institute for Health Metrics and Evaluation(2024) *Global Burden of Disease (GBD)*. Available at: <https://www.healthdata.org>

National Institute for Health and Care Excellence (NICE) (2019) Prostate cancer: diagnosis and management(NG131). Available at: <https://www.nice.org.uk/guidance/ng131> (Accessed; 16 June 2026)

NHS England (2019) The NHS Long Term Plan. Available at: <https://www.longtermplan.nhs.uk> (Accessed: 1 July 2026)

World Health Organization(2024) *Disability-adjusted life years (DALYs)*. Available at: <https://www.who.int>

References

Cancer Research UK (2025) Prostate cancer. Available at: <https://www.cancerresearchuk.org/about-cancer/prostate-cancer> (Accessed: 12 July 2026).

Macmillan Cancer Support (2025) Prostate cancer. Available at: <https://www.macmillan.org.uk/> (Accessed: 12 July 2026).

References

Bray, F. *et al.* (2024) 'Global Cancer Statistics 2022: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries', *CA: A Cancer Journal for Clinicians*, 74(3), pp. 229–263. Available at: <https://doi.org/10.3322/caac.21>

Schafer, E.J. *et al.* (2024) 'Recent Patterns and Trends in Global Prostate Cancer Incidence and Mortality: An Update', *European Urology*, 87(3). Available at: <https://doi.org/10.1016/j.eururo.2024.11.013>.

World Cancer Research Fund (2024) *Prostate cancer statistics | World Cancer Research Fund, World Cancer Research Fund*. Available at: <https://www.wcrf.org/preventing-cancer/cancer-statistics/prostate-cancer-statistics/>.

WHO (no date) *Prostate cancer, platform.who.int*. Available at: <https://platform.who.int/mortality/themes/theme-details/topics/indicator-groups/indicator-group-details/MDB/prostate-cancer>.

McDowell, S. (2024) *Cancer in men: Prostate cancer is #1 for 118 countries globally*, *Cancer.org*. Available at: <https://www.cancer.org/research/acs-research-news/prostate-cancer-is-number-1-for-118-countries-worldwide.html>.

Prostate Cancer Research. (2018). *Support Us - Prostate Cancer Research*. [online] Available https://www.prostate-cancer-research.org.uk/support-us/?gad_source=1&gad_campaignid=1629668334&gbraid=0aaaaadmbrmbxkespyub4doh6djjdjov7b&gclid=eaiaiqobchmiyooiwovmlqmvm5nqbh2mucx-eaayasaaegk8bfd_bwe [Accessed 12 July 2026].

VITUS Privatklinik. (2025). *Prostate Cancer Statistics 2026 (Global Overview) - VITUS Privatklinik*. [online] Available at: <https://vitusprivatklinik.com/en/global-prostate-cancer-statistics/> [Accessed 12 July 2026].