Cancer Screen

Targeted, low- to no-radiation cancer surveillance matched to your risk

In plain terms. This is a set of scans chosen based on your personal, family and genetic cancer risk, aiming to find cancers early — when treatment works best — while preferring tests that use little or no radiation. It is tailored: you receive the studies that fit your risk profile, not every scan.

WHAT THIS SCREENING INCLUDES

- **Whole-body diffusion MRI (DWI)** — a radiation-free, head-to-thigh scan for multi-organ surveillance, especially for people with known genetic abnormalities or high-risk individuals.
- **Mammography & breast MRI** — breast cancer screening; MRI adds sensitivity for women with dense breasts or those with an established high lifetime cancer risk.
- **Prostate MRI** — evaluates the prostate without radiation and guides targeted biopsy when needed.
- **Low-dose chest CT** — lung-cancer screening for people with a significant smoking or occupational exposure history.
- **CT colonography** — a low-dose CT examination of the bowel for polyps and cancer.

WHAT IT IS FOR & WHAT IT CAN FIND

Finding cancer earlier generally improves outcomes. Some of these tools also reduce over-treatment: MRI-guided prostate assessment may find early cancers that matter, whilst potentially sparing other men unnecessary biopsies, and low-dose CT led to reduced lung-cancer deaths by about 20% in eligible smokers in a large trial.

Guideline programmes anchor the schedule — for example, breast screening from age 40 and colorectal screening from age 45 for average-risk adults — while genetic or family risk can justify earlier or radiation-free options such as whole-body MRI.

BENEFITS

- ✓ Early detection, when treatment is most effective.
- ✓ Whole-body MRI, prostate MRI and breast MRI use no radiation.
- ✓ Standardised, quality-controlled reporting (ONCO-RADS, PI-RADS, Lung-RADS, BI-RADS).
- ✓ Matched to your actual risk rather than a one-size-fits-all panel.

LIMITATIONS & THINGS TO CONSIDER

- ! Low-dose chest CT and CT colonography use small amounts of radiation.
- ! Overdiagnosis — finding slow, harmless disease that may never have caused problems
- ! False positives are common and can lead to biopsies, further scans, cost and anxiety.
- ! Whole-body MRI in average-risk people has limited outcome evidence and frequently finds incidental spots; no test detects every cancer, and screening supplements rather than replaces dedicate diagnostic imaging.

WHO SHOULD CONSIDER IT

- Known genetic risk (e.g., BRCA, Lynch or Li-Fraumeni) or a strong family history of cancer.
- Adults 50–80 with a significant smoking history (lung screening).
- Average-risk adults reaching guideline screening ages (breast from 40; colorectal from 45).
- People with high oxidative-stress or carcinogen-exposure profiles seeking a baseline.

Radiation & safety. Whole-body MRI, prostate MRI and breast MRI use no ionising radiation; mammography is about 0.4 mSv. Low-dose chest CT is about 1.5 mSv and CT colonography about 3–5 mSv (low-dose protocols).

REFERENCES

Independently sourced and verified (September 2026). Links open the original publications.

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2. US Preventive Services Task Force. Screening for Lung Cancer: US Preventive Services Task Force Recommendation Statement. JAMA. 2021;325(10):962–970. https://doi.org/10.1001/jama.2021.1117

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4. US Preventive Services Task Force. Screening for Colorectal Cancer: US Preventive Services Task Force Recommendation Statement. JAMA. 2021;325(19):1965–1977. https://pubmed.ncbi.nlm.nih.gov/34003218/

5. Kasivisvanathan V, Rannikko AS, Borghi M, et al. MRI-Targeted or Standard Biopsy for Prostate-Cancer Diagnosis (PRECISION). N Engl J Med. 2018;378(19):1767–1777. https://doi.org/10.1056/NEJMoa1801993

6. Petralia G, Koh DM, Attariwala R, et al. Oncologically Relevant Findings Reporting and Data System (ONCO-RADS): Guidelines for Whole-Body MRI for Cancer Screening. Radiology. 2021;299(3):494–507. https://doi.org/10.1148/radiol.2021201740

This information sheet is for education and to help you choose appropriate screening. It is not a diagnosis or medical advice. Screening tests have benefits and harms; discuss your personal situation with your doctor. All studies are performed and interpreted by specialist or subspecialist radiologists (HPCSA-compliant; radiation kept As Low As Reasonably Achievable).