

MEN - Screening Pathways using Diagnostic Imaging

Risk Stratification

- **Average risk:** No significant family history, known genetic mutation or major smoking history (for lung)
- **Moderate risk:** 1st degree family member, dense breasts, moderate smoker or other recognised risk factors
- **High risk:** Known genetic syndromes (e.g. BRCA, Lynch), strong family hx, heavy smoker, prior malignancy

High-Risk Genetic Syndromes:

Targeted abdominal MRI, which is aligned to oncology/genetic guidelines is indicated for the following syndromes: BRCA 1/2, Lynch, FAP, MEN 1/2, VHL.

Note: Whole body MRI may be considered in those with an increased risk for genetic syndromes, but there is no evidence currently to support this technique in low-risk individuals as a screening tool.

Ages	Average risk	Moderate/high risk
20-39	No routine screening with imaging. Abdominal: If symptomatic.	Testicular: Testicular cancer survivors - ultrasound surveillance based on Specialist protocol.
40-49	Prostate: No routine imaging. Cardiovascular: Consider CT calcium score, around age 45-50.	Prostate: If abnormal PSA, MRI prostate. Lung: A) Annual LDCT for individuals with ≥ 20 pack year and current/previous smoker. B) High Resolution CT Chest starting between 40-50 for those with long term exposure to silica, asbestos and other industrial dusts Cardiovascular: CT Calcium Score in those >40 with diabetes.
50-74	Prostate: If PSA elevated, MRI prostate before biopsy. Bowel: CT Colonography every 5 years (or colonoscopy). Lung: Annual low-dose CT for current or former heavy smokers. Cardiovascular: CT Calcium Score age 50, (if not already performed between 45-50 years).	Prostate: If PSA elevated, MRI prostate. Bowel: Earlier and/or more frequent colorectal imaging. Lung: A) Annual low-dose CT. B) HRCT starting 50 for those with long term exposure to silica, asbestos and other industrial dusts. Cardiovascular: CT Calcium Score age 50, in conjunction with cardiology. Aorta: 65-75; single abdominal aorta ultrasound. Follow Vascular Society guidelines subsequently. Bone: Baseline Bone Density and/or Body Composition where risk factors* are present. Follow-up as per findings.
75+	Screening is individualised based on health status, life expectancy & patient preference. Prostate - MRI if PSA elevated. Bowel - only if clinically indicated. Lung - screening until age 80.	

* Risk factors that would indicate DEXA as a baseline screening tool:

- hormone-affecting metabolic disorders
- on medication associated with low bone mass or bone loss
- heavy drinkers/smokers, drug addiction
- digestive absorption disorders, e.g. Crohn's, ulcerative colitis
- minor fracture, over 50 years.