

## FACT SHEET — MEN OVER 50

# Prostate Cancer and Back Pain

*What every man over 50 with back pain should know about prostate cancer, spinal metastases, and when to seek investigation*

Back pain in men over 50 is extremely common — and the vast majority of it is mechanical, manageable, and not serious. However, prostate cancer is the most common cancer in UK men, and the spine is its most frequent site of spread. Read the urgent symptom guidance below first.

## ■■ SEEK MEDICAL ATTENTION TODAY — do not wait

**Go to A&E; or call 999 immediately if you have back pain alongside ANY of the following:**

- Sudden difficulty controlling your bladder or bowel
- Numbness or altered sensation between your legs or in the groin / saddle area
- Rapidly worsening weakness in one or both legs
- Sudden severe back pain after a fall or minor trauma in a man with known prostate cancer

**These symptoms may indicate spinal cord compression — a medical emergency. Delay in treatment can result in permanent paralysis.**

## ■ See your GP this week if you have back pain alongside:

- Back pain that is constant — present at rest, at night, and during activity
- Night pain that regularly wakes you from sleep
- Unexplained weight loss
- Difficulty urinating, poor stream, blood in urine or semen, or needing to urinate frequently at night
- Back pain that is not improving after 4–6 weeks
- New back pain with no clear mechanical cause in a man over 50
- Any new back pain in a man with a known prostate cancer diagnosis

## Prostate cancer — the basics

The prostate is a small gland in the male pelvis, sitting just below the bladder. Prostate cancer develops when cells in the prostate gland grow abnormally. It is the most common cancer in UK men — approximately 52,000 men are diagnosed each year. The spine is its most frequent site of spread, making it a critical consideration when a man over 50 presents with back pain that does not have a clear mechanical explanation.

Statistic	Figure
Most common cancer in UK men	~52,000 new diagnoses per year

Lifetime risk for UK men	<b>1 in 8</b>
Most common age at diagnosis	<b>65–69 years (but rising in 50–64)</b>
Most common site of metastasis	<b>Bone — particularly the spine</b>
5-year survival (localised)	<b>&gt;99% (caught early)</b>
5-year survival (metastatic)	<b>~48% (advanced disease)</b>

### Why early detection matters so much

Prostate cancer caught at an early, localised stage is almost always curable. Prostate cancer caught after it has spread to the bones is manageable but not curable. The difference between these outcomes can be a matter of months — which is why unexplained back pain in men over 50 should never simply be assumed to be mechanical without appropriate consideration of this diagnosis.

## How prostate cancer causes back pain

Prostate cancer causes back pain primarily through bone metastases — secondary deposits of cancer cells that spread from the prostate gland to the bones of the spine via the bloodstream. The lumbar spine (lower back) and thoracic spine (mid back) are the most frequently affected sites, followed by the pelvis, ribs, and femur.

### The mechanism of spinal metastases:

- **Osteoblastic lesions:**

Prostate cancer characteristically produces dense, sclerotic (hardening) bone metastases rather than the lytic (dissolving) metastases seen in some other cancers. This is why prostate metastases often appear as bright white areas on bone scans.

- **Vertebral involvement:**

Cancer deposits in a vertebra can weaken the bone, causing structural instability, pain, and in severe cases, vertebral collapse or spinal cord compression.

- **Nerve root compression:**

Enlarged vertebrae or collapsed bone can press on nerve roots, causing radicular pain (similar to sciatica) or more serious neurological compromise.

- **Spinal cord compression:**

If metastases compress the spinal cord itself, this is a medical emergency requiring same-day treatment. Symptoms include rapidly worsening leg weakness, bladder or bowel changes, and saddle area numbness.

### Important: mechanical and malignant back pain can feel identical

Prostate metastases to the spine can produce back pain that is indistinguishable from mechanical back pain — particularly in the early stages. The absence of urinary symptoms does not rule out prostate cancer. Many men with spinal metastases have no urinary symptoms at all. The warning features listed at the top of this fact sheet are your guide. If in doubt, see your GP.

## The PSA test — what it is and what it tells you

Prostate-Specific Antigen (PSA) is a protein produced by the prostate gland. A PSA blood test measures the level of PSA in the blood. An elevated PSA does not confirm prostate cancer — it can be raised by a number of conditions including benign prostatic enlargement, prostatitis, and urinary tract infection. However, a raised PSA in the context of back pain and risk factors is a significant indicator that further investigation is warranted.

PSA level	Interpretation	Action
Under 3 ng/mL (age 50–59)	<b>Normal range</b>	Routine monitoring if risk factors present
Under 4 ng/mL (age 60–69)	<b>Normal range</b>	Routine monitoring
Borderline elevated	<b>Requires context</b>	Repeat test, consider urology referral
Significantly elevated	<b>Investigate urgently</b>	Urgent urology referral, imaging

Note: PSA thresholds vary by age and individual circumstance. Your GP will interpret your result in the context of your full clinical picture, including a digital rectal examination (DRE) if appropriate.

### The prostate check conversation

Men over 50 in the UK are entitled to request a PSA test from their GP. You do not need symptoms to request this test. If you have back pain, urinary symptoms, or a family history of prostate cancer, the conversation with your GP about PSA testing is worth having. Early detection is the single most powerful predictor of a good outcome.

## Urinary symptoms alongside back pain

Urinary symptoms are important contextual information when a man presents with back pain. They may indicate benign prostatic enlargement, prostatitis, or prostate cancer. The following urinary symptoms alongside back pain should always prompt a GP visit:

- Difficulty starting urination or a weak, interrupted stream
- Needing to urinate urgently or more frequently than usual
- Getting up more than once per night to urinate (nocturia)
- A feeling that the bladder has not fully emptied
- Blood in the urine (haematuria) or in semen
- Pain or burning on urination
- Pain in the perineum (between scrotum and anus)

The absence of urinary symptoms does not rule out prostate cancer. Many men with prostate cancer — including those with spinal involvement — have no urinary symptoms at all, particularly in the early stages.

## What to do if you are concerned

### 1. See your GP

Do not wait and see. If you have back pain that fits any of the warning features described in this fact sheet, make an appointment. Be specific — tell your GP about the nature and duration of the back pain and any urinary symptoms.

## 2. Ask about a PSA test

If you are over 50 and have not had a recent PSA test, ask for one. This is a simple blood test. Your GP should also perform a digital rectal examination to assess prostate size and texture.

## 3. Request imaging if needed

If your GP is concerned, they should arrange an MRI or bone scan. X-rays alone are not sufficient to detect early spinal metastases from prostate cancer — bone involvement may not be visible on plain X-ray until it is advanced.

## 4. Keep your back pain practitioner informed

If you are seeing an osteopath, physiotherapist, or chiropractor for your back pain, tell them about any concerning features. A responsible practitioner will refer you appropriately rather than continuing treatment without investigation.

## 5. Know the emergency symptoms

Rapidly worsening leg weakness, loss of bladder or bowel control, or numbness in the saddle area alongside back pain is a same-day emergency. Go to A&E; or call 999.

## Treatment when spinal metastases are found

A diagnosis of spinal metastases from prostate cancer is serious but it is not a death sentence. Treatment has improved significantly in recent years and many men live well for years with well-managed metastatic prostate cancer. Treatment typically involves a combination of:

<b>Hormonal therapy (androgen deprivation)</b>	Prostate cancer is dependent on male hormones (androgens) to grow. Hormonal therapy reduces androgen levels and is the cornerstone of treatment for metastatic disease.
<b>Bone-targeted therapy</b>	Medications such as zoledronic acid or denosumab strengthen bone and reduce fracture risk from metastases.
<b>Radiotherapy</b>	Targeted radiotherapy to specific metastatic sites can relieve bone pain significantly.
<b>Chemotherapy</b>	For more advanced or hormone-resistant disease, chemotherapy (typically docetaxel) may be used.
<b>Surgery</b>	Rarely required but may be needed if spinal cord compression is causing acute neurological compromise.
<b>Palliative pain management</b>	A specialist pain team can provide medication strategies, nerve blocks, and other interventions to maintain quality of life.

## The role of manual therapy when prostate cancer is known or suspected

Manual therapy — osteopathy, physiotherapy, chiropractic — has an important role in supporting men with prostate cancer, but it must be delivered appropriately and with full knowledge of the diagnosis.

### What manual therapy can offer

Gentle soft tissue work, postural support, mobility exercises, and pain management strategies can all contribute meaningfully to quality of life in men with prostate-related back pain. A practitioner experienced in working with oncology patients can provide safe, appropriate care that complements medical treatment.

### What must be avoided

High-velocity manipulation (HVLA thrusting techniques) to the spine must not be performed when spinal metastases are present or suspected. The risk of fracture or spinal cord injury is significant. Any practitioner treating a man over 50 with unexplained back pain should screen for metastatic disease before commencing spinal manipulation.

## Related conditions and further reading

<b>Spinal metastases — general guide</b>	How secondary cancer spreads to the spine, what the symptoms are, and how it is managed.
<b>Cauda equina syndrome</b>	A spinal emergency that can arise from any cause of spinal cord or nerve root compression, including metastatic disease.
<b>Osteoporosis and back pain</b>	Bone density reduction that can coexist with cancer-related bone disease, particularly in men on long-term hormonal therapy.
<b>Back pain in older men</b>	The broader context of back pain in the over-60 male population — including multiple conditions that may coexist.
<b>Understanding your PSA result</b>	A plain-language guide to PSA testing, what the numbers mean, and what happens next.
<b>Surgical considerations for back pain</b>	When surgery is considered for back pain — including spinal stabilisation in the context of metastatic disease.

## Get your personalised report — or speak to a specialist

To receive this fact sheet by email, or to book a consultation with a specialist who can review your back pain in full, use the options below.

### Get this report by email

We will send this fact sheet together with your personalised back pain assessment summary.

Your name

Email address

**Send Me the Report**

Your details are used only to send your report.

### Book a consultation

Speak with a specialist about your back pain. Leave your details and we will be in touch.

Your name

Email address

Phone number

*Best number to reach you*

Best time to call

*e.g. mornings, weekday afternoons*

Preferred contact method

Phone call  Video call  Email

Briefly describe your back pain

*What is your main concern? How long have you had it?*

**Request a Consultation**

We aim to respond within one working day. Consultations are available in person and via video call.

*This fact sheet is produced by mybackpain.co.uk, powered by Osteospinal. It is intended for patient information and education only. It does not constitute medical advice and should not replace consultation with a qualified healthcare professional. Statistics quoted are from Cancer Research UK and NHS sources. If you are concerned about any symptoms described in this document, please consult your GP without delay.*