

# Prostate Cancer Factsheet

## The Facts

Today one man in 14 is diagnosed with prostate cancer, almost 32,000 every year, and it has now overtaken lung cancer to become the most common cancer in men.

This increasing incidence is largely due to a higher number of cases being diagnosed, (through the greater use of PSA tests), and the influence of an ageing population.

10,000 men a year die from prostate cancer in the UK, which makes it the second most common cause of cancer mortality in men after lung cancer.

The majority of men with prostate cancer are aged over 60 years. Although this cancer can also occur in younger individuals, it is very rare under the age of 50.

## What is Prostate Cancer?

### *The Prostate*

The prostate is a male sex gland located underneath the bladder. It is about the size of a walnut and fits around the tube (the urethra) which carries urine out of the bladder. The prostate produces a thick fluid that forms part of the semen.

### *Prostate Cancer*

Prostate cancer differs from most other cancers in the body, because small areas of cancer within the prostate are very common and may stay dormant for many years.

About one-third of men over the age of 50 have some cancer cells within their prostate and nearly all men over the age of 80 have a small area of prostate cancer. Most of these cancers grow extremely slowly and so, particularly in elderly men, will never cause any problems.

In a small proportion of men, the prostate cancer does grow more quickly and in some cases may spread to other parts of the body, particularly the bones.

Although Everyman scientists have made progress in prostate cancer research, little is known about the genes and molecular mechanisms which cause prostate cancer. We still do not fully understand what causes this disease, or how it develops - and we urgently need to improve on current treatments.



“ I'm planning  
on a long retirement,  
so I'm making sure  
I know the facts!  
”

## Risk Factors

### **Age**

The majority of men with prostate cancer are aged over 60 years and the disease is very rare in men under 50.

### **Family History**

Men with a brother or father who developed prostate cancer at a young age have an increased risk. Men with a family history of breast cancer also have an increased risk.

### **Race**

Prostate cancer is more common in men of African descent.

### **Environment**

Possible factors include high fat consumption and low green vegetable consumption as well as exposure to radioactive substances.

### **Protection**

It has also been suggested that Lycopene (the compound that gives the tomato its red colour), selenium and vitamin E in the diet may protect against prostate cancer.

But in most cases, we simply do not know what causes it to occur or how to prevent it. Little is known about the detailed or molecular mechanism of development of prostate cancer. Everyman is carrying out the research to find out why.

## Signs & Symptoms

One of the problems related to prostate cancer is that, in its early stages, it often does not cause symptoms. When they do occur they may include any of the following problems:

*Having to rush to the toilet to pass urine*

*Passing urine more often and/or at night*

*Difficulty getting the flow of urine started*

*Starting and stopping whilst passing urine*

*Discomfort (pain or burning) whilst passing urine*

*A feeling of not having fully emptied the bladder*

*Dribbling of urine*

*Blood in urine or semen*

*Pain or stiffness in the back, hips or pelvis*



“It's great  
to have a place  
where men can  
find out more.”

## Signs & Symptoms (cont)

The prostate enlarges as men get older, and most men have some symptoms affecting urination. These symptoms can be caused by other conditions that are less serious than prostate cancer, such as a non-cancerous enlarged prostate gland or a kidney infection.

However, It is vital that you do go and see your doctor as soon as possible if you are suffering from any of these symptoms, so that the cause can be diagnosed and any relevant treatment administered.

## Diagnosis

None of the following tests is an individually conclusive indicator of prostate cancer. Your doctor is likely to use more than one test to determine whether or not you are affected by prostate cancer.

Everyman is carrying out further research to find a more efficient, comprehensive test - as an early diagnosis is so important to successful treatment.

### **Rectal Examination**

Your doctor can actually feel the size of the prostate gland. However, an enlarged prostate does not necessarily indicate prostate cancer.

### **PSA Blood Test**

Tests the level of 'Prostate Specific Antigen' in the blood. A high reading suggests prostate cancer but could be caused by other conditions. See 'What is PSA?' for further information.

### **Biopsy**


A tiny sample of tissue from the prostate is taken using a probe and the tissue analysed.

### **Ultrasound**

A small probe is inserted into the back passage and a scan taken to show the exact size of the prostate.

### **Bone Scan**

Can be taken to determine whether there is any cancer that has spread to the bones near the prostate.



“ I didn't realise  
how much progress  
the scientists had made  
”

## Treatment

Some prostate cancers are so slow-growing that no treatment is needed and a policy of '*watchful waiting*' can be employed. This involves regular check-ups to monitor the disease and check for any change in condition. When more active treatment is required, there are currently four main options:

### *Surgery*

The entire prostate gland is removed in an operation called a 'prostatectomy'.

### *Radiotherapy*

High energy rays are used to destroy the cancer cells.

### *Hormone treatment*

Drugs can be used to lower the level of testosterone in the blood, which has the effect of slowing or stopping the growth of the cancerous tumour. However, some prostate tumours develop the ability to grow without testosterone.

### *Brachytherapy*

A treatment where radioactive 'seeds' are implanted directly into the tumour.

These treatments carry the risk of side-effects including incontinence and long-term impotence.

In recent years we have developed 'Conformal Radiotherapy', a new, more accurate method of delivering radiotherapy which leads to a major reduction in side effects, and therefore the possibility of giving higher doses leading to an increased cure rate. Everyman is working hard to develop more improved treatments for men with prostate cancer.

## What is PSA?

### *The PSA (Prostate Specific Antigen)*

The PSA test can be used to screen for early prostate cancer. The PSA Blood Test - tests the level of 'Prostate Specific Antigen' in the blood. A high reading suggests prostate cancer but could be caused by other conditions, the PSA test is not a foolproof test for prostate cancer.

*Two out of three men with a raised PSA will not have any cancer cells in their prostate biopsy.*

*Up to 1 in 5 men with prostate cancer will have a normal PSA result.*

*A positive biopsy is needed to confirm cancer.*



“The main thing is that men are talking about this issue.”

## What is PSA (cont)

If prostate cancer is diagnosed, it is not necessarily life-threatening and curative treatment may not be required. Most men diagnosed with early prostate cancer following a positive PSA test would be expected to have slowly growing cancer which should not cause any problems during their natural lifespan.

There is controversy over whether PSA testing should be used in routine screening for prostate cancer. Many medical professionals feel it would be wrong to introduce national screening in this country because the effectiveness of screening is unproven and the side effects of treatment can be significant. As a result there is no NHS PSA testing programme because it has not been demonstrated that it leads to an improvement in mortality. However every man over 50 has a right to a PSA test if they request it and in the US many men have regular PSA tests from the age of 50.

Everyman is undertaking further research to find a more efficient, comprehensive test - as an early diagnosis is so important to successful treatment.



“We've got  
the leaflets at work.  
They really help.”

# Help & Support

If you're worried that you might have symptoms, or if you or someone you care about has just been diagnosed with prostate cancer, there is a wealth of information and support to help you through this time.

## Information & Advice

The following external organisations have trained professionals on-hand to offer advice and support and also provide information on prostate, testicular and other cancers:

### ***Cancer Backup***

Cancer Backup are a free cancer information service staffed by qualified and experienced cancer nurses. As well as providing help by post, phone, fax and email, they also have a number of local centres in hospitals throughout the country. Written publications on all aspects of cancer are available on their website.

Address: 3 Bath Place  
Rivington Street  
London  
EC2A 3JR  
Telephone: 0808 800 1234 (9am-8pm, Mon-Fri)  
Fax: 0207 696 9002  
Email: via website  
Web: [www.cancerbackup.org.uk](http://www.cancerbackup.org.uk)

### ***Macmillan Cancer Support***

Macmillan provides practical, medical, emotional and financial support for people affected by cancer. They have specialist advisers to help identify the support you need and which organisation can best provide it.

Address: Macmillan CancerLine  
Macmillan Cancer Relief  
89 Albert Embankment  
London  
SE1 7UQ  
Telephone: 0808 808 2020 (9am-6pm, Mon-Fri)  
Email: [cancerline@macmillan.org.uk](mailto:cancerline@macmillan.org.uk)  
Web: [www.macmillan.org.uk](http://www.macmillan.org.uk)



“ My PSA  
is high.  
I need to find out  
what that means. ”

## Information & Advice (cont)

### *CancerHelp UK*

CancerHelp is a free information service about cancer and cancer care for people with cancer and their families. Run by Cancer Research UK it offers comprehensive information written in a way that people can easily understand. They also have specialist cancer information nurses you can call or email for further information.

Telephone: 0207 061 8355

Email: via website

Web: [www.cancerhelp.org.uk](http://www.cancerhelp.org.uk)

### *Prostate Cancer Charity*

The Prostate Cancer Charity offer practical support through their information services. They have specialist nurses offering advice over the phone, on email and at several hospitals in the UK. They can help you find a local support group and offer the opportunity to contact people who have been affected by prostate cancer through their helpline or their online forum.

Telephone: 0845 300 8383 (10am-4pm, Mon-Fri plus 7pm-9pm, Weds)

Email: via website



“ You can't take  
your health for granted  
so it's good to  
know the facts ”

## Support Groups

### *Everyman Support Group*

The Everyman Support Group, founded by Wendy Gough, who lost her son to testicular cancer, offers help, advice and awareness talks through on prostate, testicular and breast cancer. You can contact her directly by:

Telephone: 01727 730 652 or

Email: [wendygough@wgough.freemove.co.uk](mailto:wendygough@wgough.freemove.co.uk)

The following websites have been recommended to us by Everyman supporters. They offer advice, details of local support groups, or simply an individual's story of their experience.

### *North Durham Prostate Cancer Support Group*

Stafford Scholes, Everyman supporter, was diagnosed with prostate cancer in 2003. He founded the North Durham Prostate Cancer Support Group to provide help and information to men in his local area. You can contact him on 0191 373 4958.

### *Patient UK*

The Patient UK website offers health information as provided by GPs to patients during consultations. It also has a list of patient support organisations, self help groups, health and disease information providers, etc. [www.patient.co.uk](http://www.patient.co.uk)

### *Isle of Man Anti-Cancer Association*

Supporters of Everyman and The Institute of Cancer Research's SAFE Campaign, this Isle of Man-based charity raises money and awareness, as well as offering supplementary services for cancer sufferers. [http://www.cancer.org.im/anticancer\\_assoc.htm](http://www.cancer.org.im/anticancer_assoc.htm)

### *Check Em*

A prostate and testicular awareness campaign run in association with Everyman. [www.check-em.com](http://www.check-em.com)

### *Odyssey*

Odyssey is a charity which enhances the quality of life for people with cancer through imaginative programmes of challenging and dramatic activities using the outdoors. [www.odyssey.org.uk](http://www.odyssey.org.uk)

**Please note:** The information presented on the web sites listed here is not under the control of The Institute of Cancer Research and should only be used to support, not replace, the advice of your own doctor. The Institute of Cancer Research cannot accept any responsibility for the misuse of this information.



“Prostate cancer isn't all doom and gloom these days - recent advances have been tremendous.”