

Blood in Urine

Why focus on blood in urine?

- Visible blood in urine is the most common symptom of both bladder and kidney cancers, occurring in over 80% of bladder cancers¹ and more than half of kidney cancers².
- Bladder cancer is the 7th most common cancer in England. Each year more than 8500 people are diagnosed with the disease and more than 4000 die from it³.
- Kidney cancer is the 8th most common cancer in the UK. Each year more than 7000 people are diagnosed and more than 3000 die from the disease³.

Who's at greatest risk of bladder cancer?

- Bladder cancer is more common in people over 50 years³
- Bladder cancer is more common in men than women but both are affected.³
- Current smokers have between 2 and 6 times the risk of bladder cancer compared with never-smokers. Risk increases with duration of smoking and number of cigarettes smoked each day^{4,5}.
- Around 5 to 10% of bladder cancers in Europe are linked to occupational exposures⁶. Exposure to aromatic amines found in paint, plastic, rubber and paper manufacture and hair dyes and polyaromatic hydrocarbons used in many industries can increase the risk of bladder cancer⁷.
- Rates of bladder cancer do not vary much by socio-economic background⁸ but rates are generally higher in the north of England than the south⁹.
- The white population has a higher risk of bladder cancer than Asian or black populations¹⁰.

Who's at greatest risk of kidney cancer?

- Kidney cancer is most common in older people with three-quarters of cases in over 60's³.
- Kidney cancer is more common in men than women but both are affected³.
- Current and former smokers have around a 50% and 25% higher risk respectively of kidney cancer¹¹.
- Being overweight increases the risk of kidney cancer by 35% and obesity increases the risk by 70%¹².
- Patients on kidney dialysis have three to four times increased risk of kidney cancer^{13,14}
- There are slightly higher rates of kidney cancer in deprived groups than affluent groups⁸ and rates are generally higher in the north of England than the south⁹.
- The white population has a higher risk of kidney cancer than the Asian or black populations¹⁰.

Most important symptoms of kidney and bladder cancers

- Visible blood in urine (present in more than 80% bladder cancers¹ and over 50% kidney cancers²)
 - Blood in urine is a potentially serious symptom which should always be checked out by a doctor¹⁸.

- Around 1 in 10 people with blood in urine will have bladder cancer¹.
- Recurrent urinary tract infections¹⁷, pelvic or loin pain

The importance of diagnosing kidney and bladder cancers early

- One year survival for men with bladder cancer is 78% and in females 68%. Five year survival for men with bladder cancer is 57% and in females 49%³.
- One year survival for kidney cancer is 70%. Five year survival for kidney cancer is around 50%³.
- When diagnosed at the earliest stage one year survival for kidney and bladder cancers is around 94%. When found at a late stage survival is around 20 to 35%¹⁵.
- Estimates suggest that around 1000 deaths from bladder and kidney cancer could be avoided if survival rates matched the best in Europe¹⁶. This could be improved by ensuring that patients are diagnosed at an earlier stage of disease.
- 18% of bladder and 24% of kidney cancers are diagnosed through emergency presentation such as via Accident and Emergency departments¹⁷.
- There is a complex relationship between delay and bladder cancer survival. For bladder cancer some studies suggest that pre-treatment delay leads to poorer survival¹⁹, whereas others have found no link²⁰.
- There is little data on the relationship between delay and kidney cancer survival²¹. Most of the studies that have been conducted have found no link²².

Awareness of bladder and kidney cancer

- Only 29% of people recall unexplained bleeding (including blood in urine) as a possible sign of cancer²¹.

More information?

- For more information about the National Awareness and Early Diagnosis Initiative sign up to the NAEDI newsletter by emailing naedi@cancer.org.uk
- For more background on the evidence and rationale for early diagnosis, take a look at the NAEDI [BJC supplement](#)
- Find out more about diagnostic testing for [bladder](#) and [kidney](#) cancer on Cancer Research UK's patient information section of the website.
- Read the [NICE referral guidelines](#) for suspected cancer.

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