Penile Cancer
Incidence, Mortality and Survival Rates in
the United Kingdom
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The National Cancer Intelligence Network (NCIN) is a UK-wide partnership operated by Public Health England. The NCIN coordinates and develops analysis and intelligence to drive improvements in prevention, standards of cancer care and clinical outcomes for cancer patients.
This summary factsheet presents data for ICD-10 C60 “Malignant neoplasm of penis”. The most recent incidence and mortality data have been used. Rates are standardised to the 1976 European Standard Population. Where appropriate, rates are per 100,000 sex-specific population.

**Incidence rates**

The age-standardised incidence rate of penile cancer was higher in 2008-10 in England and Scotland (compared to 1993-95; p<0.01), but not in Wales or Northern Ireland (Fig. 1). In 1993-95 the incidence rate range across the four countries was 1.2-1.6 per 100,000 males, whilst in 2008-10 it was 1.3-2.0 per 100,000.

**Figure 1: Age-standardised incidence rate (per 100,000 males) of penile cancer (ICD-10 C60), males, UK, 1993–2010**

![Graph showing age-standardised incidence rate per 100,000 population](chart.png)

*Source: Celtic National Cancer Data Repository*

**Mortality rates**

The age-standardised mortality rates from penile cancer were not significantly different in 2008-10 compared to 1995-97 in any of the countries in the United Kingdom (Fig. 2). The rates in 1995-97 were 0.3-0.5 per 100,000 males across the four countries, whilst in 2008-10 they were 0.3-0.4 per 100,000 males.
Survival rates

One-year relative survival was significantly higher in England (p < 0.001) in 2006-10 compared to 1993-97, but there was no difference in the other three countries. One-year relative survival was 79-84% in 1993-97 and 87-91% in 2006-10, across the four countries (Fig. 3). Five-year relative survival was significantly higher in Wales and Scotland in 2002-06 compared to 1993-97 (p < 0.05), but there was no difference in England or Northern Ireland (Fig. 4). Five-year relative survival was 56-71% in 1993-97, and 70-80% in 2002-06, across the four countries.
Figure 3: One-year relative survival rate (%) for penile cancer (ICD-10 C60), males, UK, 1993–2010

Source: Celtic National Cancer Data Repository

Figure 4: Five-year relative survival rate (%) for penile cancer (ICD-10 C60), males, UK, 1993–2006

Source: Celtic National Cancer Data Repository
Key questions and next steps

- Why is the rate of incidence increasing? Is there a relation with increased prevalence of the Human Papilloma Virus (HPV)?
- Why is mortality remaining the same even though incidence is increasing? Is there some improvement in early diagnosis and treatment?
- How has centralisation of services affected treatment patterns and outcome?
- Explore age-specific incidence and mortality rates.
- Explore the influence of socioeconomic factors on incidence and mortality rates.
- Explore differences in treatment patterns by centre and before/after centralisation.
- Explore stage by factors such as age and socioeconomic status.