Testicular 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 factsheet presents data for ICD-10 C62 “Malignant neoplasm of testis”. 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 testicular cancer was significantly higher in 2008-10, compared to 1993-95 in England, Scotland, and Wales (all p < 0.001), but not Northern Ireland (Figure 1). Northern Ireland has the lowest counts for incidence so interpreting differences is more difficult. In 1993-95 the incidence rates across the four countries were 5.7-6.9 per 100,000 males, whilst in 2008-10 they were 7.2-8.5 per 100,000 males.

Figure 1: Age-standardised incidence rate (per 100,000 males) of testicular cancer (ICD-10 C62), males, UK, 1993–2010

Mortality rates

The age-standardised mortality rates from testicular cancer were significantly lower in England and Wales in 2008-10 compared to 1995-97 (p < 0.05), but not for Scotland and Northern Ireland (Fig. 2). In 1995-97, the mortality rates were 0.3-0.5 per 100,000 males, whilst in 2008-10 they were 0.21-0.27 per 100,000 males.
Survival rates

Survival from testicular cancer is very high and continues to improve. One-year and five-year survival rates from testicular cancer were significantly higher in England and Wales in 2006-10/2002-06 compared to 1993-97 (p < 0.05), but there was no difference for Scotland and Northern Ireland (Fig. 3 and Fig. 4). One-year survival was 93-98% in 1993-97 and 97-99% in 2006-10. Five-year survival was 90-96% in 1993-97 and 95-97% in 2002-06.
Figure 3: One-year relative survival rate (%) for testicular cancer (ICD-10 C62), males, UK, 1993–2010

Source: Celtic National Cancer Data Repository

Figure 4: Five-year relative survival rate (%) for testicular cancer (ICD-10 C62), males, UK, 1993–2006

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

- Why has there been an increase in the rate of incidence of testicular cancer?
- How has survival, mortality and recurrence been affected by centralisation of services?
- Explore age-specific incidence and mortality rates.
- Explore the influence of socioeconomic factors on incidence and mortality rates.
- Explore the effects of centralisation on treatment and referral patterns.