South West Public Health Observatory

Skin Cancer Hub
Information to support prevention and early diagnosis

Non-melanoma skin cancer: Incidence and mortality rates in England, Scotland, and Northern Ireland

Published March 2013

This non melanoma skin cancer factsheet presents data for ICD-10 C44 "Other malignant neoplasms of skin" main types. The latest available incidence and mortality data have been used.
Recording of non-melanoma skin cancer main two types, Squamous Cell Carcinoma and Basal Cell Carcinoma, is known to be variable across the English Cancer Registries and across other countries within the United Kingdom. The UKACR rule is to record the first occurrence of each Squamous Cell Carcinoma or Basal Cell Carcinoma per patient, and while some of the variations can be attributed to ethnic mix as well as geographical and behavioural factors, it is very likely that the registration process has a major part to play in the observed differences between countries. The data presented in the factsheet should be interpreted within this context. Wales requested that their data were not included on this factsheet as they do not comply with the UKACR rule regarding registration of non-melanoma skin cancer.

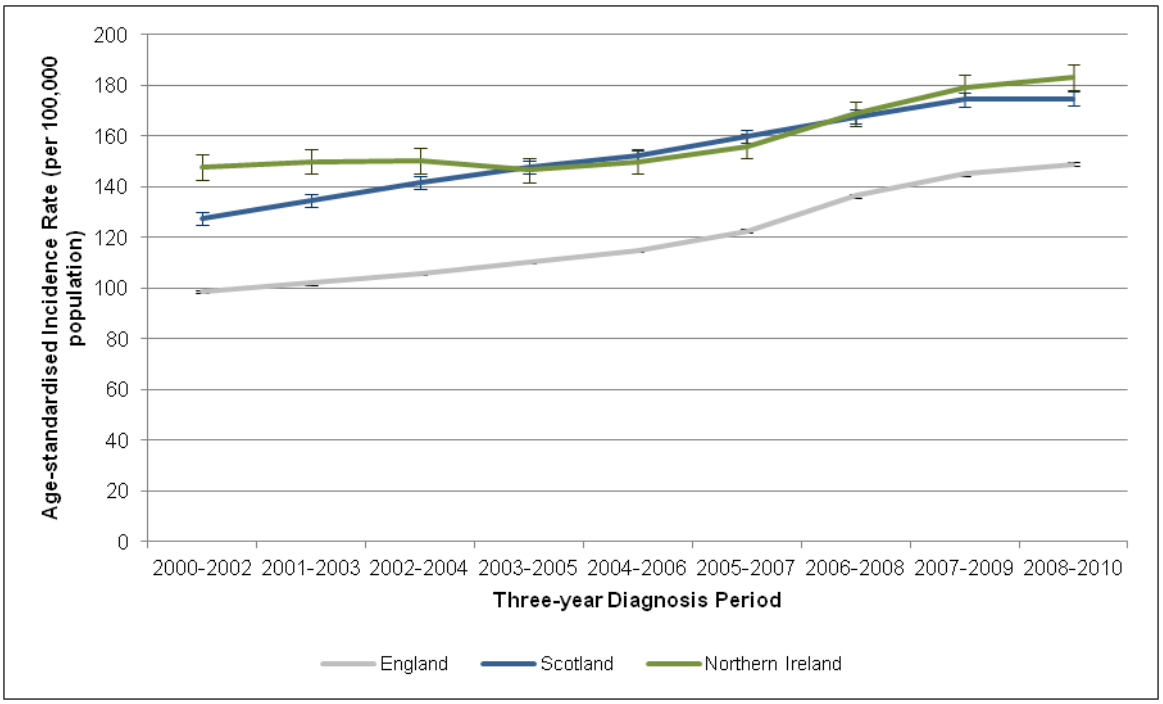
Skin cancer, including Non-melanoma skin cancers, is caused primarily by exposure to ultraviolet (UV) radiation – either from the sun or from artificial sources such as sunbeds. The international Agency for Research on Cancer classified sunbeds as carcinogenic to humans (2009)
Excessive sun exposure in children and adolescents is likely to contribute to skin cancer in later life. (www.who.int/mediacentre/factsheets/fs305/en/index.html).

For more information, visit our Skin Cancer Hub section on '*worried about skin cancer*'

Incidence rates

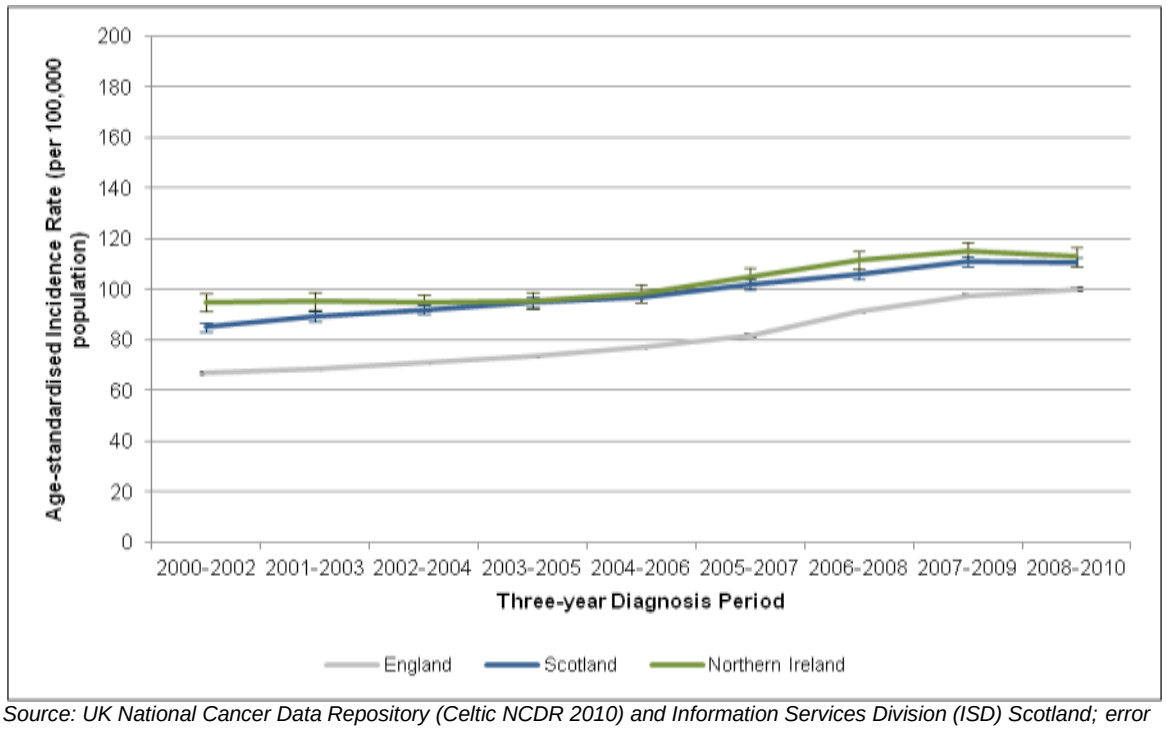
The 3-year average age-standardised incidence rate of non-melanoma skin cancer (ICD10 Code: C44) increased gradually between 2000 and 2010 for all three countries (see Fig. 1 and Fig. 2). The difference between the rate for the most recent period (2008-2010) and the earliest period (2000-2002) was statistically significant in all cases ($p < .001$). Figure 3 shows that in 2008–2010, the 3-year average age-standardised incidence rate of non-melanoma skin cancer was higher for males than females in all three countries ($p < .001$). Figures 4 and 5 show that the age-standardised incidence rates (per 100,000 population) of Basal Cell Carcinomas and Squamous Cell Carcinomas, the main tumour types of ICD-10 C44, vary for different cancer registries. This is most likely to reflect a variation in the registration of non-melanoma skin cancers between different cancer registries which would mask true differences. The differences between males and females remain.

Figure 1: Non-melanoma skin cancer – 3-year average age-standardised incidence rates for males, 2000–2010



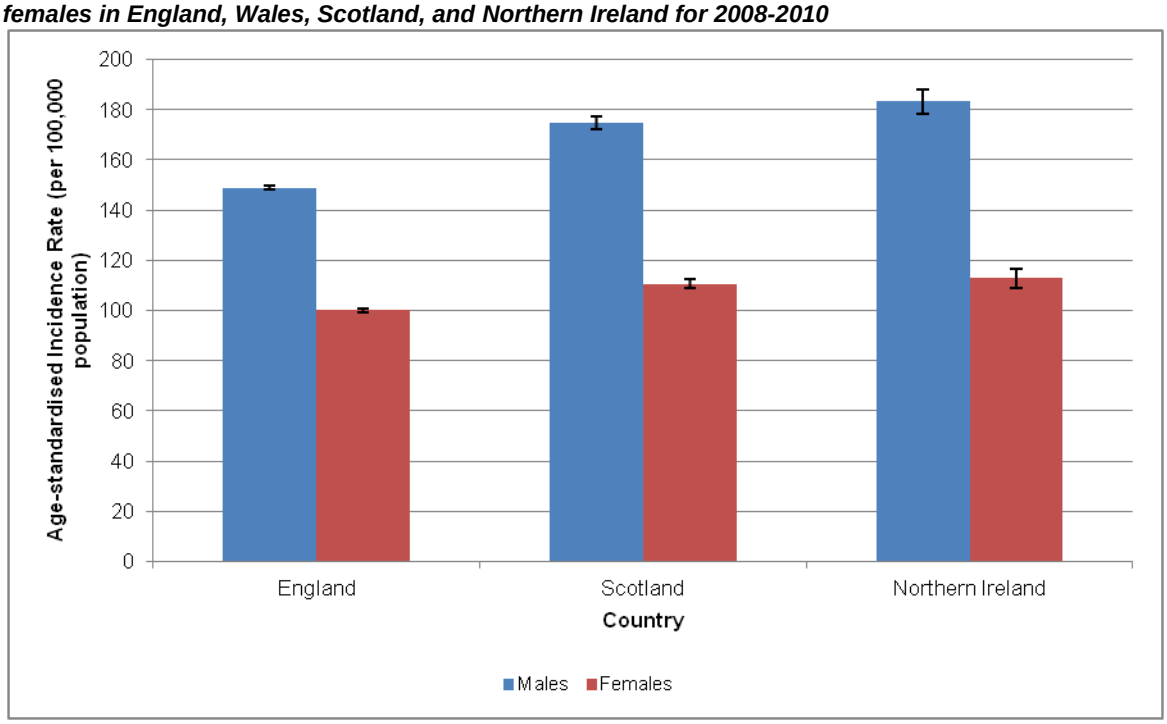
Source: UK National Cancer Data Repository (Celtic NCDR 2010) and Information Services Division (ISD) Scotland; error bars represent 95% confidence intervals

Figure 2: Non-melanoma skin cancer – 3-year average age-standardised incidence rates for females, 2000–2010



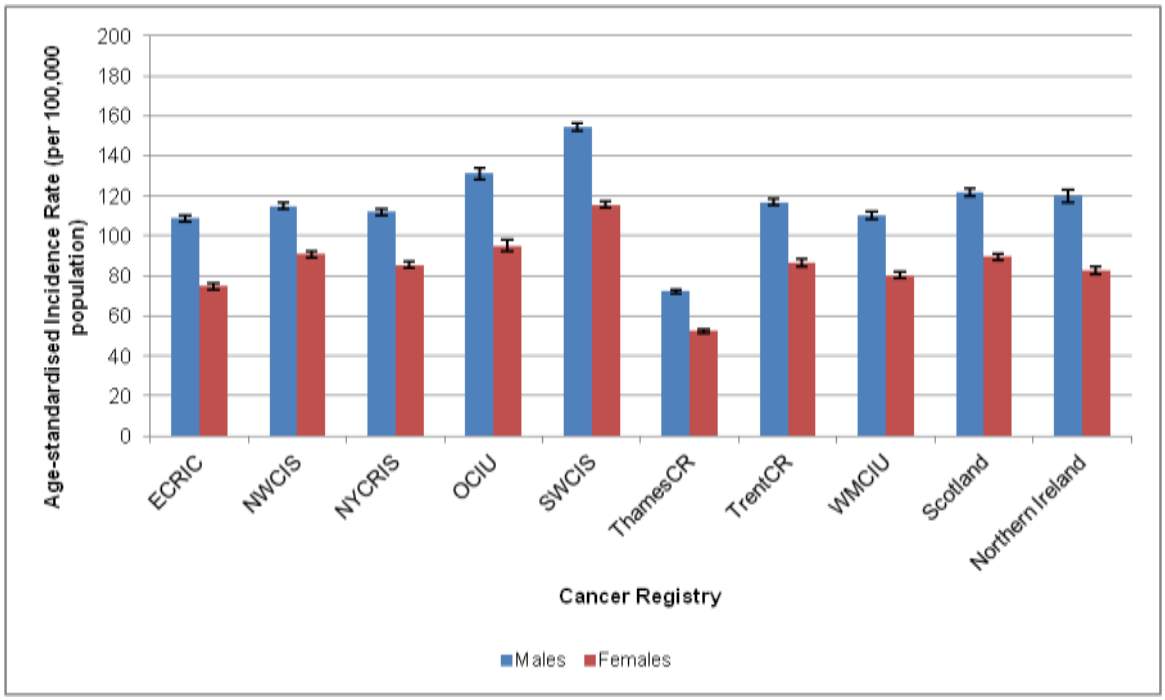
Source: UK National Cancer Data Repository (Celtic NCDR 2010) and Information Services Division (ISD) Scotland; error bars represent 95% confidence intervals

Figure 3: Non-melanoma skin cancer – 3-year average age-standardised incidence rates for males and females in England, Wales, Scotland, and Northern Ireland for 2008-2010



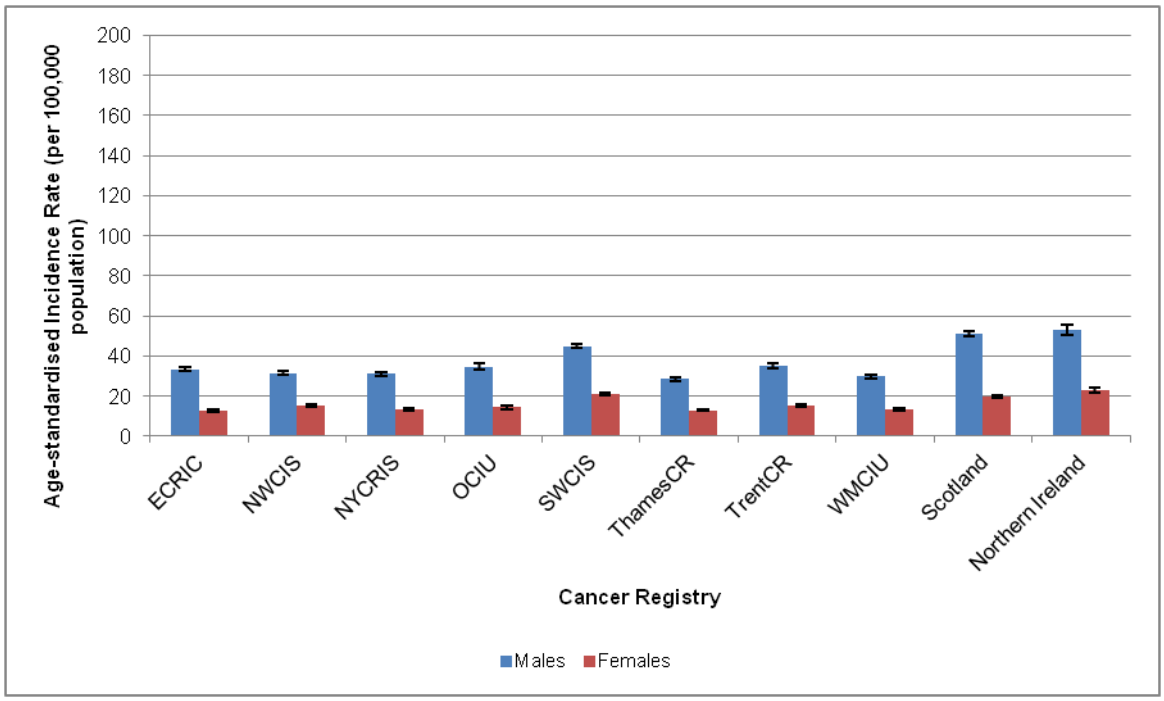
Source: UK National Cancer Data Repository (Celtic NCDR 2010) and Information Services Division (ISD) Scotland; error bars represent 95% confidence intervals

Figure 4: Basal Cell Carcinoma – 3-year average age-standardised incidence rates for males and females in England, Scotland, and Northern Ireland for 2008-2010, split by cancer registry in England



Source: UK National Cancer Data Repository (Celtic NCDR 2010) and Information Services Division (ISD) Scotland; error bars represent 95% confidence intervals

Figure 5: Squamous Cell Carcinoma – 3-year average age-standardised incidence rates for males and females in England, Wales, Scotland, and Northern Ireland for 2008-2010, split by cancer registry in England



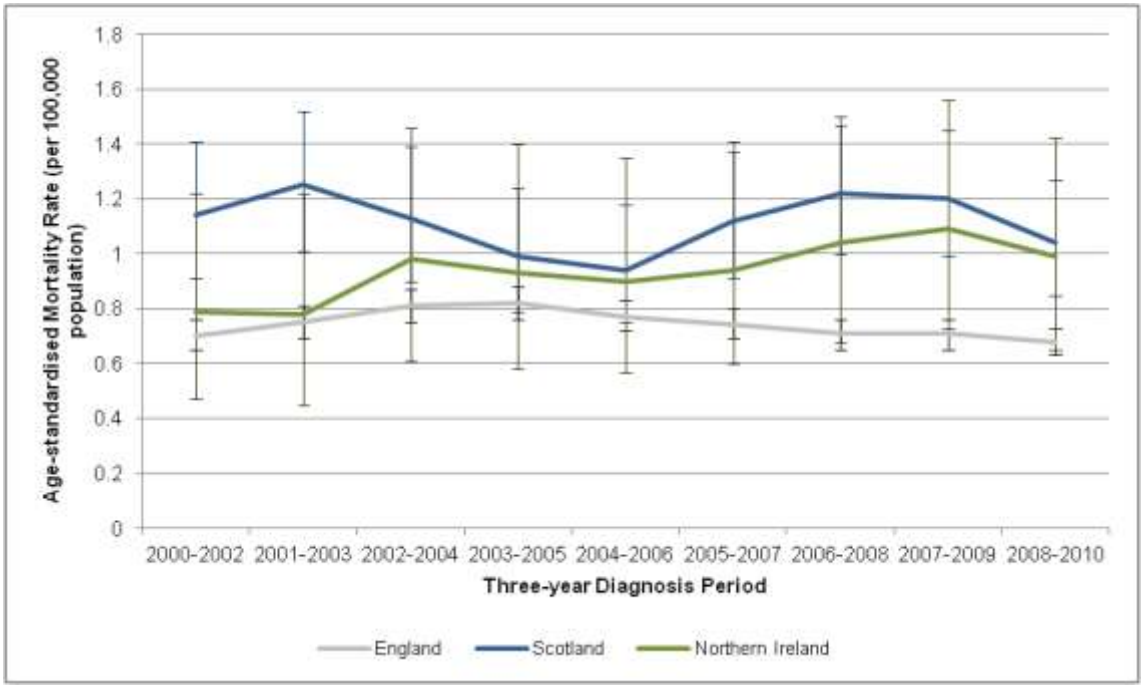
Source: UK National Cancer Data Repository (Celtic NCDR 2010) and Information Services Division (ISD) Scotland; error bars represent 95% confidence intervals

Mortality rates

Access to UK mortality data is currently limited to ICD-10 C44 “Other malignant neoplasms of skin” data and does not allow to differentiate between Squamous Cell Carcinoma, Basal Cell Carcinoma, and other rare skin cancers.

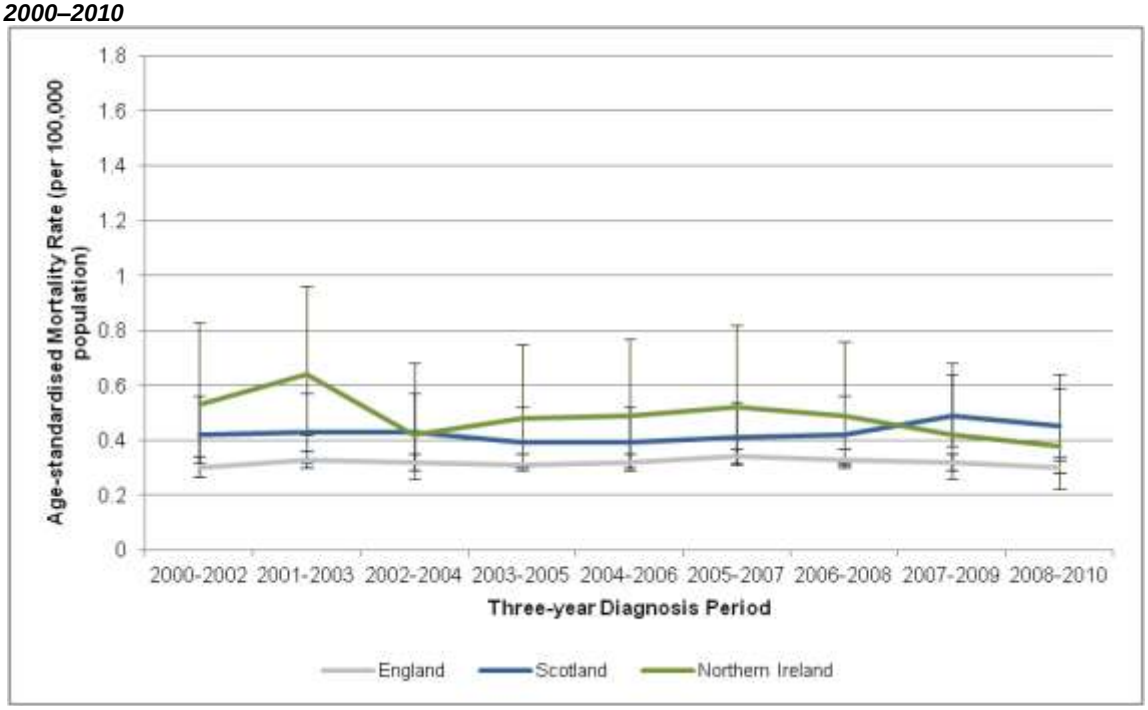
The 3-year average age-standardised mortality rate from non-melanoma skin cancer in England, Scotland, and Northern Ireland for males and females is very low and did not vary between 2000 and 2010 (see Fig. 4 and Fig. 5). In 2008–10, the 3-year average age-standardised mortality rate from non-melanoma skin cancer was higher for males than females in all three countries ($p < .01$).

Figure 6: Non-melanoma skin cancer – 3-year average age-standardised mortality rates for males, 2000–2010



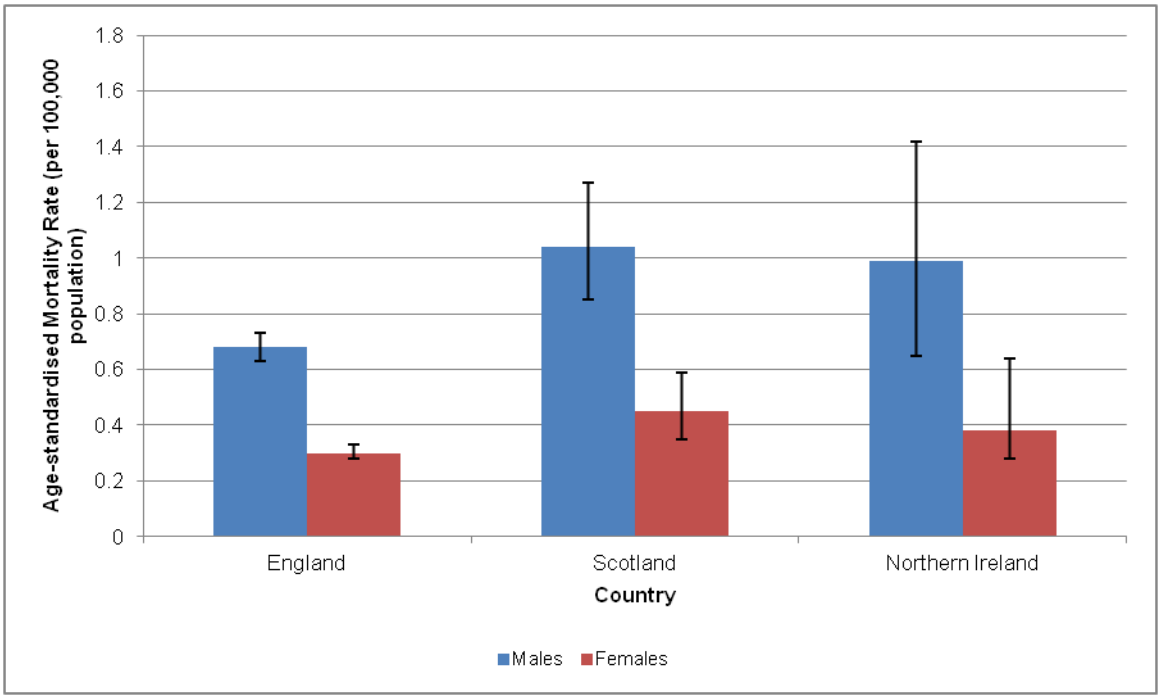
Source: UK Cancer Intelligence Service (UKCIS); error bars represent 95% confidence intervals

Figure 7: Non-melanoma skin cancer – 3-year average age-standardised mortality rates for females, 2000–2010



Source: UK Cancer Intelligence Service (UKCIS); error bars represent 95% confidence intervals

Figure 8: Non-melanoma skin cancer – 3-year average age-standardised mortality rates for males and females in England, Wales, Scotland, and Northern Ireland, 2008–2010



Source: UK Cancer Intelligence Service (UKCIS); error bars represent 95% confidence intervals

The South West Public Health Observatory will be part of Public Health England from 1 April 2013

Further information

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About the South West Public Health Observatory

The South West Public Observatory (SWPHO) is part of a network of 12 public health observatories working across the five nations of England, Scotland, Wales, Northern Ireland and the Republic of Ireland. The nine Public Health Observatories in England work together through a single work programme which contains both national and local elements. We produce information, data and intelligence on people's health and health care for practitioners, policy makers and the wider community. Our expertise lies in turning information and data into meaningful health intelligence to support decision makers.

On behalf of the Department of Health, the SWPHO works in partnership with the NHS, local authorities, researchers, national agencies as well as agencies in the South West.

The SWPHO incorporates the National Drug Treatment Monitoring System South West (NDTMS–SW), and in April 2005 merged with the South West Cancer Intelligence Service (SWCIS).

For more information about the SWPHO and its partner organisations, please visit www.swpho.nhs.uk