

Penile Cancer – Incidence by Age

NCIN Data Briefing

Introduction

Penile cancer in England is a rare disease. The rate over the last 20 years is typically 1 case per 100,000. Between 2008 and 2010, around 400 cases each year were diagnosed in England. This data briefing examines how incidence rates of penile cancer varied with age between 1990 and 2010.

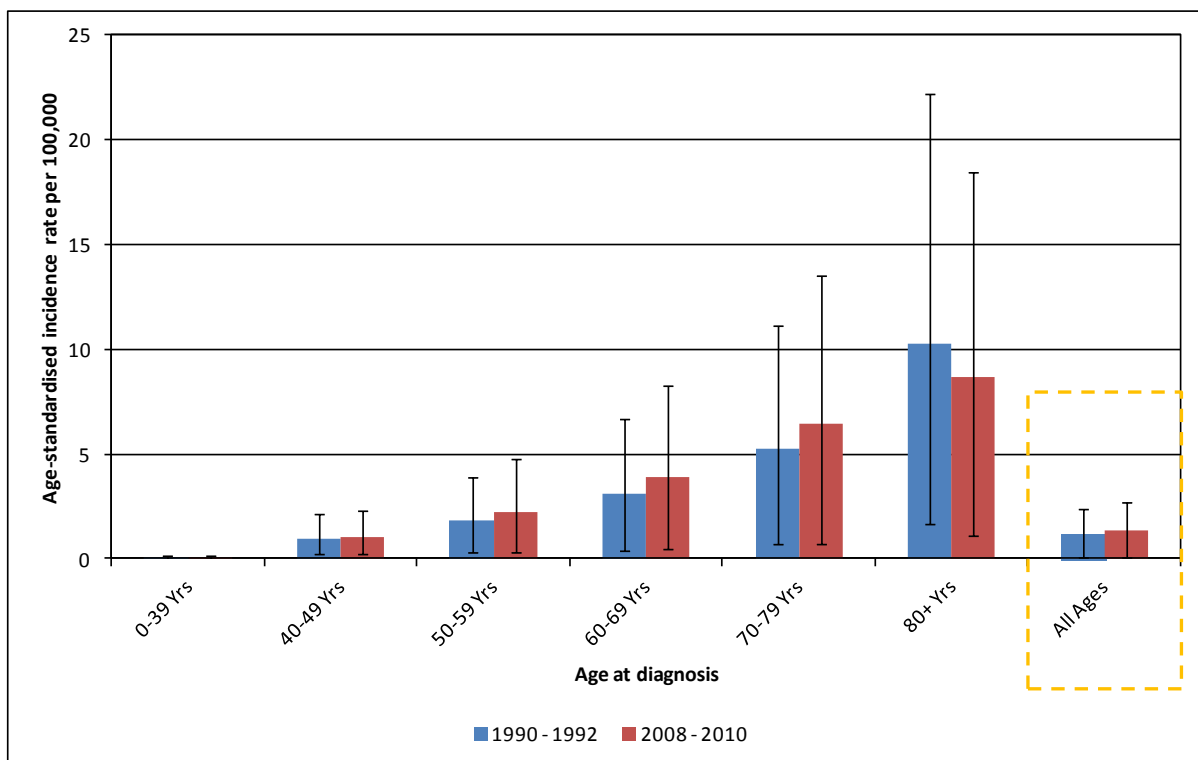
Results

The National Cancer Data Repository 2010 was used to identify all malignant penile cancers (ICD-10 code C60) diagnosed between 1990 and 2010. Cases were grouped in broad age bands: 0-39, 40-49, 50-59, 60-69, 70-79 and 80+. Directly age-standardised Rates (ASR) were calculated for 3-year rolling cohorts, using the 1976 European Standard Population.

KEY MESSAGE:

Penile cancer is a rare disease, with an age standardised rate of 1.3 cases per 100,000 males in England, in 2008-2010. Comparing 1990-92 and 2008-10, the rate for men aged under 50 has not changed significantly. For men aged 50-79, the rate has increased while for men aged 80 and over has decreased.

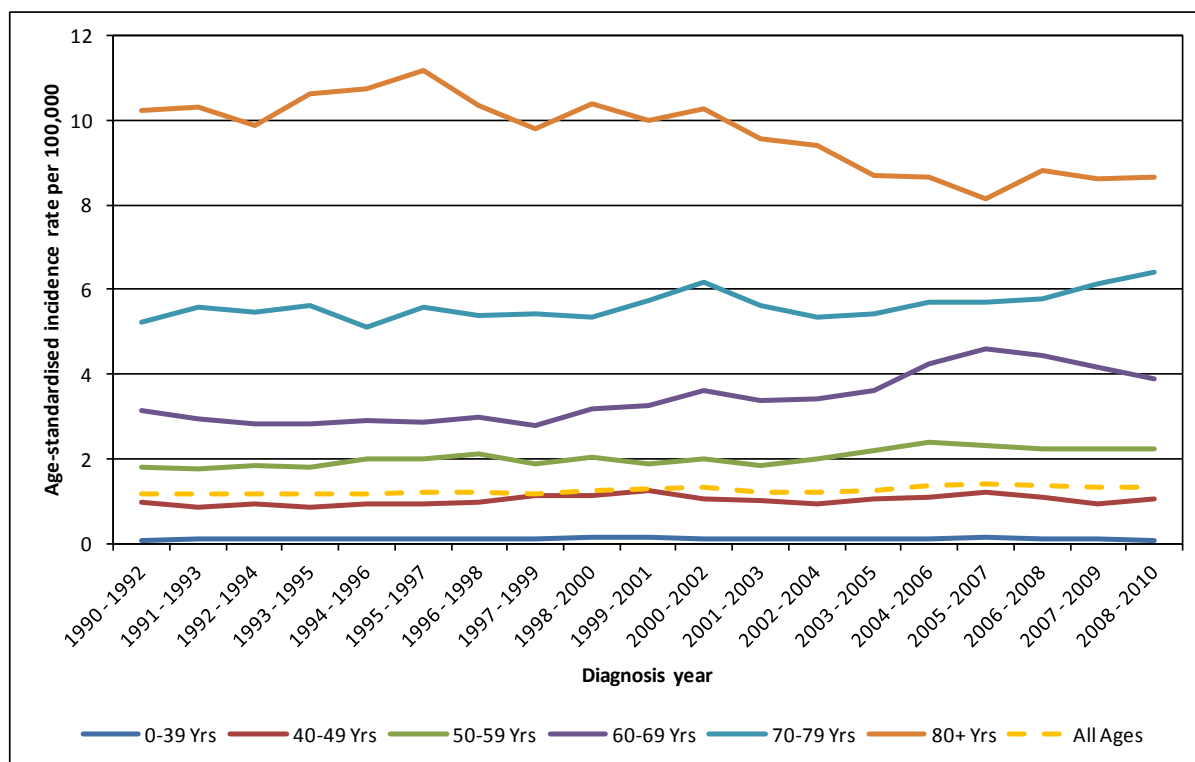
Incidence of penile cancer by age, standardised rate per 100,000 men, in England: 1990-2010



Source: National Cancer Data Repository; Office for National Statistics

Comparing ASRs from the first three years (1990-92) to the last three years (2008-10) allows a magnitude of change to be derived. Rates in the 50-59, 60-69 and 70-79 age groups were higher in 2008-10 (19% (p=0.04), 20% (p=0.01) and 19% (p=0.01) respectively). No difference was seen for the other age groups. Although there was a statistically significant increasing trend for diagnoses in those aged 40-49 and a decreasing trend for those aged 80 and over, comparing the two time periods there was no statistically significant difference. This is because trends (second graph) are based on more data and have more power to detect changes.

Incidence of penile cancer by age, age-standardised rate per 100,000 men, in England: 1990-2010



Source: National Cancer Data Repository; Office for National Statistics

The ASR in the 0-40 age group shows no trend between 1990-92 and 2008-10 and remains at 0.1 per 100,000 during the whole study period. The 40-49, 50-59, 60-69 and 70-79 age groups all show an upward linear trend in ASR during the study period ($p=0.04$, $p<0.001$, $p<0.001$, $p<0.01$ respectively). The 80 and over age group shows a downward linear trend in ASR during the study period ($p<0.001$).

Incidence of penile cancer by age, age-standardised rate per 100,000 men, in England: 1990-92 compared to 2008-10

Age	1990-92			2008-2010			Significantly different ($p<0.05$)	% Change
	1990-92	LCI (95%)	UCI (95%)	2008-10	LCI (95%)	UCI (95%)		
0-39	0.1	0.0	0.1	0.1	0.1	0.1	-	2.2
40-49	1.0	0.8	1.2	1.1	0.9	1.2	-	7.6
50-59	1.8	1.5	2.1	2.2	1.9	2.5	Higher	19.4
60-69	3.1	2.7	3.6	3.9	3.5	4.3	Higher	19.9
70-79	5.2	4.5	5.9	6.4	5.7	7.1	Higher	18.9
80+	10.2	8.6	11.9	8.7	7.5	9.8	-	-18.2
All Ages	1.2	1.1	1.2	1.3	1.2	1.4	Higher	12.6

Source: National Cancer Data Repository; Office for National Statistics

FIND OUT MORE:

The PHE Knowledge and Intelligence Team South West is the lead KIT for urological cancer.

<https://www.gov.uk/government/organisations/public-health-england>

Other useful resources:

What cancer statistics are available, and where can I find them? (December 2013) - <http://ncin.org.uk/view?rid=2494>

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.