Directly age-standardised incidence rate of colorectal cancer per 100,000 males under 75 yrs - 2002-4 to 2011-13 (3-year pooled data)

England, South East Region, Oxfordshire and districts within Oxfordshire

Key
- England
- South East Region
- Prospering Southern England
- Oxfordshire
- Vale of White Horse
- West Oxfordshire

Definition
Directly age-standardised incidence rate per 100,000 male population aged under 75 years for colorectal cancer.

Source
Health & Social Care Information Centre Indicator Portal

Numerator
Cancer registrations for colorectal cancer (ICD10: C17-C21) in the respective calendar years in males aged under 75 years.

Denominator
Office for National Statistics (ONS) latest revisions mid-year population estimates for males aged under 75 years in the respective calendar years (population shown in the table below). For middle year of the three-year period.

Strengths & Limitations
1. The European Standard Population (ESP) is an artificial population structure which is used in the weighting of mortality or incidence data to produce Directly Standardised Rates (DSRs), also known as age-standardised rates (ASRs). The ESP is divided into quinary age bands, which correspond to the age bands used by the observations and population figures. Each age band is assigned a value which is used to standardise the rate obtained from the observations and population.
2. Eurostat, the statistical institute of the European Union, decided at the end of 2012 to bring this population structure up to date. Up to 2014, indicators were directly standardised against the ESP released in 1976. From 2014 onwards, they are directly standardised against the ESP released in 2013.
3. There is a significant increase in many age-standardised cancer incidence rates using the 2013 ESP. The incidence rate in England in 2010 for all cancer sites combined was 422.4 per 100,000 males using the 1976 ESP, but rates to 558.2 per 100,000 using the 2013 ESP. The impact is smaller for females. The percentage increase varies by cancer site, with a small decrease for testicular cancer, a cancer more common in younger men. The highest increases are found in bladder, stomach, colorectal and lung cancer for both men and women (increases between 58% and 76%). The main female cancers (uterus, ovary and breast) show increases of 38%, 35% and 30% respectively.
4. 3-year rolling data are used to create a smoother line which is easier to interpret and less susceptible to annual fluctuation.
5. Current results may differ from those previously issued because of changes in methodology to extract data by area, and also because of data enhancements by ONS. Cancer registrations are also continuously being updated retrospectively and ONS records may have been updated since previous analyses.
6. Skin cancers other than malignant melanoma (ICD-10 C44, ICD-9 173) are believed to be greatly under reported. The registration of such cancers varies widely between the regions and depends on their ability to access out-patient records and general practitioners. Following ONS practice, the figures presented for ‘incidence of all cancers’ include skin cancers other than malignant melanomas.

Time Trend
1. The overall trend of incidence rates of colorectal cancer in males under 75 years was fairly static for the first part of this time period and then showing a slight upward trend. The change to the European Standard Population makes it more difficult to see a trend for the most recent data points (2009-11 and 2011-13).
2. Between 2004 and 2007 Vale of White Horse had statistically significantly higher rates of colorectal cancer amongst males than England.
3. Additionally in Vale of White Horse increased fluctuate a good deal.

Benchmarks
1. There are no statistically significant differences in the rate of colorectal cancer incidence among males in Oxfordshire compared to national and regional rates.
2. Between 2004 and 2007 Vale of White Horse had statistically significantly higher rates of colorectal cancer amongst males than England.
3. The rate for Cherwell has been significantly higher than the national rate for the last three data points.

Expert interpretation and conclusions with additional information
1. Bowel cancer is the fourth most common cancer in the UK (13% of all new cases) and the third most common cancer in males (14% of all new cases). At a local level the actual number of cases is quite small. In the three year period 2010-12 there were 457 males and 325 females diagnosed with colorectal cancer in Oxfordshire.
2. Incidence rates are higher in men than women both nationally and locally.
3. The occurrence of bowel cancer is strongly related to age with an average 43% of bowel cancer cases being diagnosed in people aged 75 years and over, and 95% being diagnosed in those aged 50 and over.
4. There is evidence for a small association between bowel cancer incidence and deprivation for males in England, while there is no evidence for an association for females.
5. The majority of cases in Oxfordshire is it is not possible to demonstrate a strong association between bowel cancer and deprivation at a local level.
6. Nationally age-standardised rates for White males with bowel cancer range are significantly higher than rates for Asian and Black males. For females there is a similar pattern.
7. Overall, bowel cancer incidence in men is not a significant concern in Oxfordshire although the trend in Cherwell should be monitored closely.
8. The RAG rating is therefore amber.

Cancer incidence - colorectal cancer <75 males

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