

Borders Cancer Report

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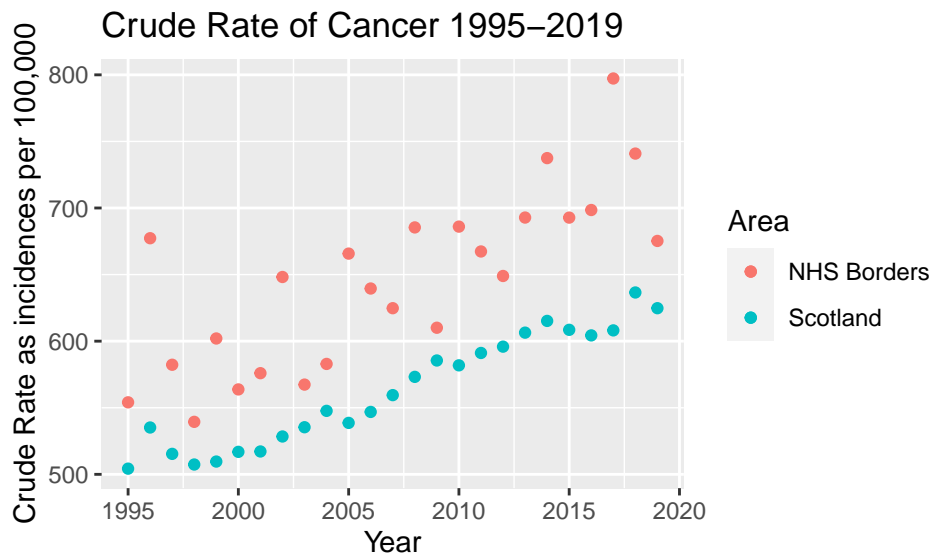
Background

This report has been prepared with the aim of helping the reader understand better the incidences of cancer in the Borders NHS Health Board, in order to inform planning for the provision of cancer services.

The data used has been taken from <https://www.opendata.nhs.scot> which includes information on cancer incidence across Scotland, broken down by NHS Health Board, and covering the period 1995 - 2019. Key variables include yearly incidence of cancer and crude rate of cancer (incidence per 100,000 population), by year, sex and cancer site. Further variables are available but in order to suit the desired report length, these have been ignored for the purposes of this analysis.

This is a publicly available dataset with no private or sensitive information.

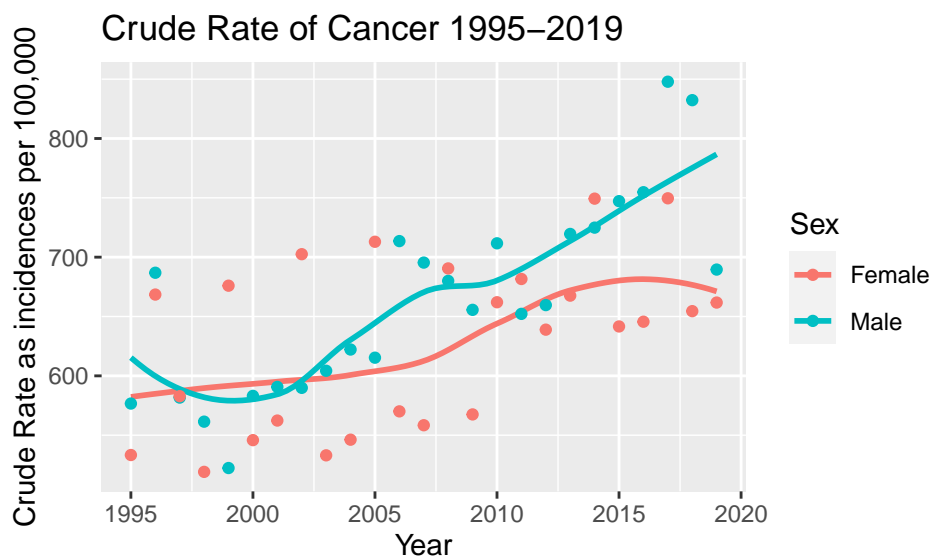
First View



Description: This is a scatter plot showing the crude cancer rate for all cancers/age groups/sexes of both NHS Borders and Scotland, for the period 1995-2019.

Observations: Both sets of data show a marked upwards trend over the period. NHS Borders has a consistently higher crude rate than Scotland. The Scotland data shows less variation than the NHS Borders data, due to the larger sample size. For this reason, going forward we will use best fit line plots to assess trends over time, but it is important to consider the variability of data around those trends.

Gender



Description: This is a best fit regression plot showing the crude cancer rate in NHS Borders for all cancers/age groups, split by sex, for the period 1995-2019.

Observations: Rates of cancer are consistently higher among males. Both males and females show an increase over the period. Female rates appear to have plateaued somewhat in the past decade, while male rates continue to trend upwards.

Cancer Sites

Table 1: Ten Most Prevalent Cancer Sites 2019

cancer_site	crude_rate
Non-melanoma skin cancer	166.13177
Basal cell carcinoma of the skin	108.55201
Colorectal cancer	79.29016
Trachea, bronchus and lung	76.45837
Squamous cell carcinoma of the skin	57.57976
Breast	52.86011
Colon	50.97225
Bladder	31.14971
Rectum and rectosigmoid junction	28.31792
Malignant melanoma of the skin	23.59826

Table 2: Ten Most Prevalent Cancer Sites 2019

cancer_site	crude_rate
Non-melanoma skin cancer	286.55528
Basal cell carcinoma of the skin	193.05688
Colorectal cancer	91.76695

cancer_site	crude_rate
Squamous cell carcinoma of the skin	90.03549
Trachea, bronchus and lung	89.16977
Breast	84.84114
Colon	64.06372
Malignant melanoma of the skin	32.03186
Pancreas	28.56896
Rectum and rectosigmoid junction	27.70323

Description: Table showing Ten most Prevalent Cancer Sites at the Start and End of the Period

Observations: The most prevalent cancer sites have not changed hugely over time. There are some clear outliers which may guide preventative efforts going forward.

Further Areas for Analysis

1. Age-related trends.
2. In-depth analysis of cancer sites vs age group and sex.
3. Comparison with other NHS Health Boards.