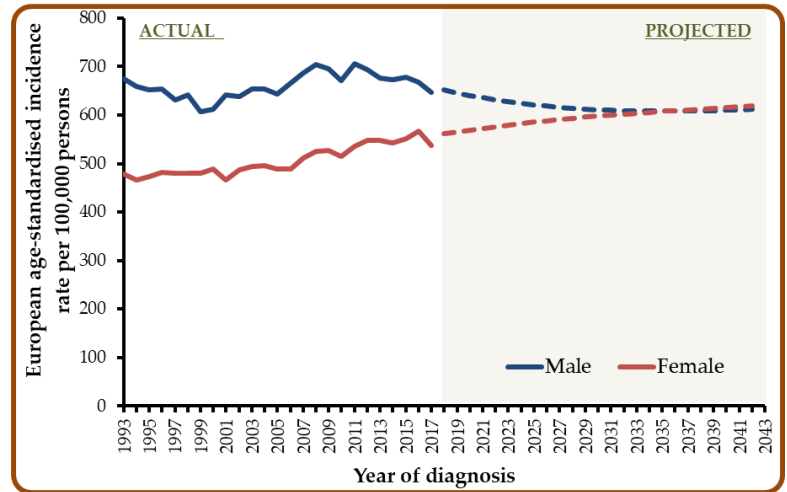


PROJECTED INCIDENCE RATES

PROJECTED INCIDENCE RATES FOR ALL CANCERS (EX. NMS)

Incidence rates of cancer (ex. NMS) among men are projected to decrease slightly in forthcoming years with a 7% reduction by 2025, compared to rates in 2013-2017, and a 9% reduction by 2040.

Among women incidence rates are projected to continue to increase, with a 7% rise by 2025 and a 12% rise by 2040 expected.



PROJECTED CHANGE IN INCIDENCE RATES BY SEX AND TYPE

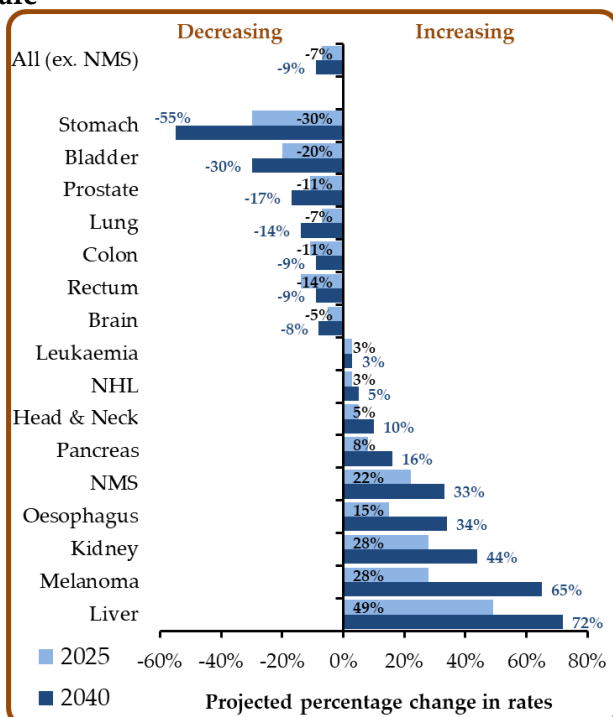
Compared to the 2013-2017 average male incidence rates are projected to:

- **decrease** by more than 10% by 2025 and by more than 20% by 2040 for stomach, bladder and prostate cancers;
- **increase** by more than 20% by 2025 and by more than 40% by 2040 for malignant melanoma, kidney and liver cancers.

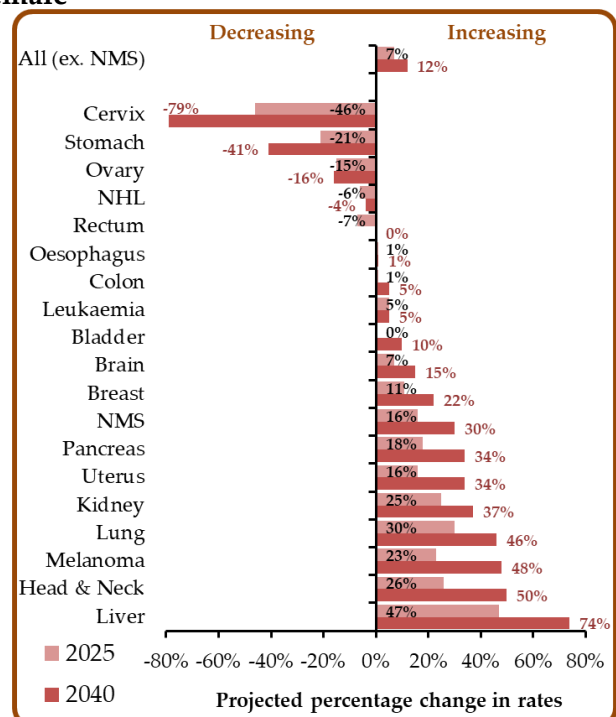
Also compared to the 2013-2017 average female incidence rates are projected to:

- **decrease** by more than 10% by 2025 and by more than 20% by 2040 for stomach and cervical cancers;
- **increase** by more than 20% by 2025 and by more than 40% by 2040 for malignant melanoma, lung, head & neck and liver cancers.

Male



Female



NHL: Non-Hodgkin's lymphoma, NMS: Non-melanoma skin

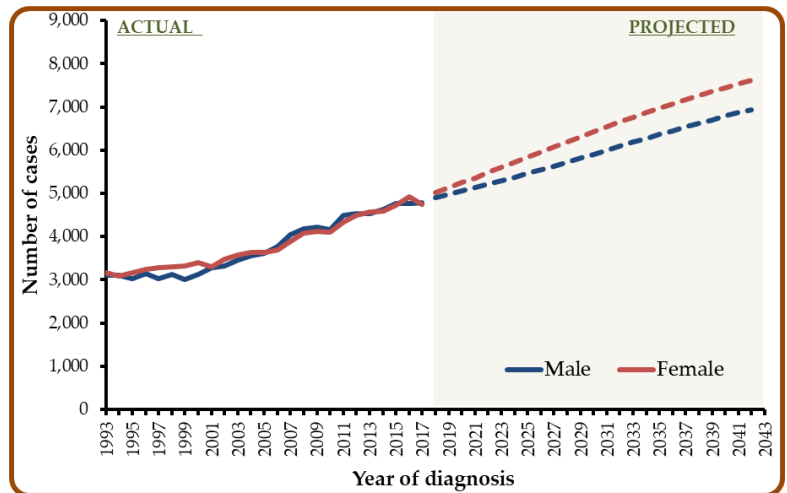
PROJECTED NUMBER OF CASES DIAGNOSED

PROJECTED NUMBER OF CASES OF CANCER (EX. NMS) DIAGNOSED

In 2013-2017 there were 4,691 male and 4,710 female cases of cancer (ex. NMS) diagnosed each year.

By 2025 this is expected to rise by 16% for men and by 24% for women to 5,463 and 5,840 cases per year respectively.

By 2040 the number of cases per year is projected to be 6,788 male and 7,450 female cases, a 45% rise among men and a 58% rise among women.



PROJECTED NUMBER OF CASES DIAGNOSED BY SEX AND CANCER TYPE IN 2025 AND 2040

By 2040 the most common cancers are expected to remain breast, bowel (colon & rectum), lung and prostate cancer. The number of breast cancers is expected to reach 2,200 cases per year, while the number of prostate cancers is expected to reach 1,500 cases per year. The total number of lung cancers is expected to exceed 2,300 cases per year, with more female than male cases projected.

| CANCER TYPE | Male | | | | | Female | | | | |
|---------------|------------------------|-----------------|-------------------------|-----------------|-------------------------|------------------------|-----------------|-------------------------|-----------------|-------------------------|
| | 2013-17 cases per year | 2025 | | 2040 | | 2013-17 cases per year | 2025 | | 2040 | |
| | | Number of cases | (% change from 2013-17) | Number of cases | (% change from 2013-17) | | Number of cases | (% change from 2013-17) | Number of cases | (% change from 2013-17) |
| All (ex. NMS) | 4,691 | 5,463 | 16% | 6,788 | 45% | 4,710 | 5,840 | 24% | 7,450 | 58% |
| Bladder | 155 | 163 | 5% | 205 | 32% | 64 | 78 | 22% | 119 | 86% |
| Brain | 85 | 93 | 10% | 104 | 23% | 64 | 77 | 21% | 97 | 51% |
| Breast | - | - | - | - | - | 1,398 | 1,769 | 27% | 2,201 | 57% |
| Cervix | - | - | - | - | - | 83 | 46 | -44% | 23 | -73% |
| Colon | 424 | 478 | 13% | 649 | 53% | 395 | 478 | 21% | 639 | 62% |
| Head & Neck | 232 | 291 | 26% | 358 | 54% | 96 | 140 | 46% | 191 | 99% |
| Kidney | 199 | 309 | 55% | 417 | 110% | 116 | 167 | 44% | 213 | 84% |
| Leukaemia | 134 | 167 | 25% | 207 | 54% | 95 | 115 | 21% | 142 | 49% |
| Liver | 85 | 164 | 93% | 237 | 179% | 48 | 85 | 78% | 134 | 180% |
| Lung | 680 | 815 | 20% | 1,003 | 47% | 610 | 956 | 57% | 1,344 | 120% |
| Melanoma | 174 | 266 | 53% | 433 | 149% | 203 | 273 | 34% | 370 | 82% |
| NHL | 184 | 233 | 26% | 287 | 56% | 151 | 167 | 11% | 217 | 44% |
| NMS | 2,149 | 3,361 | 56% | 4,986 | 132% | 1,571 | 2,158 | 37% | 3,127 | 99% |
| Oesophagus | 151 | 213 | 41% | 292 | 94% | 67 | 81 | 22% | 100 | 49% |
| Ovary | - | - | - | - | - | 208 | 201 | -3% | 235 | 13% |
| Pancreas | 130 | 181 | 39% | 251 | 93% | 124 | 177 | 42% | 262 | 111% |
| Prostate | 1,133 | 1,272 | 12% | 1,537 | 36% | - | - | - | - | - |
| Rectum | 228 | 244 | 7% | 326 | 43% | 138 | 151 | 10% | 193 | 40% |
| Stomach | 137 | 123 | -10% | 115 | -16% | 80 | 75 | -6% | 68 | -16% |
| Uterus | - | - | - | - | - | 249 | 335 | 34% | 459 | 84% |

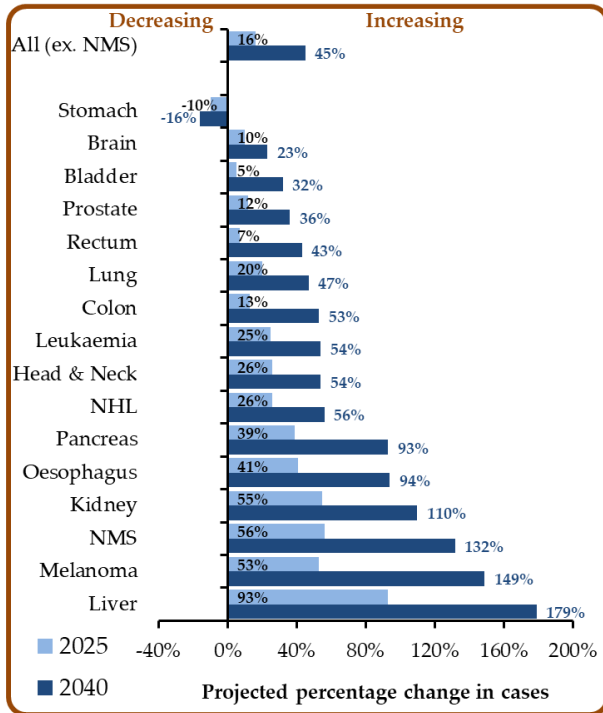
NHL: Non-Hodgkin's lymphoma, NMS: Non-melanoma skin

PROJECTED CHANGE IN NUMBER OF CASES DIAGNOSED BY SEX AND TYPE

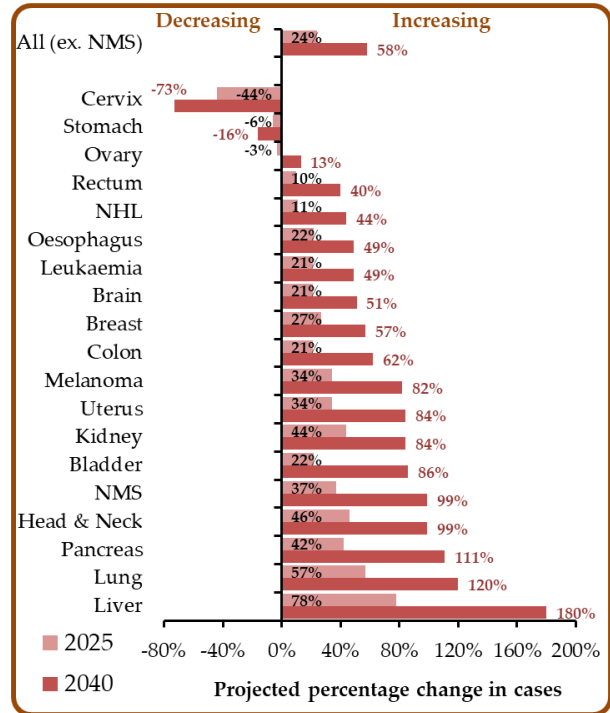
By 2040 the number of cases diagnosed each year among men is projected to increase for all cancer types compared to 2013-2017, except for stomach cancer, while among women increases are expected for all cancer types except cervical and stomach cancer.

The number of cases diagnosed each year is expected to increase among males by more than 100% for malignant melanoma, non-melanoma skin, kidney and liver cancers, and among females by more than 100% for liver, pancreatic and lung cancers.

Male



Female



NHL: Non-Hodgkin's lymphoma, NMS: Non-melanoma skin

FACTORS THAT CAN INFLUENCE CANCER INCIDENCE PROJECTIONS

- Changes to risk factor exposure within the general population.**
 The risk factors likely to have the greatest impact on future projections are: Tobacco use; Excessive alcohol consumption; Obesity, lack of physical activity and/or lack of a balanced diet; Ultraviolet radiation from sunshine or sun beds.
- Introduction of health service initiatives that aim to either prevent or diagnose cancer early.**
 These include vaccinations (e.g. the HPV vaccination), screening (e.g. the breast, cervical and colorectal screening programmes) and diagnostic tests (e.g. PSA testing for prostate cancer).
- Changes to the way in which cancer is classified and/or revisions to population projections.**

NI Cancer Registry (NICR)
 Phone: +44 (0)28 9097 6028
 e-mail: nicr@qub.ac.uk
 web: www.qub.ac.uk/nicr



Acknowledgements: NICR is funded by the Public Health Agency. NICR uses data provided by patients and collected by the health service as part of their care and support.

Citation: Please site these results as: Donnelly DW, Anderson LA, Gavin A. Cancer incidence projections in Northern Ireland to 2040. Cancer Epidemiol Biomarkers Prev 2020.