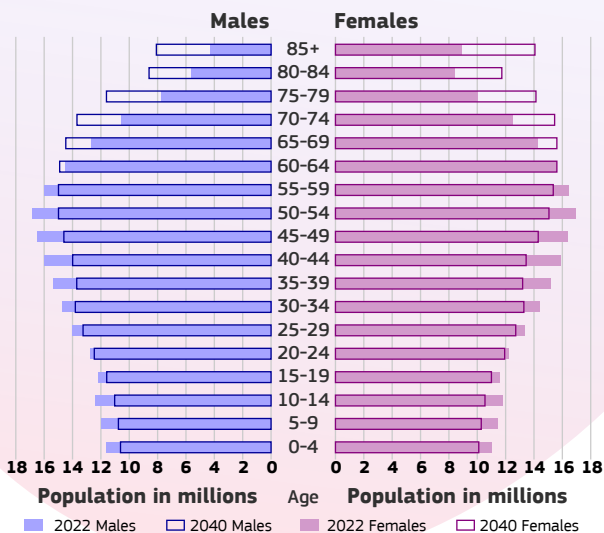


# IMPACT OF POPULATION AGEING ON THE BURDEN OF CANCER UP TO 2040 IN EU/EFTA<sup>1</sup> COUNTRIES

AUGUST 2024

## POPULATION PYRAMIDS IN 2022 AND 2040

Projected numbers of people in EU/EFTA<sup>1</sup> countries, by sex and age group



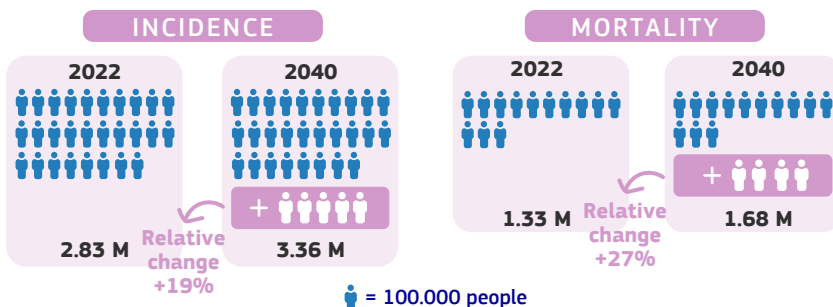
**Population is ageing in EU/EFTA<sup>1</sup> countries: by 2040, projections predict a marked transition towards a much older population structure**

To evaluate the impact of population ageing on the burden of cancer, new cancer diagnoses and cancer deaths for the year 2040 in EU/EFTA<sup>1</sup> countries were calculated applying 2022 estimated incidence and mortality rates (European Cancer Information System, ECIS) to EUROSTAT 2040 projected population.

The change in the projected population is the only factor affecting these long-term cancer burden estimates, calculated under the assumption that 2022 cancer incidence and mortality levels remain the same up to 2040.

## CANCER BURDEN IN 2022 AND 2040

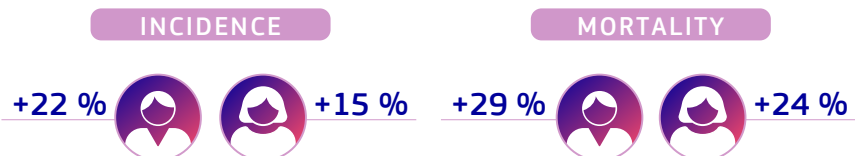
Estimated numbers of new cancer cases and cancer deaths and corresponding relative changes in EU/EFTA<sup>1</sup> countries, for both sexes together



**Cancer<sup>2</sup> diagnoses in EU/EFTA<sup>1</sup> countries are expected to increase by 19% up to 2040, in the same period cancer deaths are expected to increase by 27%.**

## VARIABILITY BY SEX

Estimated relative change of new cancer cases and cancer deaths by 2040 in EU/EFTA<sup>1</sup> countries



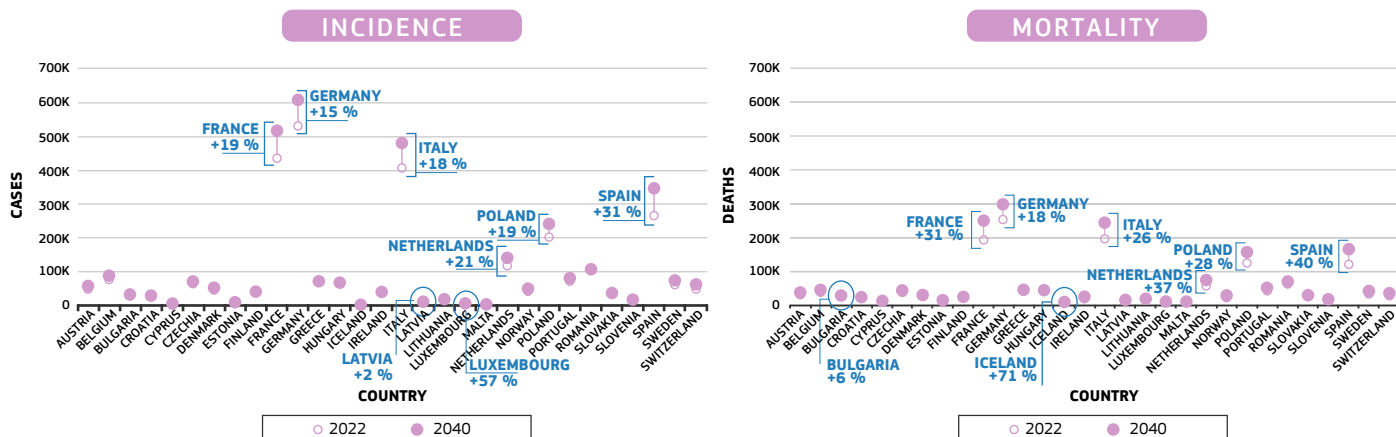
**The impact of population ageing by 2040 on both cancer<sup>2</sup> incidence and mortality is higher in men than in women.**

<sup>1</sup> Iceland, Norway and Switzerland. Liechtenstein not included.

<sup>2</sup> All cancers but non-melanoma skin cancer.

## VARIABILITY BY COUNTRY

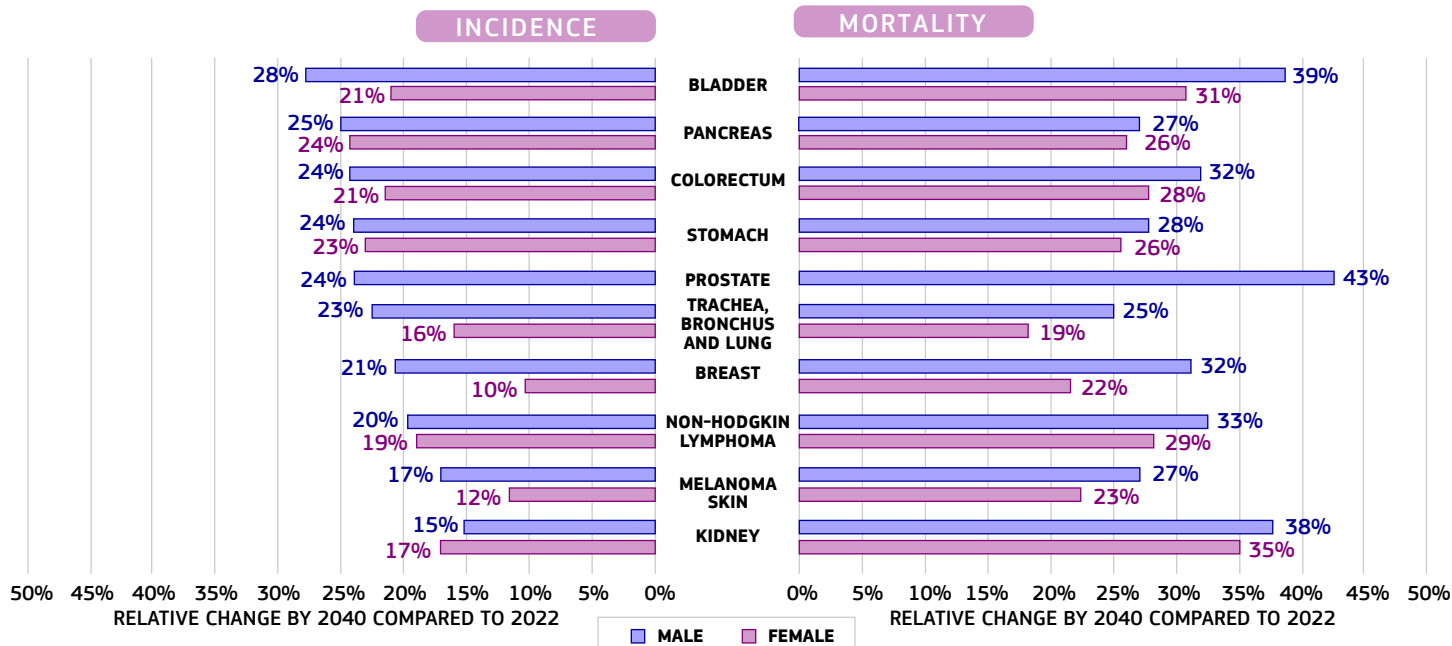
Estimated country-specific relative change of new cancer cases and cancer deaths by 2040, for both sexes together



Population ageing impacts cancer incidence differently across countries, with estimated increases in new cancer<sup>2</sup> diagnoses ranging from +2% in Latvia to +57% in Luxembourg. The effect of population ageing is stronger on cancer<sup>2</sup> mortality and varies also widely among countries, from +6% in Bulgaria to +71% in Iceland.

## VARIABILITY BY CANCER

Estimated cancer-specific relative change of new cancer cases and cancer deaths by 2040 for the most commonly diagnosed cancers in 2022, by sex



The impact of population ageing on 2040 cancer incidence of most commonly diagnosed cancers is biggest on bladder cancer cases in men (+28%), and on pancreatic cancer cases (+24%) in women. Stronger increments are visible for mortality, where the biggest impact is on prostate cancer deaths (+43%), and it is between +20% and +40% increase for the other most commonly diagnosed tumour types.

Cancer incidence and mortality are affected by many factors, including cancer risk factors and diagnostic intensity such as screening programmes. Population ageing plays a key role too.



### European Cancer Information System (ECIS)

The 2022 cancer incidence and mortality estimates are the outcome of a collaborative project between the European Commission's [Joint Research Centre \(JRC\)](#) and the [International Agency for Research on Cancer \(IARC\)](#), the specialised cancer agency of the [World Health Organization](#), in collaboration with the [European Network of Cancer Registries \(ENCR\)](#).

<sup>1</sup> Iceland, Norway and Switzerland. Liechtenstein not included.

<sup>2</sup> All cancers but non-melanoma skin cancer.