

Prevalence by cancer type, nation, sex and year

Rounded numbers for complete (all-time) prevalence

All malignant neoplasms (excluding non-melanoma skin cancer)

Nation	Sex	2020	2025	2030	2040
		2,900,000	3,400,000	4,000,000	5,300,000
UK	Both	("almost 3	("almost 3.4	("almost 4	("almost 5.3
		million")	million")	million")	million")
UK	Male	1,300,000	1,500,000	1,800,000	2,300,000
UK	Female	1,600,000	1,900,000	2,200,000	3,000,000
England	Both	2,400,000	2,800,000	3,300,000	4,400,000
England	Male	1,100,000	1,200,000	1,500,000	1,900,000
England	Female	1,300,000	1,600,000	1,800,000	2,500,000
Northern Ireland	Both	82,000	97,000	114,000	150,000
Northern Ireland	Male	35,000	41,000	49,000	64,000
Northern Ireland	Female	47,000	55,000	65,000	87,000
Scotland	Both	250,000	300,000	350,000	460,000
Scotland	Male	110,000	130,000	150,000	190,000
Scotland	Female	150,000	170,000	200,000	270,000
Wales	Both	170,000	200,000	230,000	300,000
Wales	Male	70,000	90,000	100,000	130,000
Wales	Female	90,000	110,000	130,000	170,000

Colorectal

Nation	Sex	2020	2025	2030	2040
UK	Both	340,000	400,000	470,000	630,000
UK	Male	190,000	230,000	270,000	380,000
UK	Female	150,000	170,000	200,000	250,000
England	Both	280,000	330,000	390,000	520,000
England	Male	150,000	190,000	230,000	310,000
England	Female	120,000	140,000	160,000	210,000
Northern Ireland	Both	10,000	12,000	14,000	19,000
Northern Ireland	Male	5,000	7,000	8,000	11,000
Northern Ireland	Female	5,000	5,000	6,000	8,000
Scotland	Both	30,000	35,000	42,000	56,000
Scotland	Male	16,000	20,000	24,000	33,000
Scotland	Female	14,000	16,000	18,000	23,000
Wales	Both	19,000	22,000	27,000	36,000
Wales	Male	11,000	13,000	16,000	22,000
Wales	Female	8,000	9,000	11,000	14,000

Rounded numbers for 0-5 years prevalence (people diagnosed in the last 5 years)

2020	2025	2030	2040
1,100,000	1,200,000	1,400,000	1,800,000
500,000	600,000	700,000	800,000
600,000	600,000	700,000	900,000
900,000	1,000,000	1,200,000	1,500,000
400,000	500,000	600,000	700,000
500,000	500,000	600,000	800,000
28,000	32,000	37,000	45,000
13,000	15,000	17,000	21,000
15,000	17,000	19,000	24,000
90,000	100,000	120,000	140,000
40,000	50,000	50,000	70,000
50,000	50,000	60,000	80,000
60,000	70,000	80,000	90,000
30,000	30,000	40,000	50,000
30,000	30,000	40,000	50,000

2020	2025	2030	2040
140,000	160,000	190,000	240,000
80,000	100,000	110,000	150,000
60,000	70,000	80,000	90,000
120,000	140,000	160,000	200,000
70,000	80,000	100,000	120,000
50,000	60,000	60,000	80,000
4,000	5,000	5,000	7,000
2,000	3,000	3,000	4,000
2,000	2,000	2,000	3,000
11,000	13,000	15,000	18,000
6,000	7,000	9,000	11,000
5,000	5,000	6,000	7,000
8,000	9,000	11,000	13,000
5,000	6,000	7,000	9,000
3,000	4,000	4,000	5,000



Prevalence by cancer type, nation, sex and year

Rounded numbers for complete (all-time) prevalence

Lung

Lung					
Nation	Sex	2020	2025	2030	2040
UK	Both	90,000	100,000	120,000	160,000
UK	Male	40,000	40,000	40,000	40,000
UK	Female	50,000	60,000	80,000	120,000
England	Both	70,000	80,000	100,000	130,000
England	Male	30,000	30,000	30,000	30,000
England	Female	40,000	50,000	60,000	90,000
Northern Ireland	Both	2,600	3,000	3,500	4,600
Northern Ireland	Male	1,170	1,190	1,210	1,220
Northern Ireland	Female	1,430	1,790	2,250	3,370
Scotland	Both	9,000	11,000	13,000	17,000
Scotland	Male	4,100	4,100	4,200	4,200
Scotland	Female	5,300	6,600	8,300	12,500
Wales	Both	5,000	6,000	7,000	9,000
Wales	Male	2,220	2,260	2,300	2,320
Wales	Female	2,810	3,510	4,410	6,610

Prostate

Nation	Sex	2020	2025	2030	2040
UK	Male	500,000	600,000	700,000	1,000,000
England	Male	400,000	500,000	600,000	800,000
Northern Ireland	Male	12,000	15,000	18,000	24,000
Scotland	Male	33,000	40,000	48,000	65,000
Wales	Male	28,000	34,000	42,000	56,000

Breast (female only)

Nation	Sex	2020	2025	2030	2040
UK	Female	800,000	900,000	1,100,000	1,600,000
England	Female	640,000	800,000	900,000	1,300,000
Northern Ireland	Female	21,000	25,000	30,000	41,000
Scotland	Female	65,000	78,000	93,000	130,000
Wales	Female	42,000	51,000	61,000	85,000

Rounded numbers for 0-5 years prevalence (people diagnosed in the last 5 years)

2020	2025	2030	2040
60,000	70,000	80,000	100,000
30,000	30,000	30,000	30,000
40,000	40,000	50,000	70,000
50,000	60,000	70,000	80,000
20,000	20,000	20,000	20,000
30,000	30,000	40,000	60,000
1,800	2,000	2,300	2,900
800	800	810	770
1,000	1,240	1,520	2,160
6,000	7,000	8,000	10,000
2,500	2,600	2,600	2,500
3,600	4,400	5,400	7,700
3,000	4,000	4,000	5,000
1,450	1,470	1,480	1,410
1,850	2,270	2,790	3,950

2020	2025	2030	2040
200,000	200,000	300,000	300,000
200,000	200,000	200,000	300,000
5,000	6,000	6,000	7,000
14,000	15,000	17,000	20,000
12,000	13,000	15,000	17,000

2020	2025	2030	2040	
240,000	300,000	300,000	400,000	
200,000	200,000	300,000	400,000	
6,000	7,000	8,000	11,000	
20,000	23,000	26,000	34,000	
13,000	15,000	18,000	23,000	



Methodological Explanation

When considering cancer prevalence, it's important to stress the difference between observed and complete prevalence data:

Observed prevalence refers to the number of people diagnosed with cancer during a specific time period (usually, 20 or more years) who are still alive at a specific time point, also known as the "index date".

Complete prevalence represents an estimate, based on statistically modelling, of the total number of people ever diagnosed with cancer who are still alive on the "index date".

The updated figures of complete cancer prevalence contained in this document are based on the following published measures of observed cancer prevalence for each nation, in the UK:

England: Cancer prevalence in England: 23 year prevalence (1995-2017), by Transforming Cancer Services Team for London (TCST), NHS and National Cancer Registry and Analysis Service (NCRAS), PHE.

Northern Ireland: <u>2017 cancer prevalence data: 25-year prevalence (1993-2017)</u>, by Northern Ireland Cancer Registry (NICR), Queen's University Belfast.

Scotland: <u>Prevalence of cancer in Scotland: 20-year prevalence (1998-2017)</u>, by Scottish Cancer Registry, Information Services Division (ISD).

Wales: Local Cancer Intelligence (LCI) Wales: 21-year prevalence (1995-2015), provided by Welsh Cancer Intelligence and Surveillance Unit (WCISU) and published by Macmillan Cancer Support.

The figures for the oldest prevalence groups for time since diagnosis available (20 to 23 years for England, 15 to 25 for Northern Ireland, 10 to 20 for Scotland and 10 to 21 for Wales) were extracted from each of these datasets. Through the complete cancer prevalence by time since diagnosis for 2013 from the Macmillan-NCRAS Cancer Prevalence Project, proportions between the oldest prevalence groups and the remaining population living with cancer (between 20, 21, 23 and 25, depending on the nation considered, and 66 years since diagnosis) were calculated for each cancer type, sex and nation. This was applied to the figures to produce as current as possible estimates of complete cancer prevalence based on the available observed numbers.

This process was carried out for all cancers combined (excluding non-melanoma skin cancer), female breast, prostate, colorectal and lung cancer.

For each of these calculations of complete cancer prevalence, predictive estimates were then produced for 2020 and following years. These were based on UK growth rates in the first scenario of the prevalence projections from Maddams et al (2012), using an exponential curve matching known data points. Growth rates were applied to individual cancer types and genders for 0 to 5 and all years of time since diagnosis.

This method uses the most recent available data to estimate the population diagnosed with cancer in the past, alive in 2020 and into the future. Measures of observed cancer prevalence are more accurate but do not include those who were diagnosed with cancer more than 20-25 years ago. Observed prevalence is also only currently available up to 2015 or 2017, as there is a delay in its compilation due to the process of cancer registration. Our estimates of complete prevalence are heavily rounded as they are based on multiple assumptions, such as the UK growth rates predicted by Maddams et al. (2012) are still relevant and will apply to each nation equally.