

---

# Impact of Covid-19 on incidence of brain tumours in Northern Ireland

(A comparison between April-December of 2020 and 2018-2019)

---

## Further information

Further information is available at: [www.qub.ac.uk/research-centres/nicr](http://www.qub.ac.uk/research-centres/nicr)

**Phone:** +44 (0)28 9097 6028

**e-mail:** [nicr@qub.ac.uk](mailto:nicr@qub.ac.uk)

## Acknowledgements

The Northern Ireland Cancer Registry (NICR) is funded by the Public Health Agency and is based in Queen's University, Belfast.

NICR uses data provided by patients and collected by the health service as part of their care and support.

The incidence, prevalence and survival statistics in this publication are designated as official statistics signifying that they comply with the Code of Practice for Official Statistics.



# INCIDENCE

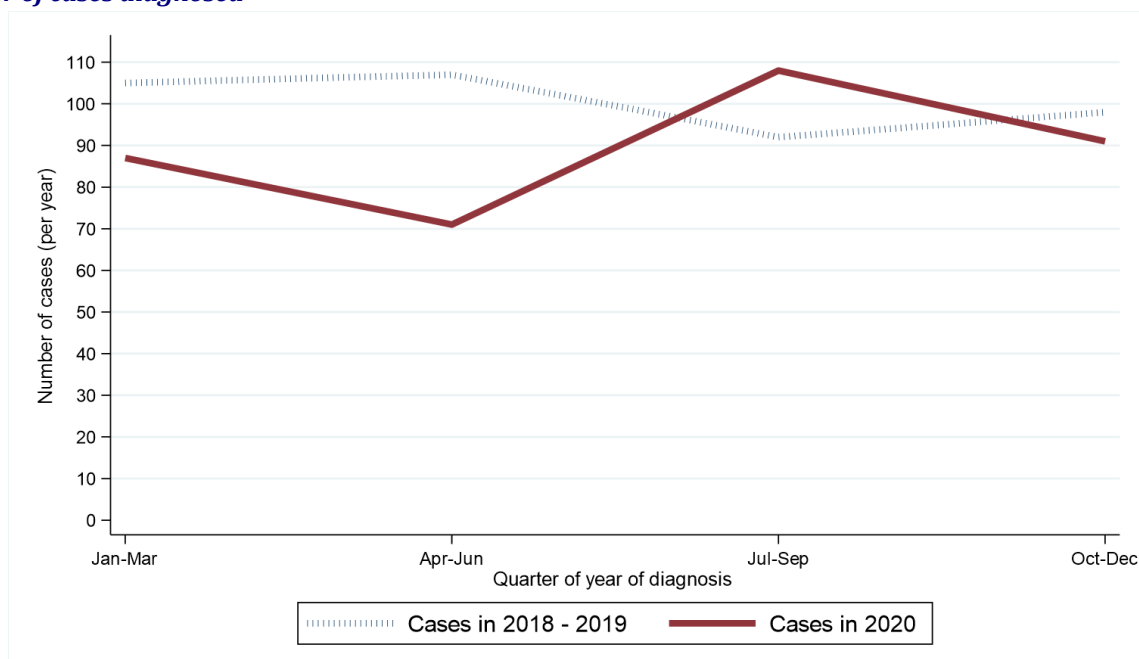
During the April-December period when Covid-19 was present the number of brain tumour cases diagnosed decreased by 8.8% (26 patients) from 296 per year in 2018 - 2019 to 270 in 2020.

**Table 1: Number of brain tumour cases diagnosed in 2018-2020 by quarter and year of diagnosis**

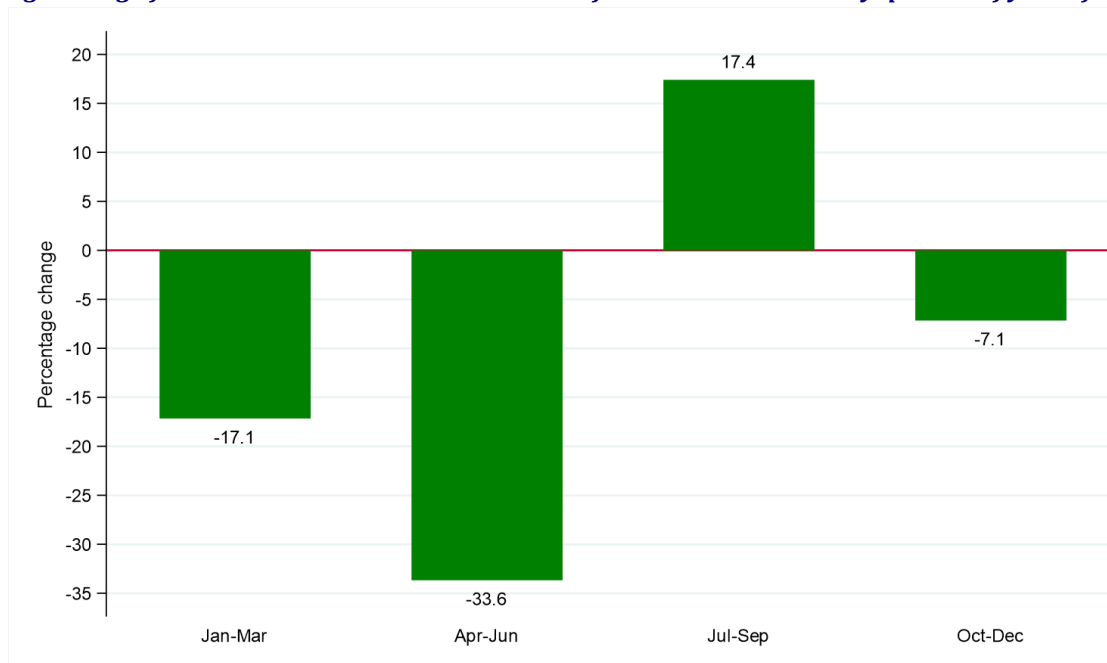
Period of diagnosis	Annual total	Quarter of year diagnosed			
		Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec
2018-2019*	401	105	107	92	98
2020	357	87	71	108	91

\* Average cases per year rounded to the nearest integer. Row sums may thus differ slightly from the total.

**Figure 1: Number of brain tumour cases diagnosed in 2018-2020 by quarter and year of diagnosis**  
**(a) Number of cases diagnosed**



**(b) Percentage change from 2018-2019 to 2020 in number of brain tumour cases by quarter of year of diagnosis**



## GENDER

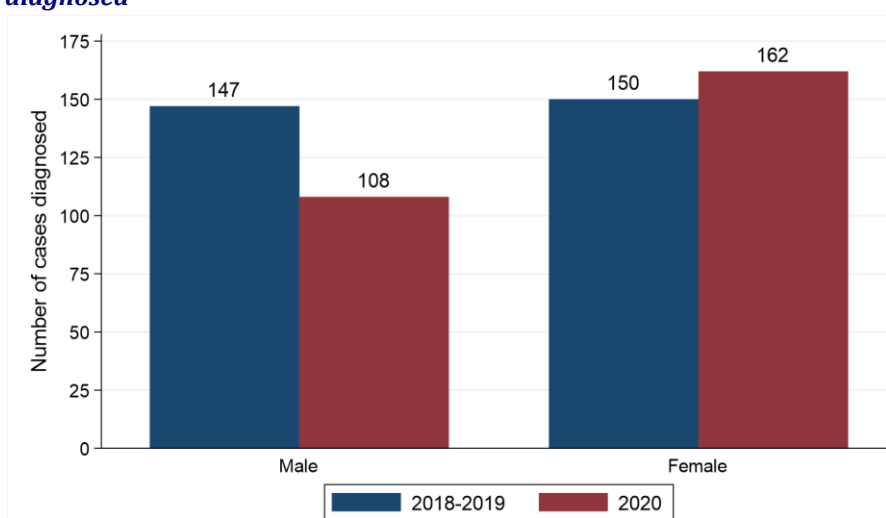
Excluding the first quarter of each year among males the number of brain tumour cases diagnosed decreased by 26.5% from 147 per year in 2018 - 2019 to 108 in 2020. Between the same two time periods the number of cases among females increased by 8.0% from 150 per year to 162. The change in case distribution by gender between 2018 - 2019 and 2020 was statistically significant ( $p = 0.010$ ).

**Table 2: Number and proportion of brain tumour cases diagnosed in April-December of 2018-2020 by gender and period of diagnosis**

Gender	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
Male	147 (49.7%)	108 (40.0%)	-26.5% (39 patients)
Female	150 (50.7%)	162 (60.0%)	+8.0% (12 patients)
All persons	296	270	-8.8% (26 patients)

\* Average cases per year rounded to the nearest integer. Column sums may thus differ slightly from the total.

**Figure 2: Brain tumour cases diagnosed in April-December of 2018-2020 by gender and period of diagnosis**  
**(a) Number of cases diagnosed**



**(b) Percentage change from 2018-2019 to 2020 in number of brain tumour cases by gender**



## AGE

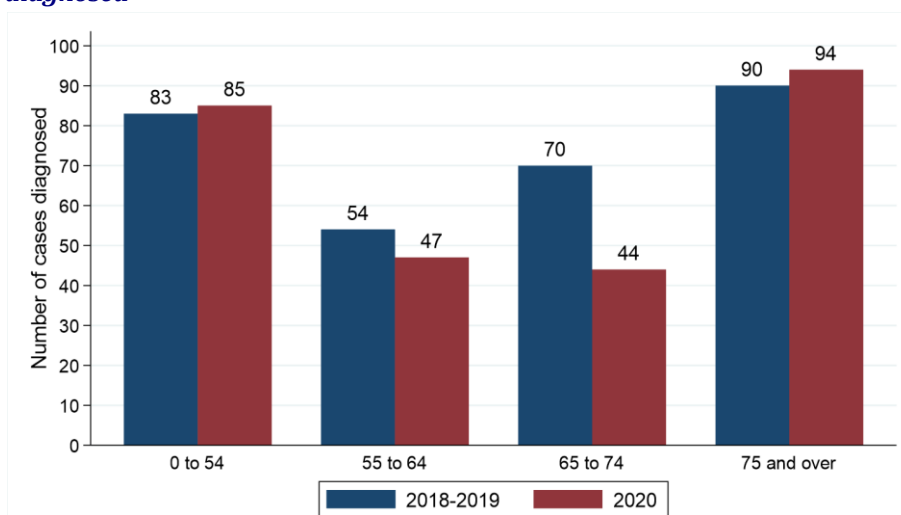
Excluding the first quarter of each year among people aged 65 to 74 the number of brain tumour cases diagnosed decreased by 37.1% from 70 per year in 2018 - 2019 to 44 in 2020. Between the same two time periods, the number of cases among people aged 75 and over increased by 4.4% from 90 per year to 94. The change in case distribution by age between 2018 - 2019 and 2020 was not statistically significant.

**Table 3: Number and proportion of brain tumour cases diagnosed in April-December of 2018-2020 by age and period of diagnosis**

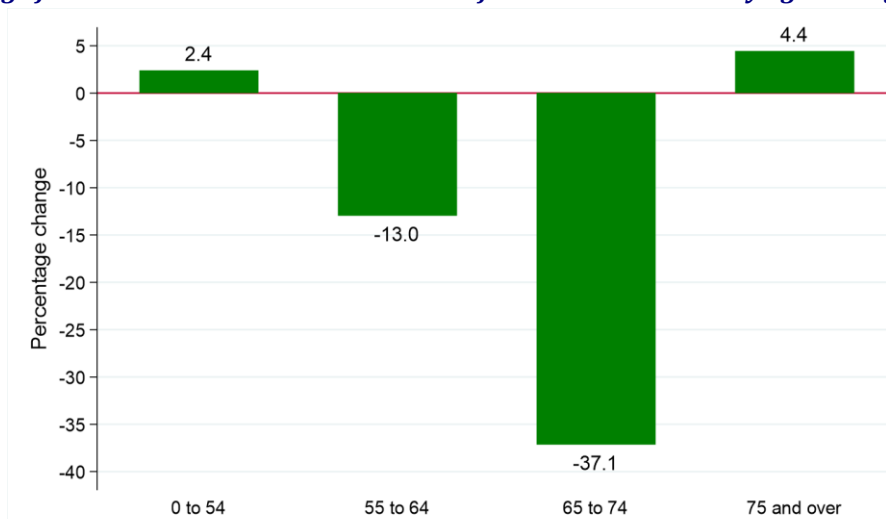
Age group	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
0 to 54	83 (28.0%)	85 (31.5%)	+2.4% (2 patients)
55 to 64	54 (18.2%)	47 (17.4%)	-13.0% (7 patients)
65 to 74	70 (23.6%)	44 (16.3%)	-37.1% (26 patients)
75 and over	90 (30.4%)	94 (34.8%)	+4.4% (4 patients)
All ages	296	270	-8.8% (26 patients)

\* Average cases per year rounded to the nearest integer. Column sums may thus differ slightly from the total.

**Figure 3: Brain tumour cases diagnosed in April-December of 2018-2020 by age and period of diagnosis**  
(a) Number of cases diagnosed



(b) Percentage change from 2018-2019 to 2020 in number of brain tumour cases by age at diagnosis



## HEALTH AND SOCIAL CARE TRUST

Excluding the first quarter of each year among residents of Western HSCT the number of brain tumour cases diagnosed decreased by 20.0% from 50 per year in 2018 - 2019 to 40 in 2020. Between the same two time periods the number of cases among residents of Southern HSCT increased by 3.9% from 51 per year to 53. The change in case distribution by HSCT between 2018 - 2019 and 2020 was not statistically significant.

**Table 4: Number and proportion of brain tumour cases diagnosed in April-December of 2018-2020 by Health and Social Care Trust and period of diagnosis**

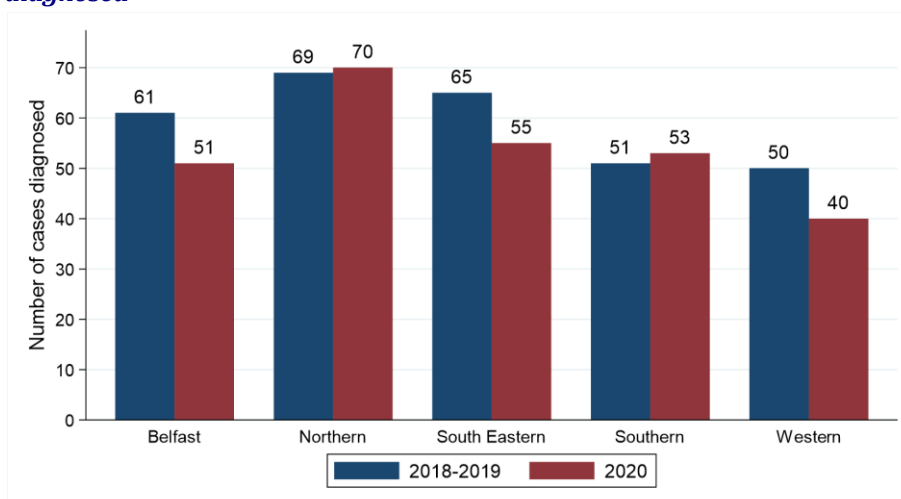
Health and Social Care Trust	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
Belfast HSCT	61 (20.6%)	51 (18.9%)	-16.4% (10 patients)
Northern HSCT	69 (23.3%)	70 (25.9%)	+1.4% (1 patient)
South Eastern HSCT	65 (22.0%)	55 (20.4%)	-15.4% (10 patients)
Southern HSCT	51 (17.2%)	53 (19.6%)	+3.9% (2 patients)
Western HSCT	50 (16.9%)	40 (14.8%)	-20.0% (10 patients)
Northern Ireland	296	270	-8.8% (26 patients)

\* Average cases per year rounded to the nearest integer. Column sums may thus differ slightly from the total.

Note: Cases with unknown Health and Social Care Trust are included in totals

**Figure 4: Brain tumour cases diagnosed in April-December of 2018-2020 by Health and Social Care Trust and period of diagnosis**

(a) Number of cases diagnosed



(b) Percentage change from 2018-2019 to 2020 in number of brain tumour cases by Health and Social Care Trust



## DEPRIVATION

Excluding the first quarter of each year among residents of the most deprived areas the number of brain tumour cases diagnosed decreased by 17.0% from 53 per year in 2018 - 2019 to 44 in 2020. Between the same two time periods the number of cases among residents of the least deprived areas increased by 1.8% from 56 per year to 57. The change in case distribution by deprivation quintile between 2018 - 2019 and 2020 was not statistically significant.

**Table 5: Number and proportion of brain tumour cases diagnosed in April-December of 2018-2020 by deprivation quintile and period of diagnosis**

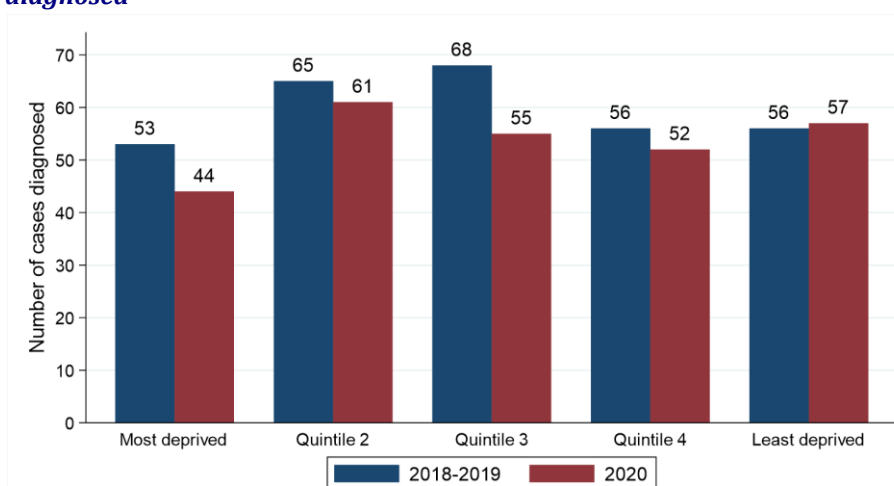
Deprivation quintile	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
Most deprived	53 (17.9%)	44 (16.3%)	-17.0% (9 patients)
Quintile 2	65 (22.0%)	61 (22.6%)	-6.2% (4 patients)
Quintile 3	68 (23.0%)	55 (20.4%)	-19.1% (13 patients)
Quintile 4	56 (18.9%)	52 (19.3%)	-7.1% (4 patients)
Least deprived	56 (18.9%)	57 (21.1%)	+1.8% (1 patient)
Northern Ireland	296	270	-8.8% (26 patients)

\* Average cases per year rounded to the nearest integer. Column sums may thus differ slightly from the total.

Note: Cases with unknown deprivation quintile are included in totals

**Figure 5: Brain tumour cases diagnosed in April-December of 2018-2020 by deprivation quintile and period of diagnosis**

**(a) Number of cases diagnosed**



**(b) Percentage change from 2018-2019 to 2020 in number of brain tumour cases by deprivation quintile**

