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# Impact of Covid-19 on incidence of cancer among children in Northern Ireland

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

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## Further information

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

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## Acknowledgements

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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

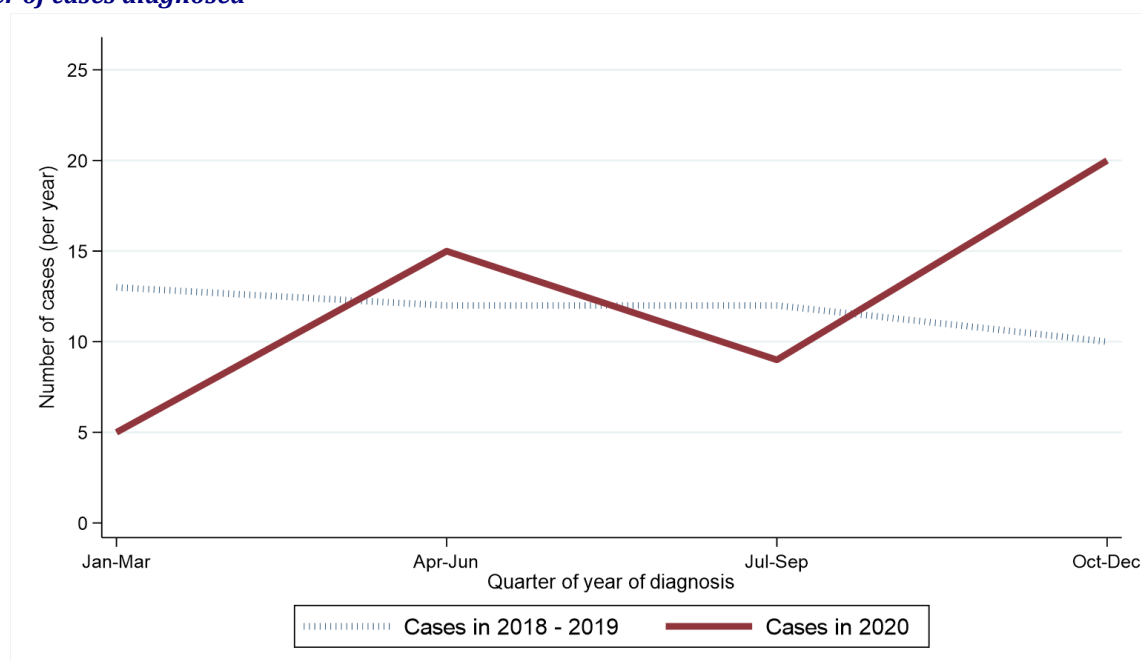
During the April-December period when Covid-19 was present the number of cases of childhood cancer diagnosed increased by 29.4% (10 patients) from 34 per year in 2018 - 2019 to 44 in 2020.

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

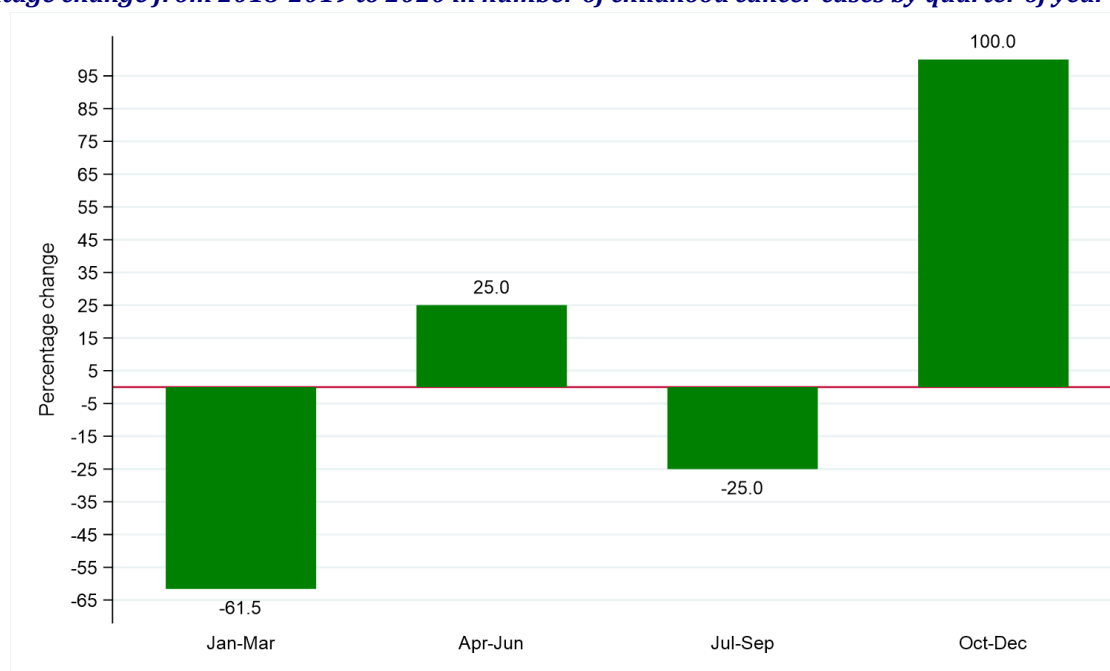
Period of diagnosis	Annual total	Quarter of year diagnosed			
		Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec
2018-2019*	46	13	12	12	10
2020	49	5	15	9	20

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

**Figure 1: Number of childhood cancer 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 childhood cancer cases by quarter of year of diagnosis



## GENDER

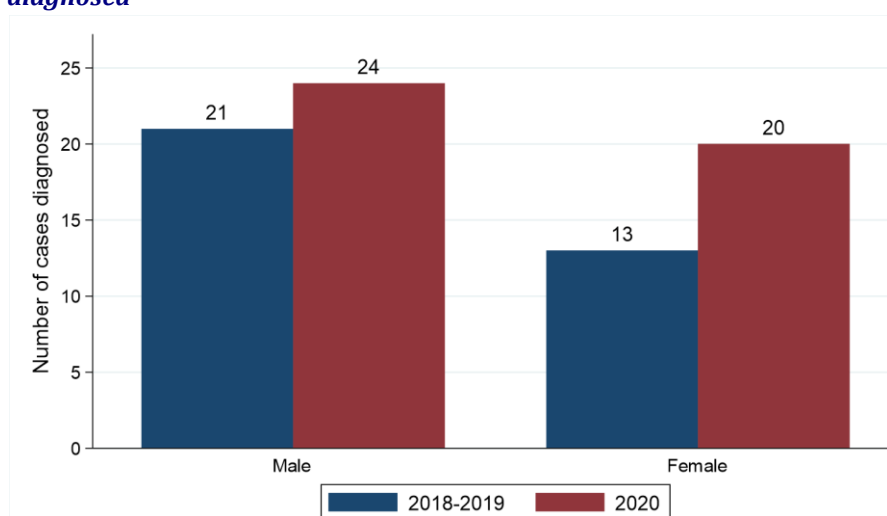
Excluding the first quarter of each year among males the number of cases of childhood cancer diagnosed increased by 14.3% from 21 per year in 2018 - 2019 to 24 in 2020. Between the same two time periods the number of cases among females increased by 53.8% from 13 per year to 20. The change in case distribution by gender between 2018 - 2019 and 2020 was not statistically significant.

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

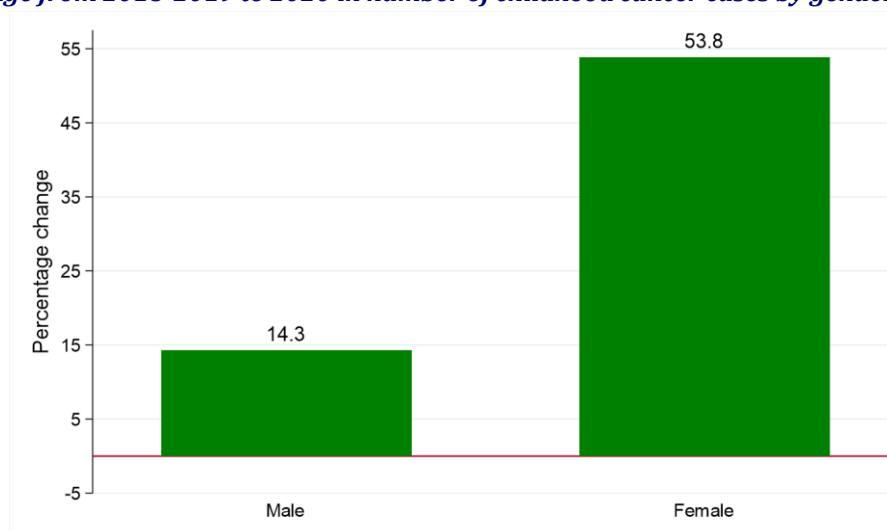
Gender	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
<b>Male</b>	21 (61.8%)	24 (54.5%)	+14.3% (3 patients)
<b>Female</b>	13 (38.2%)	20 (45.5%)	+53.8% (7 patients)
<b>All persons</b>	34	44	+29.4% (10 patients)

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

**Figure 2: Childhood cancer 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 childhood cancer cases by gender



## HEALTH AND SOCIAL CARE TRUST

Excluding the first quarter of each year among residents of Southern HSCT the number of cases of childhood cancer diagnosed decreased by 14.3% from 7 per year in 2018 - 2019 to 6 in 2020. Between the same two time periods the number of cases among residents of Belfast HSCT increased by 116.7% from 6 per year to 13. The change in case distribution by HSCT between 2018 - 2019 and 2020 was not statistically significant.

**Table 3: Number and proportion of childhood cancer cases diagnosed in April-December of 2018-2020 by Health and Social Care Trust and period of diagnosis**

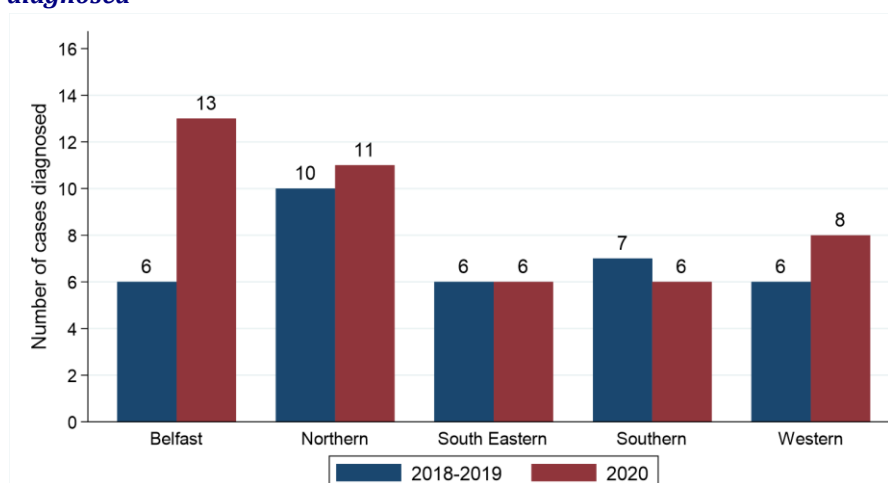
Health and Social Care Trust	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
Belfast HSCT	6 (17.6%)	13 (29.5%)	+116.7% (7 patients)
Northern HSCT	10 (29.4%)	11 (25.0%)	+10.0% (1 patient)
South Eastern HSCT	6 (17.6%)	6 (13.6%)	0.0% (0 patients)
Southern HSCT	7 (20.6%)	6 (13.6%)	-14.3% (1 patient)
Western HSCT	6 (17.6%)	8 (18.2%)	+33.3% (2 patients)
Northern Ireland	34	44	+29.4% (10 patients)

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

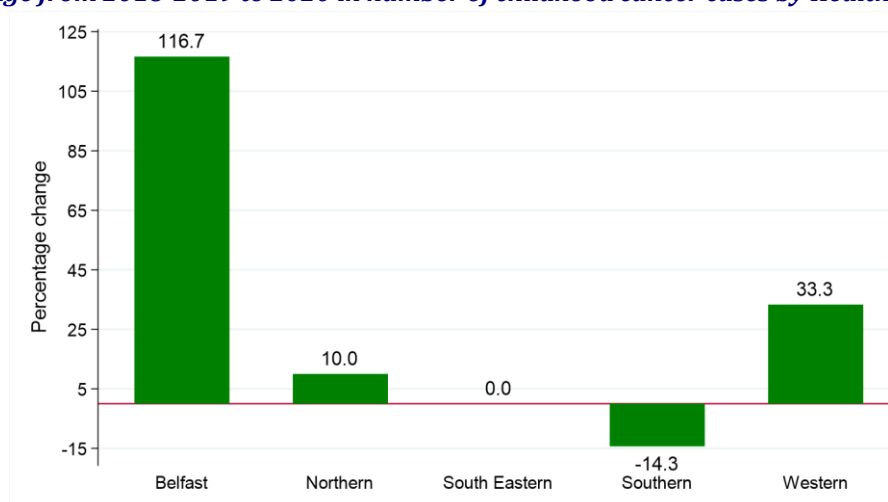
Note: Cases with unknown Health and Social Care Trust are included in totals

**Figure 3: Childhood cancer 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 childhood cancer 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 cases of childhood cancer diagnosed decreased by 16.7% from 6 per year in 2018 - 2019 to 5 in 2020. Between the same two time periods the number of cases among residents of the least deprived areas increased by 275.0% from 4 per year to 15. The change in case distribution by deprivation quintile between 2018 - 2019 and 2020 was statistically significant ( $p = 0.008$ ).

**Table 4: Number and proportion of childhood cancer cases diagnosed in April-December of 2018-2020 by deprivation quintile and period of diagnosis**

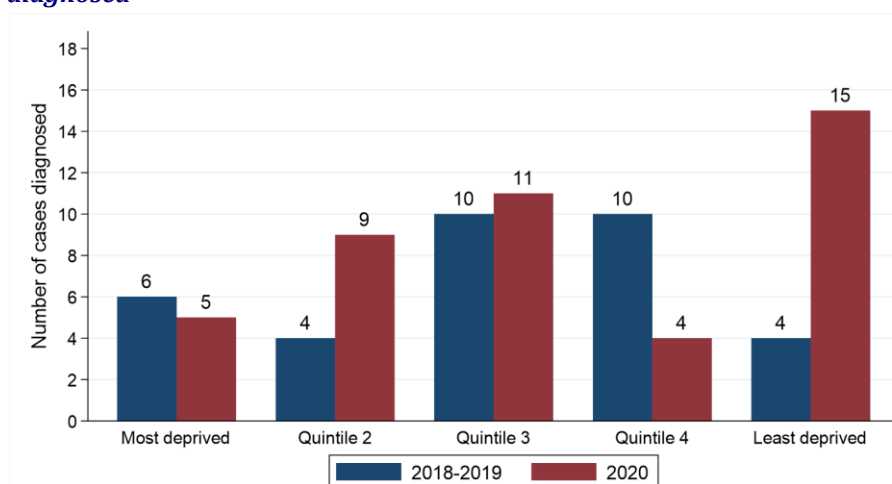
Deprivation quintile	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
<b>Most deprived</b>	6 (17.6%)	5 (11.4%)	-16.7% (1 patient)
<b>Quintile 2</b>	4 (11.8%)	9 (20.5%)	+125.0% (5 patients)
<b>Quintile 3</b>	10 (29.4%)	11 (25.0%)	+10.0% (1 patient)
<b>Quintile 4</b>	10 (29.4%)	4 (9.1%)	-60.0% (6 patients)
<b>Least deprived</b>	4 (11.8%)	15 (34.1%)	+275.0% (11 patients)
<b>Northern Ireland</b>	34	44	+29.4% (10 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 4: Childhood cancer 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 childhood cancer cases by deprivation quintile**

