Underlying conditions in confirmed cases of COVID-19 in Ireland

Report prepared by HPSC on 14/12/2020

As part of the public health follow-up of confirmed cases of COVID-19, information is routinely collected on whether a case has the following underlying medical conditions: chronic heart disease, chronic neurological disease, chronic respiratory disease, chronic kidney disease, chronic liver disease, hypertension, asthma requiring medication, immunodeficiency, diabetes mellitus, BMI ≥ 40, cancer/malignancy, pregnancy and/or other comorbidities. Data for this report were extracted from Computerised Infectious Disease Reporting (CIDR) system up to midnight Saturday December 12th on 14/12/2020 at 09:15.

Up to midnight 12/12/2020, there were 76,185 confirmed cases of COVID-19;

- 58.0% (n=44,254) had no underlying medical condition
- 25.7% (n=19,605) had an underlying medical condition and
- 16.2% (n=12,326) were unknown/not reported

Of those with an underlying condition reported, 46.8% (n=9,167) had one underlying medical condition, 22.1% (n=4,327) had two underlying medical conditions; and 14.2% (n=2,785) had three of more underlying medical conditions reported. A further 16.9% (n=3,326) had no specific underlying medical condition reported.

Table 1 describes the number and proportion of individuals with and without underlying medical conditions in different settings.

Table 2 describes the number and proportion of individuals with and without underlying medical conditions by age group.

Table 3 lists specific underlying medical conditions and the number and proportion in different settings (as a proportion of cases where there is an underlying condition). The five most commonly reported conditions overall were, chronic respiratory disease, hypertension, chronic heart disease, diabetes mellitus and chronic neurological disease.

In addition to the conditions listed in Table 3, 8,105 cases were reported to have "other co-morbidity" and 458 cases were reported to be pregnant.

Table 1: Underlying medical conditions in individuals with confirmed COVID-19 by setting, up to midnight 12/12/2020

	Community		Acute Hospital		All settings		ICU		Died	
	Number	%	Number	%	Number	%	Number	%	Number	%
Underlying condition	16,162	22.8%	3,443	63.3%	19,605	25.7%	568	88.6%	1,742	93.4%
No underlying conditions	43,037	60.8%	1,217	22.4%	44,254	58.1%	73	11.4%	50	2.7%
Unknown	11,551	16.3%	775	14.3%	12,326	16.2%	0	0.0%	74	4.0%
Total	**70,750**	**100.0%**	**5,435**	**100.0%**	**76,185**	**100.0%**	**641**	**100.0%**	**1,866**	**100.0%**

Table 2: Underlying medical conditions in individuals with confirmed COVID-19 by age group, up to midnight 12/12/2020

	0-14 yrs		15-24 yrs		25-34 yrs		35-44 yrs		45-54 yrs		55-64 yrs		65-74 yrs		75+ yrs		Unk		Total	
Underlying condition	617	8.7%	1,586	12.0%	2,162	16.9%	2,479	20.8%	3,245	28.2%	2,992	36.9%	2,286	52.5%	4,234	59.4%	4	14.3%	19,605	25.7%
No underlying condition	5,782	81.5%	9,901	74.8%	8,634	67.5%	7,575	63.4%	6,418	55.8%	3,729	46.0%	1,302	29.9%	907	12.7%	6	21.4%	44,254	58.1%
Unknown	699	9.8%	1,755	13.3%	2,000	15.6%	1,889	15.8%	1,836	16.0%	1,379	17.0%	768	17.6%	1,982	27.8%	18	64.3%	12,326	16.2%
Total	**7,098**	**100.0%**	**13,242**	**100.0%**	**12,796**	**100.0%**	**11,943**	**100.0%**	**11,499**	**100.0%**	**8,100**	**100.0%**	**4,356**	**100.0%**	**7,123**	**100.0%**	**28**	**100.0%**	**76,185**	**100.0%**

Table 3: Specific underlying medical conditions in individuals with confirmed COVID-19 by setting (as a proportion of cases who have an underlying condition), up to midnight 12/12/2020

	Community (n=16,162)		Acute Hospital (n=3,443)		All settings (n=19,605)		ICU (n=641)		Died (n=1,866)	
Chronic respiratory disease	3,946	24.4%	889	25.8%	4,835	24.7%	172	26.8%	339	18.2%
Hypertension	3,020	18.7%	895	26.0%	3,915	20.0%	231	36.0%	362	19.4%
Chronic heart disease	2,507	15.5%	1,353	39.3%	3,860	19.7%	297	46.3%	770	41.3%
Diabetes mellitus	1,548	9.6%	714	20.7%	2,262	11.5%	176	27.5%	289	15.5%
Chronic neurological disease	1,311	8.1%	517	15.0%	1,828	9.3%	30	4.7%	602	32.3%
Cancer/malignancy	796	4.9%	527	15.3%	1323	6.7%	83	12.9%	296	15.9%
Chronic kidney disease	527	3.3%	392	11.4%	919	4.7%	61	9.5%	219	11.7%
Asthma requiring medication	393	2.4%	196	5.7%	589	3.0%	80	12.5%	43	2.3%
Immunodeficiency including HIV	545	3.4%	167	4.9%	712	3.6%	43	6.7%	50	2.7%
BMI ≥ 40	175	1.1%	167	4.9%	342	1.7%	113	17.6%	37	2.0%
Chronic liver disease	187	1.2%	105	3.0%	292	1.5%	21	3.3%	35	1.9%

Technical Notes

- Data up to midnight Saturday December 12th were extracted from Computerised Infectious Disease Reporting (CIDR) system at 09:15 on 14/12/2020.
- Data provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.
- Acute Hospital refers to hospital in-patients and includes ICU cases; Community refers to all other cases
- Cases may have more than one underlying medical condition and therefore column totals in Table 3 will not add up to the number of cases in each category

Acknowledgements

Sincere thanks are extended to all those who are participating in the collection of data and reporting of data used in this report. This includes the HSE COVID-19 Contact Management Programme (CMP), staff in ICU units, notifying clinicians, laboratory staff, public health doctors, nurses, surveillance scientists, microbiologists and administrative staff.

Prepared by HPSC Epi Team on 14/12/2020.