Report of the profile of COVID-19 cases in healthcare workers in Ireland

Report prepared by HPSC on 31/08/2020
Note: Data are provisional

Summary

Healthcare worker (HCW) status is determined both by self-classification and workplace. The definition includes anyone who self- identifies as a HCW irrespective of where they work. In addition, all staff that work in any healthcare facility (includes cleaners, household staff etc.) are classified as HCWs. The category includes healthcare workers employed both by public and private providers.

This report includes data as of 31st August 2020 at 9:15 am for events created on CIDR up to midnight Saturday 29th August 2020.

Characteristic of HCW COVID-19 cases	Number	%
Total number of COVID-19 cases	29227	-
Total number of HCW cases	8691	29.7
Number of new HCW cases reported between 23 – 29 August	65	-
Median age (IQR)	41 (31-50) years	-
Total number hospitalised	325	3.7
The median age (IQR) of hospital inpatient	47 (34-54) years	
Total number admitted to ICU	54	17.0*
The median age (IQR) of HCW in ICU	51 (44-60) years	-
Total number of deaths	8**	0.09
The median age (range) for deaths	54 (30-68) years	-

*This relates to hospitalised cases and it is 0.6% of all HCW cases.
**Seven confirmed and 1 probable COVID-19 case.

There was a total of 29227 COVID-19 cases reported as of 29/08/2020 12.00 midnight, 8691 (29.7%) were healthcare workers (HCWs).

The median age of COVID-19 case HCWs is 41 years (range 17-78 years). The proportion of females is disproportionately high (73.9%) among HCW COVID-19 cases compared to non-HCW COVID-19 cases (48.6%), most likely due to some HCW specialities e.g. nursing, being female dominated. The majority (58.3%) of notified HCWs were from the HSE East. CIDR (Computerised Infectious Diseases Reporting) is a dynamic information system and data are continuously validated and updated.
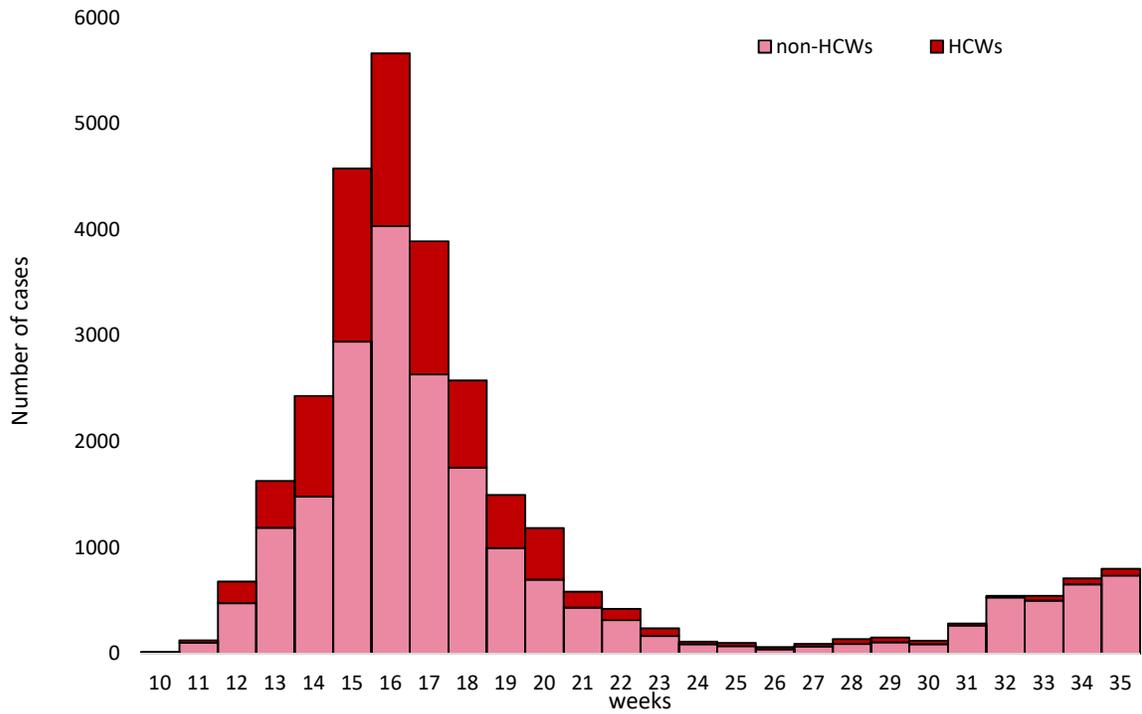
This report includes all HCW COVID-19 cases (n=8691) reported to HPSC, including confirmed, probable and possible cases. There are 63 (0.7%) probable or possible HCW COVID-19 cases included in the report.

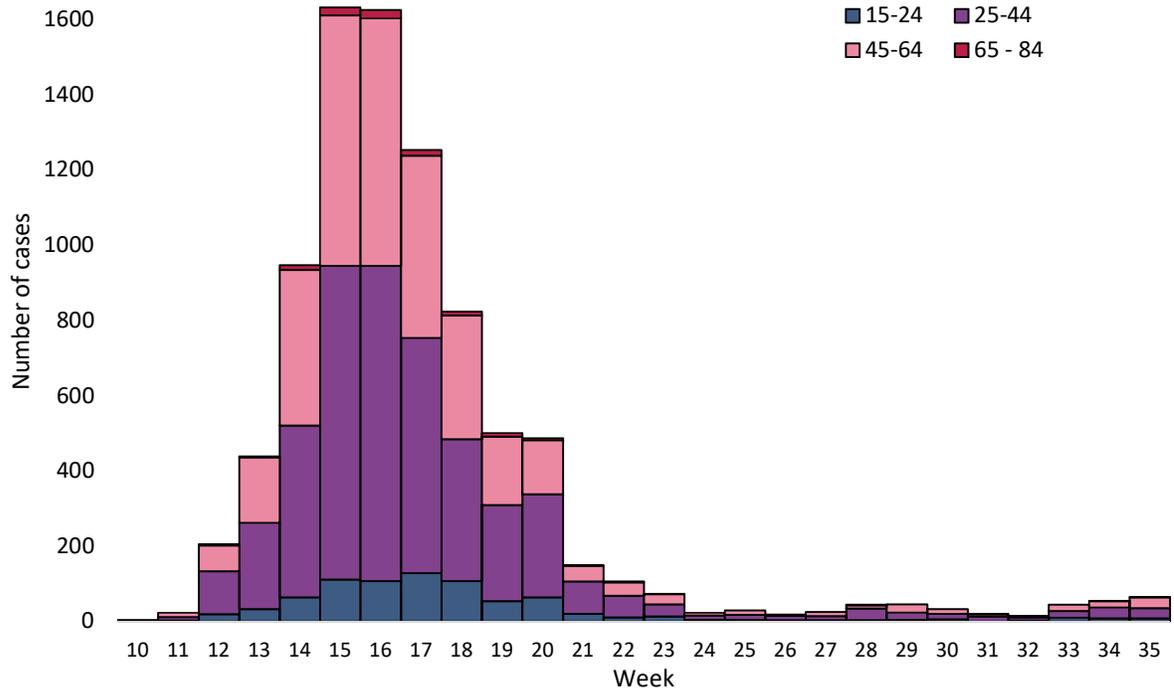**Table 1**. **Number and proportion of HCW COVID-19 cases by epidemiological week**

Epi Week (Calendar Date)	Number of HCWs	Total number of cases*	Proportion of HCWs (%)
10 (1 – 7, March)	3	16	18.8
11 (8 – 14, March)	23	128	18.0
12 (15 – 21, March)	205	683	30.0
13 (22 – 28, March)	441	1631	27.0
14 (29 March - 4 April)	950	2433	39.0
15 (5 – 11, April)	1633	4579	35.7
16 (12 – 18, April)	1626	5664	28.7
17 (19 - 25, April)	1255	3892	32.2
18 (26 April – 2 May)	824	2582	31.9
19 (3 –9 May)	501	1500	33.4
20 (10-16 May)	487	1187	41.0
21 (17-23 May)	149	585	25.5
22 (24-30 May)	106	425	24.9
23 (31 May - 6 June)	73	241	30.3
24 (7 – 13 June)	23	114	20.2
25 (14-20 June)	29	102	28.4
26 (21-27 June)	18	63	28.6
27 (28 June- 4 July)	25	94	26.6
28 (5-11 July)	44	139	31.7
29 (12- 18 July)	45	153	29.4
30 (19-25 July)	32	123	26.0
31 (26 July – 1 August)	20	286	7.0
32 (2 – 8 August)	15	546	2.7
33 (9 – 15 August)	44	546	8.1
34 (16 – 22 August)	55	712	7.7
35 (23-29 August)	65	803	8.1
Total	8691	29227	29.7

*including HCWs; confirmed, probable and possible cases.

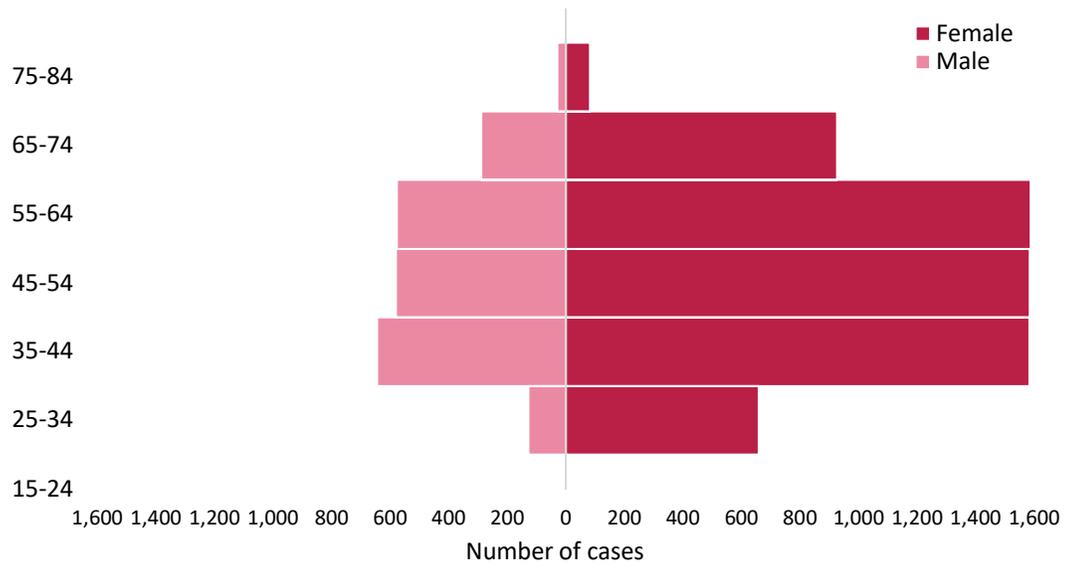**Figure 1**. Proportion of HCW and non-HCW COVID-19 cases by week in which case was notified (n= 29227)

Figure 2. Distribution of HCW COVID-19 cases by week in which case was notified * and age group (n=8682)

* Age was not available for 9 cases.

Figure 3. Distribution of HCW COVID-19 cases by age and sex (n=8668) *

* Age and sex were not available for 23 cases.

Table 2. Number and proportion of HCW COVID-19 cases by HSE area

HSE area	Number of HCWs cases	Proportion of all HCW cases (%)	Number of new HCW cases since last week
HSE E	5071	58.3%	49
HSE M	466	5.4%	8
HSE MW	379	4.4%	<5
HSE NE	1199	13.8%	7
HSE NW	311	3.6%	0
HSE SE	363	4.2%	0
HSE S	464	5.3%	0
HSE W	438	5.0%	0
Total	8691	100.0%	65

Table 3. Number and proportion of HCW COVID-19 cases by CHO area

CHO area	Number of HCWs cases	Proportion of all HCW cases (%)	Number of new HCW cases since last week
CHO1	838	9.6%	<5
CHO2	438	5.0%	0
CHO3	379	4.4%	<5
CHO4	464	5.3%	0
CHO5	363	4.2%	0
CHO6	935	10.7%	7
CHO7	1885	21.7%	30
CHO8	1138	13.1%	13
CHO9	2251	25.9%	12
Total	8691	100.0%	65

Table 4. Number and proportion of HCW COVID-19 cases by role

HCW Role	Number of HCWs cases	Proportion of all HCW cases (%)	Number of new HCW cases since last week
Nurse	2788	32.1%	10
Healthcare assistant	2326	26.8%	20
Doctor	540	6.2%	<5
Porter	98	1.1%	0
Other HCW	2041	23.40%	24
Not Specified	898	10.4%	8
Total	8691	100.0%	65

Table 5. Number and proportion of HCW COVID-19 cases linked to an outbreak by outbreak location

Outbreak location	Number of HCWs cases	Proportion of all HCW cases (%)	Number of new HCW cases since last week
Nursing home	2131	24.6%	10
Hospital	739	8.5%	0
Private house	748	8.6%	7
Residential institution	466	5.4%	10
Comm. Hosp/Long-stay unit	231	2.7%	0
Workplace	38	0.4%	<5
Travel related	30	0.3%	0
Extended family	19	0.2%	0
Community outbreak	20	0.2%	<5
Public house	2	0.0%	0
Restaurant / Cafe	3	0.0%	0
Hotel	1	0.0%	0
Other	18	0.2%	0
Not linked to an outbreak	4245	48.8%	34
Total	8691	100.0%	65

Table 6. Number and proportion of HCW COVID-19 cases with underlying medical conditions

Underlying clinical conditions	Number	Proportion (%)
Yes	3003	34.6%
No	4873	56.1%
Unknown	815	9.4%
Total	8691	100.0%

Table 7. Number of confirmed COVID-19 cases by WHO transmission classification*

Transmission classification*	Number	Proportion (%)
Community transmission - including possible community transmission**	1236	14.2%
Local transmission	7302	84.0
Travel related	153	1.8%
Total	8691	100.0%

*WHO definition of transmission classification is specified below:
- Community transmission is evidenced by the inability to relate confirmed cases through chains of transmission for a large number of cases, or by increasing positive tests through routine screening of sentinel samples.
- Local transmission indicates locations where the source of infection is within the reporting location.
- Imported cases only indicates locations where all cases have been acquired outside the location of reporting.
** Community transmission relates to those in table 11 below who are in the two categories community transmission and under investigation.

'Most likely source of transmission' is a composite variable created by combining several data fields on CIDR. The rate of HCWs with 'under investigation' transmission source category (n=857 9.8%) is expected to decrease due to continuous improvement of the transmission source variable algorithm and the completeness of surveillance data.

Table 8. Most likely source of transmission of COVID-19 in HCWs

Likely source of transmission	Number	Proportion (%)
Healthcare setting acquired: staff*	6289	72.4%
Close contact with a known confirmed case	1009	11.6%
Travel related	153	1.7%
Community transmission	379	4.4%
Healthcare setting acquired: patient	4	0.0%
Under investigation	857	9.8%
Total	8691	100.0%

*Includes HCWs with most likely source of transmission notified as 'Healthcare setting acquired: staff' AND HCWs with most likely source of transmission field not completed on CIDR who had close contact with a COVID-19 case in healthcare or workplace setting AND HCWs with most likely source of transmission field not completed on CIDR who are linked to an outbreak in a Comm. Hosp/Long-stay unit / Hospital / Nursing home.

Acknowledgements