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

Report prepared by HPSC on 27/07/2020

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 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 27th July 2020 at 9:15 am for events created on CIDR up to midnight Saturday 25th July 2020.

Characteristic of HCW COVID-19 cases	Number	%
Total number of COVID-19 cases	26343	-
Total number of HCW cases	8453	32.1
Number of new cases reported between 19 - 25 July	29	-
Median age (IQR)	41 (31-50) years	-
Total number hospitalised	324	3.8
The median age (IQR) of hospital inpatient	46 (34-54) years	
Total number admitted to ICU	52	16.0*
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 26343 COVID-19 cases reported as of 25/07/2020 12.00 midnight, 8453 (32.1%) were healthcare workers (HCWs). One additional confirmed HCW death was reported in week 30.

The median age of COVID-19 case HCWs is 41 years (range 17-81 years). The proportion of females is disproportionately high (74.0%) among HCW COVID-19 cases compared to non-HCW COVID-19 cases (49.1%), 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=8453) 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)	206	683	30.2
13 (22 – 28, March)	440	1631	27.0
14 (29 March - 4 April)	940	2433	38.6
15 (5 – 11, April)	1627	4580	35.5
16 (12 – 18, April)	1623	5664	28.7
17 (19 - 25, April)	1246	3892	32.0
18 (26 April – 2 May)	820	2584	31.7
19 (3 –9 May)	499	1500	33.3
20 (10-16 May)	487	1187	41.0
21 (17-23 May)	148	585	25.3
22 (24-30 May)	105	425	24.7
23 (31 May - 6 June)	72	243	29.6
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)	46	156	29.5
30 (19-25 July)	29	124	23.4
Total	8453	26343	32.1

*including HCWs; confirmed, probable and possible cases.

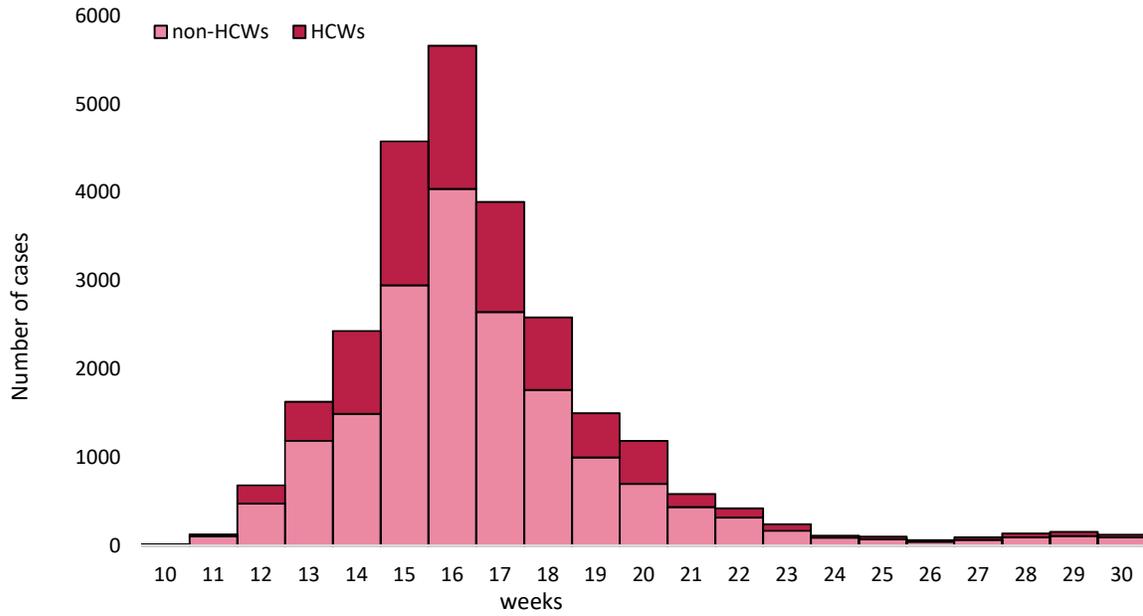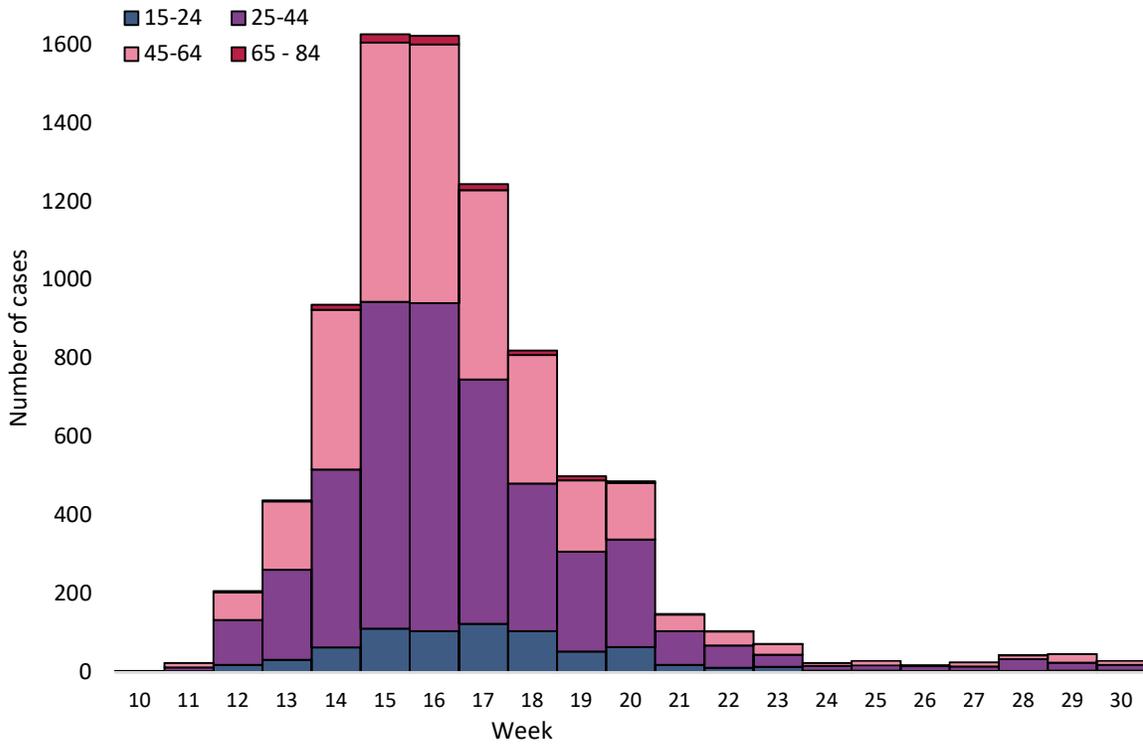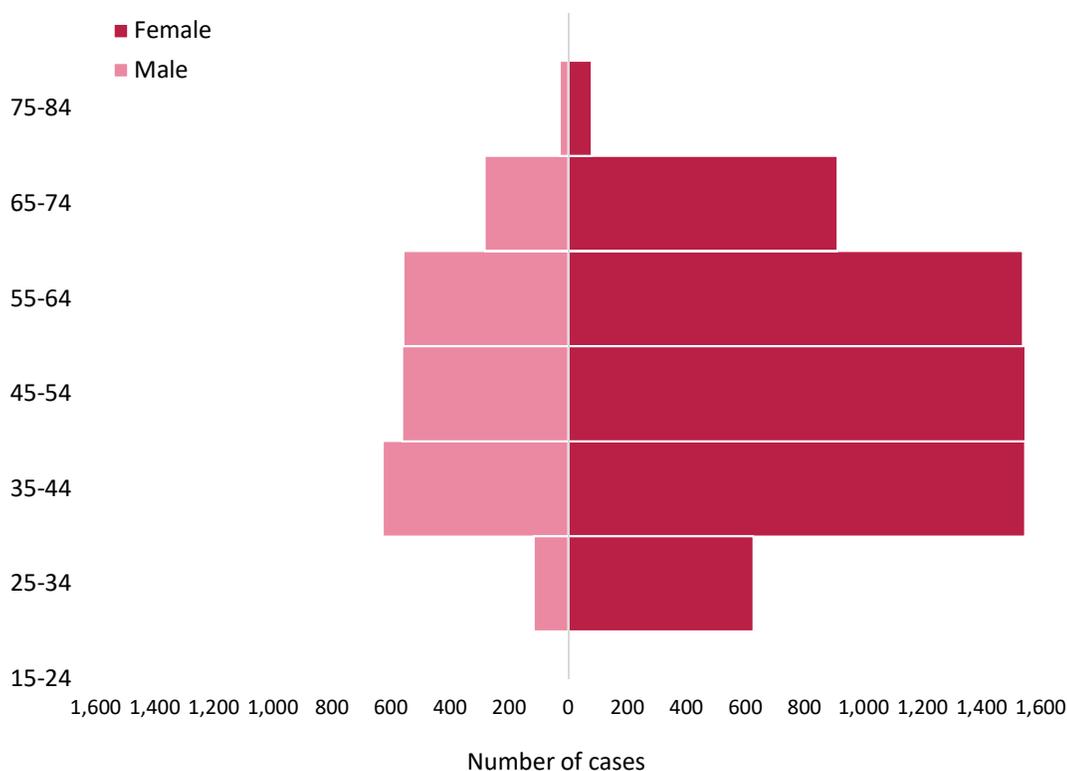**Figure 1. Proportion of HCW and non-HCW COVID-19 cases by week in which case was notified (n= 26343)**

Figure 2. Distribution of HCW COVID-19 cases by week in which case was notified * and age group (n=8444)

* Age was not available for 9 cases.

Figure 3. Distribution of HCW COVID-19 cases by age and sex (n=8429) *

* Age and sex were not available for 24 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	4929	58.3%	20
HSE M	455	5.4%	<5
HSE MW	367	4.3%	<5
HSE NE	1164	13.8%	<5
HSE NW	308	3.6%	<5
HSE SE	342	4.0%	<5
HSE S	457	5.4%	<5
HSE W	431	5.1%	0
Total	8453	100.0%	29

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	825	9.8%	0
CHO2	431	5.1%	0
CHO3	367	4.3%	<5
CHO4	457	5.4%	<5
CHO5	342	4.1%	<5
CHO6	913	10.8%	<5
CHO7	1808	21.4%	<5
CHO8	1102	13.0%	5
CHO9	2208	26.2%	13
Total	8453	100.0%	29

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	2741	32.4%	10
Healthcare assistant	2232	26.4%	11
Doctor	520	6.1%	-
Porter	96	1.2%	-
Other HCW	2002	23.7%	7
Unknown	862	10.2%	<5
Total	8453	100.0%	29

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	2072	24.5%	<5
Hospital	727	8.6%	-
Private house	682	8.1%	-
Residential institution	446	5.3%	<5
Comm. Hosp/Long-stay unit	226	2.7%	<5
Workplace	30	0.4%	-
Travel related	32	0.4%	-
Extended family	17	0.2%	-
Community outbreak	14	0.2%	-
Public house	2	0.0%	-
Restaurant / Cafe	1	0.0%	-
Hotel	1	0.0%	-
Unknown	1	0.0%	-
Not Specified	1	0.0%	-
Other	22	0.3%	-
Not linked to an outbreak	4179	49.4%	26
Total	8453	100.0%	29

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

Underlying clinical conditions	Number	Percentage
Yes	2950	34.9%
No	4712	55.7%
Unknown	791	9.4
Total	8453	100.0%

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

Transmission classification*	Number	Percentage
Community transmission - including possible community transmission**	1263	14.9%
Local transmission	7043	83.3%
Travel related	147	1.7%
Total	8453	100%

*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=953 11.2%) 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	Percentage
Healthcare setting acquired: staff*	6074	72.0%
Close contact with a known confirmed case	957	11.2%
Travel related	147	1.7%
Community transmission	310	3.7%
Healthcare setting acquired: patient	12	0.1%
Under investigation	953	11.2%
Total	8453	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