

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

week 48, 2020 (22/11/2020-28/11/2020) - week 8, 2021 (21/02/2021-27/02/2021)

Report prepared by HPSC on 02/03/2021

This report includes data on healthcare worker (HCW) cases of COVID-19 (all case classifications – confirmed, probable, possible) notified to the national infectious disease surveillance system (CIDR) from week 48, 2020 (22/11/2020 – 28/11/2020) to week 8, 2021 (21/02/2021-27/02/2021). Appendix A provides a summary of HCW cases of COVID-19 since the pandemic commenced in Ireland from week 10 (01/03/2020- 07/03/2020) to week 8, 2021 (21/02/2021-27/02/2021). CIDR is a dynamic information system and data are continuously validated and updated.

Healthcare worker definition

Healthcare worker 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.

Summary

From week 48, 2020 to week 8, 2021, there was a total of 149,269 COVID-19 cases reported to the national surveillance system (CIDR), 15,286 (10.2%) were healthcare workers (HCWs).

Table 1: Summary of healthcare worker COVID-19 cases notified to HPSC, week 48, 2020 – week 8, 2021, Ireland, (n=15,286)

Characteristic of HCW COVID-19 cases	Number	%
Total number of HCW cases	15,286	100%
Median age (IQR[^])	41 (30-51) years	-
Total number hospitalised	434	2.8%
The median age (IQR) of hospital inpatient	44 (32-54) years	
Total number admitted to intensive care units (ICU)	38	0.2%
The median age (IQR) of HCW in ICU	50 (44-59) years	-
Total number of deaths	7*	0.05%
The median age (range) for deaths	60 (52-65)	

[^] Interquartile range.

*All confirmed COVID-19 cases.

For the period from week 48, 2020 to week 8, 2021, the median age of HCW COVID-19 cases is 41 years (range 16-76 years). The number of female cases is disproportionately high (76.5%) among HCW COVID-19 cases compared to non-HCW COVID-19 cases (49.5%), most likely due to some HCW specialities e.g. nursing, being female dominated. The HSE region with the largest proportion of HCW cases is HSE East (34.2%).

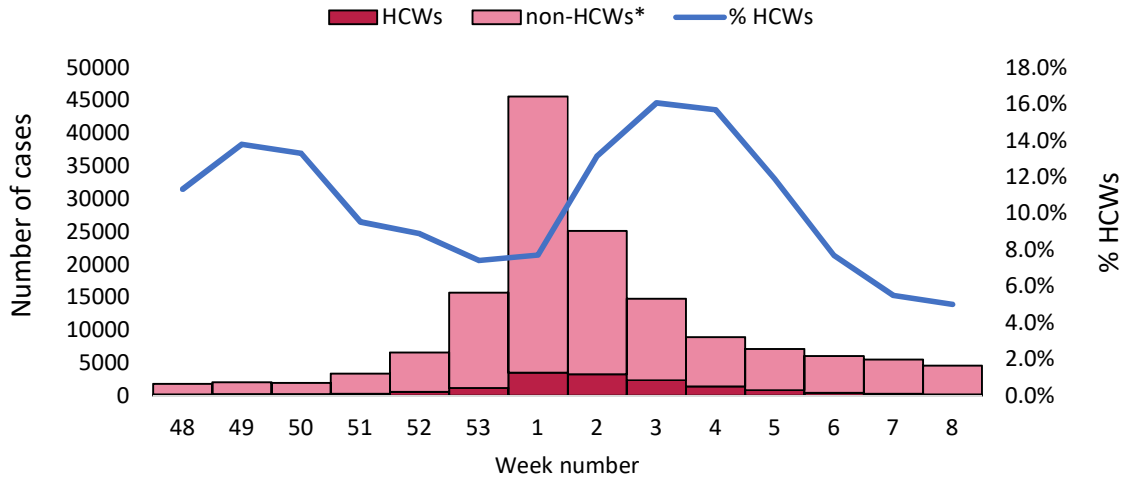


Figure 1: Healthcare worker and non-health care worker COVID-19 cases and the proportion of weekly cases identified as HCWs, notified to HPSC, week 48, 2020 – week 8, 2021, Ireland, (n=149,269)

*includes non-healthcare workers (n= 123,160) and cases with no information on HCW status (n=10,823)

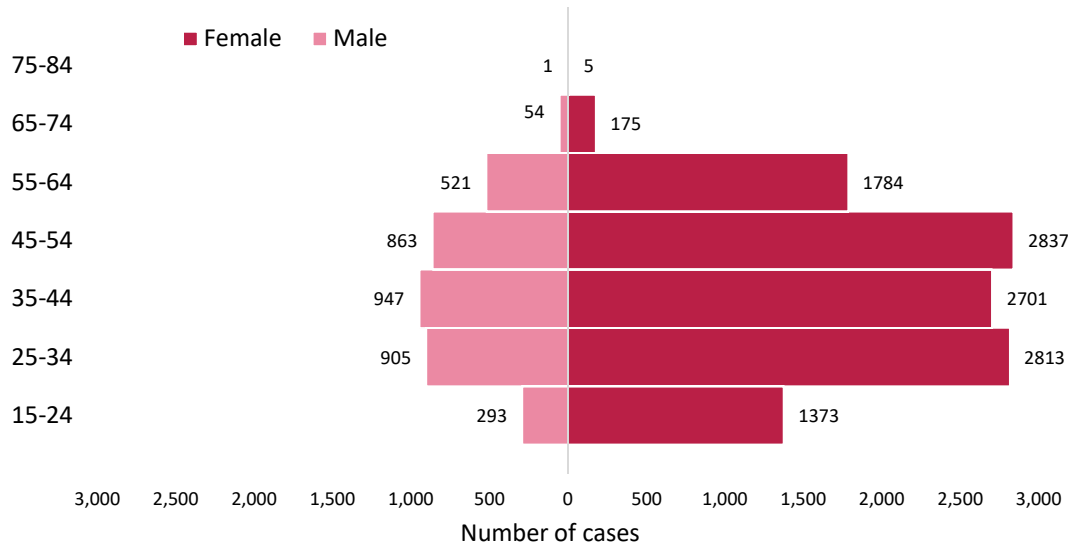


Figure 2: Distribution of healthcare worker COVID-19 cases notified to HPSC, by sex and age group, week 48, 2020- week 8, 2021, Ireland, (n= 15,272) *

* Sex or age group was not available for 14 cases.

Of the 15,286 HCW COVID-19 cases notified to HPSC between week 48, 2020 and week 8, 2021, 229 (1.5%) cases were reported in week 8, 2021.

Table 2: Health care worker COVID-19 cases notified to HPSC, by sex, age-group and HSE area, week 48, 2020- week 8, 2021, Ireland, (n= 15,286)

		Number of HCW cases (n= 15,286)	Proportion of all HCW cases (%)	Number of new cases week 8, 2021 (n=229)	Proportion of all HCW cases (%) week 8, 2021
Sex	Female	11,689	76.5	171	74.7
Age-group (years)	15-24	1,667	10.9	31	13.5
	25-34	3,721	24.4	60	26.3
	35-44	3,653	23.9	53	23.1
	45-54	3,702	24.2	52	22.7
	55-64	2,306	15.1	28	12.2
	65-74	229	1.5	5	2.2
	75-84	6	0.0	0	0.0
	Unknown	2	0.0	0	0.0
HSE area	HSE E	5,221	34.2	106	46.3
	HSE M	711	4.6	15	6.5
	HSE MW	1,262	8.3	24	10.5
	HSE NE	1,812	11.9	30	13.1
	HSE NW	923	6.0	9	3.9
	HSE SE	1,667	10.9	14	6.1
	HSE S	2,247	14.7	15	6.6
	HSE W	1,443	9.4	16	7.0

Table 3: Healthcare worker COVID-19 cases notified to HPSC, by HCW role and work location, week 48, 2020 - week 8, 2021, Ireland, (n=15,286)

		Number of HCW cases	Proportion of all HCW cases (%)	Number of new cases week 8, 2021	Proportion of all HCW cases (%) week 8, 2021
HCW Role	Healthcare assistant	3,826	25.0	64	28.0
	Nurse	3,788	24.7	38	16.5
	Admin/Clerical worker	927	6.1	24	10.5
	Doctor	656	4.3	3	1.3
	Catering/Kitchen worker	620	4.1	4	1.8
	Cleaning/household staff	369	2.4	4	1.8
	Pharmacy worker	342	2.2	7	3.1
	Social work	321	2.1	1	0.4
	Porter	185	1.2	2	0.9
	Physiotherapist	130	0.9	2	0.9
	Paramedic	127	0.8	0	0.0
	Occupational therapist	96	0.6	1	0.4
	Homecare	88	0.6	1	0.4
	Student nurse	78	0.5	0	0.0
	Radiographer	74	0.5	1	0.4
	Maintenance worker	65	0.4	1	0.4
	Medical student/student doctor	39	0.3	1	0.4
	Speech and language therapist	27	0.2	0	0.0
	Dietician	10	0.1	0	0.0
	Other HCW	1,213	7.9	48	21.0
Unknown	2,305	15.1	27	11.8	
Location of HCW role	Acute Hospital	4,347	28.4	62	27.1
	Nursing Home	3,367	22.0	43	18.8
	Community services	1,172	7.8	31	13.5
	Community Hospital/LSU	770	5.0	3	1.3
	Centre for disabilities	488	3.2	12	5.2
	GP surgery	241	1.6	6	2.6
	Mental Health Facility	200	1.3	4	1.8
	Hospice	130	0.9	2	0.9
	Homeless - hub/hostel/hotel	61	0.4	3	1.3
	Prison	12	0.1	0	0.0
	Women/Children's Refuge Facility	6	0.0	0	0.0
	Direct Provision Centre	4	0.0	0	0.0
	Testing site or assessment hub	2	0.0	0	0.0
	Other HCW place of work	1,367	8.9	33	14.4
	Unknown	3,119	20.4	30	13.1

Table 4: Healthcare worker COVID-19 cases notified to HPSC, by ethnicity and country of birth, week 48, 2020- week 8, 2021, Ireland, (n=15,286)

		Number of HCW cases	Proportion of all HCW cases (%)	Number of new cases week 8, 2021	Proportion of all HCW cases (%) week 8, 2021
Ethnicity	White	11,183	73.2	176	76.9
	Indian subcontinent	1,210	7.9	17	7.4
	Black African	686	4.5	11	4.8
	Mixed background	122	0.8	3	1.3
	Black other	52	0.3	1	0.4
	Roma	46	0.3	0	0.0
	Chinese	39	0.3	3	1.3
	Irish Traveller	32	0.2	0	0.0
	Other	732	4.8	8	3.5
Unknown	1,184	7.7	10	4.4	
Country of birth	Ireland	8,953	58.6	144	62.8
	India	1,059	6.9	14	6.1
	Philippines	557	3.6	7	3.1
	Nigeria	380	2.5	7	3.1
	Poland	330	2.2	4	1.8
	Romania	176	1.2	7	3.1
	Brazil	126	0.8	4	1.7
	Other	1,174	7.7	24	10.4
	Unknown	2,531	16.5	18	7.9

Hospitalised Cases

Of all HCW COVID-19 cases reported between week 48, 2020 and week 8, 2021, 434 had been admitted to hospital (2.8%). The median age of hospital inpatient HCW cases was 44 years (range: 18-74 years). Nine percent (n=38) of hospitalised COVID-19 HCW cases, (0.2% of all HCW cases) were admitted to ICU. The median age of HCW cases admitted to ICU was 50 years (range: 28-66 years). (Table 5.)

Table 5: Hospitalised and ICU healthcare worker COVID-19 cases notified to HPSC, by sex, age and role, week 48, 2020- week 8, 2021, Ireland, (n=434)

		Hospitalised (n=434)		In ICU (n=38)	
		Number	Proportion (%)	Number	Proportion (%)
Sex	Female	331	76.3	28	73.7
Age groups (years)	15-24	40	9.2	0	0.0
	25-34	99	22.8	5	13.2
	35-44	83	19.1	6	15.8
	45-54	110	25.4	13	34.1
	55-64	94	21.7	12	31.6
	65-74	8	1.8	2	5.3
HCW role	Nurse	142	32.7	12	31.6
	Healthcare assistant	85	19.6	11	29.0
	Catering/Kitchen worker	23	5.3	2	5.3
	Admin/Clerical worker	20	4.6	2	5.3
	Doctor	17	3.9	1	2.6
	Cleaning/household staff	13	3.0	1	2.6
	Social work	9	2.1	0	0.0
	Pharmacy worker	7	1.6	0	0.0
	Homecare	4	0.9	0	0.0
	Paramedic	4	0.9	0	0.0
	Medical student/student doctor	3	0.7	0	0.0
	Occupational therapist	3	0.7	1	2.6
	Porter	3	0.7	1	2.6
	Radiographer	2	0.5	0	0.0
	Physiotherapist	1	0.2	0	0.0
	Student nurse	1	0.2	0	0.0
	Other HCW	32	7.4	4	10.5
	Unknown	65	15.0	3	7.9

Cases linked to outbreaks

Of all HCW COVID-19 cases reported between week 48, 2020 and week 8, 2021, 5,495 (35.9%) were linked to outbreaks. During week 8, 2021 51 (22.3%) HCW COVID-19 cases were linked to outbreaks. Data are continuously validated and updated, therefore further reported cases may be linked to outbreaks.

Table 6: COVID-19 cases in HCW notified to HPSC, linked to outbreaks by outbreak location, week 48, 2020 - week 8, 2021, Ireland, (n=15,286)

Outbreak location	Number of HCW cases	Proportion of all HCW cases (%)	Number of new cases week 8, 2021	Proportion of all HCW cases (%) week 8, 2021
Nursing home	2,846	18.5	24	10.5
Hospital	943	6.2	7	3.1
Residential institution	744	4.9	6	2.6
Comm. Hosp/Long-stay unit	339	2.2	0	0.0
Other healthcare service	222	1.5	7	3.1
Private house	211	1.4	2	0.9
Extended family	59	0.4	3	1.3
Workplace	52	0.3	0	0.0
Community outbreak	19	0.1	1	0.4
Other	60	0.4	1	0.4
Not linked to outbreak	9,791	64.1	178	77.7

Mode of transmission

Table 7: Healthcare worker COVID-19 cases notified to HPSC, by mode of transmission, week 48, 2020 - week 8, 2021, Ireland, (n=15,286)

Mode of transmission		Number of HCW cases	Proportion of all HCW cases (%)	Number of new cases week 8, 2021	Proportion of all HCW cases (%) week 8, 2021
Healthcare setting acquired: staff		5,665	37.1	69	30.1
Close contact with a known confirmed case		3,487	22.8	80	34.9
Community transmission		2,176	14.2	58	25.3
Healthcare setting acquired: patient		548	3.6	10	4.4
Travel related		72	0.5	4	1.8
Under investigation		3,338	21.8	8	3.5

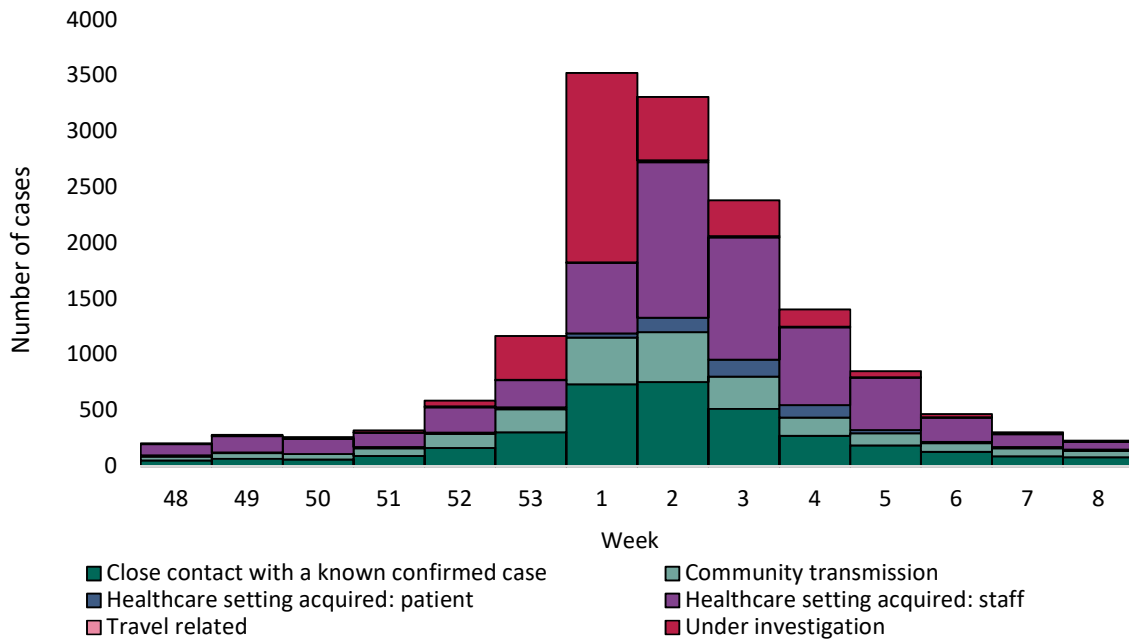


Figure 3: Healthcare worker COVID-19 cases by notification week and most likely transmission source, week 48, 2020- week 8, 2021, Ireland, (n=15,286)

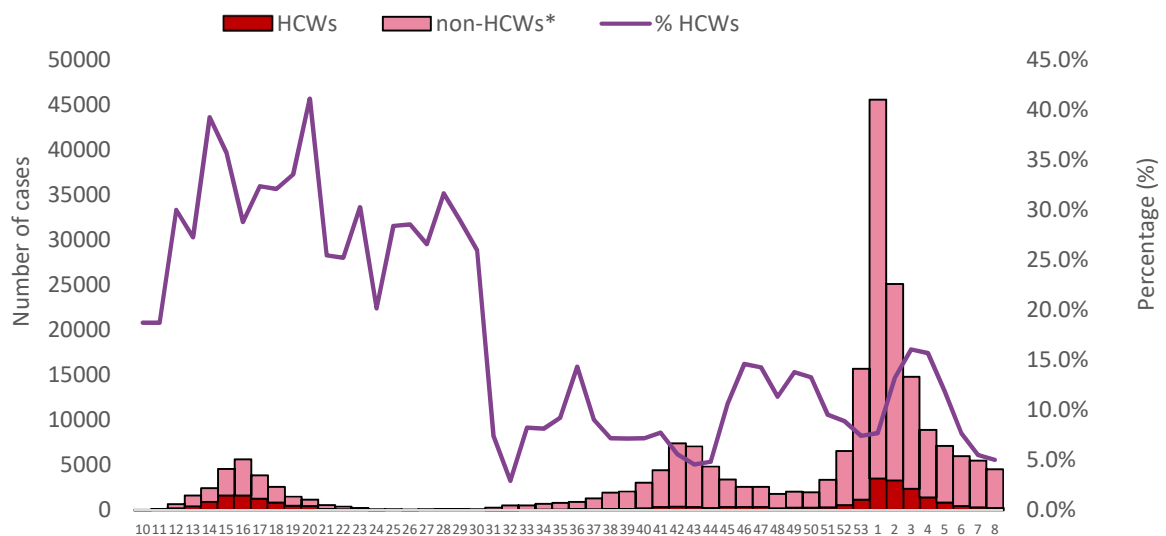
Appendix A

From week 10, 2020 to week 8, 2021, there was a total of 220,162 COVID-19 cases reported to the national surveillance system (CIDR), 27,213 (12.4%) were healthcare workers (HCWs).

Table A: Summary of healthcare worker COVID-19 cases notified to HPSC, week 10 2020 - week 8, 2021, Ireland, (n= 27,213)

Characteristic of HCW COVID-19 cases	Number	%
Total number of HCW cases	27,213	100%
Median age (IQR)	41 (30-51) years	-
Total number hospitalised	828	3.0%
The median age (IQR) of hospital inpatient	45 (33-54) years	
Total number admitted to ICU	94	0.3%
The median age (IQR) of HCW in ICU	50.5 (44-59) years	-
Total number of deaths	15*	0.05%
The median age (range) for deaths	59 (30-65) years	-

*All confirmed COVID-19 cases.



*includes non-healthcare workers (n= 173,205) and cases with no information on HCW status (n= 19,744)

Figure A: Healthcare worker and non-health care worker COVID-19 cases notified to HPSC, week 10 2020 -week 8, 2021, Ireland, (n=220,162)

Table B: Notified health care worker COVID-19 cases who died, by sex, age-group, underlying clinical conditions and role, week 10, 2020- week 8, 2021, Ireland, (n= 15)

		Number of HCW cases	Proportion of all HCW cases (%)
Sex	Female	9	61.6
Age-group (years)	15-24	0	0.0
	25-34	1	6.7
	35-44	0	0.0
	45-54	4	26.6
	55-64	9	60.0
	65-74	1	6.7
	75-84	0	0.0
HSE area	HSE E	9	60.0
	HSE M	0	0.0
	HSE MW	2	13.3
	HSE NE	1	6.7
	HSE NW	0	0.0
	HSE SE	2	13.3
	HSE S	1	6.7
	HSE W	0	0.0
Underlying clinical conditions	Yes	14	93.3
	No	1	6.7
Hospitalisation status	Yes	13	86.7
	No	2	13.3
ICU admission	Yes	8	53.3
	No	6	40.0
	Unknown	1	6.7
HCW role	Cleaning/household staff	2	13.3
	Doctor	1	6.7
	Healthcare assistant	7	46.7
	Nurse	2	13.3
	Audiologist	1	6.7
	Unknown	2	13.3

Acknowledgements

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