

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

Week 48, 2020 (22/11/2020-28/11/2020) - week 16, 2021 (18/04/2021-24/04/2021)

Report prepared by HPSC on 27/04/2021

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 16, 2021 (18/04/2021-24/04/2021). 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 16, 2021 (18/04/2021-24/04/2021). 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. A HCW occupation does not indicate that COVID-19 was contracted during the course of a person's occupation/employment.

Summary

From week 48, 2020 to week 16, 2021, there was a total of 176,319 COVID-19 cases reported to the national surveillance system (CIDR), 16,669 (9.5%) were healthcare workers (HCWs). Of the 16,669 HCW COVID-19 cases notified to HPSC between week 48, 2020 and week 16, 2021, 78 (0.5%) cases were reported in week 16, 2021.

Table 1: Summary of healthcare worker COVID-19 cases notified to HPSC, week 48, 2020 – week 16, 2021, Ireland, (n=16,669)

Characteristic of HCW COVID-19 cases	Number	%
Total number of HCW cases	16,669	100%
Median age (IQR[^])	41 (30-51) years	-
Total number hospitalised	386	2.3%
The median age (IQR) of hospital inpatient	45 (32-54) years	
Total number admitted to intensive care units (ICU)	41	0.2%
The median age (IQR) of HCW in ICU	51 (44-58) years	-
Total number of deaths	9*	0.05%
The median age (range) for deaths	60 (45-65) years	

[^] Interquartile range.

*All confirmed COVID-19 cases.

For the period from week 48, 2020 to week 16, 2021, the median age of HCW COVID-19 cases is 41 years (range 16 -80 years). The number of female cases is disproportionately high (76.6%) among HCW COVID-19 cases compared to non-HCW COVID-19 cases (49.3%), 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 (35.1%).

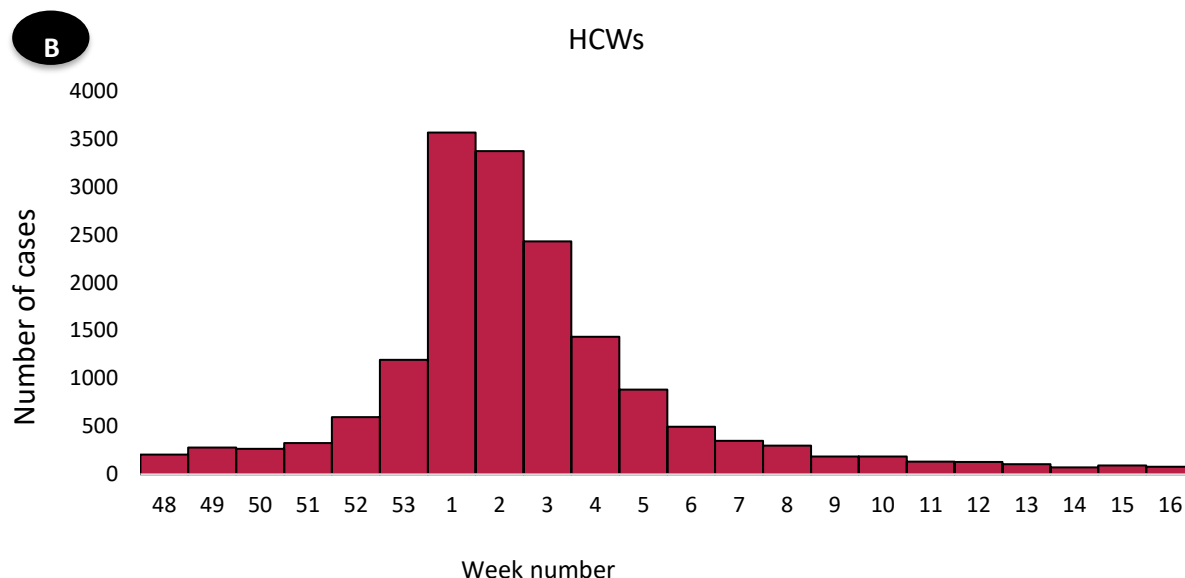
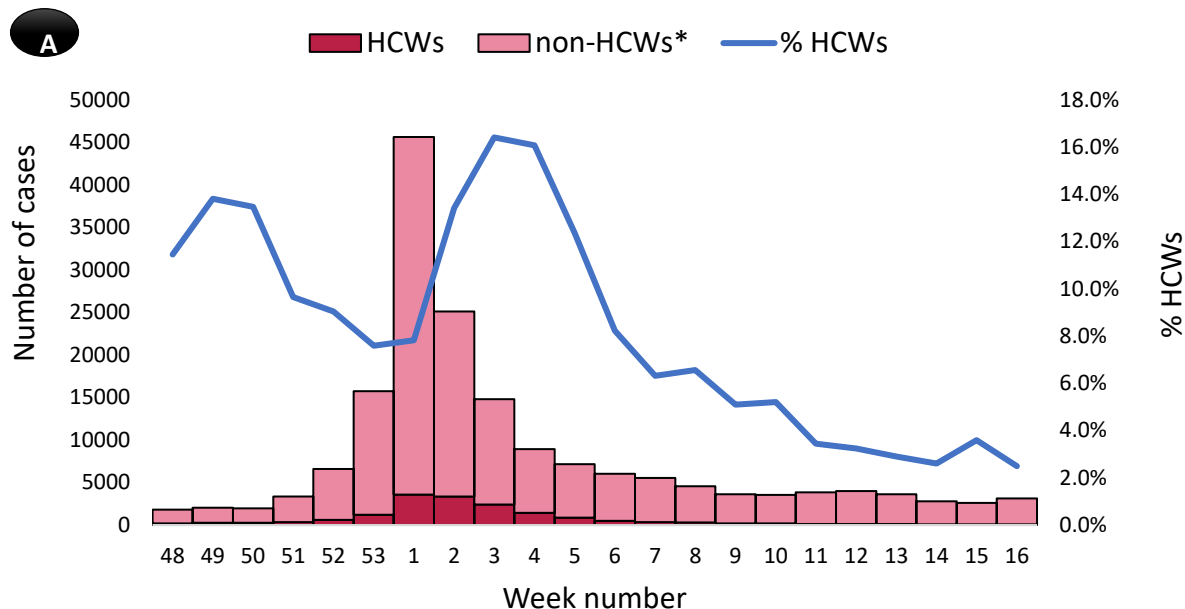


Figure 1A: Healthcare worker and non-health care worker COVID-19 cases and the proportion of weekly cases identified as HCWs, notified to HPSC, week 48, 2020 – week 16, 2021, Ireland, (n=176,319); **Figure 1B:** Showing HCWs only for the same time period.

*includes non-healthcare workers (n= 147,956) and cases with no information on HCW status (n=11,694)

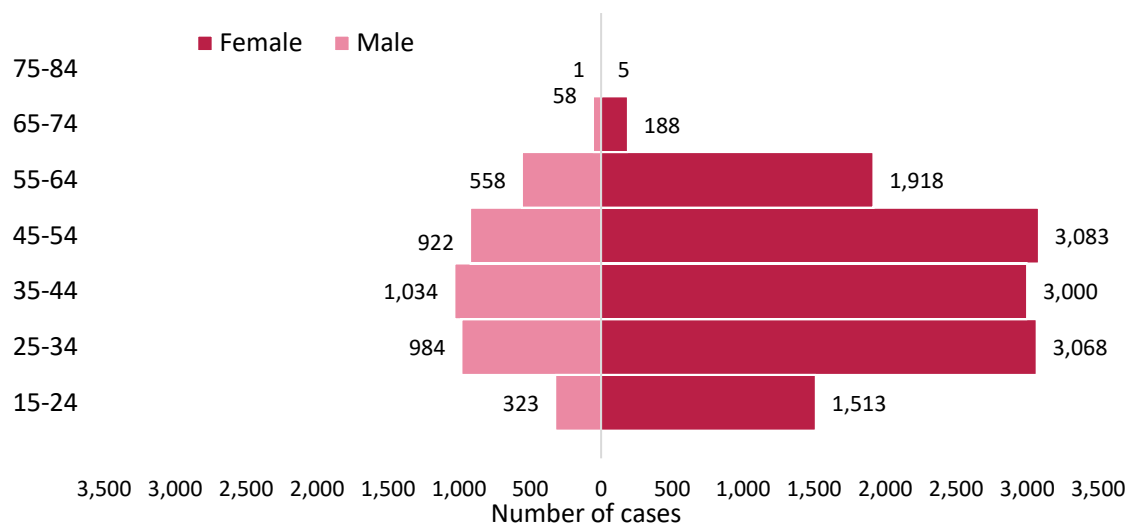


Figure 2: Distribution of healthcare worker COVID-19 cases notified to HPSC, by sex and age group, week 48, 2020-week 16, 2021, Ireland, (n= 16,655) *

* Sex or age was not available for 14 cases.

Table 2: Health care worker COVID-19 cases notified to HPSC, by sex, age-group and HSE area, week 48, 2020 - week 16, 2021, Ireland, (n= 16,669)

		Number of HCW cases (n = 16,669)	Proportion of all HCW cases (%)
Sex	Female	12,775	76.6
Age-group (years)	15-24	1,837	11.1
	25-34	4,055	24.3
	35-44	4,040	24.2
	45-54	4,007	24.0
	55-64	2,477	14.9
	65-74	246	1.5
	75-84	6	0.0
	Unknown	<5	0.0
HSE area	HSE E	5,858	35.1
	HSE M	803	4.8
	HSE MW	1,418	8.5
	HSE NE	1,934	11.6
	HSE NW	991	6.0
	HSE SE	1,766	10.6
	HSE S	2,349	14.1
	HSE W	1,550	9.3

Table 3: Healthcare worker COVID-19 cases notified to HPSC, by HCW role and work location, week 48, 2020 - week 16, 2021, Ireland, (n=16,669)

		Number of HCW cases (n = 16,669)	Proportion of all HCW cases (%)
HCW Role	Healthcare assistant	4,136	24.7
	Nurse	4,052	24.3
	Admin/Clerical worker	1,048	6.3
	Doctor	692	4.2
	Catering/Kitchen worker	682	4.1
	Cleaning/household staff	422	2.5
	Pharmacy worker	387	2.3
	Social work	349	2.1
	Porter	194	1.2
	Homecare	151	0.9
	Physiotherapist	146	0.9
	Paramedic	136	0.8
	Other HCW	2,005	12.1
	Unknown	2,269	13.6
Location of HCW role	Acute Hospital	4,724	28.2
	Nursing Home	3,650	21.8
	Community services	1,398	8.4
	Community Hospital/LSU	831	5.0
	Centre for disabilities	594	3.6
	GP surgery	282	1.7
	Mental Health Facility	226	1.4
	Hospice	144	0.9
	Homeless - hub/hostel/hotel	72	0.4
	Other HCW place of work	1,656	10
	Unknown	3,092	18.6

Table 4: Healthcare worker COVID-19 cases notified to HPSC, by ethnicity and country of birth, week 48, 2020- week 16, 2021, Ireland, (n=16,669)

		Number of HCW cases (n = 16,669)	Proportion of all HCW cases (%)
Ethnicity	White	12,218	73.3
	Indian subcontinent	1,289	7.7
	Black African	762	4.6
	Mixed background	137	0.8
	Black other	60	0.4
	Roma	51	0.3
	Irish Traveller	42	0.3
	Chinese	40	0.2
	Other	790	4.7
	Unknown	1,280	7.7
Country of birth	Ireland	9,780	58.6
	India	1,131	6.7
	Philippines	592	3.6
	Nigeria	420	2.5
	Poland	375	2.3
	Romania	208	1.3
	Brazil	140	0.8
	Other	1,391	8.4
	Unknown	2,632	15.8

Cases linked to outbreaks

Of all HCW COVID-19 cases reported between week 48, 2020 and week 16, 2021, 6,496 (39.0%) were linked to outbreaks. During week 16, 2021 14 (17.9%) HCW COVID-19 cases were linked to outbreaks. Data are continuously validated and updated, therefore further reported cases may be linked to outbreaks.

Table 5: COVID-19 cases in HCW notified to HPSC, linked to outbreaks by outbreak location, week 48, 2020 - week 16, 2021, Ireland, (n=16,669)

Outbreak location	Number of HCW cases (n = 16,669)	Proportion of all HCW cases (%)
Nursing home	3,153	18.8
Hospital	1,212	7.3
Residential institution	870	5.2
Private house	370	2.2
Comm. Hosp/LSU	309	1.9
Other healthcare service	308	1.9
Extended family	94	0.6
Workplace	50	0.3
Community outbreak	35	0.2
Other	95	0.6
Not linked to outbreak	10,173	61.0

Mode of transmission

Table 6: Healthcare worker COVID-19 cases notified to HPSC, by mode of transmission, week 48, 2020 - week 16, 2021, Ireland, (n=16,669)

Mode of transmission	Number of HCW cases (n = 16,669)	Proportion of all HCW cases (%)
Healthcare setting acquired: staff	6,723	40.2
Close contact with a known confirmed case	4,191	25.1
Community transmission	2,643	15.9
Healthcare setting acquired: patient	191	1.2
Travel related	108	0.7
Under investigation	2,813	16.9

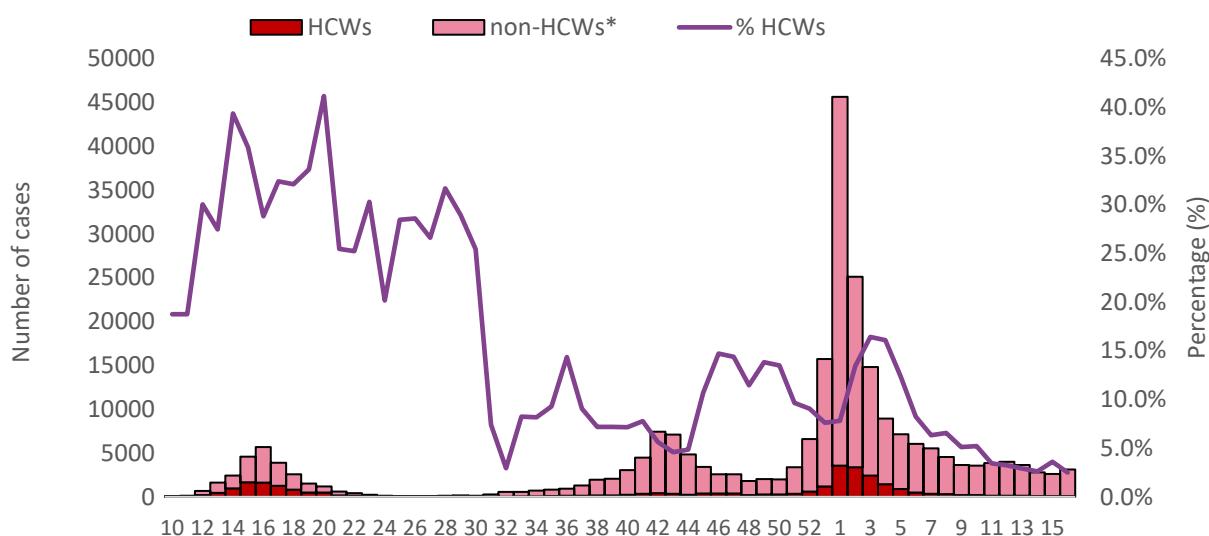
Appendix A

From week 10, 2020 to week 16, 2021, there was a total of 247,208 COVID-19 cases reported to the national surveillance system (CIDR), 28,612 (11.6%) were healthcare workers (HCWs).

Table A: Summary of healthcare worker COVID-19 cases notified to HPSC, week 10 2020 - week 16, 2021, Ireland, (n= 28,612)

Characteristic of HCW COVID-19 cases	Number	%
Total number of HCW cases	28,612	100%
Median age (IQR)	41 (30-51) years	-
Total number hospitalised	780	2.7%
The median age (IQR) of hospital inpatient	45 (33-54) years	
Total number admitted to intensive care units (ICU)	101	0.3%
The median age (IQR) of HCW in ICU	51 (44-59) years	-
Total number of deaths	17*	0.06%
The median age (range) for deaths	57 (30-65) years	

*All confirmed COVID-19 cases.



*includes non-healthcare workers (n= 198,027) and cases with no information on HCW status (n= 20,569)

Figure A: Healthcare worker and non-health care worker COVID-19 cases notified to HPSC, week 10 2020 -week 16, 2021, Ireland, (n=247,208)

Acknowledgements

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