



HHS Public Access

Author manuscript

Am J Prev Med. Author manuscript; available in PMC 2023 September 01.

Published in final edited form as:

Am J Prev Med. 2023 September ; 65(3): 521–527. doi:10.1016/j.amepre.2023.02.027.

Paid sick leave among U.S. healthcare personnel, April 2022

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Abstract

Introduction: Healthcare personnel (HCP) are at risk for acquiring and transmitting respiratory infections in the workplace. Paid sick leave benefits allow workers to stay home and visit a healthcare provider when ill. The objectives of this study were to quantify the percentage of HCP reporting paid sick leave, identify differences across occupations and settings, and determine factors associated with having paid sick leave.

Methods: In a national nonprobability Internet panel survey of HCP in April 2022, respondents were asked, “Does your employer offer paid sick leave?”. Responses were weighted to the U.S. HCP population by age, sex, race/ethnicity, work setting, and census region. The weighted percentage of HCP who reported paid sick leave was calculated by occupation, work setting, and type of employment. Using multivariable logistic regression, factors associated with having paid sick leave were identified.

Results: In April 2022, 73.2% of 2,555 responding HCP reported having paid sick leave, similar to 2020 and 2021 estimates. The percentage of HCP reporting paid sick leave varied by occupation, ranging from 63.9% (assistants/aides) to 81.2% (non-clinical personnel). Female HCP

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CRediT author statement

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and those working as licensed independent practitioners, in the Midwest, and in the South were less likely to report paid sick leave.

Conclusions: The majority of HCP from all occupational groups and healthcare settings reported having paid sick leave. However, differences by sex, occupation, type of work arrangement, and Census region exist and highlight disparities. Increasing HCP access to paid sick leave may decrease presenteeism and subsequent transmission of infectious diseases in healthcare settings.

Introduction

Healthcare personnel (HCP) are at risk for coronavirus disease 2019 (COVID-19), influenza, and other respiratory infections from workplace exposures.^{1,2} In addition to vaccination against influenza and COVID-19, staying home when ill is an important strategy to prevent transmission in healthcare settings. Paid sick leave benefits allow workers to stay home or visit a healthcare provider when they are ill. The objective of this study was to assess paid sick leave among HCP by occupation and work setting and determine factors associated with having paid sick leave.

Methods

Data from the annual opt-in Internet panel survey of HCP for the 2021–22 influenza season, conducted March 29–April 19, 2022, was used to provide estimates of influenza and COVID-19 vaccination coverage. Clinical and non-clinical HCP respondents were recruited from 2 pre-existing national opt-in Internet sources, Medscape and Dynata.³ In addition to questions about vaccination, occupation, and work setting, respondents were asked, “*Does your employer offer paid sick leave?*”. Survey data from the 2019–20 and 2020–21 influenza seasons were included in the analysis.

Responses were weighted to the U.S. HCP population by age, sex, race/ethnicity, work setting, and U.S. Census Bureau region. Population totals were estimated using the most recent Bureau of Labor Statistics Occupational Employment and Wage Estimates and Current Population Survey data. The number and weighted percentage of HCP who reported paid sick leave were calculated by occupation, work setting, type of work arrangement, and influenza and COVID-19 vaccination status.

Differences in paid sick leave by occupation, work setting, type of work arrangement, influenza and COVID-19 vaccination and between season differences were tested using two-tailed t-tests. For 2021–22 season data, a multivariable logistic regression model was used including variables with $p < 0.05$ to determine variables independently associated with having paid sick leave. Adjusted prevalence ratios (aPR) with 95% confidence intervals (CIs) are reported. Significance level was set at $p < 0.05$. SAS, version 9.4 and SUDAAN, version 11.0.1 (multilog procedure) were used. This activity was conducted consistent with applicable federal law and CDC policy.⁴

Results

In April 2022, 73.2% of 2,555 responding HCP reported having paid sick leave, similar to previous findings of 71.4% (2021) and 68.1% (2020) (Table 1). The percentage of HCP reporting paid sick leave varied by occupation, ranging from 63.9% (assistants/aides) to 81.2% (non-clinical personnel). The percentage of HCP reporting paid sick leave varied by work setting, ranging 64.7% (long-term care/home healthcare) to 79.1% (hospitals).

In bivariate analyses, age, race, education, work setting, and location of workplace were not differentially associated with reporting paid sick leave (Table 1). HCP who reported their employer neither required nor recommended influenza and COVID-19 vaccination were less likely to report paid sick leave than those with an employer requirement (59.2% vs. 78.6% and 48.3% vs. 80.0%, respectively).

In multivariable analyses, non-clinical personnel were independently more likely to report paid sick leave (aPR: 1.11, [95% CI: 1.01, 1.23]) (Table 2). Female HCP (aPR: 0.91 [0.86, 0.97]), HCP working as a licensed independent practitioner (aPR: 0.71, [0.61,0.82]), in the Midwest (aPR: 0.90, [0.83, 0.97]), and in the South (aPR: 0.91, [0.85, 0.98]) were less likely to report paid sick leave. HCP who reported their employer neither required nor recommended COVID-19 vaccination were less likely to report paid sick leave (aPR: 0.73, [0.61, 0.89]).

In additional analyses, reporting paid sick leave was associated with receipt of influenza vaccine (76.7% vs. 59.3%) and receipt of 1 dose of a COVID-19 vaccine (74.8% vs. 59.3%). In total, 36.9% of respondents reported ever being diagnosed with COVID-19. However, there were no significant differences between reporting paid sick leave and either working or missing work while ill with COVID-19.

Discussion

In this national nonprobability survey, 73.2% of responding HCP reported having paid sick leave in April 2022, similar to the past two years. This is lower than findings by the Bureau of Labor Statistics, which estimated that 85% of civilian workers in the healthcare and social assistance industry sector had access to paid sick leave in March 2021.⁵

As of 2021, the United States was one of only 11 countries in the world without a national policy mandating paid sick leave for workers although some states have enacted paid sick leave laws.⁶ The Families First Coronavirus Response Act, passed in March 2020, temporarily allowed employees to take up to 10 days of COVID-19-related emergency sick leave at full pay, and the American Rescue Plan Act of 2021 renewed this eligibility through September 2021. Exemptions were granted to employers with >500 workers and to some small employers with <50 workers.⁷⁻⁹ According to a recent study, states that gained access to paid sick leave through this Act had a statistically significant decrease in new confirmed COVID-19 cases per state per day relative to states that had already enacted sick pay mandates prior to the Act.¹⁰

In this national survey, the majority of HCP from all occupational groups and work settings reported having paid sick leave. However, despite legislation, differences by sex, type of work arrangement, and Census region exist. Similar to this study, others have found that female workers had less access to paid sick leave.^{6,11} Assistants and aides had the lowest paid sick leave coverage of all occupations. These findings underscore socioeconomic disparities, which may be lessened with a national paid sick leave policy.

Paid sick leave offers benefits to workers, employers, and society overall, as it has been shown to decrease presenteeism (working while ill),^{12–14} and it can reduce the spread of respiratory infections to coworkers and patients.^{15,16} Paid sick leave has been associated with influenza vaccination,^{11,17–18} consistent with these findings, and it has also been associated with seeking other preventive health services and seeking healthcare when ill.^{11,17–18}

The findings in this study did not reveal an association between paid sick leave and either working or missing work while ill with COVID-19. Respondents were asked to report ever being diagnosed with COVID-19; it is possible that they were ill earlier in the pandemic when paid sick leave coverage was lower. In addition, staffing shortages during the pandemic may have led to ill HCP returning to work before the end of the recommended isolation period.

Limitations

The findings are subject to some limitations. First, the study used a nonprobability sample of volunteer members of two Internet panels. While responses were weighted to be representative of the U.S. HCP population, some bias may remain. Second, the self-selection of the respondents to the panels and survey may introduce selection bias. Third, vaccination status, illness, and paid sick leave were self-reported and may be subject to recall or social desirability bias. Finally, details about paid sick leave, including if sick leave was pooled with vacation days, were not obtained. Pooling vacation and sick days may discourage workers from using their leave for mild illness.

Conclusions

The majority of HCP from all occupational groups and work settings in this national survey reported having paid sick leave. However, demographic and occupational differences exist and highlight disparities. In the absence of a national sick leave policy, increasing HCP access to paid sick leave at the healthcare systems level may decrease presenteeism and subsequent transmission of infectious diseases in healthcare settings.

Acknowledgements

The authors acknowledge Hellene Apollon and ABT Associates for their contributions to this work. The findings and conclusions in this report are those of the authors and do not necessarily represent the views of the Centers for Disease Control and Prevention. No financial disclosures or conflicts of interests were reported by the authors of this paper.

References

1. Dzinamarira T, Murewanhema G, Mhango M, et al. COVID-19 Prevalence among healthcare workers. A systematic review and meta-analysis. *Int J Environ Res Public Health*. 2021;19(1):146. 10.3390/ijerph19010146 [PubMed: 35010412]
2. Lietz J, Westermann C, Nienhaus A, et al. The occupational risk of influenza A (H1N1) infection among healthcare personnel during the 2009 pandemic: A systematic review and meta-analysis of observational studies. *PLoS One*. 2016;11(8):e016206. 10.1371/journal.pone.0162061
3. Razzaghi H, Srivastav A, de Perio MA, et al. Influenza and COVID-19 vaccination coverage among health care personnel - United States, 2021–22. *MMWR Morb Mortal Wkly Rep*. 2022;71(42):1319–1326. 10.15585/mmwr.mm7142a2 [PubMed: 36264832]
4. 45 C.F.R. part 46; 21 C.F.R. part 56; 42 U.S.C. Sect. 241(d); 5 U.S.C. Sect. 552a; 44 U.S.C. Sect. 3501 et seq. Accessed November 8, 2022.
5. U.S. Bureau of Labor Statistics. Employee benefits in the United States – March 2022. Table 6. Selected paid leave benefits. <https://www.bls.gov/news.release/ebs2.t06.htm>. Accessed November 7, 2022.
6. Heymann J, Sprague A, Earle A. US sick leave in global context: US eligibility rules widen inequalities despite readily available solutions. *Health Aff (Millwood)*. 2021;40(9):1501–1509. 10.1377/hlthaff.2021.00731 [PubMed: 34310189]
7. U.S. House of Representatives, Bill 6201, Families First Coronavirus Response Act, 116th Congress (2019–2020). <https://www.congress.gov/bill/116th-congress/house-bill/6201>. Accessed November 8, 2022.
8. US Department of Labor, Families First Coronavirus Response Act: Employer paid leave requirements. <https://www.dol.gov/agencies/whd/pandemic/ffcra-employer-paid-leave>. Accessed November 8, 2022.
9. Congressional Budget Office, Payroll tax credit for COVID-19 sick and family leave, Congressional Research Service, updated 1 April 2021. <https://www.everycrsreport.com/reports/IF11739.html>. Accessed November 8, 2022.
10. Pichler S, Wen K, Ziebarth NR, et al. COVID-19 emergency sick leave has helped flatten the curve in the United States. *Health Aff (Millwood)*. 2020;39(12):2197–2204. 10.1377/hlthaff.2020.00863 [PubMed: 33058691]
11. Zhai Y, Santibanez TA, Kahn KE, et al. Paid sick leave benefits, influenza vaccination, and taking sick days due to influenza-like illness among U.S. workers. *Vaccine*. 2018;36(48):7316–7323. 10.1016/j.vaccine.2018.10.039 [PubMed: 30361122]
12. DeRigne L, Stoddard-Dare P, Quinn L, et al. Workers without paid sick leave less likely to take time off for illness or injury compared to those with paid sick leave. *Health Aff (Millwood)*. 2016;35(3):520–527. 10.1377/hlthaff.2015.0965 [PubMed: 26953308]
13. Hoang Johnson D, Osman F, Bean J, et al. Barriers and facilitators to influenza-like illness absenteeism among healthcare workers in a tertiary-care healthcare system, 2017–2018 influenza season. *Infect Control Hosp Epidemiol*. 2021;42(10):1198–1205. 10.1017/ice.2020.1396 [PubMed: 33650477]
14. Callison K, Pesko MF. The effect of paid sick leave mandates on coverage, work absences, and presenteeism. *J Hum Resour*. 2022;57(4):1178–1208. 10.3368/jhr.57.4.1017-9124r2 [PubMed: 35812986]
15. Kumar S, Quinn SC, Kim KH, et al. The impact of workplace policies and other social factors on self-reported influenza-like illness incidence during the 2009 H1N1 pandemic. *Am J Public Health*. 2012;102(1):134–140. 10.2105/ajph.2011.300307 [PubMed: 22095353]
16. Piper K, Youk A, James AE 3rd, et al. Paid sick days and stay-at-home behavior for influenza. *PLoS One*. 2017;12(2):e0170698. 10.1371/journal.pone.0170698 [PubMed: 28151940]
17. Lamsal R, Napit K, Rosen AB, et al. Paid sick leave and healthcare utilization in adults: A systematic review and meta-analysis. *Am J Prev Med*. 2021;60(6):856–865. 10.1016/j.amepre.2021.01.009 [PubMed: 33785275]

18. DeRigne L, Stoddard-Dare P, Collins C, et al. Paid sick leave and preventive health care service use among U.S. working adults. *Prev Med.* 2017;99:58–62. 10.1016/j.ypmed.2017.01.020 [PubMed: 28189802]

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Table 1.Paid sick leave among healthcare personnel by selected characteristics — Internet panel surveys^a, 2020–2022

	2019–20		2020–21		2021–22	
Characteristic	Number (weighted %)	Weighted % with paid sick leave (95% CI)	Number (weighted %)	Weighted % with paid sick leave	Number (weighted %)	Weighted % with paid sick leave
Total/Overall	1,599 (68.1)	68.1 (62.6, 73.3)	1,652 (71.4)	71.4 (67.3, 75.3)	2,555 (73.2)	73.2 (70.2, 76.0)
Age						
18–29 years (ref)	371 (20.8)	62.2 (45.7, 76.8) ^b	263 (17.5)	58.3 (44.5, 71.2)	343 (17.3)	65.2 (52.2, 76.8)
30–44 years	981 (35.6)	68.4 (60.7, 75.4)	1,007 (38.9)	74.8 (68.6, 80.2)	1,616 (39.7)	76.4 (73.1, 79.5)
45–59 years	714 (29.6)	71.3 (60.1, 80.8)	774 (29.0)	75.8 (69.0, 81.7)	1,112 (29.1)	74.0 (70.1, 77.6)
60+ years	335 (14.1)	69.8 (58.7, 79.4)	346 (14.6)	69.7 (59.6, 78.6)	547 (13.9)	72.4 (65.9, 78.3)
Sex						
Male (ref)	793 (23.3)	75.1 (66.3, 82.5)	794 (23.3)	83.9 (78.4, 88.4)	1,081 (21.9)	79.3 (74.9, 83.2)
Female	1,608 (76.7)	66.0 (59.4, 72.2)	1,597 (76.7)	67.7 (62.6, 72.5)	2,537 (78.1)	71.5 (67.9, 74.9)
Race/ethnicity^c						
White, non-Hispanic (ref)	1,494 (59.5)	67.0 (60.3, 73.2)	1,419 (61.4)	71.5 (66.7, 76.0)	2,329 (60.7)	71.2 (67.1, 75.1)
Black, non-Hispanic	302 (17.0)	68.9 (56.4, 79.6)	316 (17.0)	69.1 (54.4, 81.4)	319 (16.5)	77.7 (70.7, 83.8)
Hispanic	334 (14.1)	67.1 (44.0, 85.4) ^b	399 (14.1)	74.9 (61.9, 85.3)	485 (14.3)	76.3 (69.2, 82.5)
Other, non-Hispanic	269 (9.4)	75.7 (60.4, 87.4)	253 (7.5)	69.0 (56.5, 79.7)	471 (8.5)	74.7 (66.3, 81.9)
Education						
Some college education or less (ref)	541 (22.9)	62.9 (53.9, 71.4)	541 (29.1)	66.0 (57.4, 73.8)	526 (27.3)	68.9 (63.4, 74.1)
Associate or bachelor's degree	804 (49.2)	65.3 (55.9, 73.8)	767 (45.2)	73.2 (67.1, 78.7)	1,038 (45.0)	75.4 (69.8, 80.5)
More than college degree	1,056 (27.9)	77.5 (70.1, 83.8)	1,082 (25.7)	74.4 (67.4, 80.6)	2,053 (27.7)	73.9 (70.3, 77.3)
Occupation^d						
Physician	236 (3.5)	47.0 (26.6, 68.0)^b	283 (3.4)	54.3 (46.1, 62.4)^e	591 (3.6)	67.0 (62.8, 71.0)
Nurse practitioner/Physician assistant	136 (1.3)	49.0 (26.2, 72.2)^b	147 (1.4)	88.8 (65.2, 98.6) ^b	333 (1.7)	70.4 (64.8, 75.6)
Nurse (ref)	174 (18.4)	75.0 (64.8, 83.5)	179 (18.4)	76.5 (66.3, 84.9)	362 (18.7)	76.9 (70.9, 82.3)
Pharmacist	307 (1.3)	74.6 (49.1, 91.7) ^b	309 (1.3)	73.4 (67.4, 78.8)	509 (1.5)	79.8 (75.8, 83.5)
Other clinical personnel ^f	589 (18.8)	55.6 (37.0, 73.2) ^b	561 (18.8)	62.4 (51.6, 72.4)	916 (18.8)	70.1 (66.0, 73.9)
Assistant/aide	614 (24.2)	62.7 (56.7, 68.4)	577 (24.2)	60.3 (56.0, 64.5)	540 (24.8)	63.9 (59.4, 68.2)
Non-clinical personnel ^g	316 (32.6)	78.4 (69.1, 86.0)	306 (32.5)	83.2 (72.8, 90.9)	333 (30.9)	81.2 (72.0, 88.4)
Work setting^h						

	2019–20		2020–21		2021–22	
Characteristic	Number (weighted %)	Weighted % with paid sick leave (95% CI)	Number (weighted %)	Weighted % with paid sick leave	Number (weighted %)	Weighted % with paid sick leave
Hospital (ref)	749 (36.6)	78.3 (71.5, 84.1)	887 (38.6)	82.4 (77.3, 86.7)	1,476 (40.3)	79.1 (75.4, 82.5)
Ambulatory care	686 (22.2)	69.1 (62.3, 75.3)	708 (22.6)	69.0 (59.6, 77.4)	1,325 (31.2)	76.2 (72.3, 79.7)
Long-term care facility/home health care ⁱ	569 (41.2)	61.7 (50.3, 72.2)	575 (41.7)	67.8 (60.0, 74.9)	646 (29.3)	64.5 (56.8, 71.7)
Other clinical setting ^j	677 (11.6)	68.6 (57.7, 78.2)	618 (10.8)	59.7 (48.5, 70.2)	773 (10.2)	70.8 (63.8, 77.2)
Type of work arrangement						
Direct hire (ref)	1,629 (76.1)	76.1 (71.2, 80.5)	1,787 (82.6)	77.0 (72.9, 80.7)	2,705 (79.6)	77.5 (75.0, 79.9)
Licensed independent practitioner	253 (7.4)	46.5 (31.9, 61.6)	263 (5.5)	50.1 (37.1, 63.1)	425 (6.0)	45.9 (38.1, 53.9)
Contract employee	305 (16.5)	45.7 (28.1, 64.1)_b	279 (12.0)	46.3 (32.4, 60.6)	424 (14.4)	62.1 (47.4, 75.3)
Location of primary workplace^k						
Rural (ref)	283 (10.7)	70.9 (56.3, 82.9)	308 (12.2)	58.7 (47.2, 69.5) ^e	496 (14.8)	71.9 (66.5, 76.9)
Non-rural	2,118 (89.3)	67.8 (61.9, 73.4)	2,080 (87.8)	73.2 (68.8, 77.3)	3,117 (85.2)	73.5 (70.1, 76.8)
U.S. Census Bureau Region^l						
Northeast (ref)	455 (19.8)	70.7 (61.1, 79.0)	456 (19.8)	77.8 (68.6, 85.3)	791 (19.9)	79.8 (75.6, 83.7)
Midwest	370 (23.4)	63.5 (52.9, 73.2)	399 (23.3)	61.3 (51.1, 70.8)	816 (23.2)	71.9 (67.1, 76.3)
South	1,016 (36.1)	61.8 (50.5, 72.3)	1,024 (36.1)	68.0 (60.4, 74.9)	1,248 (35.9)	68.4 (62.0, 74.4)
West	560 (20.7)	82.0 (73.0, 89.0)	507 (20.8)	82.8 (75.9, 88.4)	757 (21.0)	77.1 (70.8, 82.5)
Employer influenza vaccination requirement						
Required (ref)	896 (42.3)	73.7 (67.2, 79.5)	758 (32.4)	79.9 (73.9, 85.1)	1,614 (43.2)	78.6 (75.3, 81.6)
Recommended	938 (41.4)	78.3 (71.5, 84.1)	1,071 (44.7)	74.8 (68.9, 80.1)	1,333 (38.3)	74.3 (67.6, 80.2)
Neither required nor recommended	443 (16.3)	42.6 (28.8, 57.3)_e	453 (22.8)	56.7 (43.3, 69.5)	555 (18.4)	59.2 (51.7, 66.4)
Employer COVID-19 vaccination requirement						
Required (ref)	N/A		N/A		2,157 (60.0)	80.0 (77.3, 82.5)
Recommended	N/A		N/A		1,157 (31.6)	69.9 (64.8, 74.6)
Neither required nor recommended	N/A		N/A		265 (8.4)	48.3 (39.6, 57.0)

Note: Bold case indicates statistical significance compared with respective reference group using t-test (p<0.05).

^a Respondents were recruited from two preexisting national opt-in Internet sources: Medscape, a medical website managed by WebMD Health Professional Network, and general population Internet panels operated by Dynata.

^b Estimate does not meet the National Center for Health Statistic's standards of reliability. https://www.cdc.gov/nchs/data/series/sr_02/sr02_175.pdf

^cRace/ethnicity was self-reported. Respondents identified as Hispanic might be of any race. The “Other” race category included Asians, American Indians/Alaska Natives, Native Hawaiians or other Pacific Islanders, and women who selected “other” or multiple races.

^dExcludes students.

^eStatistically significant difference compared between survey years with 2022 survey year used as the reference group using t-test ($p < 0.05$).

^fOther clinical personnel include dentists, allied health professionals, technicians and technologists, emergency technicians, emergency medical technicians, and paramedics.

^gNon-clinical personnel include administrative support staff/manager and non-clinical support staff.

^hRespondents could select more than one work setting. Each work setting is represented by a separate variable with two levels (yes/no, where reference level is no).

ⁱNursing home, assisted living facility, other LTCF, home health agency, or home health care.

^jIncludes dentist office or dental clinic, pharmacy, emergency medical services, and other settings where clinical care or related services were provided to patients.

^kRurality was defined using ZIP codes where >50% of the population resides in a nonmetropolitan county, a rural U.S. Census tract, or both, according to the Health Resources and Services Administration’s definition of rural population. <https://www.hrsa.gov/rural-health/about-us/definition/index.html>.

^lNortheast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Table 2:

Factors associated with paid sick leave among healthcare personnel — United States, April 2022

Characteristic	Prevalence ratio (95% CI) ^a	Adjusted prevalence ratio ^b (95% CI)
Age		
18–29 years (ref)		
30–44 years	1.17 (0.97, 1.41)	1.06 (0.94, 1.20)
45–59 years	1.13 (0.94, 1.37)	1.04 (0.92, 1.17)
60 years	1.11 (0.91, 1.35)	1.05 (0.91, 1.20)
Sex		
Male (ref)		
Female	0.90 (0.84, 0.97)	0.91 (0.86, 0.97)
Occupation^c		
Physician	0.87 (0.79, 0.96)	0.89 (0.80, 1.00)
Nurse practitioner/Physician assistant	0.91 (0.82, 1.01)	0.93 (0.83, 1.04)
Nurse (ref)		
Pharmacist	1.04 (0.95, 1.13)	1.05 (0.94, 1.16)
Other clinical personnel ^d	0.91 (0.83, 1.00)	0.91 (0.83, 1.01)
Assistant/aide	0.83 (0.75, 0.92)	0.95 (0.85, 1.06)
Non-clinical personnel ^e	1.06 (0.94, 1.19)	1.11 (1.01, 1.23)
Primary Work Setting^f		
Hospital		
Ambulatory care	0.96 (0.90, 1.03)	1.01 (0.93, 1.09)
Long-term care facility/Home Health agency ^g	0.81 (0.71, 0.92)	0.96 (0.87, 1.07)
Other clinical settings ^h	0.88 (0.79, 0.99)	0.96 (0.85, 1.09)
Type of work		
Direct hire (ref)		
Licensed independent practitioner	0.59 (0.50, 0.70)	0.71 (0.61, 0.82)
Contract employee	0.80 (0.65, 0.99)	0.89 (0.79, 1.01)
Area of primary workplaceⁱ		
Rural (ref)		
Non-rural	1.02 (0.94, 1.11)	0.99 (0.92, 1.06)
U.S. Census Bureau Region^j		
Northeast (ref)		
Midwest	0.90 (0.83, 0.97)	0.90 (0.83, 0.97)
South	0.86 (0.77, 0.95)	0.91 (0.85, 0.98)
West	0.97 (0.88, 1.05)	0.98 (0.89, 1.07)
Employer influenza vaccination requirement		
Required (ref)		

Characteristic	Prevalence ratio (95% CI) ^a	Adjusted prevalence ratio ^b (95% CI)
Recommended	0.95 (0.86, 1.04)	1.04 (0.97, 1.11)
Neither required or recommended	0.75 (0.66, 0.86)	0.92 (0.82, 1.04)
Employer COVID-19 vaccination requirement		
Required (ref)		
Recommended	0.87 (0.81, 0.94)	0.90 (0.84, 0.97)
Neither required or recommended	0.60 (0.51, 0.72)	0.73 (0.61, 0.89)

Note: Bold case indicates statistical significance ($p < 0.05$ comparing to reference group).

^a95% confidence interval.

^bLogistic regression models included age, sex, occupation, type of work, area of primary workplace, U.S. Census Bureau region, employer influenza vaccination requirement, and employer COVID-19 vaccination requirement.

^cExcluding students.

^dOther clinical personnel include dentists, allied health professionals, technicians and technologists, emergency technicians, emergency medical technicians, and paramedics.

^eNon-clinical personnel include administrative support staff/manager and non-clinical support staff.

^fWork setting presented in Table 2 is created differently from the work setting variable presented in Table 1. The work setting variable presented here represents HCP's primary work setting created as one variable with four categories that are mutually exclusive, which is different from work setting variable presented in Table 1, where each subgroup was a separate variable that were not mutually exclusive. Primary work setting for students were excluded ($n=37$).

^gNursing home, assisted living facility, other long-term care facility, home health agency, or home health care.

^hIncludes dentist office or dental clinic, pharmacy, emergency medical services, and other settings where clinical care or related services were provided to patients

ⁱRurality was defined using ZIP codes where >50% of the population resides in a nonmetropolitan county, a rural U.S. Census tract, or both, according to the Health Resources and Services Administration's definition of rural population. <https://www.hrsa.gov/rural-health/about-us/definition/index.html>.

^jNortheast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.