

Access to Paid Sick Leave and COVID-19 Vaccination Status Among Employed Adults Aged 18–64 Years in the United States, 2021–2022

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Objectives. To measure the associations between access to paid sick leave (PSL) and COVID-19 vaccination status in the United States, both overall and stratified by occupation and industry of employment.

Methods. We extracted data on employed adults aged 18 to 64 years from the 2021 and 2022 US Medical Expenditure Panel Survey. We assessed associations between PSL and COVID-19 vaccination status using logistic regression. We used marginal effects analyses to estimate associations within occupation and industry groups.

Results. Our analytic sample ($n = 15\,089$) represented more than 114 million employed US adults. Access to PSL was significantly associated with receipt of a COVID-19 vaccination (adjusted odds ratio = 1.33; 95% confidence interval = 1.14, 1.55). Marginal effects analyses indicated that this association was significant within most occupation and industry groups.

Conclusions. These findings suggest PSL is associated with higher COVID-19 vaccination rates among US workers. PSL remains an important tool for improving preventive health care access and reducing rates of infectious disease in the United States. (*Am J Public Health.* 2025;115(8):1308–1311. <https://doi.org/10.2105/AJPH.2025.308095>)

The United States remains one of the few high-income nations without a national paid sick leave (PSL) policy.¹ As a result, 1 in 5 US workers cannot take time off work to recover from illness—or to access preventive health care resources, such as vaccinations—without risking lost wages.¹ Access to PSL may increase vaccination rates by allowing workers to take time off from work to receive a vaccine and to recover from its side effects. Although previous ecological studies indicate that city-level PSL policies are associated with higher

COVID-19 vaccination rates, this association has not been assessed nationally or by occupation or industry of employment.¹ This study reports associations between PSL and COVID-19 vaccination status in the United States, both overall and stratified by occupation and industry, for 2021 to 2022.

METHODS

We used data from the US Medical Expenditure Panel Survey (MEPS), a nationally representative survey of health care utilization, employment, and

health outcomes in the United States.² Specifically, we used the 2021 and 2022 Full Year Consolidated MEPS data files, which contain information collected from 19 807 individuals employed for the entirety of the year in which they were interviewed. Approximately 20% of this initial sample was excluded because their survey information was reported by a proxy, they were aged younger than 18 years or 65 years or older, or they were missing data on variables used for analysis. Respondents employed in military occupations or industries were excluded because

they likely had PSL and were required to receive a COVID-19 vaccine during the study period. Self-employed individuals were excluded because these respondents were missing information on PSL status in MEPS.

We defined respondents as having PSL if they indicated that their current main job offered PSL at any time within the study period. We defined self-reported COVID-19 vaccination status as having ever received a COVID-19 vaccination. Confounding variables of interest included age, sex, race/ethnicity, country of birth, family income, family size, marital status, education, region, insurance status, occupation, industry of employment, and survey year; hours worked per week was considered a potential effect modifier.

We conducted all analyses in RStudio version 4.4.1.,³ downloaded MEPS data using the RStudio package “MEPS,”⁴ and adjusted all descriptive and inferential statistics for MEPS’s complex survey design.

We calculated descriptive statistics both overall and by PSL status and measured the association between access to PSL and COVID-19 vaccination status, both unadjusted and adjusted for covariates of interest, using logistic regression with a logit link; we used a quasibinomial distribution to account for potential overdispersion. We also estimated overall associations stratified by hours worked per week (< 35, 35–40, > 40). We used marginal effects analysis to estimate the covariate-adjusted percentage of respondents who reported ever receiving a COVID-19 vaccine by PSL status and occupation or industry group, with unadjusted proportions calculated for comparison.

RESULTS

Our analytic sample ($n = 15\,089$) represented approximately 114.5 million US individuals employed during 2021 or 2022 (Table A, available as a supplement to the online version of this article at <https://ajph.org>); 22.6% reported not having access to PSL. Compared with those without PSL, those with PSL were more frequently White (61.4%), born in the United States (82.7%), married (58.0%), and college-educated (73.6%); they also tended to be older (mean = 41.9 years), to have higher total family incomes (\$92 515), and to have smaller families (2.89 members). Respondents with PSL were more frequently employed in professional and related occupations (31.3%) and education, health, and social services industries (29.4%), while those without PSL were more frequently employed in service occupations (24.6%) and construction (10.7%) or leisure and hospitality (15.0%) industries.

Respondents with access to PSL more frequently reported having ever received a COVID-19 vaccination than those without PSL (85.8% compared with 72.3%; Table B, available as a supplement to the online version of this article at <https://ajph.org>). This association was significant after controlling for confounders of interest (adjusted odds ratio [AOR] = 1.33; 95% confidence interval [CI] = 1.14, 1.55); stratified analyses indicated this association was significant in those working 35 to 40 (AOR = 1.53; 95% CI = 1.22, 1.93) and greater than 40 hours (AOR = 1.57; 95% CI = 1.13, 2.17) per week, but not less than 35 hours per week (AOR 1.02; 95% CI = 0.72, 1.43; Table C, available as a supplement to the online version of this article at <https://ajph.org>). Within

all occupation and industry groups, both the unadjusted and covariate-adjusted proportion of respondents reporting ever receiving a COVID-19 vaccine was higher in those with PSL compared with those without (Figure 1; Table D, available as a supplement to the online version of this article at <https://ajph.org>). These differences were significant in all occupation and industry groups assessed apart from farming, fishing, and forestry occupations and information industries; other services industries; and natural resource and mining industries.

DISCUSSION

This study’s findings, which represented more than 114 million employed US adults aged 18 to 64 years, suggest that workers with access to PSL are significantly more likely to report being vaccinated for COVID-19 than those without. This association was not significant in respondents working less than 35 hours per week, suggesting PSL gives full-time workers time to receive vaccines and recover from their side effects. Previous research has highlighted associations between PSL and vaccine uptake. For instance, many of the same occupations with low rates of PSL access early in the COVID-19 pandemic also had low rates of COVID-19 vaccination uptake (e.g., farming, fishing, and forestry occupations).^{5,6} Moreover, pre-pandemic analyses suggest that PSL increases uptake of vaccines for other infectious diseases, such as influenza, in workers with PSL access.⁷

Interpretations of national-level associations between PSL and preventive health care uptake are complicated by the wide variation in PSL access in the United States. As the United States

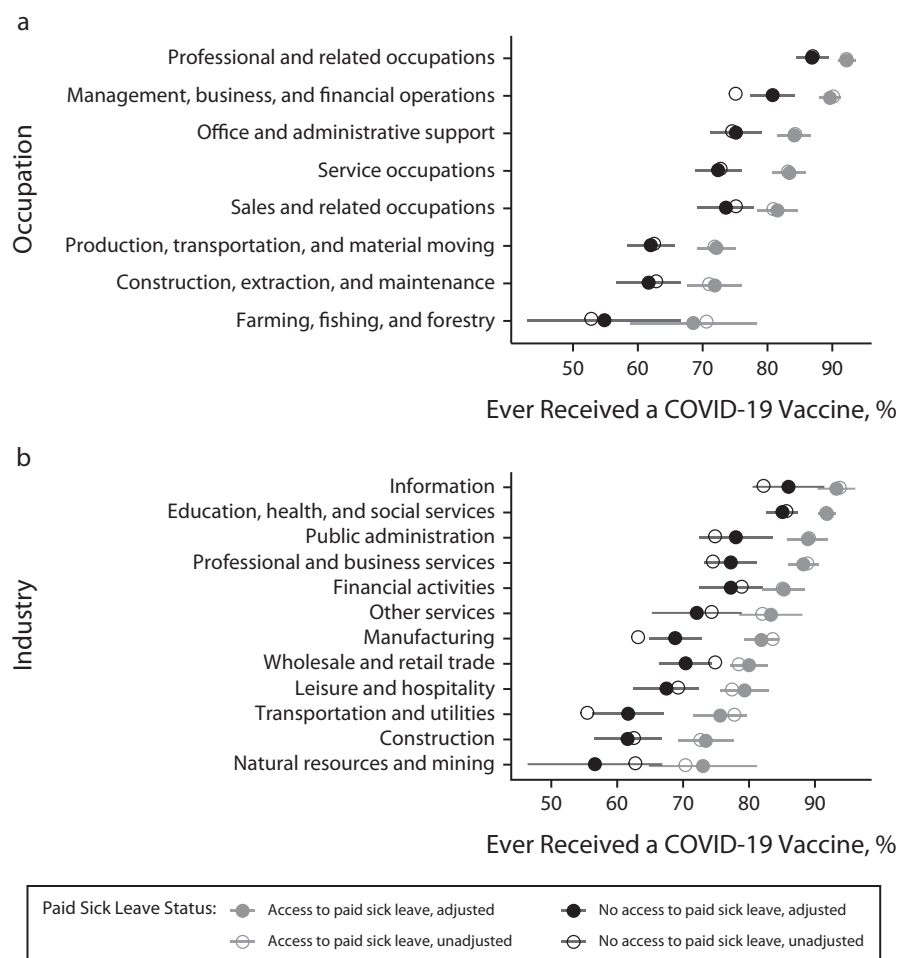


FIGURE 1— Percentage of Employed Adults Aged 18–64 Years Reporting Ever Receiving a COVID-19 Vaccine Stratified by Access to Paid Sick Leave Status and by (a) Occupation or (b) Industry of Employment: US Medical Expenditure Panel Survey (MEPS), 2021–2022

Note. Occupation and industry information in MEPS is coded using Census occupation and industry codes. Natural resources and mining industries are separate classifications but were combined here because of small cell sizes. “Other services” industries include establishments providing service not captured by other industry codes, including but not limited to equipment or machinery repair, religious services, and advocacy. The weighted sample size was $n = 114\,478\,885$. Results are presented both unadjusted and adjusted for respondent age, sex, race/ethnicity, country of birth (born in United States or not), family income, family size, marital status, education, region, insurance status, and survey year using marginal effects analysis of quasibinomial logistic regression models with a logit link.

does not have a national PSL policy, variation between state and local policies results in significant geographic and industrial variation in PSL access, potentially influencing the patterns observed in this study; some states exclude construction and agricultural workers from PSL laws,⁸ both of which had low vaccination rates relative to other occupational or industrial groups in our study.

This study is subject to certain limitations. First, our analysis represents US adults employed by other persons and is not representative of those who lost employment during our study period. Second, although personal perspectives related to vaccine safety, effectiveness, and side effects have previously demonstrated associations with COVID-19 vaccination rates,⁹ this information is not captured by MEPS.

However, these personal perspectives likely do not influence an individual's access to PSL, and our findings are consistent with previous results measuring associations between PSL and preventive health care uptake.^{1,7} Third, MEPS does not collect information related to workplace vaccination or PSL policies (e.g., if an employer requires their employees to receive a vaccine or voluntarily provides PSL), which

may be associated with PSL access and COVID-19 vaccination status within our sample.

PUBLIC HEALTH IMPLICATIONS

These findings indicate that millions of US workers did not have access to PSL throughout 2021 to 2022. Expanding PSL access nationwide has the potential to reduce the spread of infectious diseases in the United States by increasing vaccine access among employed adults, helping working parents stay up to date with their children's vaccination schedule,¹⁰ and preventing workplace spread of infectious diseases by allowing workers to stay home when sick.¹¹ Moreover, PSL has been noted to increase access to nonvaccine preventive health care resources (e.g., physician visits)⁷ and is associated with decreases in occupational injuries in US workers,¹² potentially improving chronic disease outcomes in the United States. *AJPH*

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Note. The findings and conclusions in this report are those of the author(s) and do not necessarily represent the official position of the National Institute for Occupational Safety and Health, CDC.

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E.W. Lundstrom downloaded all data, performed all analyses, and drafted the article for submission. All authors were involved in the conceptualization of the study and critical revision of the article and reviewed and approved the final article before submission.

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CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

HUMAN PARTICIPANT PROTECTION

This activity was reviewed by the CDC, was deemed research not involving human participants, and was conducted consistent with applicable federal law and CDC policy.

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