Letter to the Editor



Coronavirus disease 2019 (COVID-19) vaccinations and preservation of the healthcare workforce

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To the Editor—Healthcare facilities have been stressed to their limits throughout the coronavirus disease 2019 (COVID-19) pandemic due to the combination of surges of patients and staffing shortages. US hospitals began vaccinating staff against COVID-19 exactly 4 months ago in mid-December 2020.

Tufts Medical Center, an urban 350-bed academic medical center with ⁷7,400 employees, began vaccinating staff with BNT162b2 vaccine (Pfizer) on December 16, 2020. On December 28, 2020, we incorporated the mRNA-1273 (Moderna) vaccine into our employee vaccination clinic. Gradually increasing eligibility to more groups, on January 26, 2021, eligibility was opened to all employees, including those working remotely. To date, 6,044 employees have been vaccinated with 2 doses of mRNA vaccine.

In total, 641 employees (including those working fully remotely), contractors, volunteers, interns, and students were infected with COVID-19 between March 16, 2020, and May 3, 2021. A precipitous drop in infections was observed after these healthcare workers began to receive their second doses of mRNA vaccine (Fig. 1).¹ At its highest point, 90 employees were simultaneously out of work due to COVID-19–related illness. At the time of this writing, only 19 employees are out due

to COVID-19, even though the incidence of COVID-19 remains high in the surrounding community.

We established a telephone hotline for employees, who were also encouraged to visit the employee health department as needed to report and discuss vaccine side effects. In total, 150 employees reported side effects, of which 12 met the criteria to be reported to the Vaccine Adverse Event Reporting System.

Our hospital continues to operate at or above capacity, not only due to COVID-19 admissions but also to the increasing acuity of illness in patients without COVID-19, possibly due to delays in care. Vaccination has enabled us to preserve our workforce and provide necessary care to patients. When first introduced, many healthcare workers, trusting the data that supported the emergency use authorization, signed up to be vaccinated despite what was for some a natural trepidation associated with the idea of a "new" vaccine. Today, our real-world experience and that of others² mirrors that of the clinical trials demonstrating the safety and efficacy of mRNA vaccines against COVID-19. Given that staffing constraints caused by COVID-19 are a patient safety issue and that staff-to-staff transmission of COVID-19 has been documented frequently,^{3,4} and staff-to-patient transmission more rarely,^{3,4} we believe that healthcare workers have a duty to be vaccinated.

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Figure 1. (a) COVID 19 Employee Infections and Vaccinations per week (b) The State of Massachusetts Infections and Vaccinations per Week.

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References

- Bureau of Infectious Diseases and Laboratory Sciences. COVID 19 data. Massachusetts Department of Public Health website. https://www. mass.gov/info-details/covid-19-response-reporting. Accessed May 7, 2021.
- Benenson S, Cohen M, Nir-Paz Ran. BNT162b2 mRNA COVID-19 vaccine effectiveness among healthcare workers. N Engl J Med 2021;384: 1775–1777.
- Klompas M, Baker M, Rhee C, et al. A SARS-CoV-2 cluster in an acute-care hospital. Ann Intern Med 2021. doi: 10.7326/M20-7567.
- Klompas M, Baker M, Griesbach D, et al. Transmission of SARS-CoV-2 from asymptomatic and presymptomatic individuals in healthcare settings despite medical masks and eye protection. *Clin Infect Dis* 2021. doi: 10.1093/cid/ ciab218.