

Effectiveness of Three Versus Six Feet of Physical Distancing for Controlling Spread of COVID-19 among Primary and Secondary Students and Staff: A Retrospective, State-wide Cohort Study (CID)

Bottom Line: In this study, there were no significant differences in SARS-CoV-2 case rates among K-12 students and staff in Massachusetts public school districts that implemented ≥ 3 versus ≥ 6 feet of physical distancing between students so long as universal masking of students and staff was also in place.

Details: This study sought to assess the effectiveness of putting ≥ 3 versus ≥ 6 feet of physical distance between students on the rate of new SARS-CoV-2 cases among students and staff in Massachusetts K-12 public school districts that reopened in fall 2020. Universal masking for students in grades 2 and up and all school staff was in place in most districts during the 16-week study period. In person instruction was attended by 537,336 students and 99,390 staff in 251 school districts that met inclusion criteria. There were no significant differences in SARS-CoV-2 case rates for students and staff in school districts with official policies of ≥ 3 versus ≥ 6 feet of physical distance between students, with an incidence rate ratio (IRR) of 0.891 for students and staff. New cases among students and staff were highly correlated with levels of community transmission; after adjusting for community incidence, SARS-CoV-2 risk for both students and staff in districts with ≥ 3 versus ≥ 6 feet of physical distance remained similar (IRR of 0.904 and 1.015, respectively).

Key Takeaways:

- Findings from this study suggest that a lower physical distancing recommendation in K-12 school settings, provided universal masking is implemented, may not negatively impact safety, though more rigorously designed studies, supporting evidence, and endorsement by the CDC are needed to indicate change in guidance.

Experiences of Latinx Individuals Hospitalized for COVID-19: A Qualitative Study (JAMA Network Open)

Bottom Line: In this qualitative study of 60 Latinx adults hospitalized with COVID-19, themes relevant to the improvement of public health and health care responses to the pandemic were identified, including misinformation about COVID-19, the relationship between COVID-19 and existing social disadvantage, exposure risks due to work, and avoidance of care due to immigration and economic concerns.

Details: This qualitative study sought to examine the experiences and perspectives of Latinx individuals hospitalized with COVID-19 from March-July 2020 at hospitals in San Francisco, CA, and Denver, CO. 60 individuals participated in a telephone interview; 73% were essential workers, 78% lived with 4 or more people, and all lived in low-income areas. Moreover, most did not have paid sick leave (80%) and 35% lost their job due to COVID-19. Qualitative thematic analysis of interview transcripts resulted in 5 major themes of relevance for public health and health care: 1) invincibility, misinformation, and ingrained social norms led to the perception that COVID-19 was a distant threat; 2) intersecting

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forms of social and economic disadvantage (e.g., high-density housing, lack of protections for undocumented immigrants, concerns about unemployment and eviction) were compounded by COVID-19; 3) cost, accessibility, and deportation fears contributed to a reluctance to seek care; 4) health care system interactions; and 5) community and faith-based resiliency.

Key Takeaways:

- Findings support the need for efforts to address COVID-19 related misinformation, fears related to immigration status and deportation, and health care accessibility challenges, as well as advocate for and enact worker protection and economic policies.

COVID-19 Vaccine Second-Dose Completion and Interval Between First and Second Doses Among Vaccinated Persons — United States, December 14, 2020–February 14, 2021 (MMWR)

Bottom Line: 88% of persons who received their 1st COVID-19 vaccine dose during 12/14/20-2/14/21 and for whom enough time had passed for them to receive their 2nd dose completed the vaccination series, with 96% receiving their 2nd dose within the recommended time frame.

Details: This study used Pfizer-BioNTech and Moderna COVID-19 vaccine administration data reported to the CDC from 12/13/20-2/14/21 to analyze vaccination series completion trends. The first analysis assessed series completion (both doses) among people who received a 1st dose and had enough time to receive a second dose, while the second analysis looked at whether people receiving the second dose did so within the recommended dosing interval (17-25 days and 24-32 days after the first dose for Pfizer-BioNTech and Moderna, respectively). 88% of 12,496,258 persons who received the first vaccine dose and for whom enough time had passed for them to receive their 2nd dose completed the vaccination series, though there was variation by jurisdiction (range = 75.3%-99.7%); 8.6% had not received the 2nd dose but were still within the recommended time frame to do so, and 3.4% missed the 2nd dose (e.g., it had been more than 42 days since their 1st dose). Non-Hispanic American Indian/Alaska Native persons and 16-44 year olds had the highest percentage of missed 2nd doses – 5.1% and 4%, respectively. Among 14,205,768 persons who received a 2nd dose, 95.6% did so within the recommended time frame, though there was variation by jurisdiction (range = 79%-99.9%).

Key Takeaways:

- This analysis demonstrated that most people with enough time to receive their 2nd vaccine dose completed the series, and did so within the recommended time frame.
- During the study time period, vaccination priority groups were more likely to have been vaccinated at their residence or work site, which may have led to greater adherence to the recommended vaccination series schedule.
- Among racial/ethnic groups, non-Hispanic American Indian/Alaska Native persons had the lowest vaccination series completion rates and the highest prevalence of missed 2nd doses; more work is needed to understand reasons behind these trends and ways to improve acceptance of and accessibility to vaccines.

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- Strategies to ensure vaccination series completion include: rescheduling canceled 2nd dose appointments, repurposing missed second doses, and sending reminder notices.

Impact of the COVID-19 Vaccine on Asymptomatic Infection Among Patients Undergoing Pre-Procedural COVID-19 Molecular Screening (CID)

Bottom Line: In this study comparing SARS-CoV-2 screening test results among mRNA-vaccinated and unvaccinated adults without COVID-19 symptoms, 3.2% and 1.4% of the unvaccinated and vaccinated groups, respectively, tested positive.

Details: This retrospective cohort study sought to examine the impact of mRNA COVID-19 vaccines on asymptomatic SARS-CoV-2 infection. Over 39,000 asymptomatic adult patients had over 43,000 SARS-CoV-2 molecular screening tests prior to having elective surgery within a large healthcare system from 12/17/20-2/8/21. The main objective was to assess the relative risk of a positive test among participants who had received at least 1 vaccine dose compared to those who had not yet been vaccinated, controlling for a number of demographic and other variables. Of 3,0006 tests performed on vaccinated patients, 1.4% (n=42) were positive; of 45,327 tests performed on unvaccinated patients, 3.2% (n=1,436) were positive, or a relative risk reduction of 44%. In adjusted analyses, the relative risk of asymptomatic infection was lower among those who had received their first vaccine dose more than 10 days prior (RR=0.21) and 1 or more days after receiving their second dose (RR=0.20).

Key Takeaways:

- Findings suggest mRNA COVID-19 vaccines may reduce asymptomatic SARS-CoV-2 infection; limitations include the study design, that participants seeking elective surgery may have engaged in safer behaviors and thus have lower rates of asymptomatic SARS-CoV-2 infection than the general population, and a lack of follow-up to see if patients became symptomatic after testing.