

## VACCINATION EFFECTIVENESS AND DISTRIBUTION

### VACCINATION EFFECTIVENESS AND COVERAGE

- Between August 12 and September 19, 2021, after all three doses of an mRNA COVID-19 vaccine, 79.4 percent and 74.1 percent of 12,591 registrants reported local or systemic reactions after the third dose, respectively; 77.6 percent and 76.5 percent reported local or systemic reactions after the second dose, respectively.
  - After an extra dosage of COVID-19 vaccination, voluntary reports revealed no unusual patterns of adverse events.
- Despite being less likely to report hesitancy about getting vaccinated, individuals with disabilities had a lower likelihood of receiving COVID-19 vaccination than adults without disabilities. Adults with disabilities said it was more difficult to get a COVID-19 immunization than people without disabilities.
- In August 2021, emergency department visits and hospital admissions were greater in states with lower population vaccination coverage and lower in states with higher immunization coverage during a two-week period. In particular, the number of COVID-19 cases, emergency department visits, and hospital hospitalizations rose among people aged 0 to 17.
  - Vaccine efficacy among U.S. veterans hospitalized at five Veterans Affairs Medical Centers was 87 percent from February 1 to August 6, 2021. mRNA COVID-19 vaccinations are still very effective, even when the SARS-CoV-2 B.1.617.2 (Delta) form is widely circulated. In adults aged 65 years and older, vaccine efficacy in avoiding COVID-19-related hospitalization was 80 percent, compared to 95 percent in individuals aged 18–64 years.
- The U.S. COVID-19 Vaccination Program began December 14, 2020. By September 13, 2021, 63.0% of people in the US have received at least 1 dose; 53.8% have been fully vaccinated. 92.8% of people above 65 have received at least 1 dose. 75.7% of people above 18 have received at least 1 dose, and 73.8% of people above 12 have received at least 1 dose.
  - In Bexar county, 54% are fully vaccinated and 64% have received at least 1 dose
- On April 23, 2021, the Advisory Committee on Immunization Practices determined that the benefits of resuming Janssen COVID-19 vaccination for adults aged  $\geq 18$  years outweighed the risks and reaffirmed its prior recommendation under FDA's Emergency Use Authorization, which includes a new warning for rare clotting events among women aged 18–49 years.
- Counties with low social vulnerability index (SVI), a CDC-approved metric reflective of 15 social indicators, have 1.9% higher vaccination coverage than high SVI counties (15.8% v 13.9%). Counties with high social vulnerability, which tend to represent communities of color, were more likely to be a COVID hotspot.
- As vaccine eligibility has expanded, disparities in county-level vaccination coverage by social vulnerability have grown, particularly in large fringe metropolitan (areas surrounding large cities such as suburban) and nonmetropolitan counties. By May 1, 2021, adult vaccination coverage was lower in counties with a lower socioeconomic background and counties whose higher percentage of households with children, single parents, and people with disabilities.
- COVID-19 vaccination coverage was lower in rural counties (38.9%) than in urban counties (45.7%), with differences persisting by age and gender. Higher percentages of older persons with social vulnerabilities were seen in counties with lower immunization starting rates.

#### *Recommendation* for effective vaccine allocation:

- Resuming the Janssen COVID-19 vaccine administration will allow flexibility, choice, and improved access. Education about risks with Janssen COVID-19 vaccine is pivotal.
- Local communities should play a key role in the promotion and delivery of vaccines; opinion leaders, faith leaders, community health workers and navigators are essential in educating vulnerable communities and assisting individuals to get vaccinated.
- Data on vaccination uptake must be timely, transparent, and disaggregated by key demographic indicators, such as race/ethnicity, gender, age and income level. Such data can be used to identify and address bottlenecks and gaps to improve equality and equality in vaccine dissemination.

### INTENTION TO VACCINATE

- To date, 34% of adults aged 18–39 years said they had received the COVID-19 vaccine. People aged 18–24, non-Hispanic Black adults, and those with less education, no insurance, and poorer household incomes indicated the lowest vaccination coverage and intent to get vaccinated. Concerns regarding vaccine safety and efficacy were frequently cited as immunization deterrents.
- In April 2021, 52 percent of unvaccinated adolescents aged 13–17 years and 56 percent of parents of unvaccinated adolescents aged 12–17 years expressed an interest in getting their children vaccinated against COVID-19. Receiving additional information about adolescent COVID-19 vaccine safety and efficacy was the most common reason that would enhance vaccination intent.
- In early 2021, a survey by Kaiser Family Foundation found leading reasons for vaccination, including being able to return to more normal life, feeling safe around other people, and resuming activities like going to work or school. Most (83%) adults are aware of the CDC guidance and about half express that they understand and plan to follow CDC's guidance.
- From September to December 2020, household panel surveys were conducted to gauge intent to receive COVID-19 vaccination. Intent increased from 39.4% to 49.1% among adults and across all priority groups, and nonintent decreased from 38.1% to 32.1%.
  - Despite decreases in nonintent, younger adults, women, non-Hispanic Black adults, adults living in nonmetropolitan areas, adults living in jails, and adults with less education and income, and without health insurance have the highest of nonintent to receive COVID-19 vaccination.

*Recommendation:* Tailoring information to address concerns of individual communities is effective in increasing intent of vaccination. Educate essential workers, minority populations, and the public about the safety of the vaccine development process, and the known effectiveness and safety of authorized COVID-19 vaccines helps boost confidence. Health care providers are a trusted resource of information about vaccines and can use CDC guidance to talk to patients about the need for vaccination.