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**Is there differential coverage of COVID-19 vaccination? If so, where are disparities observed?**

Pingali C, Meghani M, Razzaghi H, et al. COVID-19 Vaccination Coverage Among Insured Persons Aged ≥16 Years, by Race/Ethnicity and Other Selected Characteristics — Eight Integrated Health Care Organizations, United States, December 14, 2020–May 15, 2021. *MMWR Morb Mortal Wkly Rep* 2021;70:985–990. DOI: <http://dx.doi.org/10.15585/mmwr.mm7028a1>

- As of May 15, 2021, 48.3 percent of people aged 16 had received one COVID-19 vaccine dose, and 38.3 percent had been fully immunized, according to the CDC's Vaccine Safety Datalink. Non-Hispanic Black (40.7 percent) and Hispanic (41.1 percent) people had poorer one-dose coverage than non-Hispanic White people (54.6 percent); non-Hispanic Asian people had the highest coverage (57.4 percent).

Gargano JW, Wallace M, Hadler SC, et al. Use of mRNA COVID-19 Vaccine After Reports of Myocarditis Among Vaccine Recipients: Update from the Advisory Committee on Immunization Practices — United States, June 2021. *MMWR Morb Mortal Wkly Rep* 2021;70:977–982. DOI: <http://dx.doi.org/10.15585/mmwr.mm7027e2>

- Myocarditis risk has been found to be higher in mRNA COVID-19 vaccinees, particularly in males aged 12–29 years. The Advisory Committee on Immunization Practices found on June 23, 2021 that the advantages of COVID-19 vaccination to individuals and the population clearly outweighed the risks of myocarditis following vaccination.

Scherer AM, Gedlinske AM, Parker AM, et al. Acceptability of Adolescent COVID-19 Vaccination Among Adolescents and Parents of Adolescents — United States, April 15–23, 2021. *MMWR Morb Mortal Wkly Rep* 2021;70:997–1003. DOI: <http://dx.doi.org/10.15585/mmwr.mm7028e1>

- 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.

Razzaghi H, Meghani M, Pingali C, et al. COVID-19 Vaccination Coverage Among Pregnant Women During Pregnancy — Eight Integrated Health Care Organizations, United States, December 14, 2020–May 8, 2021. *MMWR Morb Mortal Wkly Rep* 2021;70:895–899. DOI: <http://dx.doi.org/10.15585/mmwr.mm7024e2>

- As of May 8, 2021, 16.3 percent of pregnant women in the United States had received one dose of COVID-19 vaccination during their pregnancy, according to the CDC's Vaccine Safety Datalink. Vaccination rates were lowest among Hispanic (11.9%), non-Hispanic Black (6.0%), and women aged 18–24 years (5.5%), and highest among non-Hispanic Asian women (24.7%) and women aged 35–49 years (5.5%). (22.7 percent).

Diesel J, Sterrett N, Dasgupta S, et al. COVID-19 Vaccination Coverage Among Adults — United States, December 14, 2020–May 22, 2021. *MMWR Morb Mortal Wkly Rep* 2021;70: 922–927. DOI: <http://dx.doi.org/10.15585/mmwr.mm7025e1>

- By May 22, 2021, 57.0 percent of adults in the United States aged 18 had received one vaccine dose; coverage among younger adults was lower and increased more slowly over time. If the present vaccination rate persists through August, young adults' vaccine coverage will be significantly lower than that of older individuals.

Baack BN, Abad N, Yankey D, et al. COVID-19 Vaccination Coverage and Intent Among Adults Aged 18–39 Years — United States, March–May 2021. *MMWR Morb Mortal Wkly Rep* 2021;70: 928–933. DOI: <http://dx.doi.org/10.15585/mmwr.mm7025e2>external icon

- In total, 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.

Paul P, France AM, Aoki Y, et al. Genomic Surveillance for SARS-CoV-2 Variants Circulating in the United States, December 2020–May 2021. *MMWR Morb Mortal Wkly Rep* 2021;70:846–850. DOI: <http://dx.doi.org/10.15585/mmwr.mm7023a3>

- CDC's genomic surveillance for SARS-CoV-2 variants generates population-based estimates of the proportions of variants among all SARS-CoV-2 infections in the United States. During April 11–24, 2021, the B.1.1.7 and P.1 variants represented an estimated 66.0% and 5.0% of U.S. infections, respectively, demonstrating the potential for new variants to emerge and become predominant.

Barry V, Dasgupta S, Weller DL, et al. Patterns in COVID-19 Vaccination Coverage, by Social Vulnerability and Urbanicity — United States, December 14, 2020–May 1, 2021. *MMWR Morb Mortal Wkly Rep*. ePub: 28 May 2021. DOI: <http://dx.doi.org/10.15585/mmwr.mm7022e1>external icon

- 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.
- Recommendation: Increased vaccination coverage in areas with high social risk could be aided by outreach measures such as enhancing public health message customized to local communities and boosting immunization access.

Murthy BP, Sterrett N, Weller D, et al. Disparities in COVID-19 Vaccination Coverage Between Urban and Rural Counties — United States, December 14, 2020–April 10, 2021. *MMWR Morb Mortal Wkly Rep* 2021;70:759–764. DOI: <http://dx.doi.org/10.15585/mmwr.mm7020e3>

- COVID-19 vaccination coverage was lower in rural counties (38.9%) than in urban counties (45.7%), with differences persisting by age and gender.

Whiteman A, Wang A, McCain K, et al. Demographic and Social Factors Associated with COVID-19 Vaccination Initiation Among Adults Aged  $\geq 65$  Years — United States, December 14, 2020–April 10, 2021. *MMWR Morb Mortal Wkly Rep* 2021;70:725–730. DOI:

<http://dx.doi.org/10.15585/mmwr.mm7019e4>

- 79.1 percent of persons aged 65 years had received one dose after the first 3.5 months of the US COVID-19 vaccination program, with men initiating vaccination earlier. Higher percentages of older persons with social vulnerabilities were seen in counties with lower immunization starting rates.

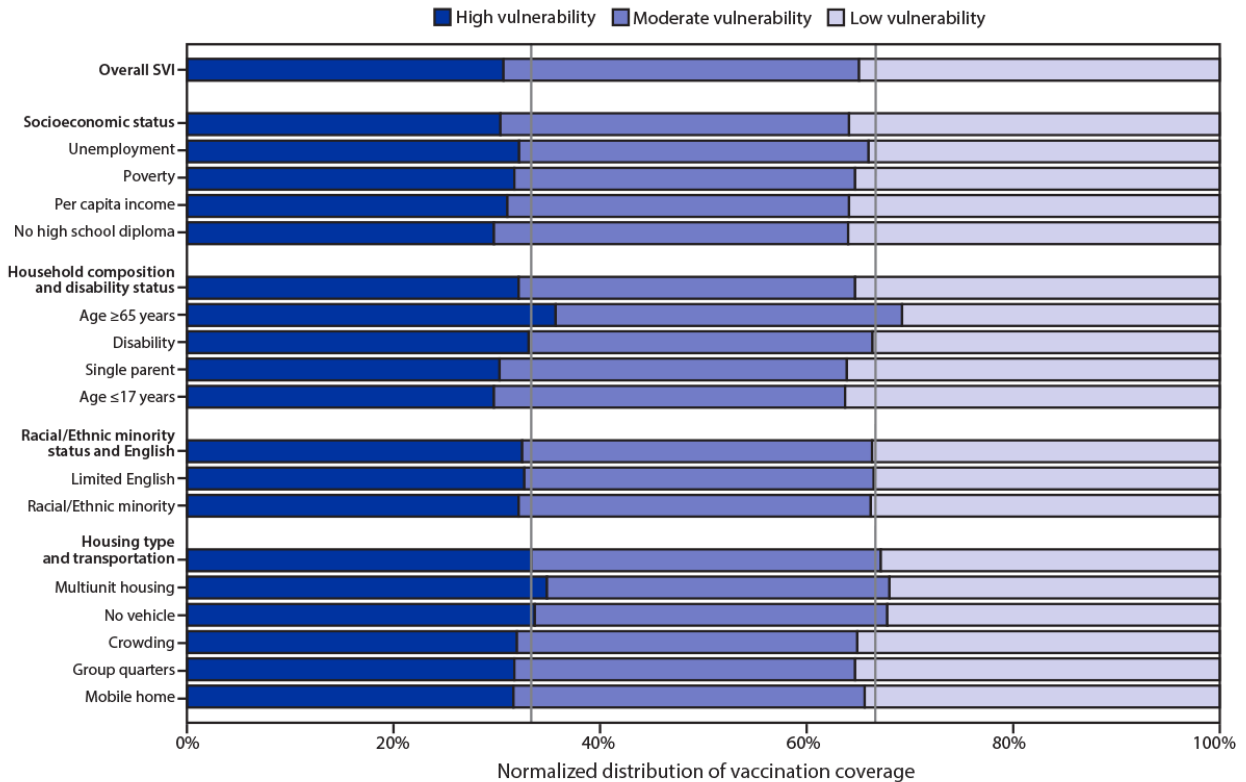
Stern MF, Piasecki AM, Strick LB, et al. Willingness to Receive a COVID-19 Vaccination Among Incarcerated or Detained Persons in Correctional and Detention Facilities — Four States, September–December 2020. *MMWR Morb Mortal Wkly Rep* 2021;70:473–477. DOI:

<http://dx.doi.org/10.15585/mmwr.mm7013a3>external icon

- From September to December 2020, residents in three prisons and 13 jails in four states (Washington, California, Florida, and Texas) were surveyed on their intent to vaccinate and their reasons for COVID-19 vaccination hesitancy or refusal. Among incarcerated or detained participants at correctional and detention facilities before authorization of COVID-19 vaccines for emergency use, 45% were willing to be vaccinated. Willingness to be vaccinated was lower among participants who were younger, identified as Black/African American, and lived in jails.

Hughes MM, Wang A, Grossman MK, et al. County-Level COVID-19 Vaccination Coverage and Social Vulnerability — United States, December 14, 2020–March 1, 2021. *MMWR Morb Mortal Wkly Rep* 2021;70:431–436. DOI: <http://dx.doi.org/10.15585/mmwr.mm7012e1>

- From December 14, 2020 to March 1, 2021, 51,873,700 residents of 49 U.S. states and DC received at least one dose of COVID-19 vaccine. Using the Social Vulnerability Index (SVI), low vulnerability counties experience 1.9 percentage points higher in terms of vaccination coverage than in high vulnerability counties (15.8% versus 13.9%). This pattern was seen across three out of four SVI themes (1-socioeconomic status, 2-household composition and disability status, and 3-racial/ethnic minority status and language). Out of all themes, disparity was largest in the socioeconomic status theme (2.5 percentage points difference). Out of all sub-theme, vaccination coverage of significant disparity between high and low vulnerability counties ( $\geq 0.5$  percentage points) was seen in: 1) population aged  $\geq 65$  years (2.3% points), 2) multiunit housing (1.3% points), and 3) households with no vehicle (0.7% points).



- Recommendation: Public health officials should investigate whether disparities are occurring because of access problems (e.g., vaccine supply, vaccination clinic availability, and lack of prioritization of vulnerable groups) or other challenges, such as vaccine hesitancy. Vaccination promotion, outreach, and administration should focus on high vulnerability populations within counties (e.g., providing resources to federally qualified health centers when socioeconomic disparities are identified).

Dasgupta S, Bowen VB, Leidner A, et al. Association Between Social Vulnerability and a County’s Risk for Becoming a COVID-19 Hotspot — United States, June 1–July 25, 2020. *MMWR Morb Mortal Wkly Rep* 2020;69:1535–1541. DOI: <http://dx.doi.org/10.15585/mmwr.mm6942a3>

- During June 1–July 25, 747 (24%) U.S. counties (representing 60% of the U.S. population) were identified as hotspots. Counties with higher social vulnerability, particularly vulnerabilities related to the representation of racial and ethnic minority residents, English proficiency, housing type, and transportation, had a higher probability of being identified as a hotspot. Counties with more social vulnerabilities, particularly those with a higher percentage of racial and ethnic minority residents, high-density housing structures, and crowded housing units, were at higher risk for becoming a COVID-19 hotspot, especially in less urban areas. Among hotspot counties, areas with more social vulnerability had significantly higher incidence than did other counties. These findings have implications for efforts to prevent counties with social vulnerability from becoming COVID-19 hotspots, including prioritizing vaccination access, and for implementing public health action in counties that become hotspots.

Nguyen KH, Srivastav A, Razzaghi H, et al. COVID-19 Vaccination Intent, Perceptions, and Reasons for Not Vaccinating Among Groups Prioritized for Early Vaccination — United States, September and December 2020. *MMWR Morb Mortal Wkly Rep* 2021;70:217–222. DOI: <http://dx.doi.org/10.15585/mmwr.mm7006e3external icon>

- 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, 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. Ensuring high and equitable vaccination coverage in all populations is critical to preventing the spread of COVID-19.

Helene D. Gayle & James F. Childress (2021) Race, Racism, and Structural Injustice: Equitable Allocation and Distribution of Vaccines for the COVID-19, *The American Journal of Bioethics*, 21:3, 4-7, DOI: 10.1080/15265161.2021.1877011

- Recommendations for fair allocation of vaccination:
  - Effective COVID-19 vaccination should completely leverage existing infrastructure in highly vulnerable communities, such as in state and local health departments, federally qualified health centers, and tribal health services.
  - Safety-net providers need focused, prioritized support to quickly receive and disseminate vaccines. Patients should not incur any out-of-pocket costs associated with vaccination.
  - Local communities should play a key role in the promotion and delivery of vaccines. Especially in vulnerable communities, high-profile vaccination champions should be identified and supported, such as opinion leaders, faith groups, and political and civic leaders. Community-led educators and navigators are pivotal in educating vulnerable communities and assisting individuals in overcoming practical and attitudinal barriers to vaccination.
  - National and state-level public health campaigns should support the delivery of vaccination. In the most affected communities, vaccine promotion campaigns need to be carefully tailored and adapted, using community-agreed language, addressing medical mistrust and other issues, and underscoring the benefits of vaccination to specific racial and ethnic communities.
  - Data on vaccination uptake must be timely, transparent, and disaggregated by key demographic indicators, such as race/ethnicity, gender, age and income level. Health officials at the state, local and federal level, as well as political leaders, should use data to identify and address bottlenecks and gaps to improve equality and equity in vaccine dissemination.

Borchering RK, Viboud C, Howerton E, et al. Modeling of Future COVID-19 Cases, Hospitalizations, and Deaths, by Vaccination Rates and Nonpharmaceutical Intervention Scenarios — United States, April–September 2021. *MMWR Morb Mortal Wkly Rep.* ePub: 5 May 2021. DOI: [http://dx.doi.org/10.15585/mmwr.mm7019e3external icon](http://dx.doi.org/10.15585/mmwr.mm7019e3external%20icon)

- Evidence gathered from six models indicate that with high vaccination coverage and moderate nonpharmaceutical interventions (NPI) adherence, hospitalizations and deaths foreseeably remain low, with rapid decreases in cases by July 2021. Even with enhanced vaccination coverage, lower adherence potentially causes substantial increases in severe COVID-19 outcomes.
- High vaccination coverage and compliance with nonpharmacological interventions are pivotal in controlling COVID-19 and preventing surges in hospitalizations and deaths.

KFF COVID-19 Vaccine Monitor: January 2021, (KFF, 01-2021 <https://www.kff.org/report-section/kff-covid-19-vaccine-monitor-january-2021-vaccine-hesitancy/>) (Accessed 5-10-2021)

- Leading reasons for vaccination include being able to return to more normal life, feeling safe around other people, and resuming activities like going to work or school.

MacNeil JR, Su JR, Broder KR, et al. Updated Recommendations from the Advisory Committee on Immunization Practices for Use of the Janssen (Johnson & Johnson) COVID-19 Vaccine After Reports of Thrombosis with Thrombocytopenia Syndrome Among Vaccine Recipients — United States, April 2021. *MMWR Morb Mortal Wkly Rep* 2021;70:651-656. DOI: <http://dx.doi.org/10.15585/mmwr.mm7017e4>

- On April 13, 2021, CDC and the FDA paused the administration of the Janssen COVID-19 vaccine after reports of thrombosis with thrombocytopenia syndrome (TTS).
- On April 23, the Advisory Committee on Immunization Practices determined that the benefits of resuming Janssen COVID-19 vaccination for adults aged ≥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.
- Resuming the Janssen COVID-19 vaccine administration will allow flexibility, choice, and improved access. Education about TTS risk with Janssen COVID-19 vaccine is pivotal.