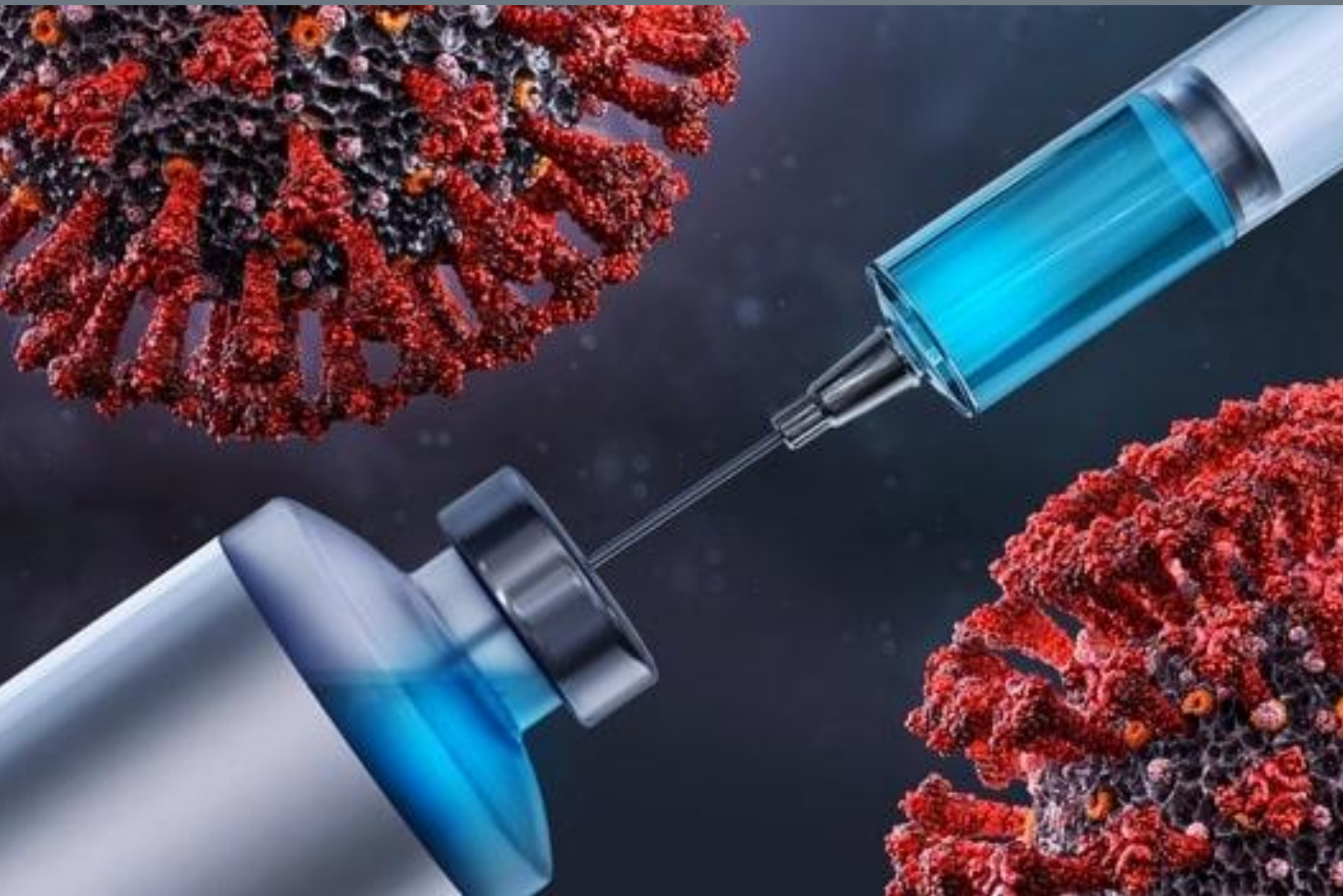


2021 | Fresno County



Mid-Year COVID-19 Vaccine Summary Report

Fresno County | Department of Public Health
Epidemiology Division | Jennifer Walch, MPH



Mid-Year Vaccine Summary Report

2021

The COVID-19 Vaccine Summary Report is published by the Fresno County Department of Public Health. This report reviews the results of vaccine efforts conducted by the Fresno County Department of Public Health, along with community partners. This report covers data from December 2020 through July 2021. This data is provisional, and subject to change.

Citing:

If any analyses, and or figures, from this report are used you must credit the Fresno County Department of Public Health.

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COVID-19 Vaccine Summary Report

2021

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Technical Information

Frequently Used Acronyms

ACS = American Community Survey

CDC = Centers for Disease Control and Prevention

CDPH = California Department of Public Health

CMR = Confidential Morbidity Report

COVID-19 = Coronavirus Disease 2019

EUA = Emergency Use Authorization

FDA = United States Food and Drug Administration

FCDPH = Fresno County Department of Public Health

J&J = Johnson & Johnson's Janssen COVID-19 Vaccine

SARS-CoV-2 = Sudden Acute Respiratory Syndrome Coronavirus-2

U.S. = United States

WHO = World Health Organization

U.S. Vaccine Types:

Pfizer-BioNTech: A two dose mRNA vaccine first given EUA in the U.S. on Dec. 11, 2020

Moderna: A two dose mRNA vaccine first given EUA in the U.S. on Dec. 18, 2020

Johnson & Johnson's Janssen Vaccine: A one dose Viral Vector (adenovirus) vaccine first given initial EUA in the U.S. on Feb 27, 2021

Definitions

Case: Diagnosis of a disease through either laboratory (tests) and or clinical (signs/symptoms) findings.

Censor: Intentionally removed or withheld data, often because it is under a specified amount, to protect the confidentiality of cases.

Emergency Use Authorization: During times of emergency, the FDA evaluates a drug, vaccine, or treatment for available evidence and assesses any known or potential risks and any known or potential benefits. If the benefit-risk assessment is favorable, the product is made available during the public health emergency.

Health Equity: Having the opportunity to "attain his or her full health potential" and no one is "disadvantaged from achieving this potential because of social position or other socially determined circumstances

COVID-19: A respiratory disease caused by SARS-CoV-2; a new coronavirus discovered in 2019. The virus is thought to spread mainly from person to person through respiratory droplets produced when an infected person coughs, sneezes, or talks. Some people who are infected may not have symptoms.

Incidence: The number of new cases of a disease that develop in a defined population and specific time period divided by the number of people in the population that are at risk for developing the disease.³³

Prevalence: The burden (i.e. existing number of cases) of a disease in a defined population during a specific time-period, divided by that area's population at mid-year. Prevalence can change over time. Causes can included: being raised by incident (new) cases or cases moving into the area, lowered through death of "diseased" individuals, the cure of disease/recovery, people leaving, or entering the area.³³

Trend: A pattern change of the data, represented by an upward or downward shift in the data over time over a prolonged period.

SARS-CoV-2: Causative agent, a virus, of the disease COVID-19.

Subgroups: The general population broken down into smaller groups based off like characteristics (e.g. race).

Vaccine: A substance used to stimulate the production of antibodies and provide immunity against one or several diseases, prepared from the causative agent of a disease, its products, or a synthetic substitute, treated to act as an antigen without inducing the disease.⁷

Equations

$$\% \text{ of Population Vaccinated} = \frac{\# \text{ of Persons with a COVID Vaccine}}{\text{Population at Risk}} \times 100$$

Introduction

County Profile

Fresno County, the fifth largest county in California, is a mixture of both rural and metropolitan cities. The county's population had an estimated 1% increase from 2018 to 2020, with a concluded population size of 1,020,292.¹ Fresno city is the largest populated city in the county, with a population of 543,451 persons.¹ Gender in the county is relatively evenly distributed, with 49.97% male and 50.00% female.³ It boasts a younger population base, with an overall median age of 32.7 years.³ When broken down by age categories, 23.6% of the population is age 0-14 years, 7.3% 15-19 years, 6.8% 20-24 years, 15.5% 25-34 years, 12.9% 35-44 years, 10.8% 45-54 years, and 22.9% ≥55 years.³



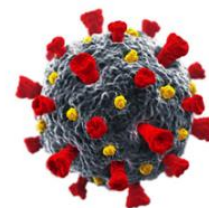
Image Source:
<https://www.usnews.com/news/healthiest-communities/california/fresno-county>

Fresno County is both ethnically and racially diverse. The racial and ethnic makeup of Fresno County includes those who self-identify as Hispanic or Latino (of any race) (53.8%), White (28.6%), Black or African American (4.4%), American Indian and Alaska Native (0.6%), Asian (10.1%), Native Hawaiian/Pacific Islander (0.2%), and Multiracial (2.1%).³ Just over 78% of the county's residents are US born. Of the remaining non-US born residents (21%) nearly 40% became naturalized US citizens.⁴ Approximately 55% of Fresno County residents are monolingual English speakers. However, a high percentage of residents speak a language other than English, with Spanish (34.6%) and "Asian and Pacific Island languages" (5.9%) being the two most common.⁵ Of those whose first language is not English, 58.3% identify as speaking English "very well".⁵

According to the Robert Wood Johnson Foundation, Fresno County ranks 46th & 51st out of the 58 counties in California for Health Outcomes and Health Factors, respectively.⁶ Fresno County's overall unemployment is nearly two times higher than that of California, at 7.2% and 4.0% respectively.⁶ The median household income in Fresno County is \$56,900. However, when broken down by race, the median household income for Whites is \$69,100, while Hispanics and African Americans are lower at \$44,000 and \$33,400 respectively.⁶ Eighty seven percent of residents have a high school diploma, aligning with California, also at 87%.⁶ In 2017, Fresno County had a 29% childhood poverty rate, 81% higher than that of California at 16%.⁶ Nine percent of the county is uninsured, just higher than that of 8% in California.⁶ There are 1,490 residents to every one primary care physician, and in 2018, 3,839 preventable hospital stays per 100,000 Medicare enrollees.⁶ With 25% reporting being in fair and or poor health, Fresnoans reported an average of 4.7 poor physical health days in a 30 day period (age-adjusted).⁶

Background

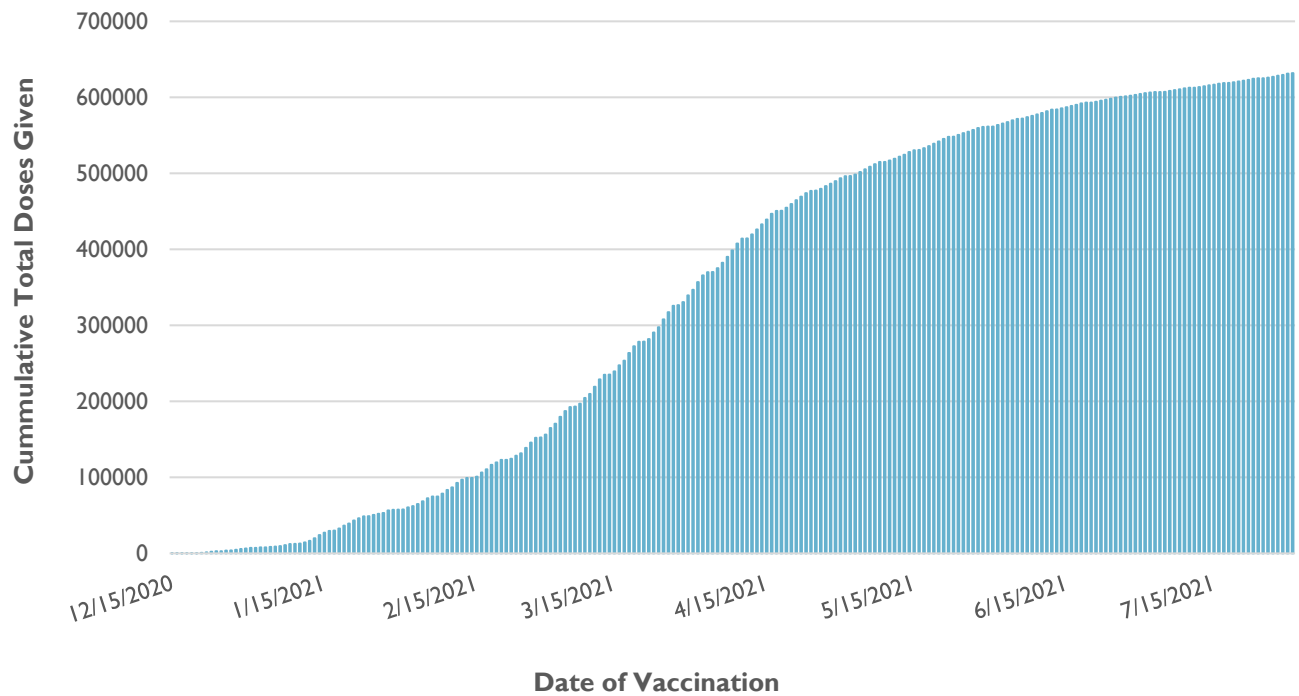
The year 2020 was filled with unprecedented challenges in the realm of public health, the most difficult amongst those being the COVID-19 pandemic. The pandemic affected the Fresno County community's healthcare system in unexpected ways. Fresno County got their first confirmed case in early March 2020. By April 30, 2020 Fresno County had surged to over 1,000 confirmed cases.



Launching an effective global vaccination effort would be critical in preventing future transmission, surges, viral mutations, hospitalizations, and deaths. The Food and Drug Administration (FDA) gave Emergency Use Authorization (EUA) on the first COVID-19 vaccine available in the United States, Pfizer-BioNTech, on December 11, 2020. Fresno County was able to administer their first dose by December 28, 2021.

Vaccine Demographics

Figure I.1 Total Vaccinations Given by Fresno County Clinics, Over Time (December 2020 — July 2021)



Note: Includes both Fresno County and Non-Fresno County Residents.

Figure I.2 Total Vaccine Doses Given in Fresno County by Vaccine Type (December 2020 – July 2021)

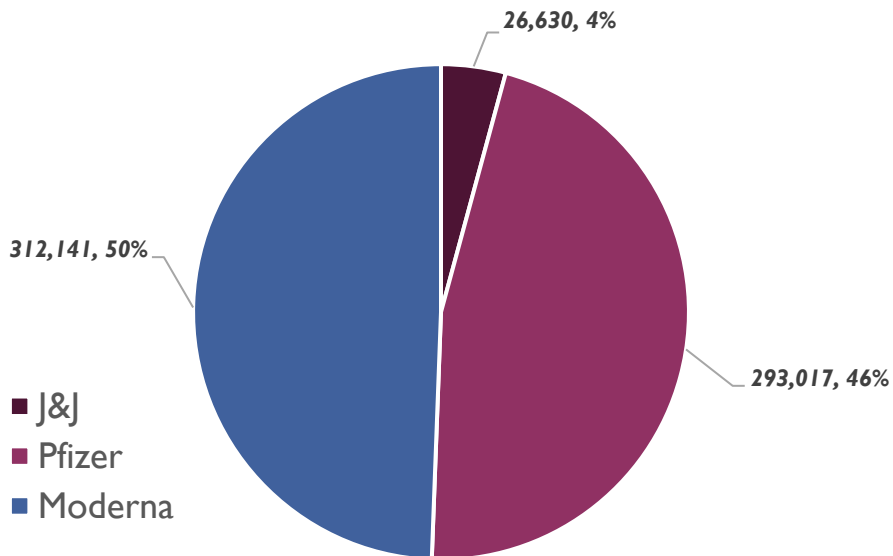
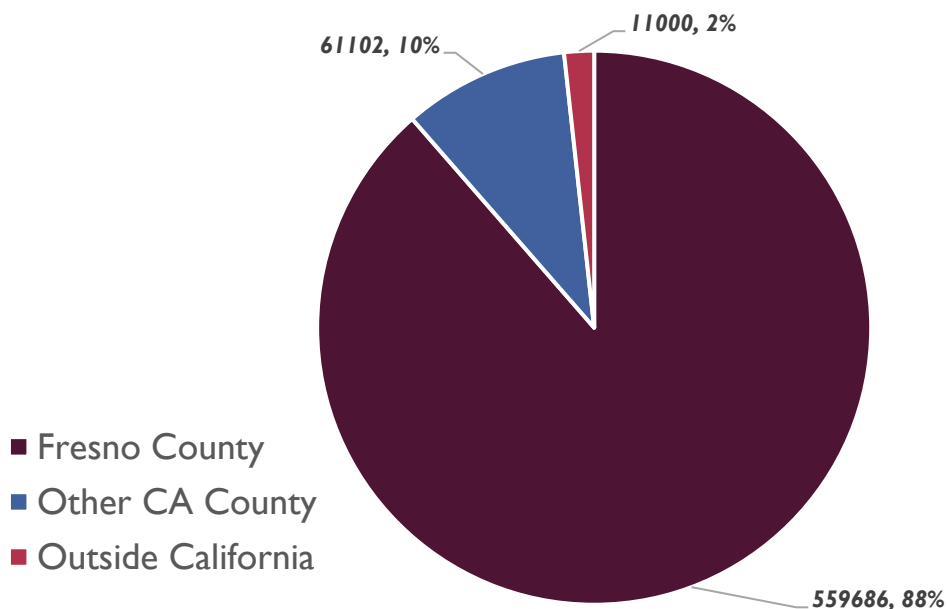
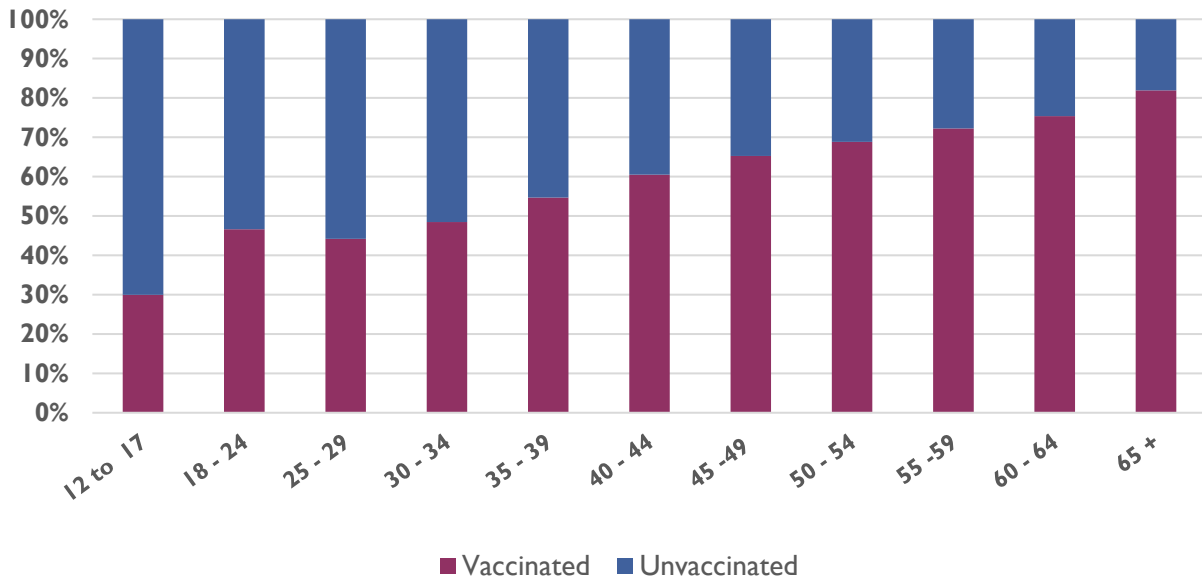


Figure I.3 Total Doses Given in Fresno County, by County Residency¹ Status (December 2020 – July 2021)



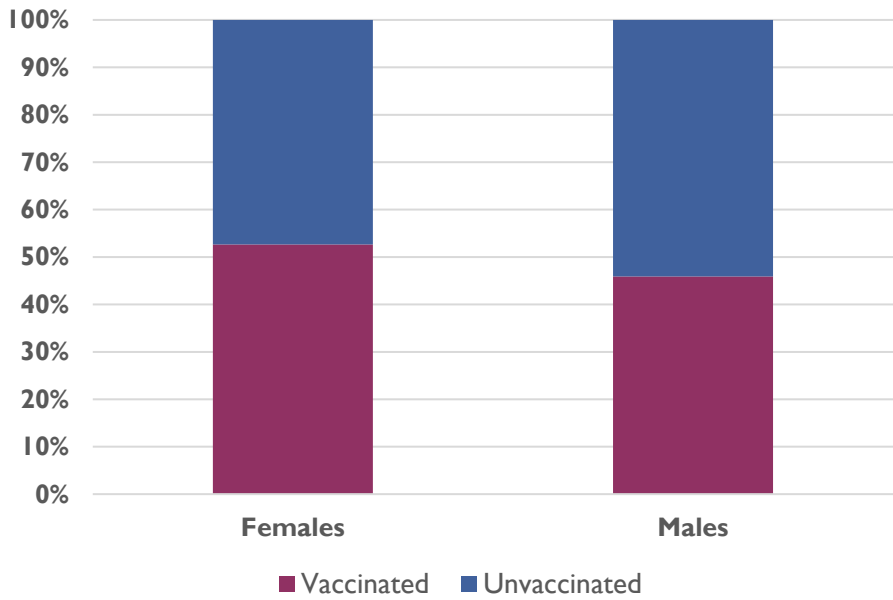
¹There were 8,202 doses where county of residence was unknown.

Figure I.4 Total Vaccinations in Fresno County Residents, by Age (December 2020 – July 2021)



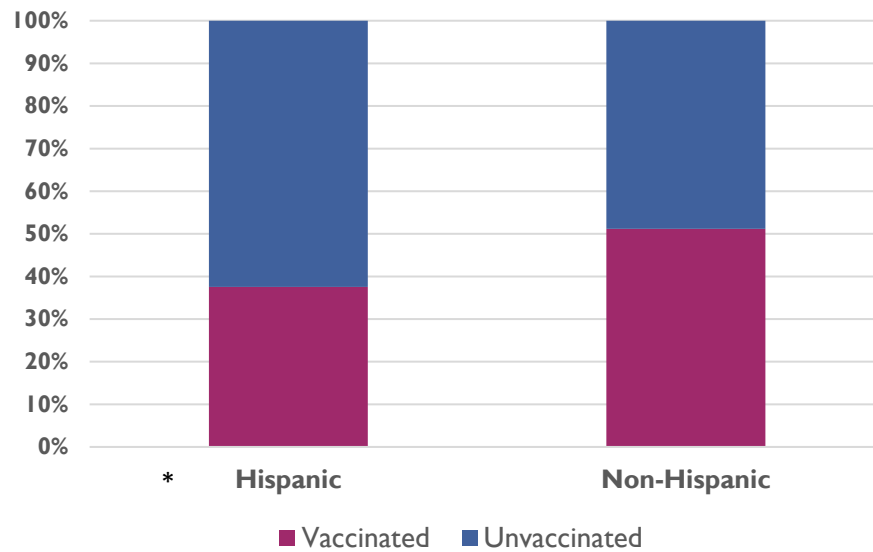
Note: Limited to Fresno County residents only. Includes persons with at least one dose of covid-19 vaccine. Includes both fully and partially vaccinated persons. Population Data Source: American Community Survey 2019 1-yr Estimates (DP05). No 2021 Data Available

Figure I.5 Total Vaccinations in Fresno County Residents, by Gender (December 2020 – July 2021)



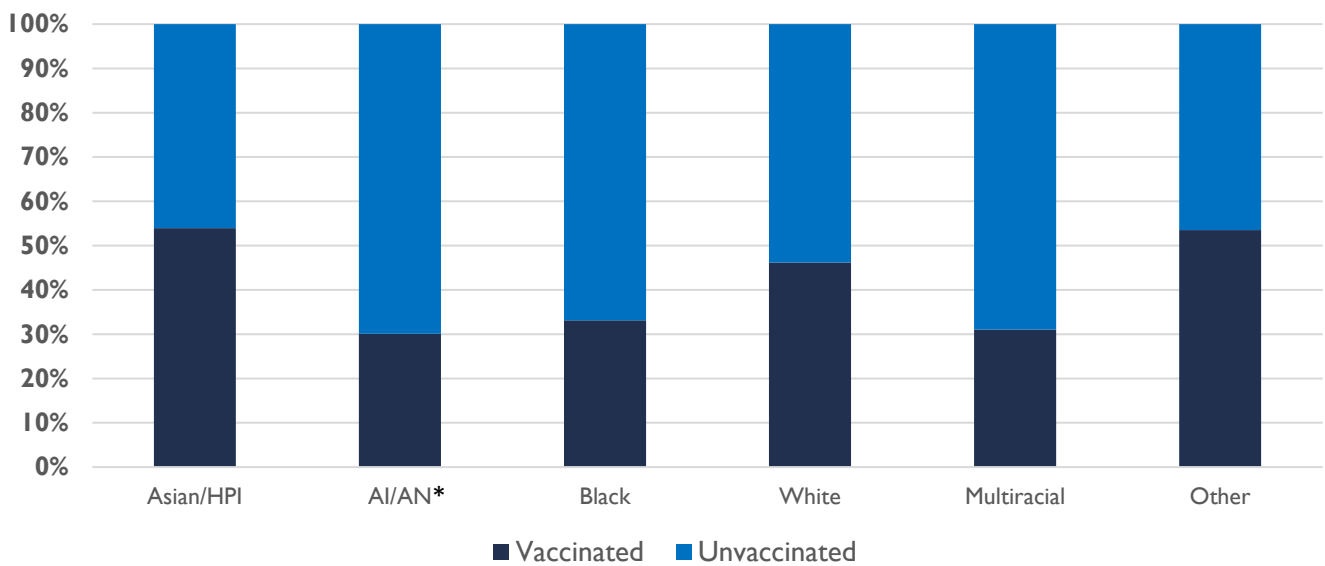
Note: Limited to Fresno County residents only. Includes persons with at least one dose of covid-19 vaccine. Includes both fully and partially vaccinated persons. Population Data Source: American Community Survey 2019 1-yr Estimates (DP05). No 2021 Data Available

Figure I.6 Total Vaccinations in Fresno County Residents, by Ethnicity (December 2020 – July 2021)



Note: Limited to Fresno County residents only. Includes persons with at least one dose of covid-19 vaccine. Includes both fully and partially vaccinated persons. *Ethnicity numbers may be underestimated, with 54,411 persons with an ethnicity of unknown. **Population Data Source:** American Community Survey 2019 1-yr Estimates (DP05). No 2021 Data Available

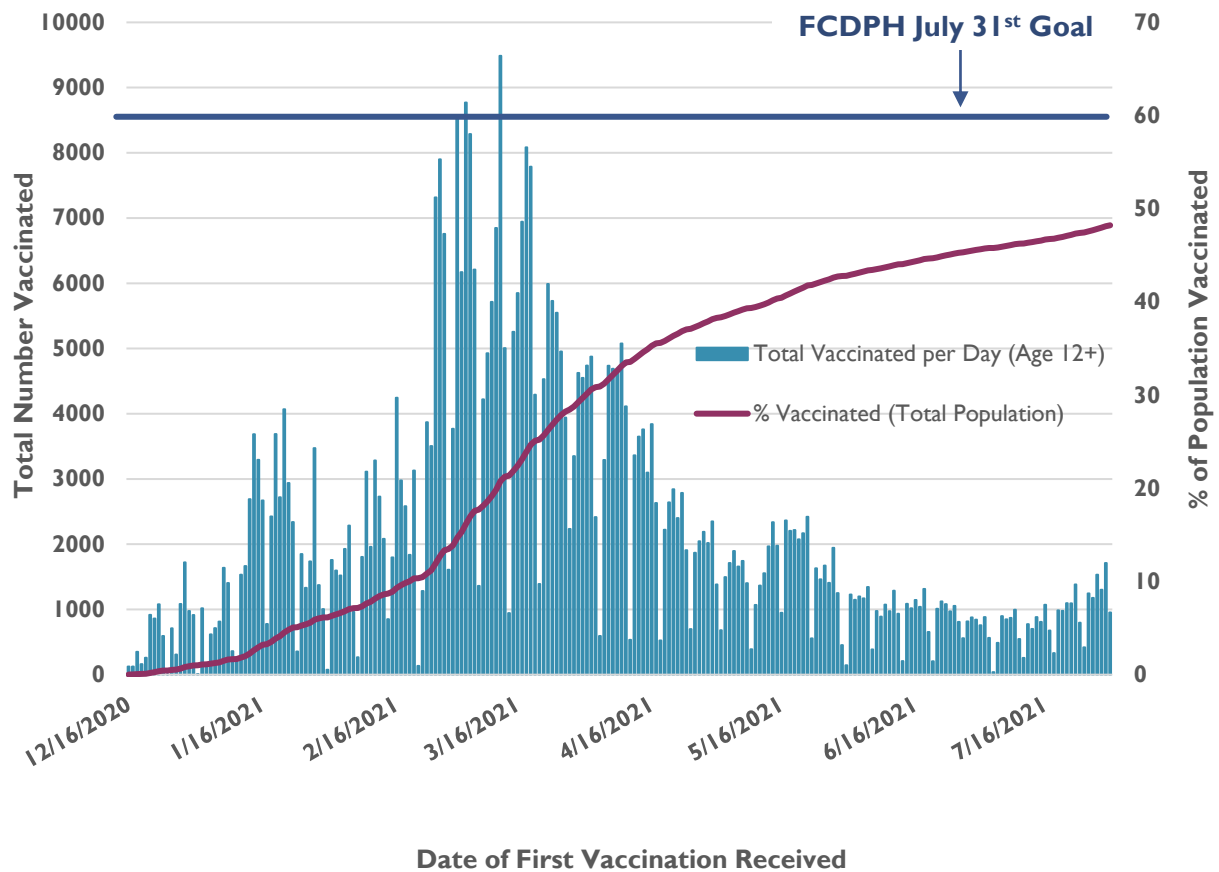
Figure I.7 Percent of Fresno County Residents Vaccinated, by Race (December 2020 – July 2021)



Note: Limited to Fresno County residents only. Includes persons with at least one dose of covid-19 vaccine. Includes both fully and partially vaccinated persons. American Indian & Alaskan Natives (AI/AN)* may be undercounted in this data. Indian Health Services (IHS) received federal doses and reported their doses to the federal immunization registry, Tiberius. Tiberius doses are not reflected in FCDPH data. **Population Data Source:** American Community Survey 2019 1-yr Estimates (DP05). No 2021 Data Available

Vaccine Target Evaluation

Figure 2.1 Percent of Total Fresno County Residents Vaccinated, by Date. FCDPH Goal of 60% of County Population. (December 2020 – July 2021)



Note: Limited to Fresno County residents only. Includes persons with at least one dose of covid-19 vaccine. Includes both fully and partially vaccinated persons. **Population Data Source:** CA Department of Finance Table P-2B. County Population by Age, 2021 Projection

Table 2.2 Percent of Fresno County Residents Vaccinated, by City (December 2020 — July 2021)

	Percent of Population		
	Partially Vaccinated	Fully Vaccinated	Vaccinated with at Least One Dose ¹
Urban (Average)	7.8	46.1	54.3
-Fresno	7.9	45.3	53.6
-Clovis	7.6	49.2	57.1
Rural (Average)	8.3	49.0	57.7
-Coalinga	6.4	29.0	35.6
-Firebaugh	10.6	50.3	61.2
-Fowler	8.5	60.7	69.8
-Huron	6.4	39.5	46.4
-Kerman	10.1	56.7	67.1
-Kingsburg	6.7	46.6	53.5
-Mendota	8.6	45.0	53.9
-Orange Cove	7.0	38.5	45.7
-Parlier	6.0	41.5	47.8
-Reedley	8.8	51.5	60.6
-San Joaquin	11.5	47.0	58.8
-Sanger	8.9	60.4	69.6
-Selma	9.5	54.2	64.2

Note: Vaccination data is for doses administered Dec. 2020 through July 2021. Some cities were censored to ensure confidentiality was maintained. Data does not include cities with a population of less than <4,000 persons. **Population Data Source:** E-1 Population Estimates for Cities, County, and the State –January 1, 2020 and 2021, from the California Department of Finance (CA DOF).

¹Partially Vaccinated and Fully Vaccinated may not total percent vaccinated with at least one dose. Persons whose vaccine status is unknown, usually due to improperly spaced vaccine doses, are not included in the partially or fully vaccinated percentages.

Table 2.3 Percent of Total Population Vaccinated¹, by County of Residency (December 2020 – July 2021)

County	Percent Vaccinated	County	Percent Vaccinated
Alameda County	70.2	Orange County	62.3
Alpine County	72.8	Placer County	57.0
Amador County	55.3	Plumas County	48.4
Butte County	43.6	Riverside County	49.3
Calaveras County	50.2	Sacramento County	55.6
Colusa County	44.3	San Benito County	60.0
Contra Costa County	69.3	San Bernardino County	46.0
Del Norte County	39.3	San Diego County	74.1
El Dorado County	55.4	San Francisco County	74.8
Fresno County	48.7	San Joaquin County	51.0
Glenn County	42.5	San Luis Obispo	58.5
Humboldt County	57.2	San Mateo County	73.7
Imperial County	68.0	Santa Barbara County	60.0
Inyo County	50.8	Santa Clara County	73.5
Kern County	40.6	Santa Cruz County	66.1
Kings County	34.2	Shasta County	40.0
Lake County	47.3	Sierra County	47.4
Lassen County	22.6	Siskiyou County	42.9
Los Angeles County	61.4	Solano County	58.5
Madera County	43.2	Sonoma County	68.1
Marin County	79.5	Stanislaus County	49.2
Mariposa County	46.2	Sutter County	47.8
Mendocino County	58.5	Tehama County	34.4
Merced County	41.9	Trinity County	40.5
Modoc County	34.4	Tulare County	40.9
Mono County	64.1	Tuolumne County	49.3
Monterey County	59.5	Ventura County	62.4
Napa County	71.0	Yolo County	59.9
Nevada County	57.7	Yuba County	37.5

Note: County vaccine data comes from the California Department of Health & Human Services COVID-19 Open Data Vaccine Progress Dashboard Data. **Population Data Source:** CA Department of Finance Table P-2B. County Population by Age, 2021 Projection.

¹Vaccinated includes persons with one or more vaccine.

Vaccine Education & Outreach

Introduction

The COVID Vaccine Planning Team is responsible for all the coordination of vaccine clinics and education requests. Clinics requests are received from members of the community. The planning team assists by connecting the requesting party with a clinical provider and a Community Based Organization (CBO) to promote the event, conduct door-to-door canvassing, support with pre-registration on MyTurn, and assist with check-in and check-out the day of the event. Preventive education is offered and provided to individuals getting vaccinated the day of and prior to. The planning team continuously evaluates areas in the community that would benefit from vaccine clinics based on priority zip codes and the most up to date information on the unvaccinated population such as the different age groups. Our team then reaches out to areas that fit these criteria (e.g., schools, parks, community centers, churches etc.).

Education and outreach are facilitated by the Public Information Officer (PIO) team and CBOs with support by the Community Outreach Liaison. The Planning Team sends educational requests to PIO or coordinates directly with the Community Outreach Liaison to identify the CBO that can best meet the diverse needs of the employer based on the employees preferred language (s). Once the CBO is confirmed, the CBO and employer are put in direct contact to finalize any further logistics for the educational session. CBOs conduct onsite or virtual thirty-minute to one-hour educational sessions covering key elements such as: how COVID spreads and how to mitigate further spread, how vaccines work, why get vaccinated, possible side effects, reaching population immunity, and vaccine efficacy. If the business opts to having the educational materials mailed or delivered in lieu of an in-person session that is an available option. Educational packets are assembled by the PIO team and include materials such as: Vaccine FAQs, and What to Expect After Getting the COVID Vaccine. Furthermore, the COVID Information Team developed a CBO script with support by Public Health Physician Dr. Trinidad Solis, MD, MPH, and the PIO team containing pertinent information on the vaccines, to help guide the small group educational sessions. This tool is continuously updated to ensure information is up to date and is shared with all CBOs involved.

Both FCDPH and CBOs assist with using all their available platforms (e.g., website, Facebook, Instagram) to communicate education and clinics to ensure our community has information regarding the COVID-19 vaccine.

CBOs, through their network of nearly 100 Community Health Workers (CHWs), do a lot of the groundwork in the community and are the “trusted” messengers for many hard-to-reach vulnerable populations. These CHWs are linguistically and culturally competent, speaking more than sixteen different languages, and dialects, including American Sign Language. CHWs are especially instrumental in providing the vital language access to help dispel some of the misperceptions, vaccine hesitancy and are equipping residents with a sense of reassurance and confidence needed to improve the vaccine rates across Fresno County’s rural and urban neighborhoods.

Table 3.1 Breakdown of Vaccination Events Conducted with FCDPH Doses, Fresno County (December 2020 – June 2021)

Type of Event/Effort	Target Pop	Brief Description of Event/Effort	Sites Included	# of Vaccinating Agencies	Total # of Locations/Sites	Total # of Events	Total # of Days Events Were Held	Total # Vaccinated
Mobile Clinics	Skilled Nursing Facility and Senior Living Facility residents and staff	FCDPH staff administered COVID vaccinations on site at roughly 95 facilities throughout the county.	Various	1	95	95	45	2282
Pop-Up Clinics	Public, IHSS Workers, Southeast Asian, HPI QI, State and Local Government Employees, Educators, First Responders	FCDPH staff, African American Coalition, and American Ambulance administered COVID vaccines to various populations and in a wide variety of settings across the county including metropolitan and rural settings.	Fairgrounds, DSS Sunnyside, FIRM, CBO Sites, Baseball Stadium, Water Park, Community Parks, and other various sites	3	12	158	158	119166
In-Home Vaccination	Homebound	FCDPH staff, African American Coalition, and American Ambulance administered COVID vaccines to homebound residents.	Various	3	24	25	25	251
School-Based vaccination efforts	Public, HPI QI	FCDPH staff and African American Coalition administered COVID vaccines on school campuses in both metropolitan and rural areas.	Schools throughout FUSD, KCUSD, and rural communities	2	5	45	45	7979
Other Targeted Events/Efforts								
Corrections	Corrections officers	Fresno County Jail medical staff vaccinated staff and inmates; FCDPH assisted with inmate vaccinations.	Fresno County Jail	2	1	9	9	335
Faith-based	Public	FCDPH staff and African American Coalition conducted clinics at Faith Based facilities.	Various	2	3	3	3	28
Housing-based (apartment complex, mobile home park, homeless shelter)	Rural, HPI QI	The Coalinga Fire Department conducted a vaccination event at an apartment complex in Coalinga in an effort to provide easier access to vaccines and increase vaccination rates	Apartment complex	1	1	1	1	8
Businesses	Employees	FCDPH staff and African American Coalition provided vaccination events at businesses to provide ease of access to vaccine.	Various	2	6	6	6	78
Ag/Food/Packing	Food, Agriculture, and Packing House Employees and their families	FCDPH staff conducted vaccination clinic in rural community at an agriculture venue, vaccinating employees, and their family members.	Various	1	1	1	1	50
Clinic/Mental Health	First responders, Mental Health Clinic patients and staff	FCDPH staff administered vaccines to First Responders; Exodus/Pathways staff provided vaccines to clients and staff.	FCDPH facilities, Exodus/Pathways	2	3	32	32	4370
			TOTAL	6*	151	375	325	134547

Note: Reflects total agencies that conducted all these events.

Table 3.2 Breakdown of Vaccination Events Conducted by CBOs in Collaboration with FCDPH, Fresno County (December 2020 – June 2021)

Type of Event/Effort	Target Pop	Brief Description of Event/Effort	Sites Included	# of Vaccinating Agencies	Total # of Locations/Sites	Total # of Events	Total # of Days Events Were Held
Pop-Up Clinics	Public, Government Employees, HPI QI, Travelers	FCDPH worked with 9 different vaccination agencies along with various CBO's to coordinate 339 Pop-Up Clinics throughout the county.	Baseball stadium, Airport, Fire Station, Senior Center, Community Center, Waterpark, Farmer's Market, Food Truck Events, LGBTQ Events	9	49	339	339
School-Based vaccination efforts	Public, School employees and their families	FCDPH collaborated with 9 vaccinating agencies and various CBOs and community organizations to organize 203 events that were held on school campuses in both rural and metropolitan areas.	Reedley College, Fresno City College, Roosevelt HS, Fresno HS, Computech MS, Gaston MS, Alvina ES, Big Creek ES, Cantua Creek ES, Central HS, Coalinga HS, CTEC HS, Las Deltas HS, Hoover HS, Golden Plains Unified, Laton HS, Orange Center ES, and various others	9	42	203	197
Other Targeted Events/Efforts:							
Corrections	Juvenile Corrections youth and staff	FCDPH collaborated to have vaccinations offered at a JJC facility.	JJC offices	1	1	2	2
Faith-based	Public	FCDPH collaborated with various vaccinating agencies and community stakeholders resulting in 3 events at Faith-based sites.	Various faith-based facilities	2	2	3	3
Housing-based (Apt Complex, Mobile Home Park, Homeless Shelter)	Public, HPI QI	FCDPH collaborated with vaccinating agencies and various community stakeholders to bring vaccination events to residents of apartment complexes and shelters.	Poverello House, various apartment complexes	3	4	14	14
Businesses	Employees of the business hosting the event	FCDPH collaborated with vaccinating agencies and various community stakeholders to bring vaccination events to local businesses requesting clinics.	Varied	2	4	9	9
Agriculture/Food/Packing House	Food, Ag., & Packing House Employees & their families	FCDPH worked with 13 different vaccinating agencies to coordinate these events	Bee Sweet, Bar 10, KP2 Ranches, Booth Ranches, Foster Farms, Fowler Packing, Harris Beef, O'Neills Vintners and Distillers, & various others	13	52	117	115
Clinic/Mental Health	Patients and staff of FQHC, Mental Health facility, or Substance Use-Related setting	LHD collaborated with 2 vaccinating agencies and other community stakeholders to hold 24 events based out of special clinic settings in both rural and metropolitan areas.	Mendota clinic, Needle Exchange, Aegis Treatment Center	2	4	24	24

Note: Reflects total agencies that conducted all these events.

Acknowledgments:

The Epidemiology Program would like to acknowledge and thank all the hard work done by the Fresno County Department of Public Health's COVID-19 Response Team, Program Technicians, Public Health Nurses, Communicable Disease Investigators, and support staff. In addition, we appreciate the consultations and work done by the California Department of Public Health Immunization Branch. Last, but not least, we would like to thank the County's area healthcare providers and our community partners, who have assisted us in the education, administration, and logistics of the COVID-19 Vaccine in Fresno County.

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