Davis COUNTY HEALTH DEPARTMENT

COVID-19 Vaccine Equity Progress Report

March 2021 - March 2022

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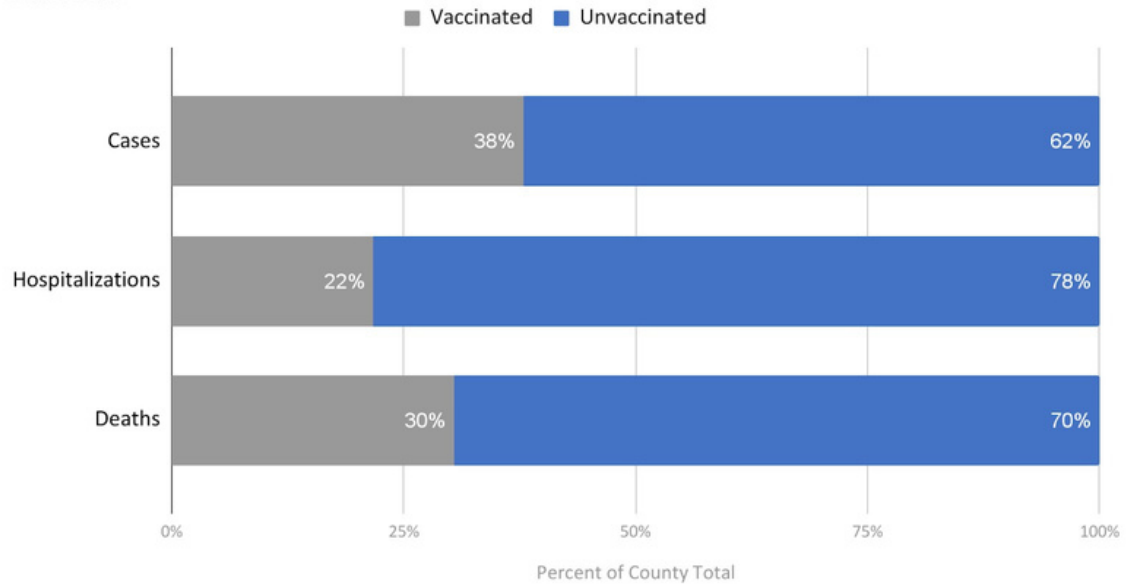
Purpose

Throughout the pandemic, historically underserved and underrepresented populations were disproportionately impacted by COVID-19 infections and outcomes, which widened existing health disparities. For example, rates of severe disease, such as hospitalizations, differed between race and ethnicity groups in Davis County (Figure 1).

Figure 1

Unvaccinated Individuals Experienced Greater Burden of Disease, Davis County, January 2021- March2022

Source: DCHD



It is important to address differences in disease burden because it impacts other aspects of a person's life that can set them back even further and impact their ability to live a healthy life. **Throughout the pandemic, families in Davis County have faced challenges related to finances, housing, childcare, employment, and more.**

Definitions

Health equity occurs when every individual has a fair and just opportunity to live their healthiest life. It doesn't matter who they are, where they live, or how much money they have.

Health disparities are avoidable, unfair, and unjust differences in health outcomes.

Health inequities are an uneven distribution of resources and barriers that limit access to community resources. Inequities lead to (and are reflected in) disparities.

Purpose *(continued)*

Vaccines were, **and still are**, an essential tool for preventing severe disease. However, when vaccines became available to the general public, data showed that not everyone had the same opportunities and resources to access this life-saving tool.

In March 2021, Davis County Health Department (DCHD) released its *COVID-19 Vaccine Health Equity Plan* after recognizing the geographical, racial, and socio-economic differences in vaccination rates emerging across our county and state. The plan was developed with over 20 county partners and agencies and guided by *Utah's Vaccine Equity Roadmap* and the *Center for Disease Control's Ethical Principles Guide*.

The purpose of this report is to **reflect on Davis County's progress** toward COVID-19 vaccine equity goals established in 2021 and to **outline goals for future** vaccine equity efforts.

2021 Goals for Vaccine Equity

1. All Davis County residents who want a vaccine can get one.
2. Davis County residents have equitable access to resources throughout the COVID-19 vaccination process.

Introduction: Vaccination Efforts

On December 15, 2020, the first COVID-19 vaccine was administered in Davis County. Vaccines were released in a phased approach due to limited supply. Healthcare workers, first responders, and teachers were eligible first, followed by older residents and those with high-risk medical conditions.

DCHD hosted drive-through and outreach vaccine clinics at a variety of venues, including businesses, schools, and community events. The drive-through clinic at the Legacy Event Center was the largest clinic operating in Davis County with the capacity to serve up to 300 cars per hour.

County residents could schedule appointments at DCHD clinics online or over the phone via the Call Center. Appointments with other providers could be found through the vaccines.gov.

Figure 2

Timeline of Vaccination Efforts by Davis County Health Department

Definitions

Drive-through clinics are sites where clients can pull-up and receive a vaccine from a nurse through their vehicle window. This model is best for serving many people quickly.

Outreach clinics are non-permanent clinics meant to bring educational materials and vaccines into the community. This model meets residents where they are and reduces barriers like transportation.

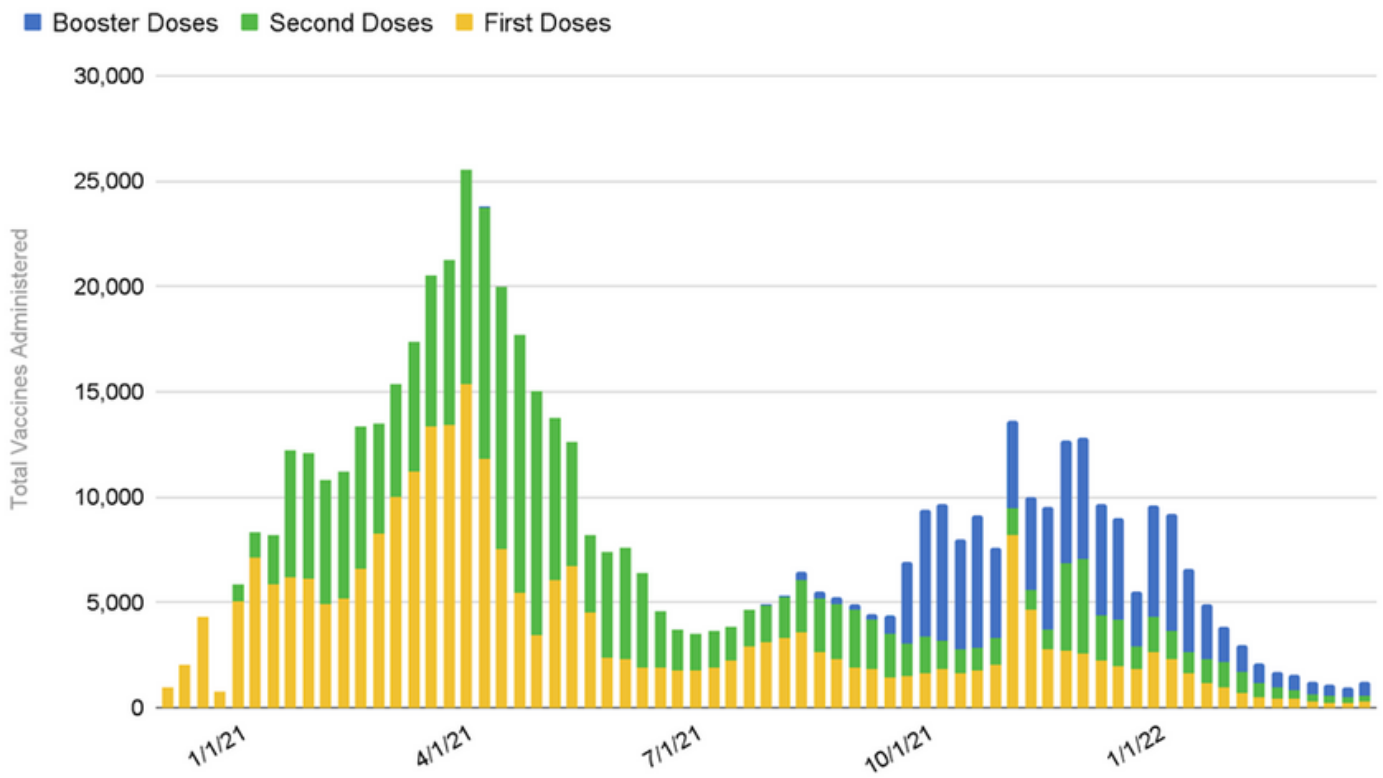
Introduction: Vaccination Efforts *(continued)*

Figure 3 shows weekly demand for COVID-19 vaccines by dose type over the past year. Public demand for vaccines in Davis County peaked in the spring of 2021 then slowed as those who were eligible and interested in getting vaccinated completed their primary series. Demand increased again when booster doses were introduced and vaccines were approved for youth in the fall and winter of 2021.

Figure 3

Count of COVID-19 Vaccines Given to Davis County Residents by Week and Dose Number

Source: DCHD; Utah COVID-19 Internal Surveillance Dashboard



By March 2022, DCHD clinics and over 650 other providers, like pharmacies and doctor offices, had provided **over half a million doses** to county residents.

Introduction: Outcomes

By March 2022...

577,595

doses were given to Davis County residents

nearly **two-thirds** of the total county population was fully vaccinated

one in four residents had received their first booster dose

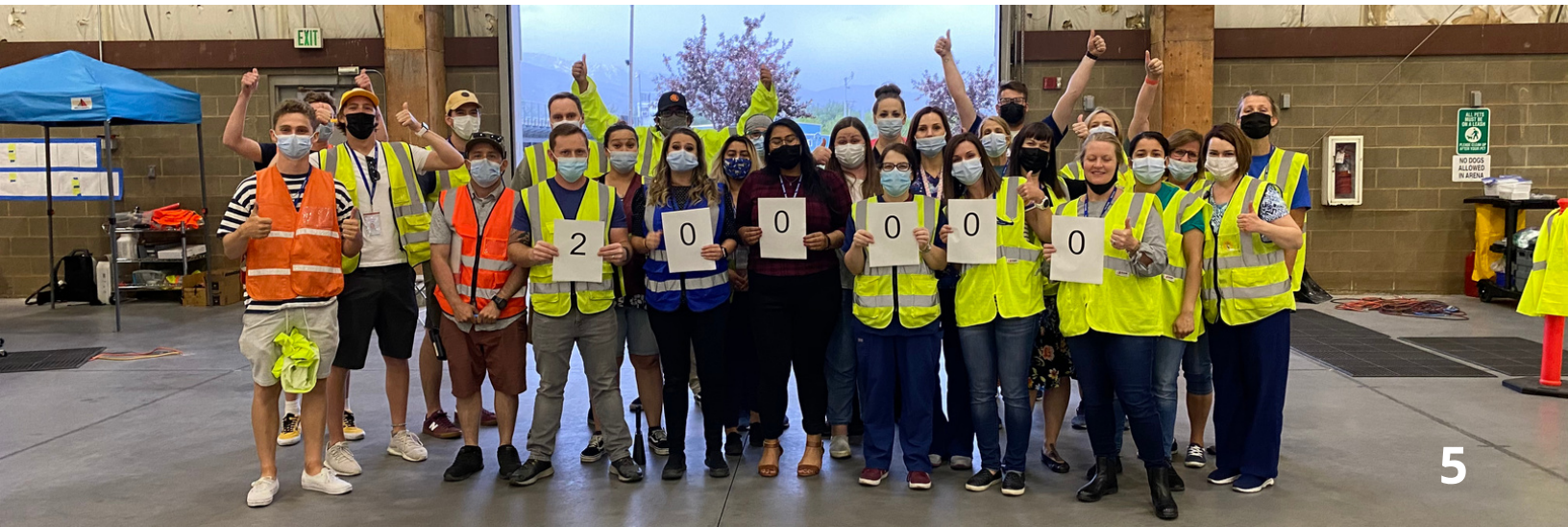
Over the course of the pandemic, Davis County maintained the **third highest county vaccination rate** in the state.

Definitions

Fully vaccinated is a 2-dose series of an mRNA COVID-19 vaccine (Pfizer-BioNTech and Moderna) or a single dose of Janssen COVID-19 Vaccine. Also referred to as your **primary series**. People who are immunocompromised may need a 3-dose series**.**

Boosted is a follow-up dose of vaccine administered to enhance or restore protection which might have waned over time after your primary series.

Up-to-date is when you have received all doses in the primary series and all boosters recommended for you, when eligible.



Vaccine Equity Strategies

DCHD identified four key strategies for reaching its *2021 Vaccine Equity Goals*. The following pages summarize progress related to those strategies.

2021 Strategies for Vaccine Equity

1. Accurately Collect and Report Data
2. Communicate Current and Credible Information
3. Reduce Barriers at Mass Vaccination Clinics
4. Reach Those Who are Not Willing or Able to Get Vaccinated at Mass Vaccination Sites

Strategy 1: Accurately and Sensitively Collect and Report Data

Client vaccine data, such as age, race, ethnicity, gender, address, and dose, were collected and analyzed by DCHD and other providers for surveillance and to drive decisions. Figure 4 summarizes key takeaways from data efforts DCHD committed to in its *2021 Vaccine Health Equity Plan*. For more data details, see Appendix C.

Figure 4

Strategy	Progress
Collect racial and ethnic data in a fair, sensitive, and **respectful manner** for all those vaccinated	• Phone and clinic staff were trained on best-practices for collecting client data. • Clients self-identified their demographic categories. • To reduce vaccine hesitancy, clients could select "unknown" or provide a business address if they felt uncomfortable sharing personal data with DCHD. However, client and staff discomfort led to some missing or inaccurate data.
Compare the demographic characteristics of vaccine **clients to the overall characteristics of the county** to identify whether any demographic groups are underrepresented	• Overall, those identifying as White or male were less likely to be vaccinated by any provider. • The share of DCHD clients who identified as Asian, Native Hawaiian/Pacific Islander, female, or over age 45 was equal to or greater than their proportion of the county population, meaning DCHD served more clients from these groups than expected. • Other providers balanced DCHD's efforts by providing care to those served at lower levels than their share of the population, such as people who identified as American Indian/Alaska Native and Black/African American. • Missing ethnicity data for 28% of DCHD clients and 4% of other provider clients prevented comparison to the county population.
Analyze characteristics between clients to determine what **type of patients are not scheduling second doses** and if certain demographic groups have higher vaccine initiation rates than others	• Approximately 5% of DCHD clients did not return for a second dose; however, clients were observed completing their dose series with other providers due to convenience. • Groups least likely to return to DCHD for a second dose included youth, males, and clients identifying as Hispanic/Latino. It's undetermined whether clients didn't return to DCHD due to medical reasons, choice, or lack of access. • Only 1% of those in high-risk age groups did not return to DCHD, suggesting DCHD's vaccine efforts protected those at greatest risk of severe disease. • Disparities in vaccination rates by age, race, and ethnicity were monitored weekly to direct education and advertising efforts.
Compare **municipal vaccine uptake rates** to vulnerability/ resilience **indexes** to identify if any at-risk communities are being underserved	• Uptake rates by city were triangulated with clinic locations and the Community Resilience Estimates Index bi-monthly to identify future outreach clinic sites. • Monthly improvements in uptake rates were observed in the areas focused on by data-driven outreach events.

Strategy 2: Communicate Current and Credible Information

Figure 5

Strategy	Progress
Internal Communication: Provide training for staff and partners to address hesitancy, myths, misconceptions, and barriers to vaccination in diverse communities	• Phone line operators were updated regularly on vaccine guidelines, such as age requirements and timelines for doses. • In-person and virtual trainings on COVID-19 vaccines were provided to vaccinators and clinic support staff. Trainings included ways to share credible information to address barriers, hesitancy, and myths. • Management utilized all-staff meetings to provide updates and address common questions coming from the public.
Reaching the Public: Promote research-based campaigns from coronavirus.utah.gov	• DCHD social media channels were updated frequently with vaccine information, clinic hours, and outreach events. • A new COVID-19 vaccine webpage was created that had 619,589 unique pageviews from January 2021 - March 2022. • Vaccine information was shared in countywide newsletters, like the Davis County Connector. • DCHD promoted two research-based statewide media campaigns: Getting There and The Vaccine Real Talk.
Connecting with Partners: Utilize partnerships with trusted sources (individuals & organizations) for health information in diverse communities	• DCHD hosted weekly calls with all mayors in Davis County through April 2021 to provide updates on COVID-19. These calls have continued on a monthly basis. • Frequent stakeholder emails were sent to local partners. • DCHD staff regularly attended Davis Links meetings and shared resources. • DCHD communicated regularly with partners to schedule outreach vaccination events. Several organizations, including local businesses, churches, mobile home parks, apartment buildings, food pantries, gyms, and schools partnered to host events.

Community Health Workers (CHWs)

CHWs are frontline public health workers whose relationships of trust enable them to serve community members in a culturally appropriate way. They help connect individuals with needed education and improve access to services.

- DCHD hired four CHWs who are uniquely connected to diverse communities throughout the county.
- CHWs provided translation services and created and distributed print and online materials in English, Marshallese, and Spanish.
- They worked to promote vaccine confidence in underserved populations and attended partner outreach events, including Head Start Resource Night.

"People are getting vaccinated nowadays, especially for the Marshallese community. They would always say yes we'll go and get the vaccine but there's more to it. They needed help with translation and also heard a lot about misinformation or just concern about the vaccine.

But, when I educate them about how safe and effective the vaccine is they feel safe to take it, and they also recommend it to their families and friends. They also mention that **they are very grateful to find out from someone that they know and trust but most importantly someone that knows and speaks their own language, and knows about their culture and their way of life."**

-Danty Marshall, Community Health Worker

Language Assistance

Spanish

- CHWs and other staff provided interpretation services to those receiving vaccinations at clinics when needed.
- Spanish resources were created and shared to help educate about COVID-19 vaccines.
- The COVID-19 Information Line (Call Center) had a designated Spanish hotline and received over 675 calls within the first three months.
- A Spanish COVID-19 webpage was created and updated regularly and had 1,097 unique pageviews from January 2022 to March 2022.
- Appointment registration was made available online in Spanish and appointment forms in Spanish were available at the clinics.

Marshallese

- DCHD hosted vaccination clinics in partnership with the Utah Pacific Islander Health Coalition (UPIHC) to increase vaccination rates among Pacific Islander populations.
- A CHW provided education and scheduled vaccination appointments for Marshallese speakers and other members of the Pacific Islander community. She provided interpretation services to those receiving vaccinations when needed.
- A CHW promoted vaccinations on Marshallese Facebook groups and church groups.

Staff provided education and interpretation in over **20 languages** to those receiving vaccinations, both at clinics and in their homes

Strategy 3: Reduce Barriers at Mass Vaccination Clinics

Appointment Registration

- Walk-in appointments were available at all DCHD clinics with laptops and printers onsite.
- Online appointment registration was available in both English and Spanish.
- A dedicated phone line and Call Center were created to assist the public in scheduling vaccination appointments.

Between January 2021 and March 2022, DCHD's COVID Information Line received

33,000 calls
1,340 call hours
in English

900 calls
25 call hours
in Spanish

Transportation

- The mass vaccination clinics accepted clients by foot, cars, bikes, motorcycles, RVs, tow trucks, patrol cars, buses, scooters, skateboards, and more.
- Staff connected residents to transportation resources through the UTA and ride share programs.
- Medical transportation was provided to those in need through the Senior Activity Centers.

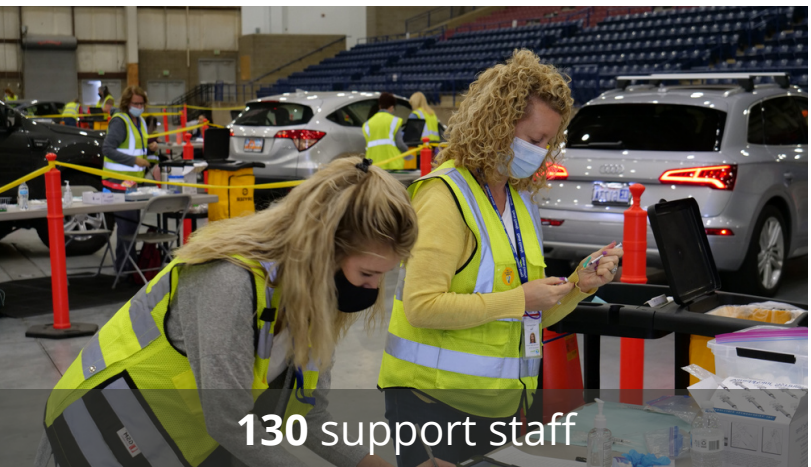
Strategy 3: Reduce Barriers at Clinics *(continued)*

The drive-through clinic at the Legacy Event Center was **the largest clinic operating** in Davis County.

From 2021-2022, DCHD administered **over 272,000** doses at the Legacy Events Center mass vaccination clinic.

95 students

110 vaccinators



130 support staff

35 National Guard

Strategy 4: Reach Those Unwilling or Unable to Be Vaccinated at Mass Vaccination Clinics

Davis County Health Department began a mobile outreach program in May 2021, resulting in **300 events with over 145 partners** through March 2022.

Populations

Geographies

- The outreach team mapped census data to inform staffing decisions about when to send Spanish-speaking staff if an outreach clinic would be held in a census tract with a large percentage of Spanish speaking residents.
- DCHD partnered with the Department of Housing and Urban Development to host outreach events in low-income housing communities such as Mercy Housing/Francis Peak Apartments, Skyline View Apartments, and Stonehedge Apartments.
- DCHD provided vaccinations and local resources at mobile home parks including Camelot, Rolling Hills, Clearfield Hills, and Holly Haven.

By March 2022, DCHD administered **over 4,930** vaccinations at community outreach events.

Strategy 4: Reach Those Unwilling or Unable to Be Vaccinated at Mass Vaccination Clinics *(continued)*

Venues

- Weekly events were hosted at Davis School District at neighborhood schools.
- DCHD worked with employers with high populations of Spanish speaking employees, including UST Manufacturing, Utility Trailer, Aerotech Manufacturing, the Layton Temple construction site, and several local Mexican restaurants.
- Reoccurring clinics were held at three Senior Activity Centers to reach older adults in a familiar setting.
- Mobile clinics were held at community venues convenient for residents such as Bountiful Food Pantry, Aztec Market, and La Favorita.

Faith Communities

- Faith leaders partnered with DCHD to host vaccination events and provide vaccination education, including events with the St. Rose of Lima Catholic Church, Ellison Park LDS Ward, NC4 Church, and the LDS missionaries assigned to Davis County. This resulted in **over 600 doses being administered.**
- CHWs attended events and services to **build trust and provide education** to Spanish- and Marshallese-speaking congregations.

Strategy 4: Reach Those Unwilling or Unable to Be Vaccinated at Mass Vaccination Clinics *(continued)*

High-Risk and Congregate Living

- Mobile clinics were taken to congregant living facilities such as residential treatment centers, assisted living and rehabilitation facilities, hospitals and long-term care facilities, and the Davis County Jail.

Promoted All Vaccine Providers

- Staff directed residents to the online vaccine provider directory at vaccines.gov.
- DCHD partnered with Midtown Community Health Center to provide **275 vaccinations**.

DCHD provided **over 500** in-home mobile appointments to residents who are medically vulnerable or homebound.

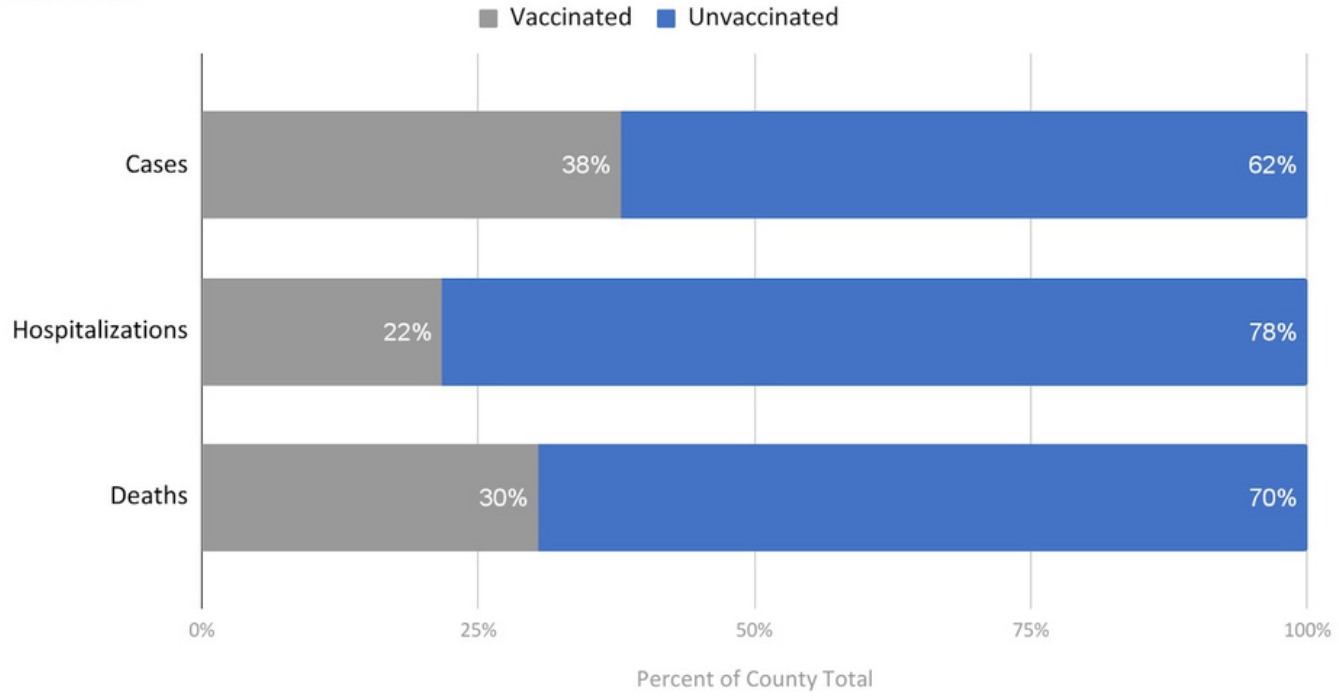
Looking To The Future

Staying up-to-date on your vaccinations is still the best protection against severe illness from COVID-19. The majority of COVID-19 cases, hospitalizations, and deaths were unvaccinated individuals (Figure 6).

Figure 6

Unvaccinated Individuals Experienced Greater Burden of Disease, Davis County, January 2021- March2022

Source: DCHD



The Davis County Health Department continues to work toward its equity goals.

In alignment with *Utah's Steady State Plan*, COVID-19 vaccines have been made available to healthcare providers such as physician's offices, pharmacies, and other clinical settings as standard practice, including as part of the Vaccines for Children Program (VFC). DCHD is committed to providing training, guidance, and clinical support to vaccine providers.

COVID-19 Resources:

- Community Health Workers are available Monday-Friday from 9:00am-5:00pm to assist community members affected by COVID-19. Reach them at 801-525-4950.

- Testing: https://coronavirus.utah.gov/utah-covid-19-testing-locations/

Outreach events, mobile clinics, and walk-in appointments continue to be available in Bountiful and Clearfield. For more information:

- Visit www.daviscountyutah.gov/health/covid-19/vaccine

- Call 801-525-4900 from 9:00am to 5:00pm Monday - Friday for help scheduling, rescheduling, or canceling an appointment. Call center operators can also help those that need a homebound appointment or medical transportation.

Partner Appreciation

The efforts of community partners contribute greatly to the accomplishments of our programs. We could not help Davis County to the same extent without our incredible partners. Thank you!

Aerotech Manufacturing
Azteca De Oro
Benchmark Behavioral
Bingham Cyclery
Black Bear Diner
Bountiful Food Pantry
Cambridge Mobile Homes
Camelot Homes
Chili's
Church of Jesus Christ of Latter-Day Saints
Clearfield Aquatic Center
Clearfield Hills Apartments
Clearfield Job Corps
Clinton Towne Center
Colman Orthodontics
Covington Senior Living
Data Master
Davis Behavioral Health
Davis Conference Center
Davis County Commission
Davis County Jail
Davis County Library System
Davis County Senior Services
Davis County Sheriff's Office
Davis School District
Davis Technical College
Days Inn
Denny's
Duraline
Elevation RTC
Everything Good Nutrition
Falcon Park Apartments
Farmington City & Fire
Francis Peaks Apartments
Freeport Center
Fusion Imaging
Grow Up Great Pediatrics
Hill Air Force Base
Hollie Haven Apartments
J & J Nursery
Kent's Market
La Puente
Lagoon
Lakeside Golf Course
Lakeview Hospital
Layton City
Layton City Fire Department
Layton City Police Department
Layton Surf & Swim
Legacy Events Center
Legacy House Park Lane
Legacy Prep Academy
Lifeline for Youth
Lifespring Pain Management
Mercy Housing
MTC Corporation
Nations for Christ
Northern Utah Immunizations Coalition
Northrop Grumman
NUAMES
Offen Petro
P.A.R.C
Performance Automotive
Performance Honda of Bountiful
Quail Cove Apartments
RC Willey
Red Orchid Spa
ReSTORE
Ridgewood Estates
Rocky Mountain Care Facility
Rolling Hills Community
Rose Cove Senior Housing
Roseman University - College of Pharmacy
Roseman University- College of Nursing
Salt Lake Cable & Harness
Saver's
Sizzler
Skyline View Apartments
South Davis Recreation
Starbucks
Stonehenge Apartments
Swig
Syracuse Arts Academy
Syracuse City
The Mandarin
Tim Dahle Nissan
Tru By Hilton
UST Manufacturing
Utah Department of Health
Utah National Guard
Utah Pacific Islander Health Coalition
Utah Spine Specialists
Utility Trailer Manufacturing
VASA
Venture X
Village on Main
Wasatch Integrated Waste
Weber Basin Job Corps
Weber State University
Woodhaven Mobile Homes
Woods Cross City
Youth Health Associates

Appendix A: Acronyms and Resources

This report encompasses DCHD vaccination efforts from March 1, 2021-March 31, 2022.

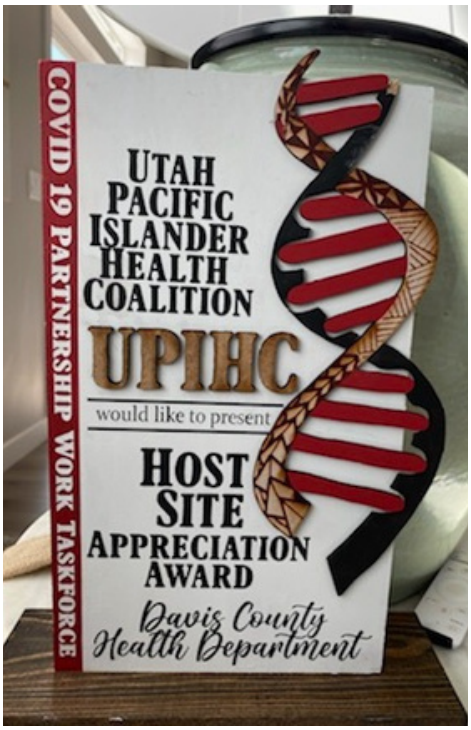
Acronyms used in this report:

- **CHW:** Community Health Worker
- **COVID-19:** Coronavirus Disease 2019
- **DCHD:** Davis County Health Department
- **UDOH:** Utah Department of Health
- **LDS:** Church of Jesus Christ of Latter-Day Saints

COVID-19 vaccination data:

- Davis County COVID-19 Information
- State of Utah COVID-19 Dashboard
- CDC COVID-19 Data Tracker
- US Census Bureau COVID-19 Portal
- US Census Bureau Community Resilience Estimates

Appendix B: Recognition



The Utah Pacific Islander Health Coalition

recognized community partners, including the Davis County Health Department, at their Community Partner Appreciation Dinner in July 2021.

The Utah Public Health Association's

Public Health Hero Award

is presented to individuals and organizations who have significantly impacted the health and well-being of their communities. The DCHD was honored to receive this recognition for the Legacy Events Center mass vaccination clinic.

In recognition of excellence in large-scale vaccination efforts, the **Center for Disease Control** awarded DCHD the

Platinum Plunger Certificate of Appreciation.

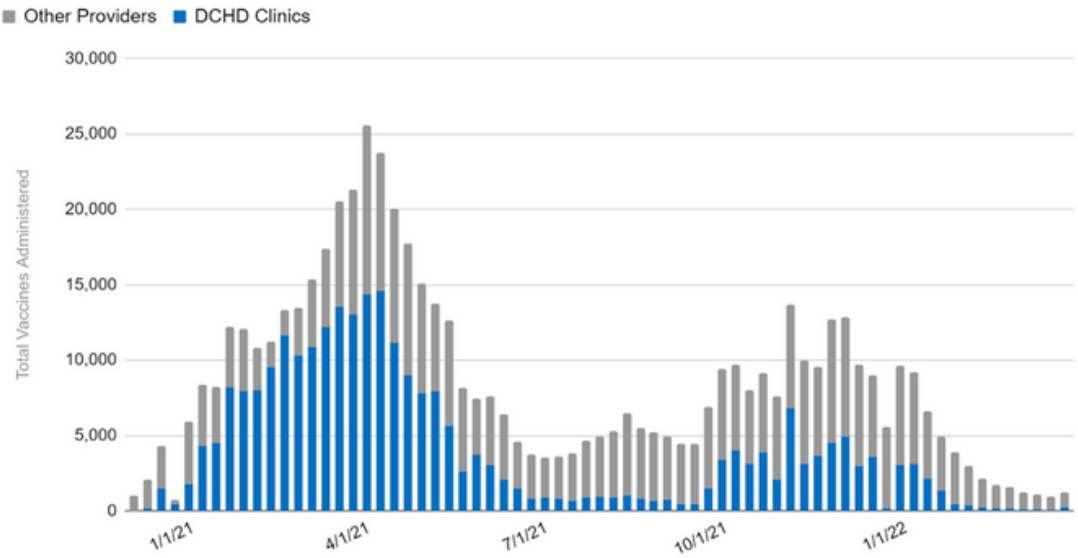
Appendix C: Additional Data

Vaccination Effort: By March 2022, DCHD had administered nearly half of all doses received by county residents. Figure 7 shows the number of vaccines administered to county residents by provider type over time.

Figure 7

Count of COVID-19 Vaccines Given to Davis County Residents by Week and Provider

Source: DCHD; Utah COVID-19 Internal Surveillance Dashboard

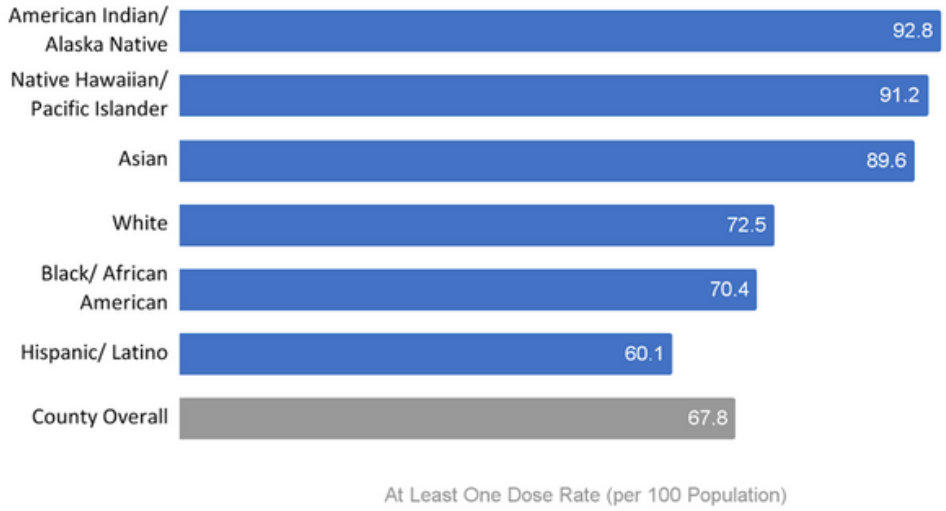


Vaccine Outcomes: Vaccine uptake rates, also known as the number of people in a specific population who started their vaccine series (at least one dose), were compared between race and ethnicity groups to identify potential disparities. Gaps in bar lengths, like those in Figure 8, prompted the outreach team and CHWs to explore vaccine hesitancy in certain communities and new strategies for educational materials.

Figure 8

Racial Differences in Vaccine Uptake Rates, Davis County, 2020-2022

Source: https://coronavirus.utah.gov/case-counts/



Appendix C: Additional Data *(continued)*

DCHD monitored vaccination rates by age group over time to inform outreach clinic and communication strategies (Figure 9). Most age groups spiked when they became eligible for vaccination then plateaued after a few weeks. Youth age 5-11 were eligible for the shortest period at the time of this report and parental hesitancy was observed, which may partially explain their lower rates.

Figure 9

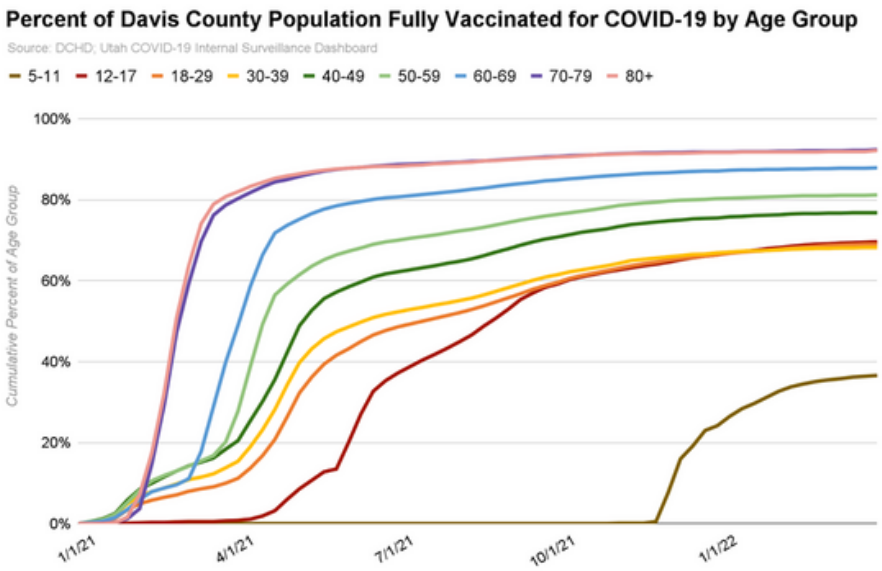
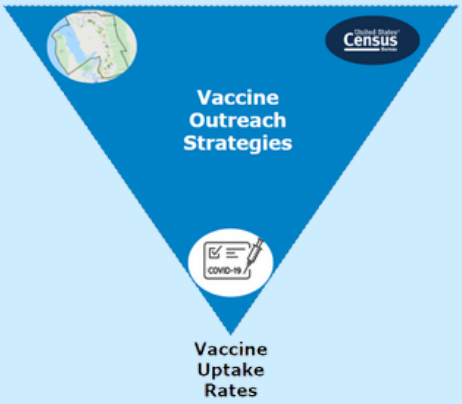


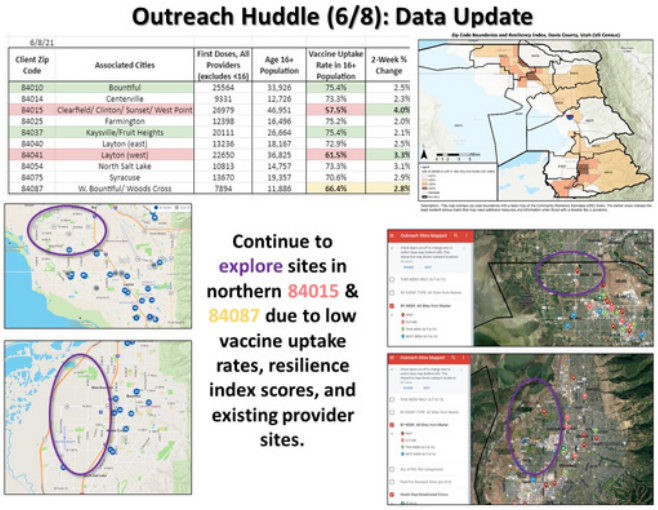
Figure 10



DCHD utilized client demographic data to periodically conduct equity analyses to ensure its clinic efforts were reducing barriers so vaccines were accessible to everyone who wanted one. DCHD triangulated data from multiple sources to inform upcoming outreach efforts (Figure 10).

Bi-monthly, the outreach team compared uptake rates by zip code to vaccine provider locations and the US Census Bureau's Community Resilience Estimates Index to identify potential geographical gaps in access to vaccination, especially for vulnerable populations (Figure 11).

Figure 11



Client Zip Code	Associated Cities	First Doses, All Providers (excludes <16)	Age 16+ Population	Vaccine Uptake Rate in 16+ Population	2-Week % Change
84010	Bountiful	25564	33,926	75.4%	2.5%
84014	Centerville	9331	12,726	73.3%	2.3%
84015	Clearfield/ Clinton/ Sunset/ West Point	26979	46,951	57.5%	4.0%
84025	Farmington	12398	16,496	75.2%	2.0%
84037	Kaysville/Fruit Heights	20111	26,664	75.4%	2.1%
84040	Layton (east)	13236	18,167	72.9%	2.5%
84041	Layton (west)	22650	36,825	61.5%	3.3%
84054	North Salt Lake	10813	14,757	73.3%	3.1%
84075	Syracuse	13670	19,357	70.6%	2.9%
84087	W. Bountiful/ Woods Cross	7894	11,886	66.4%	2.8%

Appendix C: Additional Data *(continued)*

To assess if any populations within the county were being underrepresented among first dose recipients, DCHD and other provider client demographics were compared to the demographic makeup of the county (Figure 12).

Figure 12

Demographic Representation of Davis County Resident COVID-19 Vaccine Uptake by Clinic, 2020-2022		
Demographics	**DCHD Clinics**	**Other Provider Clinics**
Age		
5-17	Under	Under
18-44	Under	Over
45-64	Over	Over
65+	Over	Over
Race		
American Indian/Alaska Native	Under	Adequate
Asian	Over	Over
Black/African American	Under	Adequate
Native Hawaiian/Pacific Islander	Adequate	Over
White	Under	Under
Ethnicity		
Hispanic/Latino	Under	Under
Not Hispanic/Latino	Under	Under
Gender		
Female	Over	Over
Male	Under	Under

*Red=Underrepresented | Yellow=Overrepresented | Green=Adequate representation

Underrepresentation across all providers points to either a data collection error (i.e. Ethnicity), vaccine hesitancy, or lack of access. Differences in representation between DCHD and other provider clients may speak to appropriateness of clinic models, length of eligibility, or strategies for certain populations. Further interpretations are outlined in Strategy 1 of this report.

Davis COUNTY HEALTH DEPARTMENT

Prepared May 2022

Questions about this report can be directed to
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