Utah's adult immunization report:

analysis through a health equity lens

Utah Department of
Health & Human Services
Population Health

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Summary of report

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Report purpose:

This report summarizes immunization data in the state's adult population through a health equity lens. In addition to general immunization summaries, this report highlights demographic, geographic, and socioeconomic metrics in order to identify gaps or successes in vaccination coverage among various populations. This report may be used as a resource to evaluate immunization coverage, identify gaps in services, and develop interventions.

Data sources:

This report presents data obtained from 3 primary sources:

Behavioral risk factor surveillance system (BRFSS)

> The Utah BRFSS is an ongoing information collection effort by the Utah Department of Health and Human Services (DHHS) in conjunction with the CDC to assess the prevalence of and trends in health-related behaviors in the non-institutionalized Utah adult population. The BRFSS survey is conducted by DHHS employees who contact Utahns by landline and cell phones and use a scripted questionnaire to conduct interviews. In 2022, 1,330 interviews were conducted by landline phones and 8,679 interviews were conducted by cell phones.

Utah statewide immunization information system (USIIS)

> Established in 1998, USIIS collects, consolidates, and manages immunization records for Utah residents of all ages. The primary sources of USIIS data are healthcare providers, including public clinics, private clinics and practices, hospitals, and pharmacies. Participation in USIIS is voluntary; not all providers of immunizations report vaccine administrations into USIIS.

National immunization survey–adult COVID module (NIS-ACM)

> The NIS-ACM is a phone survey sponsored by the CDC and conducted by the National Center for Immunization and Respiratory Diseases (NCIRD) of the Centers for Disease Control and Prevention (CDC) that provides current, population-based, state and local area estimates of COVID-19 vaccination coverage among adults 18 years and older.

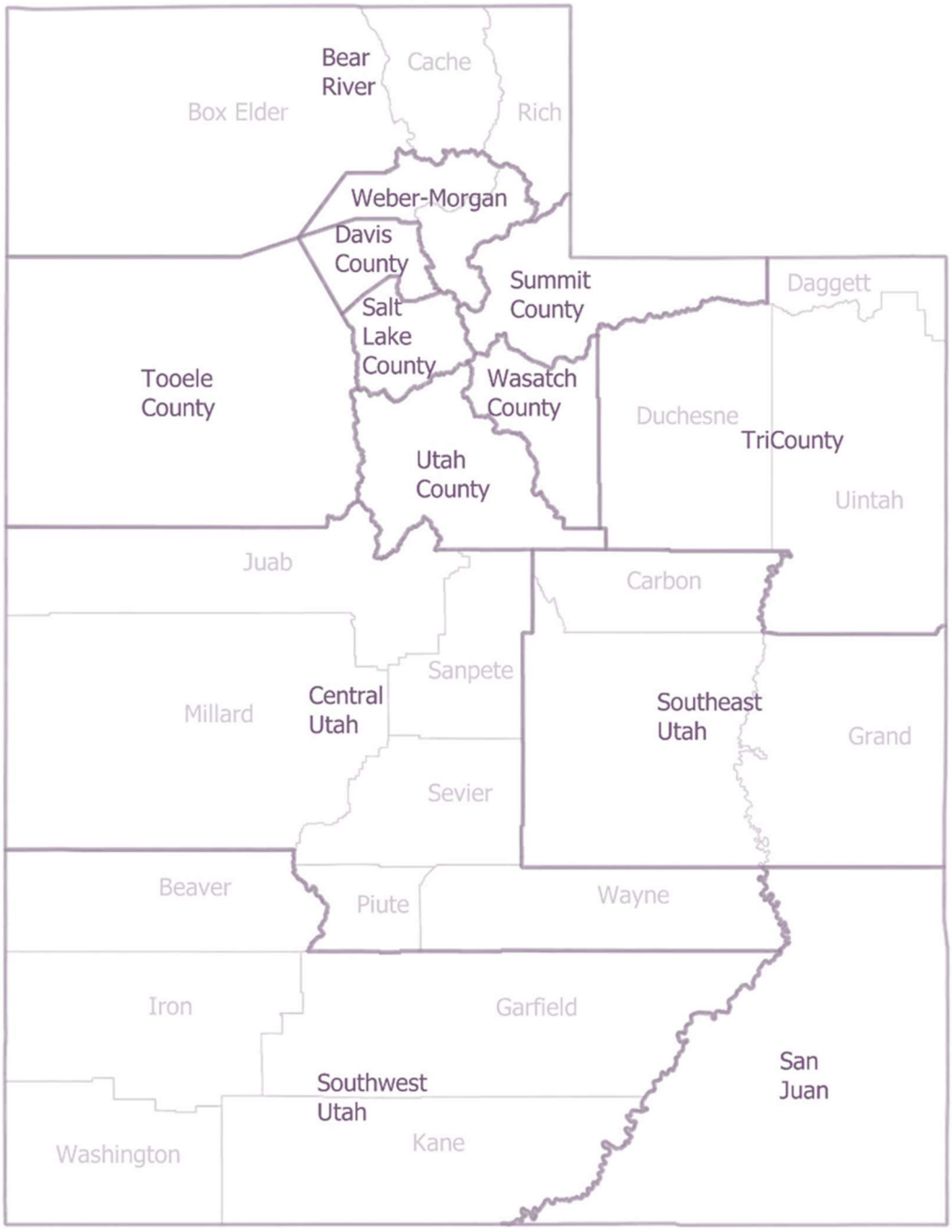
Caution should be taken when comparing data between data sources with differing collection methodologies.

Intended audience:

This report is intended to present relevant immunization data for use by state and local public health officials and community partners. Data is presented at state, local health district, and small area levels.

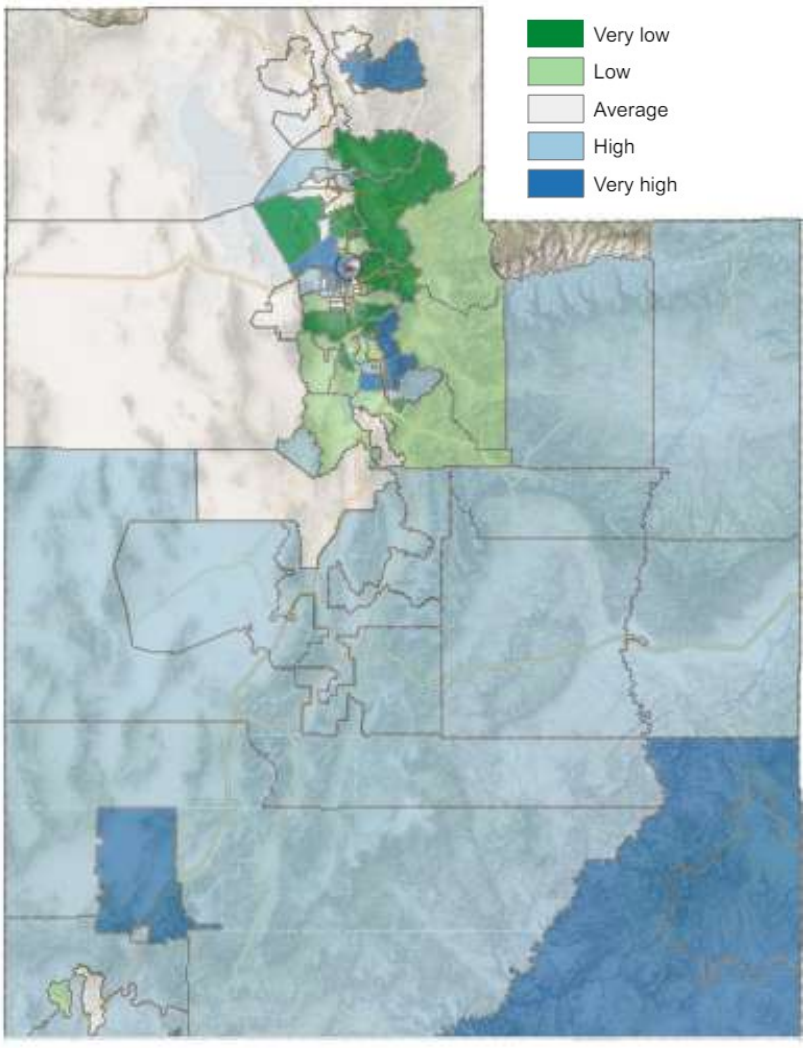
Service areas

The 29 counties in Utah are divided between 13 local health districts (LHDs) which are used in this report as the geographic boundaries of reporting service areas. See the map of Utah below.



Small areas and socioeconomic (SE) disadvantage

The 99 small areas in Utah were assigned based on measures of health equity, including population size, political boundaries, and economic similarity, in order to facilitate reporting data on a community level. The measure includes nine indicators that describe important determinants of health such as demographics, socioeconomic deprivation, economic inequality, resource availability, and opportunity structure. Based on their composite score, Utah's small areas are categorized into five groups: very low, low, average, high, and very high socioeconomically disadvantaged communities. Groups with higher scores indicate that more improvements may be needed in that area.



Data source: 2016–2020 ACS PUMS and 2016–2020 BRFSS data

Abbreviations and definitions

ACIP—Advisory Committee on Immunization Practice

AI/AN—American Indian or Alaska Native

BRFSS—Behavioral risk factor surveillance system

CDC—Centers for Disease Control and Prevention

CDC WONDER—Wide-ranging online data for epidemiologic research

CI—Confidence interval

DHHS—Department of Health and Human Services

HPV—Human papillomavirus

IHS—Indian Health Service

LGBTQ+—Lesbian, gay, bisexual, transgender, queer or questioning, and more

LHD—Local health district

NPHI—Native Hawaiian/Pacific Islander

NIS-ACM—National immunization survey-adult COVID module

PCV—Pneumococcal conjugate vaccine

PPSV—Pneumococcal polysaccharide vaccine

SE—Socioeconomically

SED—Socioeconomically disadvantaged

Td—Tetanus and diphtheria vaccine

Tdap—Tetanus, diphtheria, and pertussis vaccine

USIIS—Utah Statewide Immunization Information System

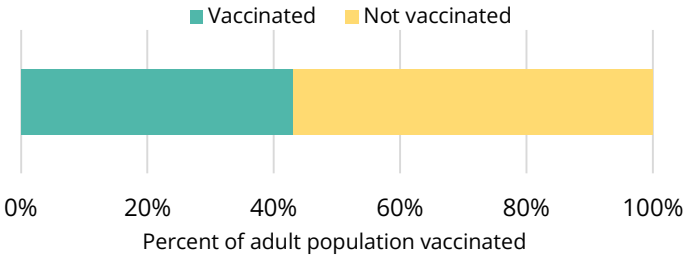
Key takeaways

- There are many demographic, geographic, social, and economic factors that create challenges to vaccination access and uptake behaviors.
    - The least vaccinated populations are often the most vulnerable: racial and ethnic minorities, communities of lower socioeconomic status, and more rural populations.
    - Elderly Utahns are the exception to this, with vaccination rates that are usually higher than younger adults but still fall below target uptake values.
- While there have been some improvements in immunization coverage measures in recent years, many have decreased.
    - Vaccinations against respiratory diseases (influenza, COVID-19, and pneumococcal) are well below target coverage rates and have notably decreased in recent years.
- If unprotected, many vulnerable people in our communities could experience serious complications from outbreaks of vaccine-preventable diseases.
- While the data provide useful insights, there are gaps, limitations, and inconsistencies that remain which limit the ability to get a complete picture of who is and who is not vaccinated.

Influenza vaccination

Routine annual influenza vaccination is recommended for all persons aged ≥6 months who do not have contraindications, ideally in September or October. CDC and ACIP preferentially recommend the use of higher-dose flu vaccines for people 65 years and older who are at greater risk of developing serious flu complications compared with young, healthy adults. Concurrent administration of influenza and COVID-19 vaccines in 2022 was encouraged to promote increased uptake. The following BRFSS data is for adult (18+) Utahns in the year 2022.

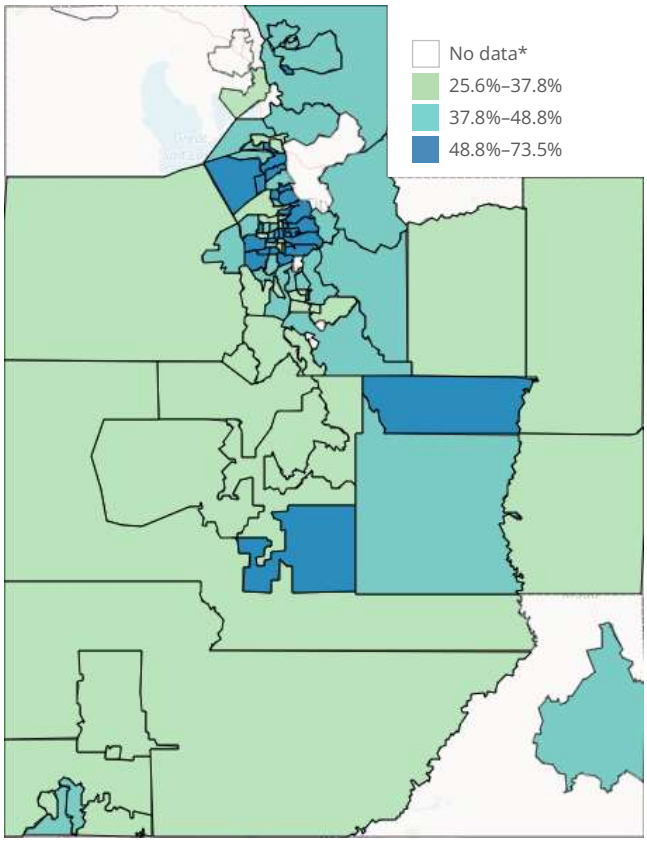
More adult Utahns were not vaccinated for influenza than were vaccinated in 2022.



Influenza vaccination was higher in small areas along the 'Wasatch Front' and 'Wasatch Back' than in rural areas. The small areas with the highest uptake are mostly within average to very low socioeconomically (SE) disadvantaged areas of Salt Lake County.

Influenza vaccination coverage tends to be higher in more densely populated areas.

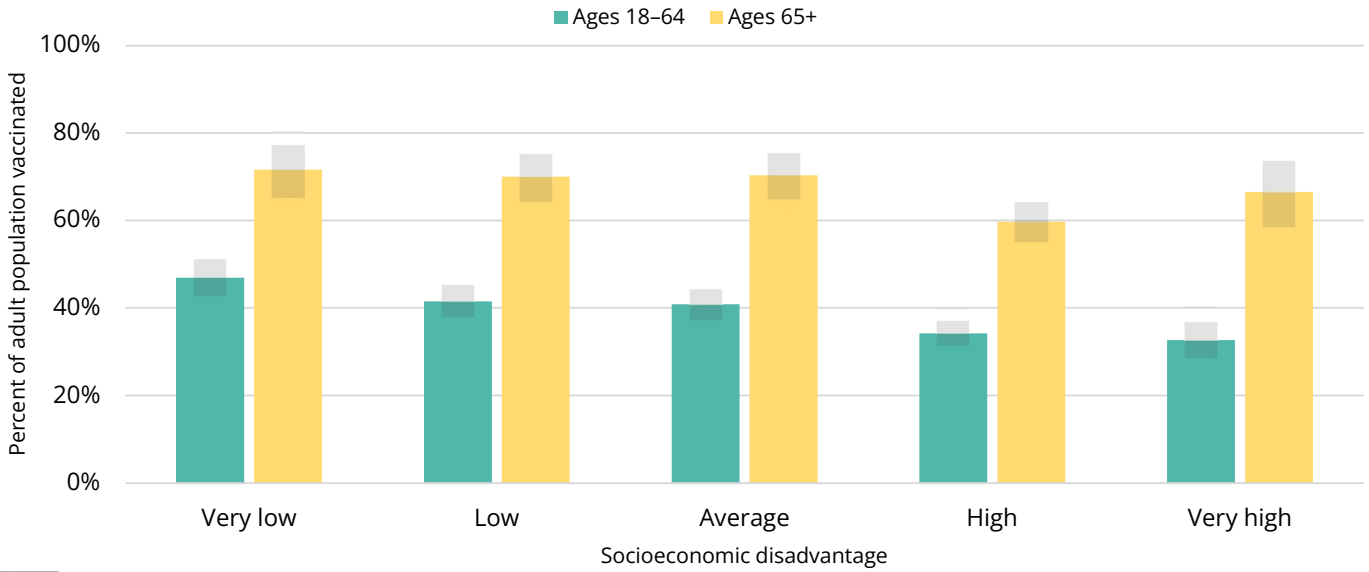
2022 seasonal flu vaccine coverage by Utah small area among Utah adults.



*Data have been suppressed because the relative standard error is greater than 50% and can't be determined or the number of events is very small.

Adults aged 65 and older were consistently more vaccinated than those aged 18 through 64.

Within both age groups, vaccination rates decreased in more socioeconomically disadvantaged communities.

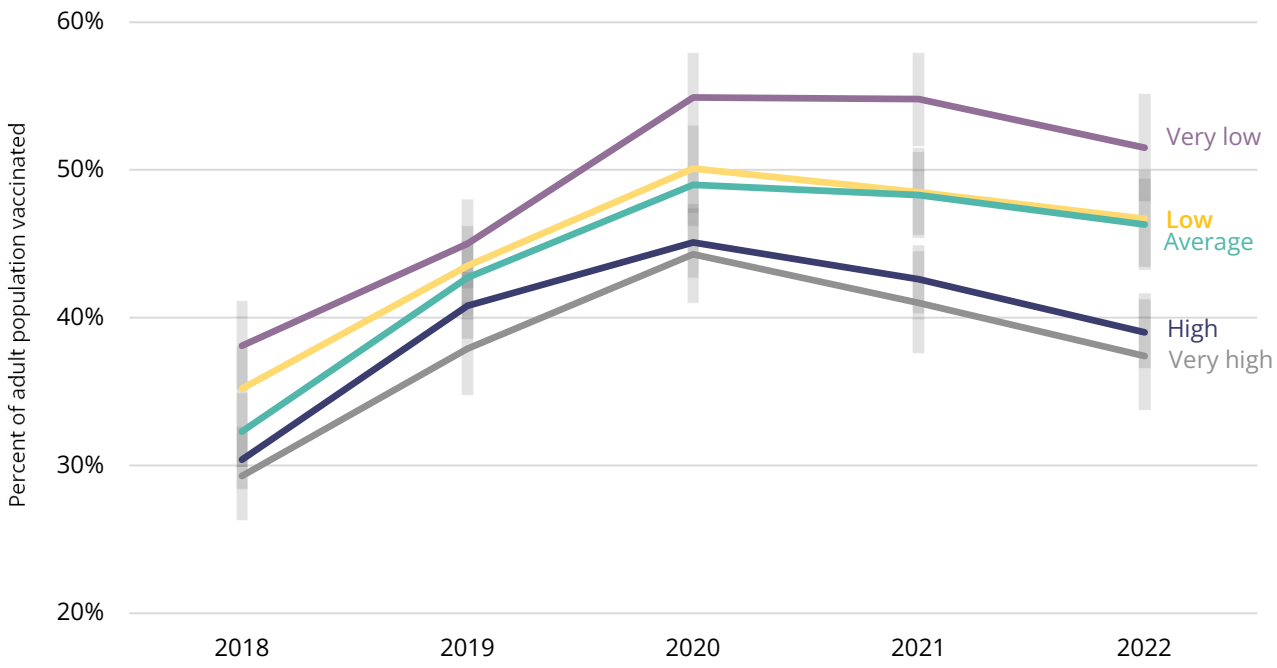


Data source: BRFSS (1)

Influenza vaccination

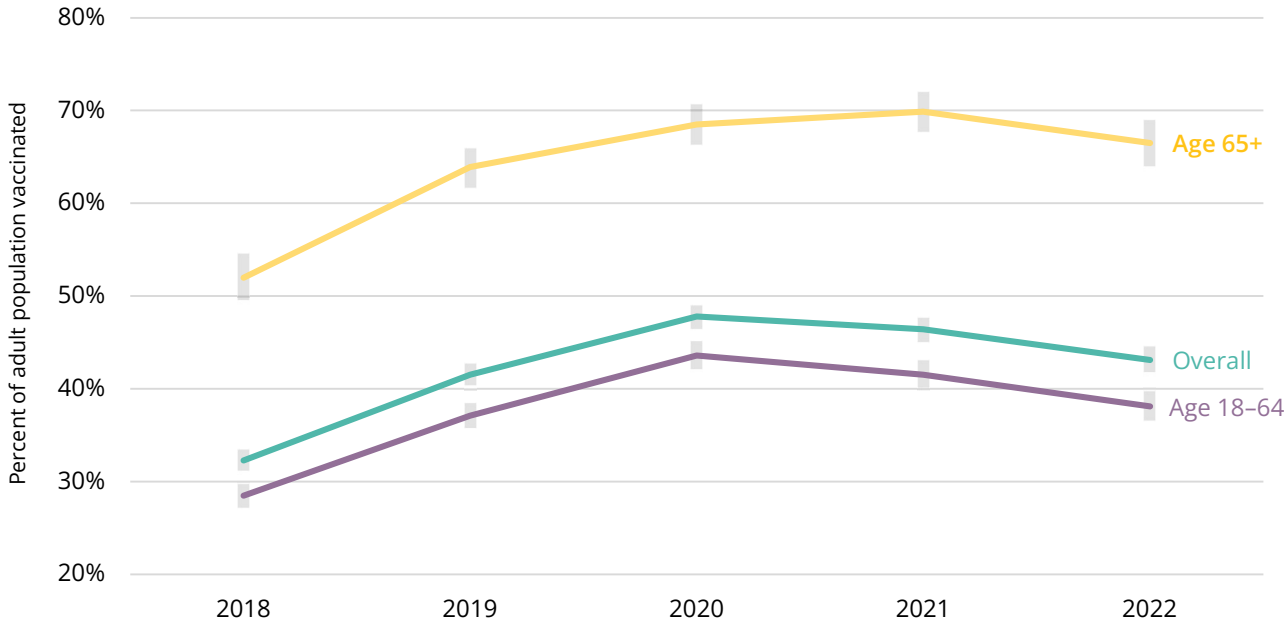
The vaccination coverage gap between different socioeconomic groups has widened over the past 5 years.

In 2018, influenza vaccination among very low socioeconomically disadvantaged Utahns was 9 percentage points higher than very high socioeconomically disadvantaged; this has increased to 14 percentage points in



Fewer than half of all adults reported receiving an influenza vaccination, following a trend of decreasing uptake in recent years.

This trend is consistent across both age groups 18–64 and 65+. Utah adults overall measure 7 percentage points below the national average of about 50% coverage.

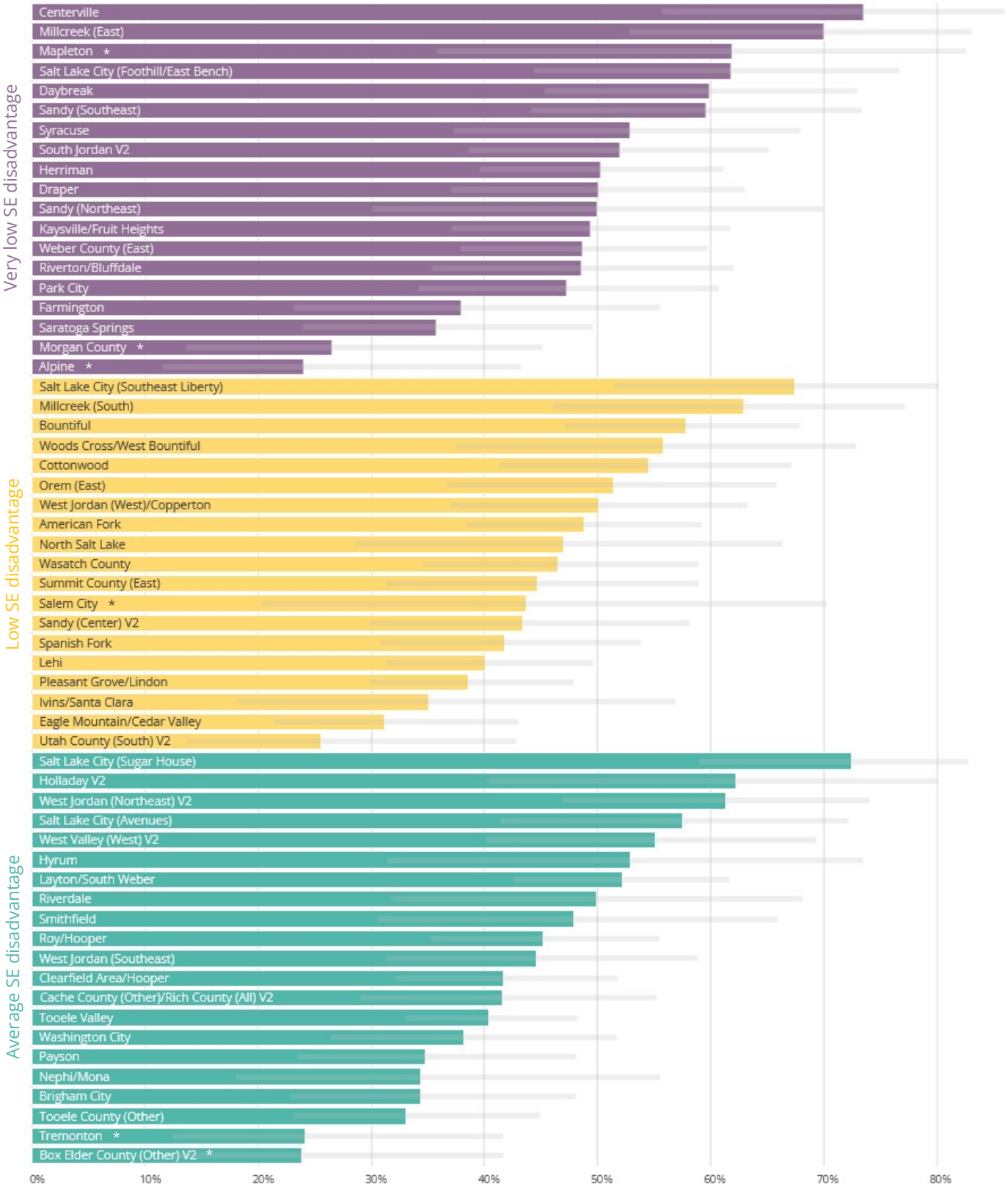


Data source: BRFSS (1)

Influenza vaccination

There is wide variation in flu vaccine uptake across small areas and within different socioeconomic groups.

Each socioeconomic group has influenza vaccine uptake rates that are high and low relative to the state average. However, the overall trend of greater socioeconomic disadvantage with lower vaccination uptake remains.



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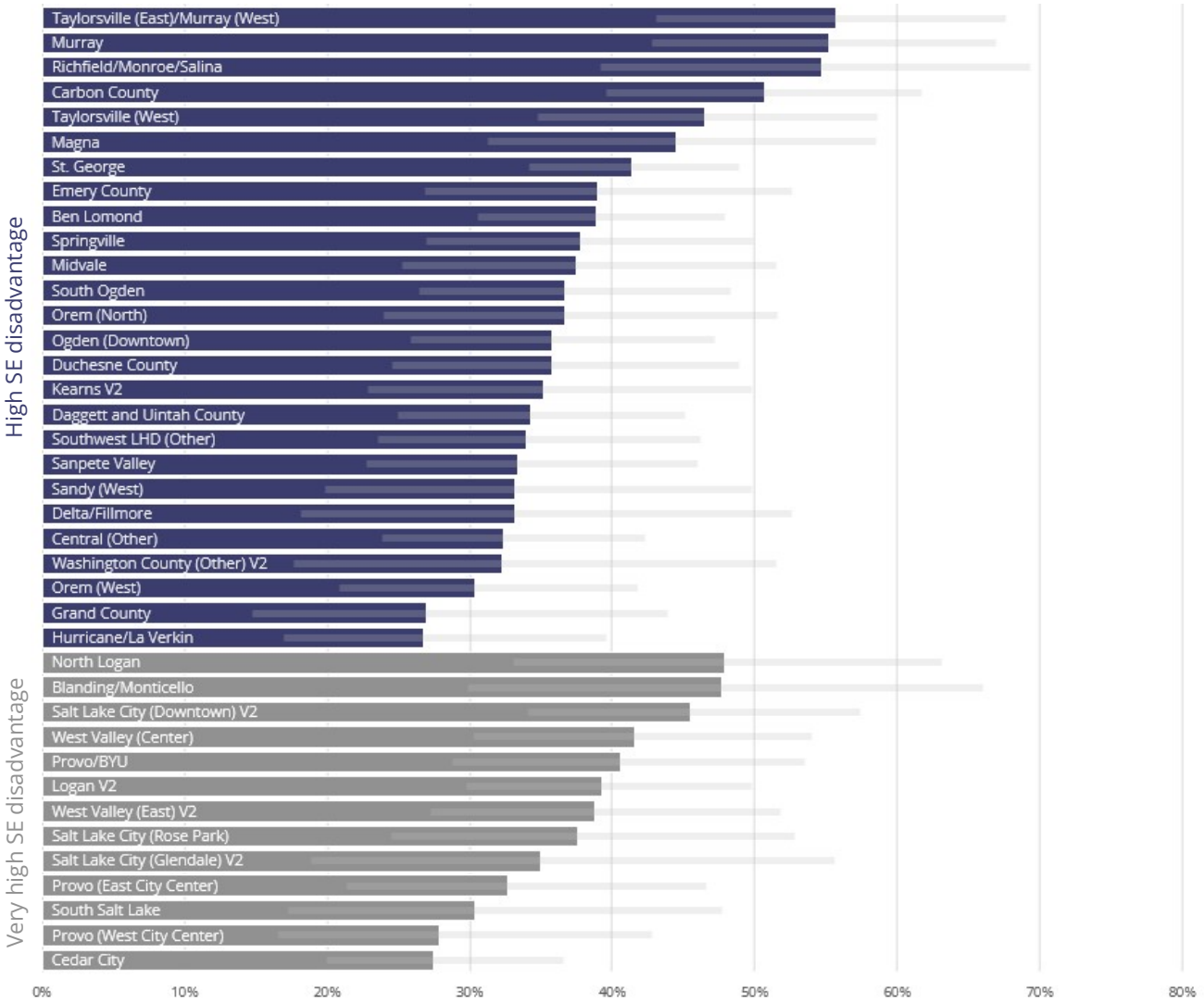
Data source: BRFSS (1)

Influenza vaccination



*Use caution in interpreting; estimate deemed unreliable by Utah DHHS standards.
Data from 1 small area has been suppressed.

Data source: BRFSS (1)

Influenza vaccination

The 10 small areas in the state of Utah with the highest influenza vaccination rates are all average to very low socioeconomically disadvantaged communities.

However, in the 10 small areas with the lowest rates, there are 3 small areas that are very low and low socioeconomically disadvantaged communities which may indicate these areas have higher rates of vaccine hesitancy or barriers not otherwise detected in socioeconomic status calculations.

Small areas with the 10 highest influenza vaccination rates, 2022

Small area	SE disadvantage	Vaccinated	CI	LHD
Centerville	Very low	73.5%	55.7–85.9%	Davis County
Salt Lake City (Sugar House)	Average	72.4%	59.0–82.7%	Salt Lake County
Millcreek (East)	Very low	70%	52.8–83%	Salt Lake County
Salt Lake City (Southeast Liberty)	Low	67.4%	51.5–80.1%	Salt Lake County
Millcreek (South)	Low	62.9%	46.0–77.1%	Salt Lake County
Holladay V2	Average	62.2%	40.3–80%	Salt Lake County
Mapleton*	Very low	61.9%	35.8–82.5%	Utah County
Salt Lake City (Foothill/East Bench)	Very low	61.8%	44.4–76.6%	Salt Lake County
West Jordan (Northeast) V2	Average	61.3%	46.9–74%	Salt Lake County
Daybreak	Very low	59.9%	45.3–72.9%	Salt Lake County

*Use caution in interpreting; estimate deemed unreliable by Utah DHHS standards.

Small areas with the 10 lowest adult influenza vaccination rates, 2022

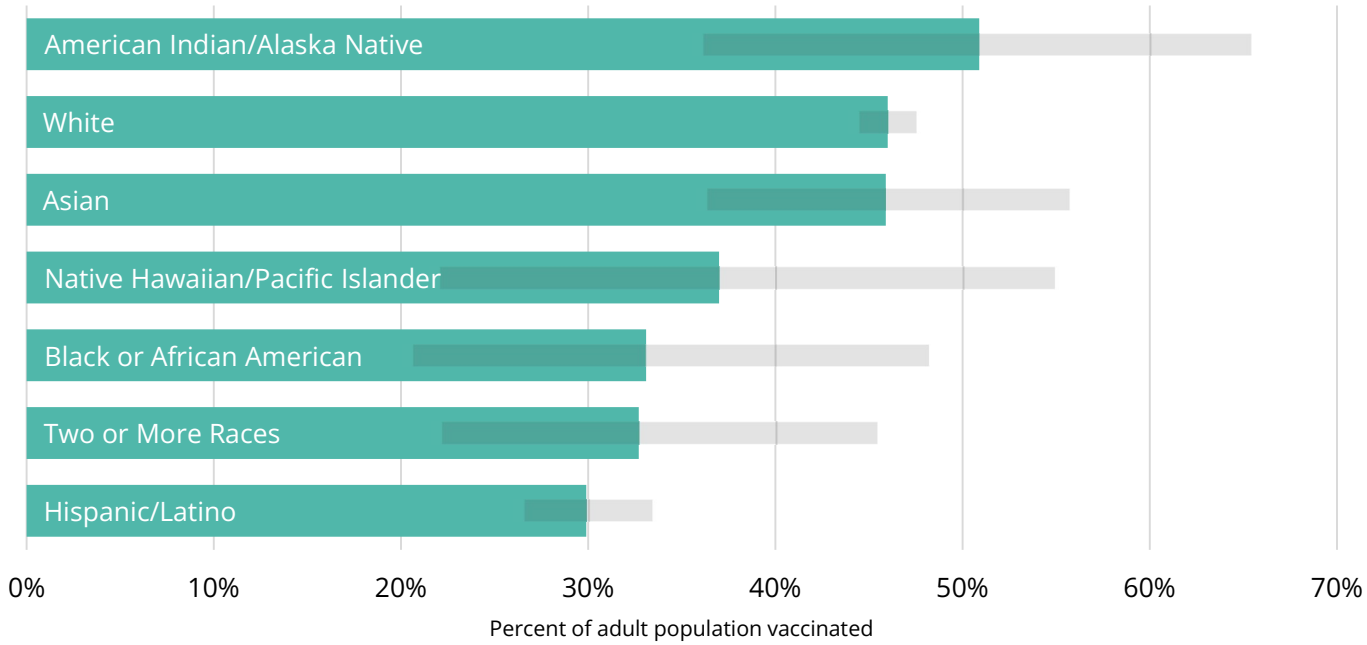
Small area	SE disadvantage	Vaccinated	CI	LHD
Box Elder County (Other) V2*	Average	23.9%	12.2–41.7%	Bear River
Alpine*	Very low	24%	11.6–43.2%	Utah County
Tremonton*	Average	24.2%	12.5–41.7%	Bear River
Utah County (South) V2	Low	25.6%	13.7–42.8%	Utah County
Morgan County*	Very low	26.5%	13.7–45.1%	Weber-Morgan
Hurricane/La Verkin	High	26.8%	17.0–39.6%	Southwest
Grand County	High	27%	14.8–43.9%	Southeast
Cedar City	Very high	27.5%	20–36.6%	Southwest
Provo (West City Center)	Very high	27.9%	16.6–42.8%	Utah County
Orem (West)	High	30.4%	20.9–41.8%	Utah County

*Use caution in interpreting; estimate deemed unreliable by Utah DHHS standards.

Data source: BRFSS (1)

Influenza vaccination

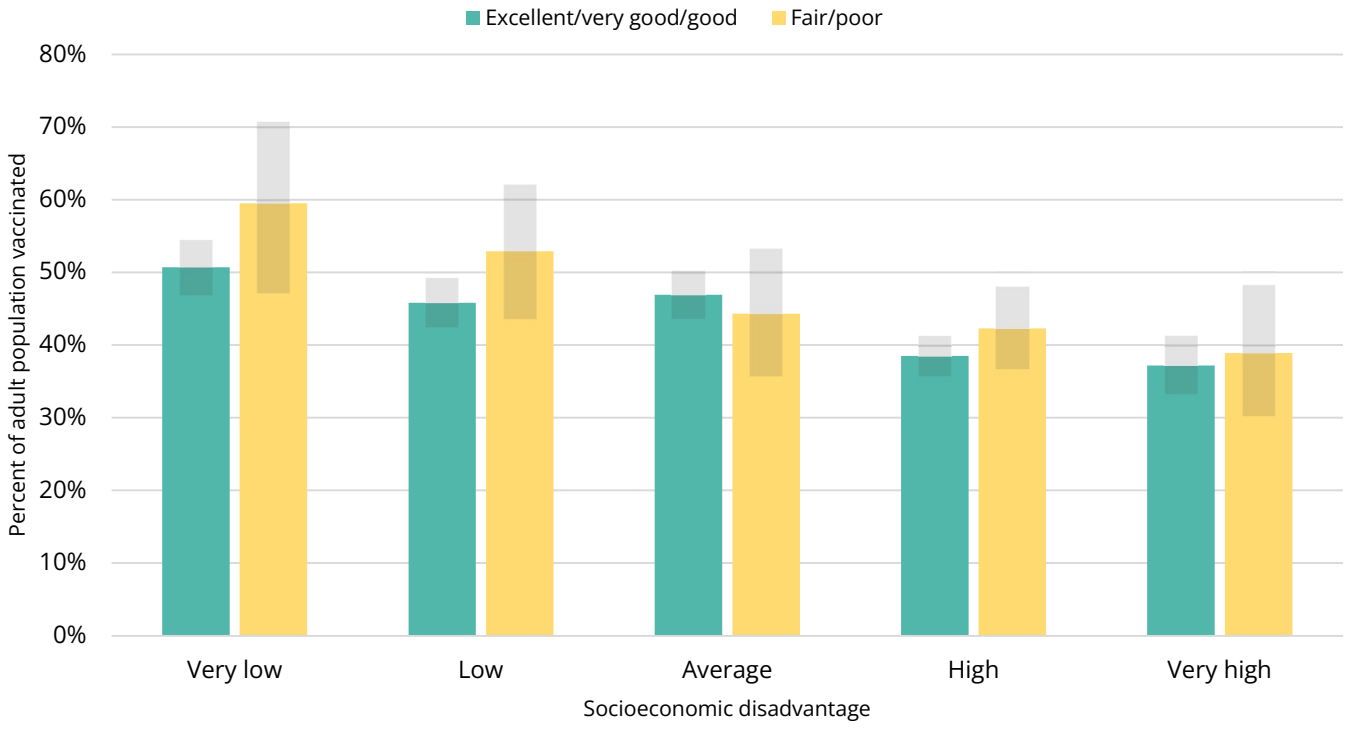
Influenza vaccination rates for Utahns who are Hispanic/Latino were significantly lower than Utahns who are White, American Indian/Alaska Native, and Asian.



† Categories are mutually exclusive, therefore all races listed are non-Hispanic

People in highly and very highly socioeconomically disadvantaged communities who reported excellent/very good/good health were less likely to be vaccinated than more advantaged Utahns who reported the same health status.

Utahns who reported fair/poor health show a similar trend, though not statistically significant due to low sample size.

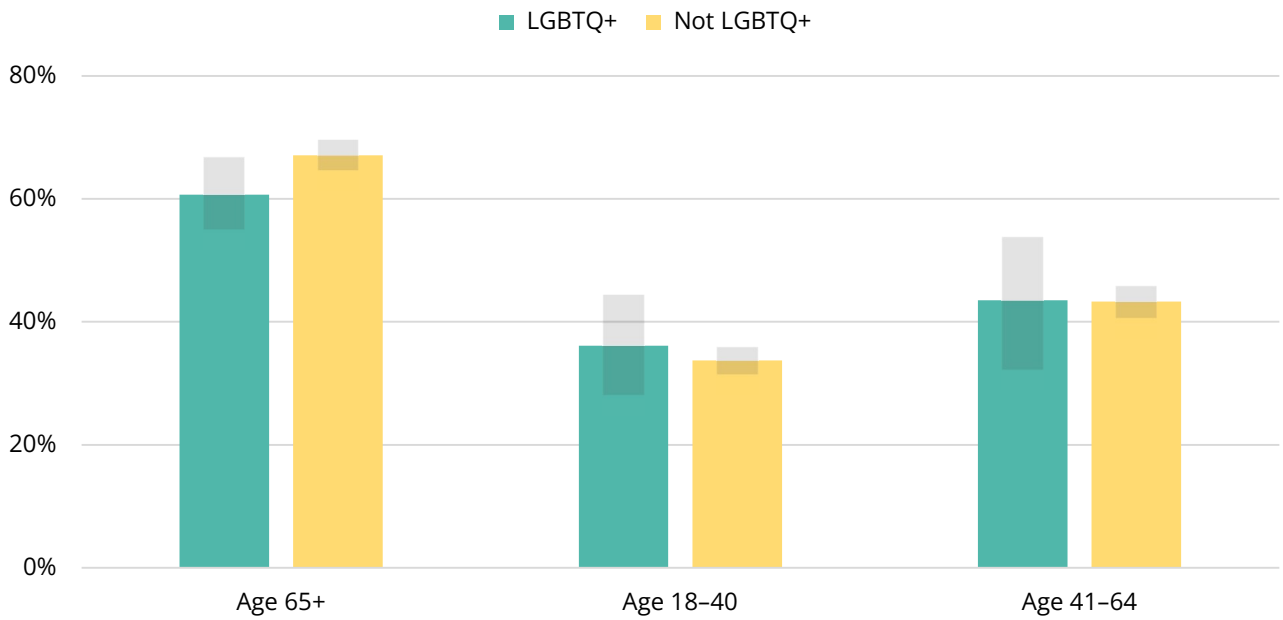


Data source: BRFSS (1)

Influenza vaccination

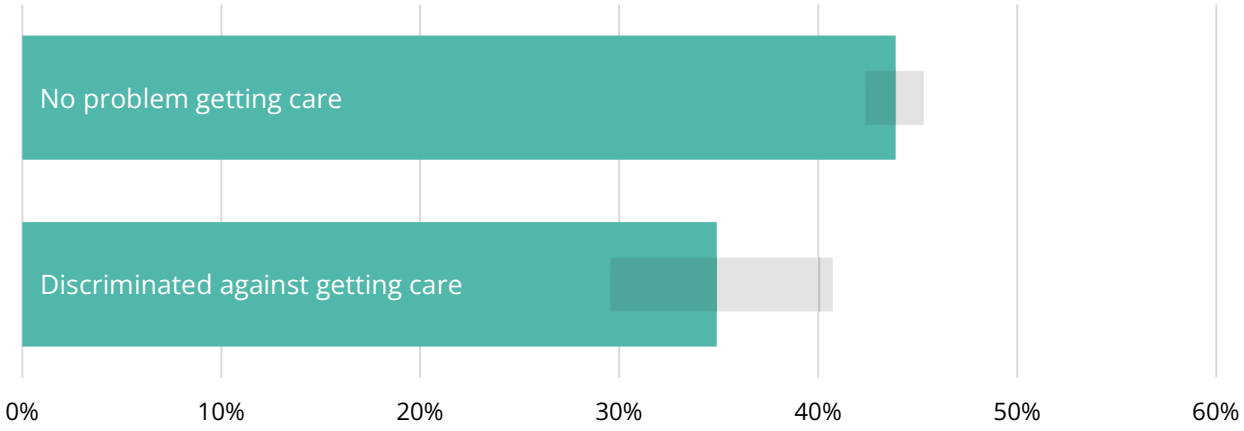
There may be differences in influenza vaccine accessibility or uptake behaviors in LGBTQ+ people of different age groups.

Those identifying as LGBTQ+ were less likely than non-LGBTQ+ to be vaccinated as age increased. LGBTQ+ were 2.4% more likely than non-LGBTQ+ to be vaccinated in the ages 18–40 group, just as likely in ages 41–64, and 6.4% less likely in ages 65+. Data on state and local immunization coverage with LGBTQ+ further broken down into sexual orientation and gender identity are sparse despite some national data indicating differences in vaccination coverage within these classifications.



Healthcare discrimination may lead to less influenza vaccination.

Utahns who reported experiencing discrimination in the Utah healthcare system had an almost 10% lower flu vaccination rate than those that reported no discrimination. Other factors such as race, gender identity, sexual orientation, weight, etc. are often linked to healthcare discrimination and are not included in our socioeconomic disadvantage analyses.



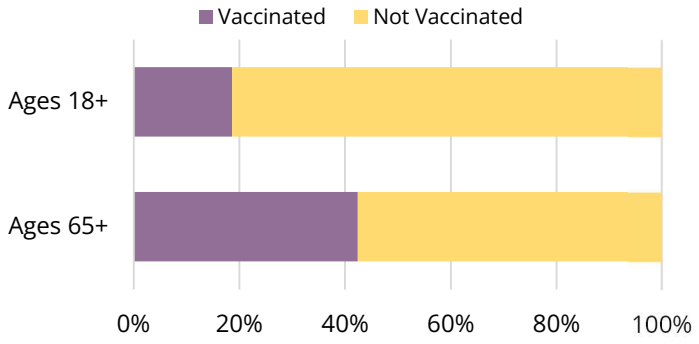
Data source: BRFSS (1)

COVID-19 vaccination

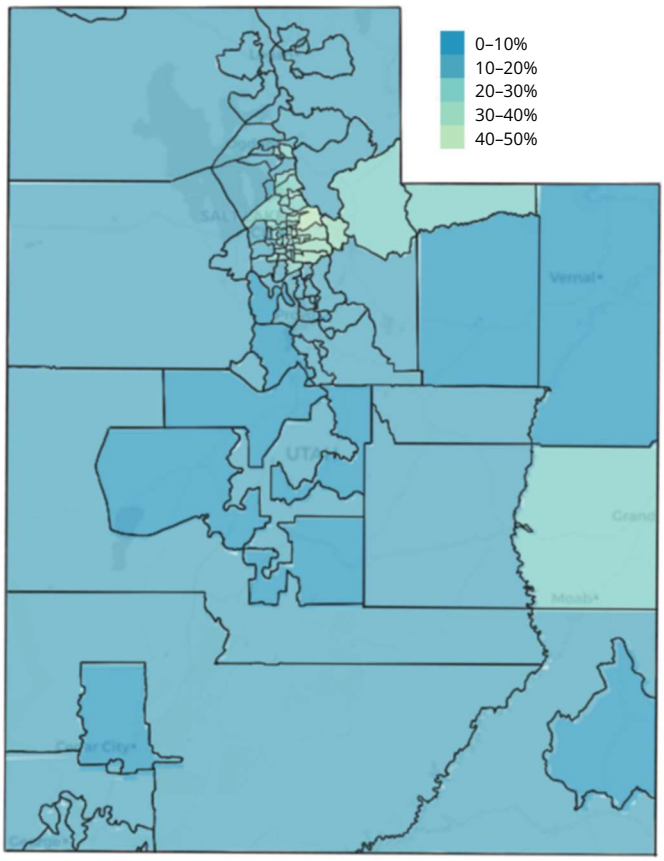
The first bivalent COVID-19 booster dose was approved in fall of 2022. By the end of 2022, everyone 6 months of age and older was eligible for an updated booster dose and CDC's definition of up-to-date changed to reflect this. The following USIIS administration data reflect Utahns ages 18 and older who have record of receiving a bivalent booster vaccine dose through June of 2022.

In the 2022–2023 respiratory disease season, 42% of people aged 65+ had received a bivalent COVID-19 booster dose, leaving more than half of elderly Utahns without bivalent protection.

Bivalent vaccination is estimated at only 18.6% in adults aged 18–64.

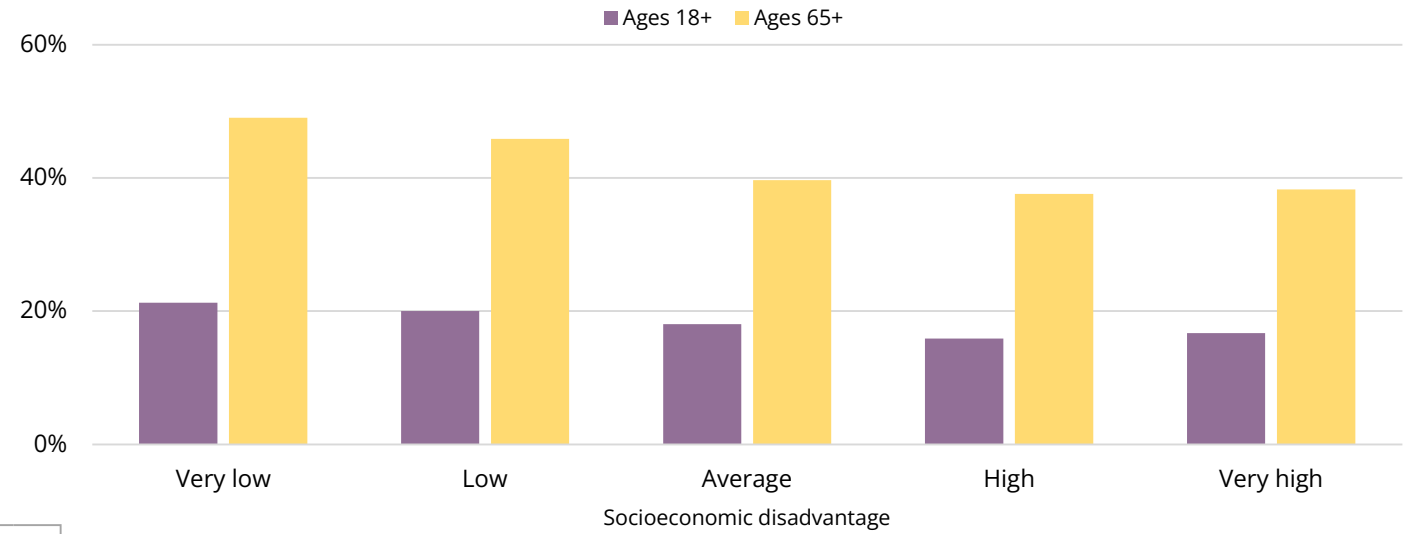


In 2022, bivalent COVID-19 booster uptake in adult Utahns was low throughout Utah but the Salt Lake valley had slightly higher rates.



There is a greater gap in bivalent booster coverage among people who are more versus less socioeconomically disadvantaged in people aged 65+ than in the general 18+ adult population.

The coverage gap between people aged 65+ in very low and very high socioeconomically disadvantaged areas is 10.7 percentage points but only 4.6 percentage points in the 18+ group.

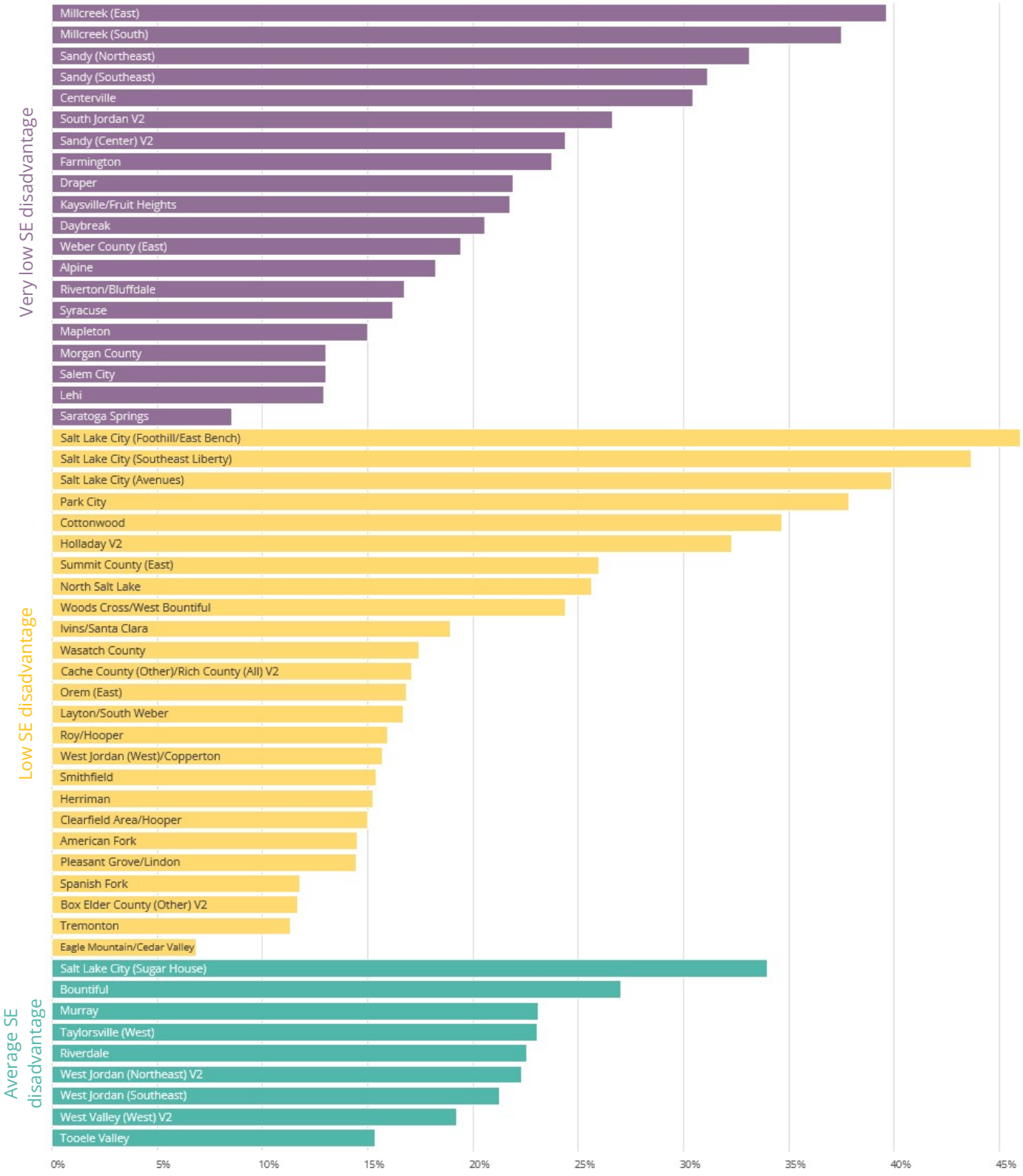


Data source: USIIS (2)

COVID-19 vaccination

There is wide variation in vaccine uptake across small areas and even within each SED group.

Each SED group has bivalent booster uptake rates that are high and low relative to the state average. Very low and low socioeconomically disadvantaged groups have coverage gaps of >30 percentage points between their most and least vaccinated small areas. However, the overall trend of highly socioeconomically disadvantaged areas having lower vaccination uptake remains.



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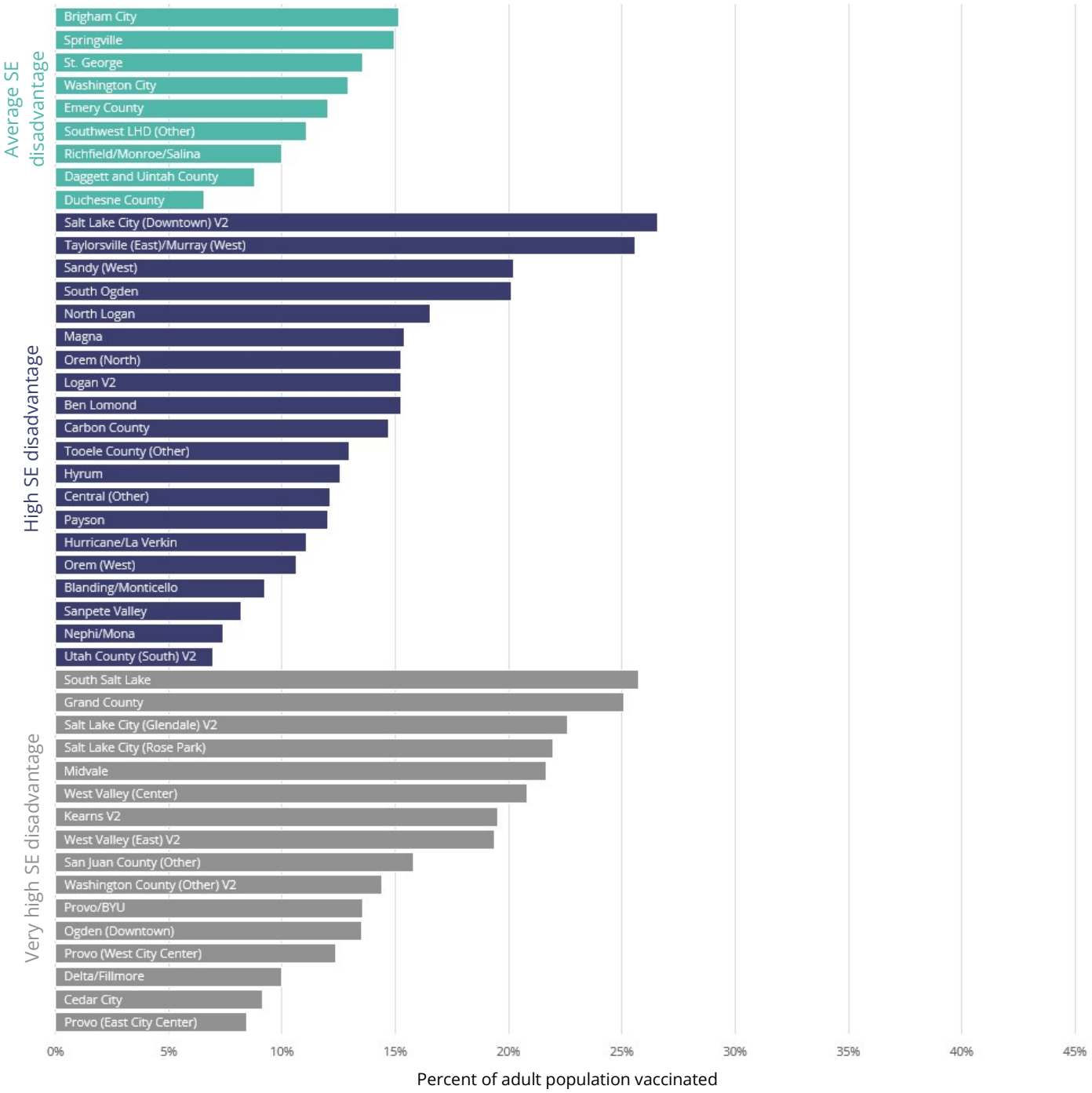
Data source: USIIS (2)

COVID-19 vaccination



Data source: USIIS (2)

COVID-19 vaccination

The 10 small areas with the highest bivalent booster vaccination rates are mostly low to very low socioeconomically disadvantaged communities and within Salt Lake County, while the 10 small areas with the lowest vaccination rates are in mostly high to very high socioeconomically disadvantaged areas throughout more rural areas of Utah.

Small areas with the 10 highest bivalent booster coverage, ages 18+, through 6/30/2023			
Small area	SE disadvantage	Vaccinated	LHD
Salt Lake City (Foothill/East Bench)	Low	46%	Salt Lake County
Salt Lake City (Southeast Liberty)	Low	43.7%	Salt Lake County
Salt Lake City (Avenues)	Low	39.9%	Salt Lake County
Millcreek (East)	Very low	39.7%	Salt Lake County
Park City	Low	37.8%	Summit County
Millcreek (South)	Very low	37.5%	Salt Lake County
Cottonwood	Low	34.7%	Salt Lake County
Salt Lake City (Sugar House)	Average	34%	Salt Lake County
Sandy (Northeast)	Very low	33.1%	Salt Lake County
Holladay V2	Low	32.3%	Salt Lake County

Small areas with the 10 lowest bivalent booster coverage, ages 18+, through 6/30/2023			
Small area	SE disadvantage	Vaccinated	LHD
Duchesne County	Average	6.6%	TriCounty
Eagle Mountain/Cedar Valley	Low	6.9%	Utah County
Utah County (South) V2	High	6.9%	Utah County
Nephi/Mona	High	7.4%	Central
Sanpete Valley	High	8.2%	Central
Provo (East City Center)	Very high	8.4%	Utah County
Saratoga Springs	Very low	8.5%	Utah County
Daggett and Uintah County	Average	8.8%	TriCounty
Cedar City	Very high	9.1%	Southwest
Blanding/Monticello	High	9.3%	San Juan

Data source: USIIS (2)

Most small areas with the highest and lowest bivalent booster uptake rates in ages 18+ overlap with those in the 65+ list, but the rates are higher in the 65+ group.

On average, coverage rates for the 65+ group were 25 percentage points higher than coverage rates for the 18+ group.

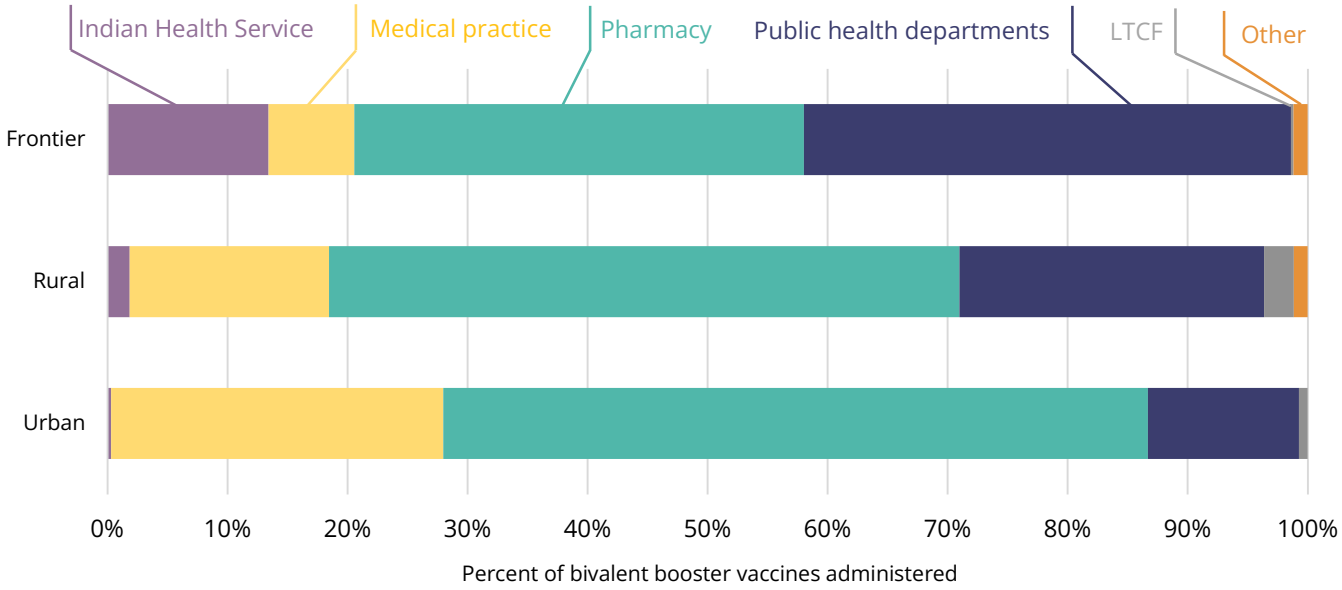
Small areas with the 10 highest bivalent booster coverage, ages 65+, through 6/30/2023			
Small area	SE disadvantage	Vaccinated	LHD
Park City	Low	71.9%	Summit County
Salt Lake City (Southeast Liberty)	Low	71.9%	Salt Lake County
Salt Lake City (Foothill/East Bench)	Low	71.2%	Salt Lake County
Millcreek (East)	Very low	62.2%	Salt Lake County
Sandy (Southeast)	Very low	61.1%	Salt Lake County
Daybreak	Very low	60.9%	Salt Lake County
Summit County (East)	Low	59.8%	Summit County
Sandy (Northeast)	Very low	58.9%	Salt Lake County
West Jordan (Southeast)	Average	58.4%	Salt Lake County
South Jordan V2	Very low	57.9%	Salt Lake County

Small areas with the 10 lowest bivalent booster coverage, ages 65+, through 6/30/2023			
Small area	SE disadvantage	Vaccinated	LHD
Eagle Mountain/Cedar Valley	Low	14.8%	Utah County
Duchesne County	Average	16.8%	TriCounty
Blanding/Monticello	High	20.5%	San Juan
Saratoga Springs	Very low	20.5%	Utah County
Utah County (South) V2	High	21.6%	Utah County
Sanpete Valley	High	22.8%	Central
Daggett and Uintah County	Average	23.7%	TriCounty
Southwest LHD (Other)	Average	24.7%	Southwest
Richfield/Monroe/Salina	Average	25%	Central
Nephi/Mona	High	25.2%	Central

Data source: USIIS (2)

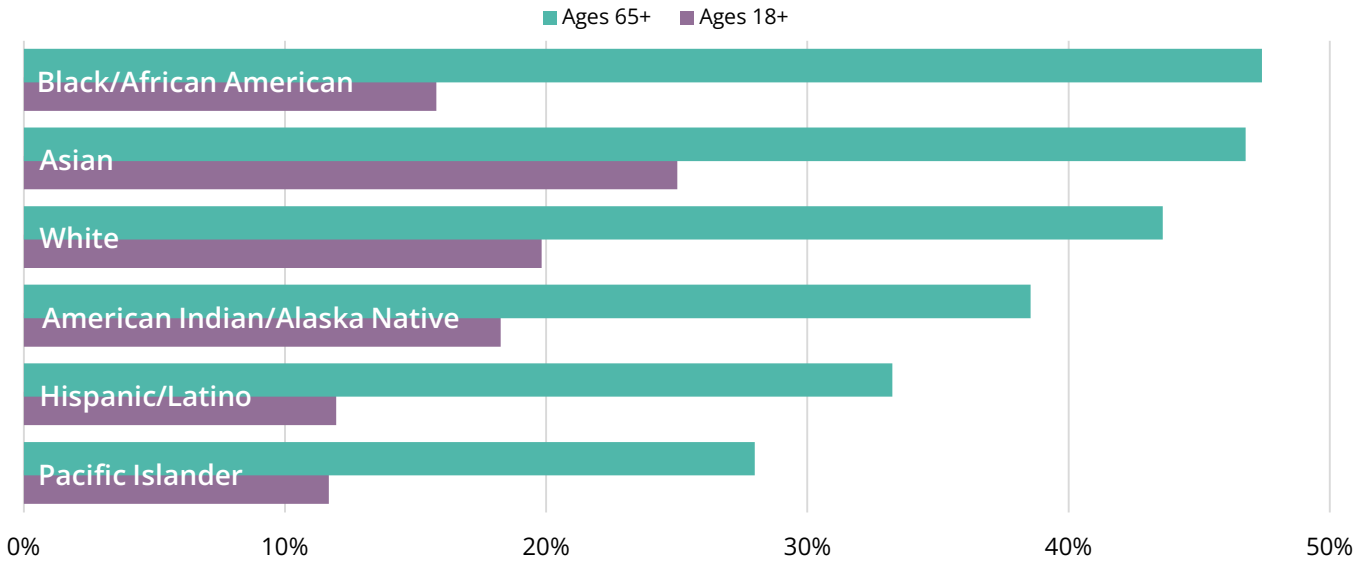
People living in different geographies get vaccines from different sources.

Slightly more than half of rural (52.5%) and 58.7% of urban residents received their bivalent booster dose from pharmacies; frontier residents used pharmacies less at 37.5%. Instead, frontier area residents were more likely to be vaccinated through public health departments (40.6%) and IHS (13.4%) than those in other areas. Urban residents were the least likely to be vaccinated by public health departments (12.6%) and the most likely group to be vaccinated by a private medical practice (27.7%).



There is wide variation in bivalent coverage among race/ethnicity categories and age groups.

People who are Black was the most vaccinated group of those 65 years and older at 47.4%; this is generally a group associated with higher socioeconomic disadvantage and is a priority target for vaccination. However, in the ages 18+ group, Asian, White, and AI/AN Utahns were more vaccinated than Black Utahns. Hispanic/Latino and Pacific Islander Utahns were consistently the least vaccinated groups between both age groups. White and Hispanic/Latino people make up the majority of Utah's population at about 77% and 15%, respectively, so adequate coverage within these 2 groups is most important for community protection.

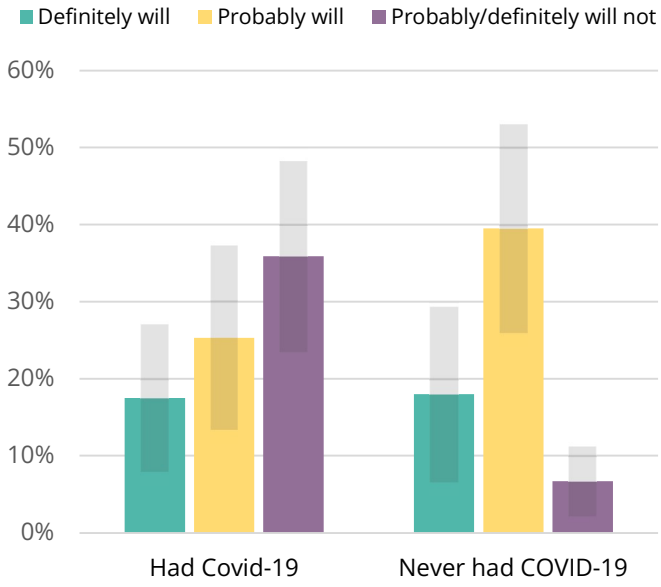


Data source: USIIS (2)

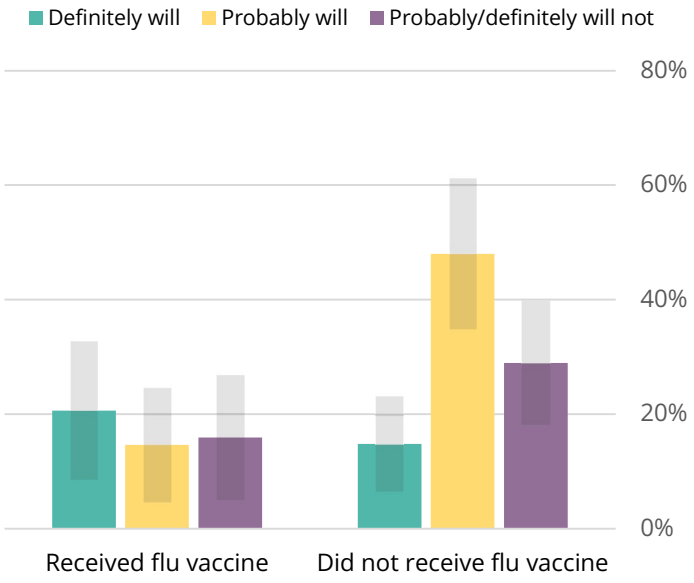
COVID-19 vaccination

The following data show responses by adult Utahns aged 18+ in December 2022 who had not yet received a bivalent booster dose to questions regarding their attitudes on whether they would definitely get a booster, probably get a booster, probably/definitely not get a booster, or were not sure, analyzed along with several other related topics.

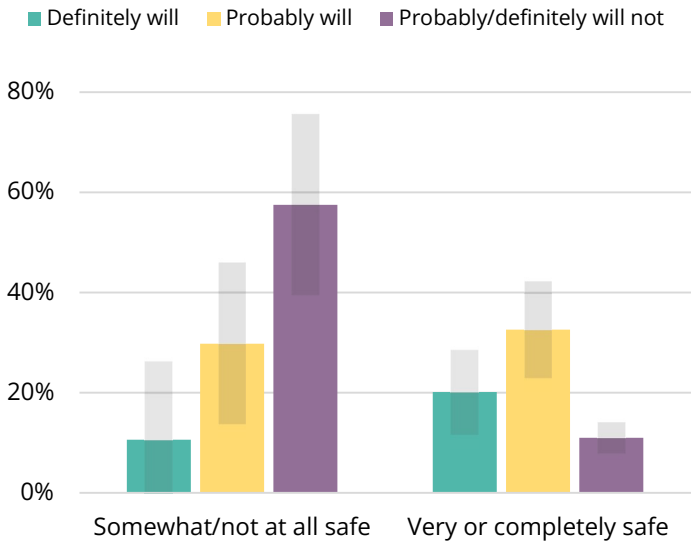
People who have had COVID-19 at least once were far more likely to report they probably would not or definitely would not get a COVID-19 bivalent booster dose.



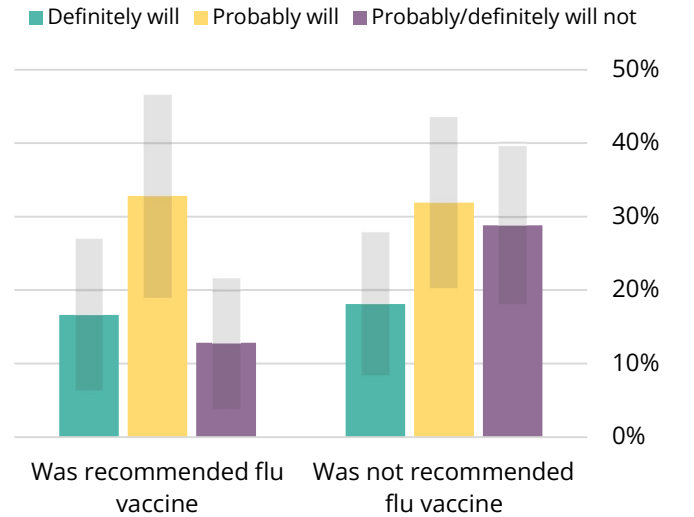
48% of people who did not receive an influenza vaccine indicated that they probably will get a COVID-19 booster; 29% of the same group said they probably/definitely will not.



Hesitation on vaccine safety may have significant impact on someone's decision to strongly oppose the booster dose. These sentiments didn't seem as strong when looking at confidence in vaccine safety and willingness to probably or definitely get the booster.



People whose health care provider did not recommend the COVID-19 were more likely to report they probably/definitely would not get a COVID-19 bivalent booster dose, but a similar number of people said they would probably still get it, though this difference is not statistically significant.



Data source: NIS-ACM (3)

Pneumococcal vaccination

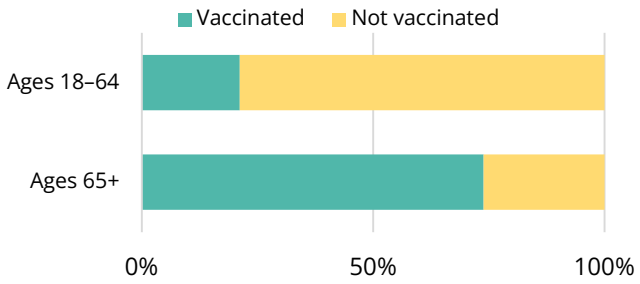
There are 3 pneumococcal vaccines that are recommended for use in the United States:

- 2 pneumococcal conjugate vaccines (PCV15, PCV20)
- 1 pneumococcal polysaccharide vaccine (PPSV23)

All adults older than age 65 and children who are younger than age 5 are recommended to receive pneumococcal vaccination, in addition to some adults aged 19–64 with certain immunocompromising conditions. The following 2022 BRFSS respondent data reflect Utahns ages 18 and older who report ever receiving a pneumococcal vaccine.

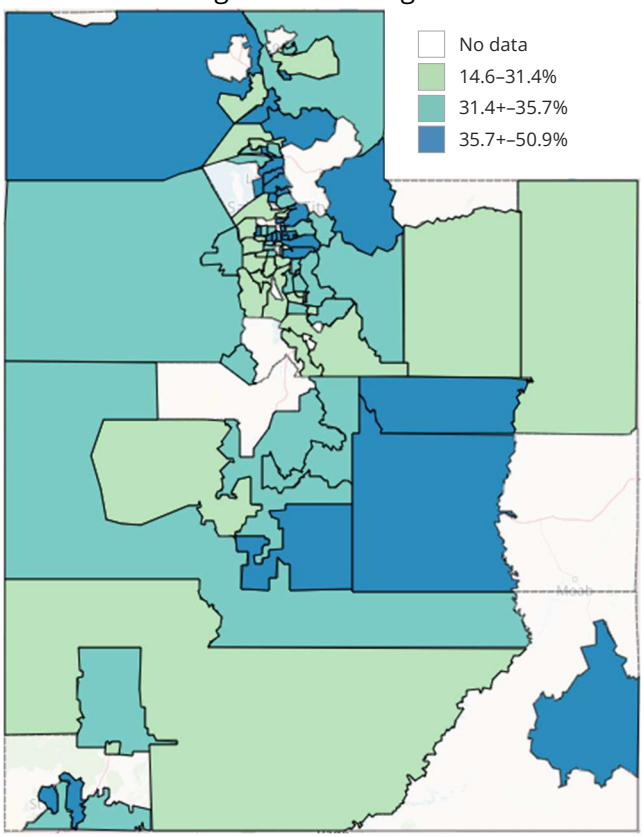
74% of people aged 65+ reported being vaccinated, leaving almost a quarter of senior Utahns unvaccinated.

Pneumococcal vaccination is estimated at only 21.2% in adults aged 18–64, which may be due to higher potential for poor recall of childhood vaccination.



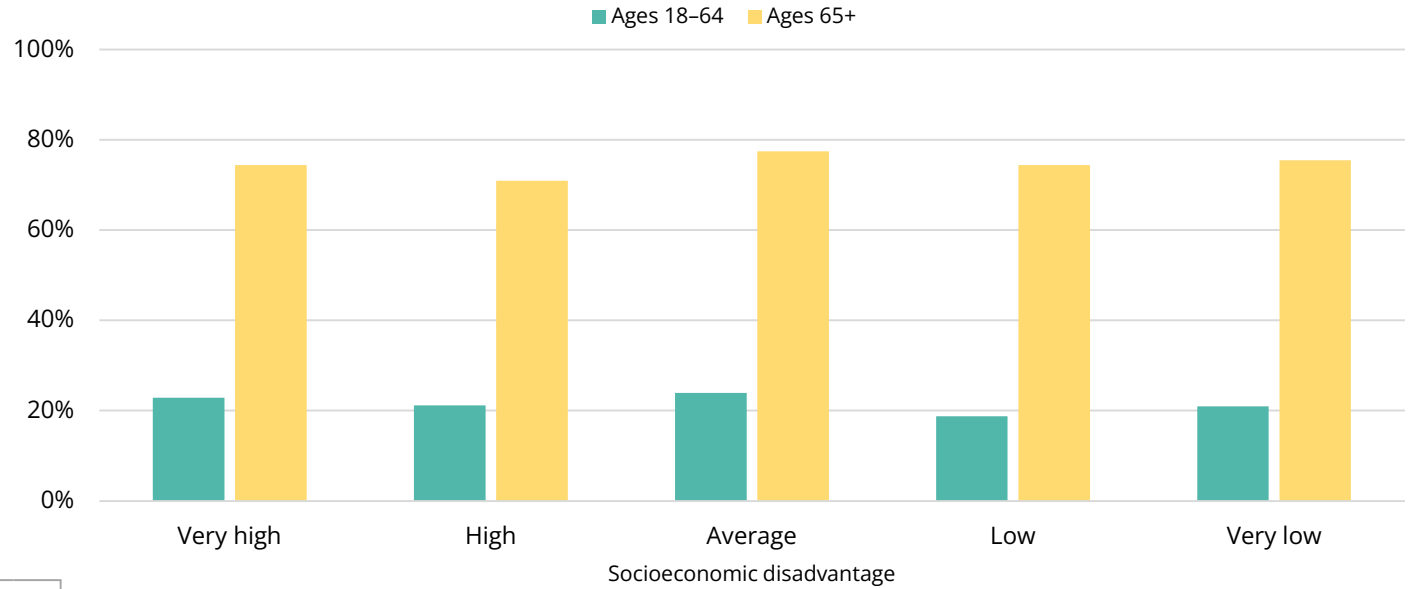
Pneumococcal vaccination coverage tends to be higher in more populated areas.

2022 pneumococcal vaccine coverage by Utah small area among Utah adults aged 18+.



Data from several small areas have been suppressed because the relative standard error is greater than 50% and can't be determined or the number of events is very small.

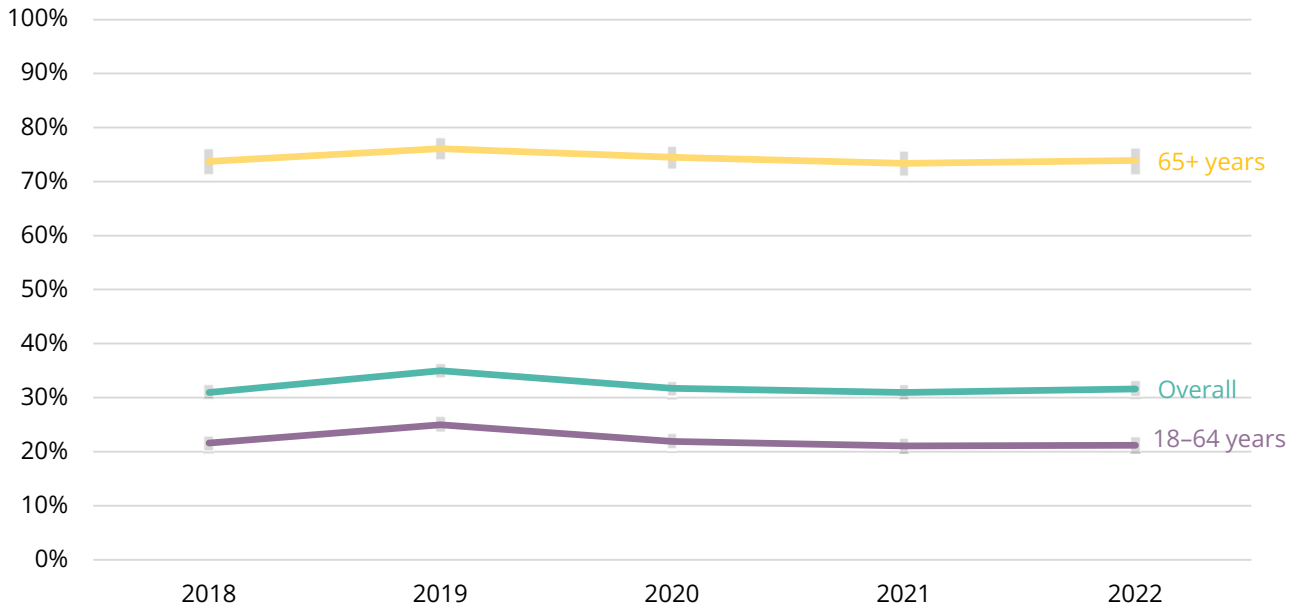
Pneumococcal vaccine coverage within each age group is consistent between communities with differing socioeconomic statuses.



Data source: BRFSS (1)

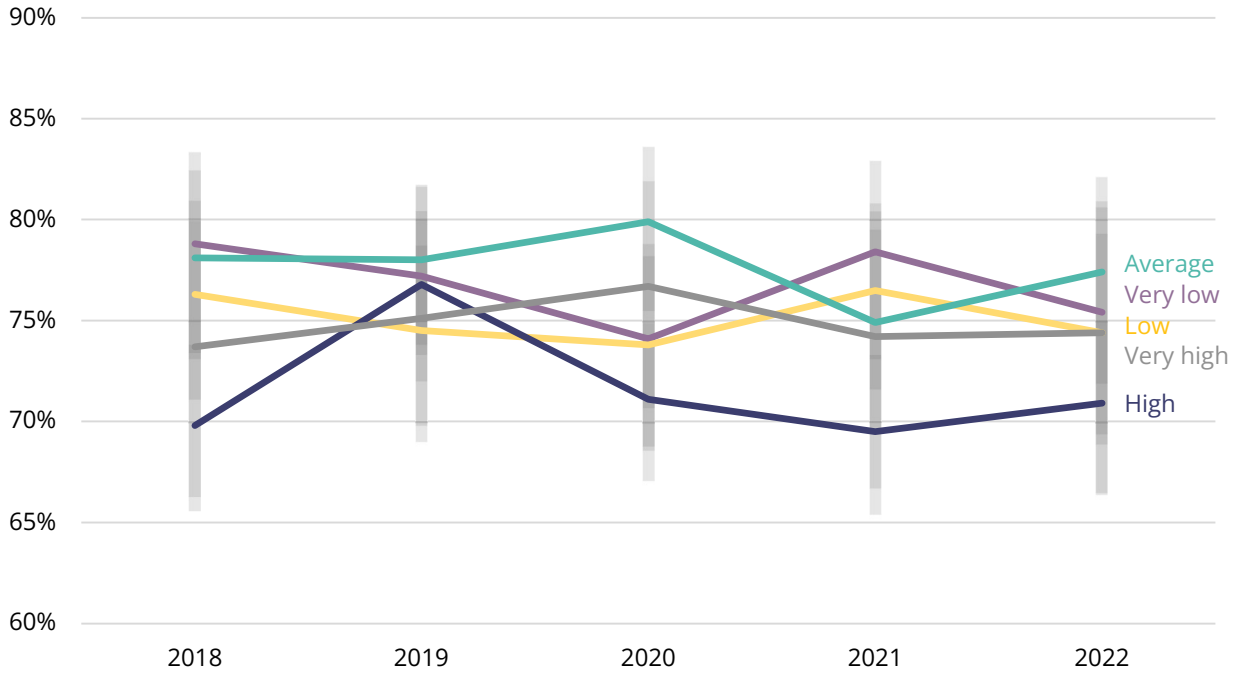
Pneumococcal vaccination

Pneumococcal vaccination coverage has remained steady within each age group between 2018 through 2022.



There is more fluctuation when looking at coverage of adults aged 65+ by socioeconomic group over time.

High socioeconomically disadvantaged communities typically had lower rates than others except for a temporary increase in 2019. Coverage estimates of each group were typically within about 5 percentage points of each other year to year, except in the high group, though this difference is not statistically significant.

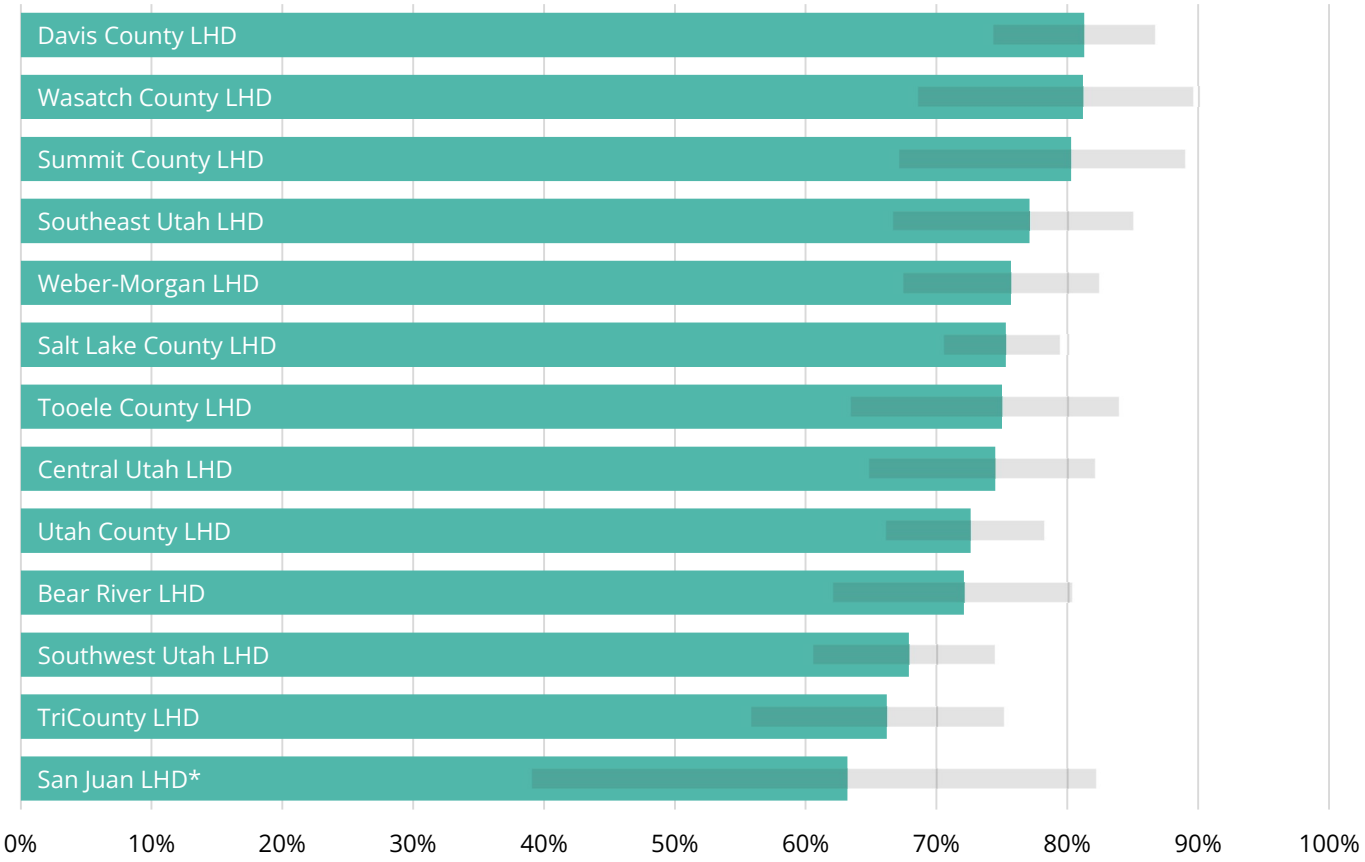


Data source: BRFSS (1)

Pneumococcal vaccination

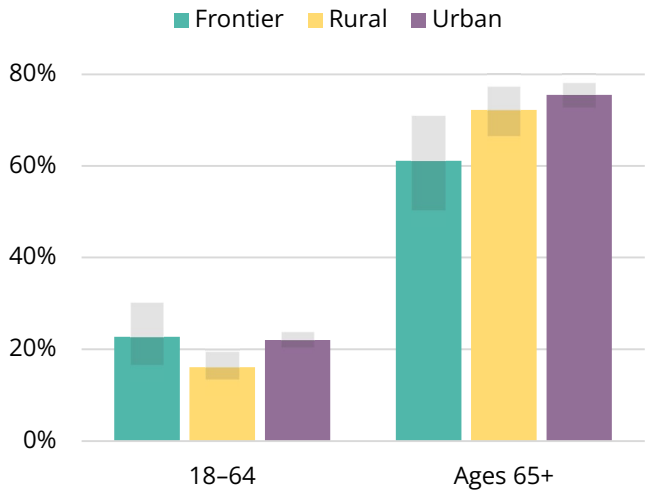
Pneumococcal vaccination coverage in people aged 65+ ranges from 63.2% to 81.3% throughout the local health districts.

Davis County is the only LHD with a statistically significantly higher rate than the overall state average.



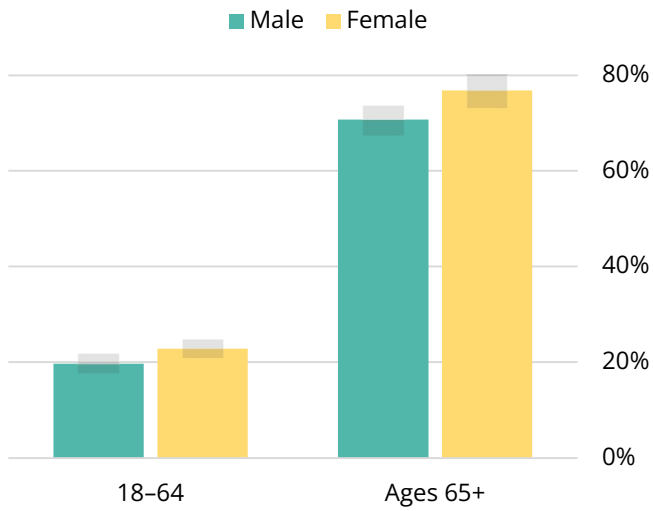
*Use caution in interpreting; estimate deemed unreliable by Utah DHHS standards.

Frontier areas were 14.4 percentage points less vaccinated than those in urban areas for ages 65+ but reported equal coverage for ages 18–64.



Females were more likely to report being vaccinated than males in both age groups.

The gap between sexes was greater in the age 65+ category at a 6.1 percentage point difference.

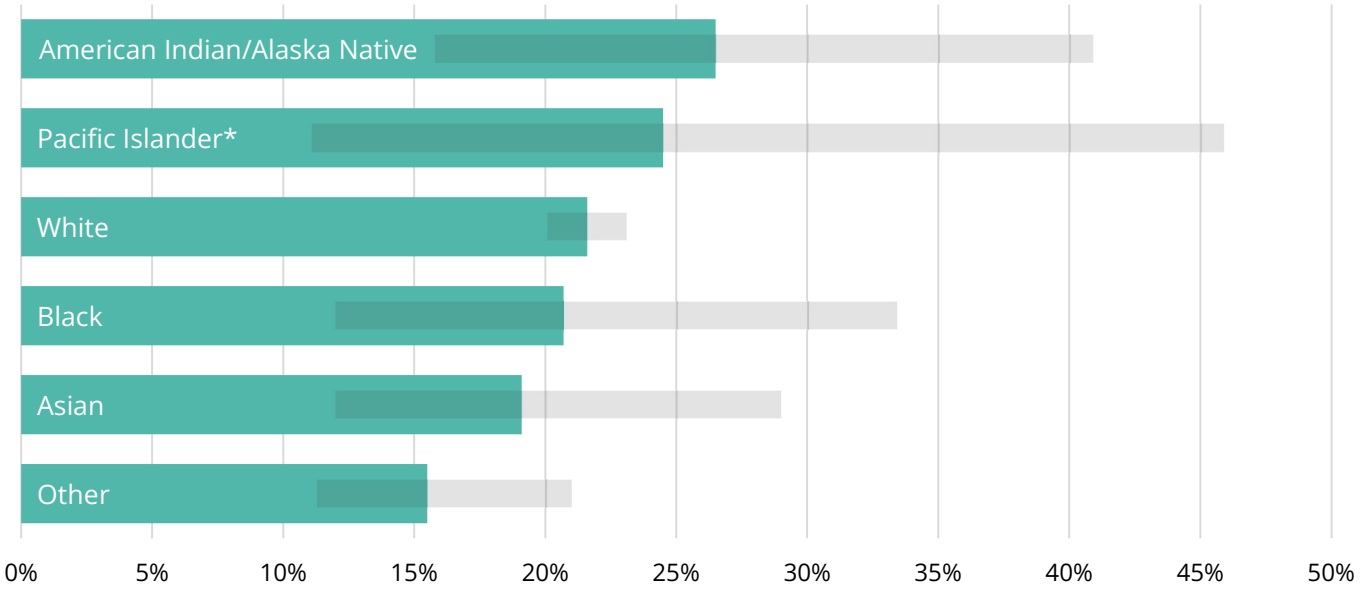


Data source: BRFSS (1)

Pneumococcal vaccination

American Indian/Alaska Native Utahns aged 18-64, typically a higher socioeconomically disadvantaged demographic, had the highest vaccination rate.

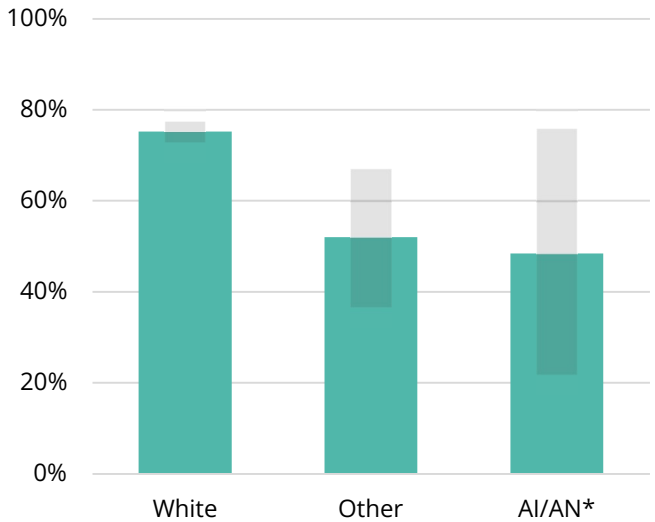
Although, most race categories had relatively high confidence interval ranges due to low sample size, except white.



*Use caution in interpreting; estimate deemed unreliable by Utah DHHS standards.

Data on pneumococcal vaccine coverage in adults aged 65+ is limited.

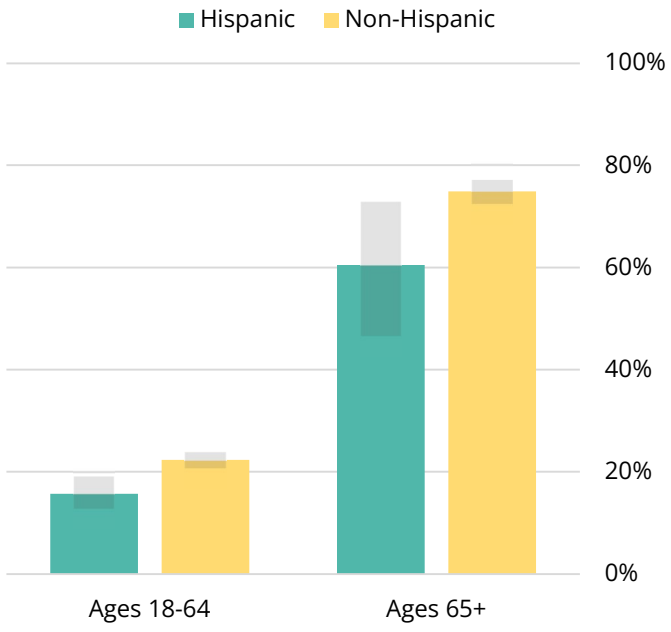
White Utahns aged 65+ reported 23.2 percentage points higher vaccination coverage than 'other' Utahns. AI/AN Utahns saw a similar rate to 'other' Utahns but was unreliable due to low sample size.



*Use caution in interpreting; estimate deemed unreliable by Utah DHHS standards.

Non-Hispanic Utahns were more vaccinated than Hispanic Utahns across both age groups.

The gap between those aged 65+ is substantial at 14.4 percentage points.

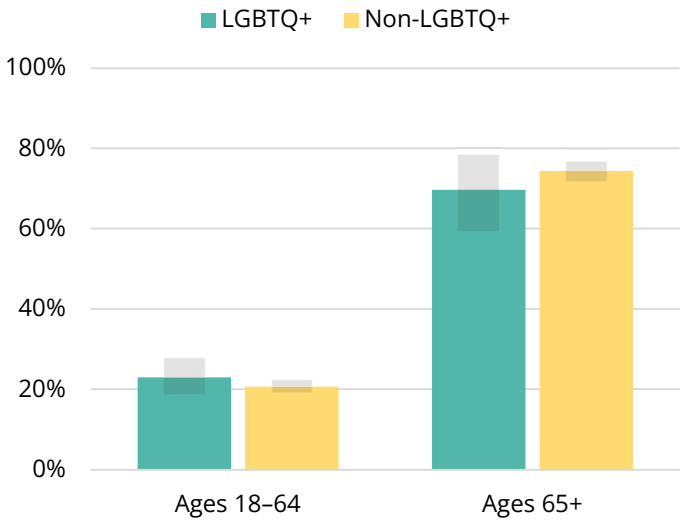


Data source: BRFSS (1)

Pneumococcal vaccination

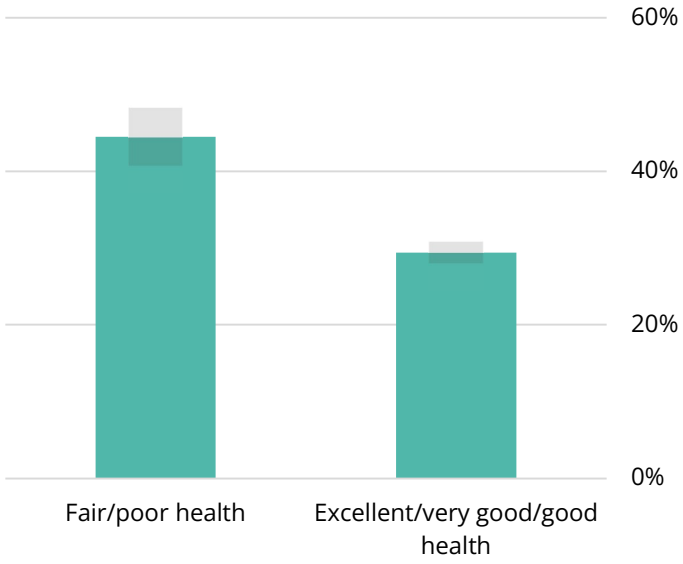
Vaccine-seeking behaviors and attitudes may vary by sexual orientation/gender identity and age group.

There are slight differences in vaccine uptake between LGBTQ+ and non-LGBTQ+ Utahns, though the differences are not statistically significant. A larger sample size could generate more reliable estimates.



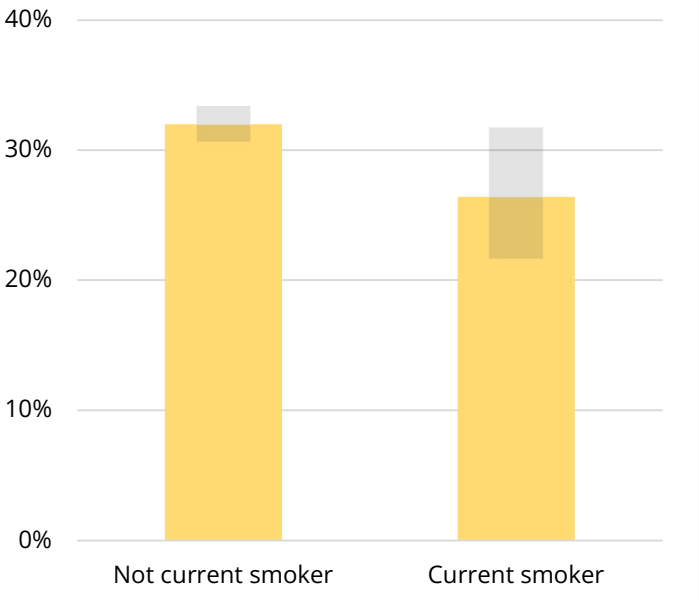
People at higher risk for invasive pneumococcal disease are more protected.

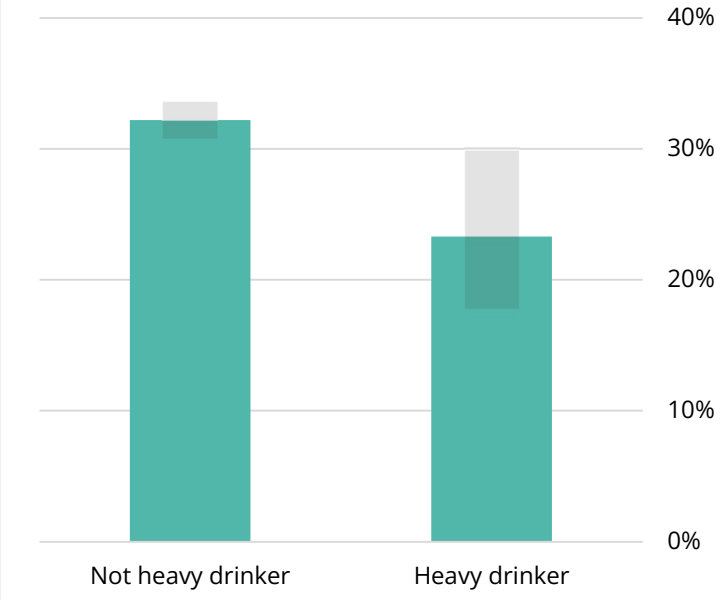
Those who report their general health to be fair/poor were much more likely to report having received a pneumococcal vaccine. These individuals may be at higher risk of contracting pneumococcal disease.



People who engage in behaviors that increase risk of invasive pneumococcal disease and other pneumococcal complications are less protected by vaccination.

Cigarette use and heavy drinking (>7 drinks/week for women, >14 drinks/week for men) are preventable behaviors that increase risk for invasive pneumonia and other pneumococcal infections. These data show lower vaccine uptake in the higher risk groups within each of these behavior categories.





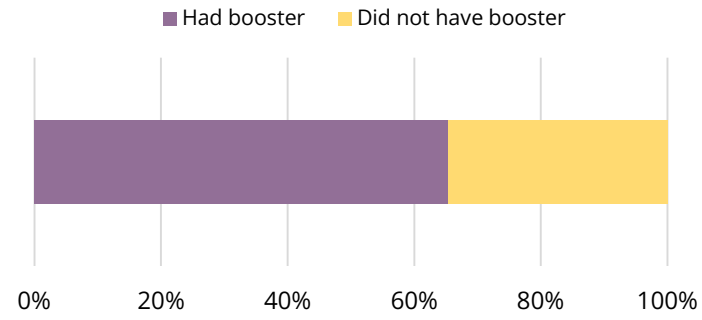
Data source: BRFSS (1)

Tdap (tetanus, diphtheria, and pertussis) vaccination

There are 2 vaccines for adults that are commonly referred to as the "tetanus shot": Td (immunizes against tetanus and diphtheria) and Tdap (immunizes against tetanus, diphtheria, and pertussis). The routine schedule is administration of a 3-dose series during childhood, with an additional booster every 10 years after. The following 2022 BRFSS respondent data reflect Utahns aged 50 and older who report receiving either the Td or Tdap vaccine within the last 10 years.

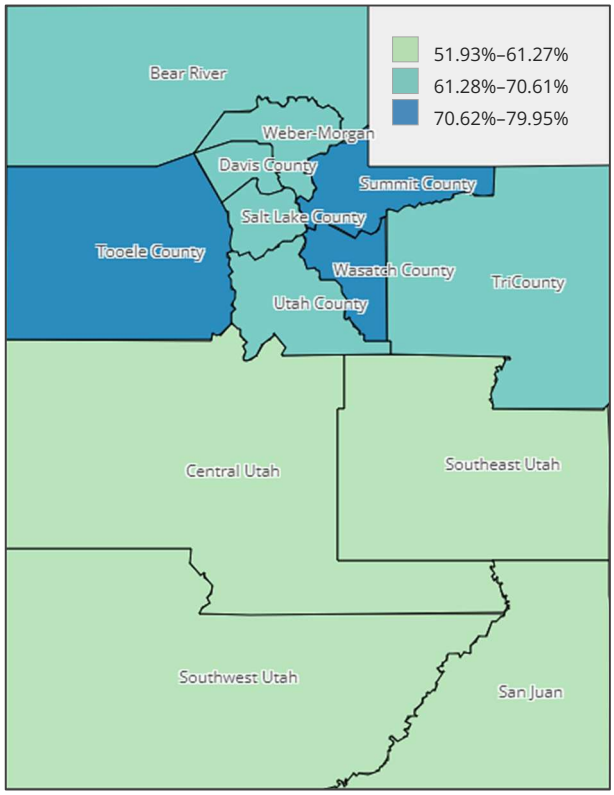
Two-thirds of Utahns aged 50 and above are up-to-date on their tetanus vaccine.

One third have not had a booster within the last 10 years.



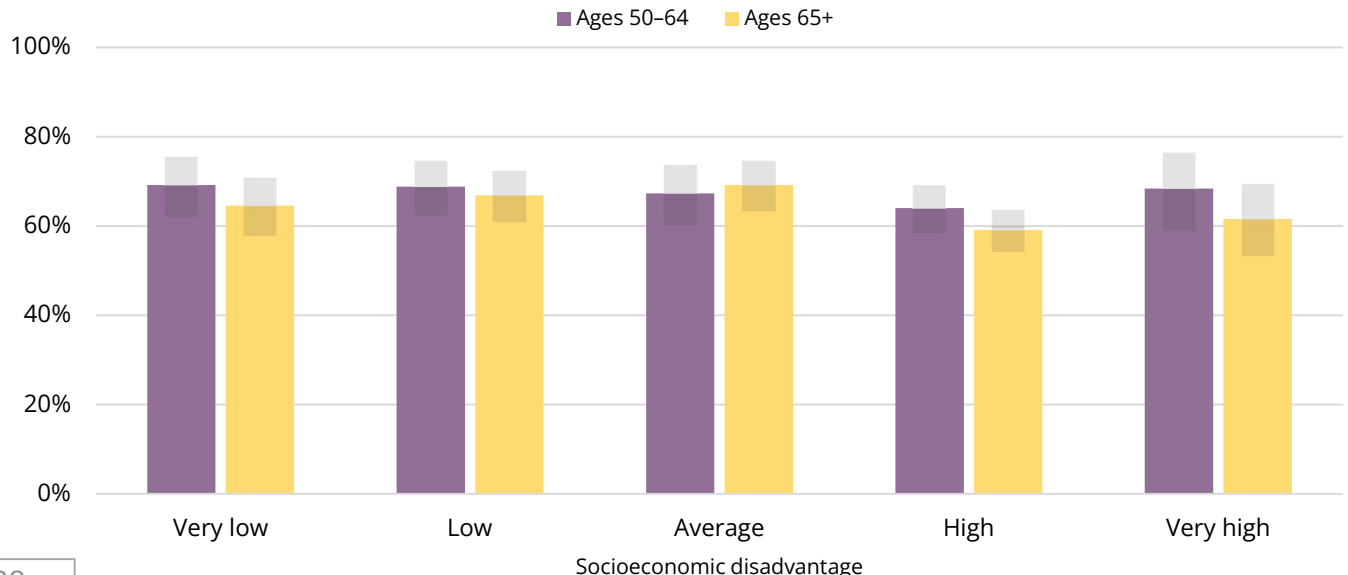
There is lower than average tetanus vaccination coverage throughout the southern half of Utah.

2022 tetanus vaccine coverage by LHD among Utah adults aged 50+.



Very high and high socioeconomically disadvantaged areas have slightly lower tetanus immunization coverage among people aged 65+, though this difference is not statistically significant.

There is a <5 percentage point gap between age groups within each socioeconomic group except very high, with 6.8 percentage points less coverage of ages 65+ than those aged 50–64 despite being higher risk for severe disease.

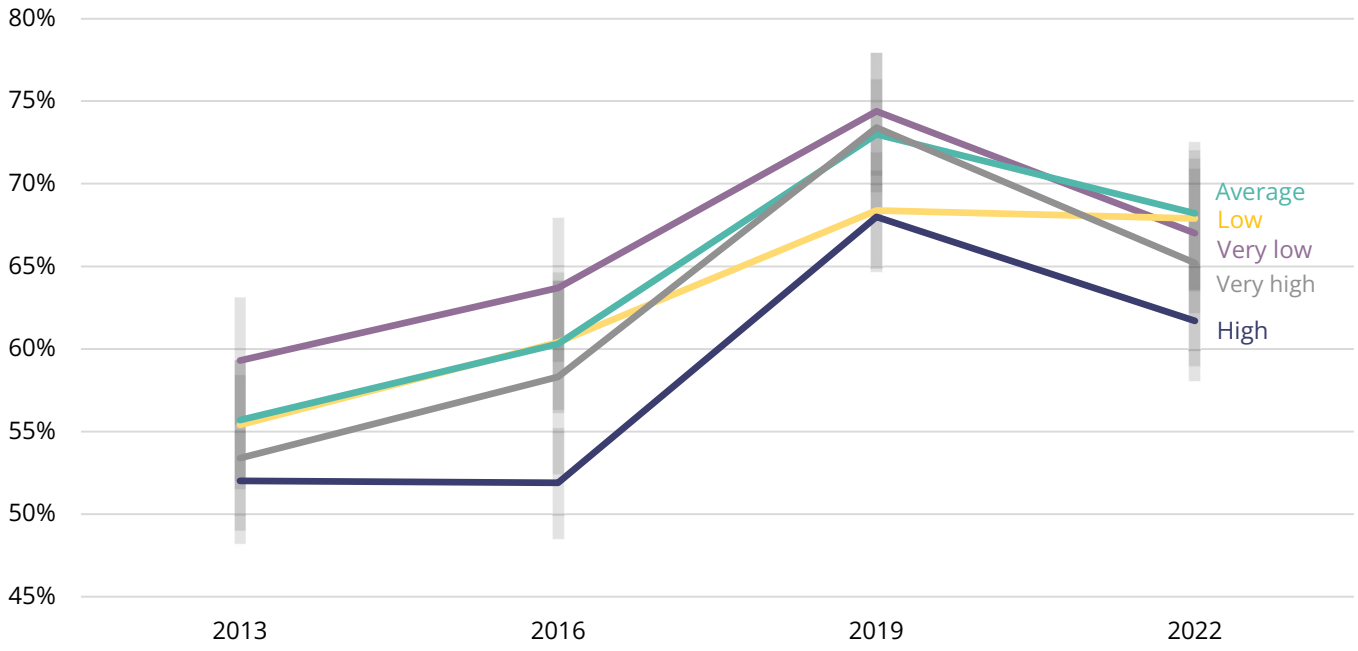


Data source: BRFSS (1)

Tdap (tetanus, diphtheria, pertussis) vaccination

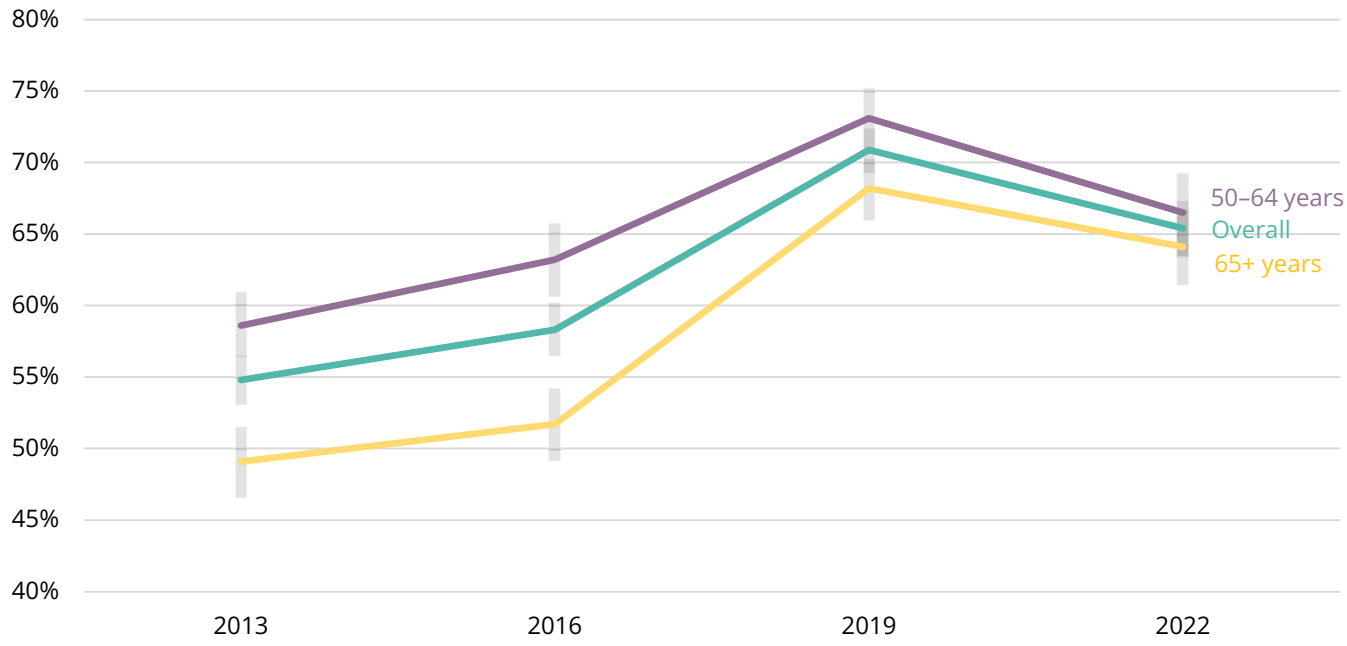
Very low, low, and average socioeconomically disadvantaged groups tend to be the most vaccinated groups.

The very high SE disadvantage group was the second most vaccinated group in 2019 but this was not the case in recent years, only surpassing the high SE disadvantage group, which is consistently the lowest coverage group.



People between the ages of 50 and 64 reported being more vaccinated than the higher risk group of aged 65+.

Tetanus immunization coverage has increased overall from 2013 to present, with the largest rise being from 2016 to 2019, but dropping again slightly in 2022.

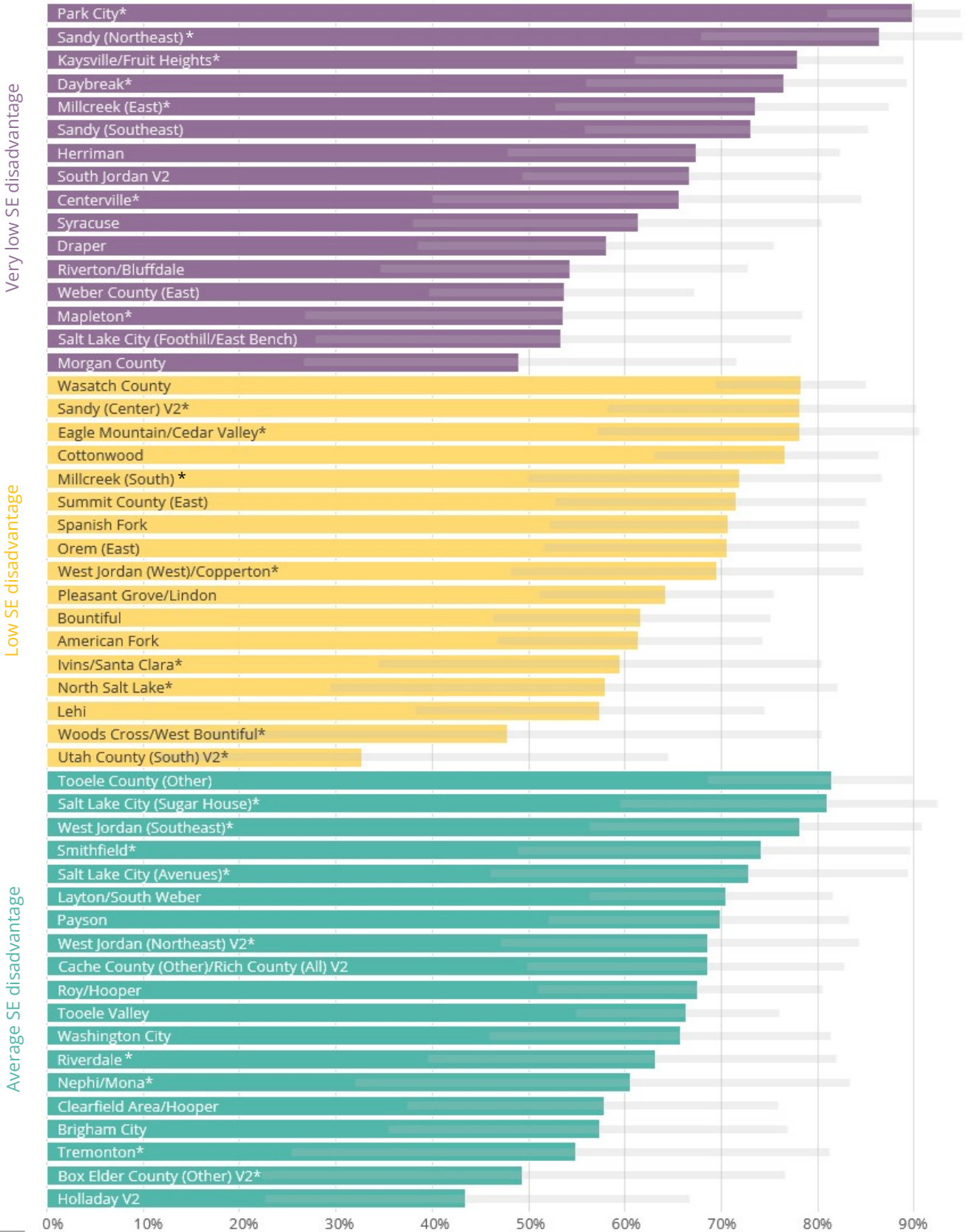


Data source: BRFSS (1)

Tdap (tetanus, diphtheria, pertussis) vaccination

There is wide variation in vaccine uptake across small areas and within communities of similar socioeconomic status.

Each SE group has tetanus vaccine uptake rates that are high and low relative to the state average. However, the overall trend of highly socioeconomically disadvantaged areas having lower vaccination uptake remains.



Data source: BRFSS (1)

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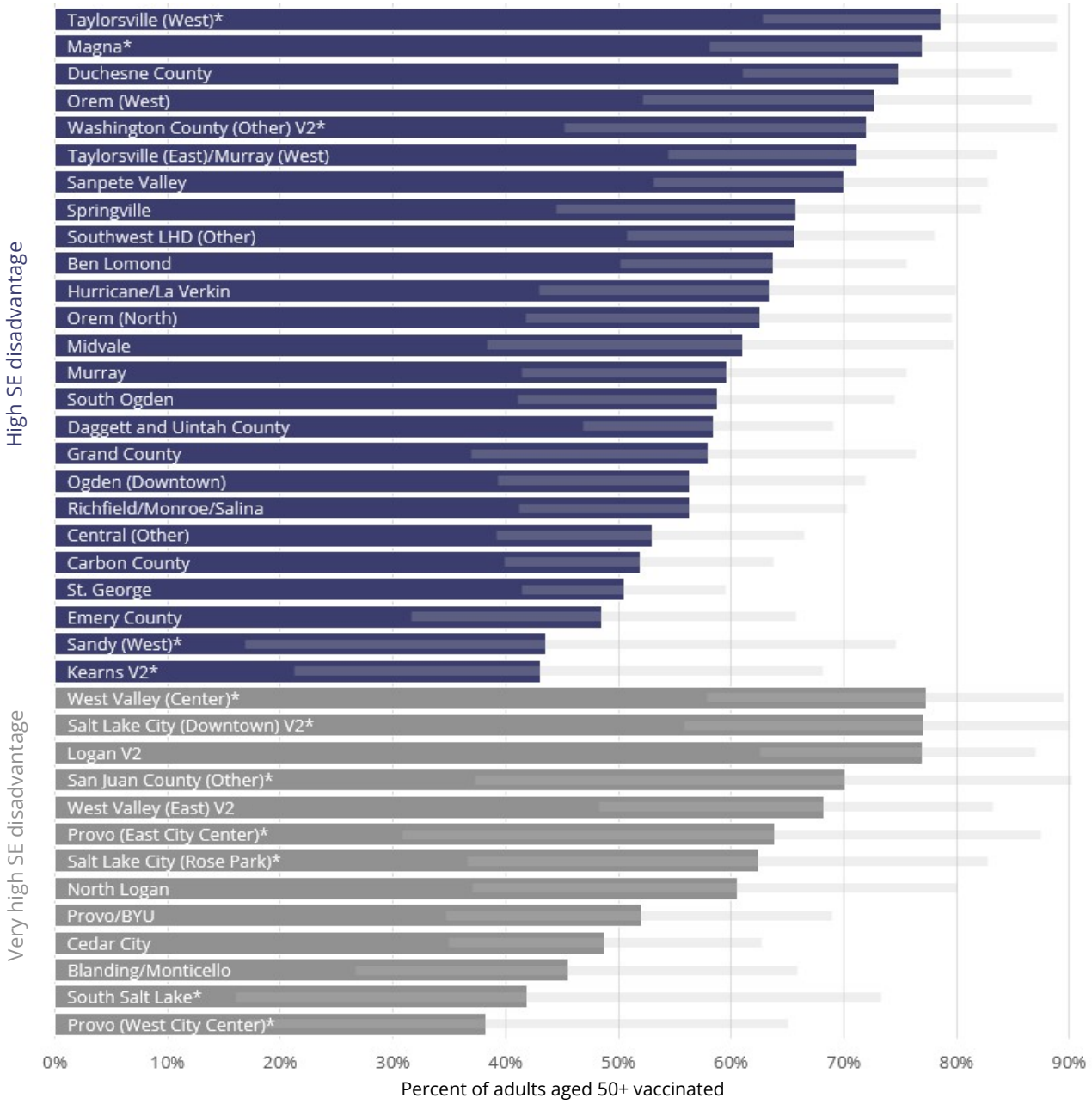
Tdap (tetanus, diphtheria, pertussis) vaccination



*Use caution in interpreting; estimate deemed unreliable by Utah DHHS standards.
Data from 9 small areas have been suppressed.

Data source: BRFSS (1)

Tdap (tetanus, diphtheria, pertussis) vaccination

The 10 small areas with the highest tetanus vaccination rates are mostly average to very low socioeconomically disadvantaged communities within the northern half of Utah, while the 10 small areas with the lowest rates are mostly high to very high socioeconomically disadvantaged communities throughout all of Utah.

A larger sample size would make these estimates more reliable and could potentially change the ranking of the small areas.

Small areas with the 10 highest tetanus vaccination rates, ages 50+, 2022

Small area	SE disadvantage	Vaccinated	CI	LHD
Park City*	Very Low	89.8%	81–94.8%	Summit County
Sandy (Northeast)*	Very Low	86.5%	67.9–95.1%	Salt Lake County
Tooele County (Other)	Average	81.4%	68.6–89.8%	Tooele County
Salt Lake City (Sugar House)*	Average	81.0%	59.5–92.5%	Salt Lake County
Taylorsville (West)*	High	78.6%	62.8–88.9%	Salt Lake County
Wasatch County	Low	78.2%	69.5–85%	Wasatch County
Sandy (Center) V2*	Low	78.2%	58.2–90.3%	Salt Lake County
Eagle Mountain/Cedar Valley*	Low	78.2%	57.1–90.6%	Utah County
West Jordan (Southeast)*	Average	78.1%	56.4–90.8%	Salt Lake County
Kaysville/Fruit Heights*	Very Low	77.9%	61–88.9%	Davis County

*Use caution in interpreting; estimate deemed unreliable by Utah DHHS standards.

Small areas with the 10 lowest tetanus vaccination rates, ages 50+, 2022

Small area	SE disadvantage	Vaccinated	CI	LHD
Utah County (South) V2*	Low	32.6%	11.5–64.5%	Utah County
Provo (West City Center)*	Very High	38.3%	17.1–65.1%	Utah County
South Salt Lake*	Very High	42.0%	16.0–73.3%	Salt Lake County
Kearns V2	High	43.2%	21.3–68.1%	Salt Lake County
Holladay V2	Average	43.4%	22.7–66.7%	Salt Lake County
Sandy (West)*	High	43.5%	16.8–74.6%	Salt Lake County
Blanding/Monticello	Very High	45.6%	26.7–65.9%	San Juan County
Woods Cross/West Bountiful*	Low	47.8%	16.9–80.4%	Davis County
Emery County	High	48.6%	31.7–65.8%	Southeast
Cedar City	Very High	48.8%	35.0–62.7%	Southwest

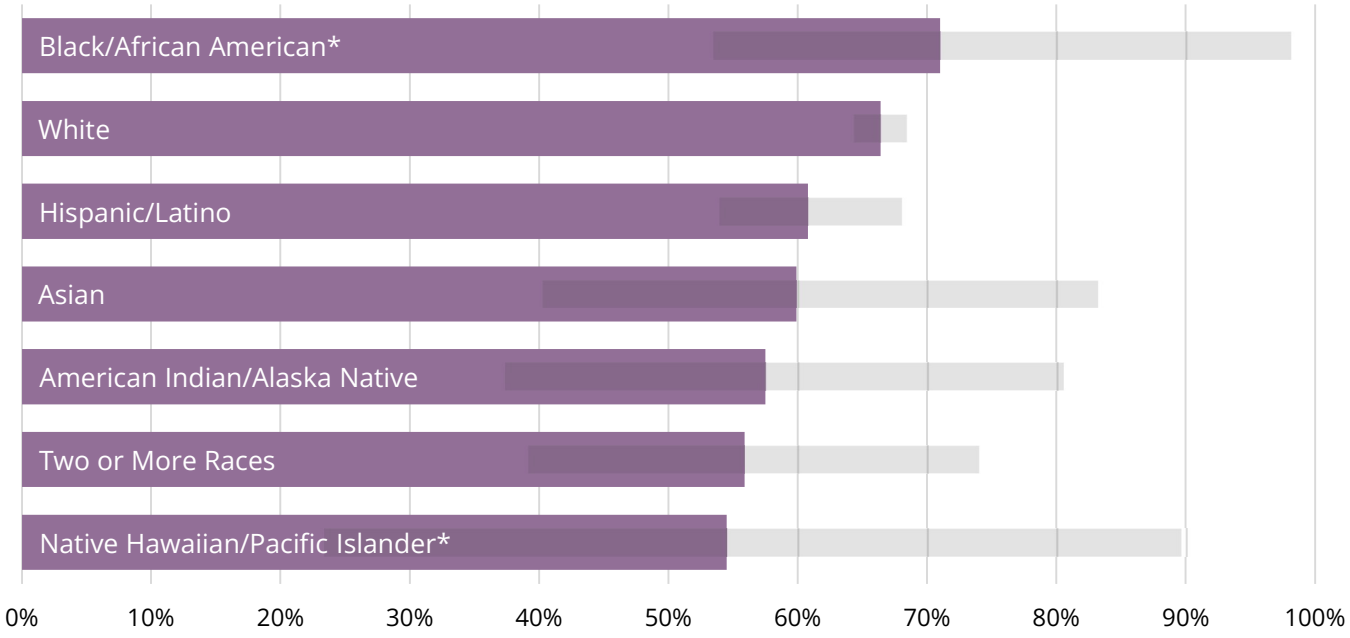
*Use caution in interpreting; estimate deemed unreliable by Utah DHHS standards.

Data source: BRFSS (1)

Tdap (tetanus, diphtheria, pertussis) vaccination

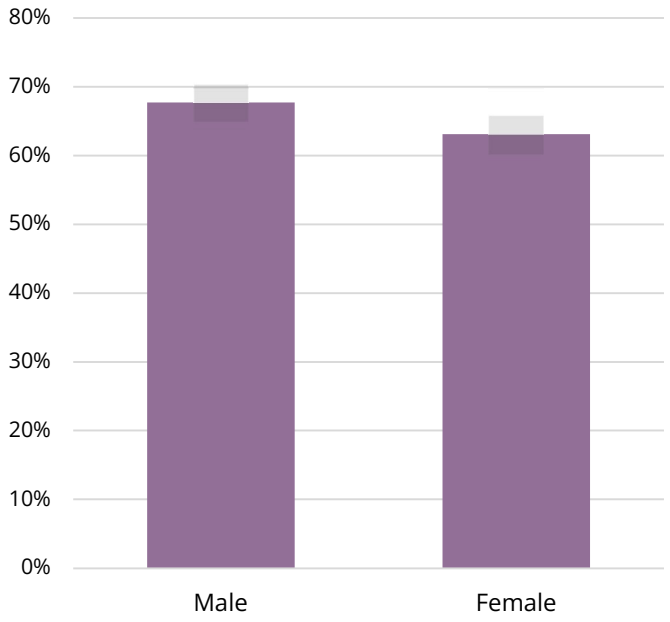
There is no statistically significant difference in 2022 tetanus immunization coverage between different race/ethnicity categories.

A larger sample size would improve the reliability of estimates and allow comparison of immunization coverage within differing race/ethnicity categories.

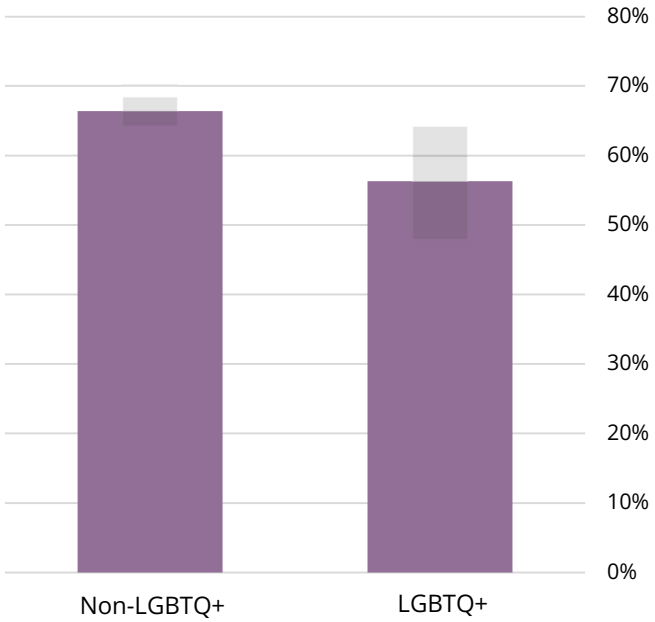


*Use caution in interpreting; estimate deemed unreliable by Utah DHHS standards.

Males had about 5 percentage points greater up-to-date tetanus vaccine coverage than females.



Non-LGBTQ+ Utahns had 10 percentage points greater tetanus coverage than LGBTQ+.

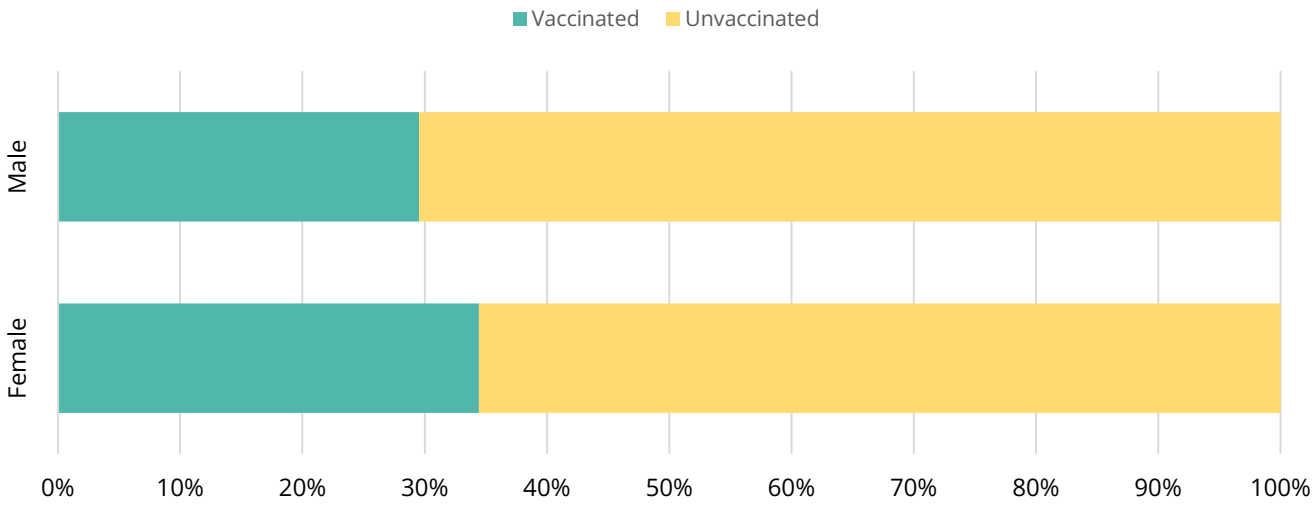


Data source: BRFSS (1)

Recombinant zoster (shingles) vaccination

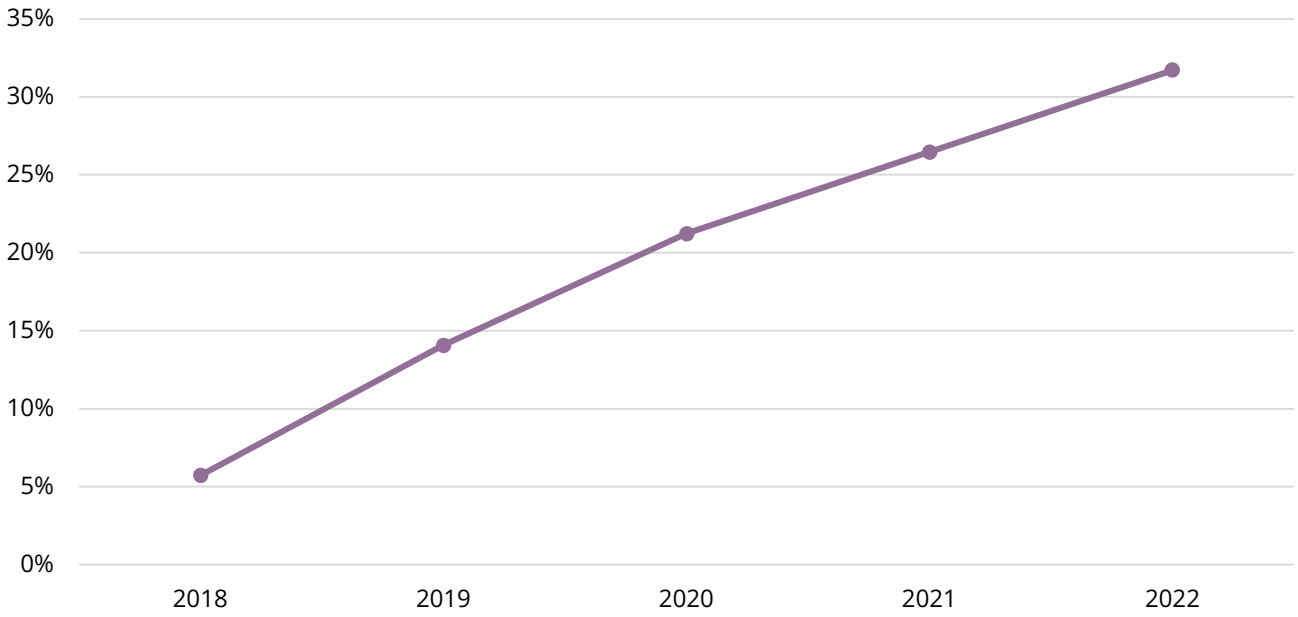
CDC recommends that adults 50 years and older get 2 doses of the shingles vaccine to prevent shingles and complications from the disease. Shingles vaccination is the only way to protect against shingles and postherpetic neuralgia (PHN), the most common complication from shingles. The following USIIS administration data reflect Utahns aged 50 and older who have record of receiving a shingles vaccine through December of 2022.

Females were 5 percentage points more vaccinated than males, but more than two-thirds of all senior Utahns aged 50+ are unvaccinated.



Shingles vaccine coverage increased 26 percentage points in the past 5 years, up from 5.7% to 31.7%.

While there has been a shingles vaccine available since 2006, a new vaccine was introduced in late 2017, and uptake in the market may have occurred differentially since then.

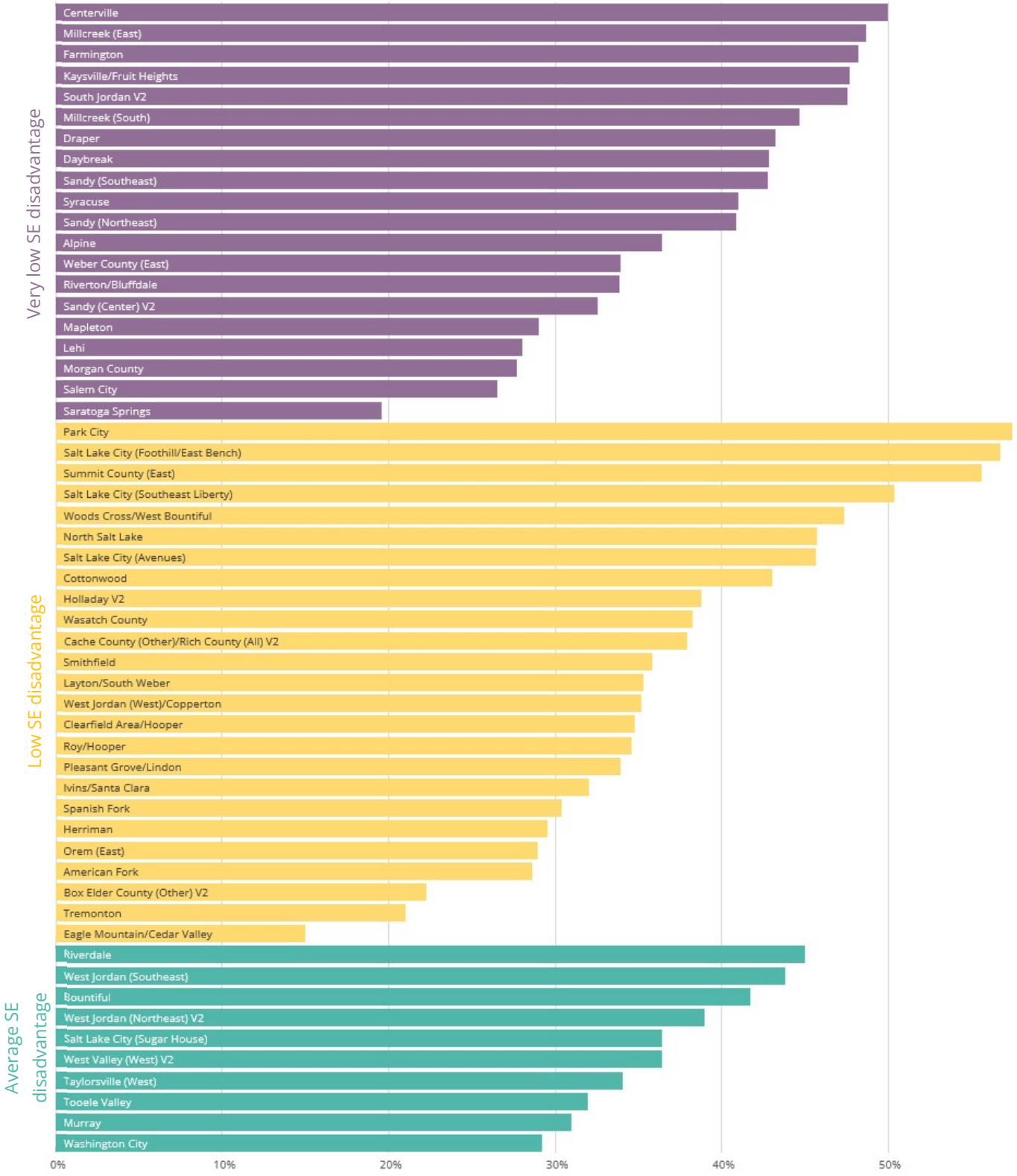


Data source: USIIS (2)

Recombinant zoster (shingles) vaccination

There is wide variation in vaccine uptake across small areas and even within each SE group.

Each community of similar socioeconomic status has bivalent booster uptake rates that are high and low relative to the state average. San Juan County (Other), a very highly socioeconomically disadvantaged community, is a notable outlier with almost 50% coverage. However, the overall trend of greater socioeconomic disadvantage and lower vaccination uptake remains.



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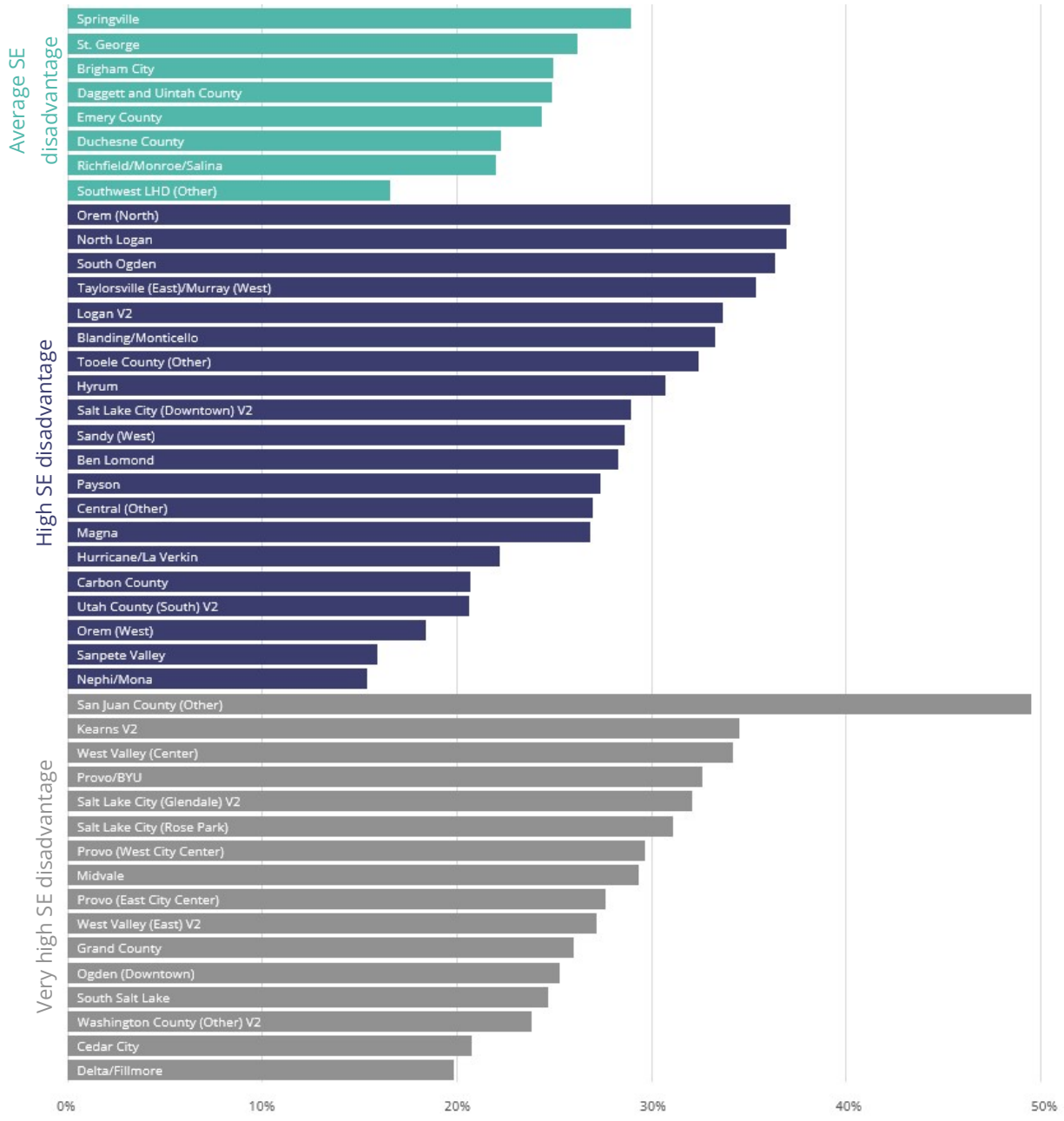
Data source: USIIS (2)

Recombinant zoster (shingles) vaccination



Data source: USIIS (2)

Recombinant zoster (shingles) vaccination

The 10 small areas with the highest shingles vaccination rates are mostly low to very low socioeconomically disadvantaged communities within Salt Lake County, while the 10 small areas with the lowest rates are mostly high to very high socioeconomically disadvantaged communities throughout more rural areas of Utah.

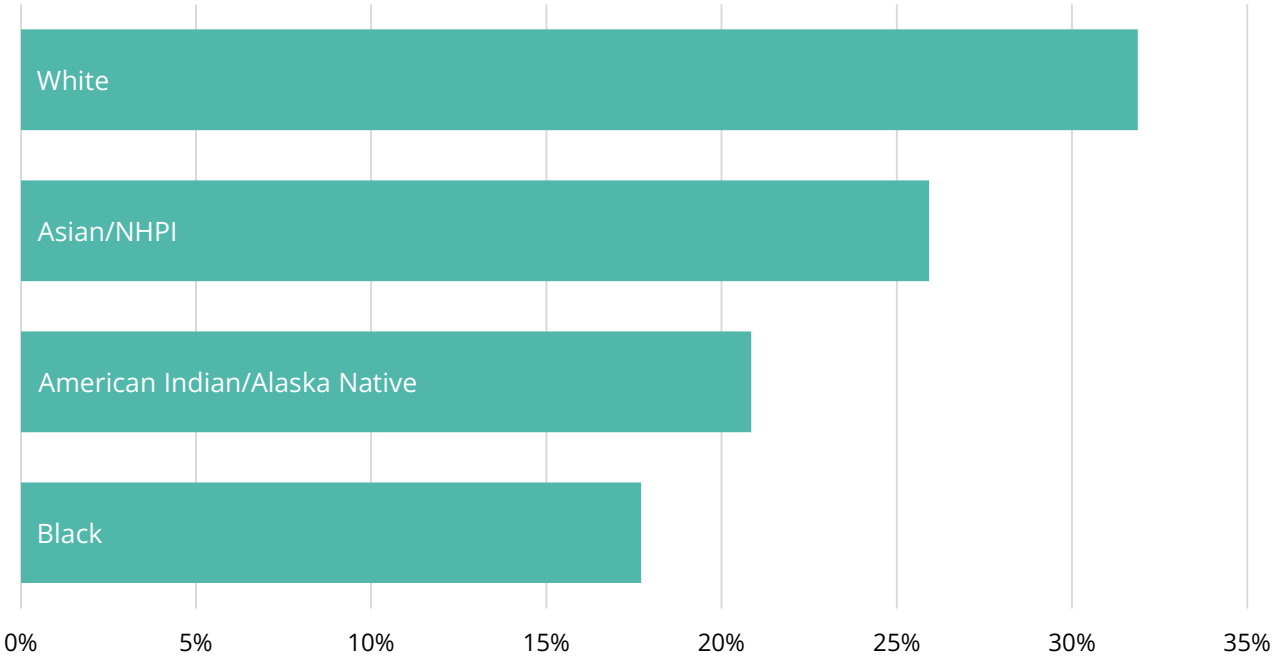
Small areas with the 10 highest shingles vaccination rates, age 50+, 2022			
Small area	SE disadvantage	Vaccinated	LHD
Park City	Low	57.5%	Summit County
Salt Lake City (Foothill/East Bench)	Low	56.7%	Salt Lake County
Summit County (East)	Low	55.6%	Summit County
Salt Lake City (Southeast Liberty)	Low	50.4%	Salt Lake County
Centerville	Very low	49.9%	Davis County
San Juan (Other)	Very high	49.5%	San Juan
Millcreek (East)	Very low	48.7%	Salt Lake County
Farmington	Very low	48.2%	Davis County
Kaysville/Fruit Heights	Very low	47.7%	Davis County
South Jordan V2	Very low	47.5%	Salt Lake County

Small areas with the 10 lowest adult shingles vaccination rates, age 50+, 2022			
Small area	SE disadvantage	Vaccinated	LHD
Eagle Mountain/Cedar Valley	Low	15.0%	Utah County
Nephi/Mona	High	15.4%	Central
Sanpete Valley	High	15.9%	Central
Southwest LHD (Other)	Average	16.6%	Southwest
Orem (West)	High	18.4%	Utah County
Saratoga Springs	Very low	19.5%	Utah County
Delta/Fillmore	Very high	19.8%	Central
Utah County (South) V2	High	20.6%	Utah County
Carbon County	High	20.7%	Southeast
Cedar City	Very high	20.8%	Southwest

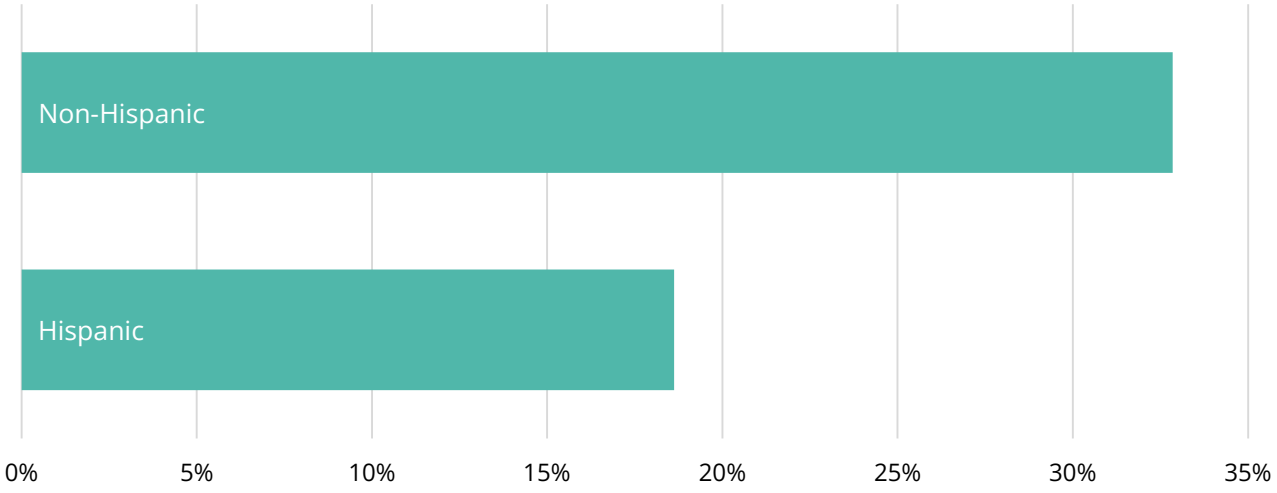
Recombinant zoster (shingles) vaccination

Utahns who are White have greater shingles protection than other races.

There is a 14.2 percentage point gap in coverage between Utahns who are White and Utahns who are Black.



Non-Hispanic Utahns have almost double the rate of vaccinations as Hispanic Utahns at 32.9% versus 18.6%, respectively.

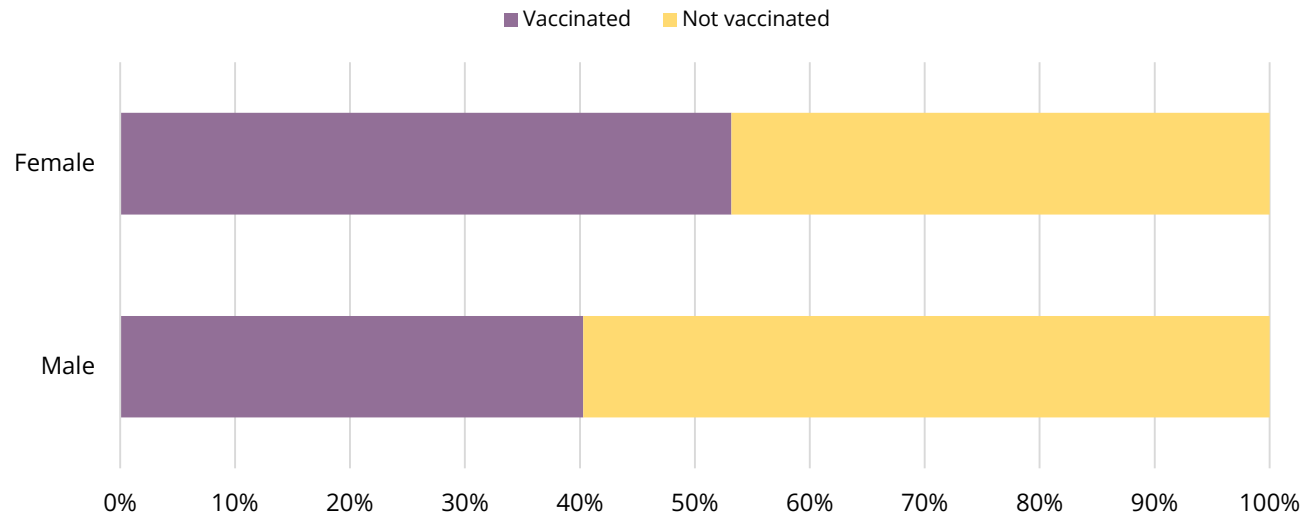


Data source: USIIS (2)

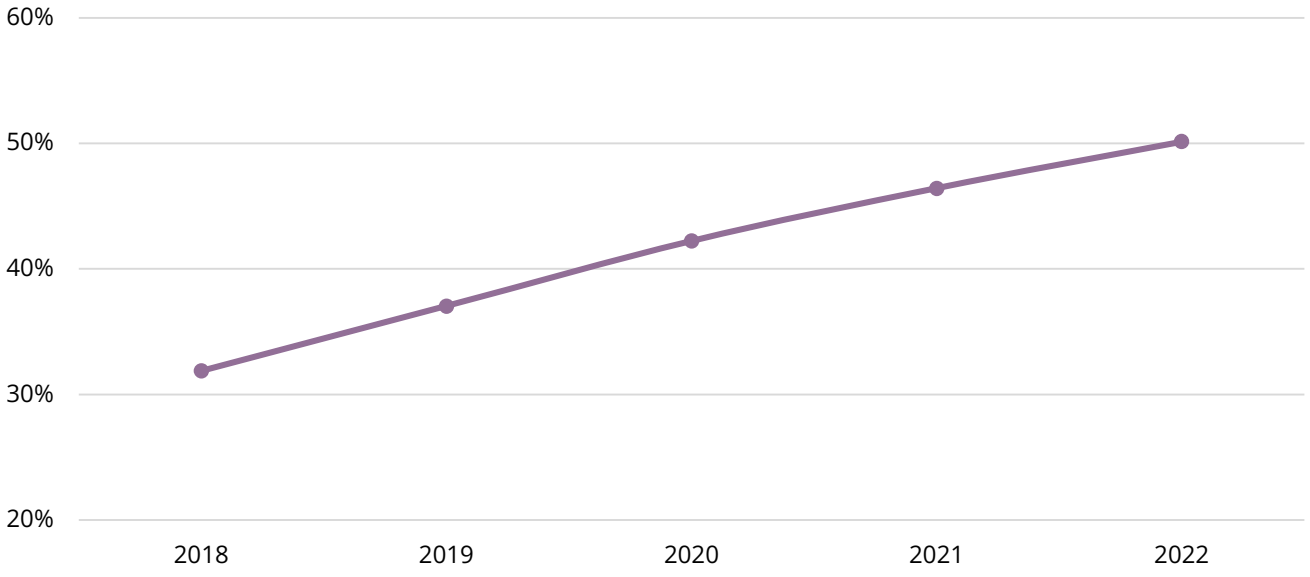
Human papillomavirus (HPV) vaccination

HPV vaccination is a 2 or 3 dose series recommended at ages 11–12 years but can be given as early as 9 years and as late as 26 years. It is currently recommended that both males and females be vaccinated against HPV. The following USIIS administration data reflect Utahns ages 18 through 26 who have at least 1 dose of HPV vaccine recorded in USIIS through December of 2022. Race and ethnicity population estimates for rate denominators were obtained from the CDC WONDER online database are based on the Blended Base produced by the U.S. Census Bureau; all other population estimates are from USIIS.

Females remain 12.9 percentage points more vaccinated against HPV than males even though recommendations were expanded to include males in 2011.



HPV vaccination has increased by 57.4% among Utahns aged 18–26 over the past 5 years.

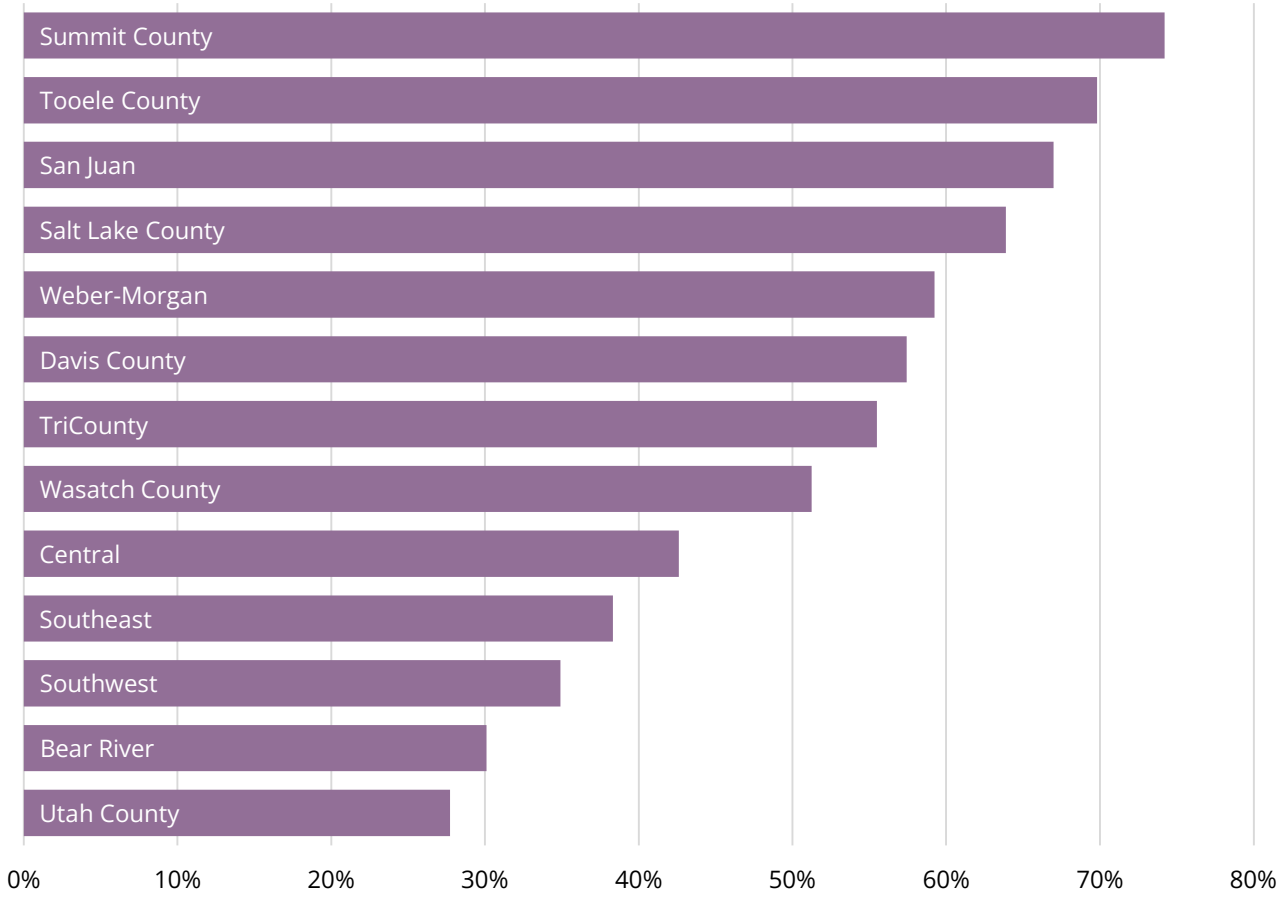


Data source: USIIS (2)

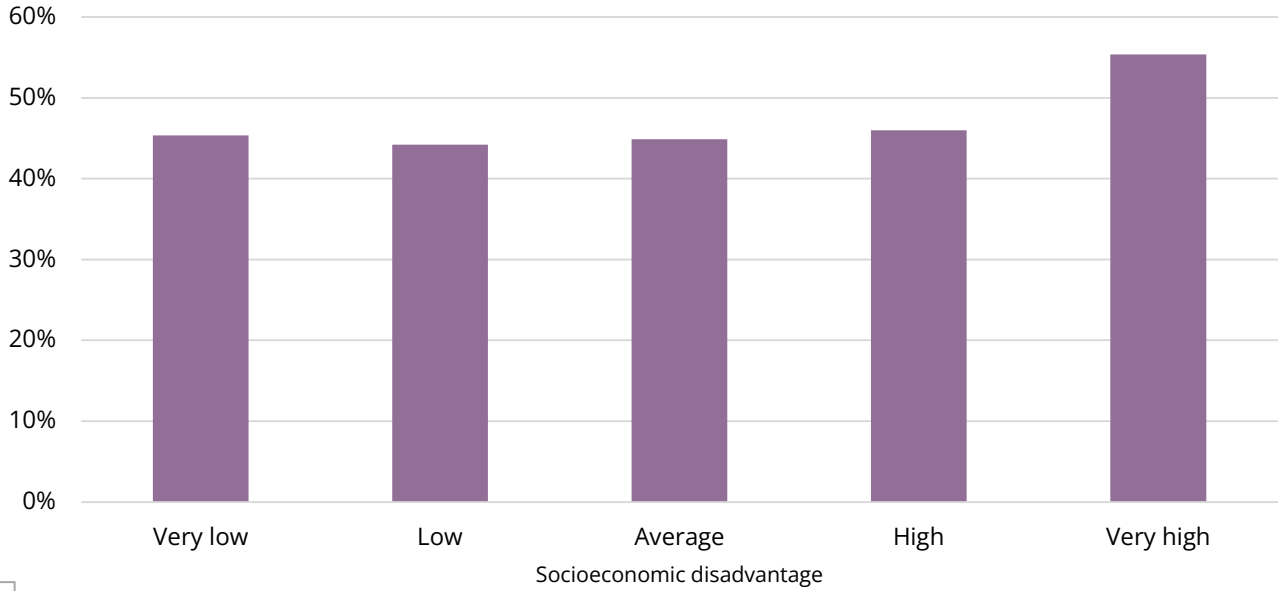
Human papillomavirus (HPV) vaccination

The HPV vaccination rate in Summit County LHD (74.2%) is more than twice the rate in the Utah County LHD of 27.7%.

More populated, urban areas tend to have higher HPV vaccine coverage than rural areas.



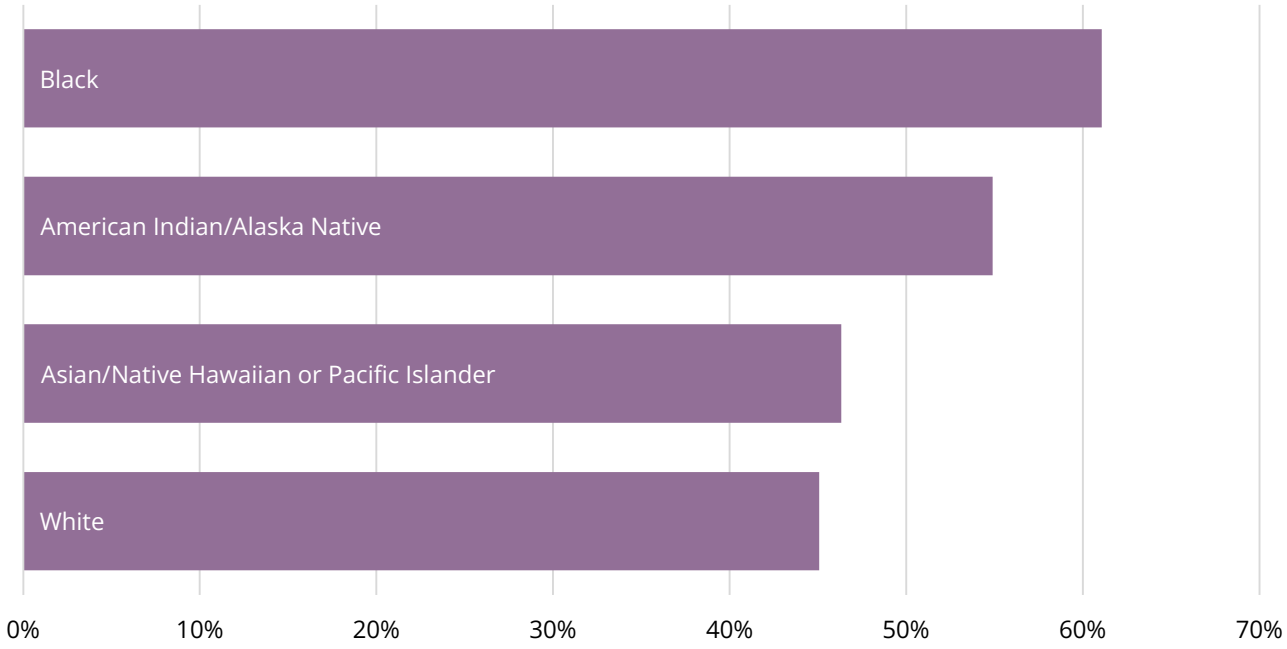
Utahns in very high socioeconomically disadvantaged communities have 22% higher uptake than all other socioeconomic status groups.



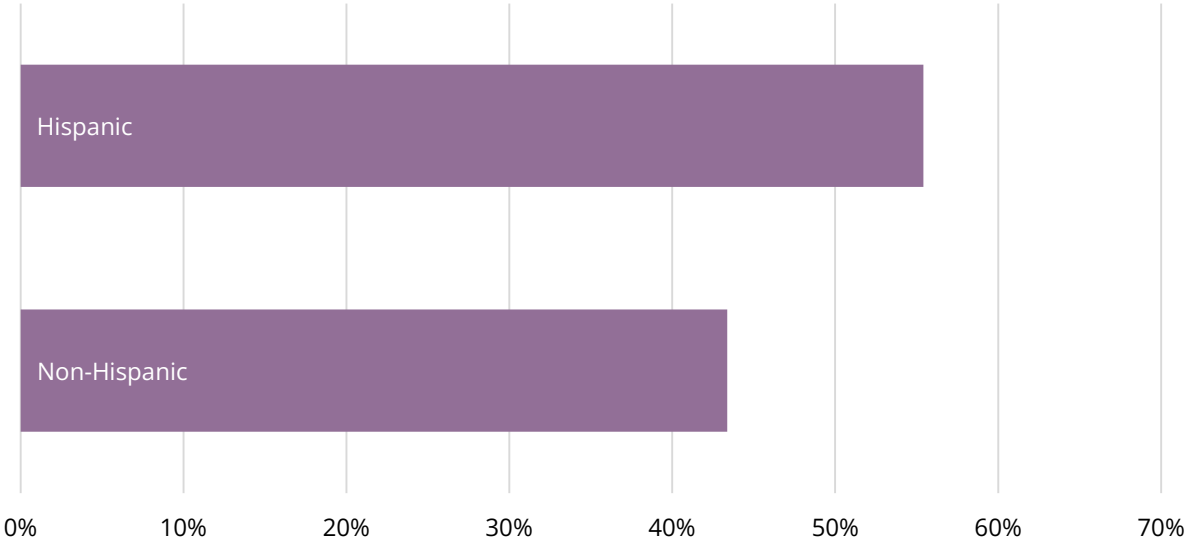
Data source: USIIS (2)

Utahns who are Black and American Indian/Alaska Natives have higher coverage than the overall state rate of 46.6%.

There is a 16 percentage point gap in coverage between White and Black Utahns.



Non-Hispanic Utahns are 12 percentage points less vaccinated against HPV than Hispanic Utahns.



Data source: USIIS (2)

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2. Utah Statewide Immunization Information System (USIIS). March 2024. Utah Department of Health and Human Services.
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