Viral hepatitis annual report

2024

Utah Department of
Health & Human
Services

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Report highlights

- Cases of hepatitis A and B remain low, and affect non-White Utahns more often.
- Hepatitis C is the most common infectious disease reported in Utah.
- Hepatitis C (acute and chronic) infection occurred in 30-39 year olds at more than double the rate of the general population.
- Incarceration and risks associated with incarceration are the most common risk factors for hepatitis C.
- Only 20% of people diagnosed with hepatitis C are treated within the year of diagnosis.
- Two-thirds of people diagnosed with hepatitis C initiate treatment within 5 years of diagnosis.

Introduction

Hepatitis is inflammation of the liver. Hepatitis A virus (HAV), hepatitis B virus (HBV), and hepatitis C virus (HCV) are some of the most common viruses that cause hepatitis. HAV causes an acute liver infection and is spread when someone ingests the virus through close personal contact with an infected person or through consumption of contaminated food or drink and is vaccine preventable. HBV is spread through blood, sexual fluid, or other body fluids and is vaccine-preventable. HCV is spread through blood only and while there is no vaccine to prevent it, there is a highly effective medication to cure the virus. Illness from HBV and HCV may last a few weeks (acute) or become a lifelong illness (chronic). Acute HBV and HCV infection can range in severity from a very mild illness with few or no symptoms to a serious condition which requires hospitalization, while chronic infection can cause serious health problems, including liver disease, liver failure, liver cancer, and even death. Symptoms including fever, fatigue, loss of appetite, nausea, vomiting, dark urine, gray-colored stool, joint pain, and yellow skin and eyes, are common with HAV but rare with HBV and HCV.

The Utah Department of Health and Human Services (DHHS) Viral Hepatitis Program manages and, with the support of local health departments, conducts surveillance for viral hepatitis cases, which are reportable conditions in Utah through Utah Administrative Code, Title R386-702 Communicable Disease Rule (CD rule). Labs reporting electronically are

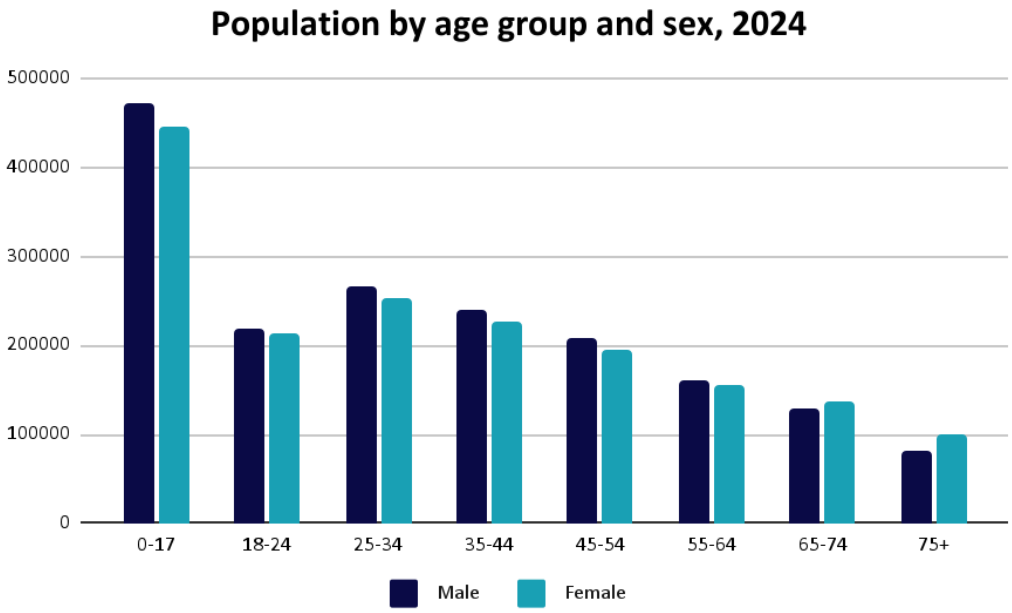
required to report both negative and positive viral hepatitis results. More than 90% of labs in Utah report electronically. Demographics, risk factors, and laboratory results are collected in Utah's surveillance system, EpiTrax. This report presents hepatitis A, B, and C surveillance data collected by DHHS in 2024. All counts in this report that are <11 have been suppressed per the data suppression guidelines. "SR" refers to a suppressed rate.

State demographics

Utah is primarily a desert state with most of the population and resources gathered along the Wasatch Mountains near the natural snowmelt watersheds. A large majority of the state's land is considered rural and 7 of the 13 local health districts' (LHD) populations make up less than 3% of the entire state's population. As of March 19, 2025, the state's total population in 2024 was estimated at 3,506,838 and divided evenly between male and female residents with a large youth population and healthy young adult population.

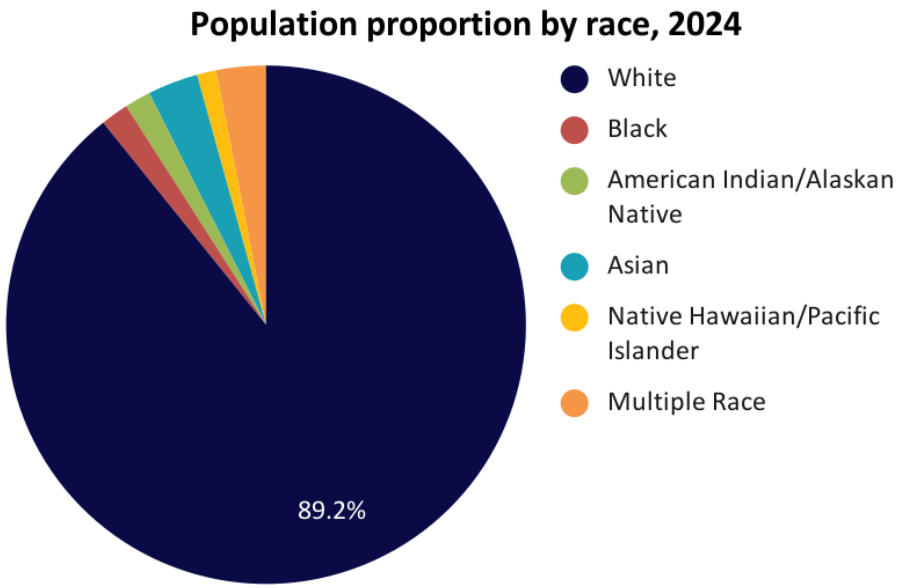
Utah's local health jurisdictions (LHDs), 2024

Note: LHD Map from "Local Health Districts" by The Utah Department of Health and Human Services, Division of Data, Systems, and Evaluation, 2022, Public Health Indicator Based Information System (IBIS), "Map of Utah's 13 local health districts" (https://ibis.utah.gov/ibisph-view/about/LocalHealth.html).



Race and ethnicity

Utahns who identify as White make up 89% of the population. The next largest racial group is persons who are Asian, at only 3%. Utah also has a growing number of residents who identify as Hispanic (of any race) at about 17% (IBIS US Census Bureau, 2024).



Hepatitis A virus (HAV)

Although anyone can get hepatitis A, certain groups of people are at higher risk for getting infected including international travelers, men who have sex with men (MSM), people who use injection or noninjection drugs, people with occupational risk for exposure such as those who work with HAV in a lab, and people experiencing homelessness. Hepatitis A is a reportable disease in Utah and surveillance data are used to detect outbreaks, monitor disease incidence, determine the epidemiologic characteristics of infected persons, identify sources of infection, and assess and reduce missed opportunities for vaccination. While the average number of annual hepatitis A infections reported to CDC has declined substantially, fluctuations have occurred due to some large outbreaks. In recent years, hepatitis A outbreaks have occurred from several different sources including foodborne and person-to-person transmission. No outbreaks occurred in Utah in 2024. When comparing rates across LHDs, cases occurred where major population centers exist. Rates, however, remain low due in large part to routine vaccination.

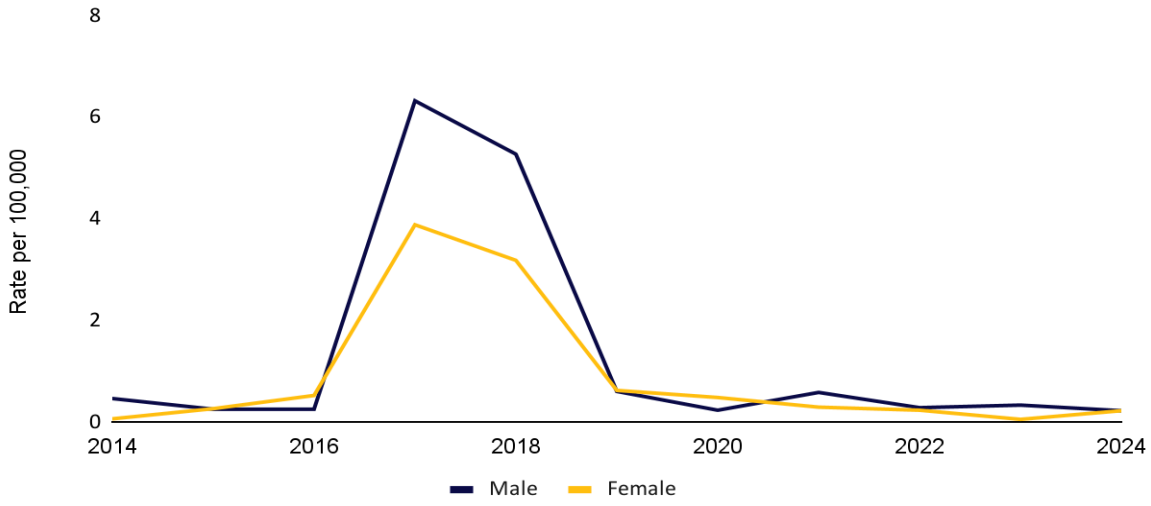
Acute HAV cases reported, 2024	Acute HAV cases per 100,000 population, 2024
<11	SR

Groups most affected by hepatitis A, Utah, 2024

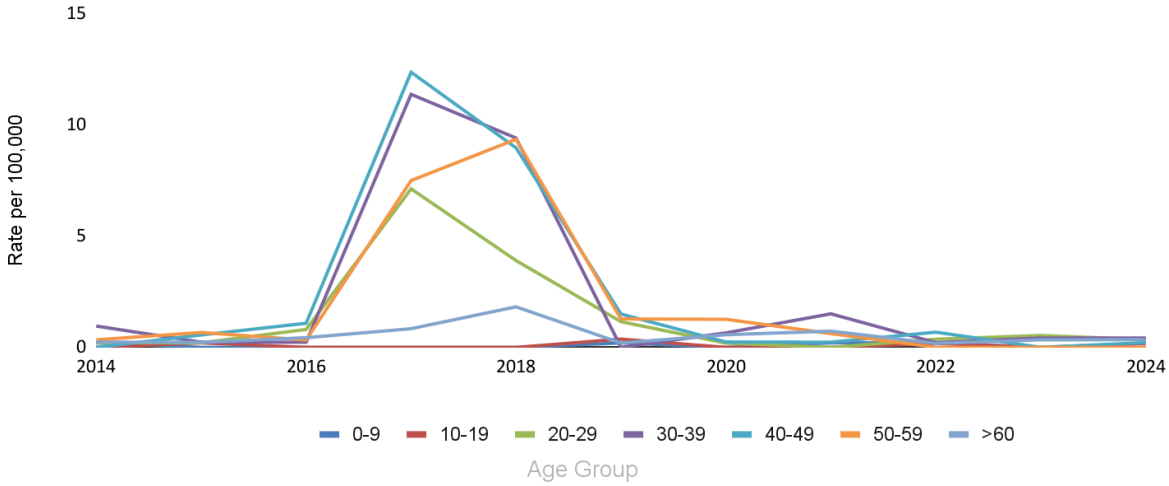
By age	By race/ethnicity
30–39 years: 0.4 cases per 100,000 people	Hispanic people: 5x higher rate than the non-hispanic population

There was a >10-fold increase in hepatitis A cases in 2017–18 compared to the previous baseline with a return to expected numbers in 2019–2020. The increase in 2017–2018 was due to unprecedented person-to-person outbreaks reported in Utah, primarily among people who use drugs and people who experience homelessness.

Acute hepatitis A rates by sex, Utah, 2014-2024



Acute hepatitis A rates by age group, 2014-2024



Hepatitis B virus (HBV)

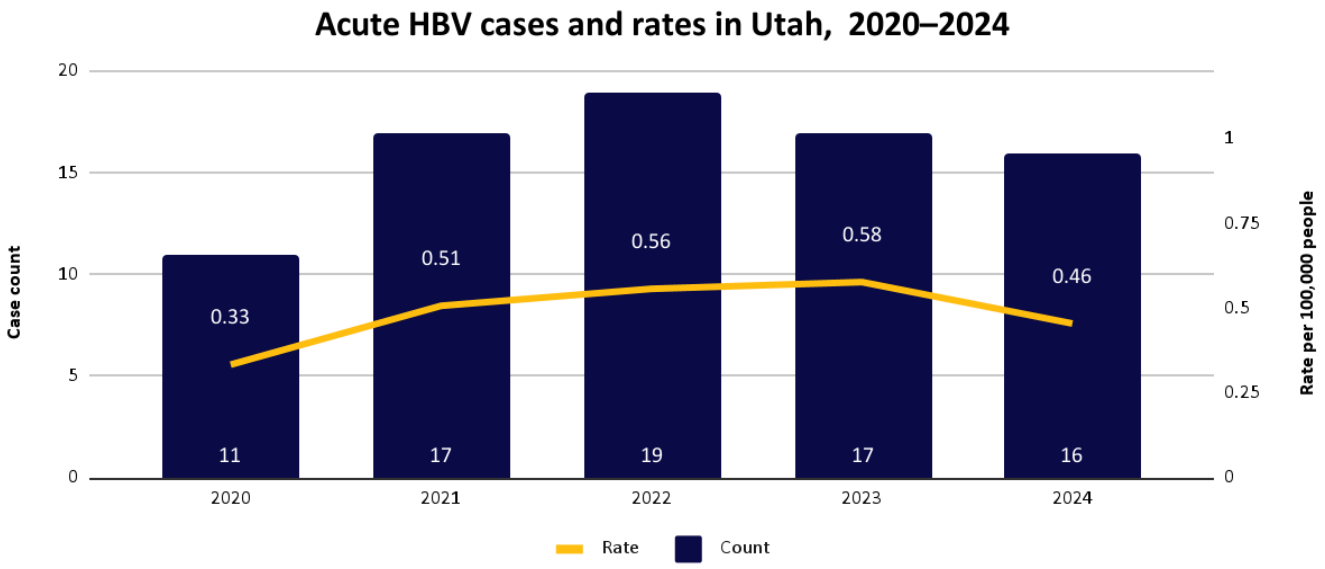
While HBV is the most prevalent hepatitis worldwide, routine childhood HBV vaccination in the United States (US) has dropped rates of infection nationally and in Utah. Most infections in Utah are from non-US born individuals and are disproportionately among people who report non-White race. In 2024, The Council for State and Territorial Epidemiologists (CSTE) updated the HBV case definition that now includes a probable case definition to allow for more cases to be captured through surveillance that may have previously been missed under the older case definition. To allow comparison between years, this report does not include these changes, and the data shown here includes only the confirmed HBV cases.

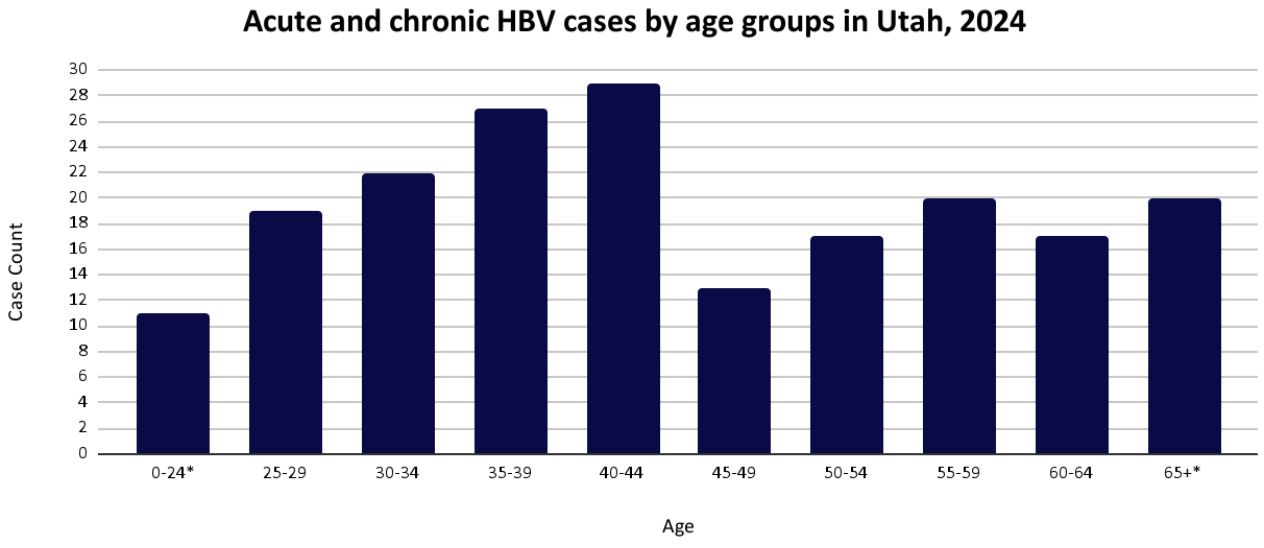
In 2024, the rate of HBV infection was significantly higher in persons who are native Hawaiian/Pacific Islander, Black, and Asian compared to the overall state rate. This has been consistently true in previous years and represents primarily preexisting infections of non-US born individuals. Infections trended slightly younger with the most cases being between 25-44 years old. In the past 5 years, Utah has seen a relatively stable rate of acute HBV with a low of 0.33 per 100,000 in 2020.

Acute and chronic cases reported, 2024	Cases per 100,000 population, 2024
194	**5.53**

Groups most affected by hepatitis B

By age	By sex	By race/ethnicity
25–34 years: **7.9 cases** per 100,000 people 35-44 years: **11.9 cases** per 100,000 people	Male rate per 100,000: **1.3 times greater** than rate of females	Persons who are Black: **8x higher rate** than the general population Persons who are Asian: **9.7x higher rate** than the general population Persons who are Native Hawaiian/Pacific Islander: **6.9x higher rate** than the general population





*<18 and 18-24 age groups combined due to low case counts
*65-70, 70-75, and 75+ age groups combined due to low case counts

HBV (acute and chronic) cases by race and ethnicity (separately), 2024. (n=194)

Race/ethnicity	Rate (per 100,000)	95% CI
White	1.47	1.05–1.89
Black	44.39	27.64–61.13
American Indian/Alaskan Native	0	0.00–0.00
Asian	53.64	39.95–67.32
Native Hawaiian/Pacific Islander	38.21	19.49–56.93
Multiple race	2.77	0.00–5.91
Hispanic	2.51	0.88–3.17
Non-Hispanic	5.10	4.11–5.72

Vaccination rate

Hepatitis B vaccine was recommended for all age groups until fall 2025. Vaccination data comes from 2 different sources. The first is the National Immunization Survey (NIS), which reports childhood vaccination data for children aged 24 months in each birth year. This is based on survey data and therefore may be biased based on patients' reports. The second is data from the Utah Statewide Immunization Information System (USIIS). USIIS data is based on vaccine data from clinics, however, it is limited as providers are not required to report immunizations into the database and the database does not contain immunization records from out of state. These 2 data sources are different and therefore will have discrepancies.

Based on NIS, the estimated HBV vaccination coverage with 3 or more doses of HBV vaccine among children aged 24 months in 2023 (corresponding to the survey year 2023, the most recently available year of data) was 94.7%, which was above the estimated US coverage rate of 91.1%. In contrast, USIIS indicates that only 85.8% of children aged 24-35 months in 2024 were fully immunized for HBV. Both estimates indicate that HBV vaccination coverage is high and sustained for this age group. Among adults aged 19 and older with records in USIIS, 36.9% had 3 or more doses of HBV vaccine in 2024 which is similar to the national coverage rate reported in 2021 at 34.2%.

Perinatal hepatitis B

The disease burden of hepatitis B in pregnancy in Utah is relatively low, with about 50–80 infected pregnant women identified annually. In order to prevent vertical transmission of hepatitis B, testing is routine for each pregnancy. Public health follows up on all children born to HBV positive women to make sure hepatitis B immune globulin (HBIG) is given to the infant at birth, followed by a complete hepatitis B vaccine series and post vaccination serologic testing (PVST). In addition, the infected mother's other children and household contacts are identified and become managed cases. Public health makes every effort to make sure infants do not become infected with HBV, as earlier infection increases the likelihood of chronic hepatitis and liver cancer later in life.

Acute hepatitis C virus (HCV)

In 2024, 132 acute cases of HCV were reported statewide. This represents a 3-year decrease after steady increases beginning in 2016 and peaking in 2021. This sharp peak in 2021 was related to a settlement agreement between the Utah Department of Corrections and state offenders. The agreement mandated all state offenders be tested for HCV and any new inmates be tested upon intake. Positive cases meeting criteria outlined in the settlement agreement must be treated. As a result, many more people were tested and the number of acute cases associated with the prison compared to the community increased. Since the beginning of the settlement, the entirety of the existing inmate population has now been tested and now only new inmates are tested at intake.

Geographically, the greatest number of cases occur in jurisdictions along the Wasatch Front but the greatest rate of acute HCV was in central and southern Utah. Of the 132 acute HCV

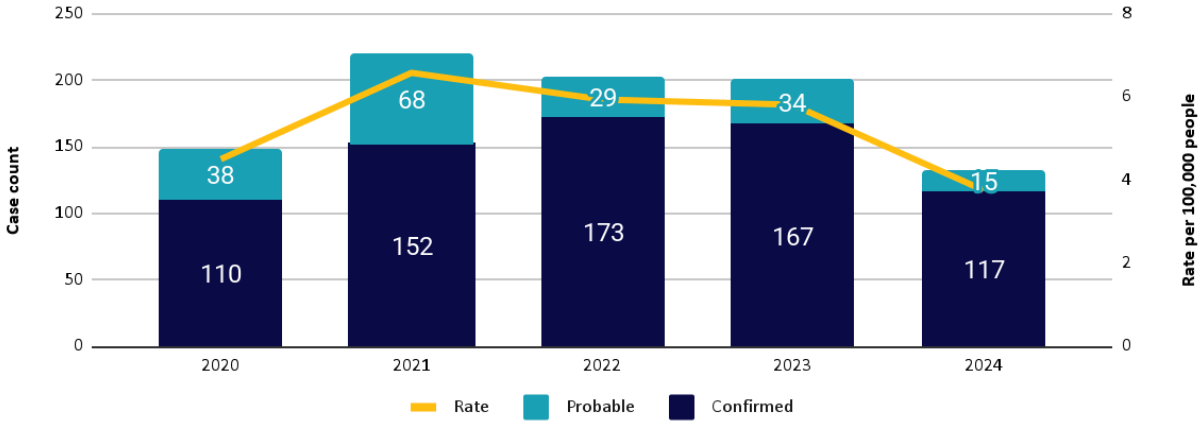
cases in 2024 for whom risk information was obtained, 41% reported injecting drugs, 33% reported noninjection drug use, and 45% reported incarceration as risk factors. One-third of Utah's acute cases were found among state offenders. The major proportion of HCV cases related to incarceration has led to it becoming a priority population for future elimination efforts. The Utah Department of Corrections and DHHS continue to collaborate on ways to increase access to hepatitis C testing and treatment in the state prison system as well as explore prevention strategies.

Acute cases reported, 2024	Rate per 100,000 people
132	**3.76**

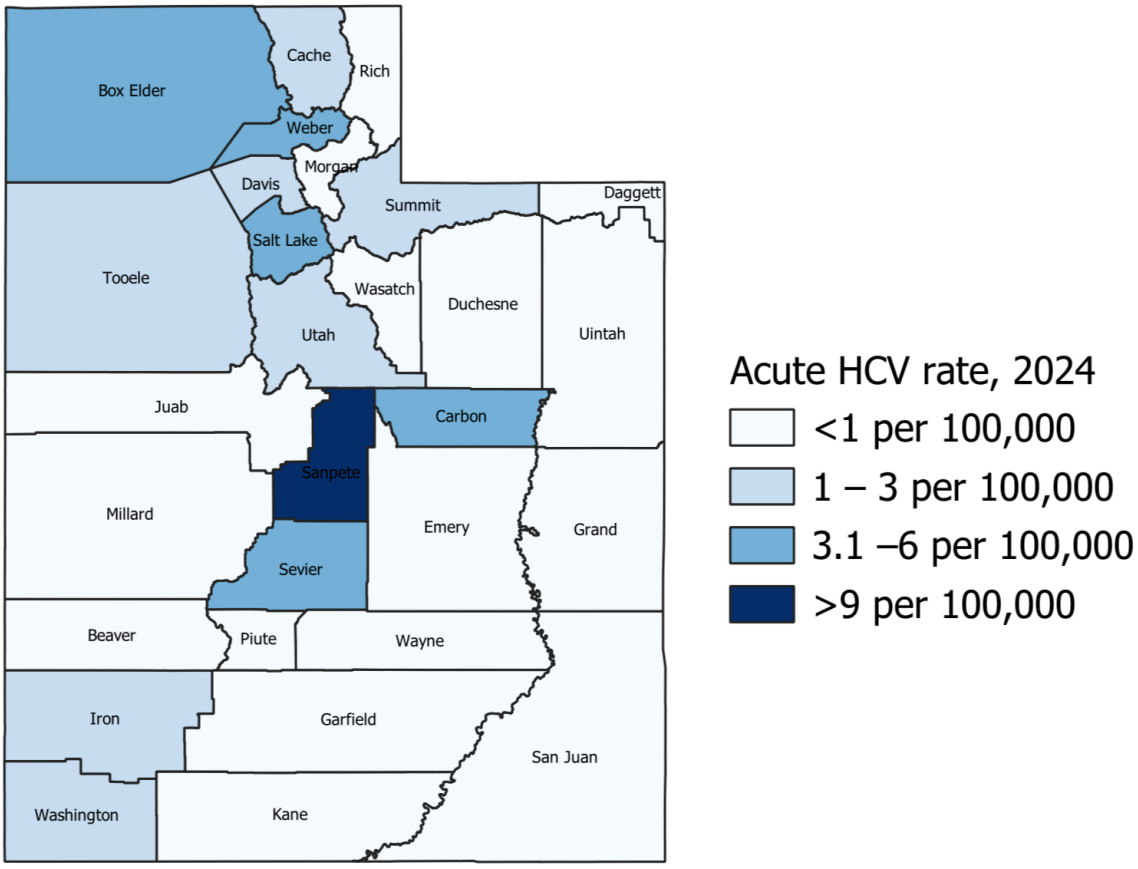
Groups most affected by acute hepatitis C

By sex	By race/ethnicity	By age
The rate of infection in men was **more than triple** the rate of women	Native Hawaiian/Pacific Islanders: **2.5x higher rate** than the general population Black Utahns: **2.2x higher rate** than the general population	Age 30–39: **2.8x higher rate than the general population**

Acute HCV cases and rates in Utah, 2020–2024



Acute HCV rates by county, Utah, 2024



Acute HCV cases are primarily found along the Wasatch Front where major population centers are located. In 2024, there was a high rate of cases in Sanpete County. This is likely due to both a low population and the presence of the Central Utah Correctional Facility in Gunnison which is where almost all cases in that county were associated.

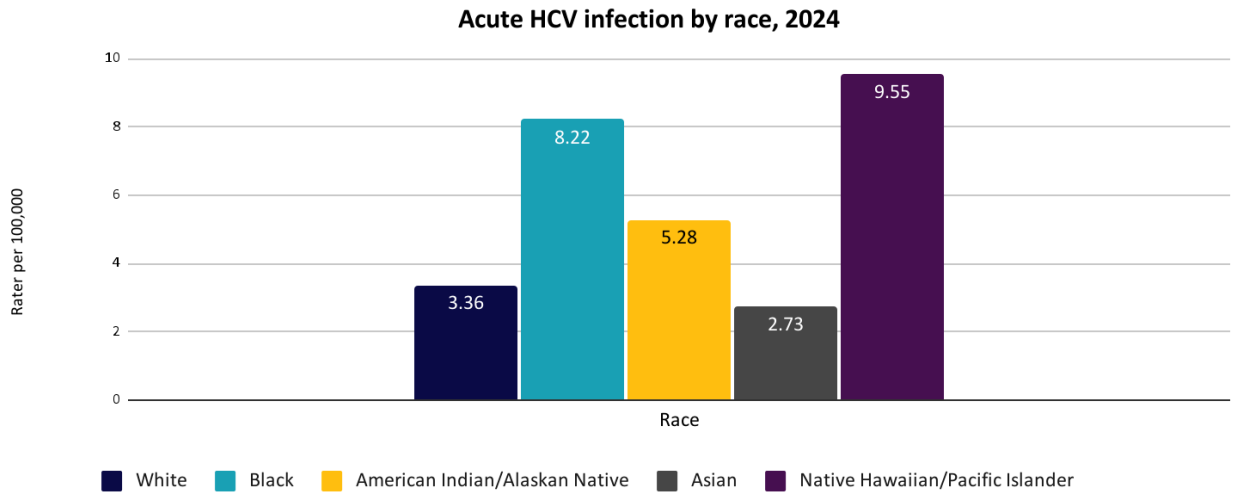
HCV is transmitted through blood-to-blood contact. In order to determine the likely cause of acute HCV infection in Utah, each acute case is investigated to determine the individual's exposures based on possible blood-to-blood contact. In general, **injection drug use** is the most common health risk among cases and can be prevented by safer injection practices such as not sharing equipment. In 2024, **past or current incarceration** was one of the single greatest risk factors making state prison facilities a primary target for elimination efforts. The same was true in 2023.

Exposures of investigated acute HCV cases, 2024

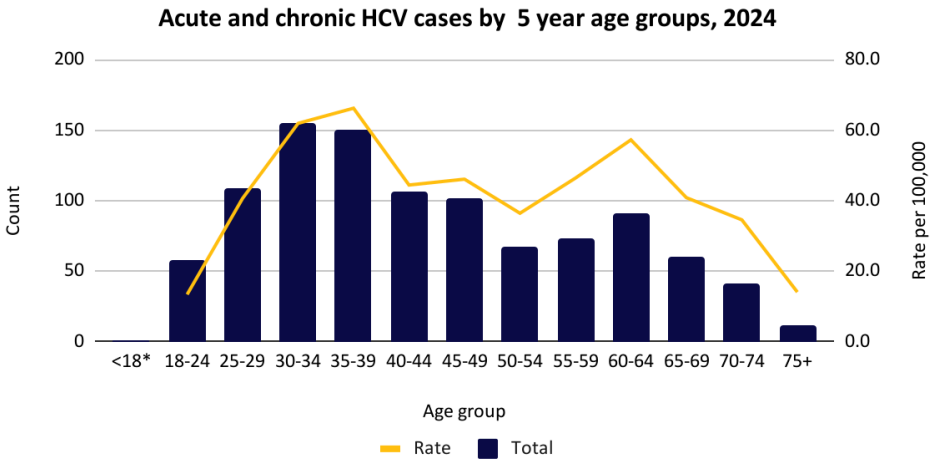
Risk factor*	% of cases
Tattoo	18
Past incarceration	**45**
Injection drug use	41
Non-injection drug use	33
Unknown	39

*Cases can report multiple risk factors. Individual risk categories are not mutually exclusive.

Utah's population is overwhelmingly White and can dictate the overall state rate from year to year. However, in 2024, acute HCV disproportionately affected people who are Native Hawaiian/Pacific Islander. It is important to note that the population sizes of these racial groups are small and rates should be interpreted with caution.



The age distribution of HCV is described as bimodal with 2 main age groups infected. The majority of cases occur among young adults and older adults (aged ≥60 years). Historically, baby boomers had the highest rates of chronic infection as a result of the limited use of universal precautions and universal blood screening. However, within the past 10 years there has been an increase in HCV infections among younger individuals related to injection drug use. The US has been in the middle of an opioid epidemic for the past several years driven by the misuse of prescription and illicit opioids. This increase in drug use has led to overlapping epidemics of opioid use disorder, HIV, and HCV among young adults who use and inject opioids and other drugs.



*<18 age group suppressed due to low case count

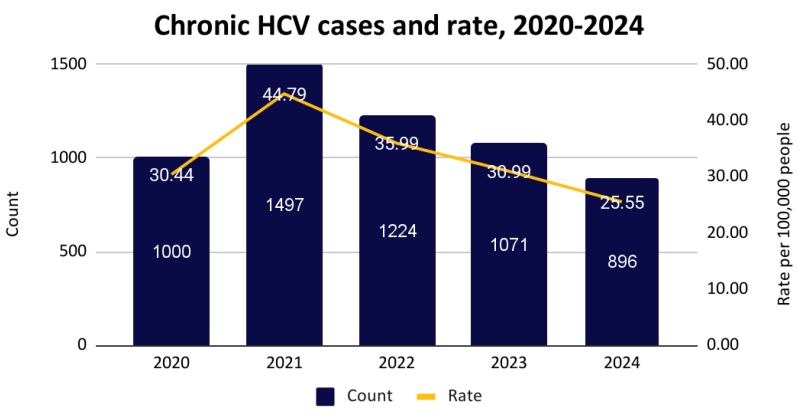
Chronic hepatitis C virus (HCV)

Chronic HCV counts continue to trend downward in the past 5 years with a notable uptick in 2021 that can be attributed to the state prison system testing all current and incoming inmates. The downward trend since 2021 can likely be attributed to a variety of factors, including the increase in acute case finding, increase in availability and practice of confirmatory testing and negative reporting to rule out cases who have self-resolved or have been treated, and the availability of highly effective and affordable treatments. Limited funding and investigation capacity limits data available for chronic hepatitis C. Many of the data available in acute cases are not available for chronic cases.

Chronic cases reported, 2024	Rate per 100,000 people
896	25.55

Groups most affected by chronic hepatitis C

By sex	By race/ethnicity	By age
The rate of infection in **men was double** the rate in women	Black Utahns: **2.4x higher** rate than the general population	30-39 year olds: **More than double** the rate of the general population



Chronic HCV cases and rate by LHD, Utah, 2024

LHD	Cases	Rate (per 100,000)	95% CI
Bear River	25	12.02	10.57–21.52
Central	41	48.93	33.95-63.91
Davis	43	11.36	7.96-14.75
Salt Lake County	452	36.67	33.29-40.05
San Juan	<11	SR	-
Southeast	18	44.72	24.06-65.38
Southwest	64	21.84	16.49-27.19
Summit	<11	SR	-
Tooele	26	31.76	19.55-43.97
TriCounty	21	36.60	20.95-52.26
Utah	91	12.14	9.65-14.63
Wasatch	<11	SR	-
Weber-Morgan	106	37.26	29.85-43.97
Tribal jurisdictions	<11	SR	-

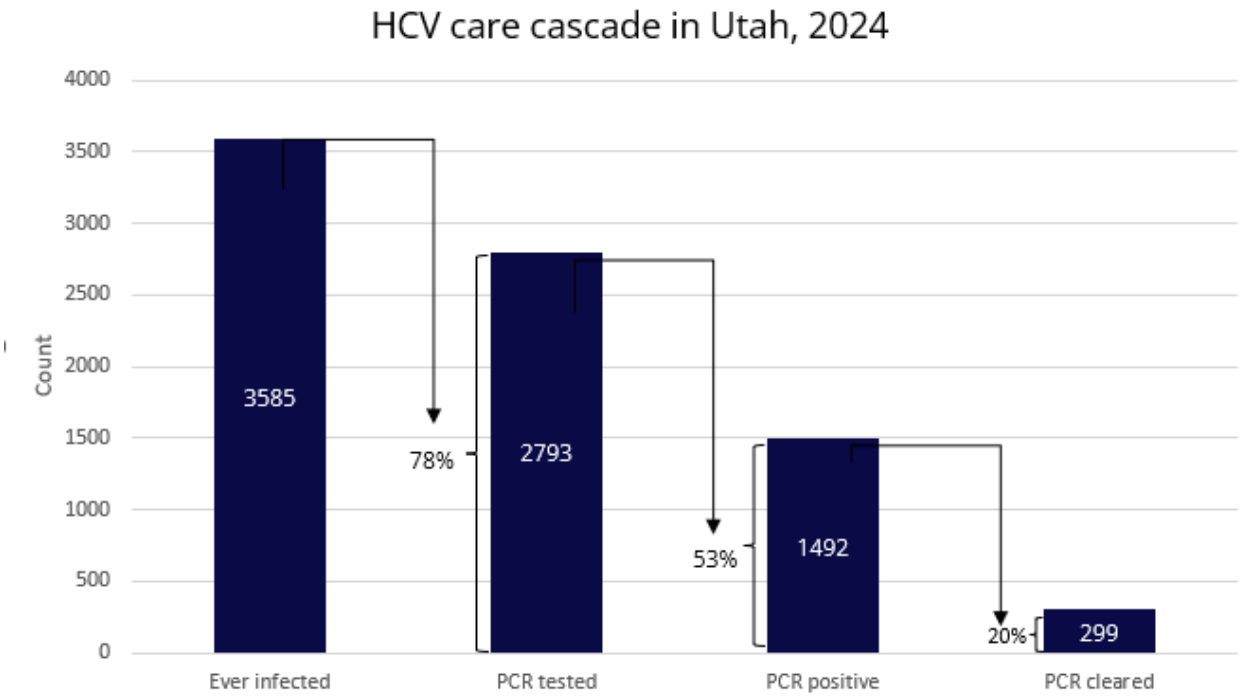
SR=Suppressed Rate

HCV care cascade

Below is the HCV surveillance based care cascade. It is intended to show the effectiveness of Utah's efforts to identify those infected with hepatitis C through screening and treat those who have active infections within a given year. In 2024, 3,585 individuals screened positive with either an antibody test or a viral load test. Of those, 78% received a subsequent PCR test at some point in 2024. About half (53%) of those tested were PCR positive, the other half had cleared the virus prior to their test. Only 20% of PCR positive individuals had evidence of cure or resolution, which would be indicated by a repeat negative PCR test. This means that the vast majority of people do not get treatment for their HCV within the year of their diagnosis.

This gap in diagnosis to treatment represents a major focus area of improvement for Utah. Comparing these data to the 2023 care cascade, we do not see a significant change among categories. There is a slight increase in the percentage of individuals who are PCR cleared (17% to 20%). The percentage remains low and representative of the number of people

who are likely to naturally clear the virus. However, this percentage increases when looking at a 5-year care cascade and include insurance claims treatment data (see page 21). These data were derived from Utah's surveillance data and it is important to note they have their limitations, including: limited to lab results from 2024, no account for false positives/negatives, unable to determine treatment vs. self-resolved cases, and the PCR cleared number only accounts for those who receive repeat testing. As such, these should only be taken as a rough estimate from Utah's most readily available data source.

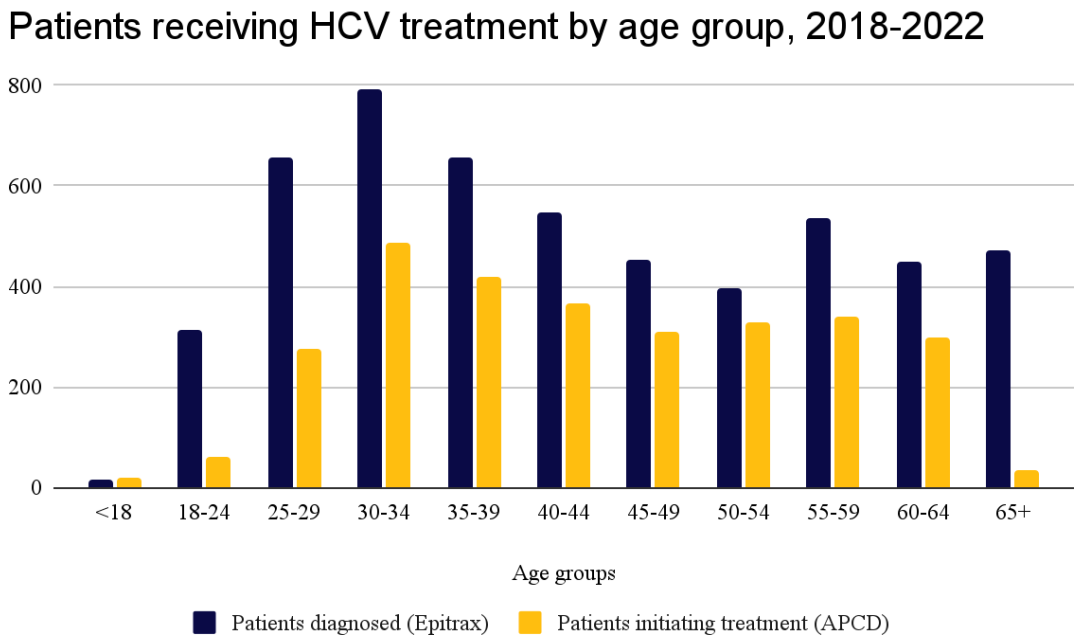


Perinatal hepatitis C

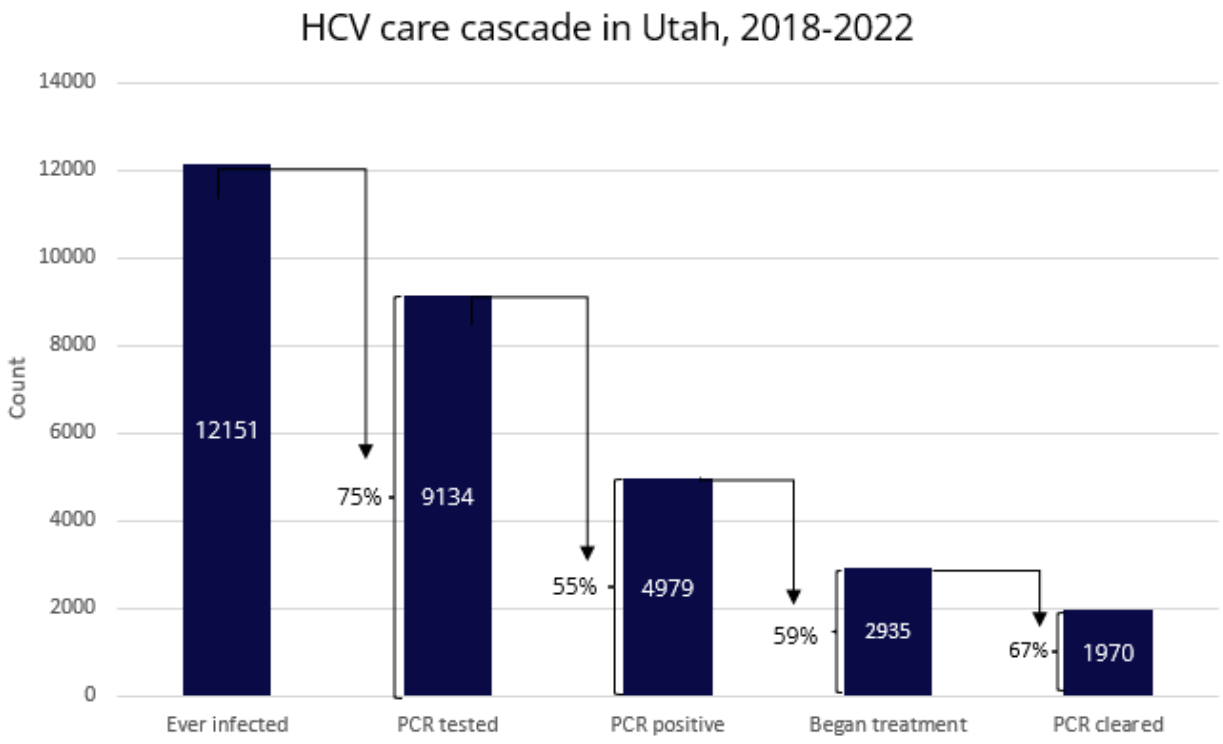
The disease burden of perinatal hepatitis C in Utah is very low (<11 cases per year). Per the Utah Communicable Disease Rule, pregnancy in an HCV positive person is reportable to public health, as is any clinical diagnosis and/or a positive hepatitis C lab in a child ≤36 months of age. There is currently not a public health process for follow-up with HCV positive pregnant persons or children born to HCV positive persons; however state and local public health officials have started work on a plan to implement tracking, education, and follow-up with these groups.

Treatment

HCV treatment is often paid for through insurance due to its high cost making data from the All-Payer Claims Database (APCD) a valuable resource to assess the number of Utahns who receive treatment beyond surveillance data alone. It does not include patients who are treated outside of insurance claims (i.e. patient assistance programs, out-of-pocket). Data provided for analysis was from 2018-2022 as the most currently available data in 2024.



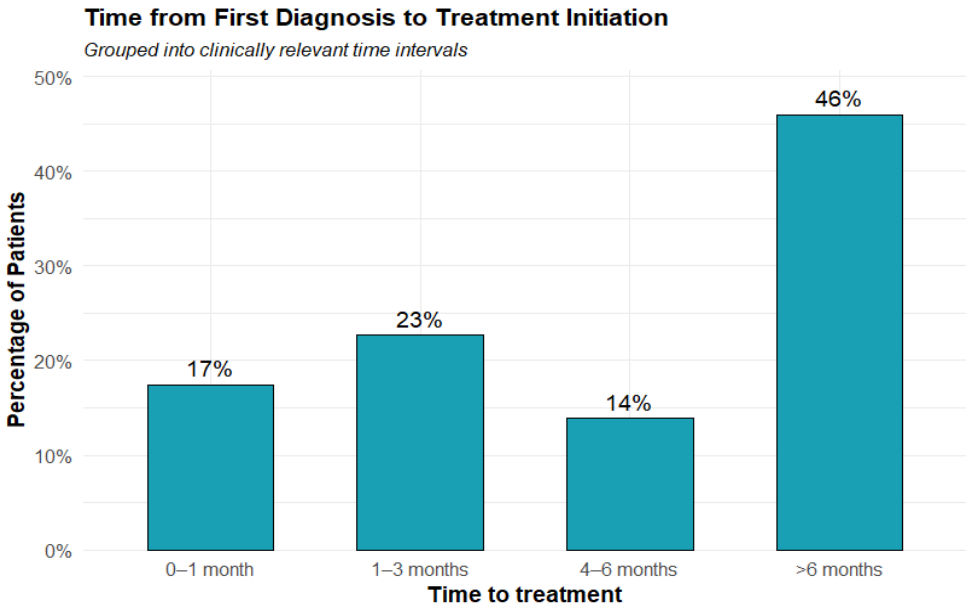
Treatment and diagnoses follow the same pattern of a bimodal curve when stratified by age groups from 2018-2022 with a larger hump among younger adults and a small hump among older adults. Diagnoses in the chart above are based on surveillance data and include confirmed cases only. Roughly two-thirds of diagnosed individuals initiated treatment for most age groups with just over half initiating treatment overall. It is worth noting the large disparity between diagnosis and treatment initiation among adults 65 and older. This is likely due to Medicare claims not being included in the dataset and it is likely most older adults are insured under Medicare.



The care cascade above uses the same methodology as the one on page 19, however this one **includes lab results from 2018 to 2022** and includes an **additional bar** showing the percentage of individuals who initiated treatment based on an insurance claim. Although this column represents data from a different source, it is consistent with the chart on page 20 indicating roughly two-thirds of individuals diagnosed initiated treatment.

While the 5-year care cascade provides a more optimistic view of linkage to care in Utah when compared to a single year, the time from diagnosis to treatment initiation is often too long. When looking at the delay between diagnosis and treatment from 2018-2022:

- **Only 17%** of cases began treatment within **1 month** of diagnosis, suggesting treatment was likely started immediately.
- **23%** of patients initiated treatment between **1 and 3 months** after diagnosis. This delay often results from the requirement for prior authorization from insurance, which can take weeks to months and lead to patients being lost to follow-up.
- **46%** of all diagnoses were **not treated until more than 6 months later** (often years later) potentially indicating treatment is likely not suggested at all the first time a patient is diagnosed.



Partner services

DHHS provides a limited number of rapid HCV test kits to community-based organizations (CBOs) and local health districts (LHDs) in an effort to target and screen populations at risk for hepatitis C. The majority of supported CBOs provide syringe services and/or opioid treatment. Tests are free of charge for any person who has a history of injecting or using drugs. In 2024, Utah DHHS provided 1,445 HCV rapid antibody tests to CBOs and LHDs. The tests yielded a 19% positivity rate overall.

Limitations/disclosures

The data represented in this report reflect the state of finalized cases at the date of data export (December 9, 2025). We recognize there may be slight discrepancies between this report and previous reports. Errors in reporting are resolved as they are discovered and may result in slightly different case counts for earlier years.