Viral Hepatitis C Surveillance Report, 2024

SAN FRANCISCO, CALIFORNIA



San Francisco Department Of Public Health
Viral Hepatitis Surveillance Program
Applied Research, Community Health
Epidemiology And Surveillance Branch (ARCHES)
Population Health Division



POPULATION HEALTH DIVISION

DISEASE PREVENTION & CONTROL

Outline

Overview of Hepatitis C in San Francisco

• San Francisco Chronic Viral Hepatitis Registry

Methods

- Key Terminology and Definitions
- Data Limitations

2024 HCV Core Surveillance

- Overall
- Demographics
- Geographic Distribution

Geographic Distribution of Active HCV Cases

Hepatitis C Clearance Cascade

- Clearance Cascade, 2021 2024
- Distribution of HCV Ab+ only cases by testing site type
- Demographics
- Geography
- Findings

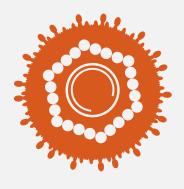
Hepatitis C & HIV

- Clearance Cascade
- Insurance Status & Risk Factors

Hepatitis C Associated Deaths

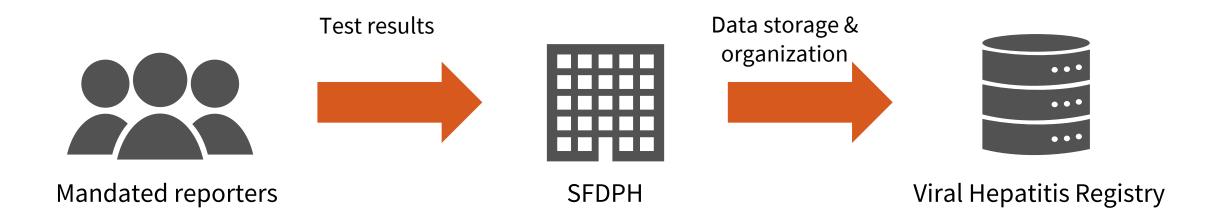
1 Overview of Hepatitis C in SF

Hepatitis C Virus (HCV) in San Francisco



The San Francisco (SF) Chronic Viral Hepatitis Registry is a population-based registry that supports core surveillance of chronic hepatitis B and/or hepatitis C test results, along with basic demographic information (e.g., name, sex, birthdate, address)

San Francisco Chronic Viral Hepatitis Registry: CORE SURVEILLANCE



Registry data allow us to examine the characteristics of HCV test results that are reported from laboratorians, clinicians, and other mandated reporters within a given time period

2 Methods

Key terminology and definitions



Probable case of chronic hepatitis C* is a person >36 months of age:

- With a positive test for antibodies to hepatitis C virus (anti-HCV) and
- With no report of an HCV nucleic acid test (NAT) and
- Who has no report of, or does not meet, clinical or laboratory criteria indicative of an acute infection

Confirmed case of chronic hepatitis C* is a person >36 months of age:

- With a positive HCV RNA NAT, including qualitative, quantitative, or genotype testing and
- Who has no report of, or does not meet, clinical or laboratory criteria indicative of an acute infection

Key terminology and definitions



Newly reported cases are those who were reported to SFDPH with chronic HCV for the first time and for whom no positive HCV laboratory report had previously been received

All reported cases are those who were reported to SFDPH with a positive HCV lab report in 2024. This includes both newly reported cases in 2024, as well as those who were reported for the first time prior to 2024 but had a positive HCV lab reported in 2024.

Data Limitations



- Surveillance data does <u>not</u> measure prevalence or incidence.
- HCV infection data potentially overestimate the number of persons reported with chronic HCV infection because they may include acute, resolved, or cured HCV infections.
- Reporting gaps exist for labs that do not report electronically. Death data are not reported; cases who may have died after being reported to SFDPH are possibly included.
- Lab reports are often missing information on patient race, ethnicity, and residential address. Cases with unknown addresses or those who may have moved out of SF are included in this report.
- Duplication of cases may occur if reports from the same person utilize multiple names. Conversely, cases may be erroneously matched.

2024 HCV Core Surveillance

Chronic HCV reports in 2024

2024

Over 5,600 positive HCV laboratory results



2,308 individuals with probable or confirmed chronic HCV

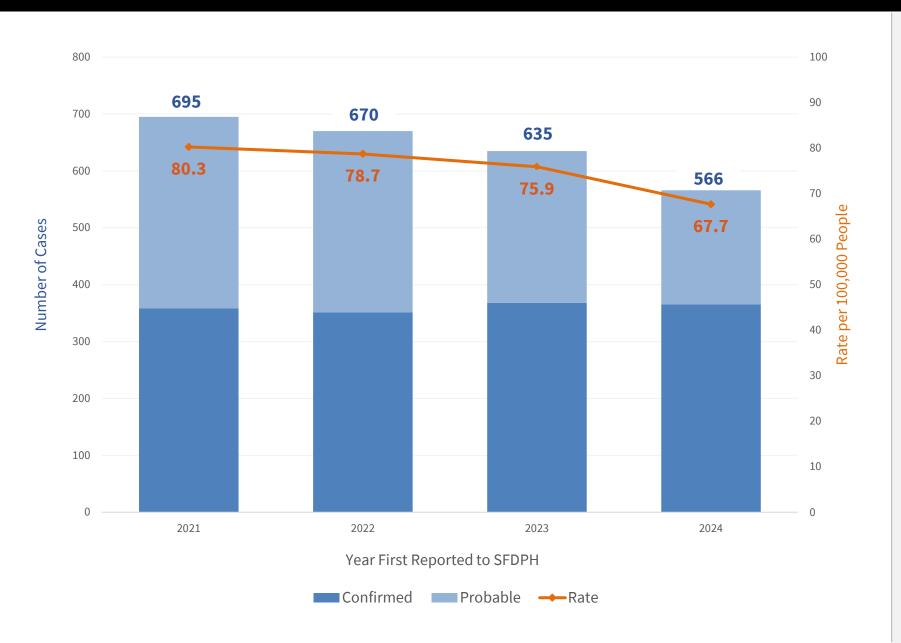
- Probable = 274 (11.9%)
- Confirmed = 2,034 (88.1%)



566 (24.5%) of these were newly reported

- Probable = 201 (35.5%)
- Confirmed = 365 (64.5%)

Number & rate of newly reported chronic HCV cases, 2021-2024



Number of newly reported chronic HCV cases in San Francisco in 2024:

566

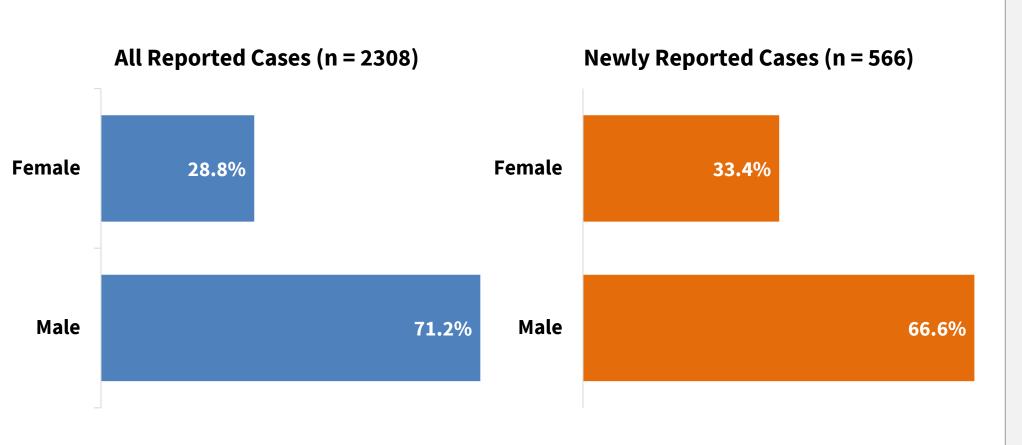
Rate of newly reported chronic HCV cases in San Francisco in 2024:

67.7

per 100,000 people

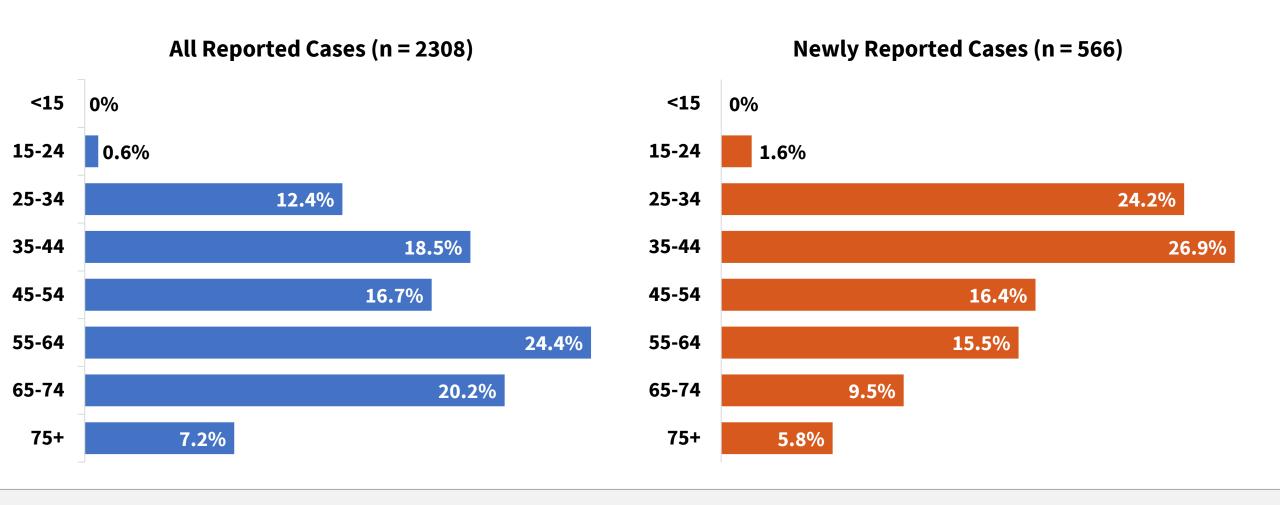
Note: The decrease in newly reported probable cases may be due to the increase in negative HCV RNA reporting, as individuals with a positive anti-HCV and negative RNA only are not considered a case. In years prior to 2024 when negative HCV RNA was limited, many of these individuals would have been included as probable cases if the negative RNA result was NOT received by SFDPH.

Reported gender of chronic HCV cases, 2024



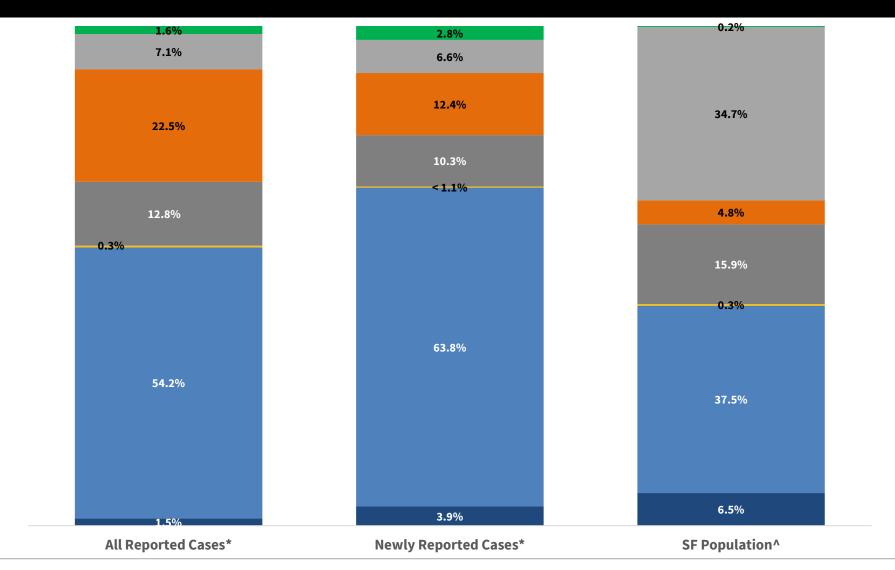
Males represented more infections for all reported and newly reported HCV cases

Age group of chronic HCV cases, 2024



The age groups with the highest proportion of HCV cases were 55-64 years among all reported cases and 35-44 years among newly reported cases

Race/Ethnicity of chronic HCV cases in 2024 and the San Francisco population



^{*} Race/Ethnicity data is missing for 134/2308 (5.8%) of all reported cases in 2024.

■ American Indian/ Alaska Native

Asian

■ Black/African American

■ Latino/a/x (all races)

■ Native Hawaiian/ Pacific Islander

White

Other

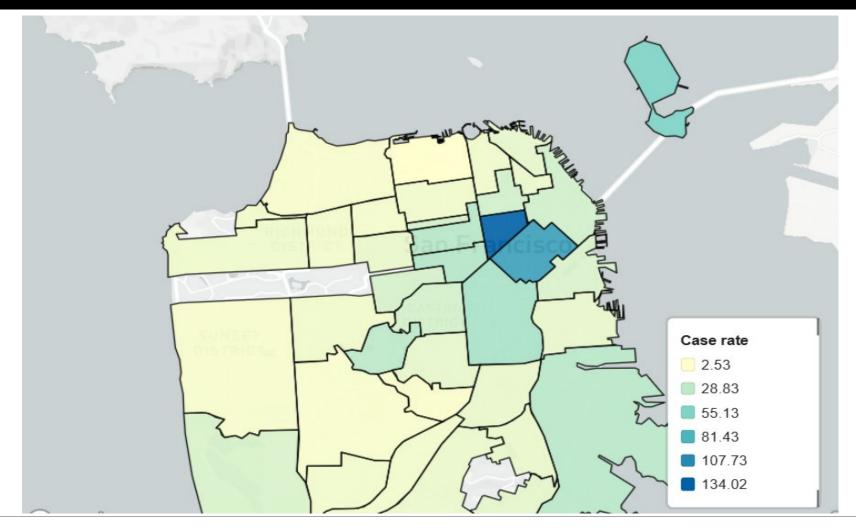
54.2% of all reported cases and 63.8% of newly reported cases were White, compared to only 37.5% of the SF population.

People who are Black/African
American made up 22.5% of all
reported cases and 12.4% of
newly reported cases, but only
4.8% of the population in SF.

[^] Race/Ethnicity data is missing for 99/566 (17.5%) of newly reported cases in 2024.

[§] San Francisco Population data source: American Community Survey (ACS) 5-year estimate 2019-2023

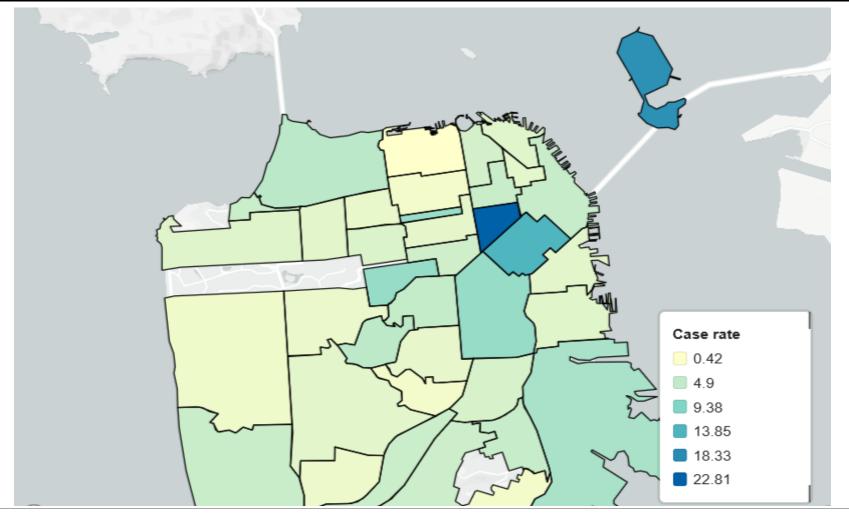
All chronic HCV cases reported in San Francisco 2024 by neighborhood*



The highest case rates of all reported HCV cases occurred in the Tenderloin (134.0), South of Market (94.3), and Treasure Island (56.6) neighborhoods

- Cases per 10,000 residents
- 444/2308 (19.2%) of all reported cases could not be geocoded and are not shown.
- Neighborhoods with a population of fewer than 1,000 people are not included and are greyed out.
- San Francisco Population data source: American Community Survey (ACS) 5-year estimate 2019-2023

Newly reported chronic HCV cases in San Francisco 2024 by neighborhood

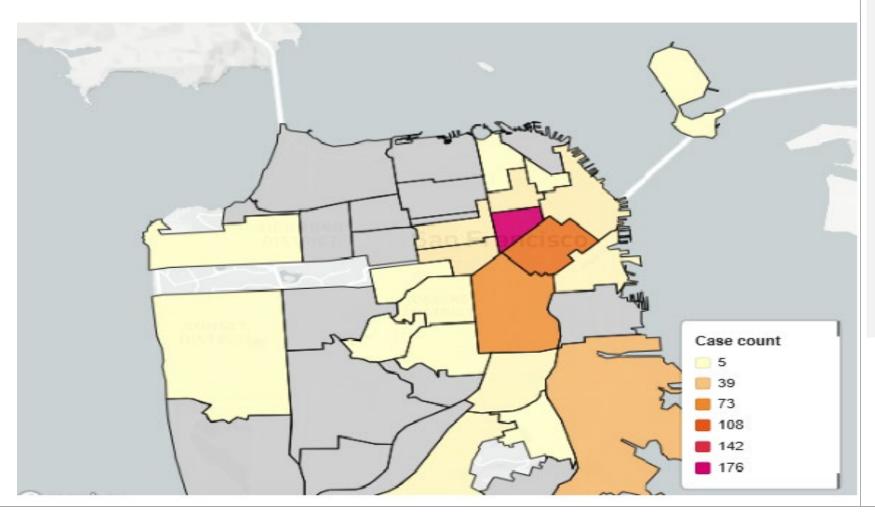


Newly reported HCV cases were highest in the Tenderloin (22.8), Treasure Island (17.7), and South of Market (13.8) neighborhoods

- Cases per 10,000 residents
- 187/566 (33.0%) of newly reported cases could not be geocoded and are not shown.
- Neighborhoods with a population of fewer than 1,000 people are not included and are greyed out.
- San Francisco Population data source: American Community Survey (ACS) 5-year estimate 2019-2023

Geographic Distribution of Active HCV Cases

People with active HCV infections reported as of December 2024, by neighborhood



The top 3 neighborhoods with active HCV infections were observed in the Tenderloin District (176 people),
South of Market (86 people), and the Mission (67 people) neighborhoods

Counts of active HCV infections in this map include people whose latest HCV viral test result was positive/ "detected" as of December 31, 2024, using a subset of cases between 2021 – 2024.

- Counts of people were used instead of rates, since the underlying population that was served by these facilities could not be estimated.
- Data on active infections include cases that have been linked to commercial buildings (e.g., long-term facilities). Therefore, not all addresses represent residential addresses. The map does not include addresses of 329/890 (37.0%) people with active HCV infection as of December 31, 2024. These addresses could not be geocoded.
- People included here represent those with test results from facilities that have been reporting negative HCV RNA results to SFDPH since 2021
- Counts are not shown for neighborhoods with fewer than five cases or for neighborhoods with a population fewer than 1,000 people.

5 Hepatitis C Clearance Cascade

Selection Criteria for the Hepatitis C Clearance Cascade



Years included: January 1, 2021- December 31, 2024



Patients with at least one HCV antibody positive or HCV RNA positive result from facilities fully reporting negative HCV RNA between 2021 - 2024*



Ever infected period: January 1, 2021 – December 31, 2023



Follow-up period: January 1, 2021- December 31, 2024

^{*} These facilities fully reported HCV RNA test results to SFDPH, including negative/undetected RNA results, between 2021 and 2024.

CDC's methodology: Hepatitis C Clearance Cascade Definitions

- Ever infected All people with any positive/ "detected" HCV test (anti-HCV, RNA, detectable genotype or core antigen) performed from the starting point (January 1, 2021) through the end of the ever-infected period (December 31, 2023)
- Viral testing People who have any HCV viral test result during the follow-up period (January 1, 2021 December 31, 2024)
- Initial infection People whose initial HCV viral test result was detected during the follow-up period (January 1, 2021 December 31, 2024)
- Cured or Cleared* People whose subsequent HCV viral test was "not detected" during the follow-up period (January 1, 2021 December 31, 2024)
- Persistent infection/reinfection[†] People with a negative/ "not detected" result that was followed by an HCV viral test positive/ "detected" during the follow-up period

^{*}The cascade is unable to distinguish between cured (referring to successful treatment response) and cleared (referring to natural, spontaneous clearance).

[†]The cascade is unable to distinguish among the reasons for persistent infection, reinfection, or false positive reports (rare). For simplicity, there is no minimum time period after an HCV viral negative / " not detected" test result (cured or cleared) and before a subsequent HCV viral positive/ "detected" test result occurs to qualify as a persistent infection or reinfection. Regardless of whether these infections represent persistent infections or reinfections, this group represents an important opportunity for linkage to care and treatment.

Snapshot of Findings from Hepatitis C Clearance Cascade



of ever infected people received testing for hepatitis C RNA

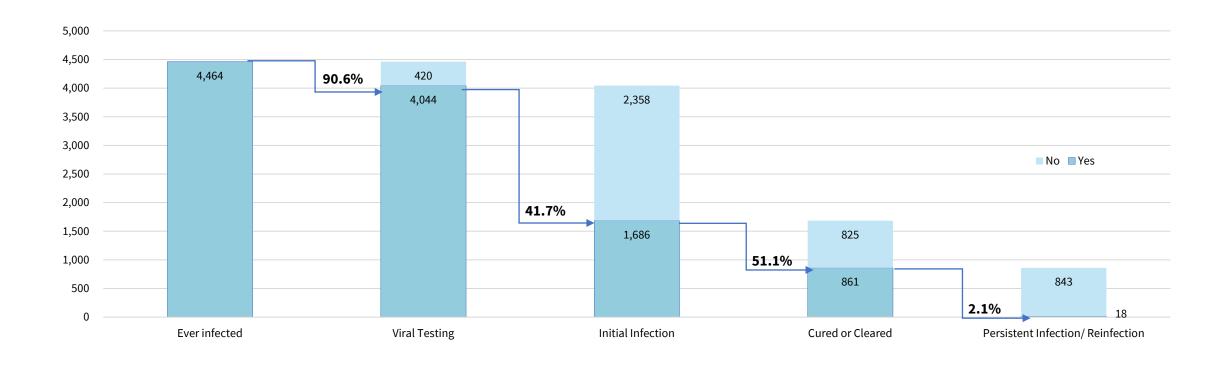
of people who received testing for HCV RNA had an initial infection

of people with an initial HCV infection were cured or cleared of HCV

of people who were cured or cleared had a persistent infection or reinfection*

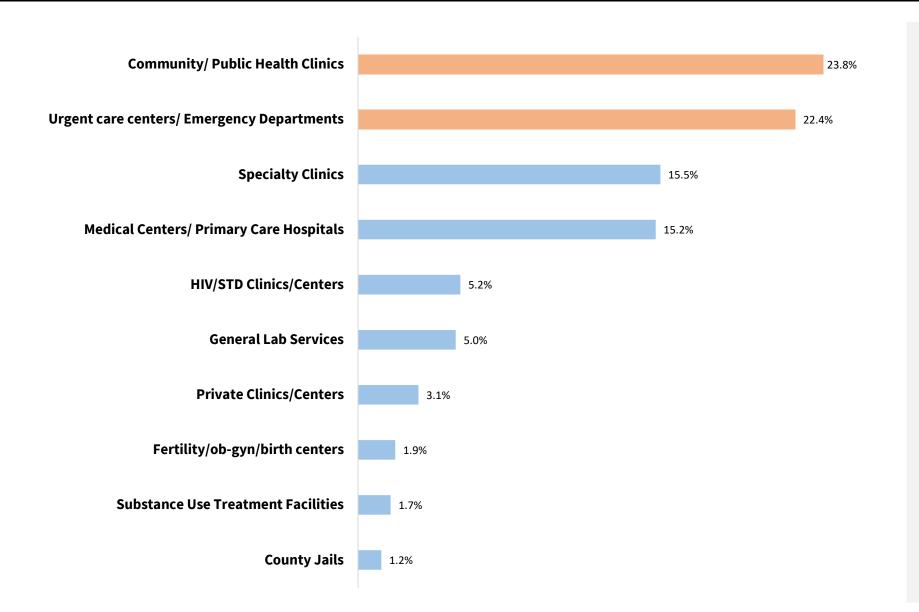
^{*}CDC has no minimum time period after HCV viral negative/ "not detected" test result (cured or cleared) and before a subsequent HCV viral positive/ "detected" test result to qualify as persistent infection/ reinfection

HEPATITIS C CLEARANCE CASCADE (2021 –2024)



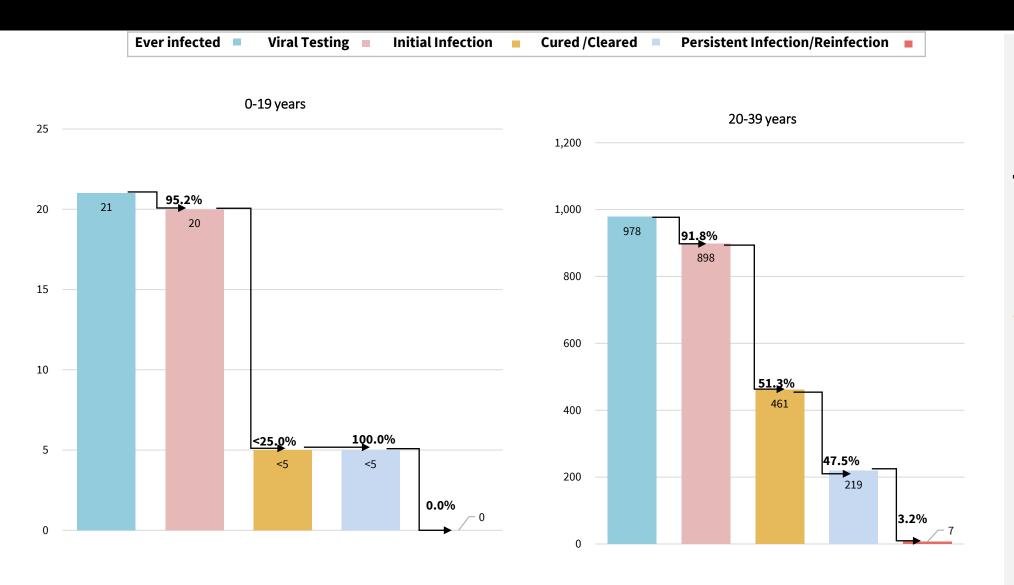
- Approximately 51.1% initially infected with HCV were cured or cleared
- Overall, the 2024 cascade did not meet the 2025 U.S. DHHS' elimination target goal of 58%

420 (9.4%) people did not receive testing for HCV RNA following a positive HCV antibody



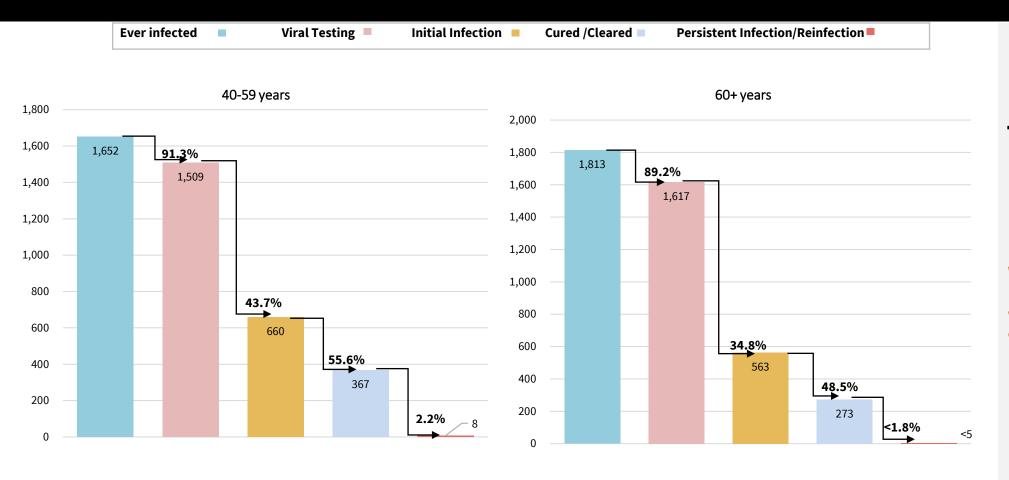
Over 46% (194/420) of people with no viral testing received HCV antibody testing either at a community health center/public health clinic or an urgent care center/ ED facility

People who were between 20-39 years old had among the lowest proportions of cure/clearance



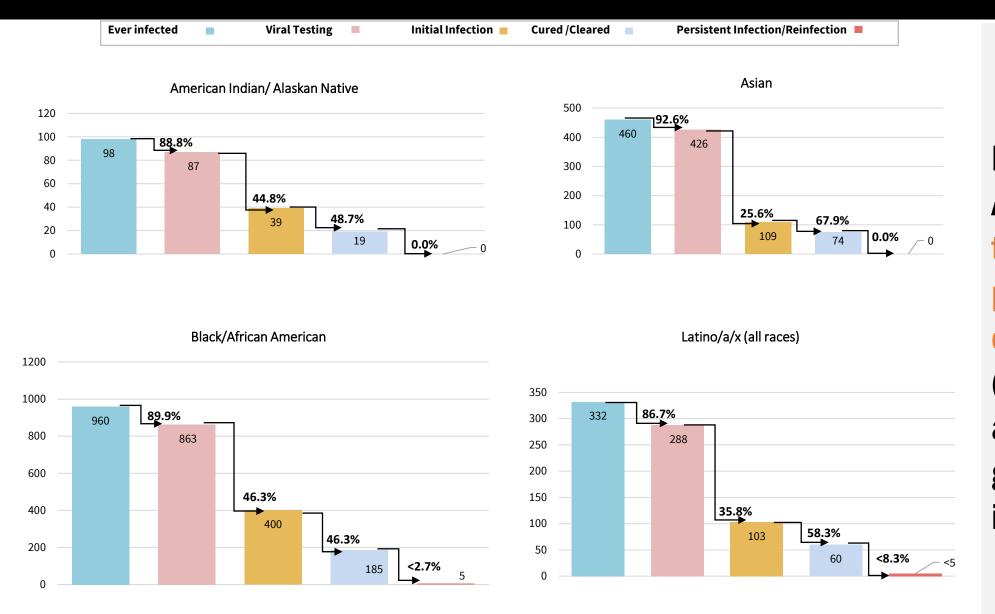
The proportion of cure/clearance among 20-39 years old was below the 2025 national elimination target goal

People who were 60 years or older had among the lowest proportions of cure/clearance



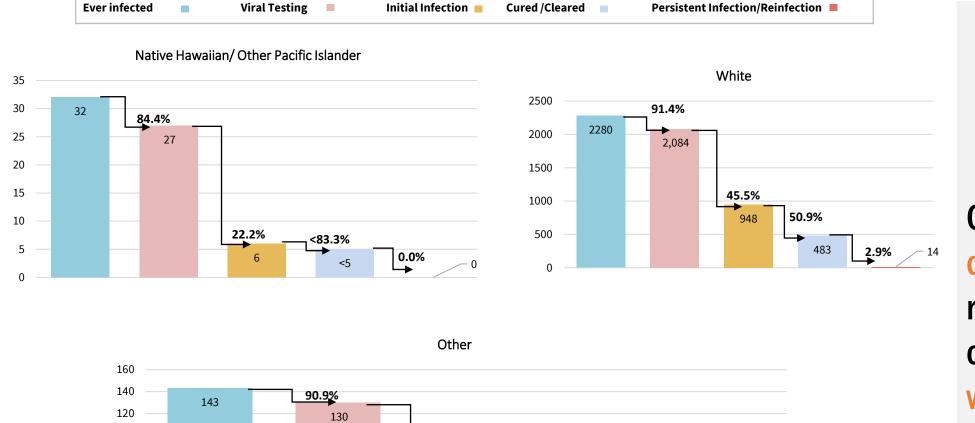
The proportion of cure/clearance among people who were 60 years or older was below the 2025 national elimination target goal

Cure/clearance among Asians exceeded the 2025 national elimination target goal of 58%



Black/African **Americans had** the lowest proportion of cure or clearance (46.3%) across all racial/ ethnic groups following initial infection

Cure/Clearance among Whites (50.9%) was similar to the overall cascade (51.1%)



56.4%

22

0.0%

30.0%

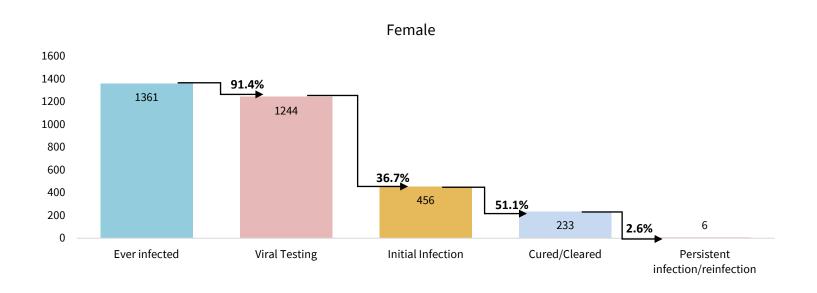
39

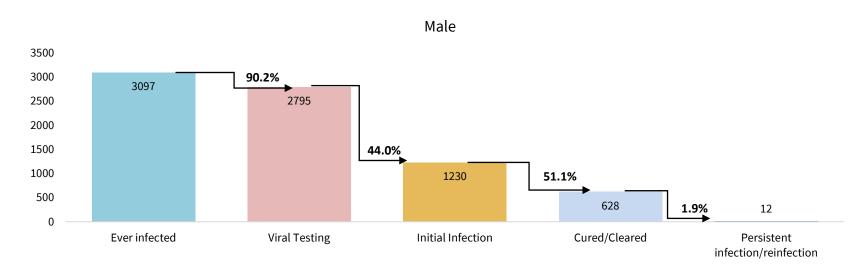
100 80

20

Overall,
disparities by
race/ethnicity in
cure or clearance
were observed

Cure/clearance among males and females was below the 2025 National Elimination Target Goal (58%)

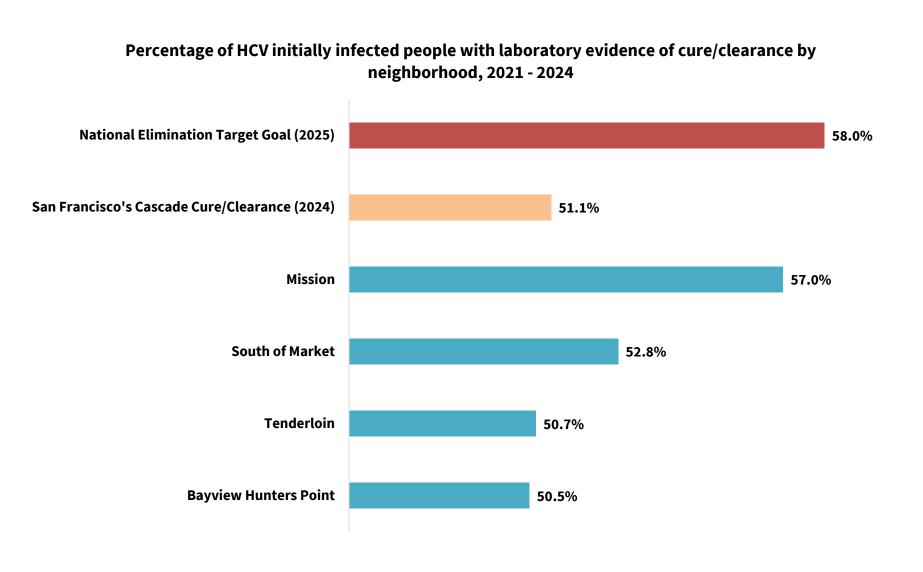




Overall,
cure/clearance was
comparable among
males and females

Geography: Cure or Clearance by Neighborhood

The percentage of cure/clearance among people living in the Mission almost met the U.S. DHHS' national elimination target goal of 58%



About 1 in 2 cases
living in Bayview
Hunters Point or the
Tenderloin was
cured or cleared

7 HCV Clearance: Findings

HCV Clearance Cascade: Success Stories

 People aged 40-59 years old had among the highest proportions of cure/clearance compared to other age groups

• The proportion of cure/clearance (58.3%) among people identifying as Latino/a/x(all races) met the 2025 national elimination target goal (58%)

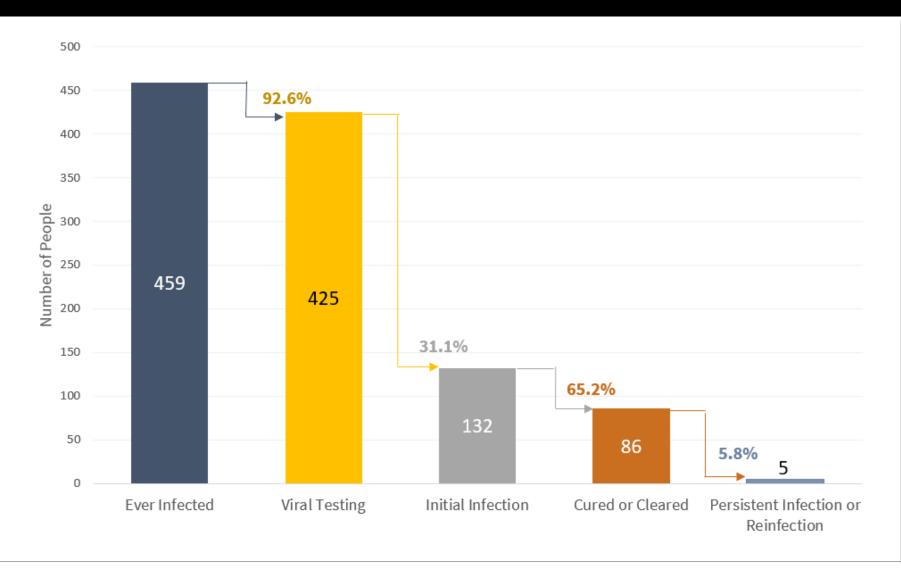
• Cure/ clearance among Asians (67.9%) exceeded the U.S. DHHS' 2025 national elimination target goal (58%)

HCV Clearance Cascade: Gaps

- Increased viral testing is necessary among people aged 60+ years old
- Progress towards cure/clearance is necessary among people aged 20-39 years and 60+ years.
- Increased efforts are needed to narrow racial disparities in achieving cure/clearance among Black/ African Americans.
- Increased efforts are needed in Bayview Hunters Point (50.5%) and the Tenderloin (50.7%) towards increasing cure/clearance from HCV infections.

8 Hepatitis C and HIV

Hepatitis C Clearance Cascade for People with HIV, San Francisco, 2021-2024



Approximately 2/3 of coinfected cases with an HCV initial infection were cured or cleared of hepatitis C as of the end of 2024

Notes: Match with whole SFDPH HIV/AIDS case registry conducted by staff in the HIV Epidemiology section. Includes 459 SF residents living with HIV with at least one positive HCV lab reported during the ever-infected period (2021-2023), then tracked through the follow-up period (2021-2024). Restricted to those with at least one HCV result from facilities providing complete HCV RNA reporting.

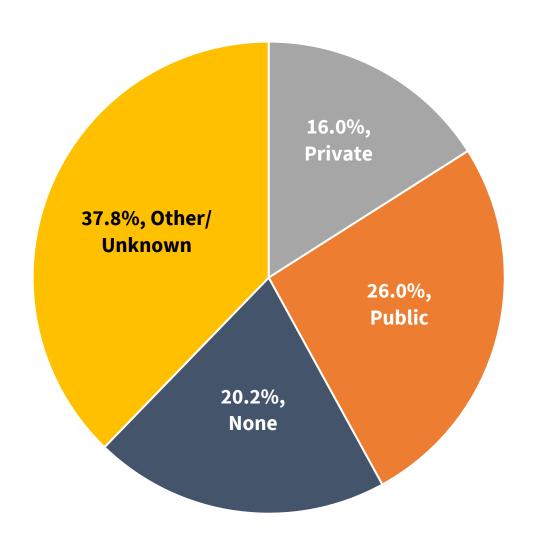
Ever infected: any positive HCV test result from 2021-2023, including anti-HCV, RNA, or genotype

Initial infection: initial HCV viral test from 2021-2024 is 'detected'

Persistent infection or reinfection: evidence of subsequent detectable HCV RNA in a person categorized as cured or cleared

Viral testing: any HCV viral test result from 2021-2024, including RNA or genotype
Cured or Cleared: subsequent HCV viral test 'not detected', following a previous 'detected' HCV viral test, through the end of 2024

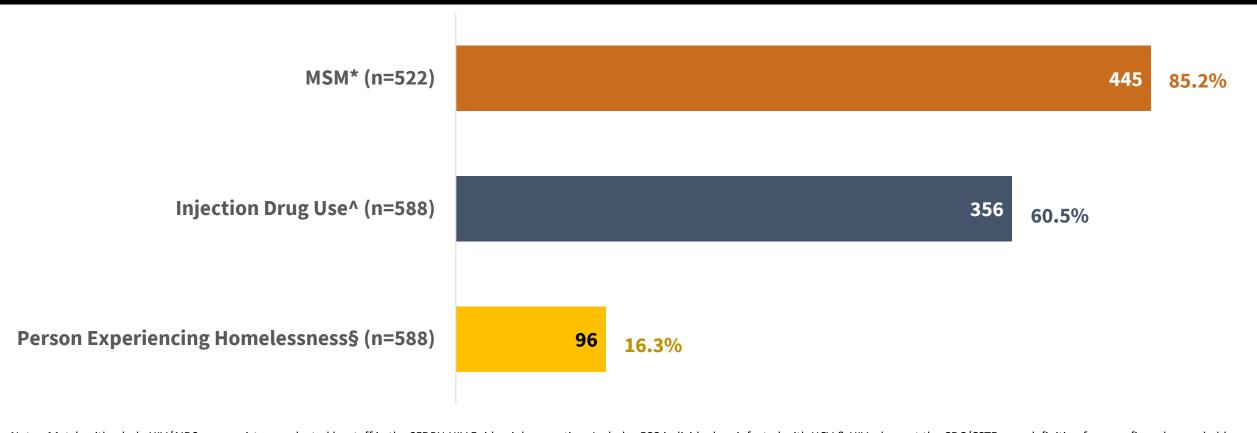
Insurance Status for Chronic HCV Cases with HIV coinfection, 2021-2024



20.2% of chronic HCV cases with HIV had no insurance at the time of their HIV diagnosis.

Notes: Match with whole HIV/AIDS case registry conducted by staff in the SFDPH HIV Epidemiology section. Includes 588 individuals coinfected with HCV & HIV who met the CDC/CSTE case definition for a confirmed or probable chronic HCV case, with at least one positive HCV lab reported from 2021-2024.

Risk Factors for Chronic HCV Cases with HIV coinfection, 2021-2024



Notes: Match with whole HIV/AIDS case registry conducted by staff in the SFDPH HIV Epidemiology section. Includes 588 individuals coinfected with HCV & HIV who met the CDC/CSTE case definition for a confirmed or probable chronic HCV case, with at least one positive HCV lab reported from 2021-2024. Risk factor data are from the HIV/AIDS case registry. Risk factors are not mutually exclusive.

Among chronic hepatitis C cases with HIV, 85.2% of persons born male were MSM and 60.5% overall had a history of injection drug use.

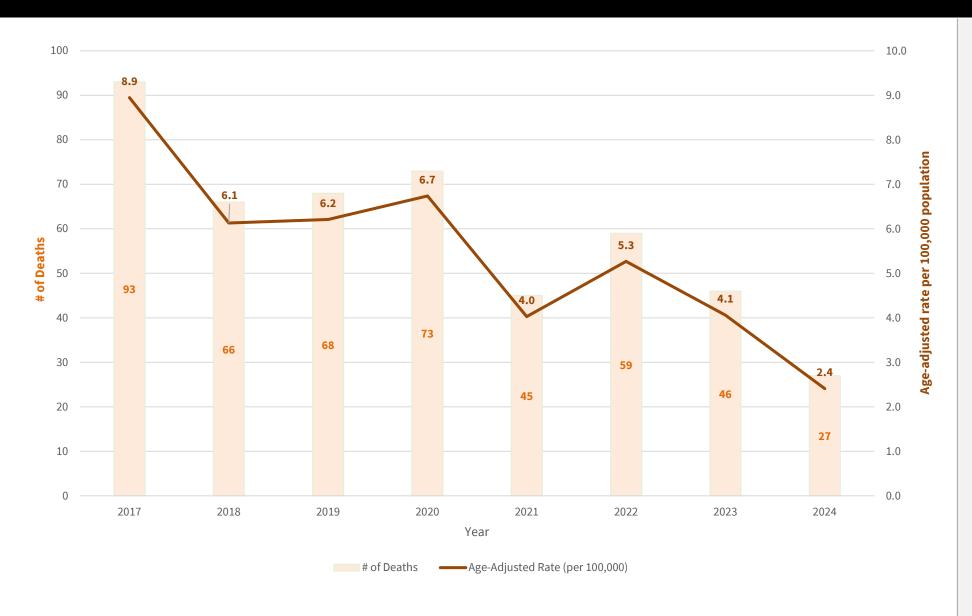
^{*} Men who have sex with men (MSM) defined as persons born male who had sex with men. Number & percentage excludes persons born female.

[^] Injected drugs prior to HIV diagnosis.

[§]Status based on most recent reported address in the HIV/AIDS case registry.

9 Hepatitis C Associated Deaths

Age-adjusted HCV-associated mortality rate among San Franciscans, 2017-2024



Since 2017, the mortality rate has decreased overall and meets the national goal of reducing the **HCV-related** death rate by 25% by 2025

Notes: Includes San Francisco decedents with HCV listed as one of the multiple causes of death in death certificate data

Want to know more?

Find the full report here:

https://www.sf.gov/resource/2024/viral-hepatitis-reports



San Francisco Department Of Public Health
Viral Hepatitis Surveillance Program
Applied Research, Community Health
Epidemiology And Surveillance Branch (ARCHES)
Population Health Division



POPULATION HEALTH DIVISION
SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH
DISEASE PREVENTION & CONTROL