Chronic Viral Hepatitis B Surveillance Report, 2024

SAN FRANCISCO, CALIFORNIA

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CONTENTS

EXECUTIVE SUMMARY

The Chronic Viral Hepatitis B Surveillance Report for 2024 presents data collected by the San Francisco Department of Public Health's (SFDPH) Viral Hepatitis Surveillance Program from January 1, 2021 through December 31, 2024 on persons who have chronic hepatitis B infection in San Francisco (SF). SFDPH receives confidential disease reports containing basic demographic information from laboratories and providers, as mandated by state regulation. This report provides an overview of hepatitis B infection in San Francisco based on surveillance data, vital records, and immunization registry data.

Key findings from the Chronic Viral Hepatitis B Surveillance Report for 2024 include the following:

- There were 462 newly reported chronic hepatitis B cases in San Francisco in 2024, with a rate of 55.2 per 100,000 people. The rate of newly reported chronic hepatitis B cases in San Francisco has been decreasing for the last several years.
- Males comprised 50.2% of all reported cases but 56.7% of newly reported chronic hepatitis B cases in 2024.
- Asians in San Francisco are disproportionately impacted by chronic hepatitis B:
  - In 2024, 84.5% of all reported cases and 64.0% of newly reported cases were Asian, while this population accounts for 34.7% of San Francisco's total population.
  - The Chinatown neighborhood bears the greatest burden of hepatitis B in San Francisco, with a rate of 252.3 per 10,000 people for all reported chronic hepatitis B cases and 24.5 per 10,000 people for newly reported cases.
- The hepatitis B vaccine is recommended for all infants by the American Academy of Pediatrics (AAP), with the initial dose given at birth.[1] 86.8% of all San Francisco newborns received the hepatitis B vaccine birth dose within 1 day after birth in 2024. This is a slight increase from 84.6% in 2023.
- In 2024, there were 22 hepatitis B related deaths in San Francisco with an age-adjusted death rate of 2.0 per 100,000 people, down from 44 deaths in 2019.

OVERVIEW OF HEPATITIS B INFECTION

Hepatitis B virus (HBV) causes a liver infection which can range from a mild illness lasting a few weeks to a serious, lifelong illness. HBV may be transmitted through blood, semen, or other body fluids from an infected person. Exposure can occur through sexual contact, needle sharing, needlestick injuries, or sharing items that may be contaminated with blood (e.g., razors, toothbrushes, etc.).[2,3] HBV can also be transmitted from an infected birth parent to their baby during birth, or rarely during pregnancy, unless hepatitis B immunoglobulin and vaccine are given to the infant within 12 hours of birth, followed by completion of a full hepatitis B vaccine series according to the recommendations by the AAP.[1,3]

Acute HBV infection may be asymptomatic or may cause an illness which can last up to six months. Symptoms of acute infection include nausea, vomiting, abdominal pain, jaundice, dark-colored urine, and light-colored stools. Most adults can resolve the infection on their own but approximately 90% of infected infants will develop chronic HBV.[3] Most people with chronic HBV are asymptomatic and are at increased risk of developing severe liver complications such as cirrhosis, liver failure, and liver cancer.[2,3]

Screening for HBV is recommended for: [4]

- all adults, 18 years and older, at least once in their lifetime using a triple panel test (hepatitis B surface antigen [HBsAg], hepatitis B surface antibody, and total antibody to hepatitis B core antigen [anti-HBc]) AND
- all pregnant people during each pregnancy, regardless of vaccination status or testing history, for HBsAg.

HBV testing is recommended for people at an increased risk for HBV exposure, with periodic testing for those with ongoing risks for exposure.[4] This includes:

- people born in regions where HBV prevalence is >2%
- people with a history of injection drug use
- men who have sex with men (MSM)
- people with a history of incarceration
- infants born to people who test positive for HBsAg
- household contacts, sexual partners, and/or needle-sharing partners of people with HBV infection
- United States-born people who were not vaccinated as infants and whose parents were born in regions with high HBV prevalence
- people with elevated liver enzymes
- people on long-term dialysis
- people with a history of hepatitis C infection
- people with HIV infection

HBV infection is vaccine-preventable. Although the Advisory Committee on Immunization Practices (ACIP) voted to eliminate the universal hepatitis B vaccination birth dose recommendation in December 2025, the California Department of Public Health (CDPH), SFDPH, AAP, and other trusted organizations continue to recommend that hepatitis B vaccination be routinely offered to all newborns.[5] The vaccine has been shown to be safe and efficacious since its introduction in 1982.[6] Vaccination is recommended for all infants, unvaccinated children and adolescents < 19 years old, adults aged 19–59 years, and adults 60 years and older with risk factors for HBV.[2] Antiviral medications are available for people living with chronic HBV. Although treatment is not considered curative, linkage to care after diagnosis is critical for regular monitoring and possible treatment to prevent and reduce morbidity and mortality.[7]

For more information about HBV, visit:
https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Hepatitis-B.aspx

CHRONIC HEPATITIS B CASES IN SAN FRANCISCO, 2024

CORE SURVEILLANCE DATA

The data presented in this section represent all persons who met the Centers for Disease Control and Prevention (CDC)/Council of State and Territorial Epidemiologists (CSTE) laboratory criteria for probable or confirmed chronic hepatitis B cases.

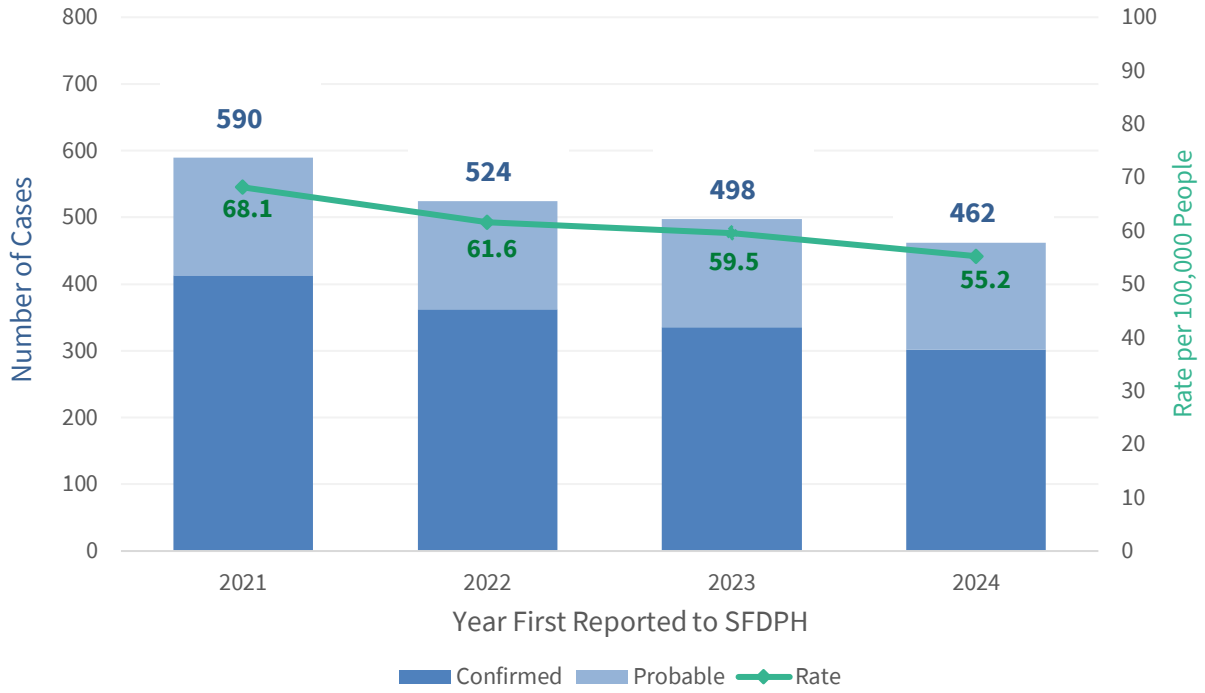
From January 1, 2024 through December 31, 2024

SFDPH received over **11,000** positive HBV laboratory reports → Reports represented **6,350** individuals with probable (161) or confirmed (6189) chronic HBV (all reported cases) → **462 (7.3%)** of all reported cases were newly reported, of which 160 were probable and 302 were confirmed

Figure 1. Number & rate of newly reported chronic HBV cases, 2021-2024

Number of newly reported chronic HBV cases in San Francisco in 2024: **462**

Rate of newly reported chronic HBV cases in San Francisco in 2024: **55.2** per 100,000 people



Note: The CDC/CSTE chronic HBV case definition changed in 2024. The 2024 case definition was applied to all cases in this report, including those first reported to SFDPH prior to 2024. This updated case definition may lead to changes in newly reported yearly confirmed and probable case counts compared to previous reports (see Technical Notes).

* Newly reported cases are cases with positive HBV results reported to SFDPH for the first time during the reporting period, with no previously reported positive HBV result; they do not represent incidence or new infections (see Data Limitations).

>>> For more information, see Technical Notes.

Per the CDC/CSTE chronic HBV case definition:[8]

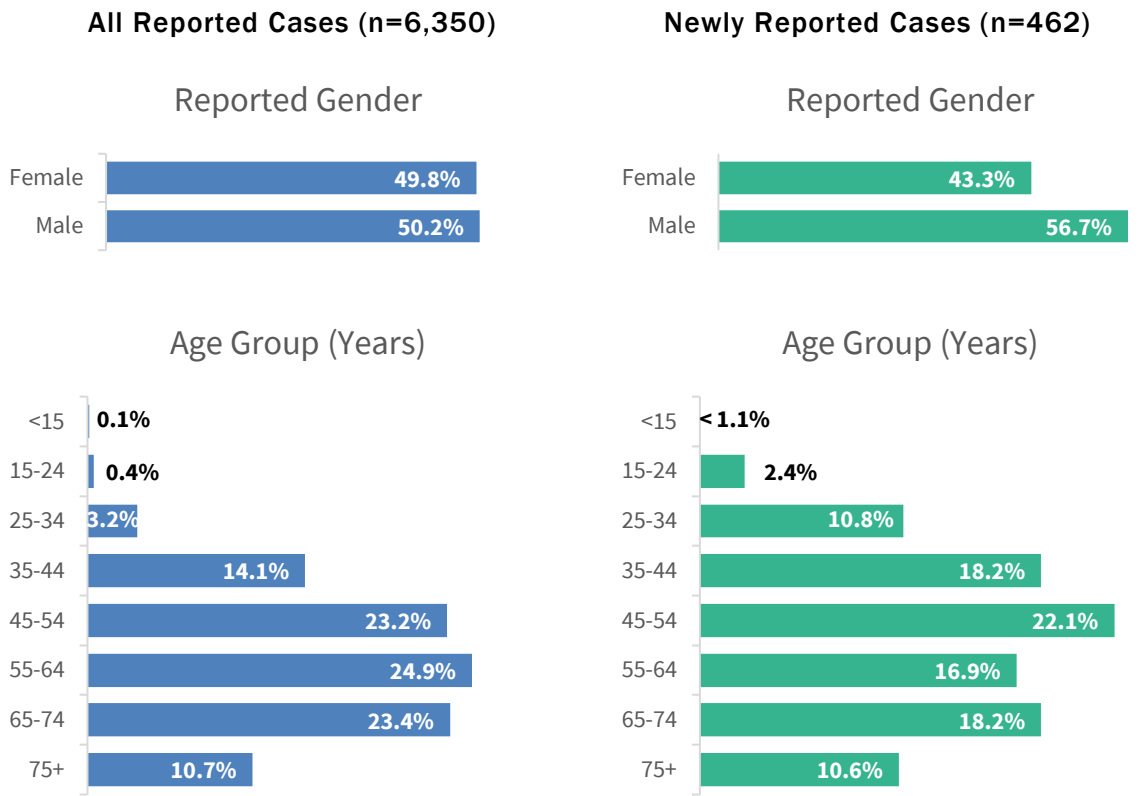
Probable: Cases with a detected HBsAg or hepatitis B e antigen (HBeAg) AND test negative, not done, or result not available for IgM anti-HBc.

Confirmed: Cases with: a) detected HBsAg in two specimens taken ≥ 6 months apart, or b) detected HBeAg in two specimens taken ≥ 6 months apart, or c) detected HBsAg or HBeAg AND detected total anti-HBc, or d) detected HBsAg and HBeAg, or e) detected HBV DNA.

In 2024, **161 (2.5%)** of the 6,350 all reported cases and **160 (34.6%)** of the 462 newly reported cases were probable HBV cases. The remaining **6,189 (97.5%)** of all reported cases and **302 (65.4%)** of newly reported cases were confirmed chronic HBV cases.

Reported Gender and Age

Figure 2. Reported gender & age group of all & newly reported chronic HBV cases, 2024



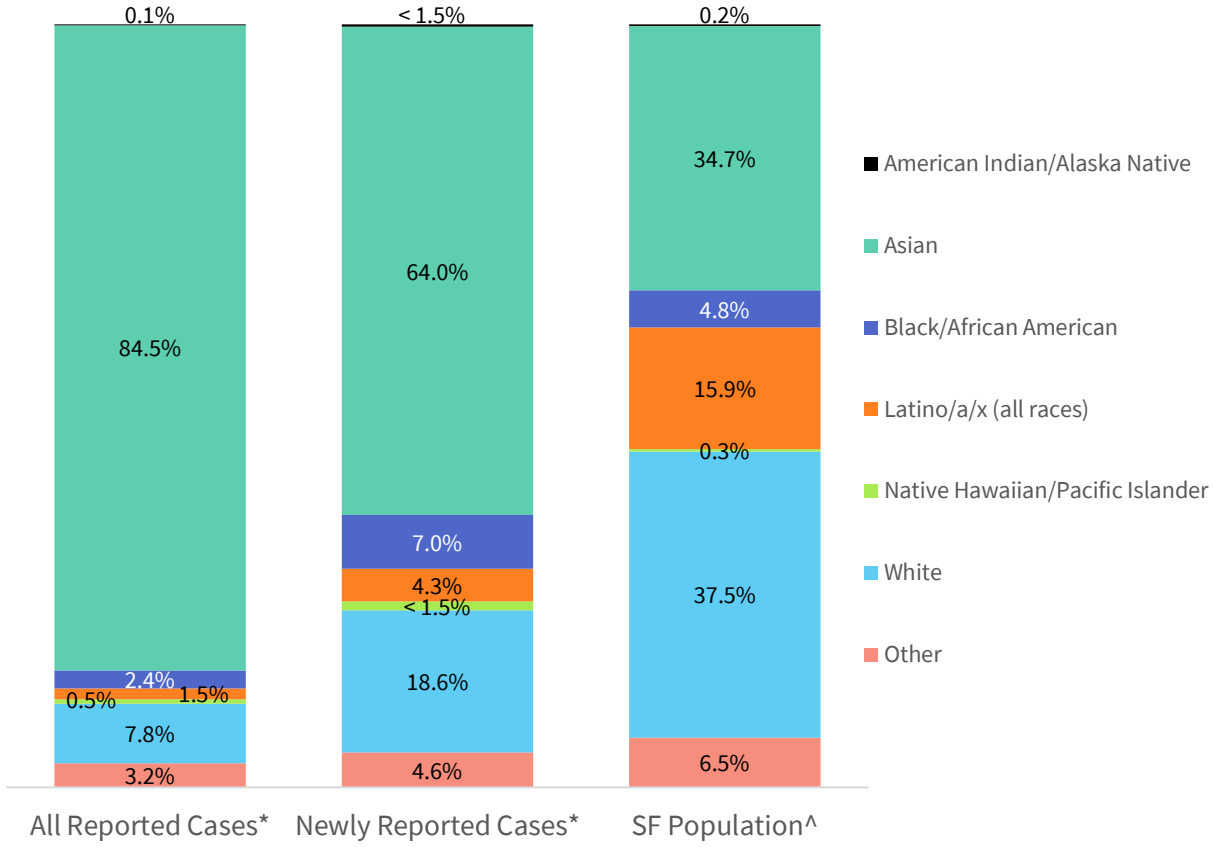
Among chronic HBV cases reported in 2024, **males** comprised **50.2%** of all reported cases but **56.7%** of newly reported cases.

In 2024, the age groups with the highest proportion of cases were **55-64 years** (**24.9%**) **among all reported cases** and **45-54 years** (**22.1%**) **among newly reported cases**.

>>> For more information & data on HBV cases in 2024, see Technical Notes & Table 1.

Race/Ethnicity

Figure 3. Race/ethnicity of all & newly reported chronic HBV cases and the SF population, 2024



***** Race/ethnicity data is missing for 612/6350 (9.6%) of all reported and 134/462 (29.0%) of newly reported cases in 2024.
^ San Francisco Population data source: American Community Survey 5-year estimate 2019-2023[9]

In 2024, 84.5% of all reported cases and 64.0% of newly reported cases were **Asian**, while Asians comprised 34.7% of the SF Population.

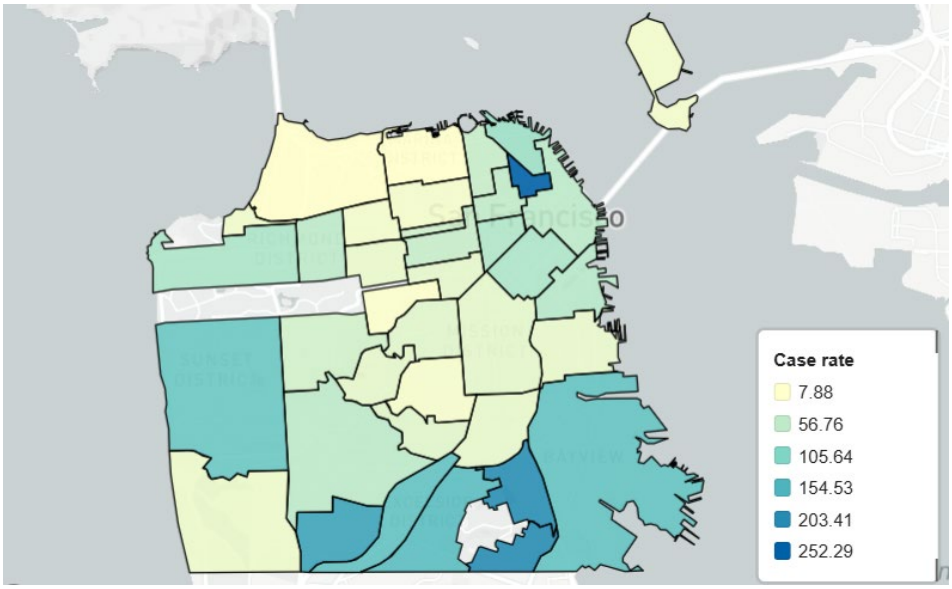
This is consistent with state and national findings, showing that rates of newly reported chronic HBV were highest among Asian/Pacific Islanders in California[10] and the U.S.[11] Additionally, findings from a study of HBsAg prevalence in selected California counties found that, in the San Francisco Bay Area, Asian/Pacific Islanders comprised 88.5% of the HBsAg-positive cases; of which, 84.0% were foreign-born.[12]

>>> For more information & data on HBV cases in 2024, see Technical Notes & Table 1.

Geographic Distribution

The following figures map the number of chronic HBV cases by neighborhood, per 10,000 population. Neighborhoods with a higher case rate are dark blue while those with a lower case rate are light yellow.

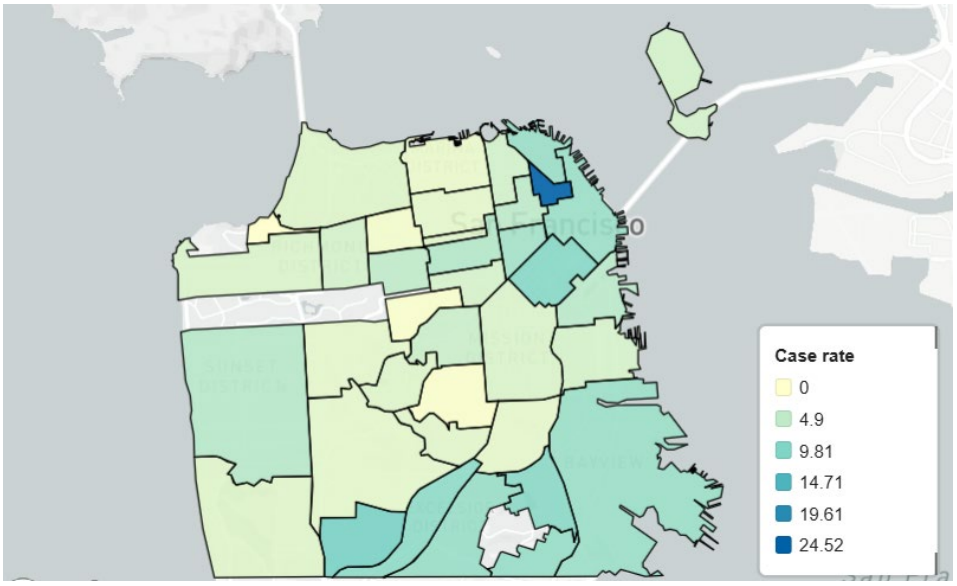
Figure 4. All reported chronic HBV cases in San Francisco by neighborhood, 2024*



Neighborhoods with highest rates of all reported chronic HBV cases (per 10,000 residents):

1. Chinatown (252.3)
2. Visitacion Valley (202.1)
3. Portola (199.3)

Figure 5. Newly reported chronic HBV cases in San Francisco by neighborhood, 2024*



Neighborhoods with highest rates of newly reported chronic HBV cases (per 10,000 residents):

1. Chinatown (24.5)
2. Oceanview/ Merced/ Ingleside (10.5)
3. South of Market (9.3)

Notes:

- 97/6350 (1.5%) of all reported and 34/462 (7.4%) of newly reported cases could not be geocoded and are not shown.
- Neighborhoods with a population fewer than 1,000 people are not included and are greyed out.
- San Francisco Population data source: American Community Survey 2019-2023 5-year estimate .[9]

Chinatown has the highest rates of all reported and newly reported chronic HBV cases, further highlighting the disproportionate impact of chronic HBV among Asians in SF.

>>> For all neighborhood case counts & rates in 2024, see Tables 2 & 3.

HEPATITIS B VACCINE BIRTH DOSE

To help prevent HBV infection, the AAP recommends universal hepatitis B vaccination for all infants, with the initial dose given within 24 hours of birth.[1] The AAP and other national medical organizations still strongly recommend the hepatitis B vaccine 'birth dose' despite changes in recommendations by CDC's ACIP.[3,5] The hepatitis B vaccine 'birth dose' has shown to be safe and effective at reducing HBV transmission; there are no known safety benefits in delaying the first dose.[6]

Percentage of San Francisco newborns in 2024 who received the HBV vaccine birth dose within 1 day after birth: 86.8%

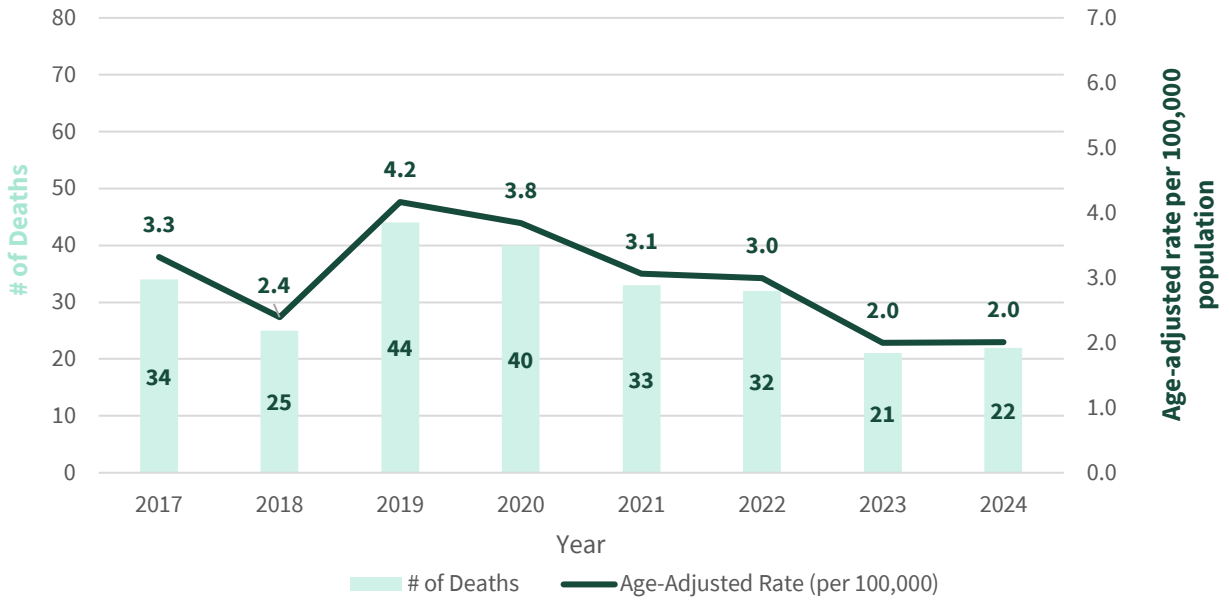
This is an increase from the percentage in 2023 of 84.6% and progress towards the World Health Organization target of 90% by 2030.[13]

>>> For more information on the hepatitis B vaccine birth dose, see Technical Notes.

HEPATITIS B ASSOCIATED DEATHS

Hepatitis B is associated with increased risk for premature death.[14] Age-adjusted mortality rates among San Francisco decedents with HBV listed as one of the multiple causes of death in death certificate data are presented in this section.

Figure 6. Age-adjusted HBV-associated mortality rate among San Franciscans, 2017-2024



In 2024, the number of HBV-associated deaths was **22** and the age-adjusted HBV-associated death rate per 100,000 people was **2.0**. This is a decrease overall since 2017 and meets the U.S. Department of Health & Human Service's national goal of reducing the rate of HBV-related deaths by 20% by 2025, [15] but is higher than the most recent state death rate of 0.7 and national death rate of 0.4 deaths per 100,000.[11]

>>> For more information on hepatitis B associated deaths, see Technical Notes.

TECHNICAL NOTES

Listed below are the technical notes for the HBV surveillance data in this report.

- **Analyses:** SAS version 9.4 and Microsoft Excel were used for descriptive and statistical analyses, tables, and figures, unless otherwise noted.
- **Case counts less than five:** All case counts less than five are displayed as "<5" and corresponding percentages or rates are displayed as less than the corresponding rate or percentage for five cases.
- **Rates:** Case rates for newly reported chronic HBV cases from 2021-2024 (figure 1) were calculated as the number of newly reported chronic HBV cases reported to SFDPH for a given year divided by the San Francisco population for that year multiplied by 100,000. Case rates for the geographic distribution analysis (figures 4 & 5; tables 2 & 3) were calculated as the number of chronic HBV cases reported to SFDPH in 2024 divided by the San Francisco population multiplied by 10,000. Death rates (figure 6) are age-adjusted per 100,000, weighted to the U.S. 2000 standard population. San Francisco population estimates used for denominators were from the American Community Survey (ACS) 5-year estimates.[9] Case rates in this report are not prevalence rates or incidence rates (see Data Limitations).
- **Total Percentages:** Percentages may not total 100 due to rounding.
- **Confidentiality:** Data collected and summarized in this report is kept strictly confidential. SFDPH is authorized by law to collect information on HBV infections for the purpose of controlling or preventing disease including: the reporting of disease, the conduct of public health surveillance, public health investigation and public health intervention.[16] SFDPH employees have a legal and ethical responsibility to protect the confidentiality of protected health information and to use that information only in the performance of their jobs.
- **Changes in Data from Previous Reports:** Changes in data in this report from previous reports may be due to delays in reporting, changes in definitions or methodology, or corrections to the data, such as the removal of duplicates. Changes in rates may be due to updated population data in the denominator of rate calculations.

CORE SURVEILLANCE DATA NOTES

- **Persons included in the 2024 Core Surveillance:** Core surveillance data in 2024 include all persons who met laboratory criteria for probable or confirmed chronic hepatitis B infections with at least one positive HBV test result (HBsAg, HBeAg, or HBV DNA) reported to SFDPH from January 1, 2024 – December 31, 2024.
- **Laboratory Results Reporting and Data Storage:** Laboratorians, clinicians, and other mandated reporters report positive and certain negative HBV test results to the SFDPH in compliance with Title 17, California Code of Regulations (CCR), Sections 2500 and 2505.[17] According to the California Health and Safety Code (HSC) Section 120130, laboratories are required to submit lab results electronically to the state electronic reporting system.[18]

Laboratories and providers are required to report test results, patient identifiers (e.g., name, date of birth, gender, address, phone number, medical record number) and provider identifiers (e.g., name, facility, address).[18] SFDPH receives and stores the reported information in a secure, electronic, person-based database. Laboratory data are quality-checked and deduplicated on a routine basis.

- **CDC/CSTE Chronic Hepatitis B Case Definition:** The 2024 CDC/CSTE laboratory criteria for diagnosis are applied to HBV test results to identify persons with probable and/or confirmed chronic hepatitis B.[8] CDC/CSTE defines a *probable* case of chronic hepatitis B as a person with detected HBsAg or HBeAg AND IgM anti-HBc test negative, not done, or result not available. A *confirmed* case of chronic hepatitis B is a person with: a) detection of HBsAg in two clinical specimens taken more than 6 months apart, or b) detection of HBeAg in two clinical specimens taken more than 6 months apart, or c) detection of HBsAg or HBeAg AND total anti-HBc, or d) detection of HBsAg and HBeAg, or e) detection of HBV DNA. The 2024 case definition was applied to all cases in this report, including those first reported to SFDPH prior to 2024, in order to better assess trends over time; this updated case definition may lead to changes in newly reported yearly confirmed and probable case counts compared to previous reports.
- **Newly Reported Cases:** Newly reported cases are persons reported to SFDPH who met laboratory criteria for probable or confirmed chronic hepatitis B for the first time during the reporting period and for whom no positive HBV laboratory report had previously been received.
- **All Reported Cases:** All reported cases are persons who were reported to SFDPH with a positive HBV lab report in 2024 and met the laboratory criteria for a probable or confirmed chronic hepatitis B case. This includes both newly reported cases in 2024, as well as those who were reported for the first time prior to 2024 and had a positive HBV lab reported in 2024.
- **Reported Gender:** In 2019, Title 17 was changed, requiring gender to be reported with laboratory results.[17] However, laboratories only report one field for sex and gender, with no way to determine whether sex assigned at birth or gender identity is being reported. In this report, reported gender is the gender/sex as reported by laboratories/facilities.
- **Age:** Age is defined as the age of the person at the time when their first positive HBV result was received by SFDPH in 2024.
- **Race/Ethnicity:** Race/ethnicity is obtained from the laboratory report and classified as American Indian/Alaska Native, Asian, Black/African American, Latino/a/x, Native Hawaiian/Pacific Islander, White, or Other. Latino/a/x ethnicity includes all persons of Latino/a/x ethnicity regardless of race; all other race categories do not include persons of Latino/a/x ethnicity. Other includes multi-race categories or those reported with race 'Other' in laboratory reports. The number and percent of persons for whom race/ethnicity is missing or unknown is shown in the footnotes of tables/figures.
- **Addresses and Geocoding:** Only individuals in the hepatitis registry with a recent San Francisco address or whose address is unknown/missing are included in this report. Address information was geocoded using ArcGIS Pro to identify latitude and longitude and then matched to San Francisco neighborhoods using R. Cases that could not be geocoded due to missing or unknown

residential address information are excluded from the geographic distribution analysis. The number and percentage of persons for whom an address is unknown is shown in table/figure footnotes. Data for neighborhoods with a case count that is less than five or with a population of <1000 are not disclosed.

HEPATITIS B VACCINE BIRTH DOSE NOTES

- **San Francisco newborns who received the hepatitis B vaccine birth dose:** Hepatitis B vaccination data for San Francisco newborns are from the California Immunization Registry (CAIR). Per Assembly Bill (AB) 1797, all California vaccine providers are required to report immunization data to CAIR as of January 1, 2023.[19]
- **San Francisco newborns:** The number of San Francisco resident newborns used for the denominators for the HBV vaccine birth dose percentages are from the California Department of Public Health's (CDPH) Vital Record Business Information System (VRBIS), as analyzed by the SFDPH Maternal Child & Adolescent Health Epidemiology Section.[20]
- **Underreporting of vaccinations:** Vaccine doses may be underreported to CAIR since it may have taken some time for submitters to be compliant to AB 1797 or patients may have moved out of California.[21]

HEPATITIS B ASSOCIATED DEATHS NOTES

- **Hepatitis B associated deaths:** The death analysis includes all decedents from 2017-2024 reported to CDPH's vital records system, VRBIS, with a San Francisco address and with HBV listed as one of the multiple causes of death.
- **Cause of Death:** Causes of death are not mutually exclusive. Hepatitis B-associated causes of death were determined based on the International Classification of Diseases, 10th Revision (ICD-10) codes.[22] Decedents with any of the following ICD-10 codes listed as one of the multiple causes of death are included in the analysis: B16, B16.1, B16.2, B16.9, B17.0, B18.0, and B18.1.
- **Interpretation of HBV deaths:** Death rates should be interpreted with caution due to the underreporting of HBV as a cause of death, [14] the impact of the COVID-19 pandemic on overall mortality, and the possibility of misclassification of ICD-10 codes on death records.

DATA LIMITATIONS

1. Surveillance data do not measure prevalence: The data presented are not an estimate of the prevalence of chronic HBV infection in San Francisco residents. Prevalence cannot be calculated because some persons infected with HBV are not tested, and others were tested before consistent reporting to SFDPH was established. In addition, some persons who were tested anonymously may not have been reported to SFDPH. Finally, the data presented may include persons who have left San Francisco or may have died after they were reported to SFDPH.

2. Surveillance data do not measure incidence: The data presented are not an estimate of the incidence rate of chronic hepatitis B cases in 2024. The incidence rate is the number of newly infected persons occurring within a defined time in a defined geographical area. While the date of initial reporting to SFDPH is tracked, this date does not necessarily reflect the initial infection or diagnosis date. For example, a person may have been infected many years ago but was not tested until 2024 when a clinician was following recommended screening practices or because symptoms of chronic hepatitis had developed.

3. Reporting gaps: Complete identification of chronic HBV cases depends on complete reporting by laboratories and clinicians. Title 17, CCR mandates clinicians to report cases of chronic hepatitis B to SFDPH[17]; however, the majority of cases are reported by laboratories and not by clinicians. In addition, there are likely San Francisco residents with chronic hepatitis B who did not receive laboratory testing for HBV in 2024 and whose treating clinician did not report their condition. Information about these persons is therefore missing from this report. Finally, people who were included in these data may not live in San Francisco, either because their address information was not provided, or they have moved.

5. Missing information: Laboratory information systems frequently do not receive or store information about patient race and ethnicity, resulting in a large proportion of cases reported with unknown race and ethnicity. Similarly, some laboratory reports are missing a residential address. Of the chronic HBV cases reported to SFDPH in 2024, approximately 1.0% were missing street address, city, and ZIP code information. Additionally, some cases were reported with a home address identical to the clinic or outpatient medical facility where they received care; these cases' residences were considered unknown for this report. Since individuals whose county of residence was unknown are included in this report along with persons known to live in San Francisco, the core surveillance data presented may overestimate the number of San Franciscans who were reported with chronic hepatitis B in 2024.

6. Duplication: SFDPH follows procedures to minimize duplicate records for persons whose laboratory results may be submitted with slight variations in name spelling (e.g., use of middle initial, typographic error). However, in some instances, it may not be obvious that two different names belong to the same person, so two cases will be recorded instead of one. This would lead to a slight overestimate of the number of reported chronic HBV cases in this period. Conversely, in some situations, information from a case may have been erroneously matched and joined to the information from another case, leading to potential underestimation of the number of chronic HBV cases reported in this period.

DATA TABLES

Table 1: Characteristics of chronic HBV cases in San Francisco, 2024

	All Reported Cases[2]		Newly Reported Cases[2]	
	Number	Percentage (Column)	Number	Percentage (Column)
All	6350	100.0%	462	100.0%
HBV Case Status				
Confirmed	6189	97.5%	302	65.4%
Probable	161	2.5%	160	34.6%
Reported Gender				
Female	3161	49.8%	200	43.3%
Male	3189	50.2%	262	56.7%
Age Group (Years)				
<15	7	0.1%	< 5	< 1.1%
15-24	26	0.4%	11	2.4%
25-34	205	3.2%	50	10.8%
35-44	893	14.1%	84	18.2%
45-54	1476	23.2%	102	22.1%
55-64	1578	24.9%	78	16.9%
65-74	1487	23.4%	84	18.2%
75+	678	10.7%	49	10.6%
Race/Ethnicity[1]				
American Indian/Alaska Native	8	0.1%	< 5	< 1.5%
Asian	4849	84.5%	210	64.0%
Black/African American	135	2.4%	23	7.0%
Latino/a/x (all races)	85	1.5%	14	4.3%
Native Hawaiian/Pacific Islander	30	0.5%	< 5	< 1.5%
White	449	7.8%	61	18.6%
Other	182	3.2%	15	4.6%

1. Race/Ethnicity is missing for 612/6350 (9.6%) of all reported cases and 134/462 (29.0%) of newly reported cases.
2. Number and percentage are not shown for categories with fewer than 5 cases.

Table 2: **All reported** chronic HBV case count, case rate, and population estimate by San Francisco neighborhood, 2024[1]

San Francisco neighborhood[2]	Case count[3]	Case rate[3,4]	Population estimate[5]	San Francisco neighborhood[2]	Case count[3]	Case rate[3,4]	Population estimate[5]
Chinatown	319	252.3	12,644	Japantown	18	45.7	3,936
Visitacion Valley	345	202.1	17,068	Inner Sunset	119	43.2	27,534
Portola	310	199.3	15,558	Glen Park	27	31.9	8,458
Oceanview/ Merced/Ingleside	433	174.8	24,770	Castro/Upper Market	70	31.8	22,024
Excelsior	540	142.4	37,915	Hayes Valley	53	29.1	18,240
Outer Mission	292	134.5	21,717	Mission	155	28.5	54,431
Bayview Hunters Point	528	132.6	39,816	Twin Peaks	22	28.0	7,861
Sunset/ Parkside	958	127.0	75,455	Bernal Heights	65	26.3	24,725
North Beach	96	83.5	11,497	Potrero Hill	40	25.9	15,463
Outer Richmond	316	71.7	44,049	Lone Mountain/USF	41	25.0	16,387
South of Market	174	70.5	24,698	Lakeshore	26	21.6	12,019
Tenderloin	219	68.4	32,009	Seacliff	5	20.7	2,419
Mission Bay	107	64.0	16,710	Presidio Heights	18	18.1	9,942
Financial District/ South Beach	147	60.0	24,519	Treasure Island	5	17.7	2,829
West of Twin Peaks	218	59.1	36,882	Pacific Heights	39	17.0	22,976
Inner Richmond	119	58.7	20,261	Noe Valley	37	15.9	23,334
Nob Hill	132	56.1	23,526	Haight Ashbury	19	10.7	17,780
Western Addition	113	51.2	22,066	Marina	19	8.0	23,733
Russian Hill	86	51.0	16,879	Presidio	<5	<13.1	3,808

1. A total of 97/6350 (1.5%) of all reported cases could not be geocoded and are not shown.
2. Neighborhoods with a population fewer than 1,000 people are not included.
3. Case counts and case rates for neighborhoods with fewer than five cases are displayed as '<5' and less than the corresponding rate for five cases, respectively.
4. The case rate is the number of cases by neighborhood per 10,000 population.
5. San Francisco Population data source: American Community Survey 2019-2023 5-year estimate.[9]

Table 3: **Newly reported** chronic HBV case count, case rate, and population estimate by San Francisco neighborhood, 2024[1]

San Francisco neighborhood[2]	Case count[3]	Case rate[3,4]	Population estimate[5]	San Francisco neighborhood[2]	Case count[3]	Case rate[3,4]	Population estimate[5]
Chinatown	31	24.5	12,644	Hayes Valley	6	3.3	18,240
Oceanview/ Merced/ Ingleside	26	10.5	24,770	Potrero Hill	5	3.2	15,463
South of Market	23	9.3	24,698	Outer Richmond	13	3.0	44,049
Portola	14	9.0	15,558	Mission	16	2.9	54,431
Outer Mission	19	8.7	21,717	West of Twin Peaks	8	2.2	36,882
Visitacion Valley	14	8.2	17,068	Inner Sunset	6	2.2	27,534
Excelsior	30	7.9	37,915	Pacific Heights	5	2.2	22,976
Bayview Hunters Point	31	7.8	39,816	Bernal Heights	5	2.0	24,725
North Beach	9	7.8	11,497	Marina	<5	<2.1	23,733
Financial District/ South Beach	19	7.7	24,519	Noe Valley	<5	<2.1	23,334
Tenderloin	23	7.2	32,009	Haight Ashbury	<5	<2.8	17,780
Western Addition	13	5.9	22,066	Lakeshore	<5	<4.2	12,019
Sunset/ Parkside	42	5.6	75,455	Presidio Heights	<5	<5	9,942
Mission Bay	9	5.4	16,710	Glen Park	<5	<5.9	8,458
Nob Hill	12	5.1	23,526	Twin Peaks	<5	<6.4	7,861
Lone Mountain/USF	8	4.9	16,387	Japantown	<5	<12.7	3,936
Castro/ Upper Market	9	4.1	22,024	Presidio	<5	<13.1	3,808
Russian Hill	6	3.6	16,879	Treasure Island	<5	<17.7	2,829
Inner Richmond	7	3.5	20,261	Seacliff	<5	<20.7	2,419

1. A total of 34/462 (7.4%) of newly reported cases could not be geocoded and are not shown.
2. Neighborhoods with a population fewer than 1,000 people are not included.
3. Case counts and case rates for neighborhoods with fewer than five cases are displayed as '<5' and less than the corresponding rate for five cases, respectively.
4. The case rate is the number of cases by neighborhood per 10,000 population.
5. San Francisco Population data source: American Community Survey 2019-2023 5-year estimate.[9]

REFERENCES

1. American Academy of Pediatrics. Recommended Child and Adolescent Immunization Schedule. AAP.org/ImmunizationSchedule. Accessed February 2026.
2. California Department of Public Health. Hepatitis B. What you need to know. https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/STI/Hepatitis-B.aspx. Accessed February 2026.
3. American Academy of Pediatrics. Healthy Children.org. Why Do Babies Need the Hepatitis B Vaccine? https://www.healthychildren.org/English/safety-prevention/immunizations/Pages/hepatitis-b-vaccine-what-you-need-to-know.aspx. Accessed February 2026.
4. Conners EE, Panagiotakopoulos L, Hofmeister MG, et al. Screening and Testing for Hepatitis B Virus Infection: CDC Recommendations — United States, 2023. MMWR Recomm Rep 2023;72(No. RR-1):1–25. DOI: http://dx.doi.org/10.15585/mmwr.rr7201a1
5. California Department of Public Health. Office of Communications. The West Coast Health Alliance, CDPH, and Leading National Medical Organizations Continue to Recommend Hepatitis B Vaccination for Newborns. https://www.cdph.ca.gov/Programs/OPA/Pages/NR25-022.aspx#. December 2025.
6. CIDRAP. Vaccine Integrity Project. Universal Hepatitis B Vaccination at Birth: Safety, Effectiveness, and Public Health Impact. https://www.cidrap.umn.edu/vaccine-integrity-project/hepatitis-b. December 2, 2025
7. Centers for Disease Control and Prevention. Hepatitis B. Treatment of Hepatitis B. https://www.cdc.gov/hepatitis-b/treatment/index.html. Accessed February 2026.
8. Centers for Disease Control and Prevention. National Notifiable Diseases Surveillance System. Hepatitis B, acute and chronic, 2024 Case Definition. https://ndc.services.cdc.gov/case-definitions/hepatitis-b-acute-and-chronic-2024/. Accessed February 2026.
9. DataSF. Open Data. Economy & Community. San Francisco Population and Demographic Census data. https://data.sfgov.org/Economy-and-Community/San-Francisco-Population-and-Demographic-Census-Da/4qbq-hvtt/about_data. Accessed February 2026.
10. California Department of Public Health. California Hepatitis B Landscape Analysis 2025. https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/Immunization/California-Hepatitis-B-Landscape-Analysis-2025.pdf. September 2025.
11. Centers for Disease Control and Prevention. Viral Hepatitis Surveillance Report – United States, 2023. https://www.cdc.gov/hepatitis-surveillance-2023/about/index.html. April 2025. Accessed February 2026.

12. Toy M, Wei B , Virdi TS, Le A, Trinh H, Li J, Zhang J, Hsing AW, So SK, Nguyen MH. Racial/ethnic- and county-specific prevalence of chronic hepatitis B and its burden in California. Hepatology, Medicine and Policy. 2018. 3:6 https://doi.org/10.1186/s41124-018-0034-7.

13. World Health Organization. Global Health Sector Strategy on Viral Hepatitis 2016-2021: Towards Ending Viral Hepatitis. June 2016. https://www.who.int/publications/i/item/WHO-HIV-2016.06.

14. Bixler D, Zhong Y, Ly KN, Moorman AC, Spradling PR, Teshale EH, Rupp LB, Gordon SC, Boscarino JA, Schmidt MA, Daida YG, Holmberg SD. Mortality Among Patients With Chronic Hepatitis B Infection: The Chronic Hepatitis Cohort Study (CHeCS). Clinical Infectious Diseases. 2019; 68(6): 956–963, https://doi.org/10.1093/cid/ciy598

15. US Department of Health and Human Services. Viral Hepatitis National Strategic Plan for the United States: a Roadmap to Elimination for the United States, 2021–2025. Washington, DC: US Department of Health and Human Services; 2020. https://www.hhs.gov/sites/default/files/Viral-Hepatitis-National-Strategic-Plan-2021-2025.pdf

16. U. S. Department of Health and Human Services. Health Information Privacy. Disclosures for Public Health Activities. 45 CFR 164.512(b). https://www.hhs.gov/hipaa/for-professionals/privacy/guidance/disclosures-public-health-activities/index.html. Accessed February 2026.

17. Title 17 California Code of Regulations § 2500 and § 2505. https://oal.ca.gov/publications/ccr/ (Search for Title 17, Section 2500 or 2505). Accessed February 2026.

18. California Code, Health and Safety Code - HSC § 120130. https://codes.findlaw.com/ca/health-and-safety-code/hsc-sect-120130/. Accessed February 2026.

19. California Legislative Information. Assembly Bill No. 1797 Immunization registry. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1797. Accessed February 2026.

20. SF.gov. Number of live births in San Francisco. https://www.sf.gov/data--number-live-births-san-francisco. Accessed February 2026.

21. California Department of Public Health. California Immunization Registry. CAIR Data Analysis Considerations. https://www.cdph.ca.gov/Programs/CID/DCDC/CAIR/CDPH%20Document%20Library/CAIRDataAnalysisConsiderations.pdf. Accessed February 2026.

22. World Health Organization. International Classification of Diseases, 10th Geneva: World Health Organization; 1998. http://www.who.int/classifications/icd/en/. Accessed February 2026.