

MONTHLY COMMUNICABLE DISEASE REPORT

DECEMBER 2022

Volume 6, Issue 12: January 20, 2023

HEPATITIS B

Hepatitis B is a vaccine-preventable viral infection that is transmitted perinatally, percutaneously, and via sexual contact and other close person-to-person contact where there is an open infectious source. Hepatitis B infection can be acute, a short-term illness occurring within the first 6 months after exposure, or it can be chronic, persisting longer than 6 months.

The acute phase of hepatitis B is often asymptomatic, especially for those <5 years old. When symptoms do occur, they may include fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay-colored stools, and jaundice. These symptoms usually resolve within a few weeks to 6 months. However, some people infected with hepatitis B go on to develop chronic hepatitis B, which can lead to serious health problems, such as cirrhosis and liver cancer. Chronic hepatitis B is more common in people who are infected at a young age, but it can occur in people of any age. Approximately 90% of infants develop chronic disease. Conversely, around 95% of adults clear the acute infection.

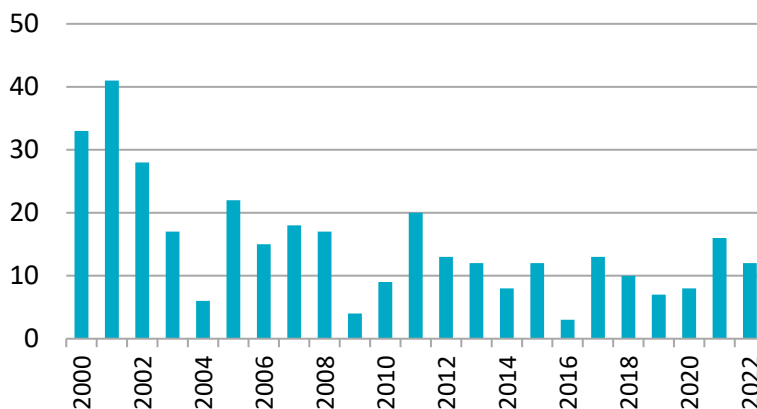
In the United States (U.S.), incidence and prevalence of hepatitis B vary by region and demographic factors. According to [data from the Centers for Disease Control and Prevention \(CDC\)](#), the overall rate of reported acute hepatitis B cases in the U.S. was 0.7 per 100,000 in 2020; however, the COVID-19 pandemic likely resulted in decreased testing and subsequent reporting.

Certain regions of the U.S. have a higher incidence of hepatitis B, particularly parts of the south and Appalachia where rates may be up to 3.2 cases per 100,000. This is thought to be associated with the opioid epidemic, which has resulted in significant increases in acute hepatitis B in states such as Kentucky, West Virginia, and Tennessee. In 2020, the highest incidence of acute hepatitis B was among White and Black non-Hispanic populations at 0.7 cases per 100,000.

An analysis using 1999-2016 data from the National Health and Nutrition Examination Survey (NHANES) found overall [chronic hepatitis B prevalence](#) in the U.S. to be 0.35%, with higher prevalence among foreign-born persons

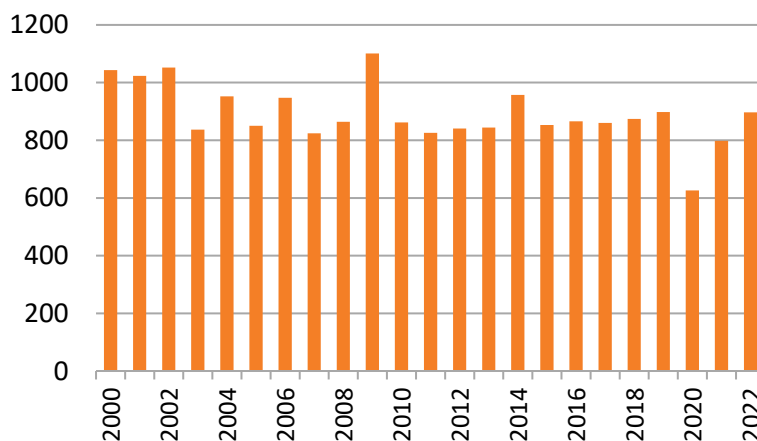
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Figure 1. Acute Hepatitis B Cases, San Diego County, 2000-2022



Data are provisional and subject to change as additional information becomes available. Grouped by CDC disease years.

Figure 2. Newly-Reported Chronic Hepatitis B Cases, San Diego County, 2000-2022



Data are provisional and subject to change as additional information becomes available. Grouped by CDC disease years.

The Monthly Communicable Disease Surveillance Report is a publication of the County of San Diego Public Health Services Epidemiology and Immunization Services Branch (EISB). EISB identifies, investigates, registers, and evaluates communicable, reportable, and emerging diseases and conditions to protect the health of the community. The purpose of this report is to present trends in communicable disease in San Diego County. To subscribe to this report, visit the [Data and Reports](#) page on the Epidemiology Program website (www.sdepi.org) and click on the subscribe link.



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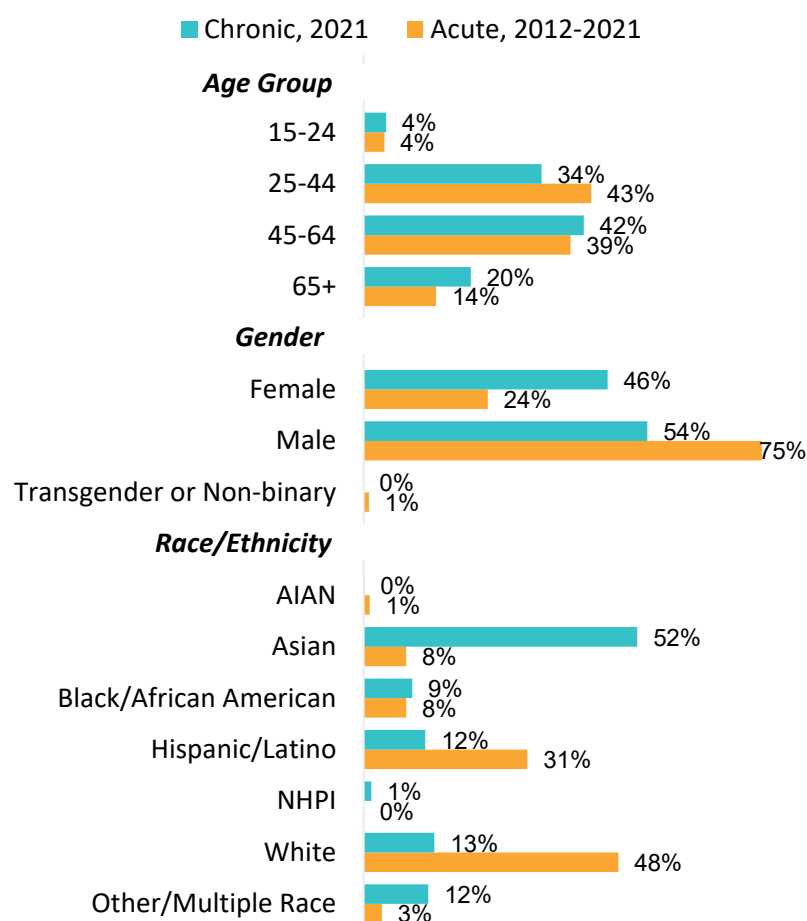
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HEPATITIS B, continued

compared to those who are U.S. born (1.28% vs. 0.15%). Foreign-born non-Hispanic Asians had the highest prevalence at 3.85%. Other high-risk populations include veterans, persons experiencing homelessness, people who inject drugs, men who have sex with men (MSM), and people with coinfection of HIV or hepatitis C. A [study of MSM](#) in Los Angeles found that 19% of the respondent population had serologic evidence of current or past infection. In 2020, there were 11,635 newly reported chronic hepatitis B infections in the U.S., with nearly half the cases from 5 states (Florida, New York, Georgia, Pennsylvania, and Ohio).

Figure 3. Demographic Summary of Acute and Chronic Hepatitis B Cases, San Diego County



Hepatitis B is detected via serology testing. Hepatitis B antigen is detected, on average, at four weeks post infection, with a range of 1-9 weeks. Persons who are not chronically infected will have negative HBsAg at 15 weeks after onset of symptoms. Acute treatment is mostly supportive. There are several treatment options available for chronic hepatitis B, including antiviral medications that can help suppress the virus and prevent liver damage. According to the [World Health Organization](#) (WHO), scaling up the use of these medications could help reduce the number of deaths due to liver cancer and cirrhosis caused by hepatitis B by up to 90%. The American Association for the Study of Liver Diseases (AASLD) provides [treatment guidelines](#) for chronic hepatitis B.

The best way to prevent hepatitis B infection is vaccination. The hepatitis B vaccine is safe and effective. All newborns and children up to age 18 should receive the vaccine as part of the routine childhood vaccination schedule. In 2022, the Advisory Committee on Immunization Practices (ACIP) expanded the age range for [universal hepatitis B vaccination](#) to include all adults aged 19-59 years. The vaccine is also recommended for older adults who are at increased risk of infection, such as healthcare workers, people with multiple sex partners, and people with HIV. Post-exposure prophylaxis is also very effective at preventing transmission, including use in infants born to infected mothers. Other prevention measures include avoiding sharing needles or other injection drug equipment, practicing safe sex, and not sharing personal items such as razors or toothbrushes with an infected person. It is also important for healthcare workers to follow infection control measures to prevent the spread of hepatitis B in healthcare settings.

Resources

- [Centers for Disease Control and Prevention \(CDC\) Hepatitis B website](#)
- [CDC Hepatitis B Vaccination website](#)
- [CDC 2020 Hepatitis B Surveillance](#)
- [California Department of Public Health \(CDPH\) Hepatitis B website](#)
- [CDPH Viral Hepatitis Surveillance](#)

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Table 1. Select Reportable Diseases		2022			Prior Years	
		Current Month	Prior Month	2022 Total	Avg YTD, 2019-2021	2021 Total
Disease and Case Inclusion Criteria (C,P,S)						
Botulism (Foodborne, Infant, Wound, Other)	C,P	0	0	4	2.3	3
Brucellosis	C,P	1	1	4	1.3	3
Campylobacteriosis	C,P	56	77	920	850.0	903
Chickenpox, Hospitalization or Death	C,P	1	0	1	1.7	3
Chikungunya	C,P	0	0	2	2.7	2
Coccidioidomycosis	C	1	3	383	494.0	512
Cryptosporidiosis	C,P	10	6	90	61.7	57
Dengue Virus Infection	C,P	0	1	14	12.7	3
Encephalitis, All	C	1	2	18	39.7	39
Giardiasis	C,P	12	10	187	183.3	176
Hepatitis A, Acute	C	4	1	31	13.3	10
Hepatitis B, Acute	C	0	0	12	10.3	16
Hepatitis B, Chronic	C,P	68	66	899	774.3	800
Hepatitis C, Acute	C,P	2	2	68	60.0	76
Hepatitis C, Chronic	C,P	158	159	2,943	3,853.3	3,539
Legionellosis	C	4	8	78	59.7	64
Listeriosis	C	1	0	17	13.3	8
Lyme Disease	C,P	0	0	7	7.7	13
Malaria	C	0	0	11	7.7	8
Measles (Rubeola)	C	0	0	0	0.7	0
Meningitis, Aseptic/Viral	C,P,S	2	5	65	103.3	46
Meningitis, Bacterial	C,P,S	2	1	30	26.3	24
Meningitis, Other/Unknown	C	0	0	12	30.7	34
Meningococcal Disease	C,P	0	0	2	4.3	1
Mumps	C,P	0	0	3	28.0	2
Pertussis	C,P,S	8	11	89	373.0	70
Rabies, Animal	C	0	0	3	6.3	4
Rocky Mountain Spotted Fever	C,P	0	0	3	2.0	1
Salmonellosis (Non-Typhoid/Non-Paratyphoid)	C,P	33	58	676	577.3	585
Shiga toxin-Producing <i>E. coli</i> (including O157)	C,P	9	8	200	175.3	163
Shigellosis	C,P	26	40	520	368.3	433
Typhoid Fever	C,P	1	0	13	7.0	10
Vibriosis	C,P	0	2	36	49.7	52
West Nile Virus Infection	C,P	0	0	3	2.3	3
Yersiniosis	C,P	1	2	39	34.3	21
Zika Virus	C,P	0	0	1	3.0	0

Case counts are provisional and subject to change as additional information becomes available. Cases are grouped into calendar months and calendar years on the basis of the earliest of the following dates: onset, lab specimen collection, diagnosis, death, and report received. Counts may differ from previously or subsequently reported counts due to differences in inclusion or grouping criteria, late reporting, or updated case information. Inclusion criteria (C,P,S = Confirmed, Probable, Suspect) based on Council of State and Territorial Epidemiologists/Centers for Disease Control and Prevention (CSTE/CDC) surveillance case criteria.

[San Diego County Sexually Transmitted Infection Data](#) | [San Diego County Tuberculosis Data](#)



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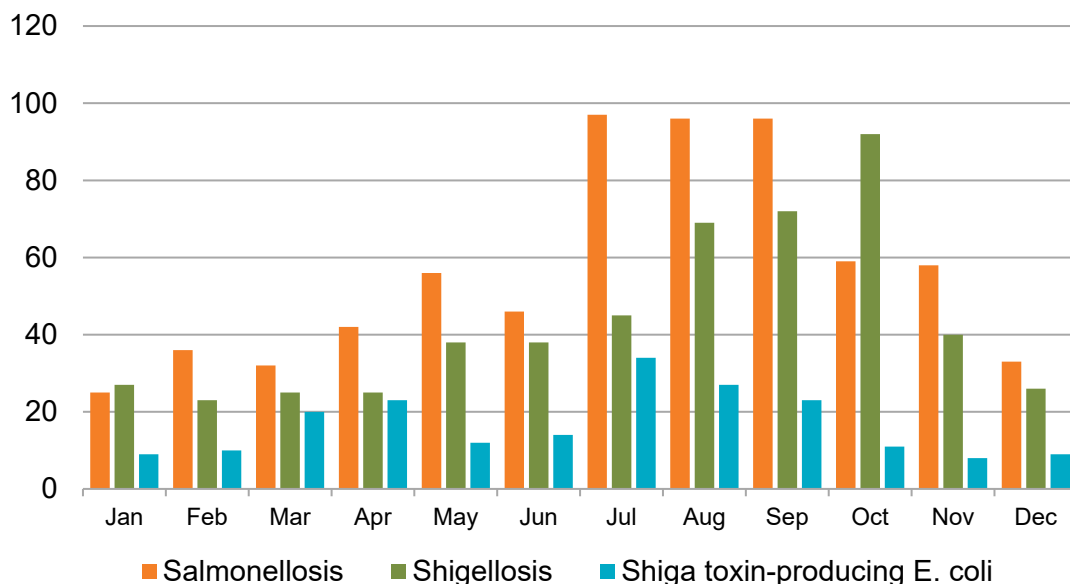
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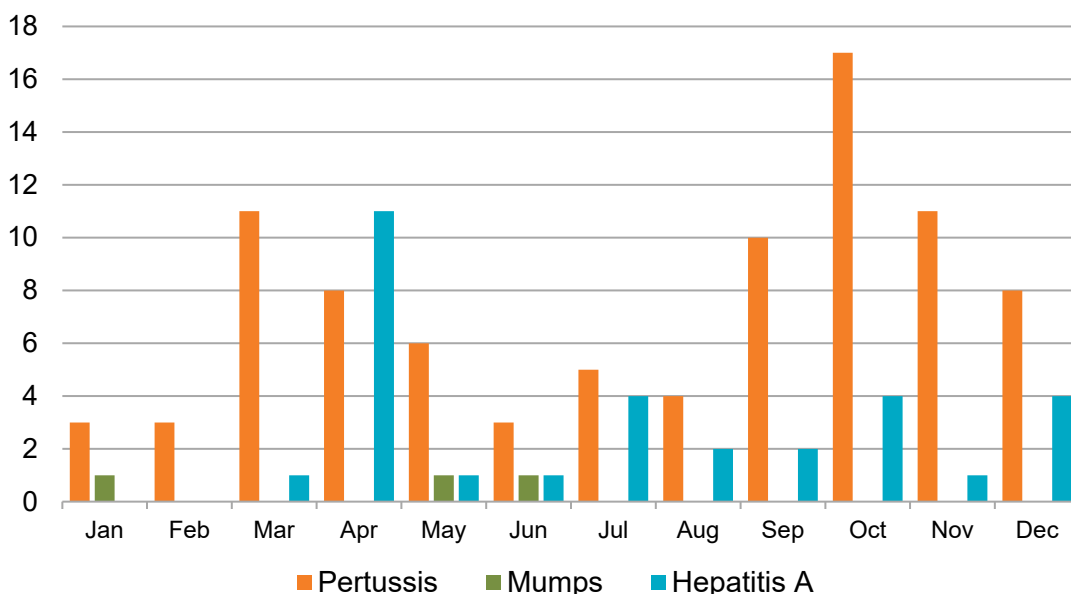
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**Figure 4. Select Enteric Infections by Month
January 2022 – December 2022**



**Figure 5. Select Vaccine-Preventable Infections by Month
January 2022 – December 2022**



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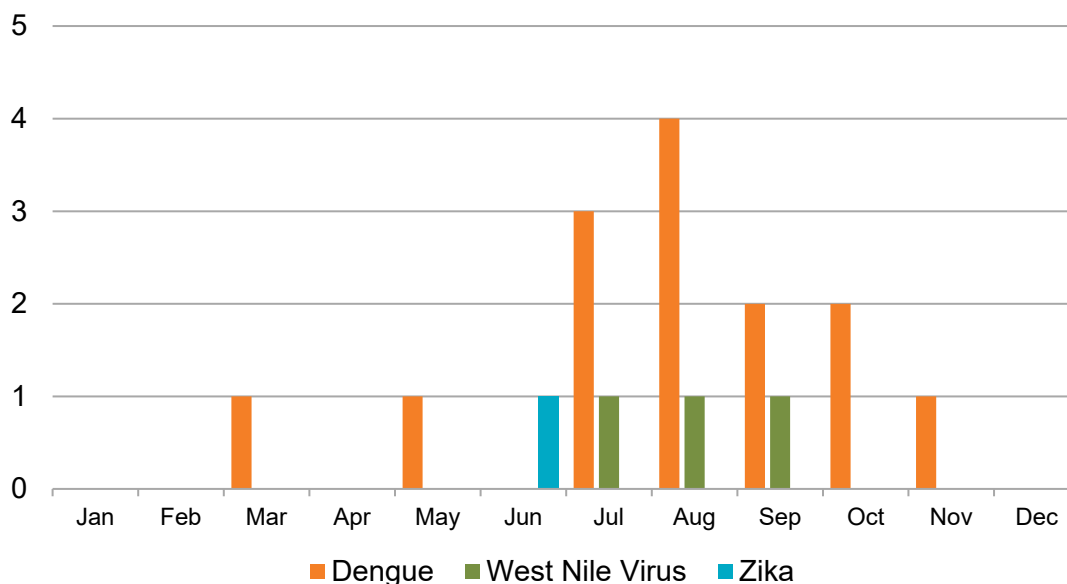
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**Figure 6. Select Vector-Borne Infections by Month
January 2022 – December 2022**



All of the dengue and Zika virus cases are travel-associated. For additional information on Zika cases, see the [HHSA Zika Virus webpage](#). For more information on West Nile virus, see the [County West Nile virus webpage](#). **Case counts are provisional and subject to change as additional information becomes available.** Cases are grouped into calendar months and calendar years on the basis of the earliest of the following dates: onset, lab specimen collection, diagnosis, death, and report received. Counts may differ from previously or subsequently reported counts due to differences in inclusion or grouping criteria, late reporting, or updated case information. Inclusion criteria (C,P,S = Confirmed, Probable, Suspect) based on Council of State and Territorial Epidemiologists/Centers for Disease Control and Prevention (CSTE/CDC) surveillance case criteria.

Disease Reporting in San Diego County

San Diego County communicable disease surveillance is a collaborative effort among Public Health Services, hospitals, medical providers, laboratories, and the [San Diego Health Connect](#) Health Information Exchange (HIE). The data presented in this report are the result of this effort.

Reporting is crucial for disease surveillance and detection of disease outbreaks. Under the California Code of Regulations, Title 17 (Sections [2500](#), [2505](#), and [2508](#)), public health professionals, medical providers, laboratories, schools, and others are mandated to report more than 80 diseases or conditions to San Diego County Health and Human Services Agency.

To report a communicable disease, contact the Epidemiology Program by phone at (619) 692-8499 or download and print a Confidential Morbidity Report form and fax it to (858) 715-6458. For urgent matters on evenings, weekends or holidays, dial (858) 565-5255 and ask for the Epidemiology Program duty officer. For more information, including a complete list of reportable diseases and conditions in California, visit the Epidemiology Program website, www.sdepi.org.

Tuberculosis, sexually transmitted infections, and HIV disease are covered by other programs within Public Health Services. For information about reporting and data related to these conditions, search for the relevant program on the Public Health Services website, <http://www.sandiegocounty.gov/content/sdc/hhsa/programs/phs.html>.



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