Chronic Hepatitis B in California
2013 Executive Summary

In 2013, the burden of notifiable chronic hepatitis B in California continued to be substantial but decreasing when compared to the prior four years.[1] In this summary, we describe changes in chronic hepatitis B burden over time, including demographic and geographic characteristics of newly reported chronic hepatitis B cases, to inform efforts to reduce viral hepatitis transmission, and limit the progression and implications of viral hepatitis-related liver disease.

With 9,833 newly reported cases[2] of chronic hepatitis B in 2013, California ranked first among all states that published their surveillance data.[3,4]

SUMMARY

From 1989 to 2013, 255,405 chronic hepatitis B cases were newly reported to the California Department of Public Health (CDPH). In 2013, CDPH received 9,833 new reports of chronic hepatitis B infections. The rate of newly reported chronic hepatitis B in California decreased 17 percent between 2009 and 2013, from 31. 0 to 25.6 per 100,000 population. However, chronic hepatitis B remained one of the most frequently reported communicable diseases. Important age, racial, and geographic disparities persist with chronic hepatitis B.

In 2013, more than sixty percent of newly reported chronic hepatitis B cases were among persons ages 25-54 years. Asian/Pacific Islander (API) persons continued to be overrepresented among chronic hepatitis B cases. Rates of newly reported chronic hepatitis B infection remained high in the San Francisco, Bay Area, Los Angeles, and Southern regions of California, and increased by more than 45 percent in four local health jurisdictions with populations >100,000 population (Pasadena and Long Beach cities, and Madera and Sacramento counties).

DISCUSSION

Sixty-four percent of all newly reported chronic hepatitis B cases in 2013 were among persons ages 25-54 years, and females ages 25-34 had the highest rates of newly reported chronic hepatitis B. These findings may be attributed to the implementation of the perinatal hepatitis B prevention program in California in 1991, which identifies pregnant women with hepatitis B infection whose infants are at risk for acquiring hepatitis B infection, and ensures these infants receive hepatitis B post-exposure prophylaxis and vaccination at birth. However, these findings are also consistent with national trends; among the seven sites funded by the Centers for Disease

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[1] Tables: www.cdph.ca.gov/programs/pages/viralhepatitisdata.aspx
Graphs: www.cdph.ca.gov/programs/pages/viralhepatitisdata.aspx

[2] A person who is being reported to CDPH for the first time because they meet the CDC/CSTE case definition for chronic hepatitis B. For more information, see Technical Notes.

[3] Eighteen jurisdictions gave the Centers for Disease Control and Prevention permission to publish their 2013 chronic hepatitis B case data.

[4] Chronic Hepatitis B: http://www.cdc.gov/hepatitis/statistics/2013surveillance/index.htm#tabs-801937-3

Control and Prevention (CDC) to conduct enhanced viral hepatitis surveillance, 65 percent of chronic hepatitis B infections were among persons aged 25-54 years.

The decrease in rates of newly reported chronic hepatitis B between 2009 and 2013 may be due to a number of reasons, including the increased identification of prevalent chronic hepatitis B cases[5] and improvements in deduplication methods used to maintain the chronic hepatitis B registry.

From 2009 to 2013, APIs accounted for more than two-thirds of newly reported chronic hepatitis B cases in California, which is home to the largest API population in the United States. This is a significant racial disparity given that APIs represent only 14 percent of the state population. This result is similar to national figures, which have found that APIs account for more than half of chronic hepatitis B cases with known race/ethnicity in the United States, despite making up 6 percent of the population. APIs are disproportionately affected by chronic hepatitis B because hepatitis B is endemic in many Asian countries and in most of the Pacific Islands. These findings underscore the importance of implementing CDC screening recommendations for persons born in countries with hepatitis B prevalence of 2 percent or higher and U.S.-born persons not vaccinated as infants whose parents were born in countries with hepatitis B prevalence of 8 percent or higher.

The geographic distribution of chronic hepatitis B in the San Francisco, Bay Area, Los Angeles, and Southern regions in California reflects high and/or increasing proportions of APIs in the local population, as well as hepatitis B screening and testing efforts at the local level, including those led by community groups that aim to increase hepatitis B awareness in API communities.[6] Additionally, organizations in at least two jurisdictions (San Francisco Department of Public Health in San Francisco County and University of California, Davis in Sacramento County) received CDC funding for hepatitis B surveillance (San Francisco) or testing and linkages to care (UC Davis),[7] respectively, which likely affected the rate of newly reported cases in these jurisdictions.

KEY FINDINGS: CHRONIC HEPATITIS B IN CALIFORNIA

Overall

- In 2013, CDPH received 9,833 new reports of chronic hepatitis B infections. The rate of newly reported chronic hepatitis B infection decreased 17 percent since 2009, from 31.0 to 25.6 per 100,000 population.
- From 1989 to 2013, 255,405 chronic hepatitis B cases were newly reported to CDPH.

[5] The percentage of chronic hepatitis B reports received by CDPH in duplicate has increased from 55 to 75 percent between 2009 and 2013.

[6] Yoo, G.J., Fang, T., Zola, J., & Dariotis, W.M. (2012). Destigmatizing hepatitis B in the Asian American community: Lessons Learned from the San Francisco Hep B Free Campaign. *Journal of Cancer Education*. 27(1), 138-44.

[7] Dang J, Chen M. Increasing Hepatitis B Testing and Linkage to Care of Foreign-Born Asians, Sacramento, California, 2012-2013. *Public Health Reports*. 2016; Supp. 2(131):119-131.

By Gender

- In 2013, the rate of newly reported chronic hepatitis B was 25.0 cases per 100,000 population among females, and 22.4 cases per 100,000 population among males; chronic hepatitis B was evenly distributed among females and males (53 percent versus 47 percent, respectively).
- From 2009 to 2013, rates of newly reported chronic hepatitis B infection decreased 27 percent among males, from 30.5 cases to 22.4 cases per 100,000 population, and remained relatively stable among females, showing a less than 5 percent decrease, from 26.2 to 25.0 per 100,000 population.

By Age

- In 2013, 64 percent of newly reported chronic hepatitis B cases in California were among persons ages 25-54 years.
- In 2013, females ages 25-34 had the highest rate of newly reported chronic hepatitis B among all females (54.2 cases per 100,000 population), while males ages 35-64 had the highest rates (between 36.2-38.5 cases per 100,000 population) among all males.
- From 2009 to 2013, rates of newly reported chronic hepatitis B decreased consistently across all male and some female age groups, but remained relatively stable for females ages 25-44 and 55-64; these age groups experienced less than a 5 percent rate increase since 2009.
- Persons less than 18 years of age had the lowest rates of newly reported chronic hepatitis B infection from 2009-2013.

By Race/Ethnicity

- In 2013, APIs represented 14 percent of the state population, but more than two-thirds (68 percent) of newly reported chronic hepatitis B cases with known race/ethnicity.
- In 2013, White and Hispanic/Latino persons were underrepresented among chronic hepatitis B cases in California. Whites were 40 percent of the state population, but only 15 percent of reported chronic hepatitis B cases, and Hispanics were nearly 40 percent of the general population, but only 10 percent of reported chronic hepatitis B cases.
- From 2009 to 2013, Asian Pacific Islanders (APIs) continued to be disproportionately affected by chronic hepatitis B, representing between 66 and 71 percent of newly reported chronic hepatitis B cases with known race/ethnicity from 2009-2013.

By Geography

- Among local health jurisdictions with population $\geq$100,000, San Francisco County had the highest rate of newly reported chronic hepatitis B cases in California in 2013, followed by Santa Clara, Sacramento, and San Mateo counties, and Pasadena City. The top five jurisdictions had higher rates of newly reported chronic hepatitis B than the statewide rate, as did Los Angeles County and Long Beach City. Together, the top five local health

jurisdictions with population ≥100,000 accounted for 31 percent (n=3,053) of all newly reported chronic hepatitis B cases in 2013.

- Among local health jurisdictions with population <100,000, Sutter County had the highest rate of newly reported chronic hepatitis B infection in California in 2013, followed by Yuba County. These two jurisdictions had lower rates of newly reported chronic hepatitis B infection than the statewide rate. All other local health jurisdictions with population <100,000 reported five or fewer cases in 2013, and thus rates were not calculated. Together, the top two jurisdictions with population <100,000 accounted for less than 1 percent (n=19) of newly reported chronic hepatitis B cases in 2013.
- From 2009 to 2013, notable increases in rates of newly reported chronic hepatitis B infection occurred primarily in jurisdictions with population >100,000 in California, including Pasadena City (218 percent), Madera (184 percent), Sacramento County (64 percent), and Long Beach City (48 percent).