

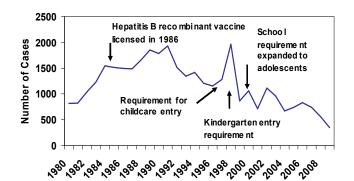
# **Epidemiology of Acute Hepatitis B in Texas, 2008**

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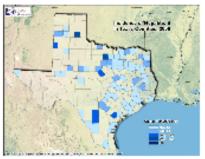
# **Incidence of Acute Hepatitis B**

Acute hepatitis B is a reportable condition in Texas. While acute hepatitis B incidence rates have decreased over the past several years, the rate of decline has fluctuated and case counts have increased on multiple occasions.

In 2008, there were 562 cases of acute hepatitis B reported in Texas. This reflects a rate of 2.3 cases per 100,000 population. This is the lowest number of cases reported in Texas since 1976.



### **Geographic Distribution of Acute Hepatitis B**



In 2008, 77 counties (out of 254) reported acute cases of hepatitis B. While the statewide incidence rate was 2.3, county-level rates ranged from 0.3 to 25.8. County-level case counts of hepatitis B ranged from 1 to 101.

# **Perinatal Hepatitis B**

Texas has an active perinatal hepatitis B prevention program. The program includes screening of pregnant women for hepatitis B infection, education for infected mothers, testing and vaccination as necessary of sexual and household contacts, and prophylaxis, vaccination and testing for the newborn. In 2008, there were 8 children diagnosed with hepatitis B before the age of 24 months. Seven of the eight children received HBIG at birth and the complete vaccination series.

#### Acknowledgements

Texas Department of State Health Services Immunization Branch; DSHS Regional Staff; Local health department staff; Perinatal Hepatitis B prevention program staff

# Demographics

The median age at diagnosis of acute hepatitis B was 48.5 years in 2008. There are very few cases diagnosed under the age of 20. People between the age of 30 and 59 represent 70% of cases. The largest percentage of cases are diagnosed in their 40's. The 40-49 age group also has the highest rate of 4.3 cases per 100,000 population.

The race and ethnicity are unknown for 35% of cases. Non-Hispanic Whites account for almost 30% of acute hepatitis A cases, followed by Hispanics with 22%. While Blacks account for only 11% of cases, they have a slightly higher case rate (2.2) compared to Whites (1.5) or Hispanics (1.3). There are almost twice as many male cases (n=368) as female cases (n=192) of acute hepatitis B.

Injection drug use

Tattoo/niercing

Incarcerated over 24 hours

Hep B blood received

Hospitalized

Surgery

0%

4%

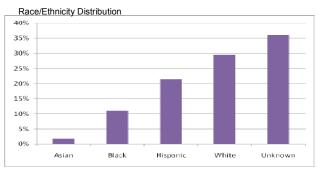
6% 8%

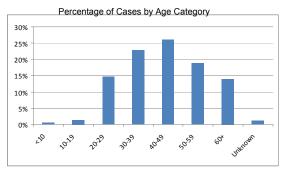
10% 12%

14% 16%

18% 20%

Blood exposure





# **Risk Factors**

Ideally, data collected for patients with acute hepatitis B includes information on risk factors. Data collection tools used in Texas include questions on medical and behavioral risk factors, although that data is not collected for many patients. Only 22-24% of patients responded to or were asked questions about risk factors. Risk factor information is asked for the time period six weeks to six months prior to hepatitis B diagnosis. The percentage of patients reporting a risk factor ranged from 1.4% (receiving blood with hepatitis B virus) to 18.1% (recent surgical procedure). No patients reported recent hemodialysis.

Vaccination status was known for only 19.4% of cases (n=109). Of those, 8.3% (n=9) reported receiving at least one dose of vaccine. Four patients reported receiving all three doses.

## Summary

Reports of acute hepatitis B decreased to 562 cases in Texas in 2008. There were eight reports of perinatal hepatitis B in 2008, 7 of which were in infants that were treated appropriately for prevention of hepatitis B. Race and ethnicity are unknown for a large proportion of cases in Texas, but the incidence rates for patients with known race and ethnicity were similar across Hispanics, non-Hispanic Whites, and non-Hispanic Blacks. The median age at diagnosis was 48.5 years. Very few cases under the age of 20 were reported, which may be indicative of the efficacy of current school requirements for hepatitis B vaccine.

There is room for improvement in capturing information on patients' risk factors for hepatitis B. This information was not captured for the majority of patients, however 18% of those providing risk factor information reported a recent surgical procedure.

While the number of hepatitis B cases has decreased, the health department needs to ensure that this trend continues by capturing information on risk factors to create targeted intervention and educational campaigns, as well as promoting child, adolescent and adult vaccination programs.