

Hepatitis A

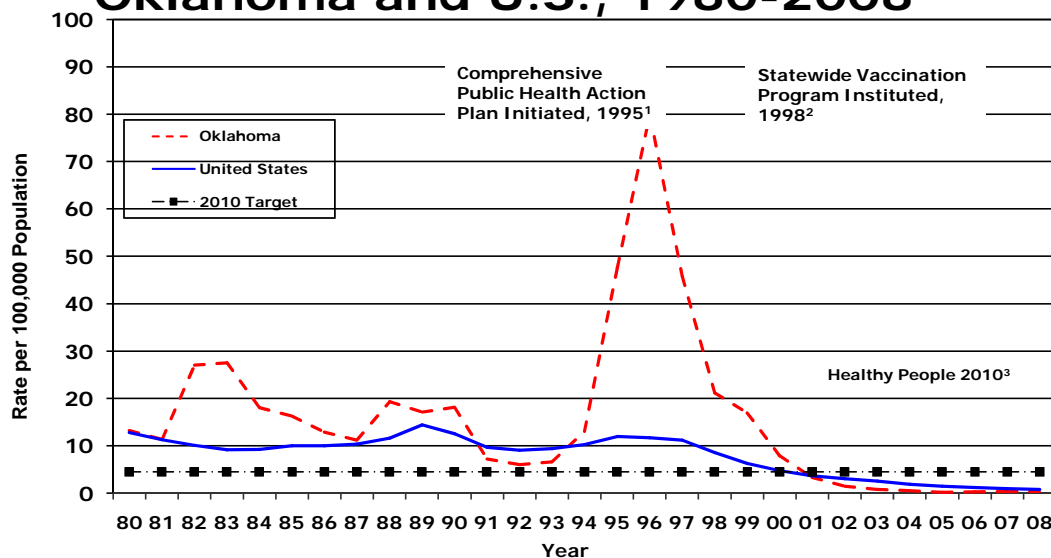
2008 Case Total	13	2008 Rate	0.36 per 100,000
2007 Case Total	13	2007 Rate	0.38 per 100,000

Since the Oklahoma Hepatitis A epidemic that took place from 1995 through 1997, with the peak in 1996 of 2516 cases (rate = 79.99 per 100,000), the incidence of hepatitis A in the state has dramatically declined. The number of cases has been less than 20 per year since 2004, and no outbreaks were identified in 2008 (refer to graph).

Cases that are associated with high-risk settings such as child care settings, food establishments and patient care settings are excluded from working during their infectious period. Three cases were associated with high-risk settings in 2008: two (unrelated) patient care providers and one resident of a homeless shelter, but no secondary cases occurred. None of the 13 cases had a history of hepatitis A vaccination, and none expired.

A total of 19 close contacts were identified (median 1, range 1 – 5 per case) that required post exposure prophylaxis (PEP) because they did not have evidence of immunity through previous testing or history of vaccination. The county health departments provide PEP to those identified as close contacts to confirmed hepatitis A cases. New PEP guidelines were released in 2007 by the Advisory Committee on Immunization Practices, which limited the use of immunoglobulin (IG) and expanded the use of the hepatitis A vaccine. For persons between 12 months and 40 years of age, the hepatitis A vaccine is the preferred method of PEP. It is still recommended to use IG for PEP for persons less than 12 months of age, greater than 40 years of age, and for those who are immunocompromised or who have chronic liver disease.¹

Hepatitis A Incidence Rate by Year, in Oklahoma and U.S., 1980-2008*



¹ Comprehensive Public Health Action Plan consisted of aggressive surveillance, enhanced Hepatitis A testing, aggressive confirmed and epi-link case investigation and contact prophylaxis, and public awareness and prevention media campaigns.

² Due to the statewide outbreak of Hepatitis A 1995-1997, Oklahoma became the first state in the nation to mandate Hepatitis A vaccinations for daycare and school (K and 7th grade) admission in 1998.

³ The Healthy People 2010 Target Rate for Hepatitis A in the United States is 4.5 cases per 100,000 population.

*2008 U.S. data provisional based on CDC, MMWR 2008;57:1420-1431

Hepatitis A should be considered in unvaccinated persons with hallmark symptoms of jaundice, very dark urine and/or clay-colored stools (refer to table for symptoms reported by cases), particularly those with recent exposure to high-risk regions through travel or residence. Three (23%) cases reported international travel during their exposure period. A positive hepatitis A IgM titer indicates current infection, although false positive tests are common.² Healthcare providers should limit testing for hepatitis A to those clients with evidence of acute hepatitis A infection. Liver function tests are usually markedly elevated in confirmed cases. All of the 2008 cases had elevated liver function tests with a median ALT of 1867 (range 400 – 6082), and a median AST of 1866 (range 132 – 4841). The median total bilirubin was 8 (range 0.4 – 17).

The hepatitis A vaccine is recommended for individuals 2 years of age or older, and the two-dose regimen is required for entry into childcare or grade school in Oklahoma. The CDC Travelers' Health website has recommendations regarding hepatitis A prevention for those traveling out of the US, and can be accessed at <http://www.cdc.gov/travel/index.htm>.

Demographic and Clinical Summary of Reported Hepatitis A Cases, Oklahoma, 2007 (N=13)

	Number (%)	Rate per 100,000
Gender		
Female	8 (61.5%)	0.43
Male	5 (38.5%)	0.28
Age	Median = 45 years (range: 24-61 years)	
Race		
White	10 (76.9%)	0.35
African American	1 (7.7%)	0.34
American Indian or Alaska Native	1 (7.7%)	0.34
Asian	1 (7.7%)	1.59
Ethnicity		
Hispanic or Latino	0	-
Not Hispanic or Latino	12 (92.3%)	0.36
Unknown	1 (7.7%)	-
Hallmark symptoms (not exclusive)		
Dark Urine	12 (92.3%)	-
Jaundice	10 (76.9%)	-
Clay-colored stool	6 (46.2%)	-
Hospitalized for this disease:	5 (35.7%)	-
Recent travel out of country	3*	-

* Eastern Europe (1), Caribbean/Central America (1), South Central Asia (1)

References:

- Centers for Disease Control and Prevention Update: Prevention of Hepatitis A After Exposure to Hepatitis A Virus and in International Travelers. Updated Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2007;56:[1080-1084], available at <http://www.cdc.gov/mmwr/PDF/wk/mm5641.pdf>
- Centers for Disease Control and Prevention. Positive Test Results for Acute Hepatitis A Virus Infection Among Persons with No Recent History of Acute Hepatitis – United States, 2002-2004. MMWR 2005;54; (453-456).