

Hepatitis A

2011 Case Total	11	2011 Incidence Rate	0.29 per 100,000
2010 Case Total	6	2010 Incidence Rate	0.16 per 100,000

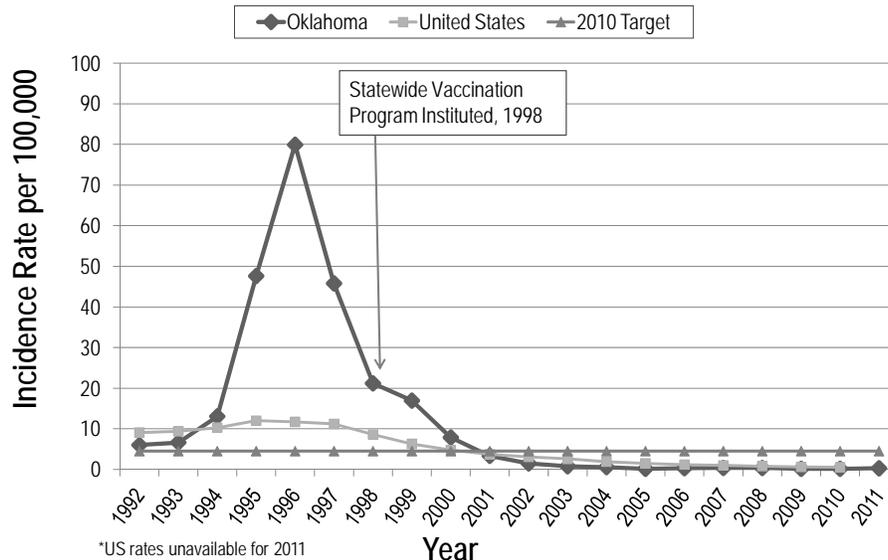
Oklahoma continues to successfully recover from the state's hepatitis A epidemic that peaked in 1996 with 2,516 cases (incidence rate = 79.99 per 100,000). Despite an 83% increase in reported cases compared to 2010, hepatitis A incidence continued to remain below the Healthy People 2010 target. The last peak in acute, symptomatic hepatitis A cases in the United States was observed around 1995, when hepatitis A vaccine became available. Since then, the decline in disease incidence has been constant.ⁱ

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. A positive hepatitis A IgM titer indicates current infection, although false positive tests are common.ⁱⁱ All positive hepatitis A IgM reports are investigated; in 2011 there were 138 reports investigated. Of the 138 hepatitis A IgM positive reports, 11 (8%) met the clinical criteria for classification as an acute case of hepatitis A.

Liver function tests are usually markedly elevated in confirmed cases, but not every time. Of the eight cases with liver function test results, the median alanine transaminase (ALT) was 249 (range: 26 – 1472), median aspartate aminotransferase (AST) of 191 (range: 20 – 380), and median total bilirubin was 1.7 (range: 0.3 – 11.7).

High risk exposures noted in the 2011 confirmed cases included street drug use (9%, n = 1) and travel out of state (9%, n = 1). High risk settings included correctional facilities (18%, n = 2). No outbreaks were identified. Four cases (36%) were hospitalized, and none of the cases expired.

Incidence Rate of Reported Hepatitis A Cases by Year, Oklahoma and US, 1992-2011*



A total of 70 close contacts were investigated (median: 2, range: 0 – 26 per case). Of those, 53 did not have evidence of immunity through previous testing or history of vaccination, and therefore required post exposure prophylaxis (PEP). The county health departments provide PEP to those identified as close contacts to confirmed hepatitis A cases. In 2007, PEP guidelines were revised by the Advisory Committee on Immunization Practices (ACIP), limiting the use of immunoglobulin (IG) and expanding the use of the hepatitis A vaccine. For persons from 12 months to 40 years of age, the hepatitis A vaccine is now the preferred method of PEP. IG remains the recommended 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 diseases such as liver disease or other chronic medical conditions.ⁱⁱⁱ

The hepatitis A vaccine is very effective, with nearly 100% seroconversion after receiving the two dose series^{iv}. The vaccine is a recommended childhood immunization to be administered at two 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 persons traveling out of the US, and can be accessed at the website www.cdc.gov/travel.

Demographic and Clinical Summary of Reported Hepatitis A Cases, Oklahoma, 2011 (N = 11)

	Number (%)	Incidence Rate per 100,000
Gender		
Male	7 (64%)	0.22
Female	4 (36%)	0.37
Age	Median = 48 years (range: 18 - 78 years)	
Race		
White	8 (73%)	0.30
American Indian	2 (18%)	0.62
Unknown	1 (9%)	-
Hispanic or Latino Ethnicity	1 (9%)	0.30
Hospitalized for this disease	4 (36%)	-
Died due to this disease	0	-
Hallmark symptoms (not exclusive)		
Dark Urine	10 (91%)	-
Jaundice	7 (64%)	-
Clay-colored stool	5 (45%)	-

ⁱ Centers for Disease Control and Prevention. [Summary of Notifiable Diseases, 2010]. Published June 1, 2012 for MMWR 2010;59(No. 53):[inclusive page numbers].

ⁱⁱ 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), available at <http://www.cdc.gov/mmwr/PDF/wk/mm5418.pdf>

ⁱⁱⁱ 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>

^{iv} Centers for Disease Control and Prevention. Epidemiology and Prevention of Vaccine-Preventable Diseases. Atkinson, W, Wolfe s, Hamborsky J, eds. 12th ed. Washington DC: Public Health Foundation, 2011, page 106. Available at <http://www.cdc.gov/vaccines/pubs/pinkbook/index.html>