

## HEPATITIS C

CRUDE DATA	
Number of Acute Cases	21
Annual Incidence <sup>a</sup>	
LA County	0.23
California	0.59
United States	1.14
Age at Onset	
Mean	39.0 yrs
Median	36 yrs
Range	24 - 59 yrs
Case Fatality	
LA County	0.0%
United States	N/A

<sup>a</sup>Cases per 100,000 population.

### ETIOLOGY

Hepatitis C virus is an RNA hepatotropic virus.

### DISEASE ABSTRACT

Hepatitis C virus (HCV) is predominantly transmitted by blood contact. Sixty to seventy percent of acute infections are asymptomatic. However, the majority of infections with persistent hepatitis C antibodies result in chronic liver disease. The formation of hepatitis C antibodies does not confer immunity because of the spontaneous appearance of multiple HCV quasi species and demonstrated reinfection by different HCV strains. Sexual and perinatal transmission of HCV appears to occur infrequently; however, the epidemiology of hepatitis C is still being elucidated.

In 1999, an acute case was defined as an individual with a positive anti-HCV (antibody test) or HCV-RNA, and evidence of jaundice, alanine aminotransferase (ALT) greater than 2.5 times the upper limit, or an onset date within six months of the date of diagnosis or report. During 1999 there were 7,495 case reports of acute and chronic hepatitis C, a 104% increase from 1998 and 131% increase from 1997. Of the 7,495 reports in 1999, only twenty-one met the surveillance definition for acute infection. Fifteen were males, including seven Hispanics and eight Non-Hispanics. Of the six female cases, two were Hispanic, three were White, and one was unknown. Risk factor information from the CMR or interview was available for seventeen cases, eleven males and six females. The remaining acute cases could not be located for interview. Eleven of the seventeen cases interviewed denied traditional risk factors. Of the remaining six cases interviewed, two cases reported IV drug use, one case reported IV drug use and was incarcerated, one case was incarcerated and reported receiving tattoos, one case had a recent blood transfusion, and one case had a history of recent dialysis, surgery, and blood transfusion.

## **PREVENTION**

Since universal blood product screening in 1990 and further improvements in test sensitivity since 1992, reduction of high-risk behaviors is the chief means of preventing hepatitis C. Education aimed at reducing high-risk behaviors for hepatitis B and HIV transmission such as sharing injection drug equipment should have additional benefit in reducing hepatitis C cases. The CDC is currently funding controlled studies looking at body tattooing as an independent risk factor for acquisition of HCV infection. Serologic testing of blood products continues to keep the risk of transfusion-associated hepatitis C low. Both alcohol consumption and co-infection with HIV accelerate the progression of cirrhosis and hepatocellular carcinoma. As such, additional funding is necessary to study the feasibility of incorporating HCV screening, counseling, diagnosis, treatment and administration of hepatitis A and hepatitis B vaccine in drug treatment and HIV screening and treatment sites.

## **COMMENTS**

Since 1995, yearly increases in reports are likely the result of: 1) the CDC's recommendation that individuals transfused prior to 1992 be screened for HCV, 2) the Food and Drug Administration's targeted look-back program which traced HCV-positive donors to recipients as far back as 1988, 3) increased public awareness via media coverage, and 4) increased pressure from special interest groups such as HIV-infected individuals, individuals in drug treatment programs and drug company advertising efforts.