

OREGON PUBLIC HEALTH DIVISION • OREGON HEALTH AUTHORITY

HCV: JUST THE FACTS, PLEASE

New treatments for hepatitis C virus (HCV) infection are being approved at a breathtaking pace these days, raising hope for a cure for thousands of Oregonians and the possibility of making a dent in the burden of disease. The price tag for these new medications has been quite high, sparking controversy about treatment eligibility and price wars among their respective manufacturers. It is perhaps timely that the Oregon Health Authority has just released its first Viral Hepatitis Profile*, detailing the cold, hard facts of HCV in our state, which we'll review in this issue of the *CD Summary*.

CHRONIC HCV

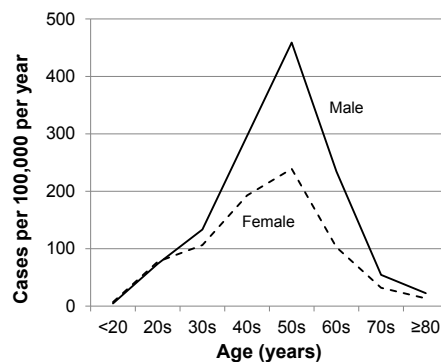
The first fact is that HCV is common in Oregon: 47,435 cases have been reported here since the infection became reportable in 2005. During 2009–2013, an average of 5,087 reports of chronic HCV infection have been received each year. Studies have estimated that half of all chronic HCV infections have not been diagnosed, suggesting that as many as 95,000 Oregonians—about 1 in 32 adults—could be infected.¹ Without antiviral treatment 25%–30% of those infected will develop cirrhosis 20–30 years later, and 25% of those with cirrhosis will develop end-stage liver disease or hepatocellular carcinoma (HCC)—invariably fatal, absent liver transplantation.²

Cases reported during 2009–2013 were predominantly in males (61%) and persons >40 years of age (79%). Incidence has been highest among men in their 40s and 50s (Figure 1). Since 2009, HCV laboratory reports have declined overall, but are climbing among persons <30 years old.

ACUTE HCV

Numbers of acute cases reported in Oregon have remained fairly stable

Figure 1. Incidence of chronic HCV infection by sex and age, Oregon, 2009–2013



over the past 10 years; during 2009–2013 an average of 25 were reported annually. Accounting for asymptomatic cases and under-reporting, these 25 reported cases represent an estimated 332 new cases of HCV in Oregon each year.

Acute HCV infection is seen most commonly in young adults: nearly half of reported cases were in persons <30 years, and 68% were in persons <40 years old. Fifty-six percent were male; 64% admitted to injecting drugs.

The incidence of acute hepatitis C reported in Oregon (0.5 cases/100,000) has been 50% higher than the national average (0.32 case) during 2007–2011 (2011 being the most recent year of which national data are available).³

LIVER CANCER

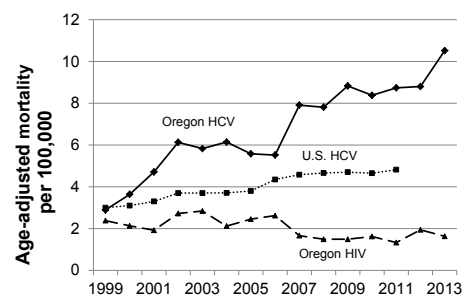
From 1996 through 2012, 3,395 cases of hepatocellular carcinoma (HCC) were reported to the Oregon State Cancer Registry. Of those, 763 (22%) were reported as having HCV since 2005. The proportion of HCC cases known to be associated with chronic HCV has risen dramatically since 2005; by 2012, 47% of liver cancer cases had HCV. Seventy-eight percent of HCV-related liver cancers occurred in men; 54% were 50–59, and 34% were 60–69 years of age.

MORTALITY

Mirroring national trends, mortality attributable to HCV has risen steadily

over the last decade, averaging >400 deaths annually in Oregon during the last five years. The mortality rate from HCV in Oregon during 2009–2013 was more than six times that from HIV. Oregon's HCV mortality exceeds that of the U.S. as a whole; in 2011, the most recent year for which national data are available, the age-adjusted Oregon HCV mortality rate was 8.7 deaths per 100,000 persons, compared to the national rate of 4.8 deaths per 100,000.⁴ In the past five years, the majority of HCV-related deaths occurred in men (71%) and in persons 45–64 years of age (80%; Figure 2).

Figure 2. Age-adjusted mortality rates for HIV and HCV, Oregon and U.S., 1999–2013



RACIAL AND ETHNIC DISPARITIES

In Oregon, HCV disproportionately affects African Americans and American Indians compared to whites. Rates of reported chronic HCV infections are more than two times higher; cases of liver cancer are 50% higher, and HCV-related deaths are twice as high in African Americans and American Indians.

HIGH-RISK POPULATIONS

In 2011, 60% of persons reported to CDC with acute HCV reported injection drug use—not very different from the proportion reported in Oregon during 2009–2013 (64%). Reports from other states paint the portrait of young injectors who acquire HCV: they are usually <25 years old, commonly reside in rural areas, and have

* Viral Hepatitis in Oregon, May 2015.

http://public.health.oregon.gov/DiseasesConditions/HIVSTDViralHepatitis/AdultViralHepatitis/Documents/Viral_Hepatitis_Epi_Profile.pdf



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Table. Burden of disease from HCV in Oregon, 2009–2013*

Case Type	Average Number of Cases per Year	Significance
Acute (newly acquired)	25 reported**	Incidence 50% higher than the national average for 2007–11
Chronic	5,087	Second only to <i>Chlamydia</i> among reportable diseases in Oregon
Liver cancer due to HCV	123	Represents 39% of liver cancer cases in Oregon
Liver transplants	18	Accounts for 54% of liver transplants performed at OHSU
Deaths	441	Six times higher than deaths from HIV in Oregon for the past 5 years.

*Except for cases of liver cancer, for which data were available for the period 2008–2012.

**Likely >300 given high proportion of asymptomatic cases.

typically used oral prescription opiates before moving to injection drug use.⁵ Oregon's Injury & Violence Prevention Section recently reported that Oregon had the highest rate of non-medical use of prescription pain relievers in the nation in 2012, so perhaps our high rates of acute HCV and increasing rates of chronic HCV in persons <30 years of age should not be surprising.[†]

Chronic HCV infection is prevalent among incarcerated persons than in the general population, ranging from 16%–41% in published studies.⁶ Inmates rarely acquire these infections while incarcerated; the chronic infection is usually present at the time of entrance, and likely explained by the fact that many are prisoners of the war on drugs. The Oregon Department of Corrections estimates

† Oregon Health Authority. Drug Overdose Deaths, Hospitalizations, Abuse and Dependency among Oregonians, 2014. Available at <http://public.health.oregon.gov/DiseasesConditions/InjuryFatalData/Docu-ments/oregon-drug-overdose-report.pdf>.

that 30% of inmates are chronically infected with HCV.[‡]

BABY BOOMER SCREENING RECOMMENDATIONS

Fifteen years after their initial recommendation in 1998 to limit HCV screening to persons with risk factors for infection, CDC recommended an additional strategy: one-time testing of all persons born between 1945 and 1965, based on national prevalence studies showing this cohort to be the most commonly infected. In Oregon, 64% of the 25,873 cases reported in the past 5 years belonged to the Baby Boomer birth cohort.

FACING THE FACTS

So let's face the facts: the burden of HCV disease is high in Oregon, with rates of new cases and deaths in our state higher than in the U.S. as a whole. Our data highlight the need to promote HCV screening programs within communities and populations at high risk and to improve linkage

‡ Shelton S. Personal communication regarding ODOC HCV estimates, June 2014.

to care and treatment. Secondly, significant health disparities exist in Oregon for HCV. There is clearly a need to 1) educate providers and communities at risk about viral hepatitis prevention and screening; and 2) support access to culturally competent care and treatment for disproportionately affected populations including American Indians, African Americans, persons who inject drugs and incarcerated persons.

FOR MORE INFORMATION

- See our new report: Viral Hepatitis in Oregon at the Oregon Health Authority Viral Hepatitis Homepage: <http://public.health.oregon.gov/DiseasesConditions/HIVSTDViral-Hepatitis/AdultViralHepatitis/Pages/index.aspx>
- CDC. Hepatitis C Information for Health Professionals: www.cdc.gov/hepatitis/HCV/index.htm

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