HIV-Hepatitis C Co-Infection in the Indianapolis-Carmel Metropolitan Statistical Area

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The <u>Marion County Public Health Department's</u> <u>Ryan White HIV Services Program</u> oversees Ryan White Part A, C, and Minority AIDS Initiative grants in the Indianapolis-Carmel Metropolitan Statistical Area (MSA). These programs serve the needs of persons newly infected or living with HIV and out of care and/or uninsured or medically underserved.

HCV: Approximately 2.7 million U.S. residents were living with chronic hepatitis C (HCV) infection at year-end 2014. Many were unaware of their status because HCV is predominantly (70%-80%) asymptomatic until the late stages of disease. HCV is a leading cause of chronic liver disease and increases risk for hepatocellular carcinoma 20-fold. HCV disproportionately affects people living with HIV. While overall prevalence is 1.3%-1.62%, 3,4,5 one in four people living with HIV also have HCV.

HIV Co-Infection: Research indicates that HCV viral loads are higher and that HCV progresses faster in those with comorbid HIV.^{7,8} In fact, HIV co-infection more than triples risk for severe HCV-related liver disease,⁷ the *leading cause of non-AIDS related death among people living with HIV*.⁷ Treatment in those co-infected is complex, lengthy and less successful than in mono-infected individuals.⁴

Prevalence of HIV Co-Infection in the MSA: On December 31, 2014, there were 5,411 MSA residents known to be living with HIV and an additional 795 thought to be HIV-positive but undiagnosed and unaware of their status. ^{9 10} At the same point in time, between 17,848 and 22,242 MSA residents over 17 years of age were thought to be living with HCV. ^{3 4 5} HCV records were searched for HIV-positive Marion County residents (85% of the MSA's people living with HIV) to identify those diagnosed with HIV-HCV co-infection at year-end 2015. Of 4,811 Marion County residents with confirmed HIV diagnoses, 5% (N=244) had also been diagnosed with HCV. While this is more than three times the estimated rate overall, it is far below the 25% thought to be co-infected with HCV. ⁸ In fact, based on: (1) the total number of county residents thought to be living with HIV (N=4,811); (2) the estimated number of living with HIV but undiagnosed and unaware (N=707); and, (3) a 25% co-infection rate, *the number of HIV-positive Marion County residents expected to be co-infected with HCV is 1,380*. Given that only 244 are known to be diagnosed with co-morbid HCV, *1,136 co-infections remain undiagnosed*. Two-thirds of Marion County residents diagnosed with HIV-HCV co-infection also have AIDS diagnoses and are more likely to have exhibited symptoms of, and been tested for, HCV.

Recommendations for HCV Testing among People Living with HIV: Given the severity of coinfection, it is important to screen for HCV among all individuals living with HIV. Current U.S. Health & Human Services *guidelines call for HCV screening for all people living with HIV* and, for those at risk, screening should be performed at least annually.¹¹

Sources:

¹ CDC. (2012). Hepatitis C FAQS for health professionals.

² IARC. (2010). IARC monographs on the evaluation of carcinogenic risks to humans.

³ NVHR. (2014). NVHR hepatitis C state specific resources pages: Indiana.

⁴ Chak, et al. (2011). Hepatitis C virus infection in USA: An estimate of true prevalence.

⁵ Ditah, et al. (2011). The changing epidemiology of hepatitis C virus infection in the United States: National health and nutrition examination survey 2001 through 2010.

⁶ NASTAD. (2011). HIV and viral hepatitis co-infection.

⁷ CDC. (2014). HIV and viral hepatitis.

⁸ NASTAD. (2006). Viral hepatitis and HIV/AIDS integration: A resource guide for HIV/AIDS programs.

⁹ CDC. (2015). Enhanced HIV/AIDS reporting system (eHARS).

¹⁰ CDC. (2015). <u>Monitoring selected national HIV prevention and care objectives by using HIV surveillance data - United States and 6 dependent areas - 2013</u>.

¹¹ HHS. (2015). <u>Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents:</u> Considerations for antiretroviral use in patients with coinfections.