



KY Hepatitis Connections

Inside our October 2014 Edition of the KY Hepatitis Connections you will find current information about viral hepatitis, opportunities for viral hepatitis continuing professional education and information about educational materials available. See all the exciting things happening here in Kentucky!

Please feel free to forward and/or copy and distribute to other professionals in your network. Your knowledge and input are greatly valued, as we are committed to keeping you up to date on shared progress in the medical community on viral hepatitis and its impact on our families throughout the Commonwealth. Follow us on Facebook at: [KY Viral Hepatitis](#).

Kathy Sanders, RN MSN

HEPATITIS IN KENTUCKY: IN THE NEWS

Heroin epidemic fuels another scourge: hepatitis C

FLORENCE, Ky. – Sara Messer is a recovering heroin addict diagnosed with hepatitis C after sharing a needle with a friend, a friend she knew had the virus.

Messer, now living at the Brighton Recovery Center for Women in Florence, is one of at least 264 people infected with hepatitis C in Northern Kentucky, and an example of why Northern Kentucky leads the country in infection rates for the blood borne pathogen.

The state of Kentucky is No. 1 in the nation with 4.1 hepatitis C cases per 100,000 residents, according to the U.S. Centers for Disease Control. That rate far surpasses the national average of 0.6 people per 100,000. And in Northern Kentucky, the rate is off the chart: 13 per 100,000, according to the Northern Kentucky Health Department.

Read More: <http://www.wcpo.com/news/local-news/boone-county/florence/heroin-surge-presents-hepatitis-c-attack-on-northern-kentucky>

Booming | could you have hepatitis C?

Anita Curpier, special writer to the Courier Journal, covered baby boomers and hepatitis in a two part series.

Read More: <http://www.courier-journal.com/story/life/wellness/health/2014/09/11/baby-boomers-hepatitis-c-might-know/15442843/>

HCV: IN THE NEWS:

Hispanic veterans with HCV at higher risk for cirrhosis, HCC

Hispanic veterans with hepatitis C virus infection had a higher risk for developing cirrhosis or hepatocellular carcinoma compared with African-American and non-Hispanic white patients, according to new study results

Researchers, including **Hashem B. El-Serag, MD, MSHS**, and **Fasiha Kanwal, MD, MSHS**, of Baylor College of Medicine and Michael E. DeBakey Veterans Affairs Medical Center, Houston, collected and analyzed data from 149,407 patients (mean age, 52.5 years) in the Veterans Administration HCV Clinical Case Registry database between 2000 and 2009. All patients had active hepatitis C virus (HCV) viremia; 56.3% were non-Hispanic whites, 36.1% were African-Americans, 6% were Hispanic, and 1.6% were of other races.

Read More: <http://www.healio.com/hepatology/cirrhosis-liver-failure/news/online/%7B600f6b0d-3290-4fe0-9bf4-4a27fe5be7f4%7D/hispanic-veterans-with-hcv-at-higher-risk-for-cirrhosis-hcc>

Hepatitis C Infection the Focus of \$900,000 CDC Award

CINCINNATI—A University of Cincinnati (UC) professor has received a three-year, \$900,000 grant from the U.S. Centers for Disease Control and Prevention (CDC) to study and combat the spread of hepatitis C among young adults in rural and suburban areas in southern Ohio who inject drugs.

"The purpose of the grant is to do both epidemiologic and interventionist work with young people, ages 18 to 30, who inject drugs and either already have hepatitis C or are at risk of contracting hepatitis C," says Judith Feinberg, MD, professor of internal medicine at UC.

Feinberg, principal investigator on the grant, is working with co-investigator Erin Winstanley, PhD, assistant professor of health outcomes in the James L. Winkle College of Pharmacy

"This is an important public health project as rates of hepatitis C are higher in suburban and rural areas than in urban areas," says Winstanley. "This grant will allow us to collect important epidemiological data and improve engagement in interventions that can prevent and reduce transmission of hepatitis C."

The grant will allow the researchers to hire and train outreach workers to recruit young people who use injection drugs and have hepatitis C or are at risk of contracting it and are residing in one of 21 counties across southern Ohio. Those counties are: Adams, Athens, Brown, Butler, Clermont, Clinton, Fayette, Gallia, Greene, Highland, Hocking, Jackson, Lawrence, Meigs, Montgomery, Pike, Preble, Ross, Scioto, Vinton and Warren.

Read More: <http://healthnews.uc.edu/news/?%2F25152%2F>

Are Fibrosis Tests a Cost-Effective Way to Decide on Hep C Treatment?

Using tests to determine liver fibrosis severity among people with hepatitis C virus and only treating those with advanced fibrosis is not cost-effective compared with a strategy of treating all, regardless of fibrosis stage. This finding may change, however, as new treatments enter the market, possibly with higher price tags.

Publishing their findings in *Hepatology*, researchers conducted a systematic review and meta-analysis to calculate the accuracy of various non-invasive tests (NITs) at determining fibrosis stage. Then they used the data from that meta-analysis, along with medical literature and national data from the United Kingdom, to compare the cost-effectiveness of four different strategies: conducting fibrosis staging with NITs and then treating those with a fibrosis stage 2 or above; staging with a liver biopsy and treating those with a fibrosis stage 2 or above; treating no one; and treating everyone regardless of their fibrosis stage.

Read More: http://www.hepmag.com/articles/fibrosis_treatment_2501_26143.shtml

Racial Differences in the Progression to Cirrhosis and Hepatocellular Carcinoma in HCV-Infected Veterans

OBJECTIVES: The race of patients infected with hepatitis C virus (HCV) in the United States may be associated with the risk for cirrhosis and hepatocellular carcinoma (HCC). However, previous studies are too small to provide convincing data regarding the effect of race on cirrhosis and HCC risk after accounting for demographic, clinical, and virological factors.

METHODS: We used the Veterans Administration (VA) HCV Clinical Case Registry to identify patients with confirmed viremia between 2000 and 2009 and with at least 1 year of follow-up in the VA. We identified cirrhosis and HCC cases through early 2010. Cox proportional hazard regression models were performed to examine the effect of race on the risk for cirrhosis and HCC while adjusting for patients' age, gender, period of service (World War I/II, Vietnam era, post-Vietnam era), HIV co-infection, HBV co-infection, alcohol abuse, diabetes, body mass index, and antiviral treatment receipt and response.

RESULTS: There were 149,407 patients with active HCV viremia. Of them, 56.3% were non-Hispanic White (NHW), 36.1% were African American (AA), 6.0% were Hispanic, and 1.6% belonged to other racial groups. After an average follow-up of 5.2 years, 13,099 patients were seen to have a recorded diagnosis of cirrhosis and 3,551 had HCC. Hispanics had the highest annual incidence rates of cirrhosis and HCC (28.8 and 7.8%, respectively), whereas AAs had the lowest rates (13.3% and 3.9%, respectively) compared with NHWs (21.6 and 4.7%, respectively). There were differences among NHW, AA, and Hispanic patients in the rates of HIV infection (2.1, 2.5, and 6.0%, respectively), HCV genotype 1 (50.0, 50.6, and 64.2%, respectively), obesity (28.0, 25.4, and 30.9%, respectively), diabetes (8.7, 16.1, and 16.1%, respectively), and absence of antiviral treatment (81.1, 89.6, and 82.1%, respectively). However, adjusting for differences in demographic and clinical factors did not change the magnitude or direction of the race effect. Compared with NHWs, Hispanic patients had a higher risk of having cirrhosis recorded (adjusted hazard ratio (HR) =1.28, 95% confidence interval (CI) =1.21–1.37) and HCC (1.61, 95% CI=1.44–1.80). In contrast, AAs had a lower risk of cirrhosis (HR=0.58, 95% CI=0.55–0.60) and HCC (0.77, 95% CI=0.71–0.83) compared with NHWs.

CONCLUSIONS: Hispanics with HCV are at a significantly higher risk, whereas AAs are at a considerably lower risk of developing cirrhosis and HCC than are NHWs. These associations persisted even after adjusting for a range of factors including HCV genotype, HCV treatment, diabetes, and body mass index.

Read More:

<http://www.nature.com/ajg/journal/vaop/ncurrent/full/ajg2014214a.html>

http://www.hepmag.com/articles/cancer_cirrhosis_risk_2501_26099.shtml

HIV-Negative Gay Men May Acquire Hepatitis C Sexually

HIV-negative men who have sex with men (MSM) are apparently at risk for sexual acquisition of hepatitis C virus (HCV), the National AIDS Treatment Advocacy Project reports. Their risk factors are likely similar to those of HIV-positive men, among whom there is an emerging epidemic of, sexually transmitted hep C. Researchers at Chelsea and Westminster Hospital in London conducted a retrospective study of the clinic's patients in which they identified 44 acute cases of hep C among HIV-negative MSM between January 2010 and December 2013. Thirty-four percent of the men spontaneously cleared the virus, 25 percent began treatment for hep C, 30 percent remained in care and 11 percent were lost to follow-up. Then men's ages ranged between 24 and 75, and the groups had a median age of 37. Eighty-two percent of the 44 men reported both insertive and receptive anal intercourse without a condom, while 9 percent reported just receptive intercourse without a condom and 2 percent reported only insertive intercourse without a condom. Twenty-seven percent reported group sex, 25 percent reported fisting, 21 percent reported any recreational drug use, and 14 percent reported condom-less intercourse while on drugs. About 9 percent reported injection drug use. Read More: http://www.aidsmeds.com/articles/sexual_transmission_1667_26110.shtml

Podcast: Sexual Transmission of Hepatitis C

The efficiency of hepatitis C virus (HCV) transmission by sexual activity remains controversial. We conducted a cross-sectional study of HCV-positive subjects and their partners to estimate the risk for HCV infection among monogamous heterosexual couples. A total of 500 anti-HCV-positive, human immunodeficiency virus-negative index subjects and their long-term heterosexual partners were studied. Couples were interviewed separately for lifetime risk factors for HCV infection, within-couple sexual practices, and sharing of personal grooming items. Blood samples were tested for anti-HCV, HCV RNA, and HCV genotype and serotype. Sequencing and phylogenetic analysis determined the relatedness of virus isolates among genotype-concordant couples. The majority of HCV-positive index subjects were non-Hispanic white, with a median age of 49 years (range, 26-79 years) and median of 15 years (range, 2-52 years) of sexual activity with their partners. Overall, HCV prevalence among partners was 4% (n = 20), and nine couples had concordant genotype/serotype. Viral isolates in three couples (0.6%) were highly related, consistent with transmission of virus within the couple. Based on 8,377 person-years of follow-up, the maximum incidence rate of HCV transmission by sex was 0.07% per year (95% confidence interval, 0.01-0.13) or approximately one per 190,000 sexual contacts. No specific sexual practices were related to HCV positivity among couples.

Conclusion: The results of this study provide quantifiable risk information for counseling long-term monogamous heterosexual couples in which one partner has chronic HCV infection. In addition to the extremely low estimated risk for HCV infection in sexual partners, the lack of association with specific sexual practices provides unambiguous and reassuring counseling messages. (HEPATOLOGY 2013)

Read More: <http://www.aasld.org/journals/hepatology/Pages/hcvsexualtransmission.aspx>

HIV Clinicians Excluded From Prescribing Hepatitis C Treatment

Two of the largest professional associations of HIV clinicians in the United States have sent letters to the Centers for Medicare and Medicaid Services (CMS) challenging cost control policies, according to a statement from the National AIDS Treatment Advocacy Project (NATAP). They claim the policies are effectively barring many HIV docs from prescribing treatments for patients co-infected with the hepatitis C virus (HCV).

The American Academy of HIV Medicine (AAHIVM) and the HIV Medicine Association (HIVMA) are urging CMS to discontinue and re-evaluate insurance restrictions under their health care plans that exclude HIV providers who are not specifically trained as gastroenterologists, hepatologists or infectious disease specialists from prescribing the latest hep C medications to their patients.

About 30 percent of the 1.1 million Americans living with HIV also have HCV. The new hep C meds are much safer and more tolerable for people living with HIV, and they are showing up to 100 percent HCV cure rates.

Read More: http://www.hepmag.com/articles/hiv_docs_excluded_hepc_rxs_2831_26137.shtml

Hep C Takes 15 Years Off Life Span, Raises Death Risk 12-Fold

People with hepatitis C virus (HCV) die 15 years earlier and have a 12-times greater risk of death when compared with those without the virus, the National AIDS Treatment Advocacy Project (NATAP) reports. The Centers for Disease Control and Prevention (CDC) conducted a multi-cohort analysis, examining electronic medical records of adults who received treatment at least once between 2006 and 2010 in four health care systems. The researchers then compared the findings of their so-called Chronic Hepatitis Cohort Study (CHeCS) with the national Multiple Cause of Death (MCOd) study covering the same period of time. They presented their findings at the IDWeek 2013 conference in San Francisco.

Looking at the records of 11,703 people with hep C, who made up a half of a percent of the 2.1 million people in the CHeCS cohort, the investigators found that 1,590 (14 percent) died during the study period. Sixty percent were between 45 and 59 years old, and 34 percent were 60 and older. When compared with the MCOd group, those in CHeCS had a 12-times greater mortality rate. With an average age at death of 59, those in the CHeCS group died an average of 15 years earlier than the typical American.

Read More: http://www.natap.org/2013/IDSA/IDSA_31.htm

The Challenge of Genotype 3

For many clinicians, genotype 3 now presents the greatest challenge in the treatment and management of patients with hepatitis C virus. In a recent paper published in the *Journal of Viral Hepatology*, *HCV Next* Editorial Board member Nezam H. Afdhal, MD, and Elliot B. Tapper, MD, from Beth Israel Deaconess Medical Center, called genotype 3 “potentially the most difficult-to-treat genotype and an area of intense research for new drug development.”

Genotype 3 is estimated to affect 54.3 million people and is the second most common worldwide behind genotype 1 (83.4 million), according to a report by Messina and colleagues published in *Hepatology* in July.

Special characteristics of genotype 3, including a more rapid development of liver disease, increased rates of steatosis and a disproportionately higher risk for hepatocellular carcinoma, present unique challenges for the clinical community that cares for patients with HCV.

“Genotype 3 is associated with progressive disease, and drug development has long been targeted on genotype 1 disease,” Eric J. Lawitz, MD, vice president of scientific and research development at The Texas Liver Institute and clinical professor of medicine at University of Texas Health Science Center, told *HCV Next*.

Read More: <http://www.healio.com/infectious-disease/hepatitis-c/news/print/hcv-next/%7Bb54ab60b-f456-4fa8-b7e8-d448c1fe6c76%7D/the-challenge-of-genotype-3>

Viral Hepatitis Updates from CDC:

2012 Viral Hepatitis Surveillance Report

The 2012 Viral Hepatitis Surveillance Report is now available.

<http://www.cdc.gov/hepatitis/Statistics/2012Surveillance/index.htm>

New Phase of the Know Hepatitis B Campaign Released

CDC has launched the second phase of the *Know Hepatitis B* campaign designed to promote Hepatitis B testing among Asian Americans and Pacific Islanders (AAPIs). Help spread the word by using and sharing the campaign’s free resources. <http://www.cdc.gov/knowhepatitisB/khb-PhaseTwo.htm>

Viral Hepatitis Posters Available to Order

A variety of viral hepatitis posters are available to order for free, including the new multi-lingual posters from the *Know Hepatitis B* campaign.

<http://wwwn.cdc.gov/pubs/CDCInfoOnDemand.aspx?ProgramID=48>

Cooperative Agreement Awarded to Community-based Programs to Test and Cure Hepatitis C

CDC has awarded three organizations with programs intending to strengthen health-care capacity to diagnose and cure hepatitis C virus (HCV) infection through implementation of a package of services in a target population. For more information, see:

<http://www.cdc.gov/hepatitis/Partners/CommunityBasedHepCProgs.htm>

AASLD/IDSA/IAS-USA Issues New Guidance on Hepatitis C Treatment

AASLD/IDSA/IAS-USA issued new Recommendations for Testing, Managing, and Treating Hepatitis C.

<http://www.hcvguidelines.org/>

ICAAC 2014: AbbVie 3D Combination Works Well for People with HIV/HCV Co-infection

An all-oral regimen of 3 direct-acting antivirals plus ribavirin taken for 12 weeks led to sustained virological response in 94% of HIV positive people with mostly genotype 1a hepatitis C co-infection in the TURQUOISE-I study, according to data presented at the 54th Interscience Conference on Antimicrobial Agents and Chemotherapy this week in Washington, DC.

Direct-acting antiviral agents that target different steps of the hepatitis C virus (HCV) lifecycle have brought about a revolution in treatment, especially with the advent of interferon-free regimens. People with HIV/HCV co-infection experience more rapid liver disease progression than people with HCV alone and do not respond as well to interferon-based therapy, but several studies suggest that having HIV is no longer a predictor of poorer response when using interferon-free regimens.

Read More: <http://www.hivandhepatitis.com/hcv-treatment/experimental-hcv-drugs/4825-icaac-2014-abbvie-3d-regimen-works-well-for-people-with-hivhcv-coinfection>

HCV: Clinical Trials:

For the latest hepatitis C drug studies, recruitment, and evaluations:

<http://www.clinicaltrials.gov/ct2/results?term=hepatitis+c&Search=Search>

Patient Assistance and Co-Pay Programs for Viral Hepatitis Drugs

Pharmaceutical companies offer Patient Assisted programs and co-pay programs to help offset costs and save money on hep C treatment.

Read More:

http://www.hepmag.com/articles/hepatitis_paps_copays_20506.shtml?utm_source=newsletter09_15&utm_medium=TJ11&utm_campaign=lesson

HEPATITIS IN CORRECTIONS:

New Hep C Meds Could Spell Disaster for U.S. Prison Budgets

Prisoners, unlike most Americans, have a constitutional right to medical care. That is why the introduction of an expensive new drug to treat hepatitis C is forcing prison administrators to begin wrestling with a big dilemma — save their budgets or treat their inmates. The drug, Sovaldi, which sells for \$1,000 a pill, is also a source of consternation for health insurers and state Medicaid directors. But the problem will be felt most intensely in the prison system because it has a disproportionate share of hepatitis C patients, and most systems will end up paying full price.

The blood-borne disease is most frequently transmitted through needles shared by intravenous drug users. Estimates vary, but a recent study finds that more than 17 percent of all inmates have the infection, which can cause liver damage, cirrhosis and cancer. Nearly a third of American residents with the virus find themselves in jail or prison at some point.

Read More: http://www.nytimes.com/2014/08/07/upshot/why-the-hepatitis-cure-sovaldi-is-a-budgetary-disaster-for-prisons.html?_r=2&abt=0002&abg=1

HEPATITIS B Corner:

Hepatitis C: Perinatal and Children Aged Five Years or Less. Update on the Project for Voluntary Reporting in Kentucky.

NEW FAX NUMBER for submitting report

Thank you for your continued support of this project and your ongoing assistance with reporting pregnant women and children aged five years and less who are infected with hepatitis C virus (HCV) and seen in birthing hospitals, medical practices, and clinics throughout the Commonwealth.

Please continue to report any HCV-positive individuals in the above categories. Complete and fax the reporting form at the end of this newsletter. Please note the new fax number:

Please fax to 502-696-3803

If you have additional questions or concerns, please call Kathy Sanders, RN, MSN at 502-564-3261, ext. 4236 or Julie Miracle, RN, BSN at 502-564-4478, ext. 4260.



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Kentucky Reportable Disease Form

Department for Public Health
Division of Epidemiology and Health Planning
275 East Main St., Mailstop HS2E-A
Frankfort, KY 40621-0001

Hepatitis Infection in Pregnant Women or Child (under the age of five)
Fax Form to 502-696-3803

DEMOGRAPHIC DATA					
Patient's Last Name	First	M.I.	Date of Birth	Age	Gender <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> Unk
Address		City	State	Zip	County of Residence
Phone Number	Patient ID Number	Ethnic Origin <input type="checkbox"/> His. <input type="checkbox"/> Non-His.		Race <input type="checkbox"/> W <input type="checkbox"/> B <input type="checkbox"/> A/PI <input type="checkbox"/> Am.Ind. <input type="checkbox"/> Other	

DISEASE INFORMATION			
Describe Clinical Symptoms:	Date of Onset: / /	Jaundice: <input type="checkbox"/> Yes <input type="checkbox"/> No	Date of Diagnosis: / /
Is Patient Pregnant? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, # wks _____	Expected Date of Delivery: / /	Name of Hospital for Delivery:	
Physician Provider Name: Address: Phone:			

LABORATORY INFORMATION				
Hepatitis Markers	Results	Date of test	Viral Load *if applicable	Name of Laboratory
HBsAg	<input type="checkbox"/> Pos <input type="checkbox"/> Neg	/ /		
IgM anti-HBc	<input type="checkbox"/> Pos <input type="checkbox"/> Neg	/ /		
HBeAg	<input type="checkbox"/> Pos <input type="checkbox"/> Neg	/ /		
IgM anti-HAV	<input type="checkbox"/> Pos <input type="checkbox"/> Neg	/ /		
HCV Antibody	<input type="checkbox"/> Pos <input type="checkbox"/> Neg	/ /		
HCV RNA Confirmation	<input type="checkbox"/> Pos <input type="checkbox"/> Neg	/ /		

SERUM AMINOTRANSFERASE LEVELS				
Patient	Reference	Date of test	Name of Laboratory	
AST (SGOT) U/L	U/L	/ /		
ALT (SGPT) U/L	U/L	/ /		

Mother: Hepatitis Risk Factors <input type="checkbox"/> IDU <input type="checkbox"/> Multiple Sexual Partners <input type="checkbox"/> Tattoos <input type="checkbox"/> STD <input type="checkbox"/> HIV <input type="checkbox"/> Foreign Born/ Country _____ <input type="checkbox"/> Exposure to known HBV/HCV Pos contact	Child: Hepatitis Risk Factors <input type="checkbox"/> Mother HBV Pos <input type="checkbox"/> Household member exposure HBV Pos <input type="checkbox"/> Mother HCV Pos <input type="checkbox"/> Household member exposure HCV Pos <input type="checkbox"/> Foreign Born / Country _____
Mother: Hepatitis A vaccination history: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused Dates Given: / / Hepatitis B Vaccination history: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused If yes, how many doses <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 Year completed: / /	
Child: Hepatitis A vaccination history: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused Dates Given: / / Hepatitis B Vaccination history: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused Dates Given: / / Was PEP Infant of Positive HBV mother given at birth? <input type="checkbox"/> Yes <input type="checkbox"/> No	

