



KY Hepatitis Connections

Happy fall! We are pleased to share with you the October issue of *KY Hepatitis Connections*. The *KY Hepatitis Connections* provides current information, opportunities for viral Hepatitis continuing professional education and information about educational materials available.

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. Join us on Facebook, KY Viral Hepatitis.

Kathy Sanders, RN MSN

SAMHSA Releases Opioid Overdose Prevention Toolkit

In August 2013, the Substance Abuse and Mental Health Services Administration (SAMHSA) released an [Opioid Overdose Prevention Toolkit](#) (The Toolkit) to educate first responders, physicians, patients, family members and community members on ways to prevent opioid overdose, as well as how to use naloxone to prevent overdose-related deaths. As part of NASTAD's ongoing [commitment to promoting injecting drug user health](#), we encourage you to take a look at *The Toolkit* and share with relevant staff and community partners.

The Toolkit includes:

§ [Facts for Community Members](#)

§ [Essentials for First Responders](#)

§ [Safety Advice for Patients](#)

§ [Information for Prescribers](#)

§ [Resources for Overdose Survivors and Family Members](#)

The [National HIV/AIDS Strategy](#) (NHAS), the HHS [Viral Hepatitis Action Plan](#) (VHAP) and the [2013 National Drug Control Strategy](#) all recognize the link between substance use and HIV and viral hepatitis prevention. Drug overdose is a common cause of non-AIDS related death among people who are living with HIV. Studies suggest that biological and behavioral factors, as well as environmental and structural factors, shown previously to increase overdose risk also affect populations living with HIV and could help explain the higher overdose risk associated with HIV status. Similarities in risk factors for HIV and overdose suggest a key opportunity to reduce HIV transmission and overdose by scaling up the public health, legal and policy infrastructures that promote prevention, education, care and treatment for HIV, viral hepatitis and drug use.

Additionally, *The Toolkit* highlights the importance of access to naloxone, a medication that reverses the effects of overdose from opioids. In April 2012, NASTAD [submitted comments](#) to the Food and Drug Administration (FDA) encouraging increased access to naloxone and stated that targeting naloxone provision to opioid users living with HIV and/or viral hepatitis “has the potential to reduce fatal overdose in these disproportionately affected populations. Making naloxone more widely and readily accessible will provide opportunities for physicians, programs and organizations that care for and provide support services for these populations to save countless lives and prevent overdoses.”

For more information on national and state-specific overdose prevention efforts, please visit the Harm Reduction Coalition's [website](#) or the Association of State and Territorial Health Officials (ASTHO)'s [website](#).

If you have any questions on NASTAD's work promoting drug user health, please contact [Natalie Cramer](#), [Chris Taylor](#) or [Oscar Mairena](#).

FDA, academia and industry team up to end hepatitis C

GAINESVILLE, Fla. — As doctors prepare to manage an influx of new hepatitis C patients and treatment options, a collaboration among academia, industry and the U.S. Food and Drug Administration is poised to deliver real-world data that can help doctors and patients optimize their treatment experience.

A research consortium known as the Hepatitis C Therapeutic Registry and Research Network, or HCV-TARGET, has joined forces with the FDA to share national data on how newly approved therapies for hepatitis C are used and managed in routine practice. HCV-TARGET is led jointly by investigators at the University of Florida and the University of North Carolina at Chapel Hill and is sponsored in part by multiple pharmaceutical companies.

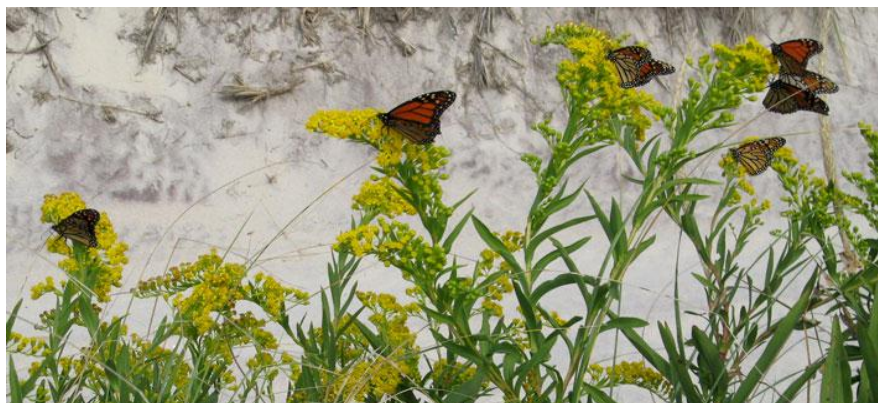
The new partnership's goal is to establish research collaborations using the HCV-TARGET database to better inform patients and clinicians about hepatitis C therapies. Read More:

<http://news.ufl.edu/2013/08/29/hcv-target-2/>

Study examines ways to restore immunity to chronic hepatitis C infection

The hepatitis C virus hijacks the body's immune system, leaving T cells unable to function. A new study in animal models suggests that blocking a protein that helps the virus thrive could restore immune function, allowing the body to fight infection. The work, led by teams at The Research Institute at Nationwide Children's Hospital and Emory University, was published online Aug. 26 in the *Proceedings of the National Academy of Sciences*.

Previous studies show that antibody treatments that inhibit the protein, called programmed cell death 1 (PD-1), can shrink tumors in humans. This new work suggests that anti-PD-1 antibodies might be equally effective in treating hepatitis C and other persistent human viral infections, says Christopher Walker, PhD, a senior author on the study and director of the Center for Vaccines and Immunity at Nationwide Children's. Read More: <http://medicalxpress.com/news/2013-09-ways-immunity-chronic-hepatitis-infection.html>



EDUCATION

Viral Hepatitis Updates from CDC

Online Serology Training

The course is comprised of six animated tutorials with voiceovers and eight case studies. The tutorials and case studies combine to teach the course objectives.

<http://www.cdc.gov/hepatitis/Resources/Professionals/training/Serology/training.htm>

Hepatitis C Online Course: Management of Cirrhosis–Related Complications

Module 3: [Management of Cirrhosis-Related Complications](http://hepatitisc.uw.edu/index.php) has been added to a self-study, interactive course for medical providers on Hepatitis C infection. Module 1: Screening and Diagnosis of Hepatitis C Infection and Module 2: Evaluation, Staging, and Monitoring of Chronic Hepatitis C are also active. New features include Color Coded Master Bibliography, Embedded Video, and Clinical Calculators. The project is brought to you by the University of Washington in collaboration with the International Antiviral Society-USA (IAS-USA). Free CME credit and free CNE credit are available. Funded by a grant from the Centers for Disease Control and Prevention. <http://hepatitisc.uw.edu/index.php>

Medscape Hepatitis C Continuing Medical Education Credits:

<http://search.medscape.com/education-search?newSearchHeader=1&queryText=hepatitis+C>

KnowHepatitis.org Training

The National Training Center provides training to frontline workers in community based organizations and clinics on hepatitis prevention, diagnosis, management, treatment and integration. Hepatitis, STDs and HIV are preventable diseases. Despite this it is estimated that up to 5 million people nationwide are chronically infected with hepatitis B or C and many of them do not know it. Concurrently, it is estimated that in 2006 that there were 36,828 new cases of AIDS, approximately 436,693 people living with AIDS and up 1.2 million people who are infected with HIV and do not know it. Approximately, 25% to 35% of all the people living with AIDS are also co-infected with HCV and chronic HCV infection is now a leading cause of death among people with AIDS.

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

SAVE THE DATE!

In commemoration of National Hispanic Heritage Month, the U.S. Department of Health and Human Services, Office of the Assistant Secretary for Health: Office on Women's Health, Office of Minority Health, Office of HIV/AIDS and Infectious Disease Policy and National Vaccine Program Office invite you to participate in the webinar:

Hispanics and Hepatitis: What You Need to Know

There are an estimated 53 million Hispanics/Latinos living in the United States, which makes this group the largest and fastest growing minority group in the U.S. The prevalence of Hepatitis C among Latinos is estimated at 2.6%; significantly higher than the estimated prevalence of 1.5% in the general population. Awareness remains very low among Hispanics despite the availability of treatments that can cure Hepatitis C.

This webinar will highlight factors affecting early diagnosis, disease progression and timely treatment for Hispanics, including barriers in access to quality care, common co-morbidities, patient awareness, education, and language barriers. Presenters will share strategies to raise awareness about viral hepatitis among Latinos; benefits of prevention, testing, education; and bring attention to related health issues, such as HIV co-infection, diabetes, obesity, and behavioral health issues, such as substance use/abuse.

When: **Monday, October 7, 2013 2:00-3:30PM ET**

You need to register for this webinar!

Participant access information:

URL:

https://www.mymeetings.com/emeet/rsvp/index.jsp?customHeader=mymeetings&Conference_ID=7689435&passcode=6207866

Conference number: 7689435

Passcode: 6207866

To register for this event:

1. Go to the URL listed above and choose Web RSVP under Join Events.
2. Enter the conference number and passcode.
3. Provide your information for the event leader and then click submit.

RVR, baseline characteristics identify patients who will benefit from dual HCV therapy

A model incorporating *IL28B* genotype, fibrosis stage, viral load and rapid virologic response was predictive of benefit from dual therapy among patients with chronic hepatitis C in a recent study.

In a retrospective analysis, researchers evaluated 1,045 treatment-naïve Caucasian patients with [chronic HCV](#) genotype 1 treated with pegylated interferon and ribavirin according to two models: The first incorporated only baseline variables associated with sustained virologic response at 24 weeks post-treatment (SVR), with the second model also included rapid virologic response at 4 weeks of therapy (RVR). Read More: <http://www.healio.com/infectious-disease/hepatitis-resource-center-2013/rvr-baseline-characteristics-identify-patients-who-will-benefit-from-dual-hcv-therapy>

The Affordable Care Act and People with HIV and Hepatitis

The Patient Protection and Affordable Care Act (ACA) is the largest overhaul of the U.S. healthcare system since the introduction of Medicare and Medicaid in 1965. While it promises to provide coverage for many people who previously could not obtain or afford insurance, some will face "sticker shock." People with complex health needs -- such as people with HIV or hepatitis B or C -- risk falling through the cracks, and the fate of existing AIDS programs remains unknown.

Enacted in March 2010 after a bruising legislative battle, the ACA is scheduled for full implementation next year. New state health insurance exchanges or "marketplaces" will open for enrolment on October 1, 2013, and coverage can start as of January 1, 2014. Read More: <http://hivandhepatitis.com/health-care-a-reform/4272-the-affordable-care-act-and-people-with-hiv>



Hep B Vaccination May Cut Deaths From Liver Disease

Taiwanese researchers report a 90 percent reduction in deaths from complications of hepatitis B since the country began its infant vaccination program in 1984.

Vaccinations have also decreased the spread of hepatitis B, which can cause liver damage, liver cancer and a deadly reaction in babies called infant fulminant hepatitis, the researchers said.

"Immunization has provided 30-year protection against acute hepatitis and end-stage chronic liver diseases, including cirrhosis and liver cancer," said lead researcher Chien-Jen Chen, a vice president at the Genomics Research Center at Academia Sinica in Taipei.

The implications of the findings are global. Read More:

<http://www.webmd.com/hepatitis/news/20130903/hepatitis-b-vaccination-cuts-deaths-from-liver-disease-cancer-study>

Question & Answer

UNDERSTANDING PEDIATRIC LIVER DISEASE

Approximately 15,000 hospitalizations occur each year for pediatric liver disease in the United States. During the first month after birth, the incidence of neonatal liver disease is as many as one in 2,500.

The different types of pediatric liver disease include jaundice (yellowing of skin and eyes), non-alcoholic fatty liver disease (build-up of extra fat in liver cells) and Wilson disease (1) (inherited disorder involving too much copper in the body's tissues).

Click on the Q&A, the article focus: biliary atresia and hepatitis C. Read More:

<http://www.liverfoundation.org/education/liverlowdown/110813/pediatric/>

Hepatitis C Is Often Not Diagnosed Until Symptoms Occur

Nearly half of surveyed people with hepatitis C were not tested for the virus until they developed clinical signs and symptoms such as elevated liver enzymes or jaundice, according to a study described in the August 16, 2013, *Morbidity and Mortality Weekly Report*. These findings support U.S. guidelines calling for all "Baby Boomers" born during 1945-1965 to be tested regardless of risk factors.

Over years or decades, chronic hepatitis C virus (HCV) infection can lead to serious liver disease including cirrhosis and hepatocellular carcinoma. Since 1998 the Centers for Disease Control and Prevention (CDC) has recommended HCV testing for people with traditional risk factors such as injection drug use, receiving a blood transfusion before 1992, or accidental exposure in a healthcare setting. Nevertheless, experts estimate that more than half of the approximately 4 million people with hepatitis C in the U.S. are not aware that they are infected. Read More:

<http://www.hivandhepatitis.com/hcv-testing-diagnosis/4263-hepatitis-c-is-often-not-diagnosed-until-symptoms-occur>

Hepatitis Continues To Plague Eastern Kentucky

By Stu Johnson and WEKU News

Needle exchange programs were first created 30 years ago, in response to the AIDS epidemic. Infected needles were often passed from drug abuser to drug abuser, spreading the deadly disease. By providing sterile needles, public health officials reduced the number of infections. Still, needle exchange programs remain controversial and under debate in Frankfort and Washington DC.

Instead of needle exchange, the term heard most often today is 'syringe service program.' Kentucky law prohibits syringe possession without a prescription. But, University of Kentucky epidemiologist Jennifer Havens would like to see a change in the law. Havens believes syringe exchanges do not increase drug abuse.

"I don't think anyone walking by the program, the syringe service program, is going to say, 'I'm gog to start doing drugs today because there's a syringe service program.' All it does is allow folks who are already injecting a safer way, a safer source of syringes and potentially program that they wouldn't otherwise be able to access," said Havens.

A study into 500 Appalachia drug abusers shows nearly two-thirds were infected with hepatitis. Besides reducing a public health threat, Havens says syringe exchanges can also draw abusers into drug treatment. The Associate Professor in Behavioral Science also wants a restoration of federal funding for needle exchanges. Without federal help, Havens says many communities in eastern Kentucky couldn't afford such programs.

"In talking to a lot of the leaders in eastern Kentucky, I haven't necessarily approached this issue in particular, but they are at their breaking point with regard to what do we do about this epidemic, so I think, actually at the end of the day, a syringe service program would probably be fairly welcome," added Havens.

Havens says syringe exchanges can also bring abusers into drug treatment programs.

Biomarker Discovery for Early Detection of Hepatocellular Carcinoma (HCC) in Hepatitis C (HCV) Infected Patients

Gul Mehnaz Mustafa, John R. Petersen¹, Hyunsu Ju, Luca Cicalese, Ned Snyder, Sigmund J. Haidacher, and Cornelis Elferink¹

Chronic hepatic disease damages the liver, and the resulting wound healing process lead to liver fibrosis and subsequent development of cirrhosis. The leading causes of hepatic fibrosis and cirrhosis is infection with hepatitis C virus (HCV), and of the patients with HCV-induced cirrhosis 2to5% develop Hepatocellular carcinoma (HCC) with survival rate of 7%. HCC is one of the leading causes of cancer related deaths worldwide and the poor survival rate is largely due to late stage diagnosis making successful intervention difficult if not impossible. The lack of sensitive and specific diagnostic tools, and urgent need for early stage diagnosis, prompted us to discover new candidate biomarkers for HCV and HCC. We used aptamer based fractionation technology to reduce serum complexity, differentially labeled samples (6 HCC, 6 HCV) with fluorescent dyes, and resolved proteins in pair-wise 2D-DIGE. DeCyder software was used to identify differentially expressed proteins, spots picked, and MALDI/MS/MS used to identify that ApoA1 was down regulated by 22% ($p < 0.004$) in HCC compared to HCV. Differential expression quantified by 2D DIGE was confirmed by 18O/16O stable isotope differential labeling with LC/MS/MS zoom scans. Technically independent confirmation was demonstrated by triple quadrupole LC/MS/MS selected reaction monitoring (SRM) assays with three peptides specific to human ApoA1 (DLATVYVDVLK, WQEEMELYR, VSFLSALEEYTK) using 18O/16O labeled samples and further verified with AQUA peptides as internal standards for quantification. In 50 patient samples (24 HCV and 26 HCC), all three SRM assays yielded highly similar differential expression of ApoA1 in HCC and HCV patients. These results validated the SRM assays which were independently confirmed by western blotting. Thus, ApoA1 is a candidate member of a SRM biomarker panel for early diagnosis, prognosis, and monitoring of HCC. Future, multiplexing of SRM assays for other candidate biomarkers is envisioned to develop a biomarker panel for subsequent verification and validation studies. <http://www.mcponline.org/content/early/2013/09/05/mcp.M113.031252.abstract>

Hepatitis C Cure? Sofosbuvir Plus Ribavirin Eliminate Liver Infection In Promising NIH Trial

Hepatitis C patients who don't normally respond to standard treatment may have a new weapon for fighting their viral liver disease. A combination drug program, with sofosbuvir and ribavirin, has cured a majority of volunteers in a **Phase II clinical trial** conducted by the National Institute of Allergy and Infectious Disease (NIAID), a branch of the National Institutes of Health (NIH).

Most people with hepatitis C virus (HCV) are unaware of their infection and often carry the disease for decades before liver damage and symptoms occur. About three-quarters of the 3.2 million U.S. cases are baby boomers that have carried the disease for most of their adult lives. Doctors in New York are now required to offer hepatitis C screening for this age group. Read more:

<http://www.medicaldaily.com/hepatitis-c-cure-sofosbuvir-plus-ribavirin-eliminate-liver-infection-promising-nih-trial-254613>



Kids Have Hep C Too

After decades of the Hepatitis C virus (HCV) going unnoticed by mainstream institutions, this illness is finally being recognized as a major health problem. An estimated five times more Americans are infected with Hepatitis C than HIV – the virus that causes AIDS, yet HCV is not routinely screened for. This is unfortunate, because the earlier Hepatitis C treatment commences the better chance there is of eliminating the virus. While prevention, detection and treatment of Hepatitis C are just now gaining momentum, these efforts primarily target adults. Hopefully, research released will encourage the medical community to expand Hepatitis C education and awareness to include children.

Prevalence in Kids

Likely because fewer children have Hepatitis C than adults, medical professionals rarely consider it as a possibility for kids. Experts estimate the following statistics about children in the U.S. with the virus:

- 0.2 percent of children younger than 12 years old have HCV
- 0.4 percent of children between 12 and 19 years old have HCV
- Approximately 240,000 children are infected with HCV

Even though the number of new HCV infections in adults is declining, new infections in children continue to occur – mostly as a result of being born to Hepatitis C-infected mothers. Read more:

http://www.hepatitis-central.com/mt/archives/2013/09/kids-have-hep-c-too.html?eml=hepcen194&utm_source=iContact&utm_medium=email&utm_campaign=Hepatitis%20Central&utm_content=HepCen%23194+A

Call to Action!

The Centers for Medicare & Medicaid has decided to initiate a new National Coverage Analysis (NCA) on screening for HCV in adults, which is recommended with a grade B by the United States Preventive Service Task Force (USPSTF).

On September 5th, CMS initiates this NCA on screening for HCV in adults. The initial 30-day public comment period begins with this posting date, and ends after 30 calendar days.

CMS considers all public comments and is particularly interested in comments that include clinical studies and other scientific information that provide evidence for improvement in short and long term outcomes related to this screening service.

Instructions on submitting public comments can be found at

<http://www.cms.gov/Medicare/Coverage/InfoExchange/publiccomments.html>

You can also submit a public comment by clicking on the highlighted word "comment" in the title bar at the top of this page.



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