WELCOME Addiction Medicine ECHO Clinic

The session will begin promptly at <u>12 pm</u>.



Please <u>mute</u> the audio on your device.



Sessions take place <u>Thursday on the 2^{cd}</u> <u>and 4th week of the</u> month.



Please connect your <u>camera</u>.

Need technical assistance? Call 907.729.2622 or text your phone number into the chat.









Recording

We will record the **didactic portion** of every session. After the session, the didactic portion of this clinic will be available on the ANTHC Addiction Medicine ECHO page.

By participating in this clinic you are consenting to be recorded.

If you do not wish to be recorded, please email <u>behavioralhealth@anthc.org</u> at least one week prior to the ECHO Clinic you plan to attend.

Some Helpful Tips

- Please mute microphone when not speaking
- Use chat function
- Position webcam effectively
- Test both audio & video

Need technical assistance? Use the chat function or call 907-317-5209



ANTHC Clinical ECHO Series

Approved Provider Statements:



In support of improving patient care, Alaska Native Medical Center (ANMC) is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Contact Hours:

ANMC designates this activity for a maximum of 25 contact hours, including 12 total pharmacotherapeutics contact hours, commensurate with participation.

Financial Disclosures:

None of the presenters and planners for this educational activity have any relevant relationship(s) to disclose with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

Approved for 1 CHAP CE

Conflict of Interest Disclosures:

None of the presenters and planners for this educational activity have any relevant relationship(s) to disclose with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

Requirements for Successful Completion:

To receive CE credit be sure you are included in attendance record as directed by the facilitator/session moderator, and complete the course evaluation or post session survey via this link: https://forms.gle/QhwCeGTf4zLNwpBX7

For more information contact Jennifer Fielder at jlfielder@anthc.org or (907) 729-1387

Introductions

Addiction Medicine ECHO

- Please introduce yourself in the chat :
 - Name
 - Location
 - Profession/Credentials
 - Note: The chat will be saved as our attendance record for continuing education credits.





Hepatitis C Virus Basics: What You Need to Know

June 9, 2022

Leah Besh, PA-C ANTHC Liver Disease & Hepatitis Program ANTHC Early Intervention Services/HIV Program labesh@anthc.org

Objectives

- Participants will understand the risk of HCV transmission with substance use
- Participants will recognize strategies to prevent HCV with patients experiencing substance use disorders
- Participants will gain knowledge of HCV testing, care, and treatment options



This training is provided in partnership with

Mountain West AIDS Education and Training Center





I have no conflicts of interests to disclose



Hepatitis C Virus

- Blood borne single-stranded RNA virus that attacks the liver
 - First identified in the 1980's
 - First reliable antibody test available in 1992
- Causes chronic inflammation and can lead to cirrhosis, liver cancer and liver failure
- No vaccine available due to high mutation rate of virusfrequency that virus changes from original type to a different variant form
- Six major genotypes (types or "strains") identified: 1-2-3-4-5-6





Hepatitis C (HCV) Epidemiology

- Hepatitis C is the most common blood-borne infection in the U.S
- About 2.4 million Americans are living with active hepatitis C infection
- There were 57,500 new cases of acute hepatitis C in 2019
 - The highest age population is 20-39 years
 - Men are still making up more of the newly diagnosed cases
- CDC reported more than 137,000 persons with new diagnosis of chronic hepatitis C in 2019



Hepatitis C (HCV) Epidemiology (cont.)

- Hepatitis C is the leading cause of complications from chronic liver disease
- Before COVID-19, it was associated with more deaths than the top 60 reportable infectious diseases combined
- Only 55.6% of adults infected with hepatitis C were aware they had it
- American Indian/Alaska Native people have:
- The highest rate of acute hepatitis C
- The highest Hepatitis C related death rate



Annual Reported cases of Hepatitis in Alaska January 1, 2000 to December 31, 2018

Year	Hepatitis A	Hepatitis B, acute	Hepatitis C**
2018	1	7	1238
2017	0	9	1214
2016	2	7	1193
2015	4	3	1240
2014	1	3	1227
2013	1	1	1037
2012	1	1	987
2011	2	4	1092
2010	5	6	662
2009	2	4	829
2008	5	1	1006
2007	5	8	999
2006	2	9	1039
2005	4	8	982
2004	2	11	932
2003	8	8	821
2002	12	11	746
2001	13	9	741
2000	16	14	722

** Numbers for Hepatitis C represent newly reported cases (acute and chronic for each year.

- Hepatitis C became reportable in January 1996
- Universal Hepatitis A Immunization Program began January 1996
- Hepatitis B Immunization Program expanded April 1997
- Mandatory Hepatitis A and B immunization for children attend Alaska schools and licensed childcare facilitates began in Fall 2001



Hepatitis C On the Rise: Data from ANTHC





Two Epidemics of Hepatitis C in the USA and Alaska

- Epidemic in the 1960's, 1970's and Early 1980's
 - Related to heavy injecting drug use, unscreened blood transfusions, unprofessional tattooing and lack of universal precautions before HIV
 - Estimated that 3.25% of baby boomers (persons born between 1945 and 1965) have been exposed to hepatitis C
- Current epidemic since 2010 is from recent surge in injection drug use
 - 20-30% of PWID become infected within first 2 years of starting injecting drugs, 50% within 5 years



Rates of Reported Acute Hepatitis C Case in U.S by Race/Ethnicity



Year



Hepatitis C RISK Factors











Hepatitis C: Methods of Transmission & Persons to Screen

- Blood transfusion or Organ transplant before 1992
- Contaminated Needles and Syringes:
 - Injection drug use: Accounts for about 60% to 70% in baby boomers and > 90% of new infections in US
 - Unsafe medical procedures: In baby boomers in US and in developing world
- Sexual: Rare with vaginal and oral sex
 - Anal sex and traumatic sex are risk factors as there is more risk of bleeding
- Mother to baby: about 5-6%; 15-20% if mother has HIV



Hepatitis C: Methods of Transmission & Persons to Screen (continued)

- Other causes:
 - Unprofessional tattooing or body piercing
 - Snorting cocaine
 - Sharing equipment used to prepare and inject drugs
 - Sharing tooth brushes, razors, nail clippers with person who has hep C
- Being in prison increases risk:
 - High rate of persons with hepatitis C coming into prison system
 - Injection drug use and sharing needles
 - Unprotected sexual activity
 - Blood-to-blood contacts through tattooing and physical violence
- Baby Boomers born 1945-1965 (3.25% have been exposed)



Case Presentation

Project ECHO's goal is to protect patient privacy

To help Project ECHO accomplish that goal, please only display or say information that doesn't identify a patient or that cannot be linked to a patient.

References: For a complete list of protected information under HIPAA, please visit www.hipaa.com

Vitålsigns™

Dramatic increases in hepatitis C CDC now recommends hepatitis C testing for all adults



Want to learn more? www.cdc.gov/hepatitis/hcv/

4 in 10

About 4 in 10 people with hepatitis C do not know they are infected.



New hepatitis C cases are 4 times as high as they were 10 years ago. 20-39

Younger adults 20–39 years old have the highest rates of new hepatitis C cases.



#vitalsigns APRIL 2020

Who to screen: Everyone

CDC and USPSTF HCV Screening Recommendations



CDC recommends all adults get tested for hepatitis C.



Final Recommendation Statement

Hepatitis C Virus Infection in Adolescents and Adults: Screening

March 02, 2020



Recommendation Summary

Population	Recommendation	Crade
Adults aged 18 to 79 years	The USPSTF recommends screening for hepatitis C virus (HCV) infection in adults aged 18 to 79 years.	В



click here to learn more



SOURCES: CDC Recommendations for Hepatitis C Screening, MMWR, April 2020 CDC Vital Signs, April 2020



Natural History of Hepatitis C Infection

Out of 100 people who have hepatitis C:

- Up to about half of people will clear virus naturally without medicine
 - If person clears virus <u>or</u> is successfully treated, hepatitis C antibody will remain positive for life
- More than half of people will develop chronic infection
- Most who develop chronic infection will have mild disease
- About 17 out of 100 people with chronic infection will develop cirrhosis within 10-20 years
 - About 4 of these people will die from the disease.
 - The others will be alive after 20 years but may have severe liver disease or liver cancer





Time Course of Progression with Chronic Hepatitis C Infection

HCC=Hepatocellular cancer, ESLD=end-stage liver disease



Risk Factors Associated with Progression of HCV

- Heavy alcohol use: Strongest co-factor
- Male sex
- Diabetes
- Fat in the liver (hepatic steatosis)
- Older age at time of infection
- Co-infection with HIV or Hepatitis B
- Hepatitis C Genotype 3

McMahon et al. Gastroenterology 2010;138:922-31 and Clinical Gastro Hepatology 2017;15:431-7



Thank you for joining us today. We appreciate your participation and hope to see you at the <u>NEXT ECHO Session:</u> June 9, 2022 from 12pm -1 PM

You will be receiving a follow up survey that we hope you will complete to help us improve. If you are requesting continuing education credits, you will be required to complete the survey to receive your CMEs.

Hepatitis C Virus Screening and Clinical Tests



Hepatitis C antibody may not be detected in early infection. If infection is suspected an HCV RNA should be obtained.



www.anthctoday.org/community/hep/providers

Hepatitis C Virus Screening and Clinical Tests

Anti-Hepatitis C Antibody



- This result indicates a person has been exposed to hepatitis C, but does not have an active infection.
- ~15-25% of persons clear HCV spontaneously.
- Negative test may be repeated in 4-6 months.



Hepatitis C Virus Screening and Clinical Tests



HCV Symptoms

Fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, light stool, joint pain, jaundice (skin/eyes) (usually acute HCV)

Usually asymptomatic or symptoms often vague (chronic HCV)



Why Treat Hepatitis C

Cure – aka Sustained Virologic Response (SVR)

- Defined as NO HCV RNA detectable 12 weeks after completion of HCV treatment
- Results in 90% reduction in cirrhosis and 70% reduction in liver cancer ^{1,2,3}
- Linked to improvements in all-cause mortality, cardiovascular death, and other (non liver cancer) malignancy.²
- Associated with reduced insulin resistance and a decreased incidence of diabetes.⁴

Prevents new infections



Who Should Be Treated

RECOMMENDED	RATING	
Treatment is recommended for ALL patients with acute or chronic HCV infection, except those with a short life expectancy that cannot be remediated by HCV therapy, liver transplantation, or another directed therapy. Patients with a short life expectancy owing to liver disease should be managed in consultation with an expert.	1, A	

No large scale clinical trials of pregnant or breastfeeding women Treatment should be considered on an individual basis after patient-provider discussion about potential risks and benefits

Source: AASLD/IDSA HCVguidelines.org Updated 8/27/20

Current 1st Line HCV Medication Options

Glecaprevir/pibrentasvir (Mavyret[™])

Pangenotypic

Sofosbuvir/velpatasvir (Epclusa[®]) Pangenotypic

Ledipasvir/sofosbuvir (Harvoni[®])

Genotypes: 1, 4, 5, 6 (many nuances)

Source: AASLD/IDSA HCV Guidelines.org 11/6/2019



Hepatitis C Medications

Treatment length 8-12 weeks

Medications	Cure Rate	Common Side Effects
Glecaprevir/pibrentasv ir (Mavyret™)	> 95 %	Headache, fatigue, nausea*, diarrhea*
Ledipasvir/sofosbuvir (Harvoni®)	> 95 %	Fatigue, headache
Sofosbuvir/velpatasvir (Epclusa®)	>95%	Headache, fatigue, nausea

*In large study of PWIDs



History of Hepatitis C Treatment Response





The Era of Direct Acting Antivirals (DAAs) –

The HCV Revolution

2014 to present

Short treatments (8-12 weeks)

Very few side effects

Very little monitoring needed during treatment

High cure rates

Treatment reverses scarring in the liver, can reduce development of cirrhosis, liver cancer, liver-related death

Medication coverage is widely available



Thank You

Visit our website: www.anthc.org/hep

AASLD/IDSA Guidelines are available at: www.hcvguidelines.org/

Join us for:

<u>Liver Disease ECHO</u> 3rd Thursdays 12-1pm (AK time) Liver Disease didactic and cases (CEs)

AK Infectious Disease (ID) ECHO 2nd Tuesdays 12-1pm (AK time) HCV, HIV, STI, PrEP, PEP didactic and cases (CEs)

<u>LiverConnect</u> – 1 hour didactic program (CEs) on liver disease 2nd Tuesdays 8-9am AK time

Info for all of 3 <u>CE programs</u> is available at: <u>www.anthc.org/hep/liverconnect</u>

Leah Besh, PA-C ANTHC Liver Disease & Hepatitis Program ANTHC Early Intervention Services/HIV Program labesh@anthc.org

