What HIV Providers Need to Know About Hepatitis C

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Introduction to the Speaker

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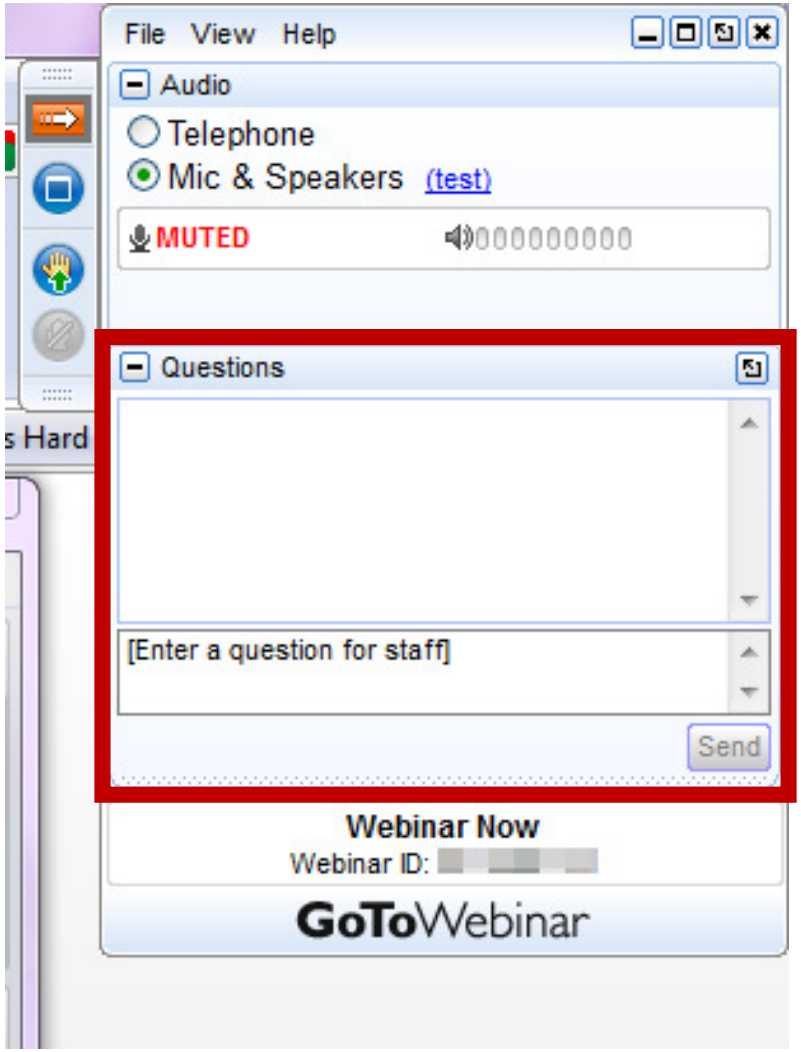
- **Andrew Reynolds** *is the Hepatitis C Education Manager at Project Inform. In this capacity he writes fact sheets and booklets on HCV, HIV/HCV coinfection and harm reduction. He is also a counselor on a national hepatitis C phoneline, 1-877-HELP-4-HEP, and facilitates several HCV support groups in San Francisco. He is member of the National Viral Hepatitis Roundtable Policy Committee, and former Chair of the San Francisco Hepatitis C Task Force. Prior working for Project Inform, Andrew worked for the San Francisco Department of Public Health in HIV and STD prevention and treatment.*

Ground Rules

- To ask questions during presentation, use question tab.
- Visual/ audio difficulties please close out of GoToWebinar and log in again.



Overview of Presentation

- Intro to Hepatitis C
- Overview of HCV in African Americans
- Living Well with HCV
- HCV Treatment Options: 2014 and beyond
- Advocacy

History of Hepatitis C

- In retrospect, blood samples show HCV infection as far back as 1948
- Originally called “Non-A, Non-B Hepatitis”
- Identified as a distinct virus in 1989
- Antibody screening developed in 1990
- Not fully screened in blood until July 1992

Epidemiology and Statistics

- Globally, about 3% of world's population, or 150-180 million people are infected
- United States: most common blood-borne pathogen, with approximately 17,000 new infections per year (probably upwards of 55,000).
- Official Stats: 2.7 to 3.9 million people living with it in U.S.; more likely much more (some estimates as high as 6-8 million)
- About 300-400,000 are HIV/HCV Co-Infected

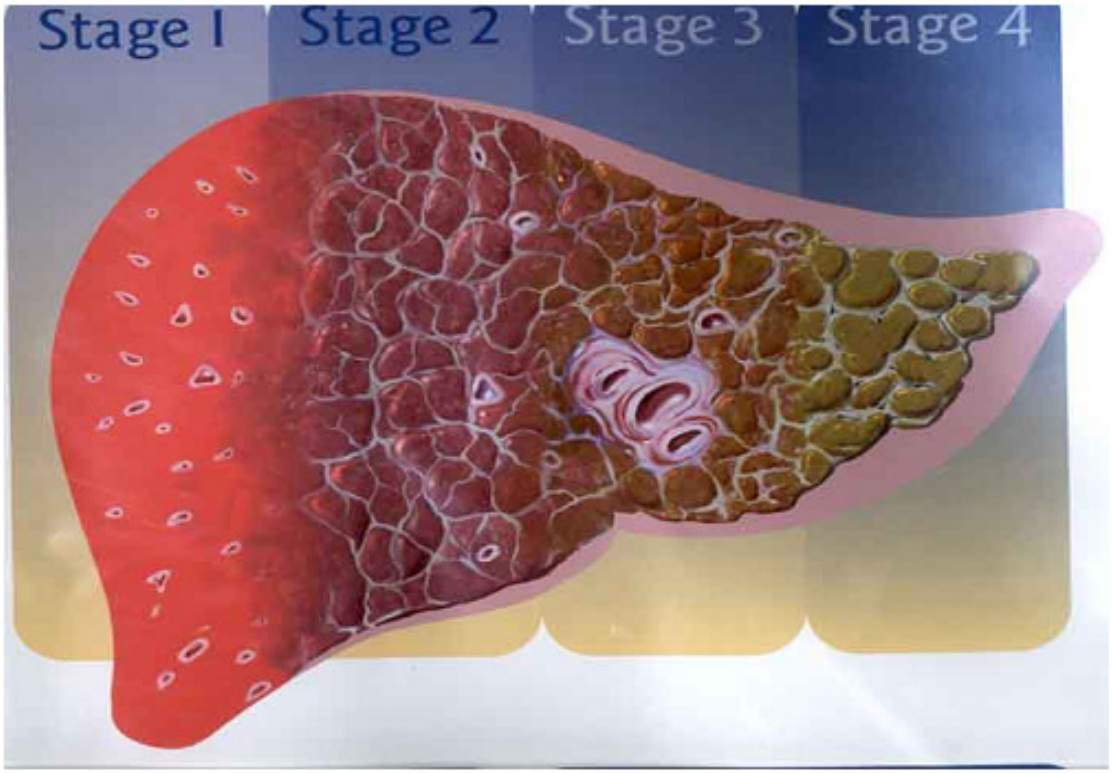
Hepatitis and the Liver

- The Liver: largest internal organ with over 500 vital functions;

- “Hepatitis” simply means “inflammation of the liver”

HCV and liver damage over time

- **Stage 1:** Some inflammation but minimal effect on function
- **Stage 2:** Some limited accumulation of scar tissue (fibrosis) but with liver function
- **Stage 3:** Extensive fibrosis (cirrhosis) and scarring but with relatively normal functioning
- **Stage 4:** Substantial cirrhosis damaging liver and impairing vital functions



- **Treatment can slow, halt or reverse liver damage in stages 1 to 3**
- **Extent and rate of progression of liver damage within individuals is variable although several factors influence fibrosis progression.**

Hepatitis C Transmission

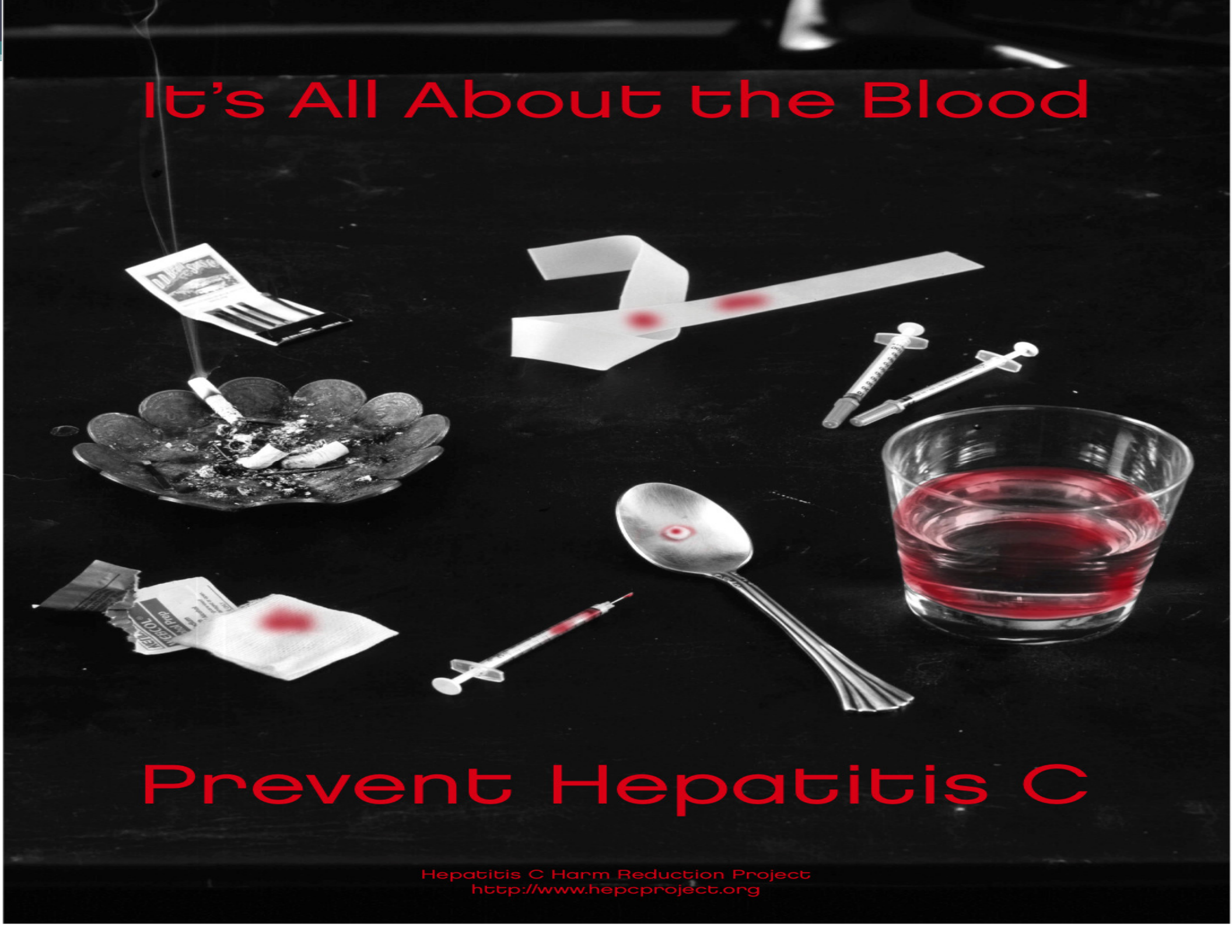
- Blood-to-Blood contact: Risky fluid transfer (aka, blood into you)

- Can be transmitted from mother to child during birth (5 in 100); higher likelihood if mother is co-infected (17-20 in 100).

HCV Epidemiology in People Who Inject Drugs (PWIDs)

- HCV prevalence: 30% and 70%; in some areas even higher
- HCV incidence:16% and 42% per year
- 55.8% (2.2 million) of HCV infections in U.S. due to injection drug use
- CDC estimates that injection drug use accounts for at least 50% of acute infections
- HIV/HCV Co-infection:

It's All About the Blood



Prevent Hepatitis C

Hepatitis C Harm Reduction Project
http://www.hepcproject.org

HCV Prevention: The Syringe

- HCV can survive in the barrel of a syringe for up to 63 days
- The amount of organic material, fresh or dried blood, left in syringe (aka “soil load”) increases infectivity
- High dead-space syringes (HDSS) hold over 1000 times more blood, even after rinsing, than do low dead-space syringes (LDSS)
- HCV infection from a contaminated syringe is 5-20-fold higher than it is for HIV

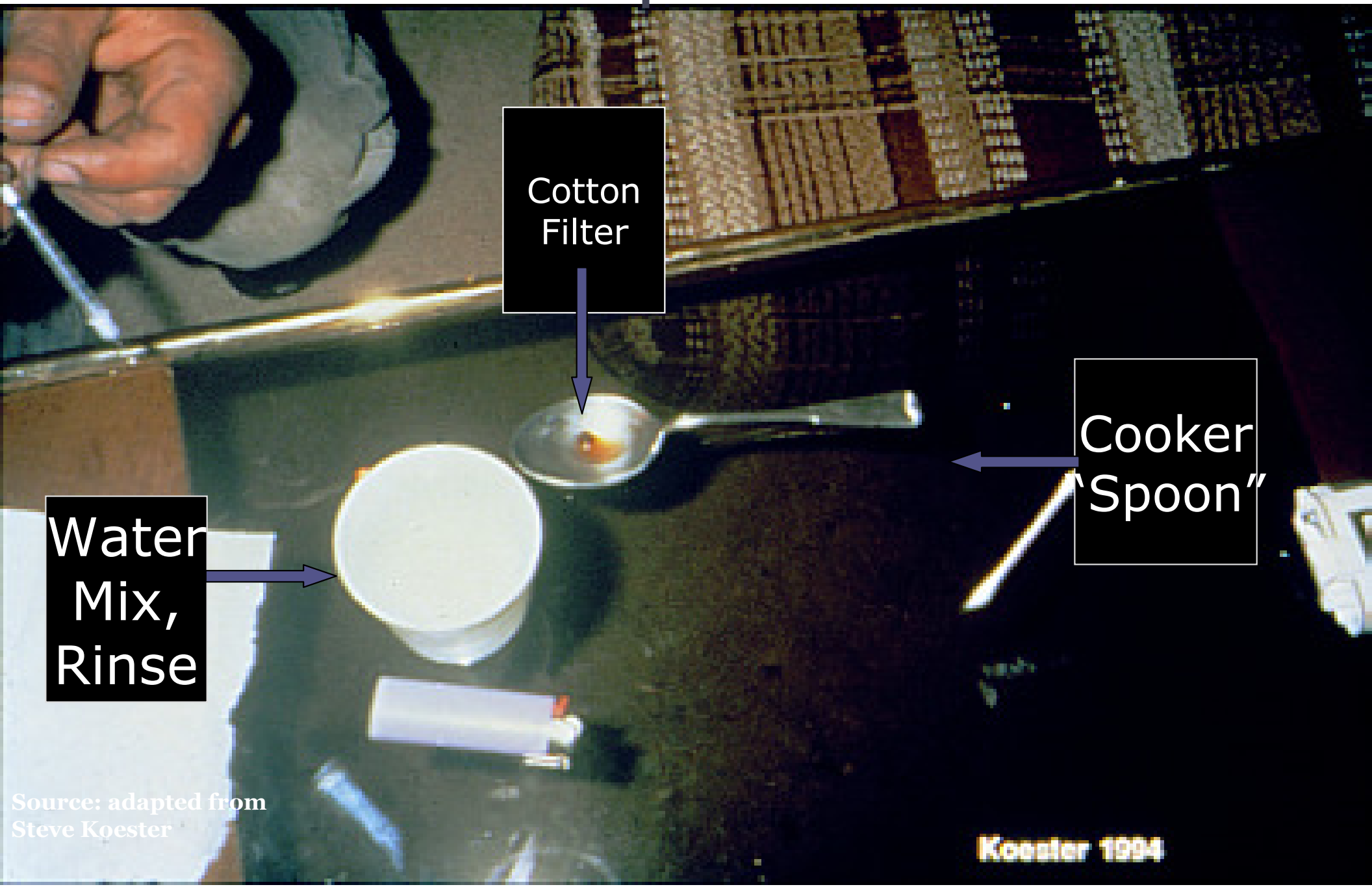
HCV Prevention: The Cooker

- HCV can survive on surfaces at infectious levels for as long at 16 days (this includes cookers)
- Heating drug solution for 80-95 seconds at 136 to 144 degrees will kill HCV (HIV dies in 7-10 secs), but it also ruins the drug
- Ethnographic research shows that most PWIDs cook their drugs for about 15 seconds before use

HCV Prevention: The Water

- HCV in water remains infectious for up to 21 days
- Viral load matters: the lower a VL, the sooner the water loses its infectivity
- The containers of water also make a difference: Aluminum and plastic water containers that hold HCV-contaminated water retain infectivity even after new, clean water is replaced
- Glass containers do not have residual infectivity.

Risk Sites for Hep C Contamination



Source: adapted from Steve Koester

Hepatitis C Prevention: IDU

- Aseptic Injection: use all clean supplies each time you inject. Everything including cotton, water and cookers.
- Safer Injection and drug splitting: Front-loading, back-loading
- Non-Injection: It's not the drug causing HCV, it's the sharing of works
- Treatment if desired; non-judgmental interactions no matter what

Hepatitis C Prevention: IDU

- Sterile equipment throughout the process
- Bleach the syringe if no other options present themselves; remember, you can't bleach water or cotton
- Make an effort to identify your works; create a distinct space for your injection to prevent accidental sharing
- Self-Efficacy: Promote it and support it

Hepatitis C and Crack Use

- Sharing of Pipes can transmit HBV and HCV
- Use Rubber Stem Covers
- Wipe down with bleach or alcohol if nothing else
- Keep lips and mouth healthy
- Stay hydrated
- Invest in lip balm
- Maintain dental hygiene—bleeding gums

HCV and Alcohol

- Consumption of more than 50 grams per day accelerates disease progression (see next slide for drink and alcohol content)
- Women appear to be more severely impacted than men
- Active alcohol use during HCV treatment decreases the efficacy of treatment regardless of genotype

STANDARD DRINKS

SPARKLING WINE

100 mL

13% alc/vol

WINE

100 mL

13% alc/vol

LIGHT BEER

425 mL

2.7% alc/vol

REGULAR BEER

285 mL

4.9% alc/vol

FORTIFIED WINE

60 mL

20% alc/vol

SPIRITS

30 mL

40% alc/vol

EACH OF THESE IS ONE STANDARD DRINK. A STANDARD DRINK CONTAINS APPROX. 10 GRAMS OF PURE ALCOHOL

Alcohol and HCV Disease Progression

- Increased risk of chronic HCV infection
- Higher hepatic inflammation
- Higher HCV viral load
- Increased fibrosis
- Increased risk of cirrhosis
- Increased risk of liver cancer

Hepatitis C Transmission: Sex

- HCV can be sexually transmitted, but not efficiently
- Blood-to-Blood contact; not present in semen or vaginal fluids
- One study showed that only 1.5% of long-term partners of people with HCV tested positive for the virus

Hepatitis C Transmission: Sex

- Safer sex techniques, with more blood awareness
- Sexual communication and education
- Minimize “risky fluid transfer”: Keep blood, semen and vaginal fluids out of your body or in contact with mucous membranes
- Regular STD self-checks and screens

Sexual Transmission of HCV: HIV-infected Persons

- Emerging evidence of higher rates of sexual transmission in HIV-infected people
- Sexual risk factors appear to be: unprotected insertive and receptive anal sex, mucousally traumatic practices (fisting), club drugs (crystal meth and poppers)
- Presence of STDs also raises risk

Hepatitis C Prevention: A Vaccine?

- No
- The different genotypes and ease in which the virus mutates makes it difficult
- Because of the Hep A and Hep B vaccines, lots of people get confused and think they have been vaccinated against Hep C
- **Note: Infection does not always lead to chronic disease, but repeated exposures could eventually do so.**

Hepatitis C Diagnostics

HCV Antibody (AB) Screen

- Very similar to HIV antibody screening
- Blood Sample (Rapid test is available)
- Window period is not clearly defined, but antibodies usually appear in 6-8 weeks, sometimes taking as long as 6 months.
- If exposed to HCV and test negative, return in 6 months from exposure for follow-up screen.
- Positive("reactive") HCV AB tests must be confirmed by an RNA (aka PCR, viral load) test

USPSTF HCV Screening Recommendations

1. Birth-cohort screening: Everyone born between 1945-1965 should have a once in a lifetime HCV antibody test;

2. Risk-based screening: People with certain risk factors should be screened at intervals to be decided on a case-by-case basis

HCV Diagnostics: Who Should Get Screened?

- Any injection drug user, current or former, even if just tried it once;
- Intranasal drug use from snorting straws;
- Anyone who received a tattoo in an unregulated setting;
- People with a history of incarceration;
- People born between 1945 and 1965
- Anyone who received a transfusion, blood products, or organ transplant prior to July, 1992
- Anyone who received clotting factors prior to 1987
- Anyone who receives hemodialysis
- Anyone with evidence of liver disease (including unexplained elevated liver function tests)
- HIV-infected persons who are sexually active

HCV Diagnostics: Special considerations not included in USPSTF

- People with a history of STDs (herpes, HPV, syphilis) and/or multiple sex partners should be offered HCV screening;

- People who smoke crack or crystal meth and share (blood-to-blood contact from shared pipes and other risk factors)

Living with Hepatitis C: Liver Care

- Vaccinate against HAV and HBV
- "HCV Stops With Me:" Practice your own personal brand of universal precautions and protect others
- Reduce or stop alcohol intake
- Quit smoking
- Regular monitoring checks (see your provider, get CBCs with LFTs)

Living with Hepatitis C: Liver Care

- Eat a healthy, balanced diet
- Cut down on salt, sugar and fat
- No shellfish
- Drink lots of water
- Avoid high doses of vitamins A, D, E and K
- No iron supplements
- Review herbs with providers

Living with HCV: Herbs and Vitamins

- Milk Thistle (silymarin): Stimulates liver cell proteins, leading to quicker recovery of liver cells after they have been damaged
- Multivitamin: take with food for better absorption; check iron content
- Whey protein intake to take some of the pressure off of the body
- Anti-Oxidants

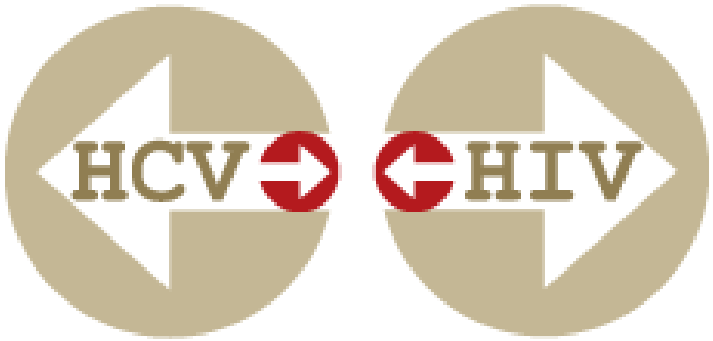
Living with HCV: Acetaminophen

- Tylenol can be toxic to the liver
- Generally Safe in Small Doses: 1,000mg per day
- Always check with your provider before taking it

- **DO NOT MIX WITH ALCOHOL**
- Be Careful: Many medications have acetaminophen in it, so check labels

HIV and HCV Co-Infection

- HCV disease progression is hastened in the presence of HIV
- HCV may hasten or worsen HIV disease progression



- The healthier the immune system, the slower the HCV disease progression
- Most HIV medication pass through the liver, so a compromised liver could complicate HIV treatments

HIV/HCV Co-Infection

- Monitor HCV very closely
- Treat HIV; Be Wary of Liver Toxicity
- Be Cognizant of HIV and HCV treatment interactions
- Get an Experienced HIV/HCV Medical Provider
- Seek Support
- Prevention for Positives

HCV Treatments: New Medications, New Era!

- The ultimate goal is an interferon-free, all oral regimen for 12 weeks (or less!)
- We are getting there:
  - genotypes 2 and 3 can be treated with Sovaldi + ribavirin
  - Off-label: Sovaldi +Olysio, with/without ribavirin for 12 weeks

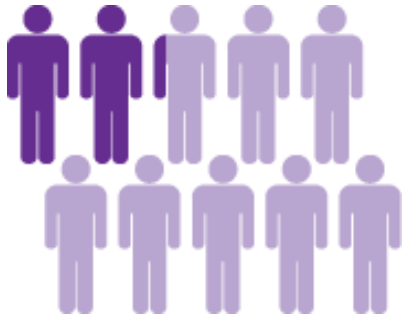
HCV Treatment: Current Standard of Care (AASLD/IDSA Recommended Txs)

Genotype	Combination	Duration of Treatment	Approved for HIV/HCV Coinfection
1	Sofosbuvir+Pegylated Interferon+Ribavirin	12 weeks	Yes
2	Sofosbuvir + ribavirin	12 weeks	Yes
3	Sofosbuvir + ribavirin	24 weeks	Yes
4	Sofosbuvir+Pegylated Interferon+Ribavirin	12 weeks	Yes
5	Sofosbuvir+Pegylated Interferon+Ribavirin	12 weeks	Yes
6	Sofosbuvir+Pegylated Interferon+Ribavirin	12 weeks	Yes

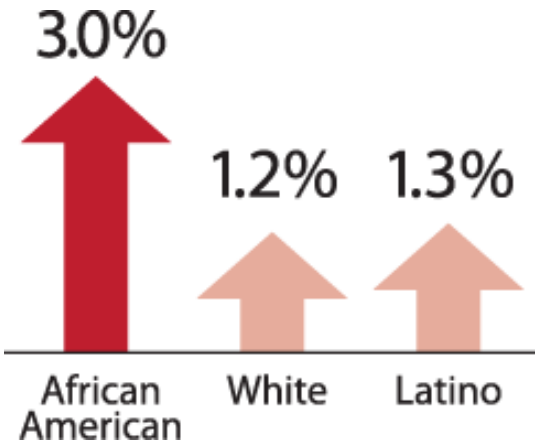
HCV Treatments: The End of 2014 and beyond

- Fall, 2014: AbbVie “3-D” drug combo (GT1, 96% SVR12)
- Fall, 2014: Ledipasvir+Sofosbuvir (GT1, 1 pill, 93-99% SVR rates in 8, 12 and/or 24 weeks)
- Fall, 2014: Daclastavir (several potential combinations with other HCV medications)

African Americans and Hepatitis C



- 22.7% of Americans with HCV are African American
- African Americans are twice as likely to get infected with HCV compared to Caucasians
- Prevalence of HCV in African Americans: 3% (compared to 1.2% in Caucasians and 1.3% in Latino/Hispanic)
- The numbers are probably low and under-reported for a variety of reasons



Why the disparity?

- Occupational exposures: Over 3 million African Americans work in the healthcare field
- Blood exposures : Transfusions to manage sickle cell anemia
- The same risk factors as everyone else, often exacerbated by structural violence like racism, discrimination, poor availability of culturally competent services and poverty

Why the disparity: Biology AND Sociology

- For unknown reasons, African Americans are more likely to be chronically infected (87-95%) compared to Caucasians (66-67%)

"Recognizing that race is a construct reflecting social stratification of groups according to phenotypic and cultural characteristics, this finding still has important implications in understanding the basis for variable outcomes in HCV infection, including differential response to antiviral therapy"

--Alan Franciscus

Other Reasons

- Genotype 1 is the most common in the U.S., and the most difficult to treat. It's more common in African Americans (91% of infections)

- African Americans have poorer response rates to current HCV treatments

- IL28B: A genetic factor that influences response to interferon and ribavirin; the less favorable subtypes are more common in African Americans

Some Good News

- The research is small, but it appears that African Americans develop cirrhosis at a slower rate
- Current 3-drug HCV therapies have improved African American cure rates (from 62% up to 89% of those with genotype 1)
- Newer therapies hold greater promise of cures with fewer side effects, shorter duration and higher rates of cure

Hepatitis C Advocacy: Examples

- San Francisco Hepatitis C Task Force
- African American Hepatitis C Action Day: July 25, 2014
- San Francisco Drug Users Union
- Caring Ambassadors Project: Viral Hepatitis Testing Act

Stay Informed

- Find HCV support groups in your area; if none exist, think about starting one
- Call The Support Partnership's national HCV support line: 1-877-HELP-4-HEP
- Help people learn their status:
- Link people with HCV into medical care and advocate for treatment

Closing

- Please don't hesitate to stay in touch should you want to talk more about HCV and talk about potential projects to collaborate on together!

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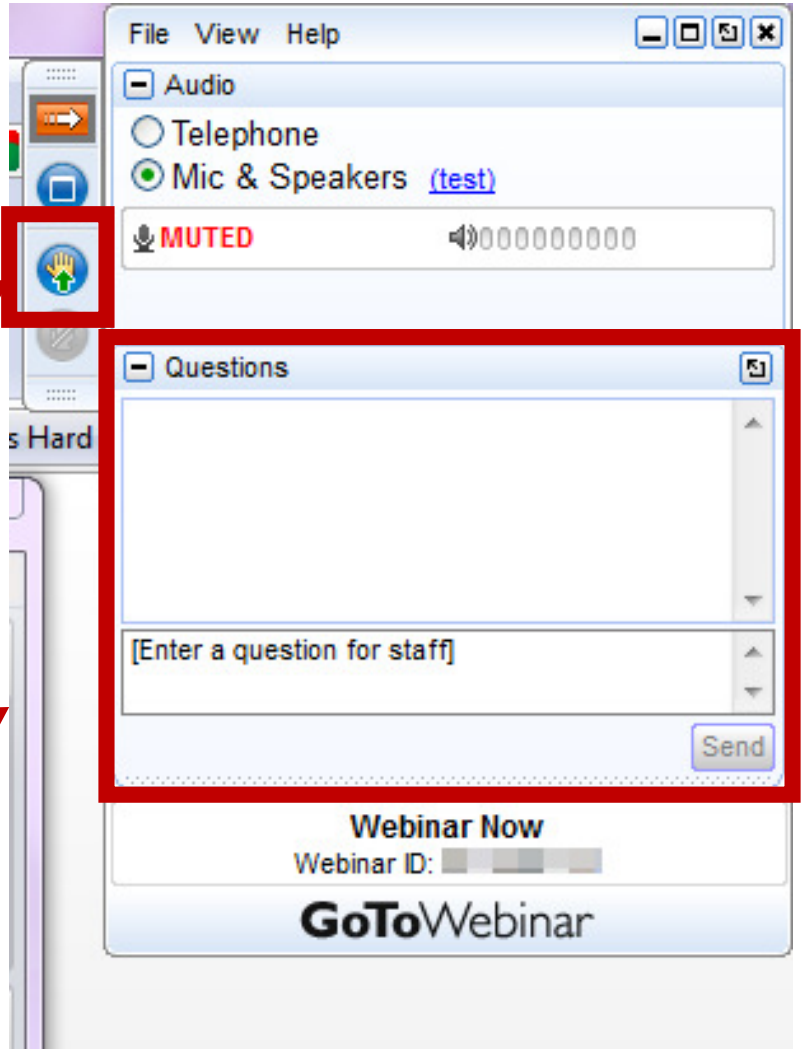
Questions for the Speaker

- Please feel free to ask questions at this time.

Option 1

Option 2



Announcements

- Take today's survey!
- Submit **Event Information Form** by Thurs 6/12
- USCA winners will be announced Fri 6/13
  - *Submit all documents by 6/12*
- AAHU Science and Treatment College Fellowship applications are open!
  - *BlackAIDS.org > Programs > AAHU > STC > Becoming a Fellow or email programs@BlackAIDS.org*