





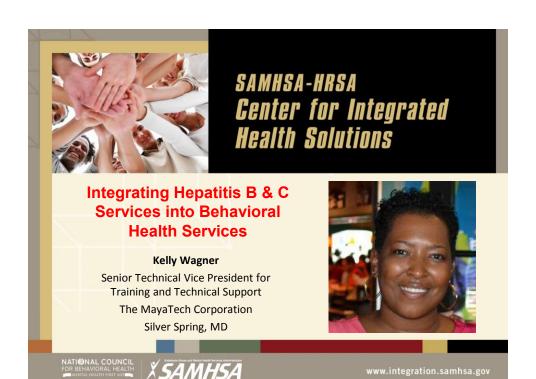
Learning Objectives

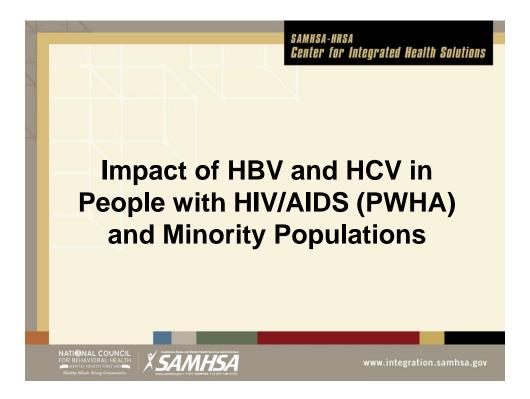
Participants will be able to:

- Describe the impact of HBV and HCV on minority populations and people living with HIV/AIDS
- Understand recommended staffing and training needs to establish HBC and HCV testing on site
- Describe a model for integrating HIV/hepatitis services into behavioral health services
- Identify models used to manage HBV and HCV/HIV coinfection









Current Hepatitis B Virus (HBV) Infection Among the U.S. Population Estimated 1.4 million people with chronic HBV infection (2013) 3,050 reported acute hepatitis B cases in 2013 Incidence rate of 1.0 cases per 100,000 Estimated 19,800 new HBV infections in 2013 Many HBV infections are asymptomatic or unreported Rates are highest among males 25-44 Source: Viral Hepatitis Surveillance, United States 2013, http://www.cdc.gov/hepatitis/statistics/2013surveillance/pdfs/2013hepsurveillancerpt.pdf

Current Hepatitis C Virus (HCV) Infection Among U.S. Populations

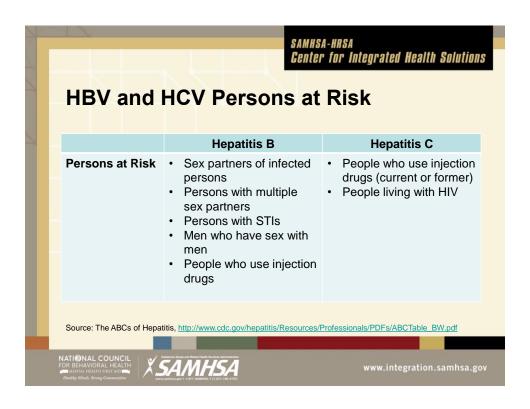
- Estimated 3.9 million people with chronic HCV infection (2013)
- 2,138 reported acute hepatitis C cases in 2013
 - Incidence rate of 0.7 cases per 100,000
- Estimated 29,700 new HCV infections in 2013
 - Adjusted for asymptomatic infection and underreporting
- Infection most prevalent among people born between 1945-1965

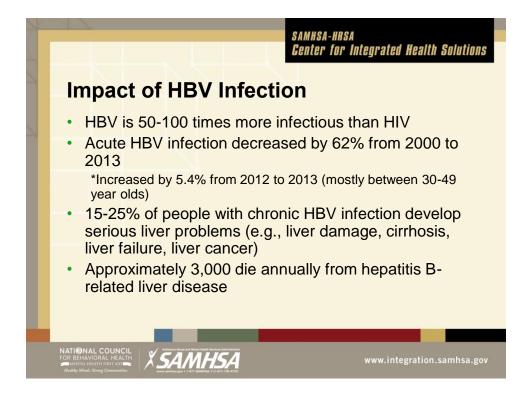
Source: Viral Hepatitis Surveillance, United States 2013, http://www.cdc.gov/hepatitis/statistics/2013surveillance/pdfs/2013hepsurveillancerpt.pdf

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| HBV and | HCV Routes of | iransmission |
|---------------------------|---|--|
| | Hepatitis B | Hepatitis C |
| Routes of Transmission | Contact with infectious blood, semen, and other bodily fluids primarily through: • Birth to an infected mother • Sexual contact with infected person • Sharing contaminated injection drug equipment • Needlesticks | Contact with blood of an infected person primarily through: • Sharing contaminated injection drug equipment |





Impact of HCV Infection

The most common blood-borne infection in the United States

45-85% of those infected are unaware of infection

550% increase in acute HCV infection between 2010 and 2013

For every 100 people infected with HCV:

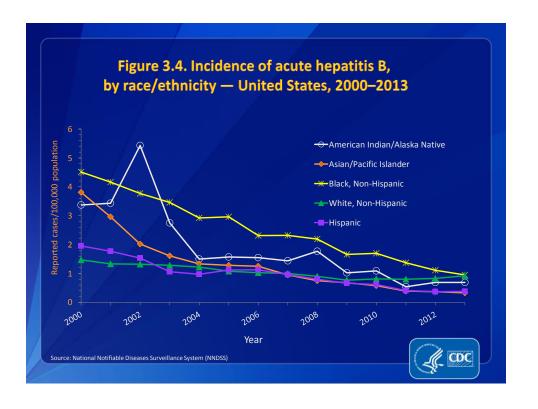
75-85 develop chronic infection

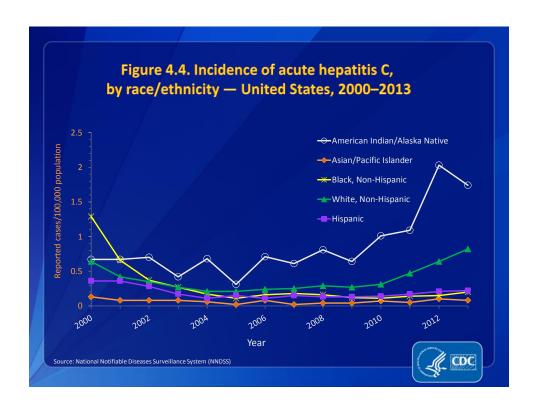
60-70 develop chronic liver infection

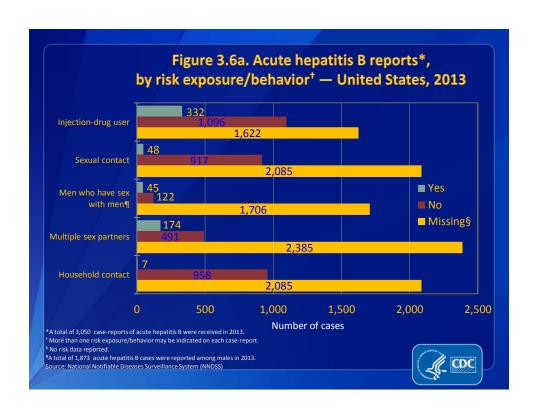
5-20 develop cirrhosis

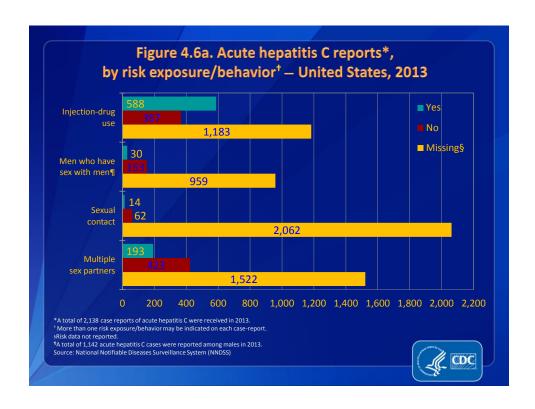
1-5 will die from liver cancer or cirrhosis

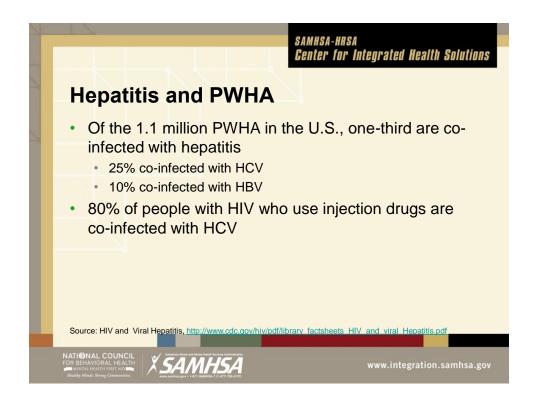
Armstrong et al. Ann Intern Med. 2006: HCV FAQs for Health Professionals, http://www.cdc.gov/hepatitis/hcv/hcv/faq.htm//section1











Health Consequences of HIV/Hepatitis Co-Infection

- HIV/HBV Co-infection
 - Higher levels of HBV DNA
 - Rapid liver disease progression
 - Lower rates of HBV clearance
 - Increased risk of liver-related mortality
 - · Decreased response to HBV treatment
 - · Higher risk of hepatotoxicity following ART initiation
 - · Little effect on HIV disease progression

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www.integration.samhsa.gov

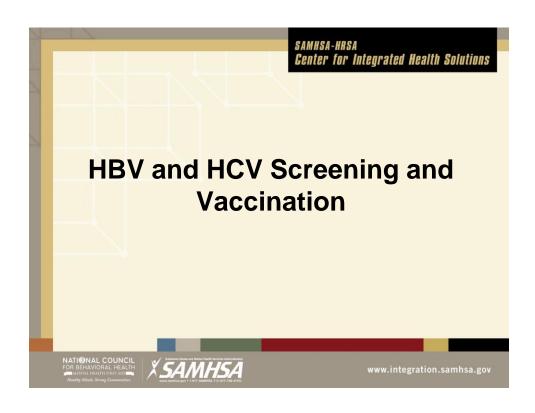
SAMHSA-HRSA Genter for Integrated Health Solutions

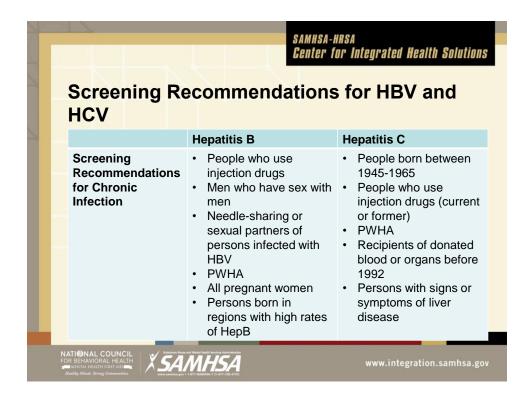
Health Consequences of HIV/Hepatitis Co- Infection

- HIV/HCV Co-infection
 - Leading cause of morbidity and mortality among PWHAs
 - Increased HCV viral load
 - Increased hepatitis C disease progression
 - Tripled risk of developing liver disease, liver failure, and liverrelated death
 - Increased chance of sexually transmitting HCV

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Healthy Minds. Strong Communities.

× SAMHSA





HBV Vaccination Recommendations

- Sexual partners of persons with HBV
- People with multiple sex partners
- People with STIs
- Men who have sex with men
- People who use injection drugs
- All infants at birth
- PWHA



www.integration.samhsa.gov

SAMHSA-HRSA Center for Integrated Health Solutions

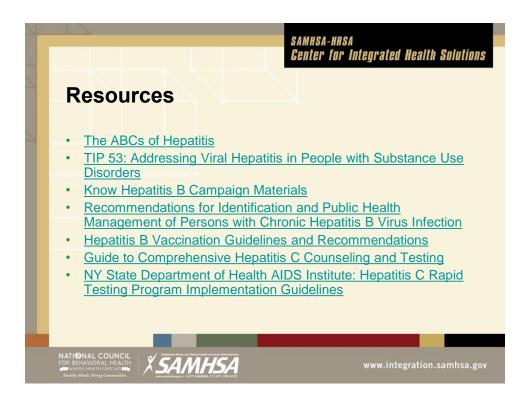
Recommendations for Implementing HepC Testing

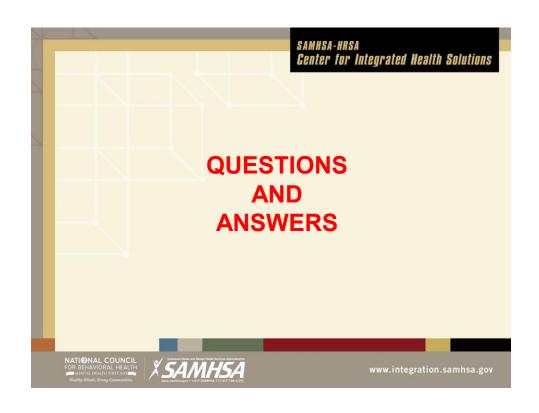
- Technology
 - OraQuick HCV Rapid Test
- Training
 - Hepatitis C 101 risk, transmission, screening, vaccination
 - Hepatitis counseling messages
 - Conducting and interpreting the HCV rapid antibody test and controls
 - · Specimen collection
 - Disposal of biohazardous materials

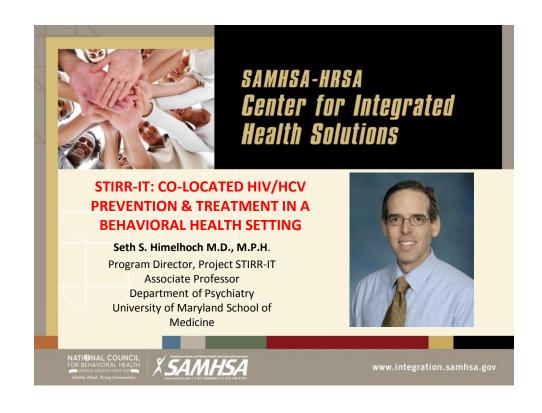
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MINTAL HEALTH FIRST AID
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SAMHSA-HRSA Center for Integrated Health Solutions **Recommendations for Implementing HepC Testing (cont.) Quality Control Plan** Inventory checks Kit and controls storage Temperature monitoring and maintenance Testing area readiness Policies and Procedures Confidentiality Staff training and proficiency **Quality Control** Counseling Record keeping · Lab quality assurance Referrals and tracking for HCV diagnostic testing, care, and treatment









OVERVIEW

- STIRR-IT
 - What does STIRR-IT mean?
 - Why Baltimore?
 - Implementation Strategy
 - Outcomes to date
- QUESTIONS



STIRR-IT



http://www.insidethehuddle.tv/articles/traveler-baltimore-md-home-ravens



STIRR-IT



Baltimore City

http://www.insidethehuddle.tv/articles/traveler-baltimore-md-home-ravens



WHAT DOES STIRR-IT MEAN?

Screening &
Testing for HIV/HCV,
Immunization for Hepatitis A & B,
Risk Reduction Counseling linked to
Integrated HIV

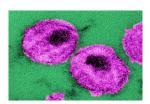
Integrated HIV Treatment

http://publichealthandeducation.blogspot.com/



WHAT IS STIRR?

Evidence based practice



http://womenshealth.gov/hiv-aids/what-is-hiv-aids/how-hiv-is-spread.html





NIH Public Access Author Manuscript

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Assessing the STIRR Model of Best Practices for Blood-Borne Infections in Clients with Severe Mental Illness

Stanley D. Rosenberg¹, Richard W. Goldberg^{2,3}, Lisa B. Dixon^{2,3}, George L. Wolford¹, Erio P. Stade^{2,3}, Seth Himelhoch^{2,3}, Gerard Gallucod¹, Wendy Potts³, Stephanie Tapscott³, and Christopher J. Wedn³

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*State of Delaware, Division of Substance Abuse and Mental Health

Objectives—People dnally diagnosed with a were mental libres; and substance use disorders are stancied by elevated risk for HIV, lepsatis B and hepatisis C, but generally do notives her basic recommended evenives. Several burniss impede secept of services, including lake of programs offered by mental librally providers, and clarit relusated evaluable services. Clarita from what motority groups are seven he likely to acceptate commended evervices. The representances to design of the facilities steeped infections disa use programming in mental librally estimated to find the steeped of infections disa use programming in mental librally estimated.

Methods—A randomized clinical trial (n=250) compared enhanced treatment as usual (Control) to a barf insurvenism to deliver bestpractic searcies for blood-borne diseases in a nurban, largely minority search of duality disapped children. The insurvention in clade Servening, Testing for HIV and layattis, Journalization of hopeids A and B, Ridd relation conseiling endimedical treatment Relational and spopm (CSTROL) with the late of matching the control and appear of the Servening and medical treatment Relational and spopm (CSTROL) with the late of matching the control and spopm (CSTROL) with the late of matching the control and spopm (CSTROL) with the late of matching the control and spopm (CSTROL) with the late of matching the control and the

treatment contents and appoint (5) I copy (after 6 to 0 Institutes in cost.)

Result 8—Chair randomized to STREAdhalph lave (60 cot 80%) of participation and acceptance of core services. They were more likely to be tested drift HEV and HCV, immunited for hepatific A and E5 increase their hepatities knowledge and the order their recitance shows. However, they showed no reduction in trisk behavior, were no more likely to be referred to care (30 to 7.5%) and showed no increase in HIV zenovellage, in structuring costs were \$54 t per chent. Conclusions—STIRR appears to be efficacious in providing a basic, best-practice package of interventions for dually diagnosed clients.

Psychiatric Services, 2010





Published in final edite of form as:

Burchist: Surv 2010 Sentember: 61(9): 885-891 doi:10.1176/smnine.61.9.88

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STIRR is efficacious at providing basic, best-practice package for dually diagnosed clients

animony covariance in a preparate a management of the production of the recommended services. Several barness impede receipt of service s, including lade of programs offered by mental health, providers, and chertrefused of available services. Cherts from ethnic mixing groups are even he is likely to acceptre commended services. The interventiant stead was designed to facilitate integrated infectious dies are programming in mental health settings, and to

Methods—A randomized clinical trial (n=236) compared enhanced restment as usual (Contro) to a brisf intervention to deliver best practic securios for blood-borne diseases in authon, largely miniority sumple of chally disposed clients. This intervention in Inded Screening, Testing for HIV and bepatits, Januarianization for hepatits A and B. Jakk reduction courseling and medical treatment Polymanian and common course for the production of the

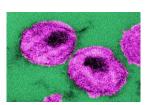
Results—Clearis randomized to SIERR halfulgh levels (over 90%) of participation and acceptance of one service. How you more Bally to be treated for IEEV and BUCK, immunited for hepstins A and B; increase that he pathic is nowideg and to reduce that robotions observed to reduct an intellectual robotion and intellectual robotions. In the other contracts allow the self-randomized contracts of the robotion of the r

Psychiatric Services, 2010



WHAT IS STIRR?

- Evidence based practice
- Provides HIV & HCV Screening and Testing,
 Immunization and Risk Reduction Counseling



http://womenshealth.gov/hiv-aids/what-is-hiv-aids/how-hiv-is-spread.html



CDC RECOMMENDATIONS

- HIV screening for all persons aged 13-64 in all health care settings in the United States
- HCV testing for all people in 1945-1965 age group and/or engage in IDU
- Vaccination with HBV and HAV for those who engage in unsafe sex or risky drug use



http://www.cdc.gov/knowmorehepatitis/



WHAT IS STIRR?

- Evidence based practice
- Provides Screening, Immunization and Risk Reduction Counseling
- Targets people with Serious Mental Illness (SMI)

http://womenshealth.gov/hiv-aids/what-is-hiv-aids/how-hiv-is-spread.html



WHY THOSE WITH SMI?

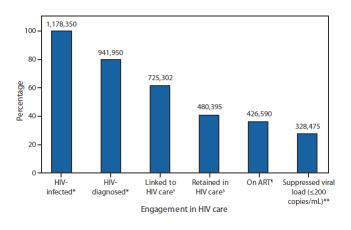
• They may be at Higher Risk:

| CONDITION | PREVALENCE AMONG THOSE WITH SMI | PREVALENCE IN THE GENERAL POPULATION |
|-----------|---------------------------------------|--|
| HIV | 1-23% | 0.03% |
| HCV | 8.5-30% | 1.8% |

Himelhoch et al., Psychiatric Services, 2007; Psychosomatics, 2009



THIS IS CRITICAL...



CDC.gov



WHAT IS STIRR?

- Evidence based practice
- Provides Screening, Immunization and Risk Reduction Counseling
- Targets people with Serious Mental Illness (SMI)
- Occurs in Behavior Health Centers

http://womenshealth.gov/hiv-aids/what-is-hiv-aids/how-hiv-is-spread.html



University of Maryland

WHY BEHAVIORAL HEALTH CENTERS?

- Less than ½ people at risk for HIV and HCV with SMI receive testing
- Reliance on mental health system to provide medical care
- Maximize efficiency to ensure people get into early treatment
- Allow for co-location of treatment

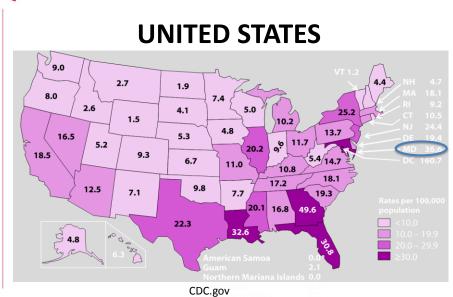


WHY BALTIMORE?



http://www.insidethehuddle.tv/articles/traveler-baltimore-md-home-ravens

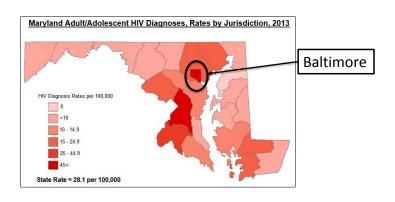




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MARYLAND



http://phpa.dhmh.maryland.gov



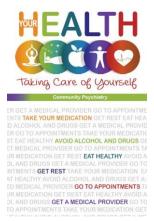
RISK FOR HIV AND HCV

- Study of 153 people with SMI receiving mental health services in Baltimore, Maryland
- ~25% reported history of IDU
 - 92% reported sharing needles
- 83% reported history of unprotected sex
 - ~30 reported unprotected sex in last 6 months
- ~20% reported MSM history

Himelhoch et al., J Community Psychol 2011



IMPLEMENTATION OF STIRR





CLINIC DEMOGRAPHICS

- Over 80% self-identify as African-American.
- Average age is 53 years (range: 18-69 years)
- Half are women
- Over 70% diagnosed with SMI
- · Vast majority with history of substance use



STIRR IT-TEAM

- NURSE
 - Delivers STIRR-IT intervention
- PEER NAVIGATOR
 - Assists nurse and provides additional support
- NURSE PRACTITIONER
 - Provides on-site access for treatment and referral
- CONSULTANTS
 - ID and Psychiatry



STIRR-IT COMPONENTS

| RFA Key Components | STIRR Intervention | |
|----------------------------------|--------------------|--|
| HIV and HCV risk assessment | ✓ | |
| HIV Testing | ✓ | |
| HCV Testing | ✓ | |
| Hepatitis A and B immunization | ✓ | |
| Pre and Post Test Counseling | ✓ | |
| Referral to On-Site Medical Care | ✓ | |



STIRR-IT DELIVERY MODEL

- Integrated staff
- Accessible office near waiting room
- Blood drawing facilities on-site
- Vaccines stored and delivered on-site
- Connected to EMR
 - Accessible notes and results of testing



CHALLENGES

- Cost and types of vaccine
- Hiring peer navigator





OUTCOMES

- Successfully implemented model
- · To date:
 - 46 began receipt of STIRR services
 - 28 completed STIRR services
 - 35/38 (92%) received immunization
 - 13 HCV positive (28.2%)
 - 2 HIV positive (4.3%)
 - 100% referred to care





QUESTIONS?



http://www.nhs.uk/conditions/vaccinations/pages/parents-questions-about-childhood-vaccinations.aspx

