FAST 15: The Status of HIV in 2020

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Disclosure

I, Casey Messer, have no relevant financial, professional or personal relationships with commercial interests to disclose.

Objectives

At the conclusion of this session, the participant will be able to:

- Discuss the current status of the HIV epidemic in the US
- Identify updated guidelines for prevention & treatment of HIV

HIV Epidemiology Overview

- Approximately 1.1 million people in the U.S. are living with HIV
- New infections are steady at ~39,000 per year
- 1 in 7 (14%) persons living with HIV are unaware
- More than 50 percent of new diagnoses occur in 48 counties;
 Washington, DC; and San Juan, Puerto Rico

HIV Epidemiology Overview

HIV disproportionately affects certain populations



1.2% of HIV diagnoses are in the 6 U.S. dependent areas: American Samoa, Guam, Northern Mariana Islands, Puerto Rico, Republic of Palau, U.S. Virgin Islands



Source: CDC, 2018

HIV Epidemiology Overview

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HIV Prevention

- Harm reduction approaches are individualistic based on risk
 - Abstinence/nonpenetrative sexual contact/mutual monogamy
 - Consistent condom use
 - Durable viral suppression (U=U)
 - Biomedical interventions
 - Pre-Exposure Prophylaxis (PrEP)
 - Post-Exposure Prophylaxis (PEP)
 - Occupational vs nonoccupational exposure

HIV PrEP

- Pre-Exposure Prophylaxis (PrEP)
 - An option for anyone who injects drugs or is not in a mutually monogamous sexual relationship with an HIV negative partner
 - Daily oral administration is the only FDA-approved dosing
 - emtricitabine/tenofovir disoproxil fumarate (F/TDF)
 - emtricitabine/tenofovir alafenamide (F/TAF)
 - HIV Ag/Ab, Hep B surface ab/ag, Creatinine at baseline
 - Repeat Creatinine at 3 months after initiation, then annually
 - HIV Ag/Ab every 3 months (also other STIs, HCG)
 - PrEP Consulatation Service
 - 855-448-7737

HIV PEP

- Occupational Post-Exposure Prophylaxis
 - Follow your employers guidelines and protocols
- Nonoccupational Post-Exposure Prophylaxis (nPEP)
 - Evaluate <72 hours after potential exposure
 - HIV testing, combination Ag/Ab preferred, or rapid antibody test
 - Emtricitabine/tenofovir disoproxil fumarate (200mg/300mg) once daily

plus

dolutegravir 50mg daily OR raltegravir 400mg twice daily

- PEP Consultation Service
 - 1-888-448-4911

HIV Testing

- The USPSTF recommends that clinicians screen for HIV infection in adolescents and adults aged 15 to 65 years. (CDC 13-64)
- Ag/Ab combination (4th generation)
- More frequent HIV screening should be provided to patients living in high HIV incidence areas and among populations disproportionately burdened:
 - Southern US
 - Black/African Americans
 - Men who have sex with men (gay, bisexual, same-gender-loving, etc.)

HIV Treatment

- DHHS Guidelines on use of Antiretroviral Agents (December 2019)
 - Antiretroviral Therapy (ART) should be started immediately or as soon as possible after diagnosis
 - Dolutegravir may be used as alternative regimen for persons of childbearing age who are not using contraception, recommended option for individuals using effective contraception
 - Increase in age-related comorbidities for long-term survivors
 - Recommended Initial Regimens
 - Multiple triple therapy combination single tablet regimens
 - dolutegravir/lamivudine
 - bictegravir/tenofovir alafenamide/emtricitabine (before drug resistance testing)

HIV Models of Care

- Test and Treat (T&T)
- Treatment as Prevention (TasP)
- Data to Care (D2C)
- Syringe Services Programs (SSPs)
- Syndemic Theory (behavioral, social, structural factors)

- Adverse Childhood Experiences (ACE)
- Mental/Behavioral Health
- Substance Use Disorder
- Systemic Racism
- Viral Hepatitis/STIs
- Incarceration

Frequently Asked Questions

When will there be an HIV vaccine?

Frequently Asked Questions

What's the latest on long-acting injectable HIV medications?

Frequently Asked Questions

I heard that the US wants to end the HIV Epidemic by 2030. Without a cure, how is that possible?

References

- Branson BM, Handsfield HH, Lampe MA, et al. Revised recommendations for HIV testing of adults, adolescents, and
 pregnant women in health-care settings. *MMWR Recomm Rep*. 2006;55(RR-14):1–17.
- Casazza JP et al. Durable HIV-1 antibody production in humans after AAV8-mediated gene transfer. Conference on Retroviruses and Opportunistic Infections, abstract 41LB, March 2020.
- Centers for Disease Control and Prevention. HIV Surveillance Report, 2018 (Preliminary); vol. 30. http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published November 2019.
- Centers for Disease Control and Prevention: US Public Health Service: Preexposure prophylaxis for the prevention of HIV infection in the United States—2017 Update: a clinical practice guideline. https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2017.pdf. Published March 2018.
- Crotty S. *Engineering vaccine immunity*. Conference on Retroviruses and Opportunistic Infections, plenary presentation 112, March 2020.
- Fauci AS, Redfield RR, Sigounas G, et al. Ending the HIV epidemic: a plan for the United States. JAMA. 2019;321(9):844–845.
- Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents with HIV. Department of Health and Human Services. Available at http://aidsinfo.nih.gov/contentfiles/lvguidelines/AdultandAdolescentGL.pdf
- US Preventive Services Task Force. Screening for HIV Infection: US Preventive Services Task Force Recommendation Statement. JAMA. 2019;321(23):2326–2336. doi:10.1001/jama.2019.6587
- Wilson PA, Nanin J, Amesty S, Wallace S, Cherenack EM, Fullilove R. Using syndemic theory to understand vulnerability to HIV infection among Black and Latino men in New York City. J Urban Health. 2014;91(5):983-998. doi:10.1007/s11524-014-9895-2