

HIV/AIDS AND HCV IN THE VETERAN POPULATION

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OUTLINE

- Background
 - Terminology
 - Transmission
 - Rates of Infection
- Treatment
 - Treatment as prevention
- Psychosocial Factors
- Role of Peer Support Specialists
- Resources



HIV/AIDS BACKGROUND & TREATMENT



Important Definitions

- **HIV:** Human Immunodeficiency Virus
 - Virus that targets cells of body's immune system (i.e. CD4 cells)
- **CD4 Cells (aka T-cells):** Types of white blood cells that are part of body's immune system
 - CD4 count is a measure of damage due to HIV
 - Normal range: 500-1500 cells/mL of blood

Important Definitions

■ **AIDS:** Acquired Immune Deficiency Syndrome

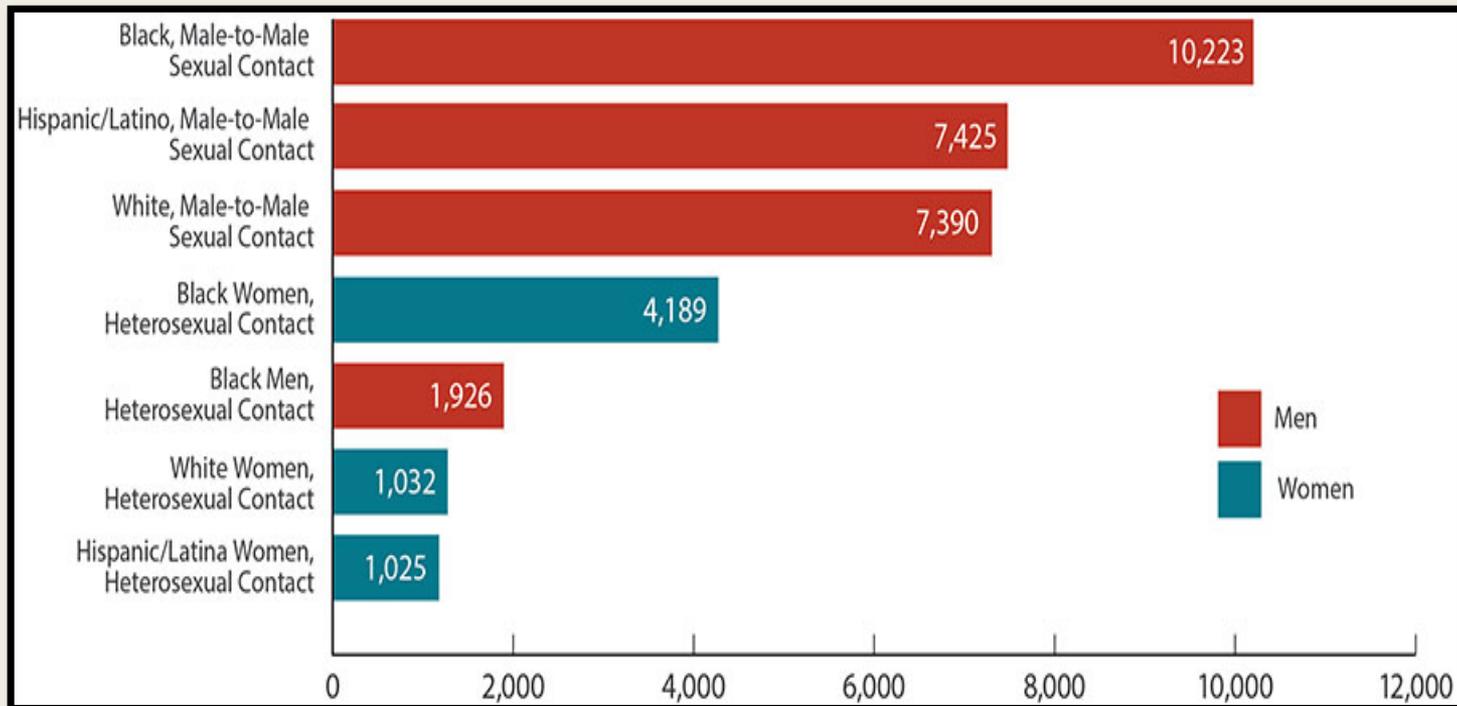
- Refers to the advanced stages of HIV when the infection has progressed and caused:
 - CD4 count <200 cells/mL,
 - CD4 percentage <14%, OR
 - Diagnosis of opportunistic infection

■ **Viral Load:** Measure of the number of copies of the HIV virus per mL of blood.

- Measure of how active the virus is and how well medication is working
- Ranges from undetectable (i.e. <20 copies per mL of blood) to *millions*

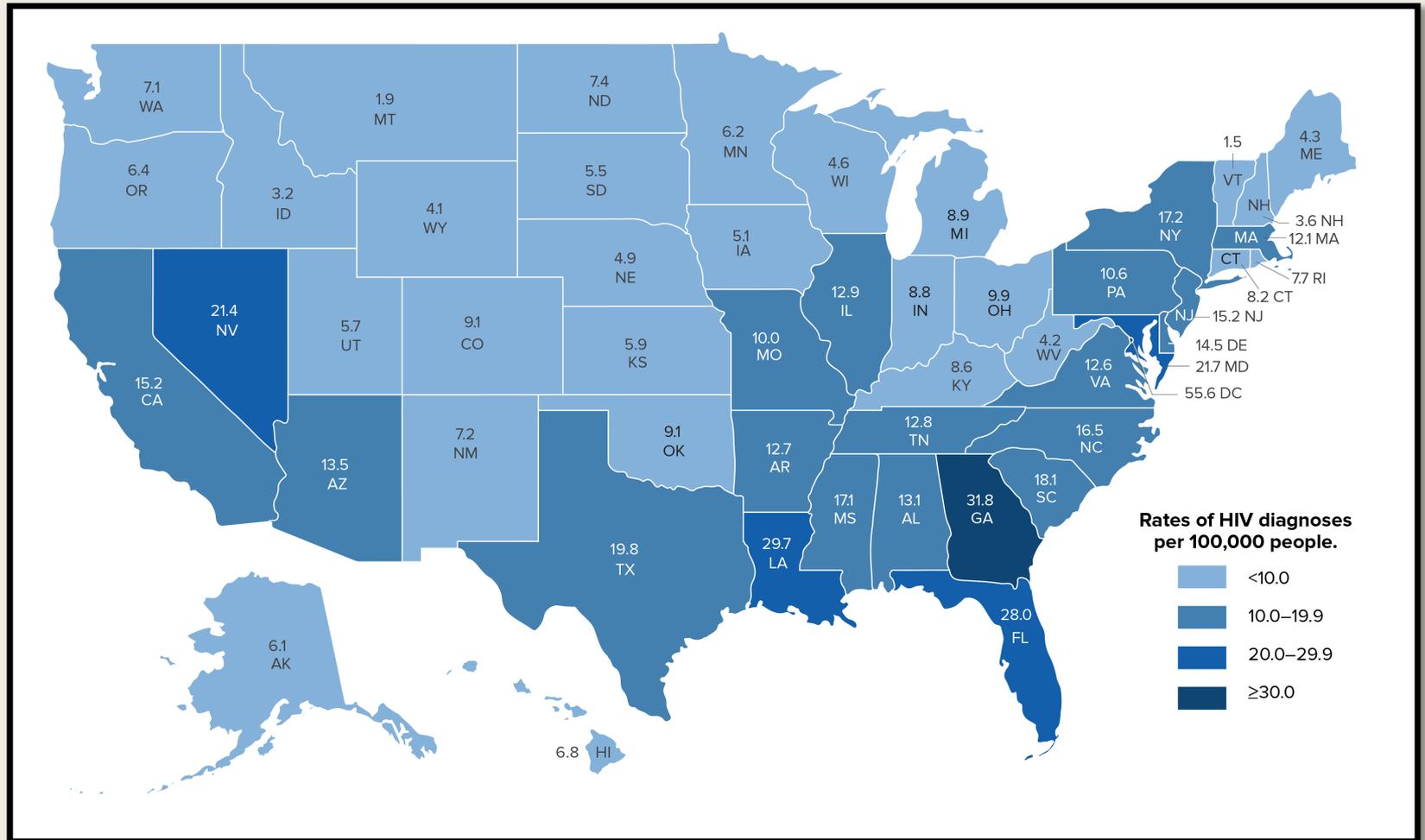
HIV in the United States

- In 2015, there were approximately 38,500 new infections in the U.S.
 - *Annual infections are declining in the U.S. New infections in 2015, decreased 8% from 2010.*



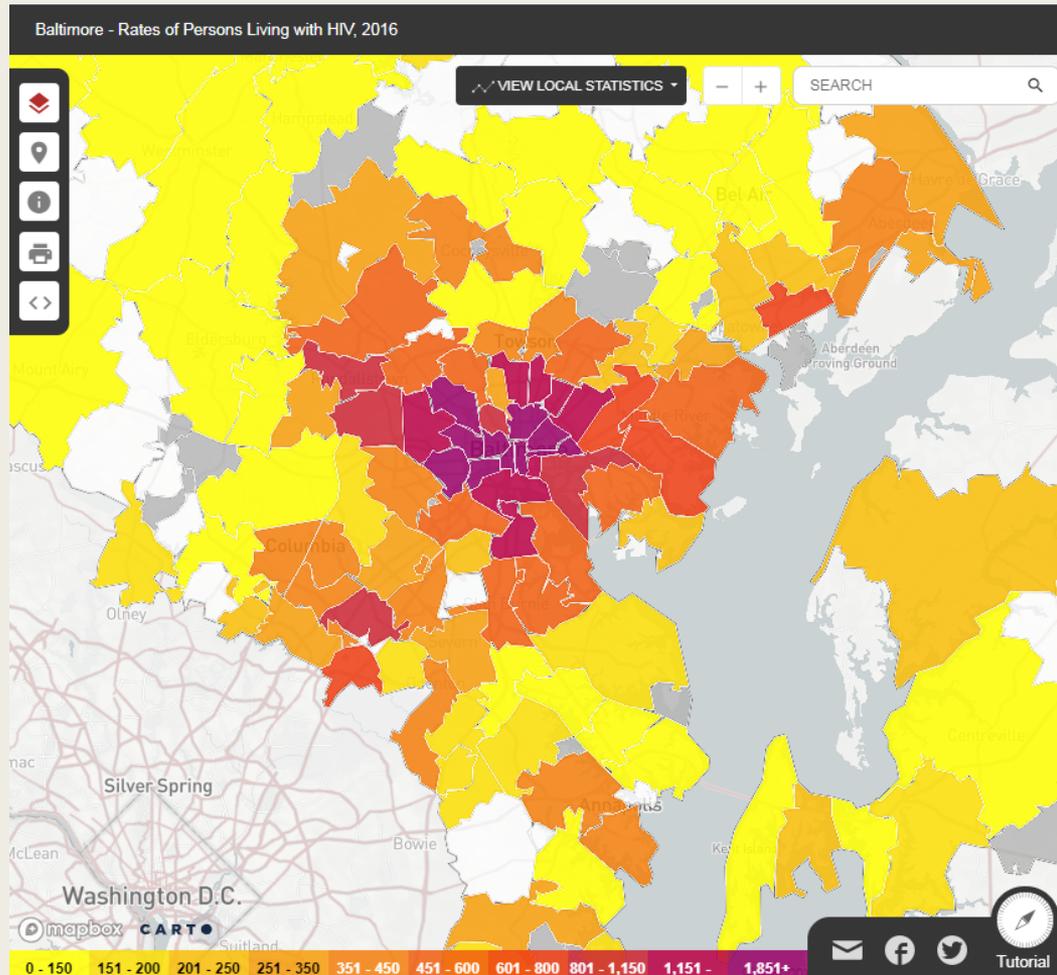
Note. New HIV diagnoses in the U.S. for the most-affected subpopulations in 2016 (www.cdc.gov)

HIV in the United States



Note. Rates of HIV diagnoses among adults and adolescents in the U.S. by state in 2016 (cdc.gov)

HIV in Baltimore



Visit
www.aidsvu.org
to find more
about HIV in your
area

HIV in the VA

- Over 25,000 Veterans engaged in HIV-care
- Veterans in the VA being seen for HIV treatment are:
 - Predominately male
 - Average age = 56.1 years old (75% are 50 or older)
 - Race:
 - African American/Black = 50 %
 - Caucasian/White = 42%
 - Hispanic/Latino = 7%

Transmission

- Virus is transmitted through bodily secretions:
 - Blood
 - Semen
 - Vaginal Secretions
 - Breastmilk
- Enters through an opening or tear in the mucosal membrane (e.g., skin)

HIV is NOT transmitted by:

- Air or water
- Saliva, sweat, or tears
- Closed-mouth kissing
- Insects (e.g., mosquitos) or pets
- Sharing toilets, food, or drinks

POP QUIZ!



A mother can transmit HIV to her child during childbirth.

True or False?

POP QUIZ!



A mother can transmit HIV to her child during childbirth.

TRUE

Transmission

YOU CAN GET HIV VIA...



Unprotected sex



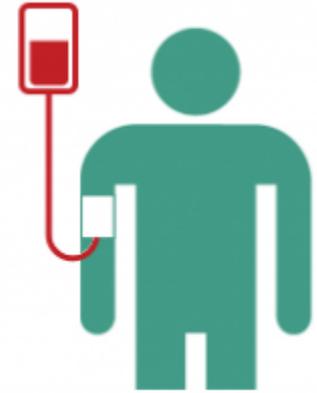
Pregnancy,
childbirth &
breastfeeding



Injecting drugs



Working in
healthcare



Blood
transfusions &
organ/tissue
transplants

POP QUIZ!



What is the most common means of transmission for new infections?

- a. Injection drug use
- b. Child birth
- c. Unprotected sex among heterosexual couples
- d. Unprotected sex among same sex couples

POP QUIZ!

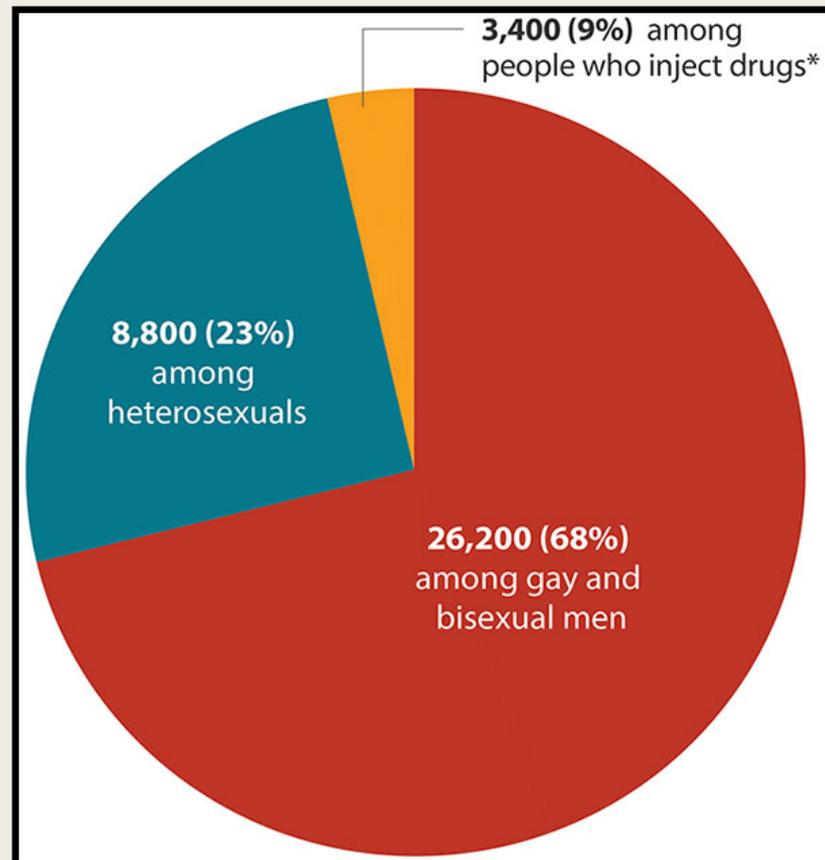


What is the most common means of transmission for new infections?

Unprotected sex among same sex couples

Transmission

- Estimated New HIV Infections in the U.S. in 2015 by Transmission Category



Transmission

	Without Condom	With Condom
Kissing	Little to no risk	N/A
Oral Sex	Little to no risk	Little to no risk
Insertive Vaginal Sex	4	1
Receptive Vaginal Sex	8	2
Insertive Anal Sex	11	3
Receptive Anal Sex	138	51

Note. Numbers reflect the risk of transmission per 10,000 sexual acts

Know the risk at www.cdc.gov/hivrisk

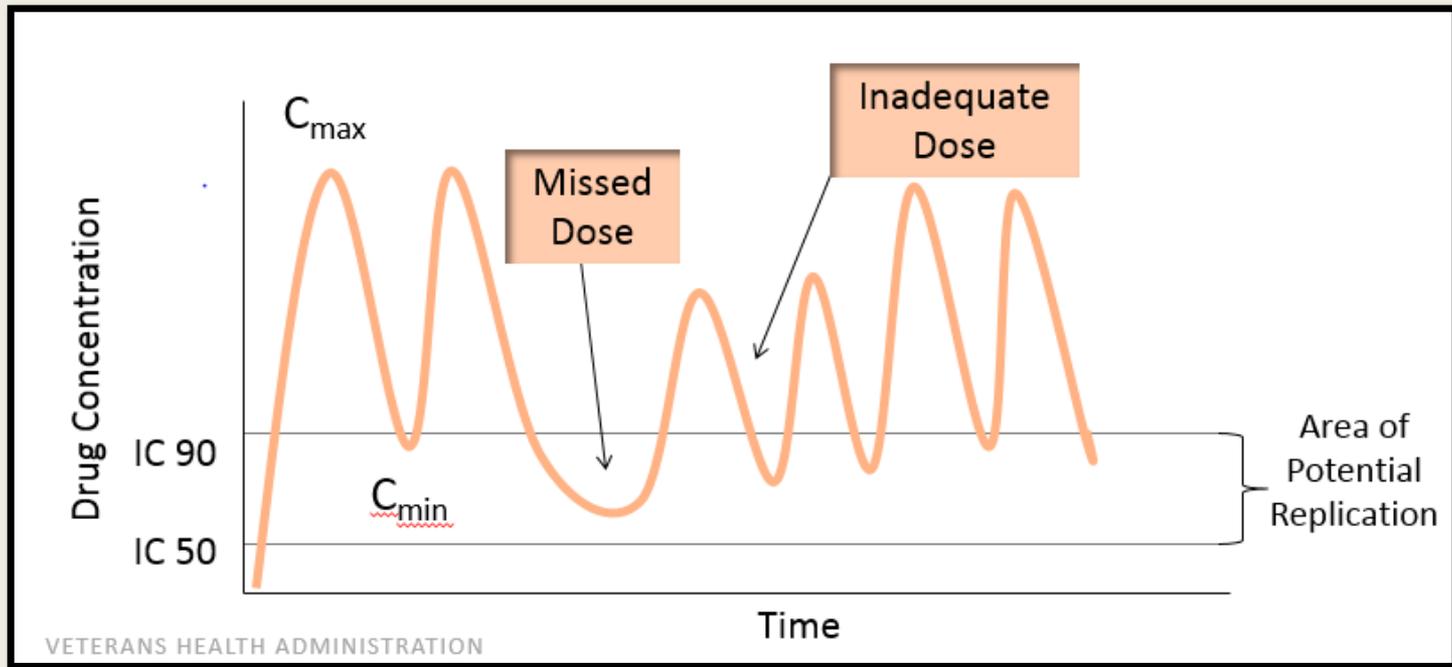
Reducing Risk of Transmission

- Antiretroviral (ARV) for HIV+ positive partner
 - The higher a person's viral load, the greater the risk of transmission
- Pre-exposure Prophylaxis (PrEP) for HIV- partner
 - Daily medication to prevent HIV infection for persons who are HIV- but are at higher risk for contracting HIV
- Post-exposure Prophylaxis (PEP) for HIV- individuals who believe they may have been exposed to HIV
- Condoms

HIV Treatment- An Evolution

- Early treatment (1990's)
 - Fewer medications approved to treat HIV
 - Sometimes over 20 pills per day, taken at different intervals
- Combined Antiretroviral Therapy (CART)
 - Current treatment guidelines recommend using at least 3 different medications from at least 2 different classes, usually in a single pill
 - When developed, reduced AIDS-related deaths by half in 3 years
- Medications must be taken daily as prescribed to be effective
 - 90-95% adherence needed to maintain optimal viral suppression

HIV TREATMENT



Adherence is key!

How is the VA Doing?

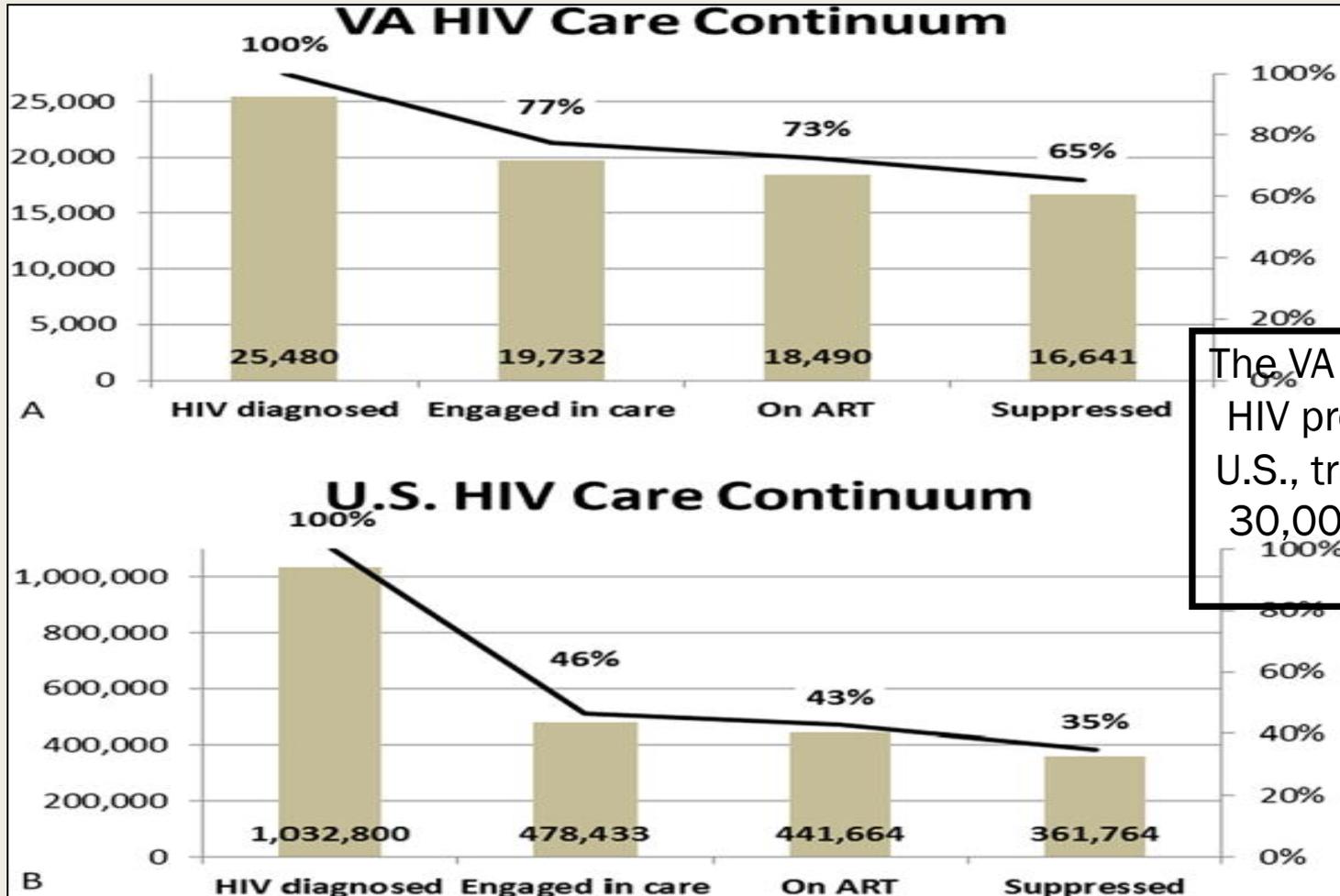
	HIV Viral Load Suppression
December 2014	79%
December 2015	80%
December 2016	82%
December 2017	81%

Goals of Treatment

HIV

- Viral Suppression
- Immune system restoration
- Reduced HIV-related mortality
- Treatment as prevention
 - Early initiation of ARV can reduce transmission of HIV by 96%

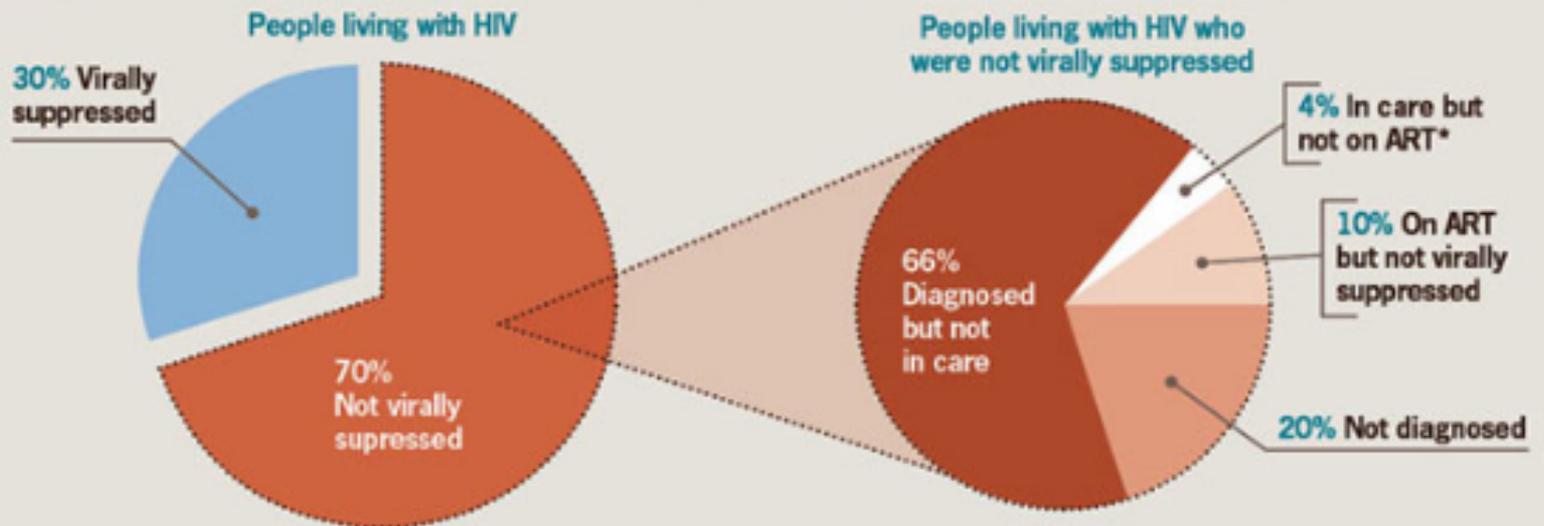
HIV Care Continuum



The VA is the largest HIV provider in the U.S., treating nearly 30,000 patients a year.

HIV Care Continuum

Achieving Viral Suppression: More People with HIV Need to be in Medical Care



SOURCES: CDC National HIV Surveillance System and Medical Monitoring Project, 2011.

*Antiretroviral therapy

HEPATITIS C BACKGROUND & TREATMENT



Important Definitions

■ **Hepatitis:** Viral infection that causes inflammation and damage to the liver

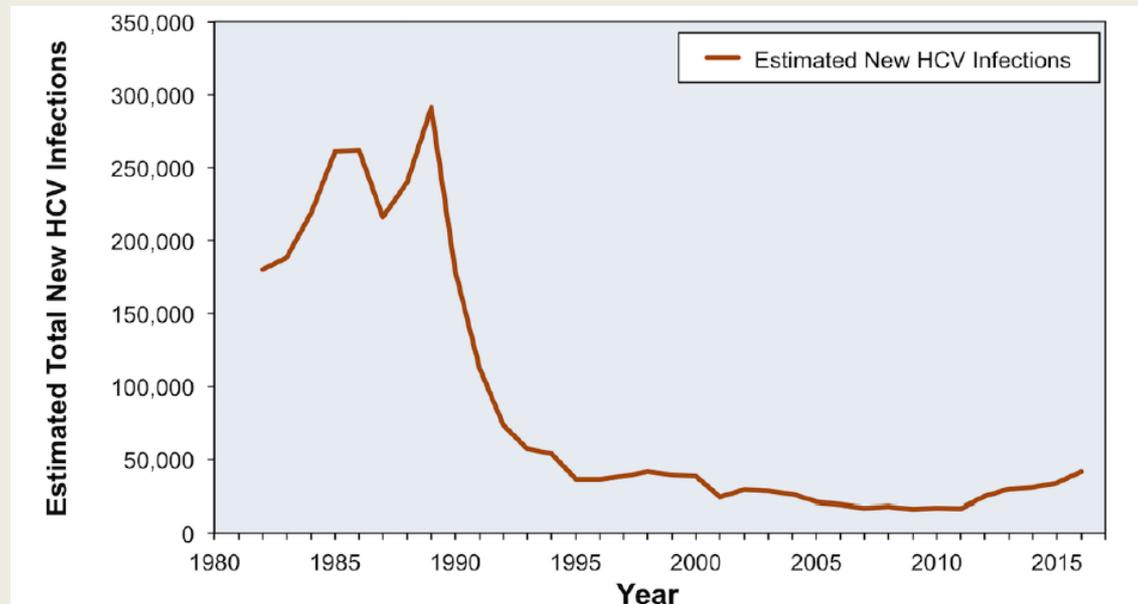
- There are 5 different Hepatitis viruses (A, B, C, D, E)

■ **SVR:** Sustained Virologic Response

- The HCV virus has been cleared from the blood and remains undetectable for 6 months

HCV in the United States

- Estimate 3.2 million people in the US are living with HCV.
 - Of these, 2.7 million have a chronic infection
- Veterans have higher rates (6%) of HCV than the general population.



Transmission

- Virus is primarily transmitted through infected blood or bodily fluids that contain blood.
- Possible exposures:
 - Injection drug use
 - Sharing snorting straws
 - Recipient of donated blood products/organs before 1992
 - Needlestick injuries
 - Birth to an HCV-infected mother
 - History of incarceration
 - *Less common exposures:*
 - Sexual contact with an HCV-infected person (increased risk if partner is *also* HIV positive)
 - Sharing personal items (e.g., razors, toothbrushes)
 - Unregulated tattooing

POP QUIZ!



The rates of new hepatitis C infections in the US are decreasing.

True or False?

POP QUIZ!



The rates of new hepatitis C infections in the US are decreasing.

FALSE

HCV Treatment- An Evolution

- Previously treated with Interferon
 - Not a cure (only about 50% of patients achieved SVR)
 - Long treatment duration (24-48 weeks)
 - Significant side effects (e.g., flu-like symptoms, insomnia, GI distress, mood changes, muscle pain, low white blood cell count)
 - Treatment was often contraindicated for patients with mental health or substance use disorders
- Current treatments are a cure—95% of patients who receive oral HCV antivirals are cured
 - Fewer side effects
 - Shorter treatment duration (8-12 weeks)
 - No contraindications for patients with mental health or substance use disorders.
- Adherence is very important!

How is the VA Doing?

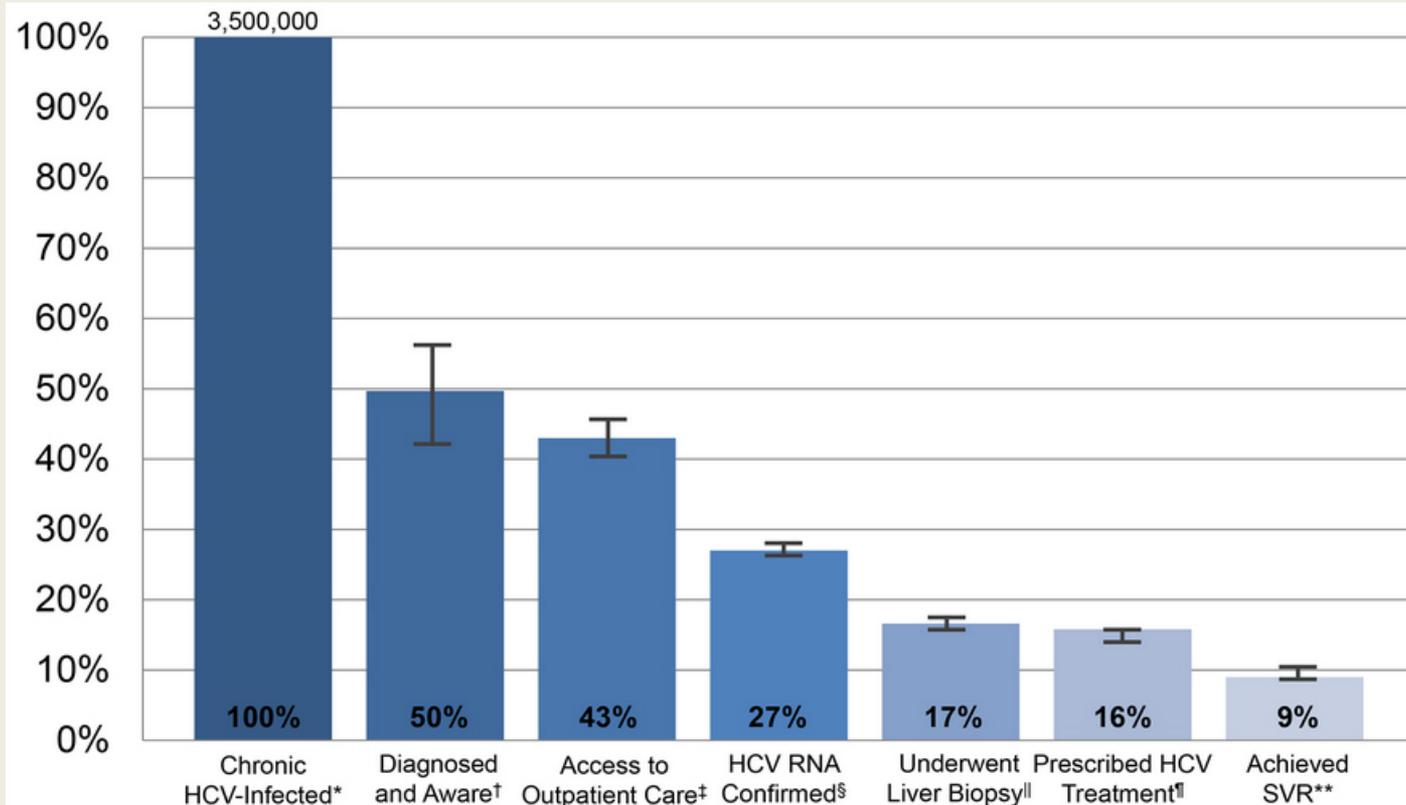
	HCV Sustained Virologic Response (SVR)
December 2014	70-80%
December 2015	85%-94%
December 2016	93%-95%
December 2017	93%-97%

Goals of Treatment

HCV

- Sustained virologic response
- Delayed progression of advanced liver disease
- Treatment as prevention

HCV Care Continuum (Non-VA)



* Chronic HCV-Infected; N=3,500,000.

† Calculated as estimated number chronic HCV-infected (3,500,000) x estimated percentage diagnosed and aware of their infection (49.8%); n=1,743,000.

‡ Calculated as estimated number diagnosed and aware (1,743,000) x estimated percentage with access to outpatient care (86.9%); n=1,514,667.

§ Calculated as estimated number with access to outpatient care (1,514,667) x estimated percentage HCV RNA confirmed (62.9%); n=952,726.

|| Calculated as estimated number with access to outpatient care (1,514,667) x estimated percentage who underwent liver biopsy (38.4%); n=581,632.

¶ Calculated as estimated number with access to outpatient care (1,514,667) x estimated percentage prescribed HCV treatment (36.7%); n=555,883.

** Calculated as estimated number prescribed HCV treatment (555,883) x estimated percentage who achieved SVR (58.8%); n=326,859.

Note: Only non-VA studies are included in the above HCV treatment cascade.

HIV & HCV Co-Infection

- Among people living with HIV in the U.S., approximately 25% also have HCV.
 - Among people with HIV who inject drugs, 50-90% also have HCV.
- In people with HIV/HCV coinfection, HIV may cause liver disease associated with chronic HCV to progress quicker.
 - Unclear if there is any impact of HCV on HIV progression

PSYCHOSOCIAL FACTORS AND HIV



Infectious Diseases & Mental Health

Co-morbid Condition	% of HIV+ patients ever diagnosed	% of HCV+ patients ever diagnosed
Depression	57%	60%
Anxiety	33%	38%
PTSD	18%	29%
Bipolar	10%	13%
Schizophrenia	6%	9%
Any Mental Illness	64%	70%

Sources: <http://vaww.hiv.va.gov/data-reports/ccr2014/Cond-ComEverInCare-Jan15-HIVPARV-2014-All.asp>
<http://vaww.hepatitis.va.gov/data-reports/ccr-index.asp>

HIV & Mental Health

- Depression is significantly more common about individuals with diagnosis of HIV than those without.
- Depression among patients with HIV is associated with:
 - Less engagement in HIV care
 - Increases in mortality for Veterans with HIV
 - Reduced immune functioning
 - Increase HIV disease progression

Infectious Diseases & Substance Use

Co-morbid Condition	% of HIV+ patients ever diagnosed	% of HCV+ patients ever diagnosed
Tobacco	48%	67%
Alcohol	33%	55%
Stimulants	27%	35%
Cannabis	16%	26%
Opioids	11%	22%
Other Drug Use	25%	39%

Sources: <http://vaww.hiv.va.gov/data-reports/ccr2014/Cond-ComEverInCare-Jan15-HIVPARV-2014-All.asp>
<http://vaww.hepatitis.va.gov/data-reports/ccr-index.asp>

Infectious Diseases & Substance Use

- Substance use associated with sexual risk factors (e.g. unprotected sex)
 - Can transmit HIV or HCV to partner
 - Can be re-infected with alternate strain of HIV or HCV virus
 - Can contract other STD's that are associated with HIV disease progression
- 57-66% of HIV+ IV drug users reported engaging in unprotected sex in last 6 months
- No data supporting minimum abstinence requirement for HCV treatment initiation or achieving SVR

Berg, Michelson, & Safren, 2007

Medication Adherence

- ARV adherence is suboptimal in 30-70% of patients with HIV
- Barriers:
 - Complicated regimens—though less now with current treatments
 - Dietary restrictions
 - Side effects
 - Psychosocial stressors
 - Mental health symptoms
 - Substance use
 - Limited knowledge about HIV or HCV and relevant treatment
 - Lack of access to healthcare
 - Low self-efficacy regarding adherence

Infectious Diseases & Stigma

- People living with HIV and HCV may experience stigma through negative social attitudes, discriminatory behavior, and self-stigma (e.g. feeling ashamed)
- Patients may even experience stigma from care providers
 - Stigma perceived from medical providers has been negatively linked with patient satisfaction in patients with HIV/AIDS and engagement in care
- Stigma can:
 - Interfere with treatment engagement
 - Interfere with adherence
 - Lead to depressive symptoms resulting in faster HIV disease progression

STRATEGIES FOR
WORKING WITH
VETERANS WITH
HIV/AIDS AND HCV



General Strategies

- Patient-centered language
 - **DO:** Person living with HIV/AIDS or patient (diagnosed) with Hepatitis C; Person with depression
 - **DON'T:** HIV/AIDS patient; Depressed patient
- Ask permission
 - *“Would it be okay to talk to you about your HIV diagnosis?”*
 - *“Would you mind if I asked you more about your understanding of your HCV medications?”*
- Use patient’s language and terminology
- Be empathic and non-judgmental

General Strategies, cont.

- Avoid judgment-laden terminology
 - **DON'T:** *Infected, dirty, contaminated*
- Use open-ended questions
 - *“Tell me more about your HIV diagnosis.”*
 - *“How are you coping with your HCV diagnosis?”*
 - *“What do you know about your HIV medication?”*
 - *“How would you describe your mood?”*
 - *“Tell me about your substance use.”*
- Use a strength-based approach
 - *“What ways have you been successful with [managing your health, taking medications] in the past?”*
 - *“What resources do you have to help you with X?”*
- It's okay to say you don't know

People at Risk for HIV or HCV

- Be aware of risk factors and educate patients
 - Use www.cdc.gov/hiv/risk with patients to demonstrate risk
 - Who should get tested for HCV:
<https://www.hepatitis.va.gov/pdf/Hepatitis-C-Testing-Factsheet-Veterans.pdf>
 - *“What do you know about [e.g., oral sex] and your risk for HIV [or HCV]?”*
- Recommend testing for patients identified as at-risk
 - *“What are your thoughts about getting tested for HIV [or HCV]?”*
- Risk Reduction
 - Discussing strategies to reduce risk
 - Refer for PrEP if at risk for HIV
- Be non-judgmental about a person’s risk behaviors

People Recently Diagnosed or Not Engaged in Treatment

- Reassurance, empathy, and non-judgment
- Addressing feelings of shame and guilt
- Supporting disclosure
- Addressing misconceptions
 - HIV is not a death sentence—life expectancy for patients with HIV is not significantly different than patients without HIV
 - HCV treatment is curative and easier to tolerate than previous treatment
 - Can't see it on them, they are not dirty
- Education
 - Resources for people recently diagnosed:
<https://www.hiv.va.gov/patient/diagnosis/resources.asp>
- Identified and Problem-solve Barriers to Treatment

People who are in Treatment

- Supporting adherence
 - Regularly assessing adherence to medication
 - Identifying barriers
 - Providing solutions (e.g., pillbox, setting alarms, using visual cues)
- Reassessment of motivation, willingness, and ability to engage in treatment and adhere to medication
 - Remember: motivation fluctuates!
- Assess and identify other factors that could impact adherence (e.g., substance use, mental health, stress)
 - *“What are the barriers to you taking your medication everyday as prescribed?”*
 - Provide support or refer as needed

RESOURCES



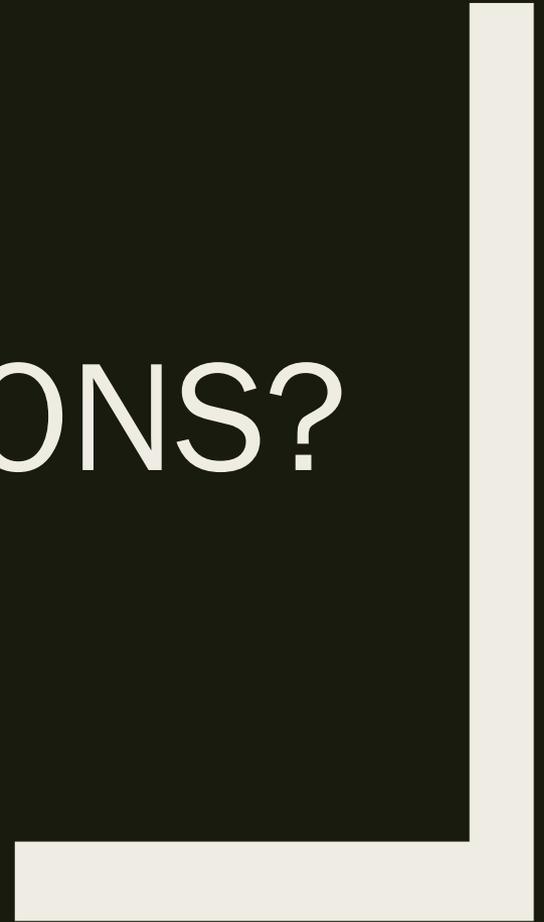
HIV Resources

- VA National HIV/AIDS Program: <https://www.hiv.va.gov/index.asp>
- CDC: HIV/AIDS: www.cdc.gov/hiv
- National HIV/AIDS Strategy: www.AIDS.gov
- AIDSinfo: <https://aidsinfo.nih.gov/>
- Know Your Risk: www.cdc.gov/hivrisk

HCV Resources

- **VA National HCV Program:**
<https://www.hepatitis.va.gov/hcv/index.asp>
- **CDC HCV:** <https://www.cdc.gov/hepatitis/hcv/index.htm>
- **Who Should Get Tested:**
<https://www.hepatitis.va.gov/pdf/Hepatitis-C-Testing-Factsheet-Veterans.pdf>

QUESTIONS?



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