



# Improving Health of Persons With HIV: Understanding the Impact of HIV Resistance

October 28, 2020

HealthHIV

# Upcoming Webinars

- Identify, Link, and Expand: Care Coordination to Advance HIV Health Outcomes
  - November 10, 2020 at 2PM EST
- Empowering the Care Team to Collaboratively Address Treatment Resistance
  - November 23, 2020 at 2PM EST

# Goals for Today's Webinar

- Today we will address:
  - Recent Advances in HIV Treatment
  - The Diversity of Patients and Treatments
  - Improving Patient and Provider Communications
  - Understanding HIV Labs and Tests for Viral Resistance
  - Viremia and Associated Health Risks
  - Empowering Patients with Health Care Engagement

# Learning Objectives

- By the end of today's session, participants will be able to:
  - Better understand viremia and concepts related to viral resistance to HIV medications
  - Describe available options for treatment of HIV resistance to medications
  - Identify ways to engage with your medical provider about treatment options for HIV resistance to medications



# Faculty



**W. David Hardy, MD, AAHIVS** *(he/him/his)*

An infectious diseases/HIV specialist, researcher and patient advocate. Cared for persons with HIV since 1982 and conducted research on HIV and related diseases since 1984.



**Scott Bertani, MPA**

**Director of Advocacy, HealthHIV**

Guides advocacy and policy from a shared lived experience, as both a long-term and graying consumer of HIV services and front-line leader in the care as prevention field. Previously was at Lifelong AIDS Alliance and Evergreen Wellness Advocates.



# Improving Health of Persons With HIV: Understanding the Impact of HIV Resistance

W. David Hardy, MD, AAHIVS

# HIV Surveillance Report

**37,968<sup>\*</sup> • Total HIV Diagnoses in 2018**

## Diagnoses by Race/Ethnicity

In 2018, Blacks/African Americans **and** Hispanics/Latinos accounted for **69% of HIV diagnoses** but comprised only 31% of the U.S.<sup>\*\*</sup> population.



<sup>\*\*</sup> Diagnoses by race/ethnicity for the United States only    <sup>†</sup> American Indian/Alaska Native: <1% • Asian: 2% • Native Hawaiian/Other Pacific Islander: <1% • Multiple races: 3%

## HIV Diagnoses Trends from 2014–2018\*

Women

**down  
8%**

Transgender Women<sup>††</sup>

**up  
5%**

<sup>††</sup> People who were assigned the male sex at birth but identify as women

25–34 year olds

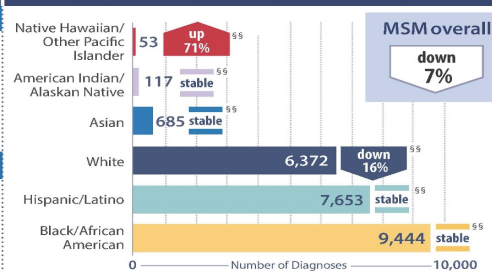
**up  
6%**

White PWID<sup>§</sup> <sup>¶¶</sup>

**up  
51%<sup>§</sup>**

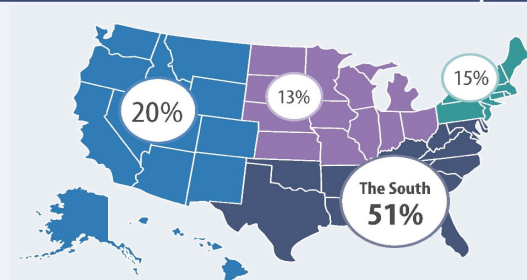
<sup>§</sup> People who inject drugs  
<sup>¶¶</sup> Excludes men who have sex with men (MSM) and injection drug users  
<sup>§§</sup> Decreasing among PWID in all other races/ethnicities

## Diagnoses Among MSM by Race/Ethnicity in 2018\*



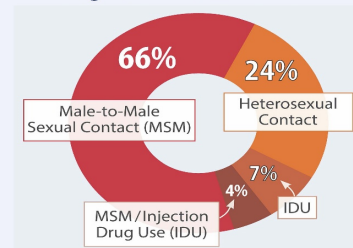
<sup>§§</sup> HIV Diagnoses Trends from 2014–2018

## HIV Diagnoses by Region



## HIV Diagnoses by Transmission Category\*

Among Adults and Adolescents



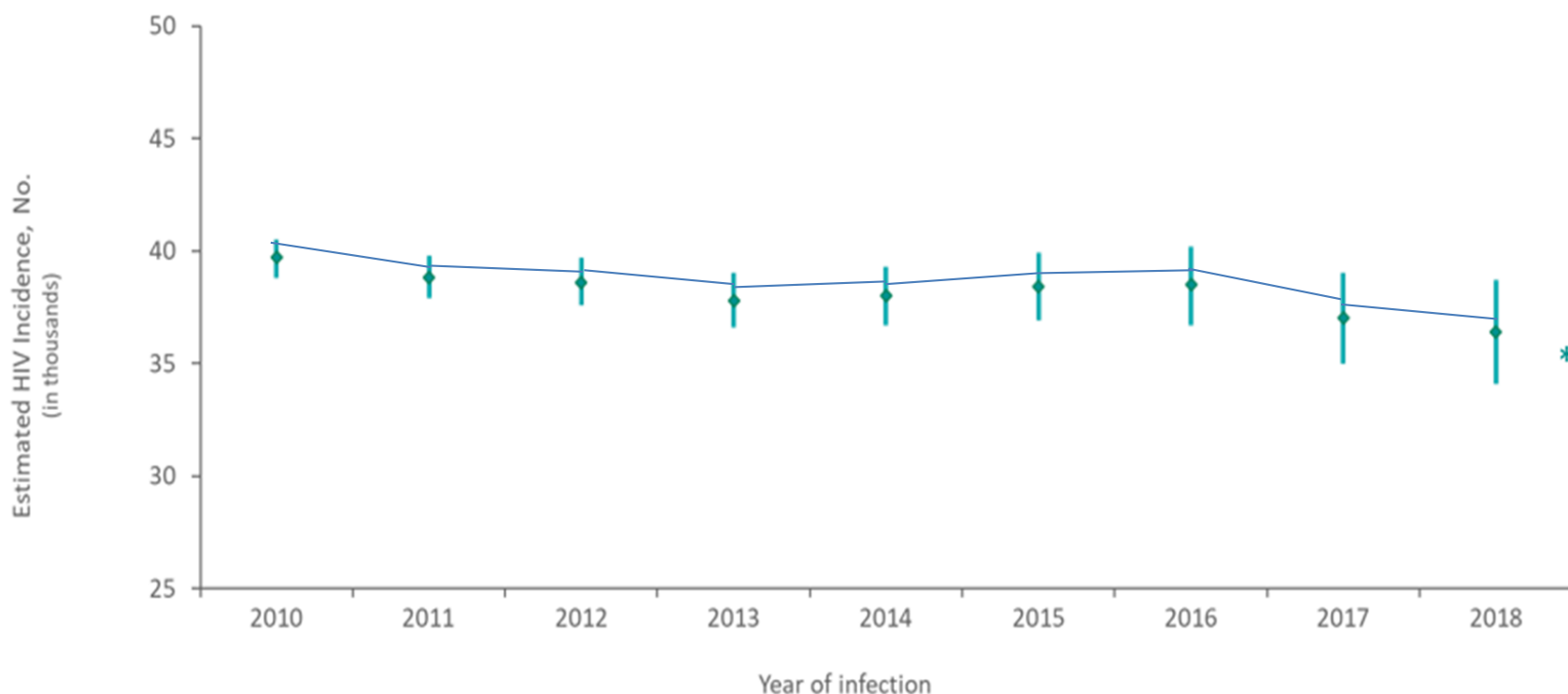
1.2% of HIV diagnoses are in the 6 U.S. dependent areas: American Samoa, Guam, Northern Mariana Islands, Puerto Rico, Republic of Palau, U.S. Virgin Islands.

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention  
Division of HIV/AIDS Prevention



<sup>\*</sup> Data include diagnoses from the U.S. and 6 dependent areas. Trends in numbers and rates are considered stable if there is an increase or decrease of less than 5%.  
Read the full report at <https://www.cdc.gov/hiv/library/reports/hiv-surveillance/vol-31/index.html>.

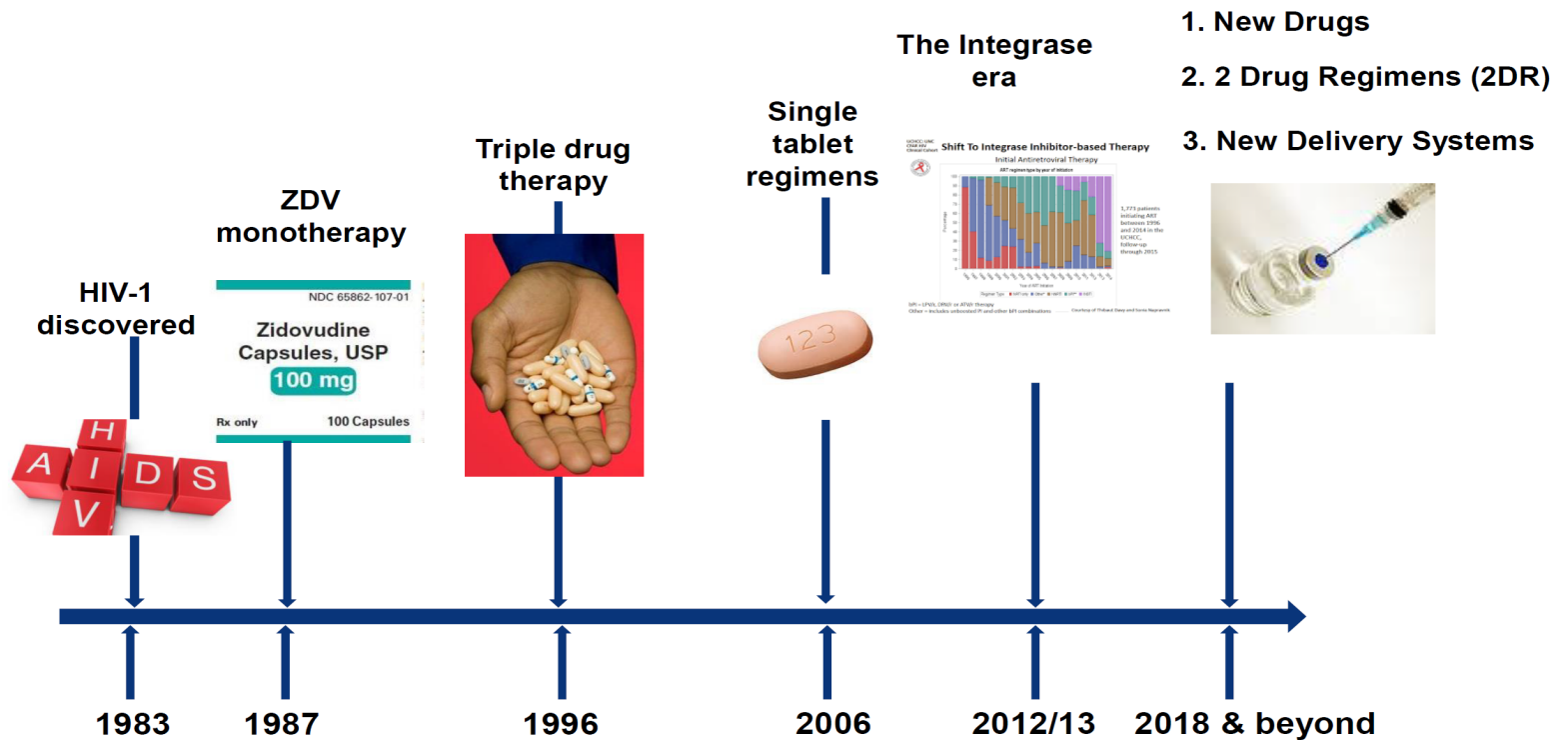
# Estimated Number of New Persons with HIV Aged $\geq 13$ Years, 2010–2018—United States



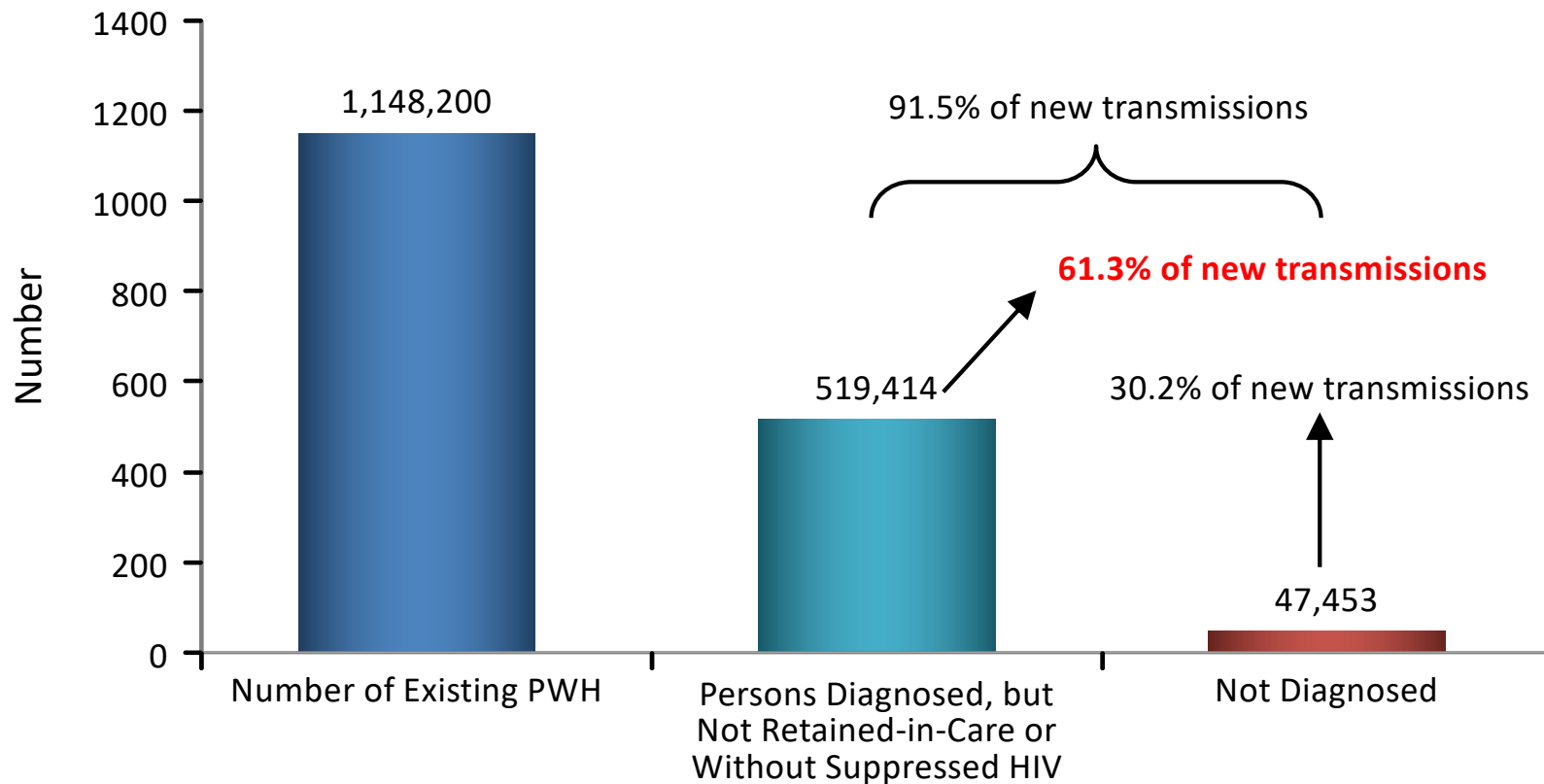
Note. Estimates were derived from a CD4 depletion model using HIV surveillance data. Bars indicate the range of the lower and upper bounds of the 95% confidence intervals for the point estimate.

\* Difference from the 2010 estimate was deemed statistically significant ( $P < .05$ ).

# Antiretroviral Therapy: Past, Present, and Future



# Why HIV Diagnosis, Retention-in-Care and Treatment Is So Important?



Skarbinski J, et al. *JAMA Intern Med.* 2015;175:588-596.

HIV Treatment Resistance Webinar

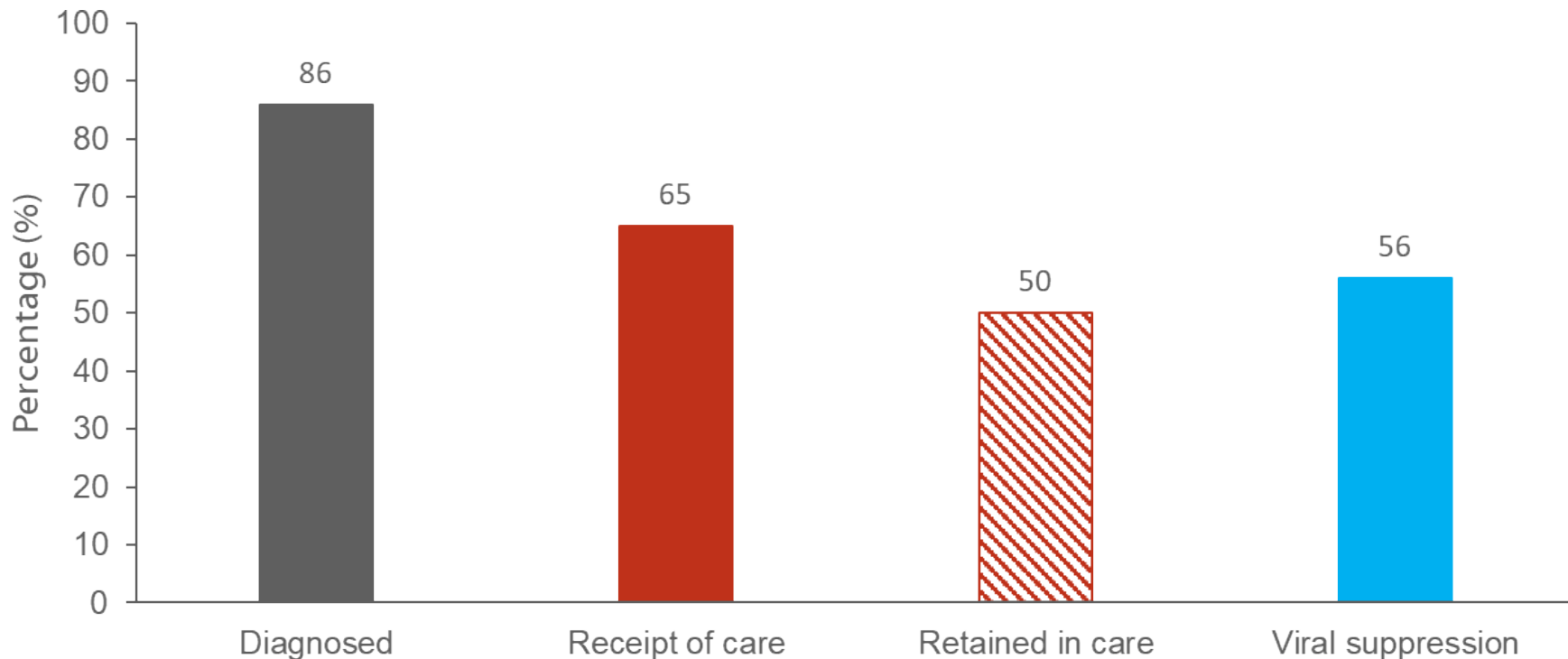
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# HIV CARE CONTINUUM:

The series of steps a person with HIV takes from diagnosis through their successful treatment with HIV medication.



# HIV Care Continuum, 2018 - United States

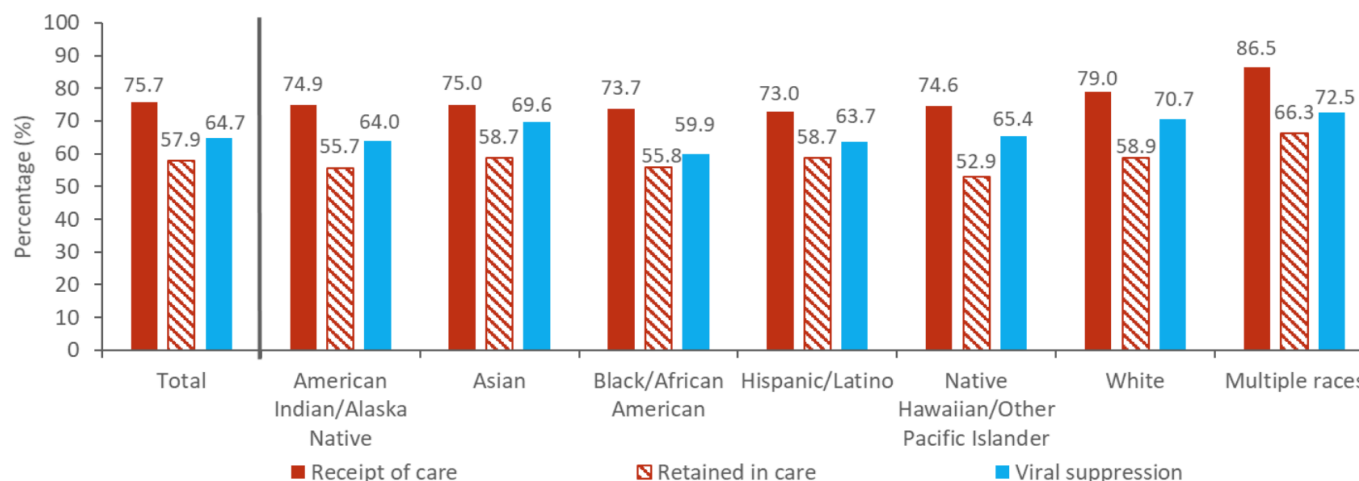


Note. Receipt of medical care was defined as  $\geq 1$  test (CD4 or VL) in 2018. Retained in continuous medical care was defined as  $\geq 2$  tests (CD4 or VL)  $\geq 3$  months apart in 2018. Viral suppression was defined as  $< 200$  copies/mL on the most recent VL test in 2018.



# People Living with HIV: Accessing Antiretroviral Therapy in the US

**Receipt of HIV Medical Care, Retention in Care, and Viral Suppression among Persons Aged ≥13 Years Living with Diagnosed HIV Infection, by Race/Ethnicity 2018—41 States and the District of Columbia**



Note. Receipt of medical care was defined as ≥1 test (CD4 or VL) in 2018. Retained in continuous medical care was defined as ≥2 tests (CD4 or VL) ≥3 months apart in 2018. Viral suppression was defined as <200 copies/mL on the most recent VL test in 2018. Asian includes Asian/Pacific Islander legacy cases. Hispanics/Latinos can be of any race.

Source: CDC. [Selected national HIV prevention and care outcomes \(slides\) pdf icon\[PDF – 2 MB\]](#).

HIV Treatment Resistance Webinar

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The science is clear:  
with HIV, undetectable equals untransmittable





# OPTIMAL ADHERENCE



**LOW  
RESISTANCE**



**BETTER  
HEALTH**

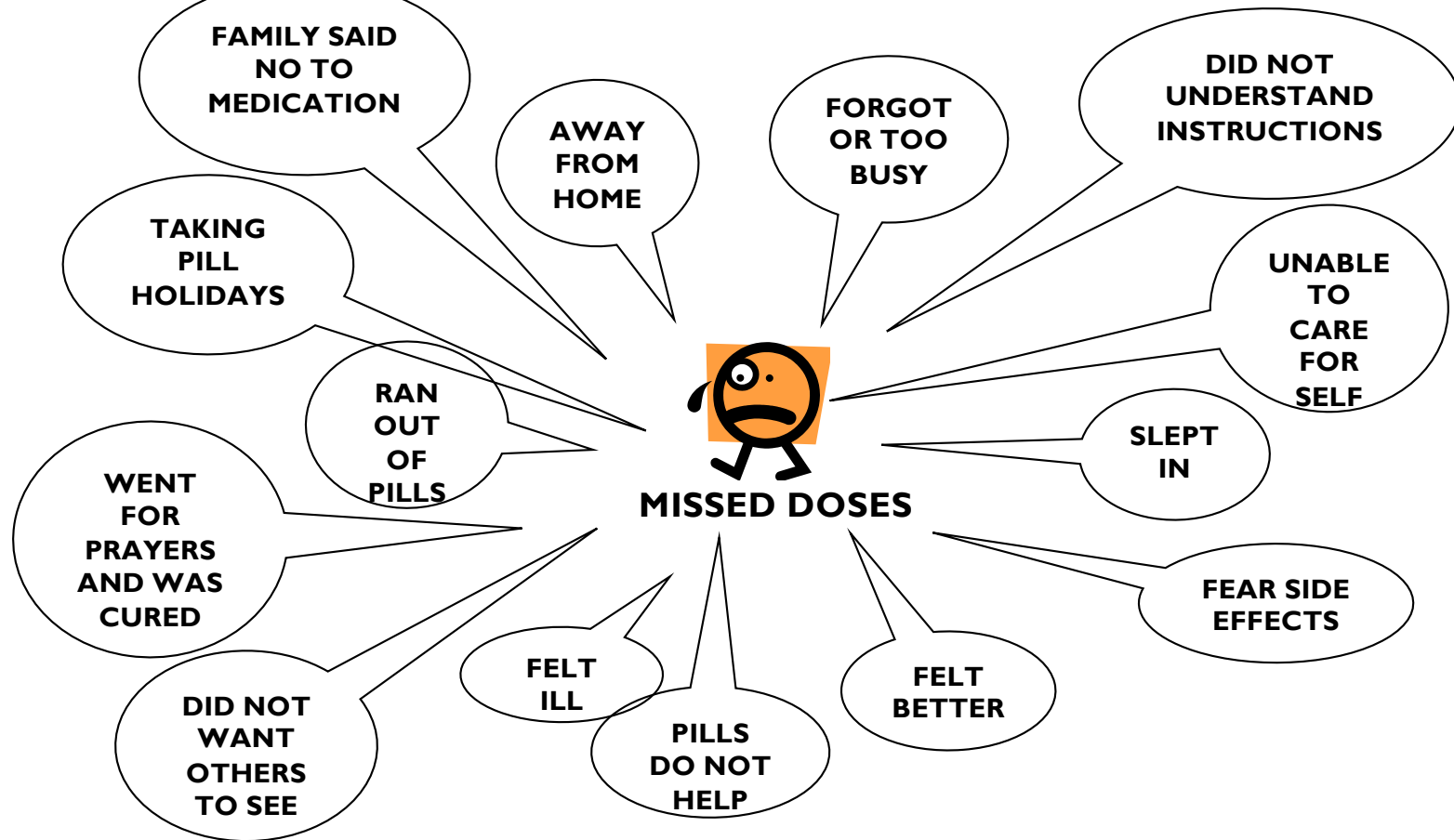


**MAINTAINS  
SUPPRESSION**



**HELPS PREVENT  
TRANSMISSION**

# Adherence Challenges



## What are some challenges I might face when taking my medication?

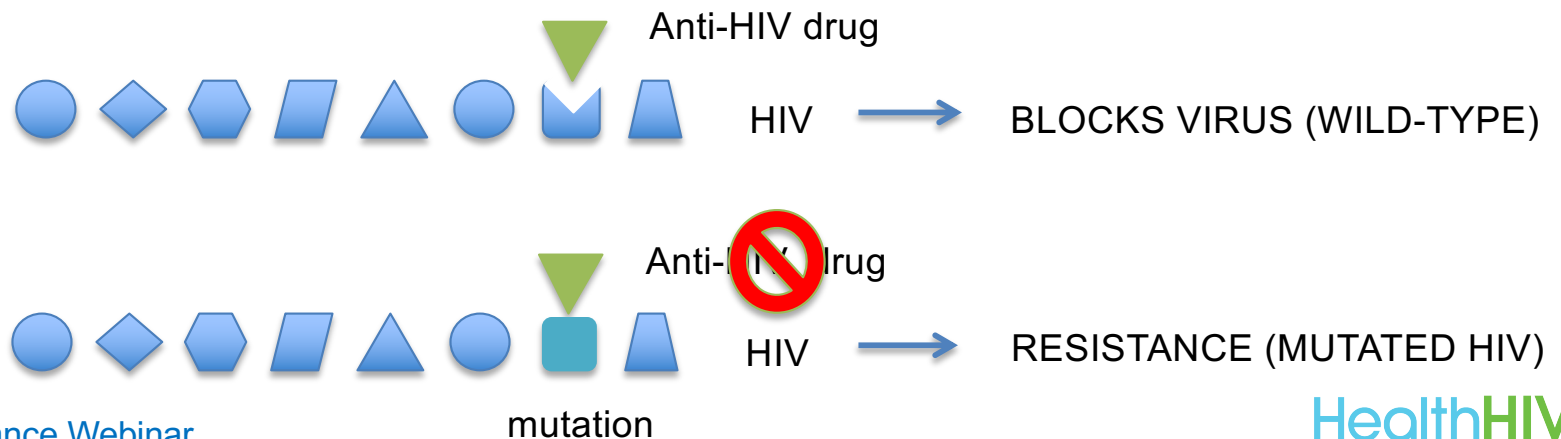
- Side effects from my medications
- Behavioral or mental health concerns
- Interactions with my other medications which change my HIV medications or vice-versa
- My use of alcohol or other drugs which alter my judgement or mood
- My busy work/life schedule that interferes with my medication schedule
- Treatment fatigue

## What are the benefits of taking my HIV medicine every day as prescribed?

- Allows HIV medications to work as optimally as possible to reduce the amount of HIV in my body.
- Helps keep my immune system stronger and better able to fight infections and keep me healthy.
- Reduces the risk of me passing HIV to others.
- Helps prevent HIV from becoming resistant to my medications.

# What is HIV resistance to medications?

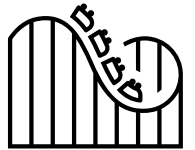
- **Resistance** means that the virus has mutated or changed so that certain HIV drugs are no longer effective.
  - Resistance is caused by mutations that occur in the virus → these mutations can cause resistance to *one* antiretroviral drug or to *many* antiretroviral drugs
  - Anytime HIV is able to reproduce itself, mutations can occur




# 10 Important Things to Know About HIV Drug Resistance

1.  Antiretroviral Drugs Do Not Cause Resistance

2. “Wild-type HIV” is the Natural State of the Virus



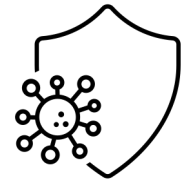
3.  HIV Replicates Quickly but is Prone to Make Mistakes (Mutations)



# 10 Important Things to Know About HIV Drug Resistance

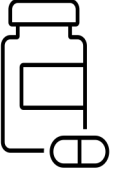
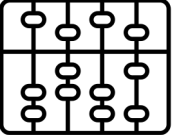


4. ✓ Mutations Can Increase to Deepen Drug Resistance

5. Having a Resistant Strain of Virus Doesn't Mean That You Are Resistant (It's about the virus)



6.  Viral Resistance Can be Passed to Others

# 10 Important Things to Know About HIV Drug Resistance

7.  Resistance Testing Helps Guide the Selection of the Best Drugs for Your Virus
8. Poor Adherence Gives the Virus a Survival Edge 
9.  Resistance to One Drug Can Affect Multiple Drugs in the Same Class of Drugs
10. Resistance is Manageable, but it is Forever 

# Understanding Your Lab Test Results

# CD4+ T Cell Counts and HIV

- CD4+ T cells are central players in the human immune system and are specifically infected by HIV. A person with a healthy immune system has 500 to 1,600 CD4+ T cells in a cubic millimeter ( $\text{mm}^3$ ) or drop of blood. AIDS is diagnosed when the CD4+ T cells are lower than  $200/\text{mm}^3$ .
- AIDS-defining infections, also called opportunistic infections, typically occur in PWH with CD4+ T cells below  $200/\text{mm}^3$ . Viruses, bacteria, or fungi that don't usually make healthy people sick can cause these infections in someone with AIDS.

# Let's Discuss Your Lab Test Results

Clinical Laboratory Report				
Patient Name DOE, JOHN		Date Drawn 12/20/13	Date Received 12/20/13	Date of Report 12/22/13
Sex M	Age 31	Client Name / Address MEDICAL CENTER YOUR DOCTOR, M.D. 123 MAIN STREET ANYTOWN US 10023	I.D. Number 78987654	Account Number 12343
Ordering Physician SMITH 123094567			Specimen Number 918273	Time Drawn 11:00
Patient I.D./Soc. Sec Number				
TEST NAME	RESULT	UNITS	REFERENCE RANGE	
LYMPH SUBSET				
CD3 ABS	1962	cu.mm	625 - 2460	
CD3%	82.0	Percent	60 - 90	
CD3+/CD4+ (HELPER) ABS	570	cu.mm	423 - 1724	
CD3+/CD4+ (HELPER) %	23.8 L	Percent	32 - 68	
CD3+/CD8+ (SUPPRES) ABS	1290 H	cu.mm	140 - 958	
CD3+/CD8+ (SUPPRES) %	53.9 H	Percent	10 - 36	
CD4/CD8 RATIO	0.44 L	Ratio	0.90 - 6.00	

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When reviewing your lab test report, be sure that the patient information matches your own, including the ordering physician information.

# Let's Discuss Your Lab Test Results

**Clinical Laboratory Report**

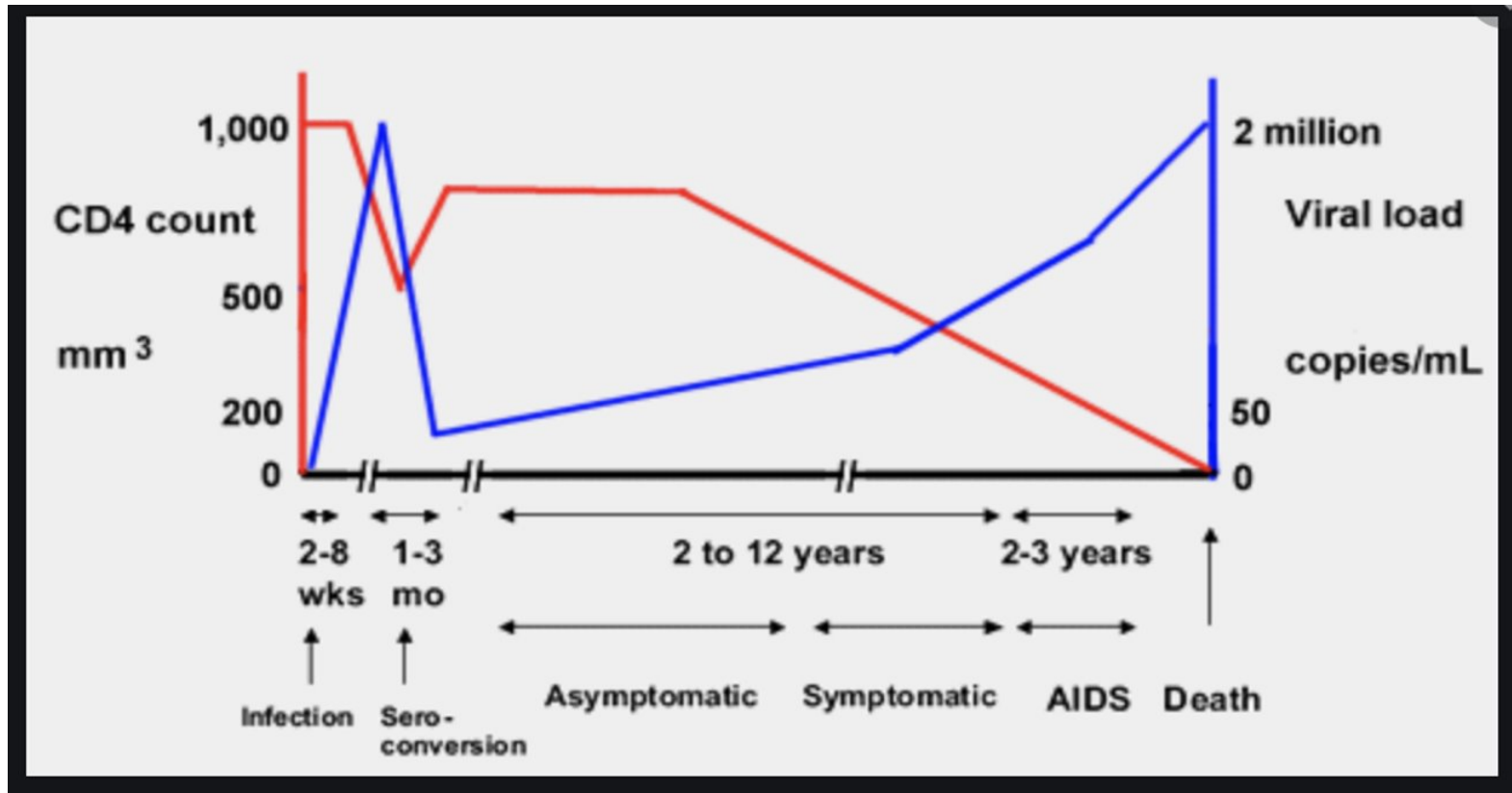
Patient Name DOE, JOHN		Date Drawn 12/20/13	Date Received 12/20/13	Date of Report 12/22/13
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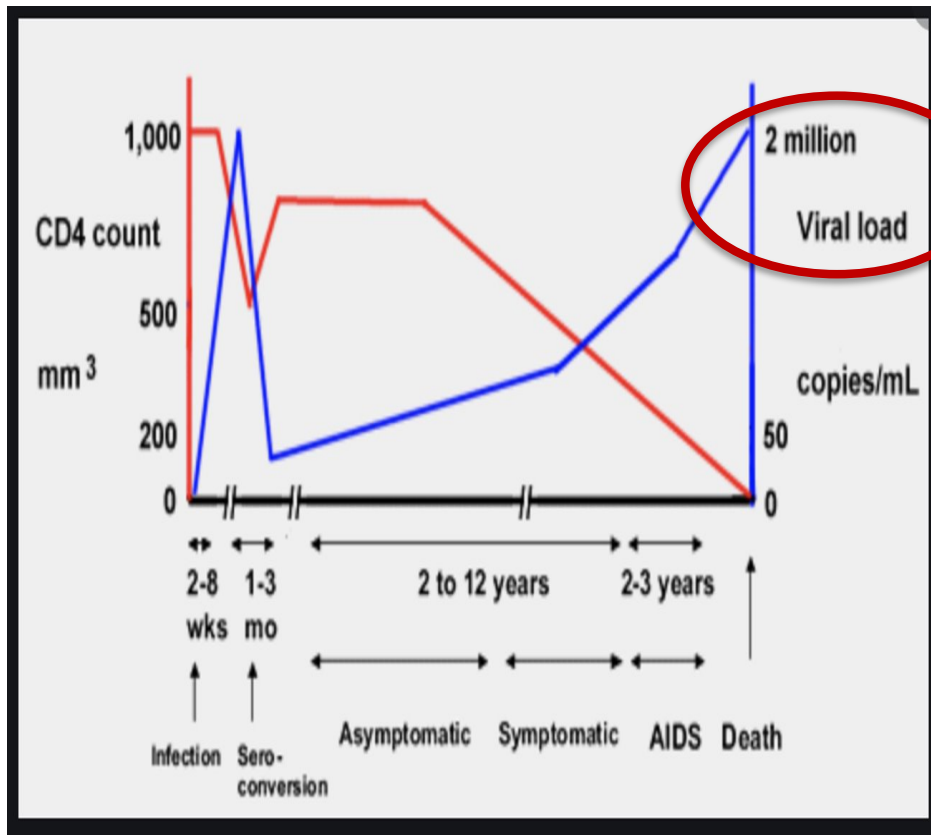
Be sure to look for the test results for the CD3+/CD4+ or “Helper” cells. They are reported both as a percentage (%) of all T cells and as an absolute number of cells. Check the Reference or “normal” range to best understand where your T cells are.

# Let's Discuss Your Lab Test Results





# Let's Discuss Your Lab Test Results

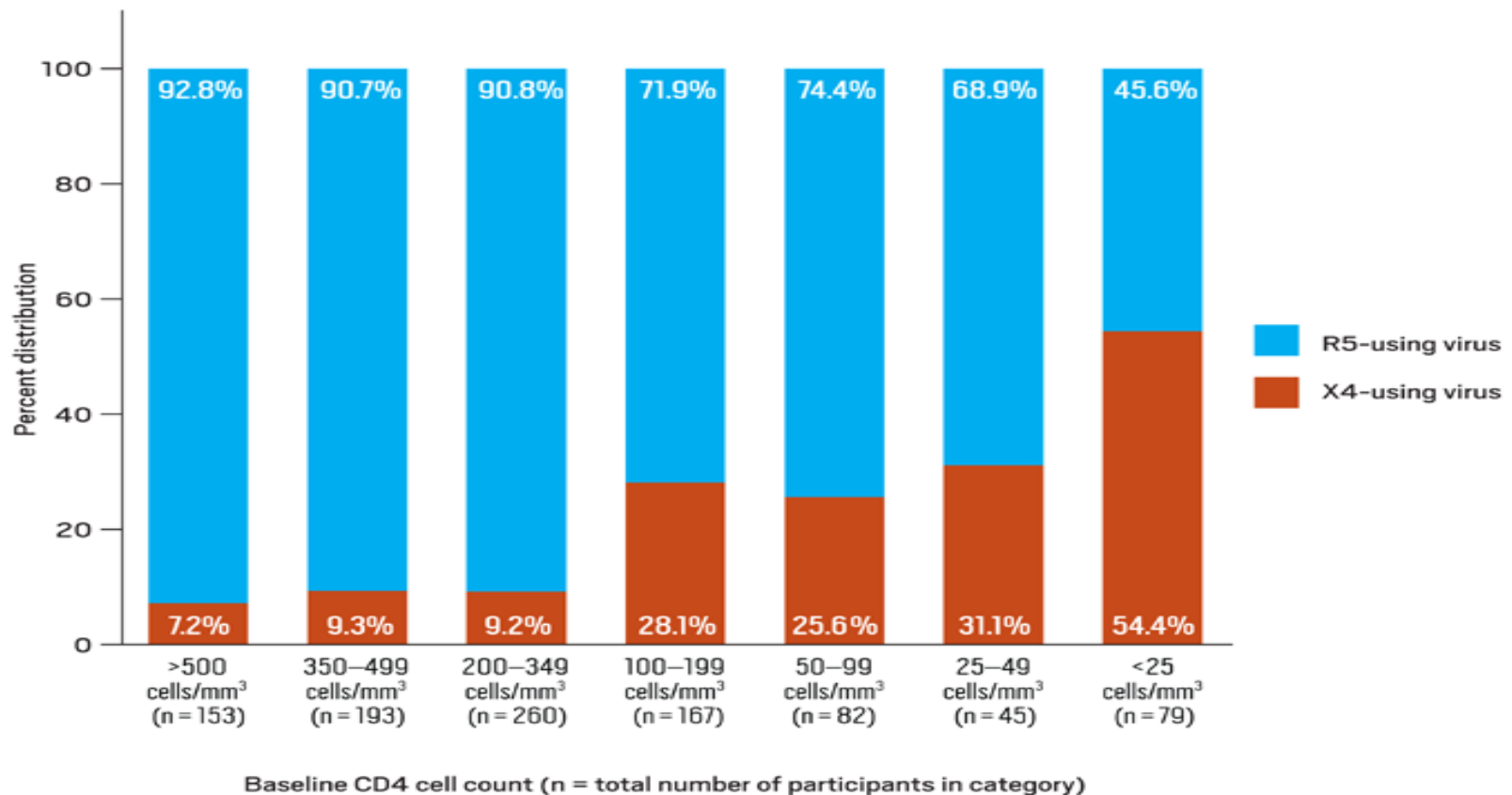


Viral load (aka HIV RNA) is the direct measurement of HIV in the blood. It's highest right after contracting HIV and then fluctuates as the immune system fights against it. Eventually, HIV destroys CD4+ T cells and infections occur. Anti-HIV medication strongly controls the virus and protects and allows CD4+ T cells to re-constitute or re-plenish themselves back to normal levels.

# Your Lab Test: Helpful Terminology Explained

- What is HLA-B\*5701?
  - A positive test result means you have the *HLA-B\*5701* gene and have a higher risk of developing a potentially life-threatening reaction to abacavir. If your test result is positive, you should not take abacavir.
- What is Viral Tropism?
  - HIV can use two different entry pathways to infect human CD4+ T cells, the R5 or X4 route. Different strains of HIV use one pathway exclusively while some use both. Maraviroc is an anti-HIV drug that effectively blocks R5-type HIV, but not X4 HIV. A tropism test will define which pathway a virus uses.

“We need to ensure that people who start treatment can stay on effective treatment, to prevent the emergence of HIV drug resistance...”



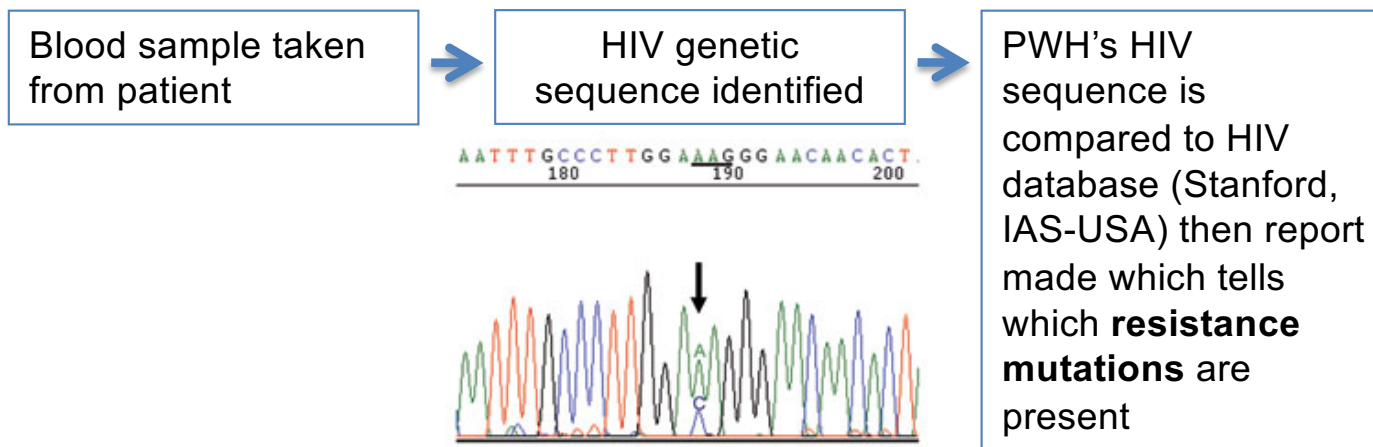
# When do we suspect resistance?

1. If a PWH has an increasing viral load while on ART then we suspect there may be resistance
  - This assumes the patient has been adherent in taking their HIV medications
2. All PWH should have viral resistance tests prior to starting ART for the first time
  - Transmitted resistance can occur about 5%-20% of the time

# How do we test for resistance?

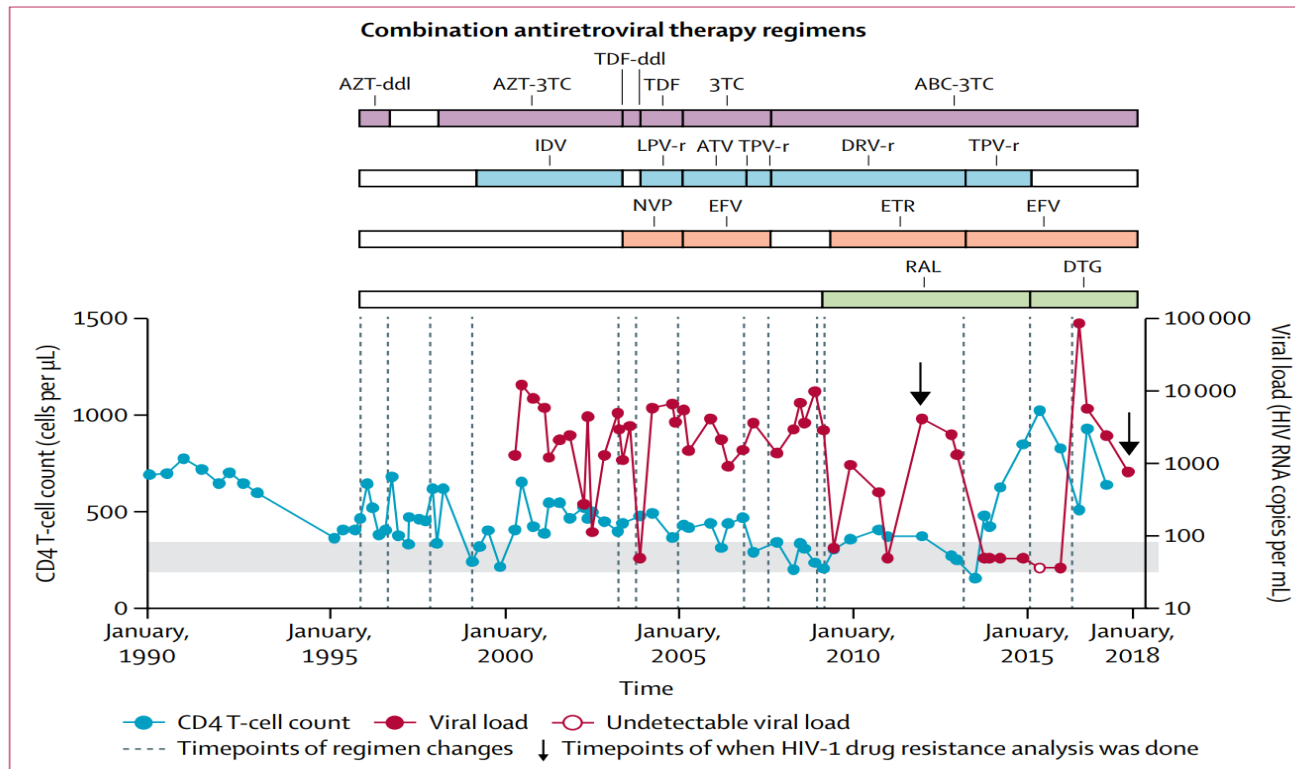
- HIV Genotype Test

- This test determines the genetic sequence of the HIV in the PWH's blood which is then compared to a database to identify if mutations are present.



### Component Results

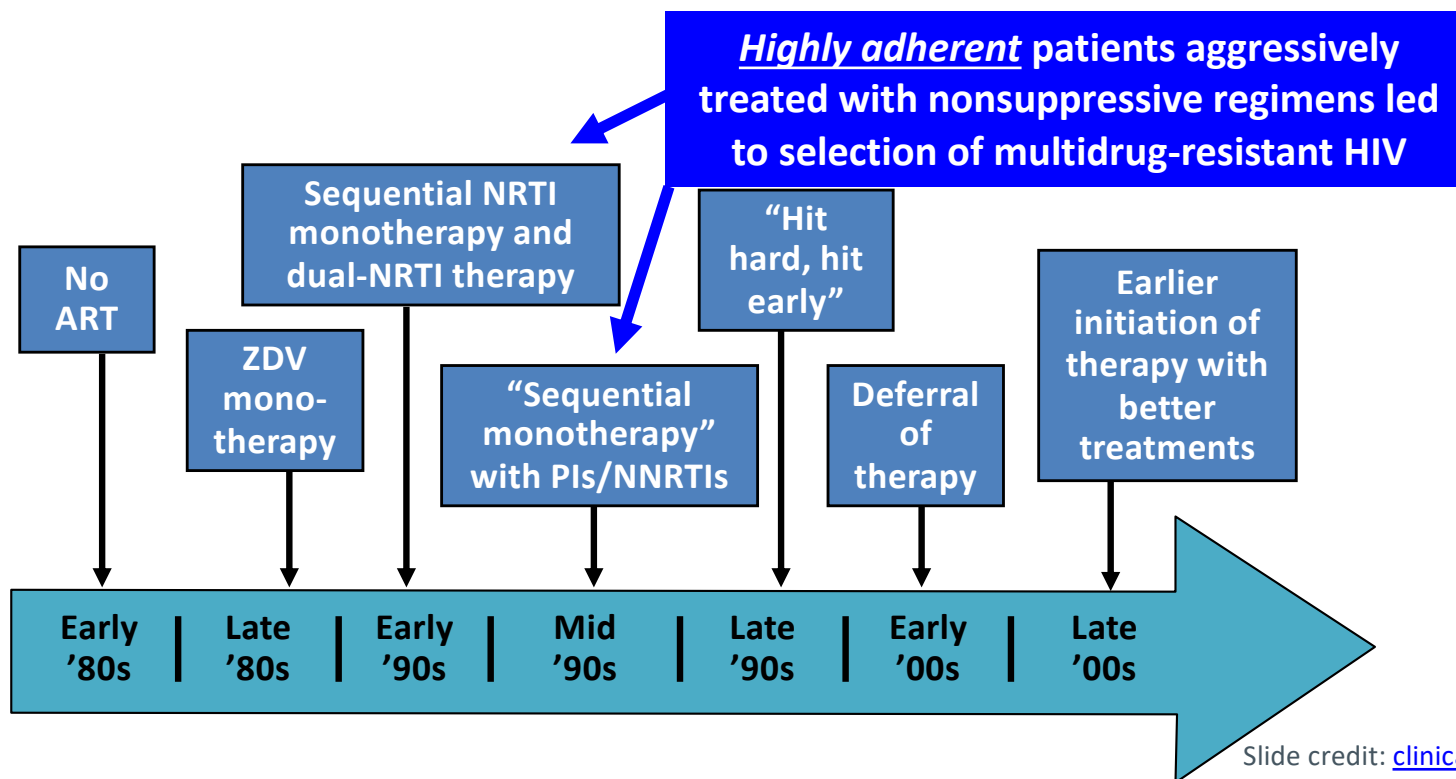
Component	Value	Flag	Range	Units	Status
<b>HIV1 Genotype</b>	<b>DETECTED</b>		<b>()</b>		<b>Final</b>
Comment:					
HIV Subtype: B					
-----					
Antiretroviral drugs	Resistance Predicted	Mutations Detected			
-----					
NRTIs		!	!		
ZDV (zidovudine or Retrovir)	!	NO!			
ABC (abacavir or Ziagen)	!	NO!			
ddI (didanosine or Videx)	!	NO!			
3TC (lamivudine or Epivir)	!	YES!+M184V, V118I			
FTC (emtricitabine or Emtriva)	!	YES!+M184V, V118I			
d4T (stavudine or Zerit)	!	NO!			
TDF (tenofovir or Viread)	!	NO!			
-----		!	!		
NNRTIs		!	!		
ETR (etravirine or Intelence)	!	NO!			
EFV (efavirenz or Sustiva)	!	NO!			
NVP (nevirapine or Viramune)	!	NO!			
RPV (rilpivirine or Edurant)	!	NO!			
-----		!	!		
PIs		!	!		
FPV (fos-amprenavir or Lexiva)	!	NO!			
IDV (indinavir or Crixivan)	!	NO!			
NFV (nelfinavir or Viracept)	!	NO!			
SQV (saquinavir or Invirase)	!	NO!			
LPV (lopinavir or Kaletra)	!	NO!			
ATV (atazanavir or Reyataz)	!	NO!			
TPV (tipranavir or Aptivus)	!	NO!			
DRV (darunavir or Prezista)	!	NO!			
-----		!	!		
PRB = PROBABLE OR EMERGING RESISTANCE					
OTHER MUTATIONS DETECTED					
RT GENE MUTATIONS: F214L					
PR GENE MUTATIONS: E35D, L63P, A71T, V77I					



**Figure: Patient clinical course and treatment**

The different combination antiretroviral therapy regimens received by the patient over time are illustrated in the top panel as nucleoside reverse transcriptase inhibitors (purple), protease inhibitors (blue), non-nucleoside reverse transcriptase inhibitors (orange), and integrase strand transfer inhibitors (green). Undetectable HIV-1 viral load was defined as less than 50 RNA copies per mL or less than 37 RNA copies per mL, depending on the test used. The CD4 T-cell count range of 200–350 cells per  $\mu\text{L}$  is highlighted (CD4 T-cell counts of  $<200$  cells per  $\mu\text{L}$  are considered to indicate AIDS). AZT=azidothymidine. ddl=didanosine. 3TC=lamivudine. TDF=tenofovir disoproxil fumarate. ABC=abacavir. IDV=indinavir. LPV=lopinavir. r=ritonavir. ATV=atazanavir. TPV=tipranavir. DRV=darunavir. NVP=nevirapine. EFV=efavirenz. ETR=etravirine. RAL=raltegravir. DTG=dolutegravir.

# Who Are the People With Multidrug Resistant HIV?





## Heavily Treatment–Experienced People With HIV: Who are They?

- 2 primary populations of PWH<sup>[3-5]</sup>
  - 1) Older people with HIV treated in early days of ART with less potent regimens that had low resistance barriers
  - 2) Younger people who acquired HIV infection during or soon after birth, now adults
- Currently, **maraviroc, ibalizumab, fostemsavir, and enfuvirtide** are the best options<sup>[6-8]</sup>
- ART with new ways of working against HIV plays a critical role for these people with HIV: those with **resistance to multiple drug classes and no/limited treatment options**<sup>[1,2]</sup>

1. Struble. AIDS Lond Engl. 2005;19:747. 2. Richman. AIDS Lond Engl. 2004;18:1393. 3. Weinstock. J Infect Dis. 2004;189:2174. 4. Yazdanpanah. Clin Infect Dis. 2009;49:1441. 5. Tassiopoulos. Clin Infect Dis. 2020;71:133. 6. Emu. NEJM. 2018;379:645. 7. Reeves. J Virol. 2005;79:4991. 8. Kozal. NEJM. 2020;382:1232.



Slide credit: [clinicaloptions.com](https://clinicaloptions.com)

## Trogarzo<sup>®</sup> (ibalizumab-uiyk)

- Trogarzo<sup>®</sup>, in combination with other antiretrovirals has been shown to be effective for the treatment of HIV in highly treatment-experienced PWH with multiple drug resistant HIV failing their current antiretroviral regimen.
- Trogarzo<sup>®</sup> is administered as an intravenous infusion every 2 weeks. It may be a more effective and easier HIV therapy for those struggling with oral medication adherence.
- Clinical trials with Trogarzo<sup>®</sup> showed that 63% of PWH had undetectable viral loads ~ 1 year after starting treatment.

## Trogarzo<sup>®</sup> Infusion

- The length of the initial infusion is generally 30 minutes with subsequent infusions of 15 min.
- This estimate only includes the time that it takes for the medication to go into your body; it will take additional time to prepare supplies and medications and to place the IV catheter.
- Side effects which led to discontinuing Trogarzo infusions occurred in 5 of 40 (13%) PWH over 25 weeks of treatment.

# Healthcare Team

- Often a team approach within your provider's practice is a strategy to help improve adherence during your care.
- Having a healthcare team can help strengthen your relationship with the resources you will need to focus on your health.
- Your team can also help to keep you aware of the resources in your community or nationwide.

# Use Your Healthcare Team for Support

- Keep a list of questions you have and bring those with you to all of your appointments
- Keep track of potential side effects and concerns and share those with your provider
- If something about your routine or needs change, please let your provider know so they may provide support

# Understanding HIV and Resistance

- Theratechnologies website – [HIVandResistance.com](http://HIVandResistance.com)
- HIV organizations or clinics
  - Join email list
  - Access to valuable information and resources
- People with HIV
  - Understanding HIV and Resistance Brochure
  - HIV Discussion Guide



## Today I have HIV

A Patient's perspective on Resistance and Options

Scott Bertani, MPA  
Director of Advocacy, HealthHIV

## **February 1996: The Diagnosis – C3**

**Treatment Options come online**

**Resistance was a luxury to be had in later, better days.**



- **A history of (HAART) options for (the) treatment (naïve):**
  - **NRTIs or Nukes:** Targeting the action of an HIV protein called reverse transcriptase.
  - **Protease:** Block the activity of the protease enzyme, which HIV uses to break up large polypeptides into the smaller pieces, resulting in more immature viral particles.
  - **NNRTIs or Non-Nukes:** Also target Reverse Transcriptase, but in a different way to NRTIs by binding directly to it, blocking the Reverse Transcription process.
- **Followed later by:**
  - **Integrase Inhibitors:** Target a protein in HIV called integrase which is essential for viral replication
  - **Entry Inhibitors:** Stop HIV from entering human cells. CCR5 inhibitors and fusion inhibitors
  - **Chemokine Coreceptor antagonist:** CCR5 antagonist and CXCR4 antagonist
- **Trogarzo a Post-attachment Inhibitor:**
  - Post-attachment inhibitors bind to the CD4 receptor on T-cells. They prevent the HIV gp120 protein from changing its shape to engage with co-receptors after it engages with the CD4 receptor.
- **More than 30 Antiretroviral Medications in 6 Drug Classes**
- **16 Pills: Morning, Noon & Night:**
  - Learning Adherence (rituals)

# Mutations

**I promise to monitor my mute button while on Zoom calls**

**What if we copied this instead?**

**I promisedto monitor my mute button on Zoom conf calls.**

# Mutations

## Can occur randomly

Have an effect on the wild-type virus

Drug-resistant strains

## Aren't always our fault

Adherence challenges are real

# How bad *is* Drug Resistance for People like You and Me?

## Options

Genotypic Resistance Testing: Reverse transcriptase (RT), Protease (PR), and Integrase (IN) genes

Viral Load Testing

Clinical Care Maintenance

Daily Adherence

## Selective Pressure on the Wild: Fold Factor

Phenotypic Resistance Testing: Calculates growth rate compared to the rate of your Wild Type virus

# How do people develop drug resistance?

## **Acquired HIV Drug Resistance**

Sometimes the drugs themselves, or a combination of how a person's body reacts to the drug can cause it

Clinical Care Maintenance

Daily Adherence

## **Transmitted HIV Drug Resistance.**

That occurs when a person with HIV who's never been on treatment acquires a strain of HIV that is already resistant to one or more HIV drugs.

## **How do you know if you've developed resistance?**

### **Viral Load Blip? Or?**

#### **Generally speaking, watch out for 3 things:**

1. If your viral load goes above 1,000 copies/mL, drug resistance testing's recommended.
2. If your viral load goes above 500 copies/mL, but remains below 1,000 copies/mL, drug resistance testing might not be whereas successful, remember, but worth considering. OR
3. If your treatment regimen is not lowering your viral load as quickly as it should be, then drug resistance testing is again recommended.

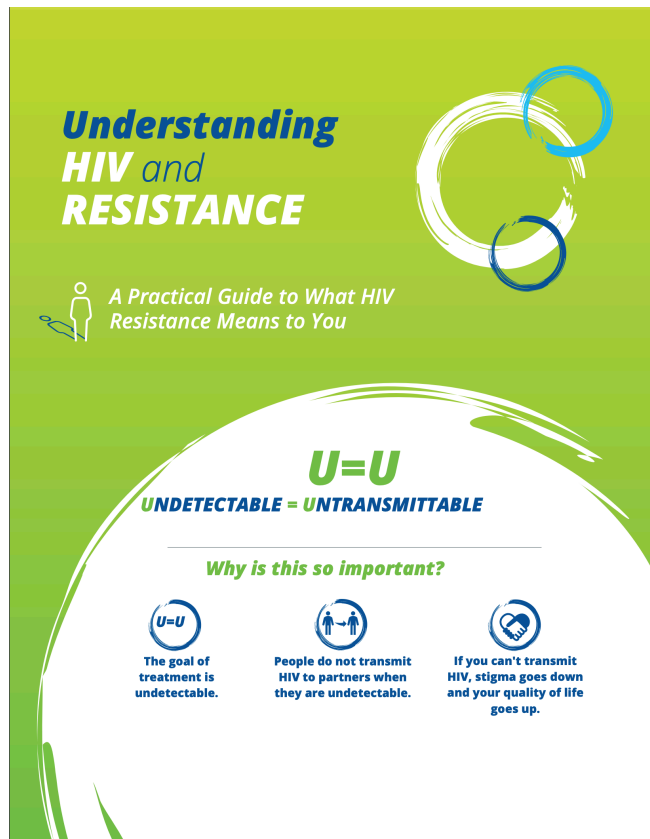
# Six Quick Takeaways:

1. **Learn** everything you can about **your treatment options**. *Like I did in the early days.*
2. **Work with your provider** to choose the best possible regimen after resistance testing.
3. **Treatment Adherence** is where it's at. *No more than one missed dose a month.*
4. **Talk with your doctor and communicate honestly and routinely**. *We've fought hard in making sure our Sexual Orientation Gender Identify Biological preference info is included.*
5. **Monitor your health**—labs, metabolic panels, STI testing, mental health, substance use, etc.
6. **Be good to yourself and others.**



# Q & A

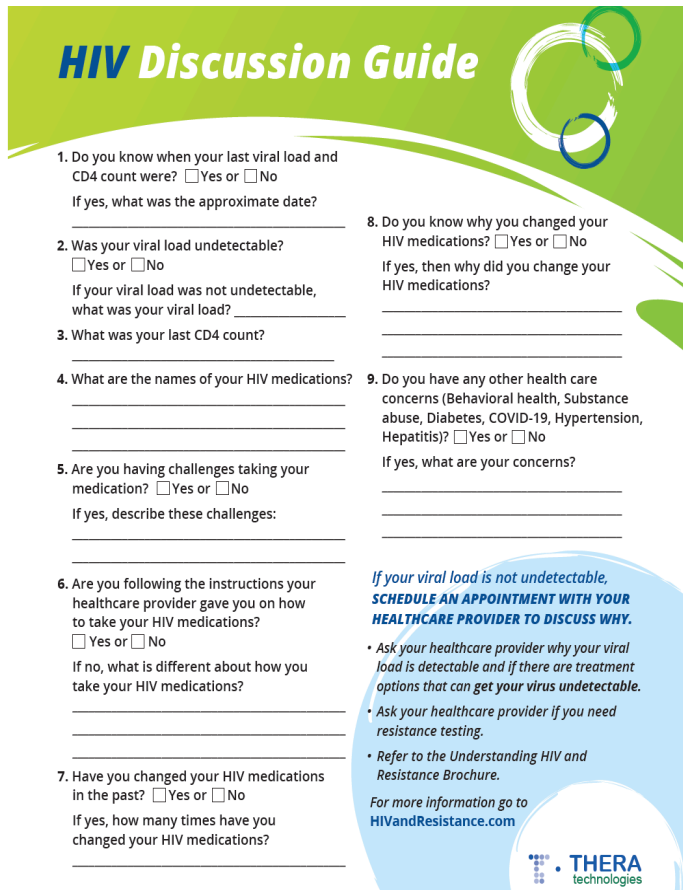
# Understanding HIV and Resistance: A Practical Guide to What HIV Resistance Means to You



- What happens if HIV is not well controlled?
- Why do my HIV medications change?
- What is HIV resistance?
- Questions to ask your doctor.

[HIVandResistance.com](http://HIVandResistance.com)

# HIV Discussion Guide

The form is titled "HIV Discussion Guide" in a green header. It contains nine numbered questions about HIV treatment and resistance. Questions 1-5 are on the left, and questions 6-9 are on the right. Questions 1-5 have checkboxes for "Yes" or "No" and lines for additional information. Questions 6-9 have checkboxes for "Yes" or "No" and lines for additional information. At the bottom right, there is a blue box with text about scheduling an appointment and a logo for THERA technologies.

**HIV Discussion Guide**

1. Do you know when your last viral load and CD4 count were? ☐ Yes or ☐ No  
If yes, what was the approximate date? \_\_\_\_\_

2. Was your viral load undetectable? ☐ Yes or ☐ No  
If your viral load was not undetectable, what was your viral load? \_\_\_\_\_

3. What was your last CD4 count? \_\_\_\_\_

4. What are the names of your HIV medications? \_\_\_\_\_

5. Are you having challenges taking your medication? ☐ Yes or ☐ No  
If yes, describe these challenges: \_\_\_\_\_

6. Are you following the instructions your healthcare provider gave you on how to take your HIV medications? ☐ Yes or ☐ No  
If no, what is different about how you take your HIV medications? \_\_\_\_\_

7. Have you changed your HIV medications in the past? ☐ Yes or ☐ No  
If yes, how many times have you changed your HIV medications? \_\_\_\_\_

8. Do you know why you changed your HIV medications? ☐ Yes or ☐ No  
If yes, then why did you change your HIV medications? \_\_\_\_\_

9. Do you have any other health care concerns (Behavioral health, Substance abuse, Diabetes, COVID-19, Hypertension, Hepatitis)? ☐ Yes or ☐ No  
If yes, what are your concerns? \_\_\_\_\_

*If your viral load is not undetectable, SCHEDULE AN APPOINTMENT WITH YOUR HEALTHCARE PROVIDER TO DISCUSS WHY.*

- Ask your healthcare provider why your viral load is detectable and if there are treatment options that can get your virus undetectable.
- Ask your healthcare provider if you need resistance testing.
- Refer to the Understanding HIV and Resistance Brochure.

For more information go to [HIVandResistance.com](http://HIVandResistance.com)

**THERA** technologies

Find out if your virus is at risk of becoming resistant to your medication.


Fill out and download this discussion guide to help you talk to your provider.

[www.HIVandResistance.com](http://www.HIVandResistance.com)

# HealthHIV Consumer Guide


CONSUMER  
GUIDE TO

IMPROVING HIV CARE COORDINATION  
AND PROMOTING RESILIENCE



### COVID-19 AND CONTINUING HIV CARE

During the COVID-19 pandemic, it is important that people with HIV continue their treatment.<sup>1</sup> Click here for information on staying connected to care:  
<https://aidsinfo.nih.gov/guidelines/html/8/covid-19-and-persons-with-hiv-interim-guidance-554/interim-guidance-for-covid-19-and-persons-with-hiv>



#### HIV Clinical Considerations


- People with HIV who have a detectable viral load may be at greater risk for serious illness due to COVID-19, so it is essential to continue care such as antiretroviral therapy (ART) medication.<sup>1,2</sup>
- People with HIV who become hospitalized should continue their ART during hospitalization. Take all antiretroviral (ARV) medications with you to the hospital, as many ARVs may not be available through the hospital's in-patient pharmacy.
- People with HIV on an ART regimen that includes Ibalizumab (Trogarzo®) IV infusions every 2 weeks should contact their providers or THERA patient support<sup>3</sup> for assistance 1-833-23-THERA (1-833-238-4372) to plan for continued treatment without interruption.<sup>1</sup>
- People with HIV at greater risk for serious illness due to COVID-19 are also those who:
  - have other chronic conditions, such as cancer, diabetes, obesity, or respiratory conditions
  - are age 65+ years
  - are in a nursing home<sup>3</sup>
- For those with more than one medical condition, it is important to coordinate care.<sup>1,2</sup>
- Some doctor's appointments, clinic visits, or lab tests may be postponed, particularly for those with well-controlled HIV.<sup>1</sup>
- Those with poorly controlled HIV can benefit from continuing or resuming care.
- People with HIV who stopped ART medication can benefit by starting again.
- It's important to keep at least a 30-day supply of medication on hand, and if possible, a 90-day supply.<sup>1,2</sup>
- No HIV medications (ART) are proven to prevent or treat COVID-19, therefore, it's not necessary to switch medications.<sup>1,2</sup>
- COVID-19 treatment and vaccine research studies are underway, and people with HIV may want to enroll.

More information is available here: <https://clinicaltrials.gov/>

1. <https://aidsinfo.nih.gov/guidelines/html/8/covid-19-and-persons-with-hiv-interim-guidance-554/interim-guidance-for-covid-19-and-persons-with-hiv>

2. [https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/hiv.html?CDC\\_AA\\_reVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fspecific-groups%2Fhiv.html](https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/hiv.html?CDC_AA_reVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fspecific-groups%2Fhiv.html)

3. <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html>



CONSUMER  
GUIDE TO

## IMPROVING HIV CARE COORDINATION AND PROMOTING RESILIENCE

- HIV Clinical Considerations
- Telehealth
- AIDS Service Organizations and Community-Based Organizations
- Housing and Access to Healthcare
- Self-Care and Healthy Outlook: Aging People and People of Color
- Faith-Based Approaches for Social Connection

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<https://tinyurl.com/yxlbddy7>

This webinar is generously supported through an educational grant from:



[www.Theratech.com](http://www.Theratech.com)

# For More Information & Technical Assistance



[www.HealthHIV.org](http://www.HealthHIV.org)



[www.HealthHCV.org](http://www.HealthHCV.org)



[www.HealthLGBT.org](http://www.HealthLGBT.org)



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