HIV Facts, Prevention and Care

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EXPLORE
HEALTHCARE SUMMIT

Learning Objectives

- Be informed of facts surrounding HIV in the US and Oklahoma
- Identify symptoms related to HIV infection
- Understand the screening indications and diagnostic algorithm of HIV
- Be able to summarize treatment options and clinical care in HIV
- List indications for pre-exposure prophylaxis (PrEP) to HIV
- Describe efficacy data in various populations at risk for HIV
- Construct an appropriate PrEP plan for a patient
- Identify appropriate follow up for a PrEP patient

HIV

HIV in the US – National Statistics
HIV in Oklahoma – State Statistics
Clinical Presentation and Care in HIV

HIV in the US – National Statistics

HIV in the US – National Statistics

- Approximately 1.2 million people in the U.S. have HIV
- In 2022, an estimated 31,800 people acquired HIV in the U.S.
- Disproportionate impacts:
  - Gay
  - Bisexual
  - Men who have sex with men (MSM)

1.2 Million

Approximately how many people are living with HIV in the US
(diagnosed & undiagnosed)

13%

People with HIV who do not know they have it

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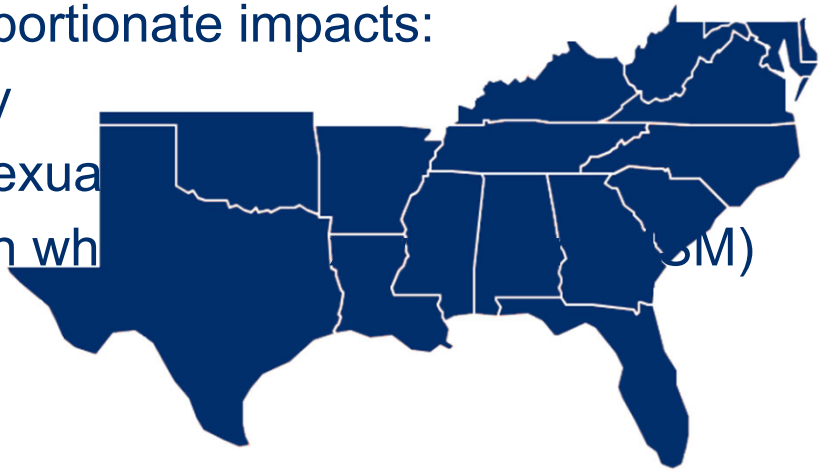


D.C.
Georgia
Florida
Louisiana
Nevada
New diag

1.2 Million

Approximately how many people are living with HIV in the US *(diagnosed & undiagnosed)*

27

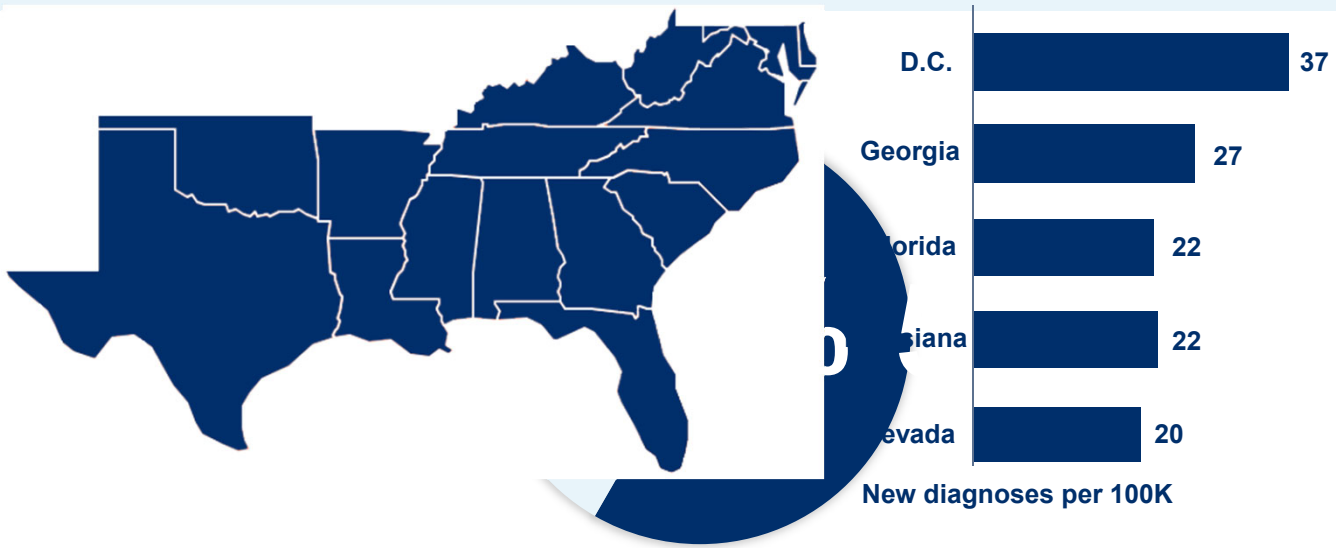
13%

People with HIV who do not know they have it

HIV in the US – National Statistics

From 2018 to 2022, new HIV infections decreased 12%

About 56% of persons aged 13 to 34 accounted for new infections



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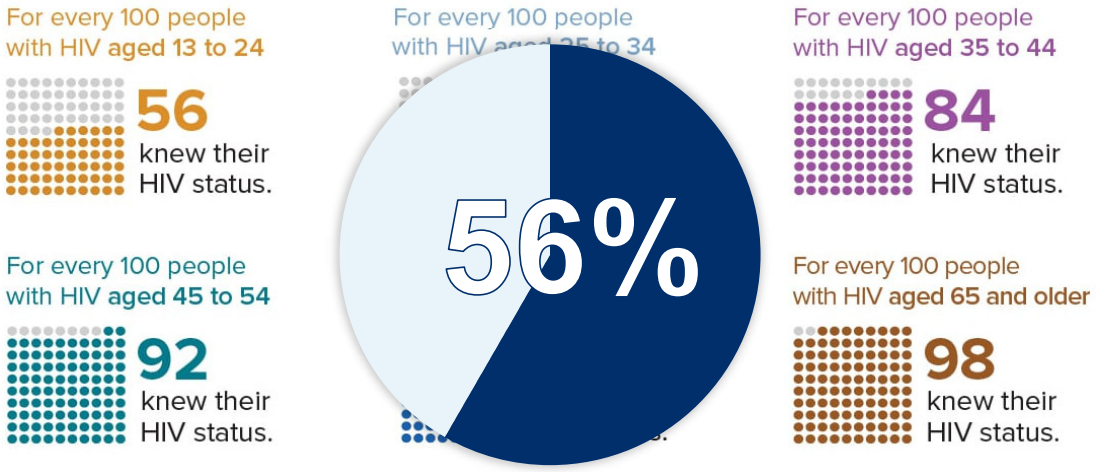

* Data not available for children aged 12 and under.

Source: CDC. Estimated HIV incidence and prevalence in the United States, 2018–2022. *HIV Surveillance Supplemental Report*, 2024; 29(1).

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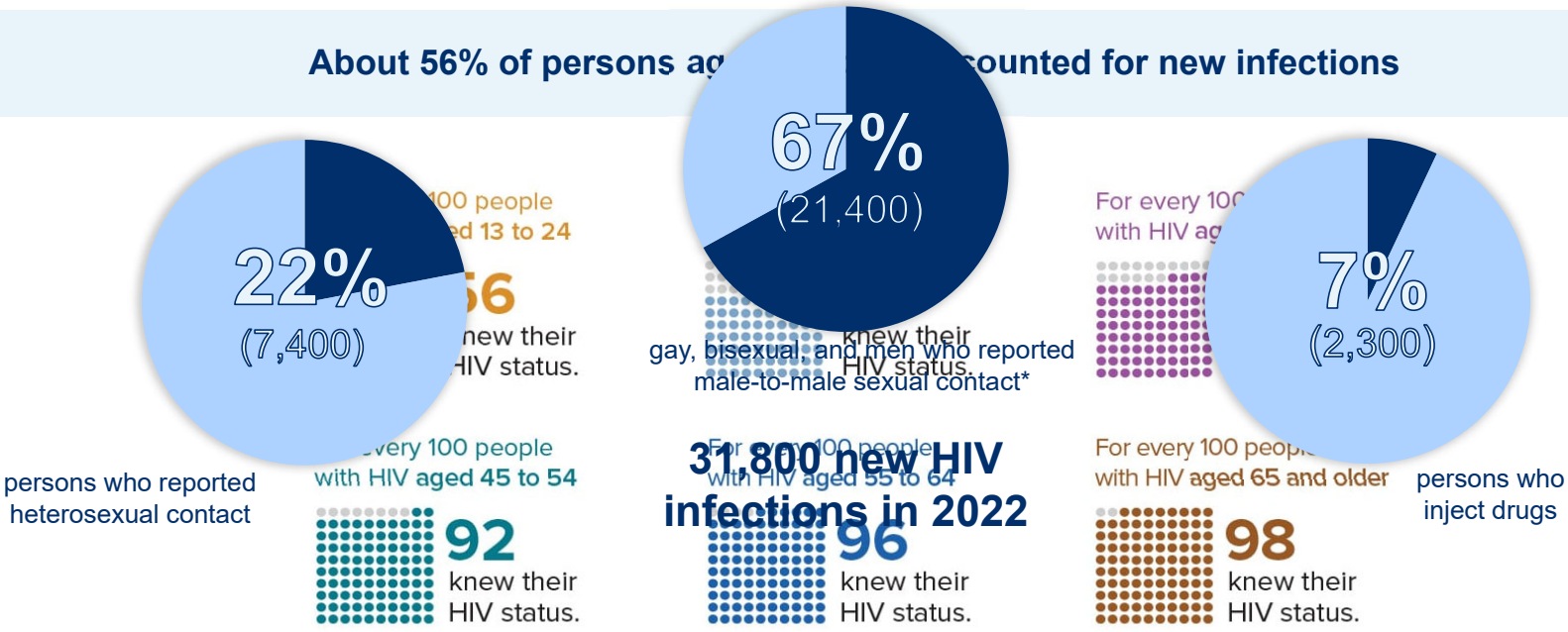

* Includes infections attributed to male-to-male sexual contact *and* injection drug use (men who reported both risk factors).

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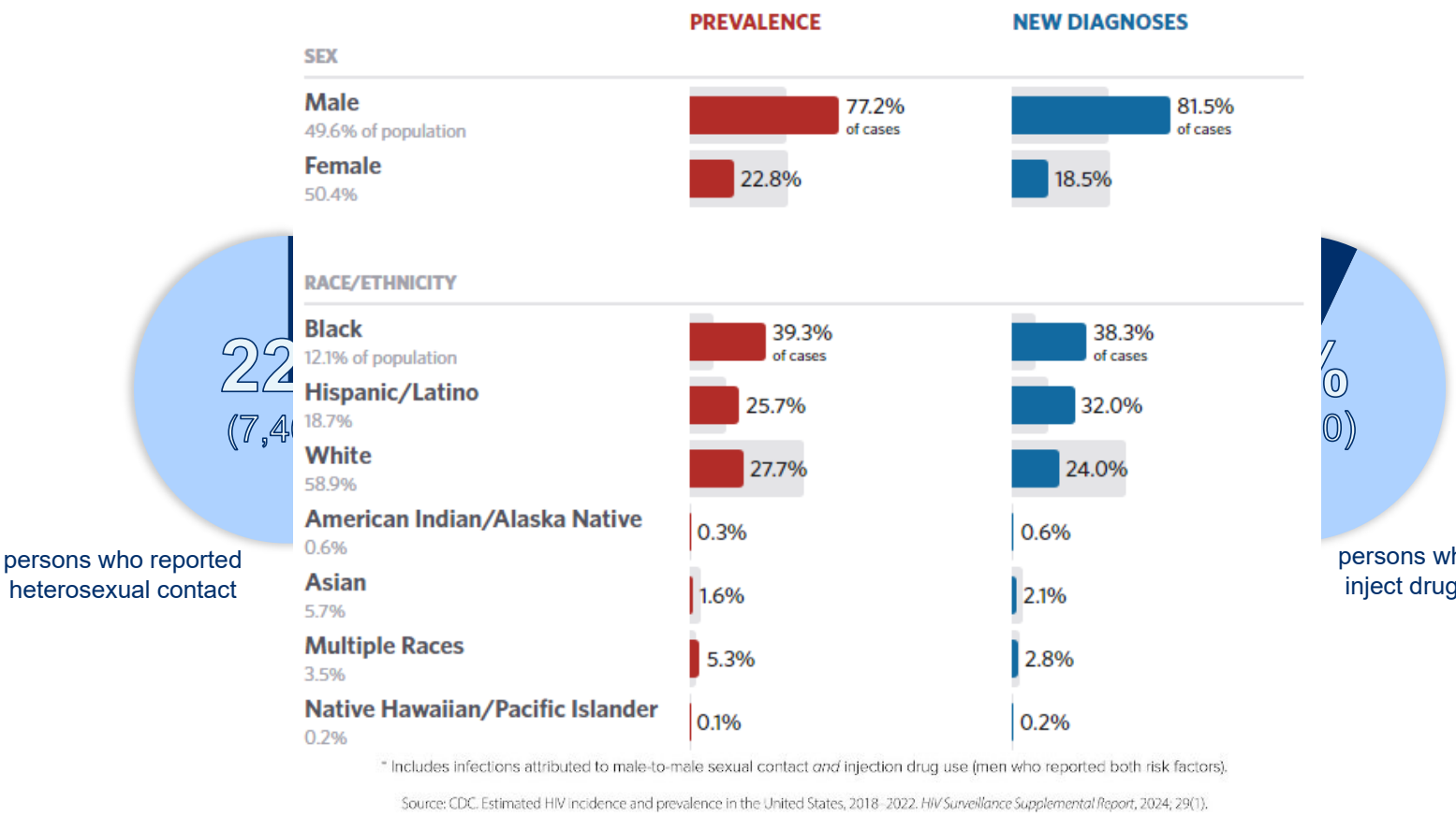

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HIV in Oklahoma – State Statistics

HIV in Oklahoma – State Statistics

- Approximately 7,264 people are living with HIV in Oklahoma in 2022
- In 2022, an estimated 394 people acquired HIV in Oklahoma
- Disproportionate impact in rural Oklahoma

7,264

Approximately how many people are diagnosed with HIV in Oklahoma

17%

People with HIV who do not know they have it

HIV in Oklahoma – State Statistics

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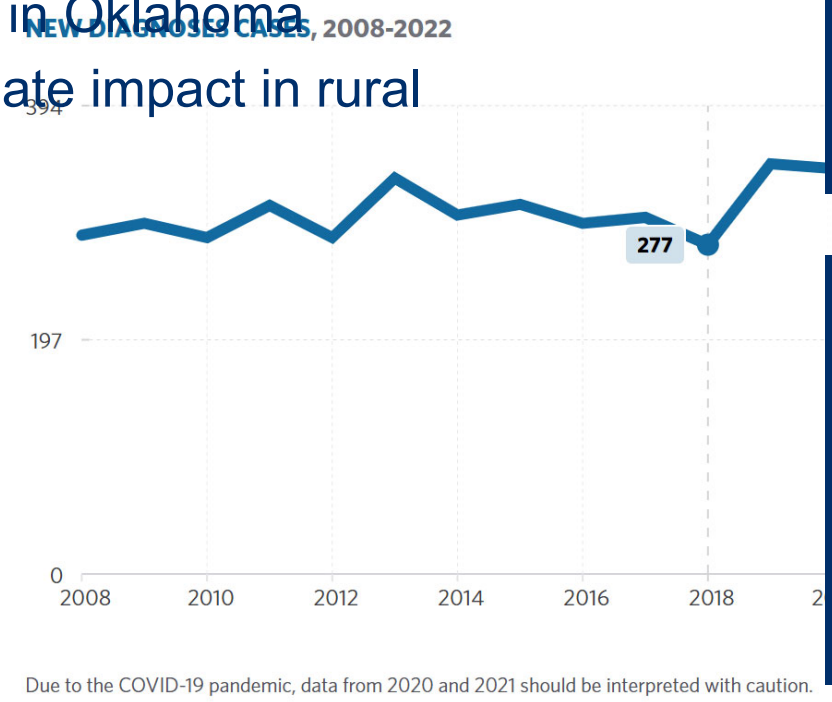
From 2018 to 2022, new HIV infections increa



7,264

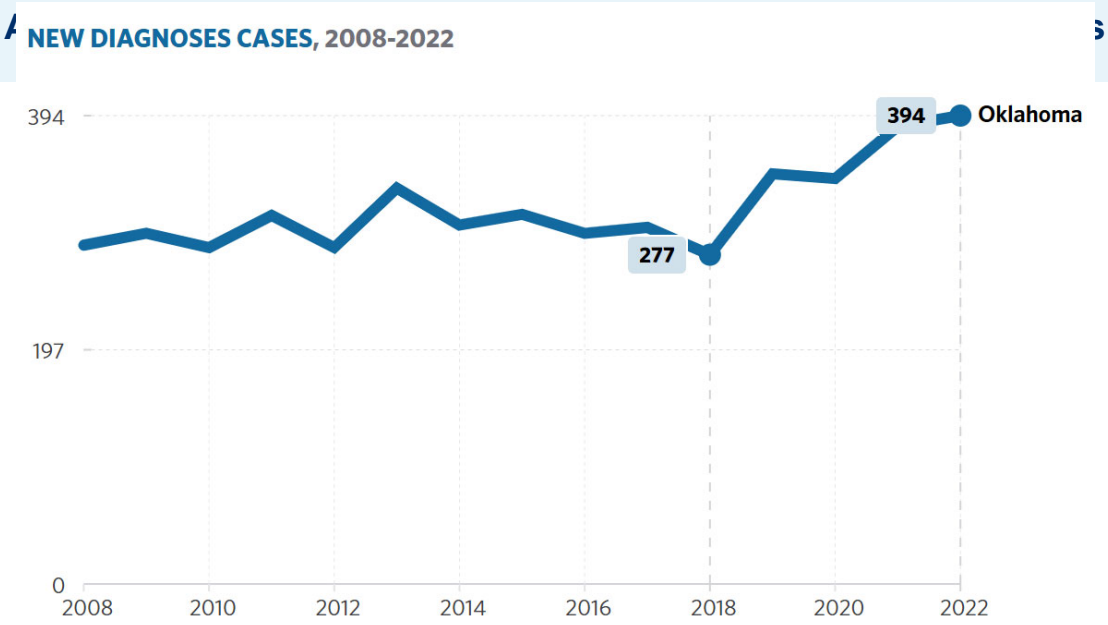
Approximately how many people are diagnosed with HIV in Oklahoma

17%

People with HIV who do not know they have it

HIV in Oklahoma – State Statistics

From 2018 to 2022, new HIV infections increased by 42%

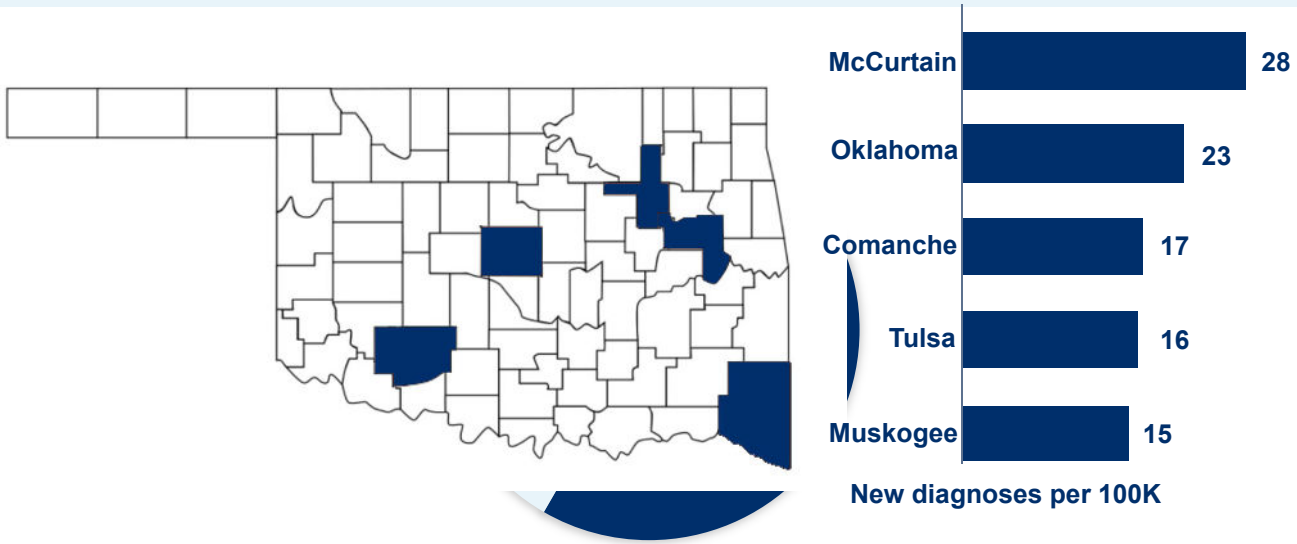


Due to the COVID-19 pandemic, data from 2020 and 2021 should be interpreted with caution.

HIV in Oklahoma – State Statistics

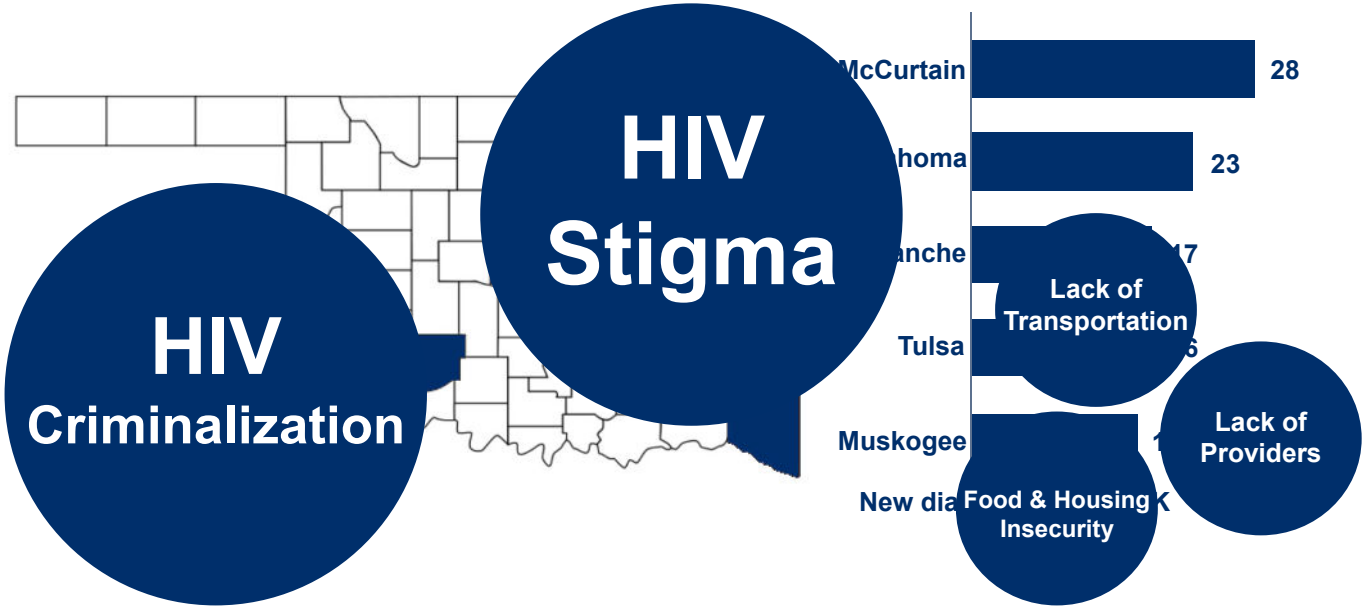
Estimated infections in 2022 disproportionally affected specific areas

About 57% of persons aged 13 to 34 accounted for new infections



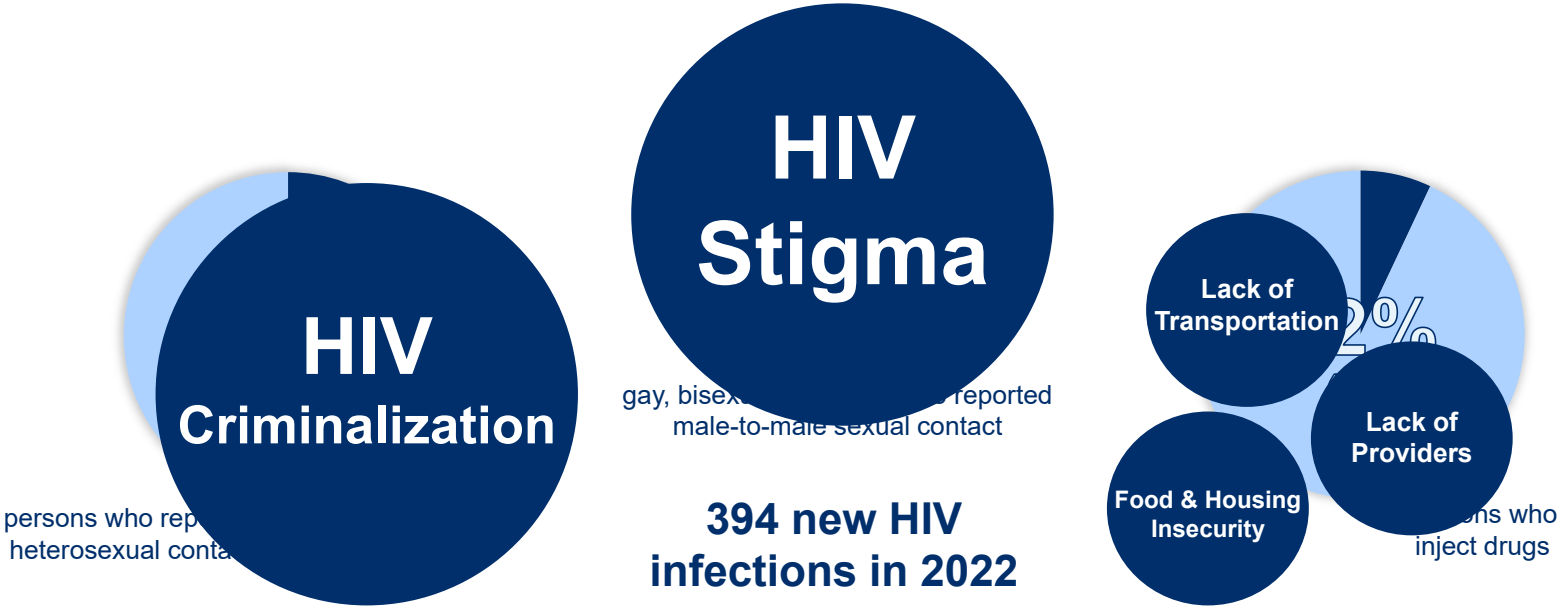
HIV in Oklahoma – State Statistics

Estimated infections in 2022 disproportionally affected specific areas



HIV in Oklahoma – State Statistics

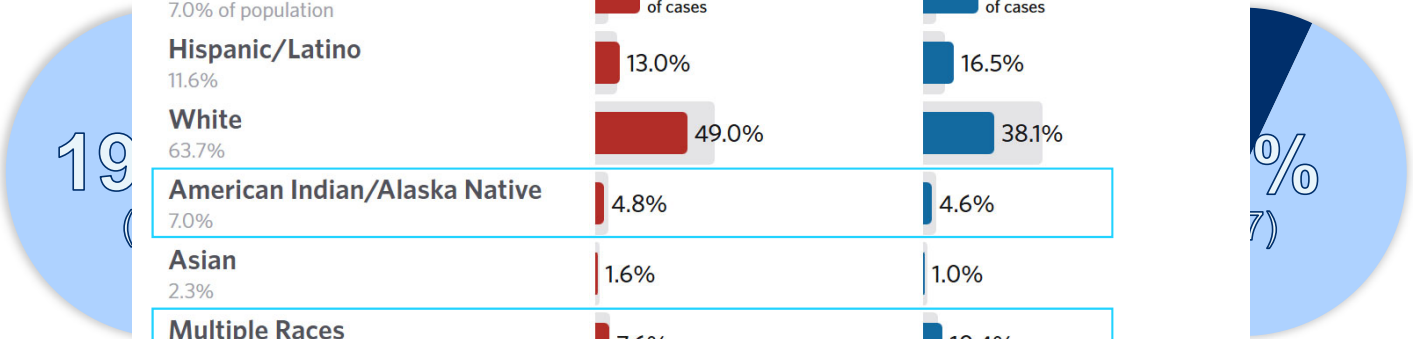
Estimated infections in 2022 disproportionally affected specific areas



HIV in Oklahoma – State Statistics

Esti

ions



persons who reported heterosexual contact

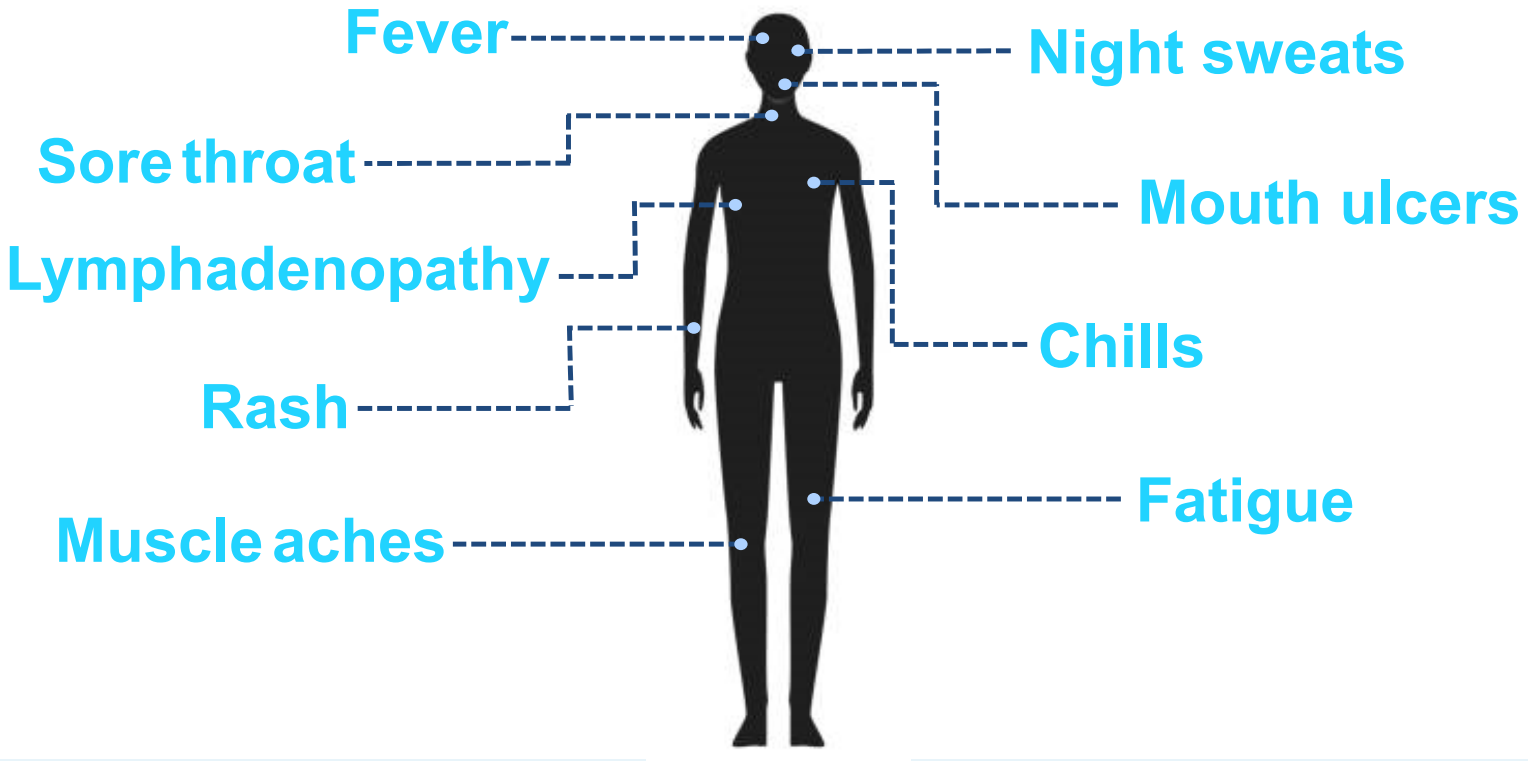
persons who inject drugs

	PREVALENCE	NEW DIAGNOSES
SEX		
Male 49.9% of population	81.5% of cases	78.4% of cases
Female 50.1%	18.5%	21.6%
RACE/ETHNICITY		
Black 7.0% of population	23.9% of cases	29.4% of cases
Hispanic/Latino 11.6%	13.0%	16.5%
White 63.7%	49.0%	38.1%
American Indian/Alaska Native 7.0%	4.8%	4.6%
Asian 2.3%	1.6%	1.0%
Multiple Races 8.0%	7.6%	10.4%
Native Hawaiian/Pacific Islander 0.2%	0.2%	0.0%

Clinical Care in HIV

Clinical Care in HIV

Symptoms of Acute HIV Infection



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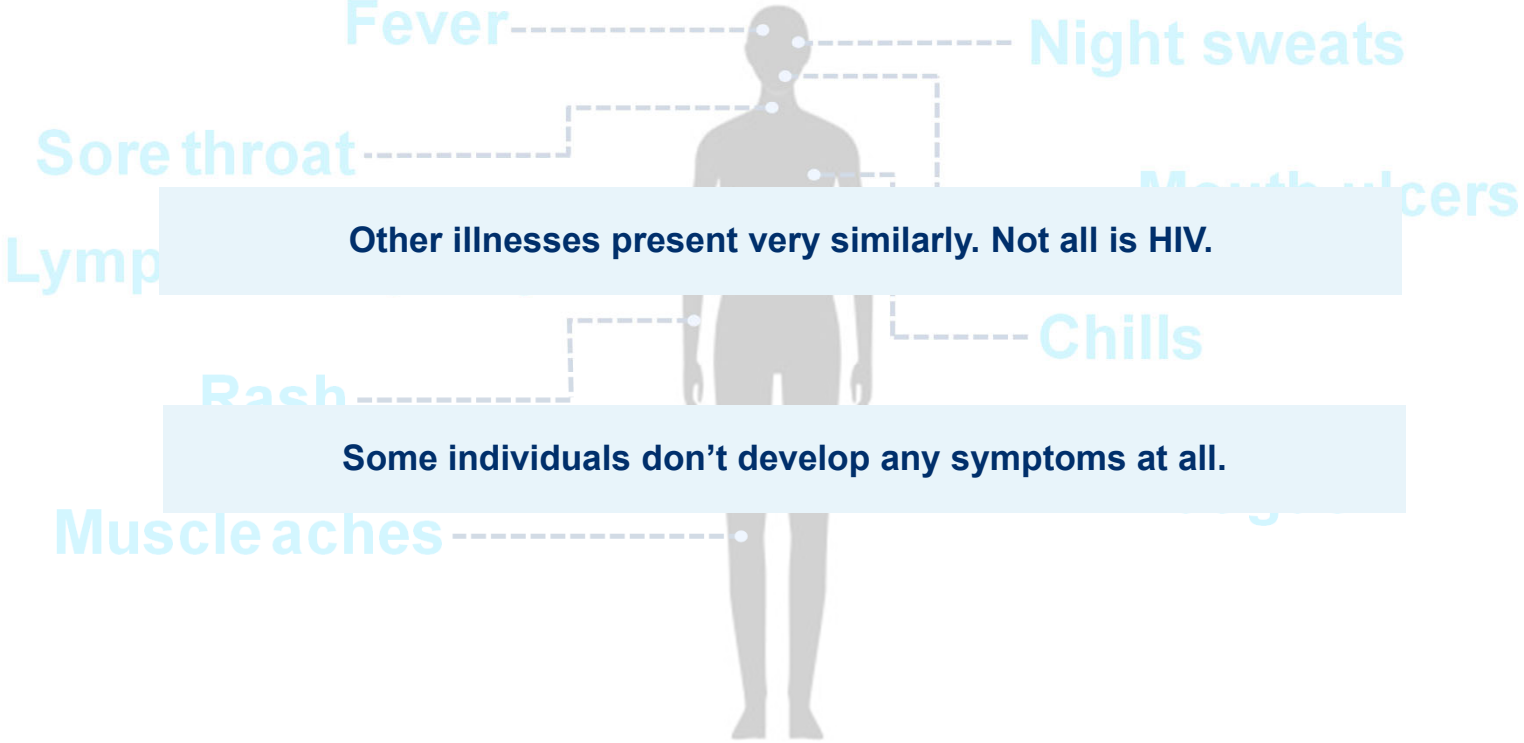
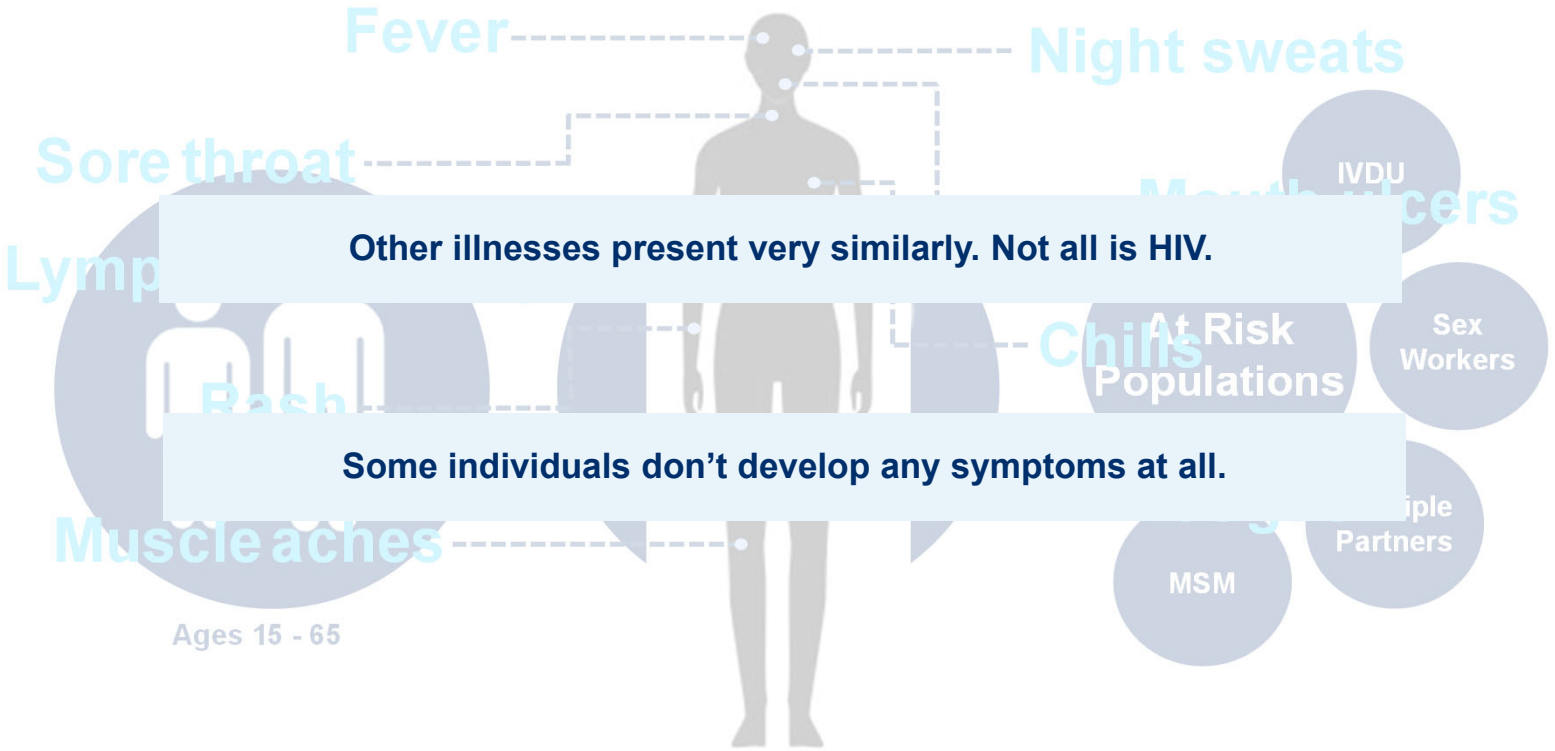


Other illnesses present very similarly. Not all is HIV.

Some individuals don’t develop any symptoms at all.

Clinical Care in HIV

Symptoms of Acute HIV Infection



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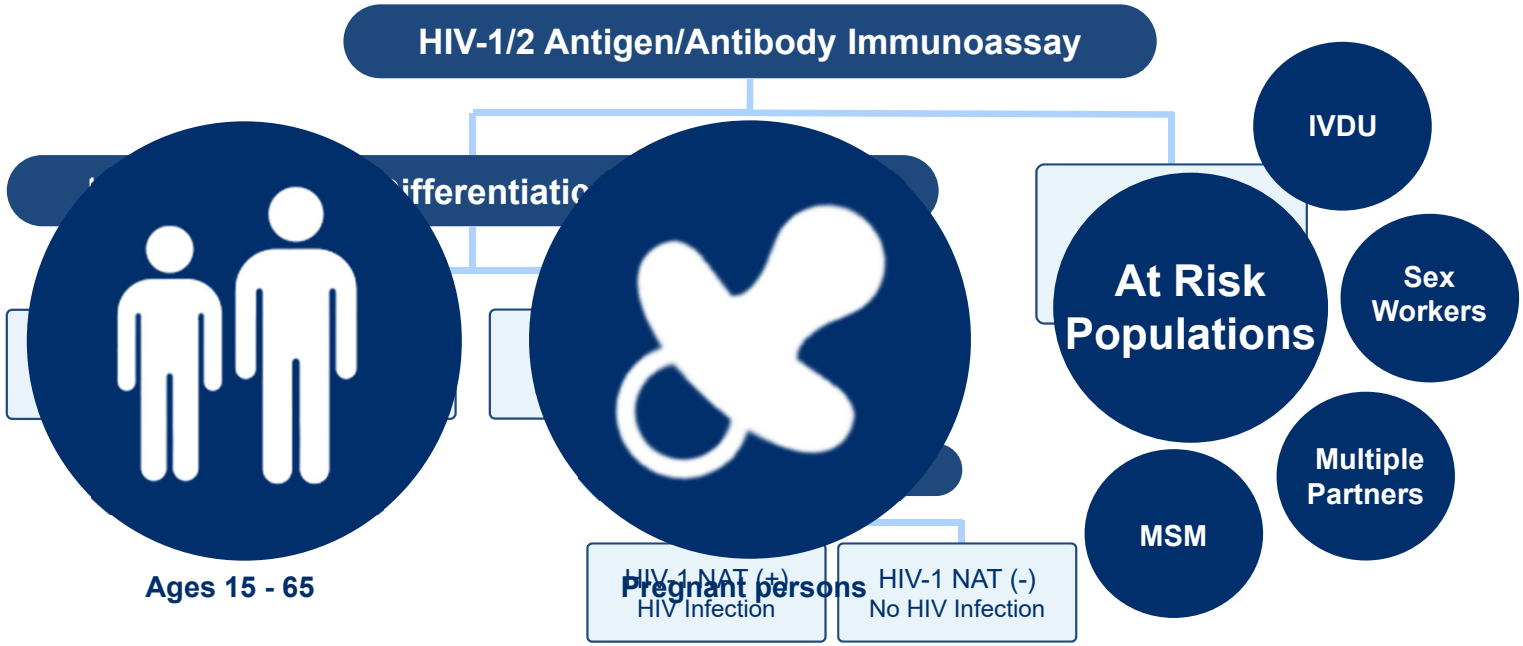
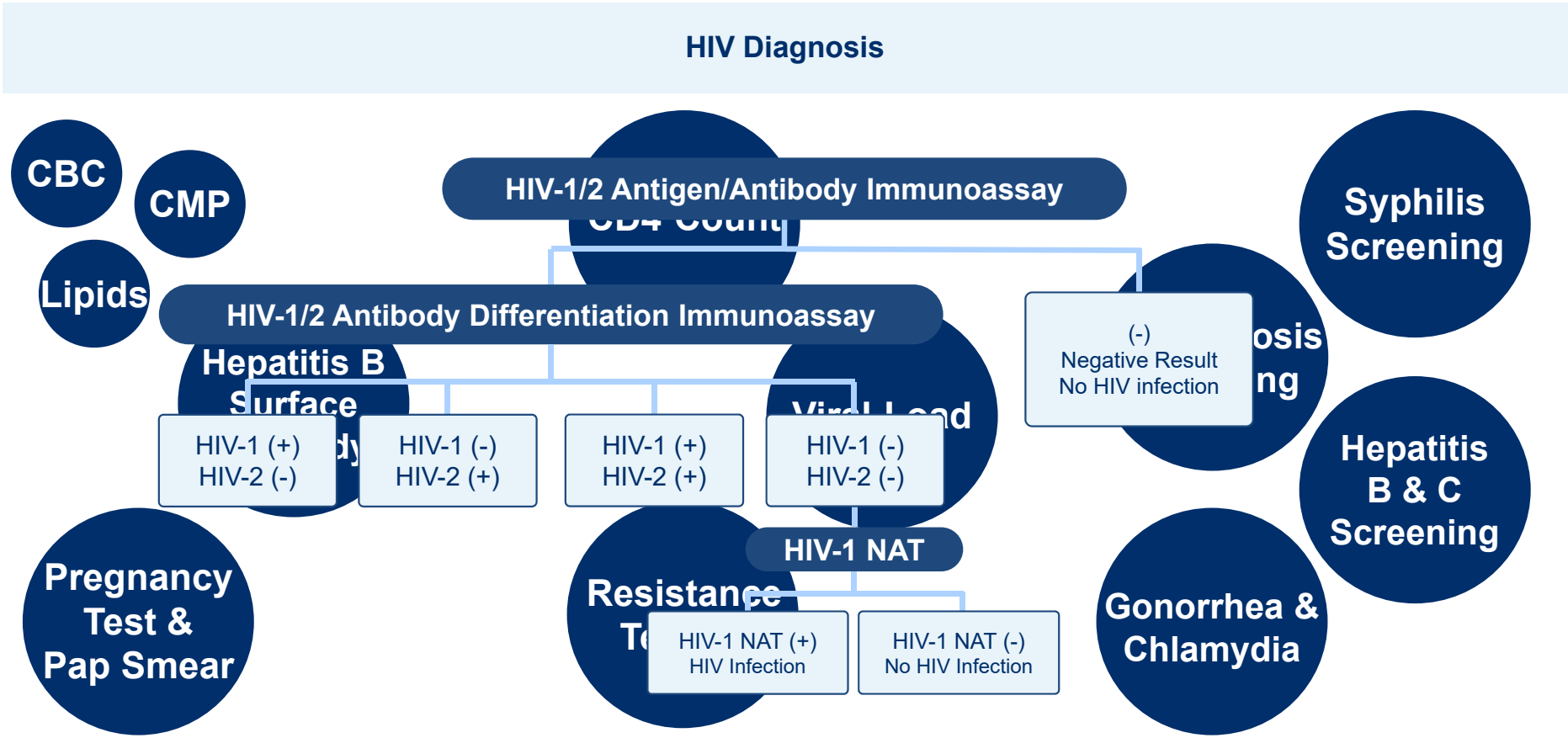
Clinical Care in HIV

Who to Screen



Clinical Care in HIV



Clinical Care in HIV

Initial Tests After Diagnosis

CBC

CMP

Lipids

CD4

Hepatitis B Surface Antibody

Pregnancy Test & Pap Smear

- The major indicator of immune function and best
- Assesses urgency and/or need for opportunistic infec phylaxis
- Mo cy of therapy
  - B
  - Years : eve months
  - Years 3+:
    - CD4 <300: c -6 months
    - CD4 300-500 months
    - optional

CD4 Count

Viral Load

Resistance Testing

Syphilis Screening

Tuberculosis Screening

Hepatitis B & C Screening

Gonorrhea & Chlamydia

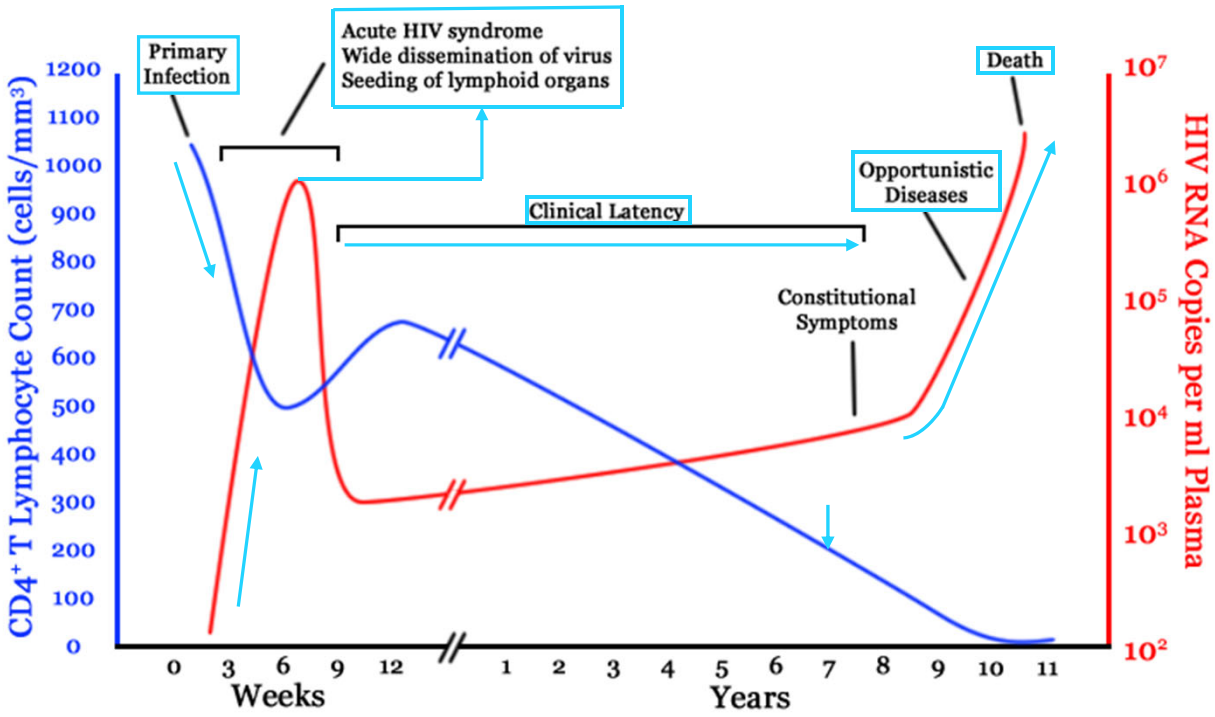
Clinical Care in HIV

HIV RNA Quantitative

- Goal: viral suppression or undetectable viral load
  - <20-75 copies/mL depending on assay
- Monitors response to therapy
  - Baseline
  - Recheck in 2-4 weeks from initiation
  - Every 4-8 weeks until <200 copies/mL (suppression)
  - Every 3-4 months with continued suppression
  - Every 6 months with suppression for 2+ years
- Isolated “blips” can occur
  - Transient, not thought to predict failure

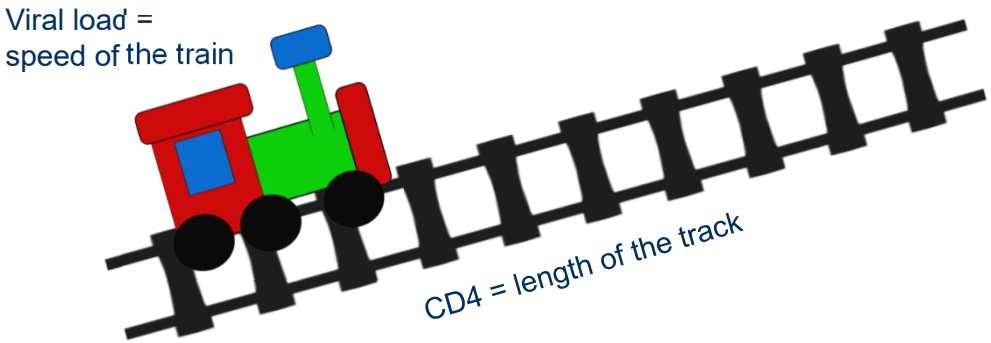
Clinical Care in HIV

HIV RNA Quantitative



Clinical Care in HIV

HIV RNA Quantitative



Resistance Testing

- Shows mutations in the virus
  - Before initiation
  - With virologic failure

GenoSure® MG	GenoSure® Integrase
Genotypic resistance NRTI, NNRTI, PI	Genotypic resistance Integrase inhibitors only
GenoSure PRIme®	**GenoSure Archive®**
Genotypic resistance All 4 classes	Genotypic resistance All 4 classes Lower viral loads (<500)

PhenoSense®
Phenotypic resistance Treatment experienced

Clinical Care in HIV

Resistance Testing

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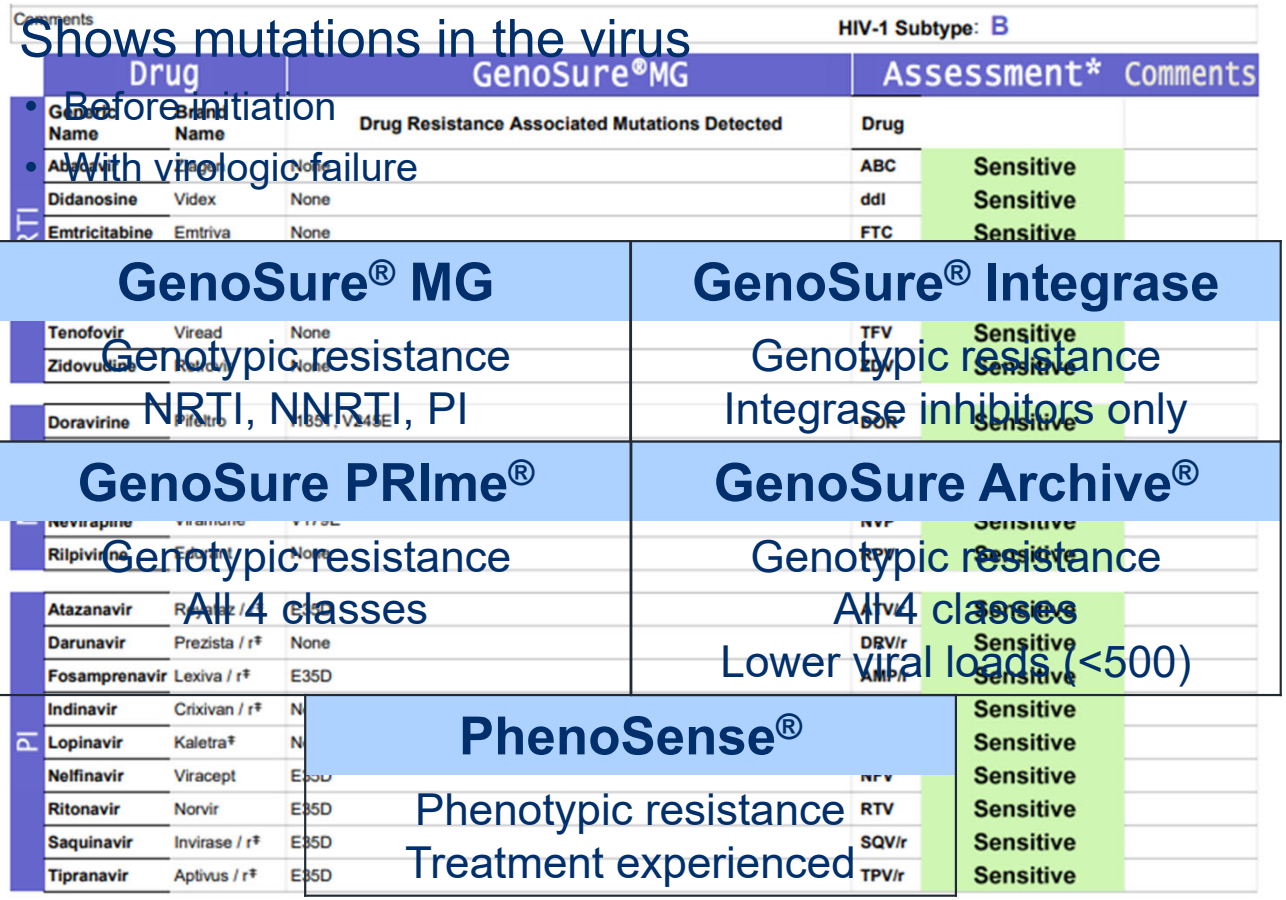
  - With virologic failure



GenoSure® MG

Genotypic resistance
NRTI, NNRTI, PI

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Integrase inhibitors only

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Genotypic resistance
All 4 classes

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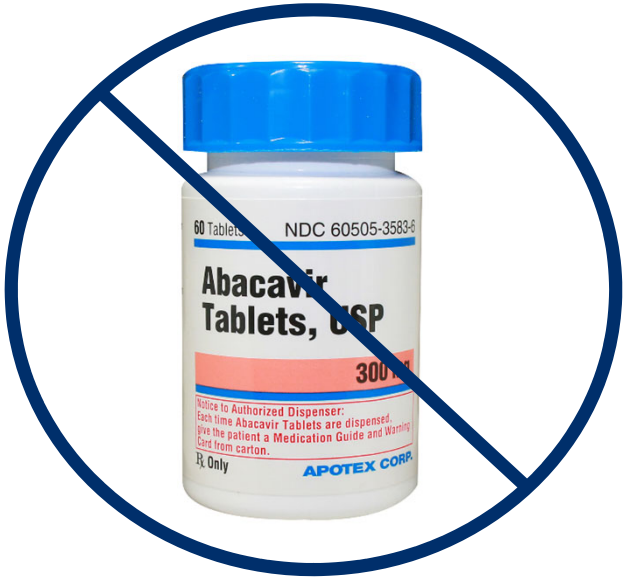
Genotypic resistance
All 4 classes
Lower viral loads (<500)

PhenoSense®

Phenotypic resistance
Treatment experienced

HLA-B*5701 Screening

- HLA-B*5701-positive patients have increased risk of having a hypersensitive reaction to abacavir
- Abacavir should be recorded as an allergy if positive



Clinical Care in HIV

HLA-B*5701 Screening

When to Start Therapy

- HLA-B*5701-positive patients have increased risk of having a hypersensitive reaction to abacavir
- Abacavir should be recorded as an allergy if positive

d be started on ART regardless of CD4 count

ose to postpone ART

tart treatment

ide effects of treatm

c or psychosocial fa

ose to defer ART

to treatment

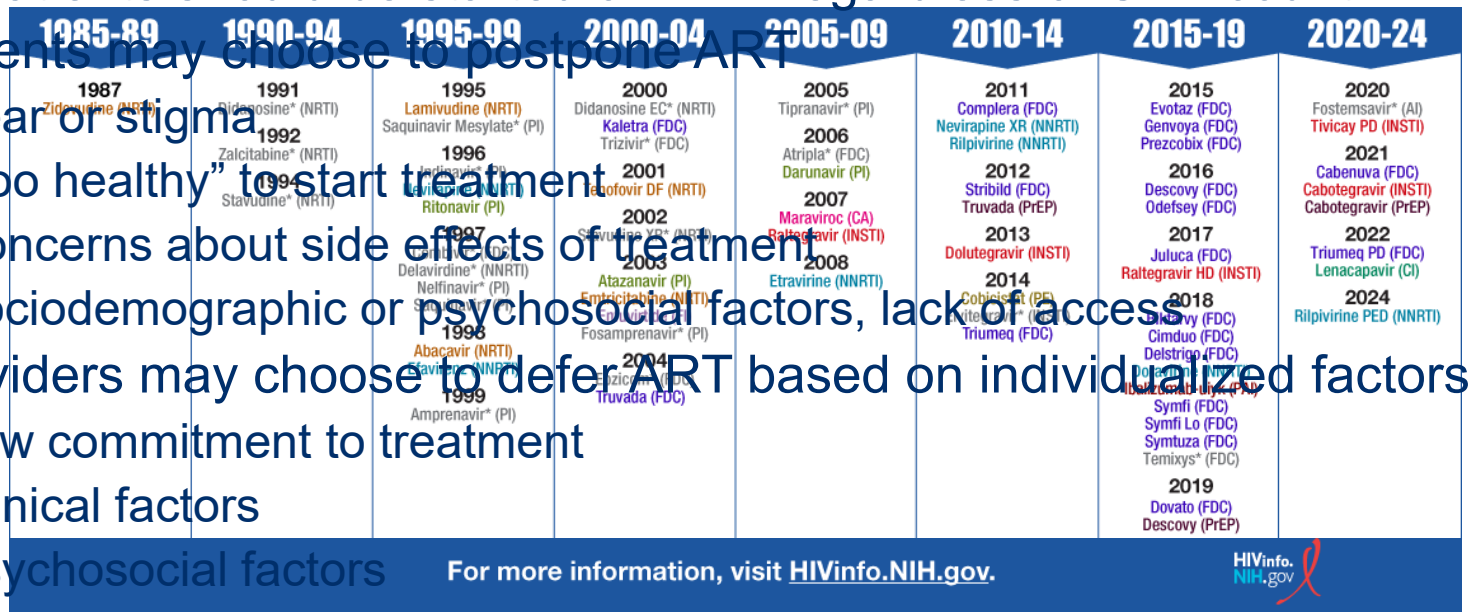
ors

ed factors

Clinical Care in HIV

When to Start Therapy

- All patients should be started on ART regardless of CD4 count
- Patients may choose to postpone ART
  - Fear or stigma
  - “Too healthy” to start treatment
  - Concerns about side effects of treatment
  - Sociodemographic or psychosocial factors, lack of access
- Providers may choose to defer ART based on individualized factors
  - Low commitment to treatment
  - Clinical factors
  - Psychosocial factors



Clinical Care in HIV

Timeline of Therapies

1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24
1987 Zidovudine (NRTI)	1991 Didanosine* (NRTI) 1992 Zalcitabine* (NRTI) 1994 Stavudine* (NRTI)	1995 Lamivudine (NRTI) Saquinavir Mesylate* (PI) 1996 Indinavir* (PI) Nevirapine (NNRTI) Ritonavir (PI) 1997 Combivir* (FDC) Delavirdine* (NNRTI) Nelfinavir* (PI) Saquinavir* (PI) 1998 Abacavir (NRTI) Efavirenz (NNRTI) 1999 Amprenavir* (PI)	2000 Didanosine EC* (NRTI) Kaletra (FDC) Trizivir* (FDC) 2001 Tenofovir DF (NRTI) 2002 Stavudine XR* (NRTI) 2003 Atazanavir (PI) Emtricitabine (NRTI) Enfuvirtide (FI) Fosamprenavir* (PI) 2004 Epzicom* (FDC) Truvada (FDC)	2005 Tipranavir* (PI) 2006 Atripla* (FDC) Darunavir (PI) 2007 Maraviroc (CA) Raltegravir (INSTI) 2008 Etravirine (NNRTI)	2011 Complera (FDC) Nevirapine XR (NNRTI) Rilpivirine (NNRTI) 2012 Stribild (FDC) Truvada (PrEP) 2013 Dolutegravir (INSTI) 2014 Cobicistat (PE) Elvitegravir* (INSTI) Triumeq (FDC)	2015 Evotaz (FDC) Genvoya (FDC) Prezcobix (FDC) 2016 Descovy (FDC) Odefsey (FDC) 2017 Juluca (FDC) Raltegravir HD (INSTI) 2018 Biktarvy (FDC) Cimduo (FDC) Delstrigo (FDC) Doravirine (NNRTI) Ibalizumab-uiyk (PAI) Symfi (FDC) Symfi Lo (FDC) Symtuza (FDC) Temixys* (FDC) 2019 Dovato (FDC) Descovy (PrEP)	2020 Fostemsavir* (AI) Tivicay PD (INSTI) 2021 Cabenuva (FDC) Cabotegravir (INSTI) Cabotegravir (PrEP) 2022 Triumeq PD (FDC) Lenacapavir (CI) 2024 Rilpivirine PED (NNRTI)

For more information, visit HIVinfo.NIH.gov.

HIVinfo.NIH.gov

Component	Example
Abacavir	Triumeq®
	ada®
	®,
	s
	fic
Decreased pill burden	

Bold = commonly used

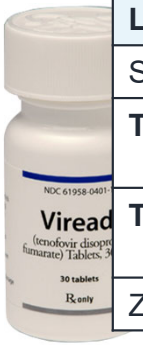
Clinical Care in HIV

NRTI

Treatment Regimen Component

Component	Example
Abacavir	**Triumeq®**
Didanosine	Videx®
Emtricitabine	**Biktarvy®, Descovy®, Odefsey®, Truvada®**
Lamivudine	**Delstrigo®, Dovato®, Triumeq®**
Stavudine	Zerit®
Tenofovir alafenamide	**Biktarvy®, Descovy®, Genvoya®, Odefsey®, Symtuza®**, Vemlidy®
Tenofovir disoproxil	Atripla®, Complera®, Stribild®, **Truvada®**, Viread®
Zidovudine	Combivir®, Trizivir®

Tenofovir dis … **r alafenamide**



Increased … **bone toxicity** … Decreased

Advantages	Disadvantages
Good tolerability Few drug interactions Decreased pill burden	Medication-specific

Bold = commonly used

Clinical Care in HIV

NRTI

Treatment Regimen Component				
Tenofovir disoproxil	✓	**Abacavir**		Zidovudine
		Hypersensitivity reaction		Headache
		Rash		GI intolerance
		Possible increased MACE risk	✓	Lipoatrophy
		Once-daily dosing		Bone marrow suppression
RTIs				
acidosis	✓	**Tenofovir**	✓	Stavu
steatosis		**High virologic efficacy**		Peripheral n
strophy		Renal impairment (TDF > TAF)		Lipoat
Per neuropathy	✓	Osteopenia/osteoporosis		Pancr
		Headache		
		Active against HBV	✓	
		GI intolerance		Didan
Increased		**Potential for renal and bone toxicity**	Decreased	GI intol
		Emtricitabine		Peripheral ne
		Dizziness		Possible increased MACE risk
		Headache		Pancreatitis
		GI intolerance		Possible portal hypertension

Tenofovir alafenamide

Bold = commonly used

Clinical Care in HIV

NRTI

Treatment Regimen Component

Component	Example
Doravirine	**Delstrigo®, Pifeltro®**
Efavirenz	Atripla®, Sustiva®
Etravirine	Intelence®
[illegible]pine	Viramune®
Rilpivirine	

All NRTIs

Lactic acidosis
Hepatic steatosis
Lipodystrophy
Peripheral neuropathy

Abacavir

Hypersensitivity reaction
Rash
Possible increased MACE risk

Tenofovir

Renal impairment (TDF > TAF)
Osteopenia/osteoporosis
Headache
GI intolerance

Emtricitabine

Dizziness
Headache
GI intolerance

Zidovudine

Headache
GI intolerance
Lipoatrophy
Bone marrow suppression

Stavudine

Peripheral neuropathy
Lipoatrophy
Pancreatitis

Didanosine

GI intolerance
Peripheral neuropathy
Possible increased MACE risk
Pancreatitis
Possible portal hypertension

Advantages

Long half-lives
Less dyslipidemia, insulin resistance
PIs and integrase inhibitors preserved for later use

Disadvantages

[illegible] barrier to resistance
Increased risk of transmitted resistance
Cross-resistance amongst NNRTIs

Bold = commonly used

Clinical Care in HIV

NNRTI

Treatment Regimen Component

Component	Example
Doravirine	**Delstrigo®, Pifeltro®**
Efavirenz	Atripla®, Sustiva®
Etravirine	Intelence®
Nevirapine	Viramune®
Rilpivirine	**Cabenuva®, Odefsey®**

All NNRTIs

Rash (SJS)
Hepatotoxicity
Drug-drug interactions

Efavirenz

Neuropsychiatric
Teratogenic
Dyslipidemia

Rilpivirine

Depression
Virologic failure with high VL or low CD

Nevirapine

Increased rash risk
Hepatotoxicity

Advantages

Long half-lives
Less dyslipidemia, insulin resistance
PIs and integrase inhibitors preserved for later use

Disadvantages

Low genetic barrier to resistance
Increased risk of transmitted resistance
Cross-resistance amongst NNRTIs

Bold = commonly used

Clinical Care in HIV

NNRTI

Adverse Drug Reactions

Component	Example
Atazanavir	Reyataz®
Darunavir	**Prezista®**
Fosamprenavir	Lexiva®, Telzir®
Lopinavir	Kaletra®
Nelfinavir	Viracept®
Ritonavir	Norvir®
Saquinavir	Invirase®
Tipranavir	Aptivus®

All NNRTIs

Rash (SJS)
Hepatotoxicity
Drug-drug interactions

Doravirine

Nausea
Fatigue
Headaches

Efavirenz

Neuropsychiatric
Teratogenic
Dyslipidemia

Rilpivirine

Depression
Virologic failure with high VL or low CD4

Nevirapine

Increased rash risk
Hepatotoxicity

Advantages	Disadvantages
Lower rates of side effects	Require pharmacokinetic booster

Bold = commonly used

Clinical Care in HIV

Protease Inhibitor

Treatment Regimen Component

Component	Example
Atazanavir	Reyataz®
Darunavir	**Prezista®**
Fosamprenavir	Lexiva®, Telzir®
Lopinavir	Kaletra®
Nelfinavir	Viracept®
Ritonavir	Kaletra®, Norvir®
Saquinavir	Invirase®
Tipranavir	Aptivus®

All PIs

Dyslipidemia
Lipodystrophy
Hepatotoxicity
GI intolerance
Drug-drug interactions

Fosamprenavir

Rash
Possible increase MACE risk

Nelfinavir

Diarrhea

Saquinavir

PR and QT prolongation

Advantages

Lower rates of side effects

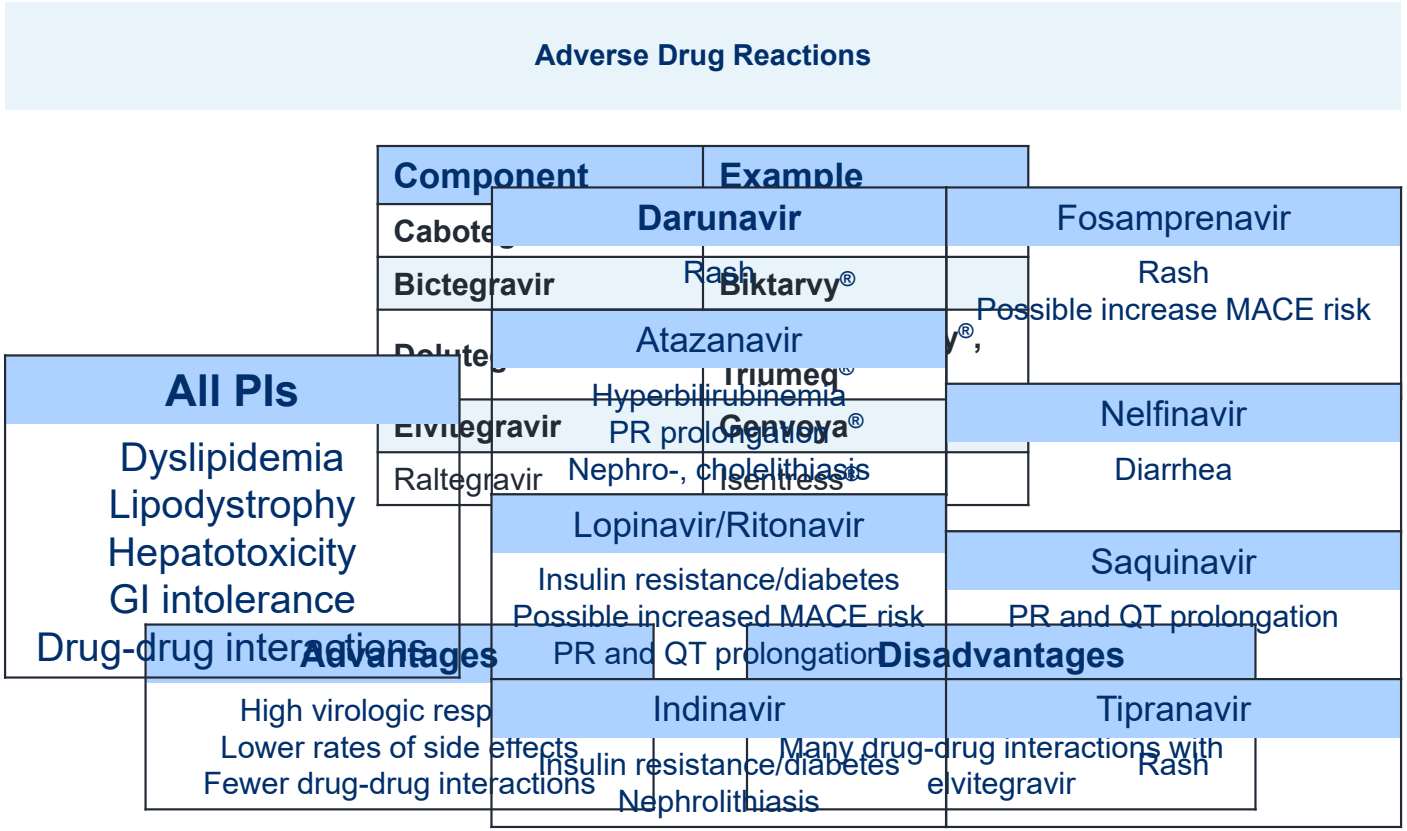
Disadvantages

Require pharmacokinetic booster

Bold = commonly used

Clinical Care in HIV

Protease Inhibitor



Bold = commonly used

Clinical Care in HIV

Integrase Inhibitor

Treatment Regimen Component

Component	Example
Cabotegravir	**Cabenuva®**
Bictegravir	**Biktarvy®**
Dolutegravir	**Dovato®, Tivicay®, Triumeq®**
Elvitegravir	**Genvoya®**
Raltegravir	Isentress®

Bictegravir
Headache

Dolutegravir
Headache

Raltegravir
CK elevation
Myopathy, rhabdomyolysis
Rash

Elvitegravir/cobicistat
Diarrhea

Advantages

High virologic response
Lower rates of side effects
Fewer drug-drug interactions

Disadvantages

Lower genetic barrier to resistance
Many drug-drug interactions with elvitegravir

Bold = commonly used

Integrase Inhibitor

Adverse Drug Reactions

Bictegravir	Raltegravir
Headache Nausea Diarrhea	Headache Nausea Diarrhea
Dolutegravir	**Cabotegravir**
Headache Insomnia Rash	Nausea Diarrhea

Additional Medications

Treatment Drug Component

Choosing a Regimen

...bone

...ibitor (preferred)

...ibitor or NNTRI

Ibalizumab-uiyk	Enfuvirtide
CD4 post-attachment inhibitor	Fusion inhibitor
Fostemasvir	**Maraviroc**
Gp120 attachment inhibitor	CCR5 antagonist

Two-drug regimen

↳ Integrase inhibitor + NRTI (dolutegravir + lamivudine)

Lenacapavir
Capsid inhibitor

...vidualize the regimen choice

Clinical Care in HIV

Choosing a Regimen

Single-tablet Regimens

Biktarvy®

Triumeq®

Dovato®

Symtuza®

Two-drug regimen

Integrase inhibitor + NRTI
(dolutegravir + lamivudine)

Odefsey®
(Rilpivirine/TAF/emtricitabine)

Genvoya®
(Elvitegravir/cobicistat/
TAF/emtricitabine)

Juluca®
(Dolutegravir/rilpivirine)

Symfi®
(efavirenz/TDF/lamivudine)

Complera®
(rilpivirine/TDF/emtricitabine)

Stribild®
(Elvitegravir/cobicistat/
TDF/emtricitabine)

vidualize the regimen choice

Delstrigo®
(Doravirine/TDF/lamivudine)

Atripla®
(efavirenz/TDF/emtricitabine)

Bold = commonly used

Clinical Care in HIV

Single-tablet Regimens

Biktarvy®
(Bictegravir/TAF/emtricitabine)

Triumeq®
(Dolutegravir/abacavir/lamivudine)

Dovato®
(Dolutegravir/lamivudine)

Symtuza®
(darunavir/cobicistat/TAF/emtricitabine)

Odefsey®
(Rilpivirine/TAF/emtricitabine)

Genvoya®
(Elvitegravir/cobicistat/TAF/emtricitabine)

Juluca®
(Dolutegravir/rilpivirine)

Symfi®
(efavirenz/TDF/lamivudine)

(abacavir/lamivudine)

Complera®
(rilpivirine/TDF/emtricitabine)

(TDF/lamivudine)

Stribild®
(Elvitegravir/cobicistat/TDF/emtricitabine)

(atazanavir/cobicistat)

Delstrigo®
(Doravirine/TDF/lamivudine)

Atripla®
(efavirenz/TDF/emtricitabine)

Bold = commonly used

Clinical Care in HIV

Combination Regimens

Two NRTI Backbone		Protease Inhibitor + Booster
Truvada® (TDF/emtricitabine) 	**Descovy®** (TAF/emtricitabine) 	**Prezista®** (Darunavir/cobicistat) 
Epzicom® (abacavir/lamivudine)	Cimbudo®/Temixys® (TDF/lamivudine)	Evotaz® (atazanavir/cobicistat)

- Polyvalent cations (magnesium, calcium, etc.)

Bold = commonly used

Clinical Care in HIV

Drug Interactions (incomplete list)

- Acid suppressants (omeprazole, pantoprazole, etc.)
- Antiarrhythmics
- Anticoagulants
- Anticonvulsants (phenytoin, etc.)
- Antiplatelets
- Antipsychotics
- Benzodiazepines

HIV Drug Interactions
https://www.hivdrugInteractions.org/

CLINICAL INFO HIV.gov
https://clinicalinfo.hiv.gov/en/guidelines/hiv-clinical-guidelines-adult-and-adolescent-arv

- Corticosteroids
- Opioid agonists
- Oral contraception
- Phosphodiesterase-5 inhibitors (sildenafil, tadalafil, etc.)
- Polyvalent cations (magnesium, calcium, etc.)
- Rifampin
- Statins

HIV/HCV MEDICATION GUIDE
https://www.hivmedicationguide.com/

UpToDate®
https://www.uptodate.com/drug-interactions/ (paid subscription)

Clinical Care in HIV

Drug Interactions (incomplete list)

- Definition: inability to achieve or maintain viral suppression
- Carefully assess cause of virologic failure
  - Evaluat ctions, social barriers, fooc urity
  - Resista e the person is on therapy f discontinuation
- Develop new regimen with two, preferably three, fully active agents
- Goal is to s e virus
  - Alternativ ize toxicity, preserve CD4 progressi
- Can initiate salvage therapy with fostemsavir, ibalizumab or enroll in clinical trial

HIV Drug Interactions
https://www.hiv-druginteractions.org/

HIV/HCV MEDICATION GUIDE
https://www.hivmedicationguide.com/

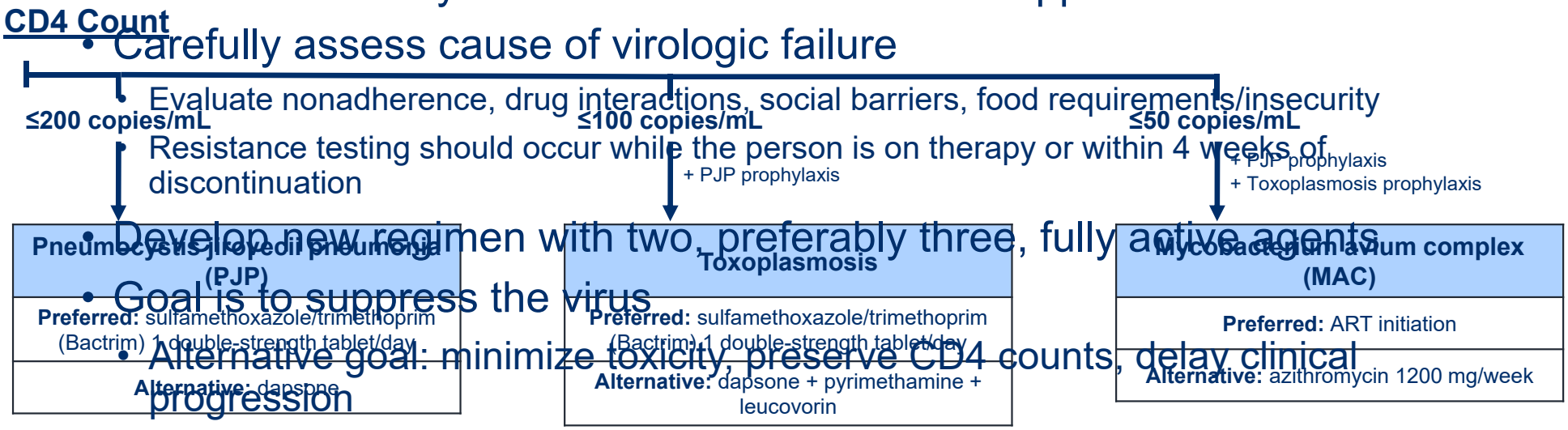
CLINICAL INFO HIV.gov
https://clinicalinfo.hiv.gov/en/guidelines/hiv-clinical-guidelines-adult-and-adolescent-arv

UpToDate®
https://www.uptodate.com/drug-interactions/
*paid subscription

Clinical Care in HIV

Virologic Failure

- Definition: inability to achieve or maintain viral suppression
- Carefully assess cause of virologic failure
  - Evaluate nonadherence, drug interactions, social barriers, food requirements/insecurity
  - Resistance testing should occur while the person is on therapy or within 4 weeks of discontinuation
- Develop new regimen with two, preferably three, fully active agents
- Goal is to suppress the virus
  - Alternative goal: minimize toxicity, preserve CD4 counts, delay clinical progression
- Can initiate salvage therapy with fostemsavir, ibalizumab or enroll in clinical trial



Summary

- Screening is underutilized but vital
- Resistance testing *must* be obtained prior to or at ART initiation
- Single-tablet regiments are always preferred if able to be utilized
- Individualize treatment
- ***Always check for drug interactions***

PrEP

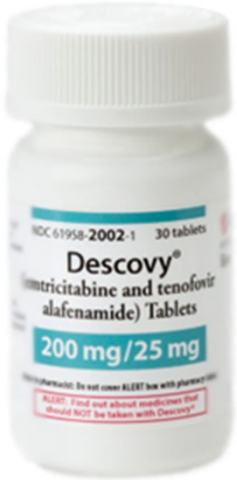
Indications & Options
Prescribing PrEP
Continued Care & Follow Up

Indications & Options

Indications & Options

Currently Available Medications

PrEP: Pre-exposure prophylaxis

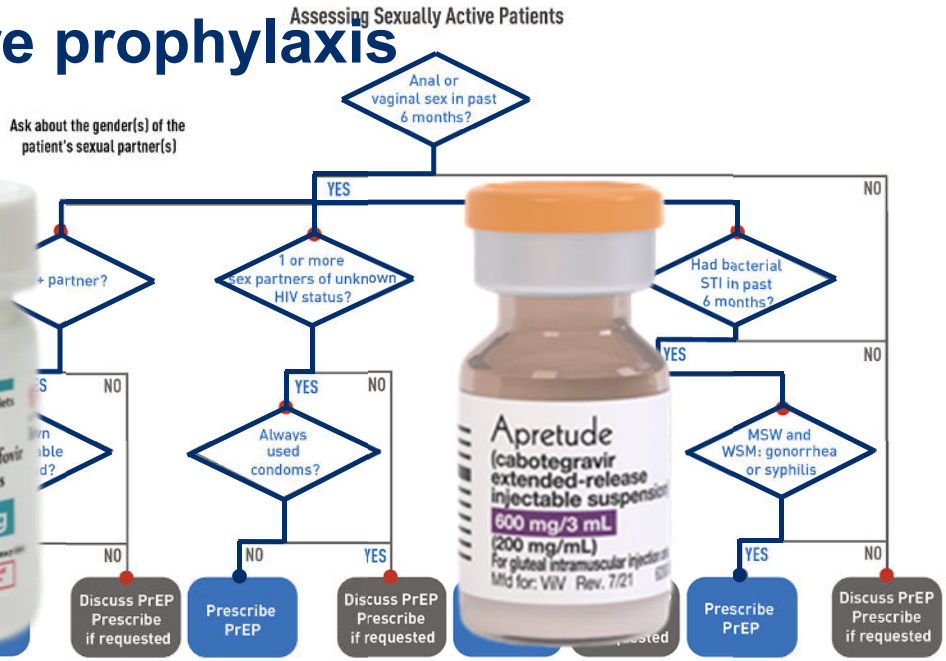


Indications & Options

Currently Available Medications

PrEP: Pre-exposure prophylaxis

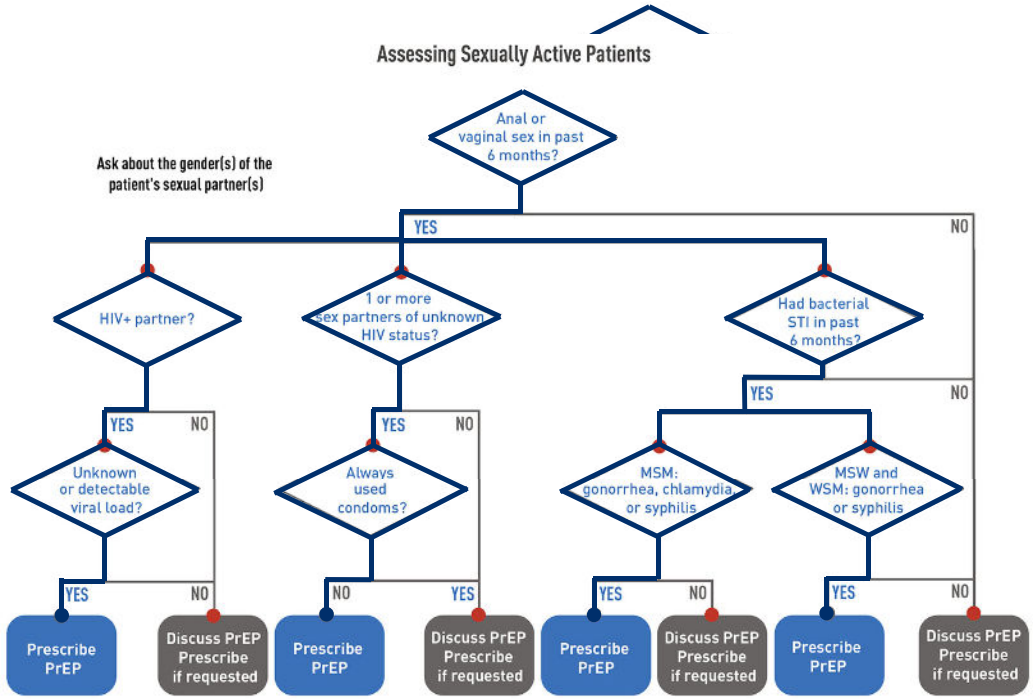
- Sexually active in the last 6 months participating in anal and/or vaginal sex
  - With HIV+ partner with unknown or detec ad
  - One or tners of unknown HI status t utilize condoms consis
  - Has h al STI in the last s month
- Prescrib ested



Indications & Options

Indications

- Sexually active in the last 6 months participating in anal and/or vaginal sex
  - With HIV+ partner with unknown or detectable viral load
  - One or more partners of unknown HIV status and doesn't utilize condoms consistently
  - Has had a bacterial STI in the last six months
- Prescribed if requested

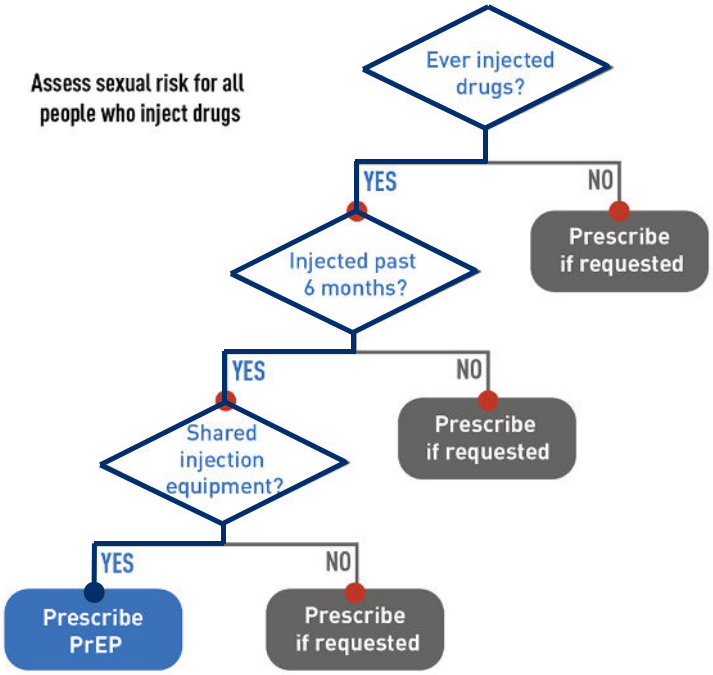


Indications & Options

Indications

- Ever injected drugs
  - Injection use in the last six months
  - Shared equipment
- Prescribe if requested

Prescribe if re



Indications & Options

Truvada®

(tenofovir disoproxil-emtricitabine)

Indications

- Single-tablet regimen taken once daily by mouth
- [illegible] at use injection drugs (male and female sex)
- 2-1-1 dosing for MSM
  - Two tablets, 2-24 hours prior to sex
  - One tablet, 24 hours after
  - One tablet, 48 hours after last sexual encounter
- Weight of at least 35 kg or 77 lb
- TDF: creatinine clearance ≥60 mL/min

Prescribe if requested

Indications & Options

Truvada®

(tenofovir disoproxil-emtricitabine)

- Single-tablet regimen taken once daily by mouth
- Population: biologic males, biologic females, those that use injection drugs (male and female sex)
  - Has not been studied in biologic females/vaginal tissue
- 2-1-1 dosing for MSM
  - Two tablets, 2-24 hours prior to sex
  - One tablet, 24 hours after
  - One tablet, 48 hours after last sexual encounter
- Weight of at least 35 kg or 77 lb
- TDF: creatinine clearance ≥60 mL/min
- TAF: creatinine clearance ≥30 mL/min

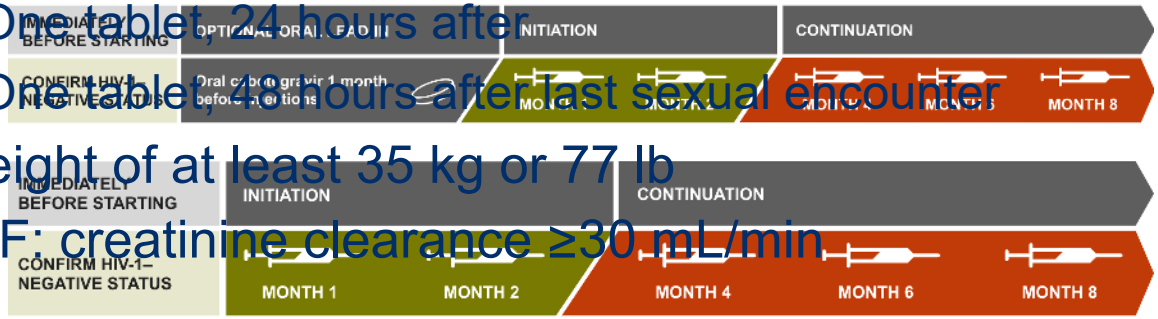
Indications & Options

Descovy®

(tenofovir alafenamide-emtricitabine)

- Single-tablet regimen taken orally daily
- Population: biologic male
- 2-1-1 dosing for MSM
  - Two tablets, 2-24 hours prior to sex
  - One tablet, 24 hours after
  - One tablet, 48 hours after last sexual encounter
- Weight of at least 35 kg or 77 lb
- TAF: creatinine clearance ≥30 mL/min

Oral lead-in is not required but may be used prior to initiation of APRETUDE to assess the tolerability of cabotegravir.



- Single-tablet regimen taken orally daily
- Population: biologic male
- 2-1-1 dosing for MSM
  - Two tablets, 2-24 hours prior to sex
  - One tablet, 24 hours after
  - One tablet, 48 hours after last sexual encounter
- Weight of at least 35 kg or 77 lb
- TAF: creatinine clearance ≥30 mL/min

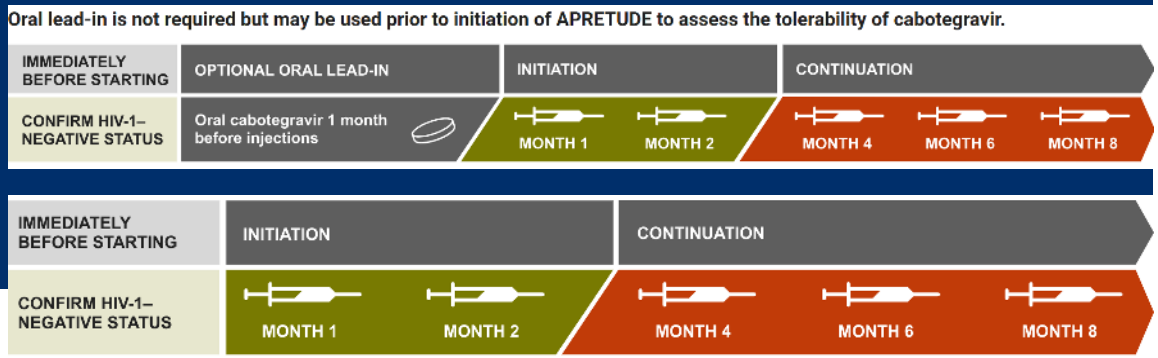
- Single-tablet regimen taken orally daily available
- Oral lead-in available option for first 28 days to assess tolerability
  - Has not been studied in biologic females/vaginal tissue
  - Monthly injection for two months
  - Every other month injection thereafter
- Weight of at least 35 kg or 77 lb
- Population: biologic male and biologic female

Indications & Options

Apretude®

(cabotegravir)

- Only injectable option for PrEP currently available
  - Oral lead in: available option for first 28 days to assess tolerability
  - Monthly injection for two months



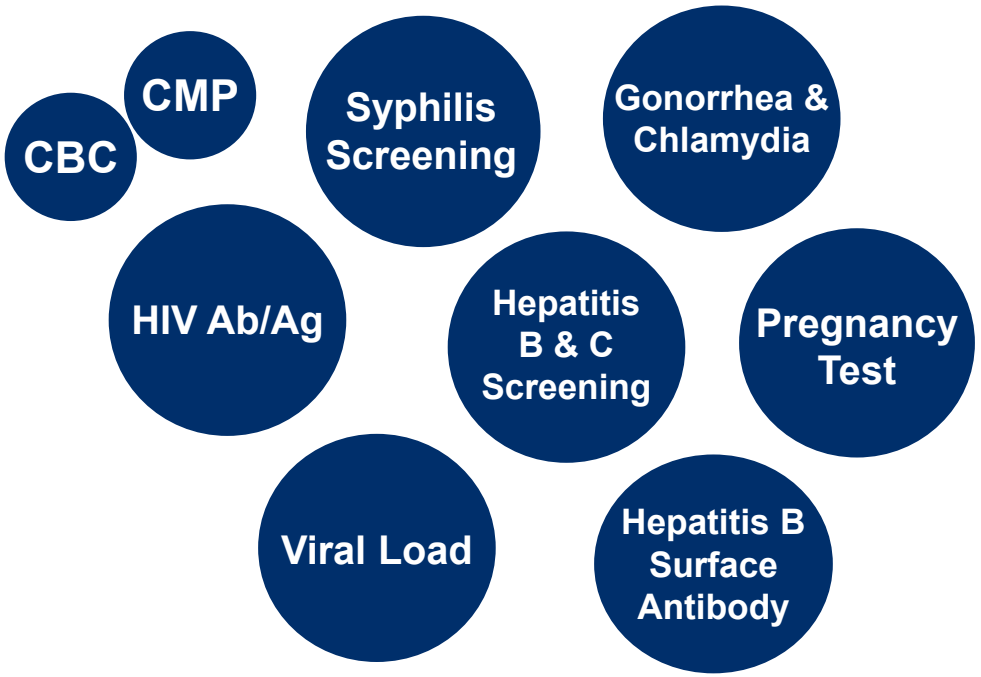
- Weight of at least 35 kg or 77 lb
- Population: biologic male and biologic female

Prescribing PrEP

Prescribing PrEP

Initial Evaluation and Appointment

Initial labs:



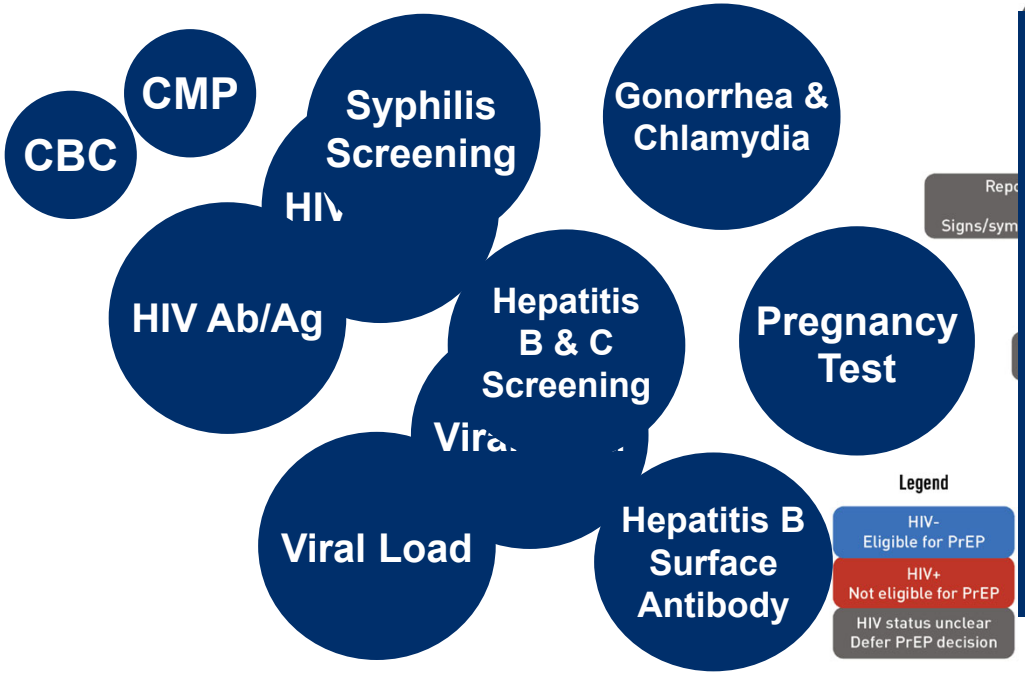
Initial documentation:

- No signs of symptoms of active HIV infection and negative HIV testing
- Renal function
- HBV immune status
- No contraindicated medication use

Prescribing PrEP

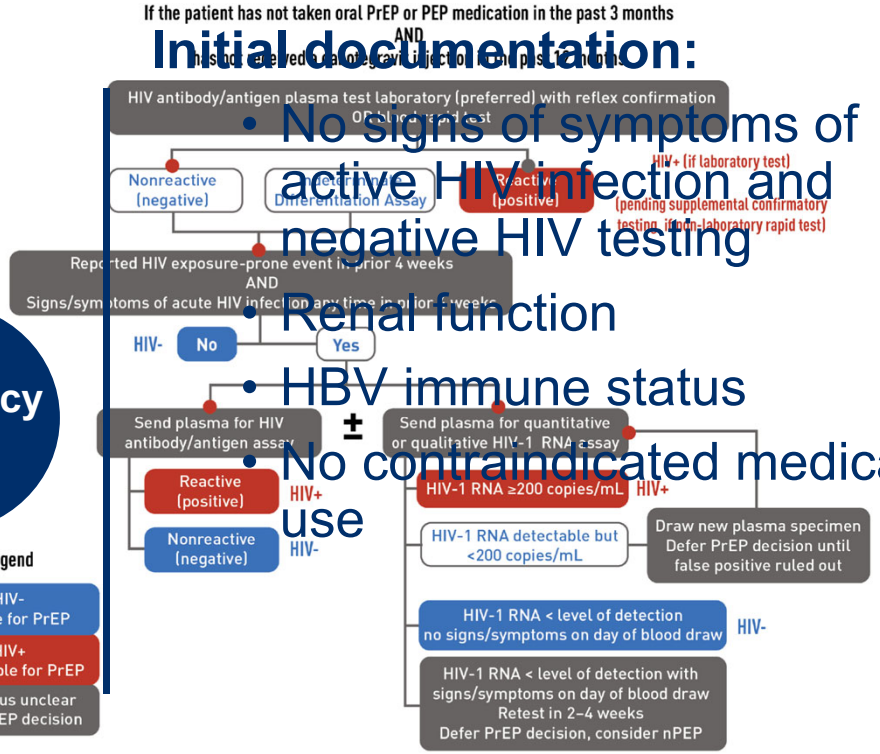
Initial Evaluation and Appointment

Initial labs:



Initial documentation:

- No signs of symptoms of active HIV infection and negative HIV testing
- Renal function
- HBV immune status
- No contraindicated medication use



Continued Care & Follow Up

Continued Care & Follow Up

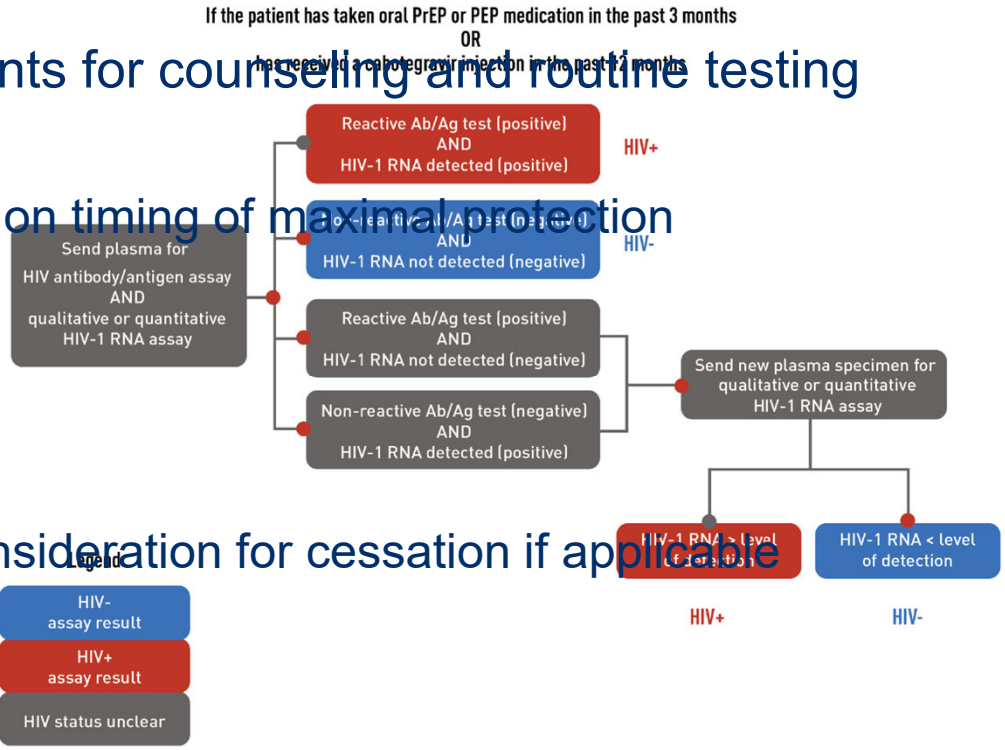
Counseling

- Continue with routine appointments for counseling and routine testing
- Counseling points:
  - PrEP adherence – no consensus on timing of maximal protection
    - Blood: 20 days
    - Cervicovaginal tissue: 20 days
    - Rectal tissue: 7 days
  - Safe sex practices
  - Reassess HIV exposures and consideration for cessation if applicable

Continued Care & Follow Up

Counseling

- Continue with routine appointments for counseling and routine testing
- Every 3 months:
  - Counseling points:
    - Obtain HIV Ab/Ag and viral load
    - PrEP adherence – no consensus on timing of maximal protection
    - Screen STIs and treat as appropriate
      - Blood: 20 days
      - Cervicovaginal tissue: 20 days
      - Rectal tissue: 7 days
    - Hepatitis B & C screening
    - Safe sex practices
    - Fasting lipid panel
    - Reassess HIV exposures and consideration for cessation if applicable
    - Consider anal Pap in MSM
- Annually:



Summary

- Consider PrEP and discuss with patients
- ***Prescribe if requested by the patient***
- Educate, counsel, and check in often

Resources

- https://www.hiv.gov/hiv-basics/overview/data-and-trends/statistics?
- Fast Facts: HIV in the US by Age | HIV | CDC
- Understanding the Current HIV Epidemic in the United States – AIDSVu
- https://www.cdc.gov/hiv/data-research/facts-stats/index.html?
- HIV Prevention: Oklahoma
- Oklahoma Among Seven States With Highest Rural HIV Burden
- US Public Health Service. Pre-exposure Prophylaxis for the Prevention of HIV infections in the United States-2014
- Machalek DA et al. Anal Human papillomavirus infection and associated neoplastic lesions in men who have sex with men: a systematic review and meta-analysis. Lancet Oncol 2012; 13:487-500
- Centers for Disease Control and Prevention (CDC). 2015, Nov 27. Vital Signs: Estimated Percentages and Numbers of Adults with Indications for Preexposure Prophylaxis to Prevent HIV
- Acquisition — United States, 2015. Morbidity and Mortality Weekly Report (MMWR).
- CDC. Diagnoses of HIV infection, by race/ethnicity and selected characteristics, 2019. HIV Surveillance Supplemental Report. 2019;32.
- Gildead. State of the HIV Epidemic: Substantial Progress and the Challenges that Remain.
- https://www.gileadhiv.com/landscape/state-of-epidemic/?utm_id=iw_sa_15442187166_127739510062&utm_medium=cpc&utm_term=hiv+cases+by+state&gclid=CjwKCAiAxJSPBhAoEiwAeO_fP
- 6DFHXC2e-6dJHkFKva_FKC6t6nCzZoqlk6nLQlW5Qctl36wnJpuwhoCmCkQAvD_BwE&gclsrc=aw.ds+
- AIDSVu. Deeper Look: PrEP. https://aidsvu.org/resources/deeper-look-prep/
- AIDSVu. Local Data: Oklahoma. https://aidsvu.org/local-data/united-states/south/oklahoma/
- Hardy, W. David (Ed) et al. (2021) Fundamentals if HIV Medicine. Oxford University Press.
- How Do I Prescribe PrEP? | Prevention | Clinicians | HIV | CDC
- https://clinicalinfo.hiv.gov/en/guidelines