# HIV in the Caribbean

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# The Caribbean

#### Diversity

- Geography: flat to mountainous
- Languages: English, Spanish, French, Dutch, Creole
- •42m population: ~5,000 (Montserrat) to 11.5M (Cuba)
- 28 Countries

#### Unity • CARICOM 📭 , CARPHA 👰 , UWI 🎪





#### Economy

- Heavily tourist dependent (20m visitors per year)
- Tourism major source of revenue
- Poverty and inequality common

#### Religion

Deeply religious (Christian)

#### HIV

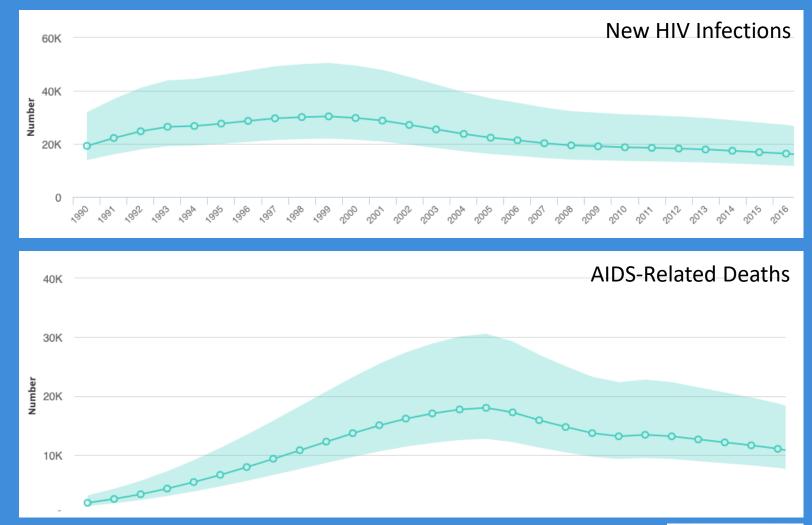
2<sup>nd</sup> highest regional HIV prevalence

## Select National HIV Prevalence | 2017

Country	Number PLHIV	Adult HIV prevalence (%)	Number AIDS deaths	ART coverage (%)	
Bahamas	5,300	1.9	No Data	57	
Barbados	2,700	1.6	<100	49	
Belize	4,500	1.9	<200	31	
Cuba	30,000	0.4	<500	66	
Dominican Republic	67,000	0.9	2,600	52	
Guyana	8,200	1.7	<200	64	
Haiti	150,000	1.9	4,700	64	
Jamaica	34,000	1.8	1,500	34	
Suriname	4,800	1.3	<200	51	
Trinidad and Tobago	11,000	1.1	<500	62	
Region	310,000	1.2	10,000	57	



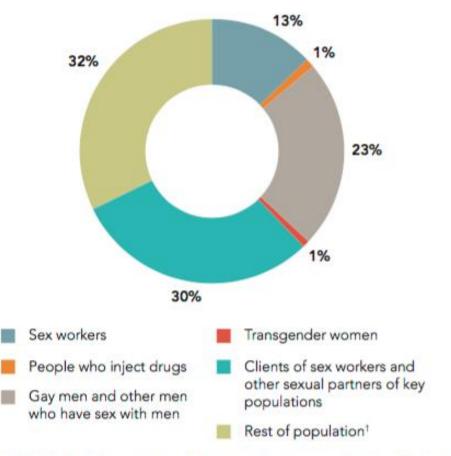
# New HIV Infections and AIDS Deaths in the Caribbean





# Modes of HIV Transmission in the Caribbean

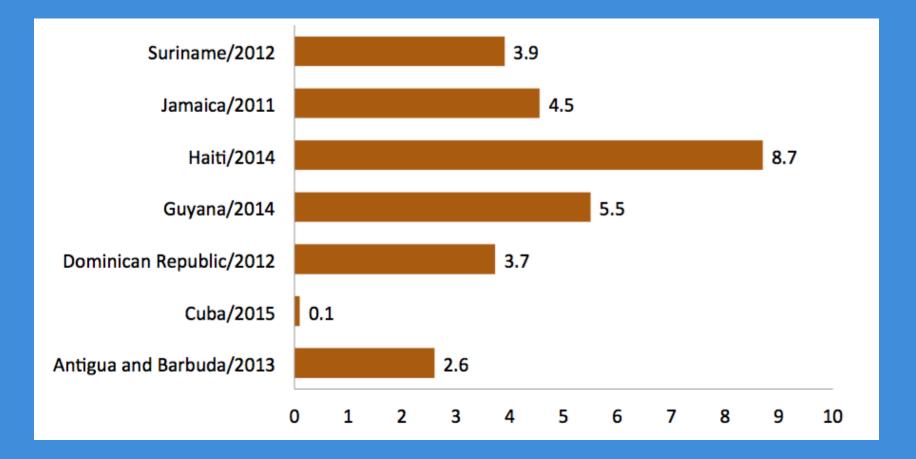
- Generalised and concentrated epidemic
- Predominantly heterosexual intercourse (exception MSM Cuba)
- MTCT low
- IDU extremely low (exception Puerto Rico and Bermuda)
- Key subpopulations:
  - MSM
  - Sex workers
  - Drug users



<sup>†</sup>Individuals in this category did not report any HIV-related risk behaviour.

UNAIDS special analysis, 2018

## Key Subpopulations: Female Sex Workers

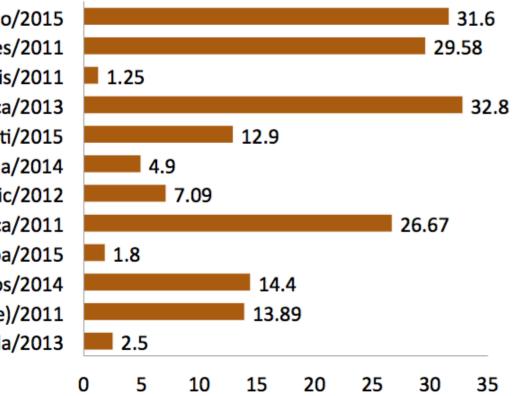


# Female Sex Workers | Jamaica

- 95% condom use with last client
- Unprotected sex with non-paying partner common
- 65% know HIV status
- STI in street FSW:
  - -~25% Trich. Pos.
  - -~15% CT Pos.
  - -~10% GC Pos.

HIV prevalence decreased from 9% in 2005 to 2% in 2017

# Key Subpopulations: Men Who Have Sex With Men



Trinidad and Tobago/2015 Saint Vincent and the Grenadines/2011 Saint Kitts and Nevis/2011 Jamaica/2013 Haiti/2015 Guyana/2014 Dominican Republic/2012 Dominica/2011 Cuba/2015 Barbados/2014 Bahamas (the)/2011 Antigua and Barbuda/2013

# Nen Who Have Sex With Men Jamaica

- 88% do not always use a condom
- ~15% have STI (other than HIV)
- 52.9% HIV positive amongst transgender MSM
- 58% indicated little or no chance of getting HIV
- 60% of HIV+ MSM did not disclose status to partner
- 56% of MSM bisexual

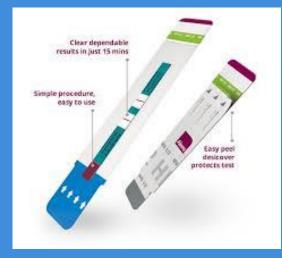
# Factors Driving the HIV Epidemic in the Caribbean

- Major high risk behaviors of heterosexual men:
  - <u>Multiple partners</u>
  - Transactional sex
  - Unprotected sex with sex workers
- High HIV rates among MSM due to <u>unprotected</u> <u>anal intercourse</u> with multiple partners
- High rates of <u>bisexuality among MSM</u> act as a bridge for HIV to reach the general population
- High rates of sexually transmitted infections
- Majority of men <u>not circumcised</u>

# Testing | Jamaica

## Primarily rapid 3<sup>rd</sup> generation

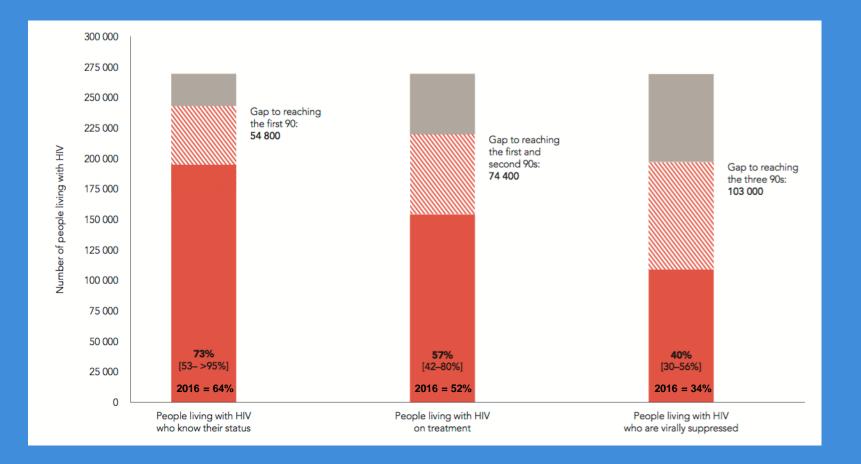
- Cost
- Time





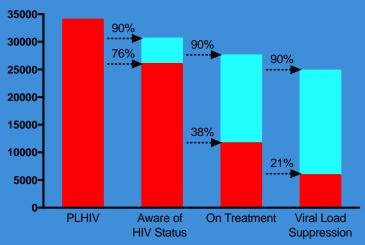
4<sup>th</sup> generation available but not used for routine testing
Cost

## HIV Testing and Care Continuum | Caribbean 2017



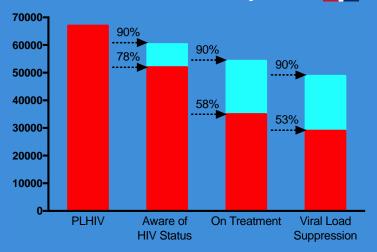
## HIV Testing and Care Continuum | 2017

5000-

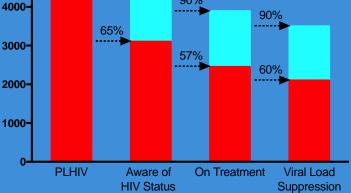


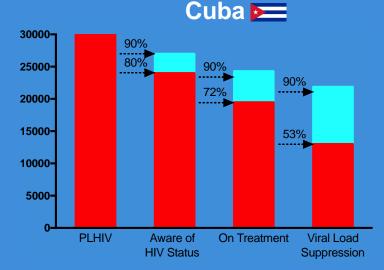
#### Jamaica 🔀

Dominican Republic



# Suriname \star





# Antiretroviral Therapy

### • 57% ART coverage in Caribbean

- Test and treat
  - January 2018 (Jamaica)
- Adherence
  - Social status and stigma
- Resistance
  - TDR ~10% (Jamaica)<sup>#</sup>
- Cost
  - Jamaica: Free to public
  - National cost barrier for newer ARV
- PrEP
  - Pilot 2019 (Jamaica)@

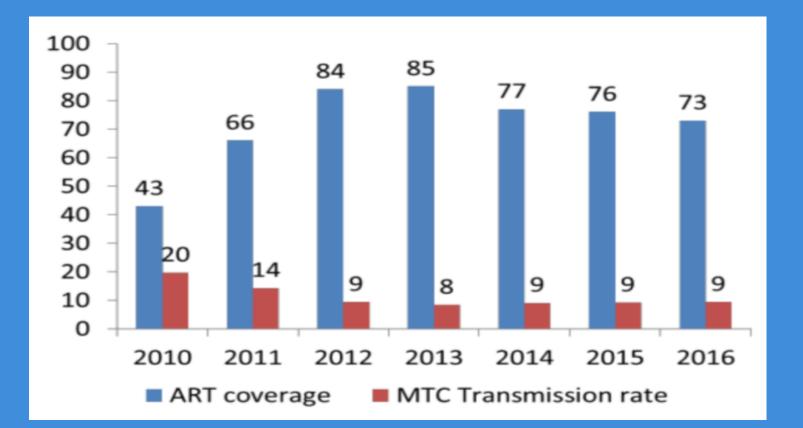
<sup>#</sup>Preliminary data (Geoffrey Barrow, personal communication) <sup>@</sup>25 MSM and 25 serodiscordant (Geoffrey Barrow, personal communication)

#### Jamaica ARV Treatment Guidelines

Treatment Line	Drugs					
1 <sup>st</sup> (1 <sup>st</sup> choice)	Tenofovir	Lamivudine*	Efavirenz			
1 <sup>st</sup> (2 <sup>nd</sup> choice)	Abacavir or Zidovudine	Lamivudine*	Nevirapine			
2 <sup>nd</sup> (1 <sup>st</sup> choice)	Tenofovir	Lamivudine*	Atazanavir/R itonavir			
2 <sup>nd</sup> (2 <sup>nd</sup> choice)	Abacavir or Zidovudine	Lamivudine*	Lopinavir/Rit onavir			
3 <sup>rd</sup>	Raltegravir	Etravirine	Darunavir			

Reaction use emtricitibine

# Pediatric | Maternal ARV Coverage and Transmission Rates



From 2000 ~70% decrease in new children infected

# Pediatric | Select Countries eMTCT

## **7 COUNTRIES ACHIEVED MTCT ELIMINATION STATUS**

2017 MTCT Status	Select Caribbean Countries								
eMTCT	Anguilla	Antigua and Barbuda	Bermuda	Cayman Islands	Cuba	Montserrat	St Kitts and Nevis		
>95% ARV	Dominican Republic	Jamaica							
<95% ARV	Bahamas (51%)	Belize (41%)	Guyana (64%)	Haiti (70%)	Surinam e (76%)	Trinidad and Tobago (81%)			

# Challenges

- ART adherence
- Reducing stigma/discrimination
- Cost of epidemic response
- High turnover of clinical staff
- Medical training in HIV is lacking
- Prevention
- General sexual behavior
- Research funding

# **Research** | Jamaica

## Current work:

- ARV resistance
- GC AMR

## Planned work:

- PrEP
- Asymptomatic STI in PLHIV
- Survey of co-morbid CVD and diabetes biomarkers in PLHIV

# Progress

- Increasing ART coverage
- Decreasing AIDS deaths
- Many countries near or complete eMTCT
- PrEP
  - Available in public health system for Bahamas and Barbados
  - Available privately in Dominican Republic, Jamaica and Suriname
- Decriminilisation of homosexual sex
  - 2016 Belize
  - 2018 Trinidad and Tobago

## New drug to prevent HIV being pushed in region



Efforts are being made to introduce to the Caribbean a pill that could prevent the spread of human immunodeficiency virus (HIV) among high-risk groups.

## NEWS Trinidad and Tobago set to decriminalize homosexuality

A judge ruled Thursday that the Caribbean nation's colonial-era laws banning gay sex are unconstitutional.



## **Acknowledgements**



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