



HIV Case Based Surveillance in Barbados

*11th Meeting of Caribbean National Epidemiologists and Laboratory Directors
Port-of-Spain , Trinidad
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Outline

HIV Surveillance in
Barbados - May 2011

- Background of Barbados
- HIV Surveillance system
- HIV/AIDS Epidemiology in Barbados
- HIV/AIDS Surveillance 2010
- Programme response
- Conclusion

Barbados

- Barbados is the easternmost island in the Caribbean
- Size: 430 sq. km (166 sq. miles)
- Population (2010 est.): 275, 700
- GDP: \$14, 500 USD per capita



United States

North Atlantic Ocean

Gulf of Mexico

The Bahamas

Cuba

Cayman Islands (U.K.)

Turks and Caicos Islands (U.K.)

Haiti

Dominican Republic

Puerto Rico (U.S.)

Jamaica

Anguilla (U.K.)

Antigua and Barbuda

St. Kitts and Nevis

Montserrat (U.K.)

Guadeloupe (Fr.)

Dominica

Martinique (Fr.)

St. Lucia

Barbados

St. Vincent and the Grenadines

Grenada

Aruba (Neth.)

Netherlands Antilles (Neth.)

Trinidad and Tobago

Mexico

Belize

Guatemala

Honduras

El Salvador

Nicaragua

Costa Rica

Panama

Venezuela

Guyana

Colombia

Brazil

North Pacific Ocean

Ecuador

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0 200 400 Kilometers
0 200 400 Miles

Boundary representation is not necessarily authoritative

HIV Surveillance in Barbados

- **HIV surveillance is laboratory-driven.**
- All blood samples for HIV testing are sent to a central laboratory at the main hospital.
- Each HIV+ case is documented and submitted to the HIV Surveillance Unit
- Previously we got very basic information on patients
 - no CD4
 - no risk data

HIV Surveillance in Barbados (2)

- Now, a Surveillance Nurse completes the case report form (in effect since January 2009) before submission to the Surveillance Unit.
- Information on the HIV+ cases are then entered into the NHS data base.

Minimum Variables

- 1) Name
- 2) Sex
- 3) Date of Birth
- 4) Address
- 5) Date of diagnosis
- 6) Risk behaviour
- 7) Related laboratory results
- 8) Data on Care/treatment

Reporting criteria

- Anyone who is newly diagnosed with HIV at any clinical stage
- Anyone who was previously diagnosed and reported with HIV who has progressed to **AIDS** is reported **again** as having AIDS
- When an HIV-infected person dies

Epidemiology of HIV/AIDS in Barbados

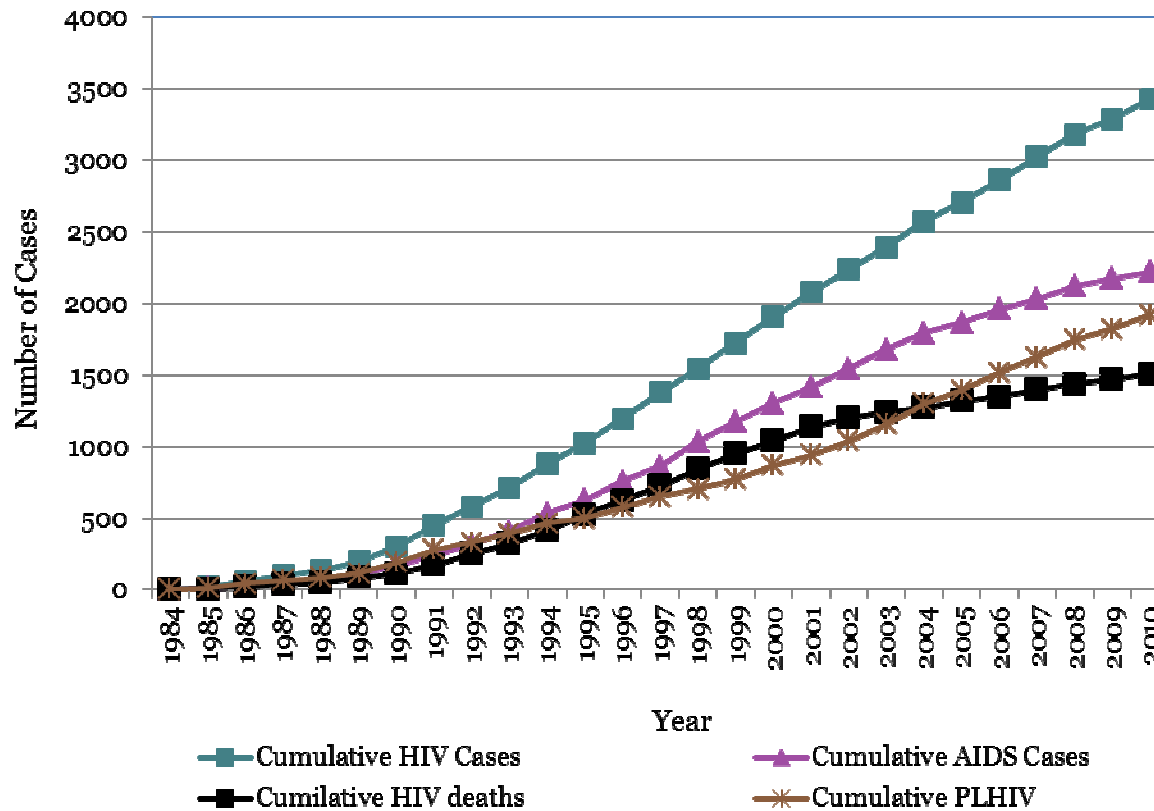
- The first case was in 1984
- Stable HIV incidence since 1994
- Dramatic decline in HIV deaths after 2001
- 1.9% HIV prevalence amongst adults¹
- The HIV epidemic is **mixed**
- Vulnerable populations – *some identified but little HIV sero-prevalence data*

Cumulative HIV Statistics; 1984 - 2010

Gender	HIV Cases	AIDS Cases	HIV Deaths	PLHIV (at the end of December 2010)
Male	2144 (62.5%)	1509 (68.0%)	1092 (72.5%)	1052 (54.8%)
Female	1282 (37.5%)	710 (32.0%)	415 (27.5%)	867 (45.2%)
<i>Total</i>	<i>3426</i>	<i>2219</i>	<i>1507</i>	<i>1919</i>

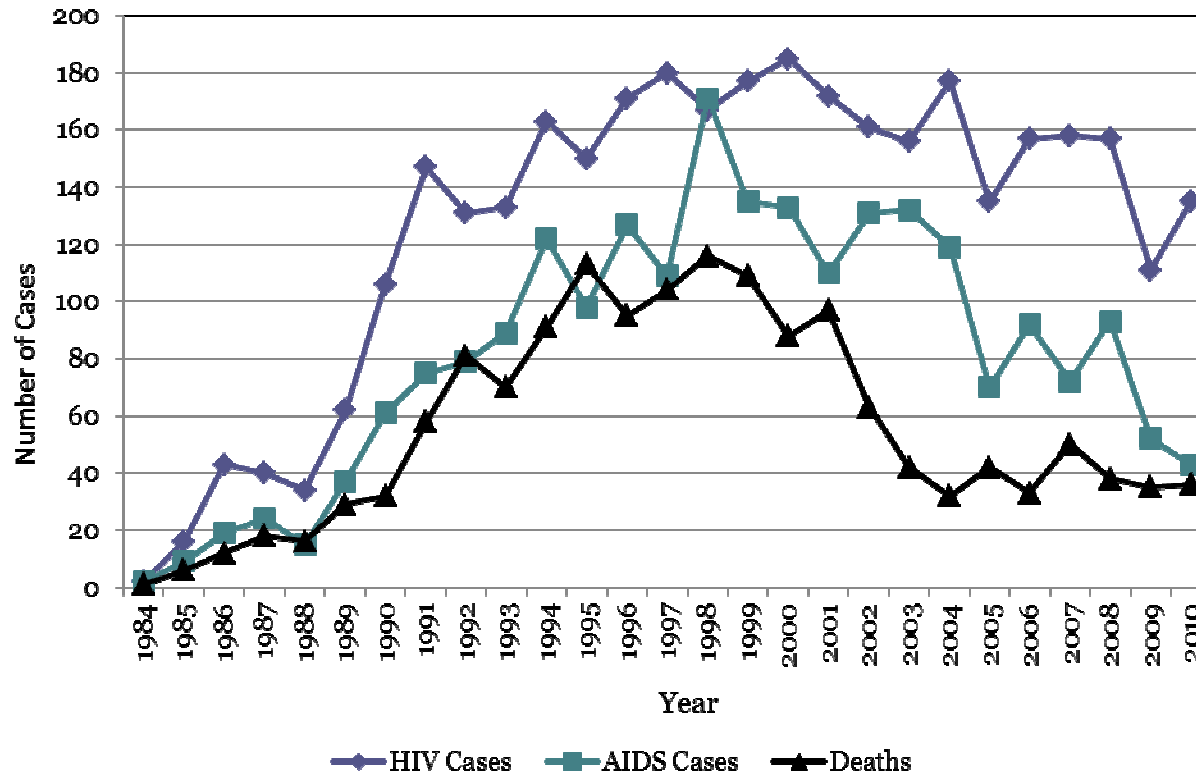
Cumulative HIV and AIDS cases, Persons living with HIV and HIV-related deaths from 1984 to 2010

HIV Surveillance in
Barbados - May 2011



HIV/AIDS surveillance 1984 - 2010

HIV Surveillance in
Barbados - May 2011



HIV/AIDS Surveillance in 2010

- 135 cases newly diagnosed with HIV; 90 males (66.7%) and 45 females (33.3%)
- 43 new AIDS cases; 31 males (72.1%) and 12 females (27.9%)
- 36 PLHIV died; 23 males (63.9%) and 13 females (36.1%)
- Male preponderance of all facets of surveillance

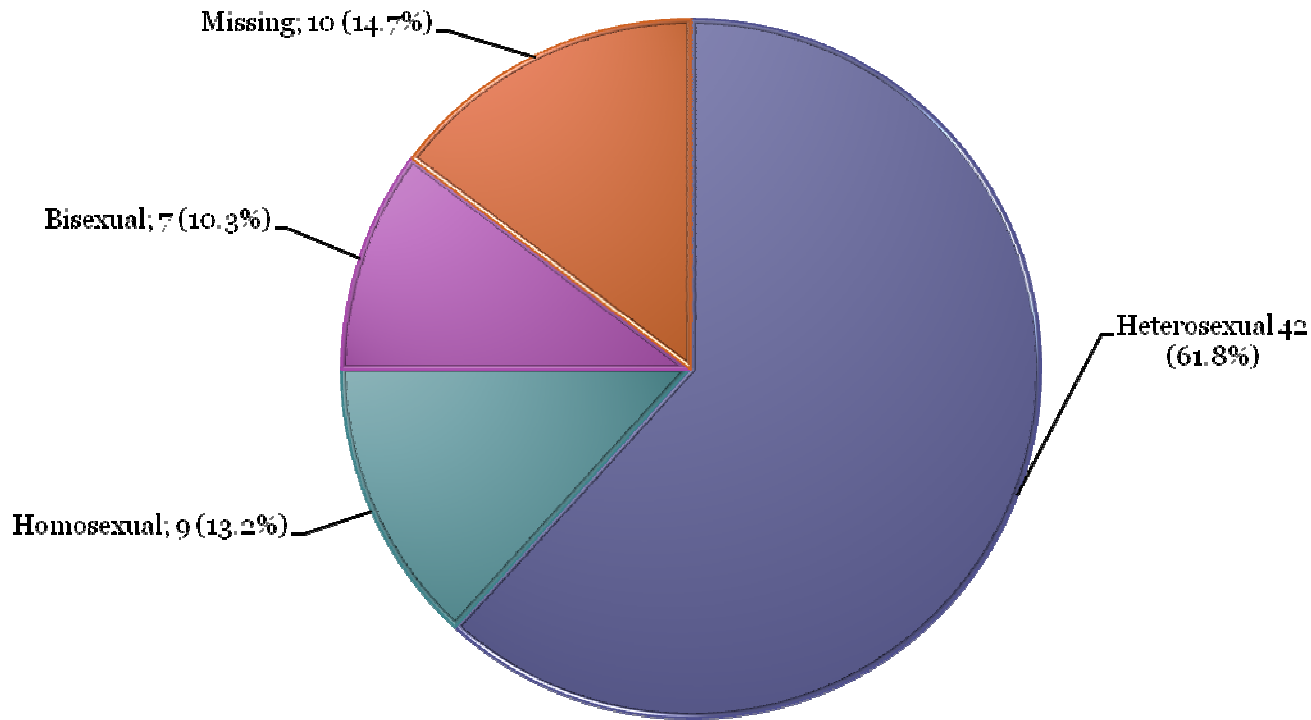
Risk factors for HIV transmission

- 98 PLHIV registered for care in 2010
- Detailed information is captured in their medical records
- These data were analyzed to determine some possible risk factors for HIV transmission in Barbados

Self identified sexual preferences of HIV+ men in 2008

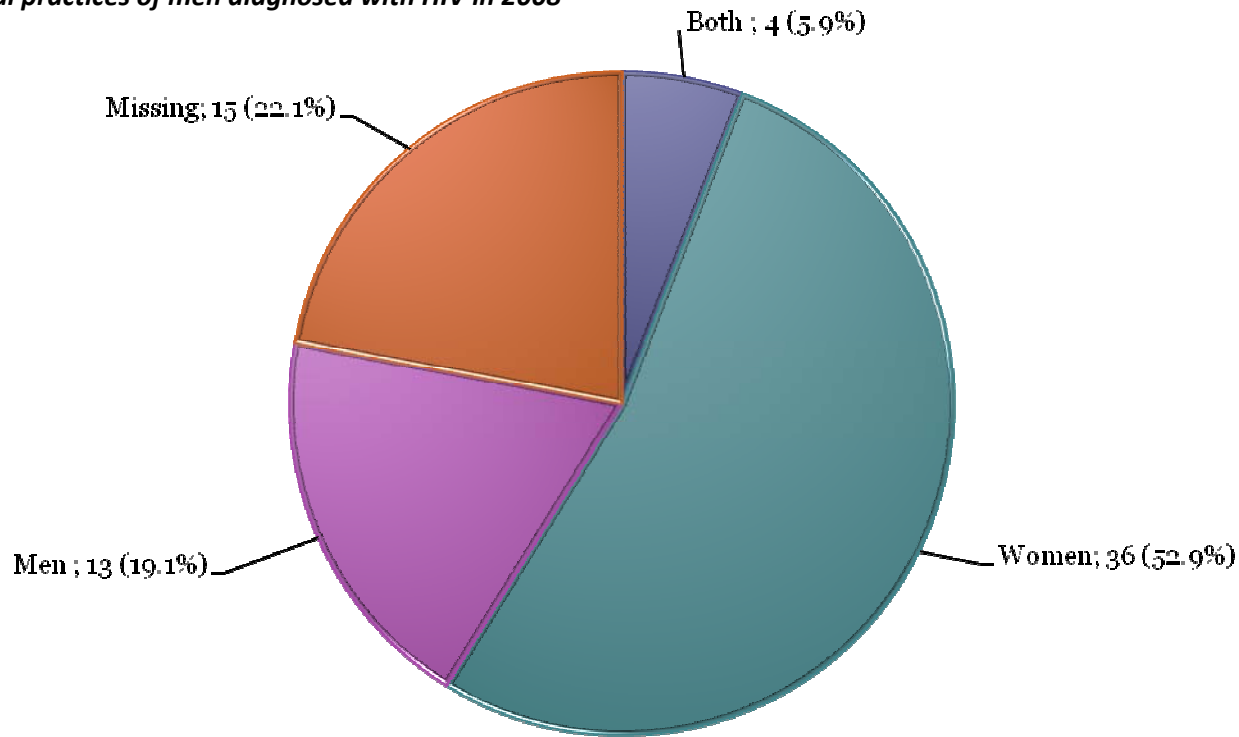
Barbados HIV/AIDS
Surveillance Report 2008
- Dr.D. Babb, MCH

Self-identified sexual preferences of HIV+ men in 2008



Current sexual practices of men diagnosed with HIV in 2008

Current sexual practices of men diagnosed with HIV in 2008



Immunological classification of new patients 2008

Barbados HIV/AIDS
Surveillance Report 2008
- Dr.D. Babb, MOH

WHO HIV-associated immunological classification	CD4 (cells/mm ³)	Sex		Total	
		Female	Male	n	%
<i>Severe</i>	<i>< 200</i>	<i>18</i>	<i>41</i>	<i>59</i>	<i>42.1</i>
Advanced	200 - 349	8	16	24	17.1
Mild	350 - 499	8	7	15	10.7
None or not significant	≥ 500	11	7	18	12.9
No Classification	Not Known	12	12	24	17.1
Total		57	83	140	100.0

Programme response

- Efforts to diagnose HIV earlier; particularly for men
 - Targeted HIV testing and outreach programs, more routine testing (PITC)
- Plan to improve contact tracing to increase number of PLHIV diagnosed and accessing care
- Efforts to collect information on risk behaviours routinely
- Future behavioural surveillance on our most-at-risk populations (including MSM, sex workers and drug addicts)
- Male focussed prevention interventions
- Future studies on mortality

Data Management

- NHS database and database at the clinic (SHIP) are being improved with support from the CDC and HRSA
- AIM: To use IT databases to obtain more routine, accurate and detailed epidemiologic analyses

Resources

Technical Assistance

Human Resources

1. Head of HIV diagnostics
2. Surveillance Nurse
3. Data Analyst (Statistician)
4. HIV programme manager (*Senior Medical Officer of Health*)

1. Caribbean Epidemiology Centre (CAREC)
2. CDC

Conclusions

- 1. HIV case surveillance is laboratory-initiated***
- 2. The new HIV case report form was introduced in 2009 and it has assisted us obtaining more detailed understanding of the HIV epidemic in Barbados**

Conclusions (2)

1. More appropriate and targeted interventions for most-at-risk groups
2. Evaluate the HAART programme

Acknowledgements

- The CDC (Caribbean Regional Office and the CDC, Atlanta)
- PAHO/WHO (Caribbean Office)

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