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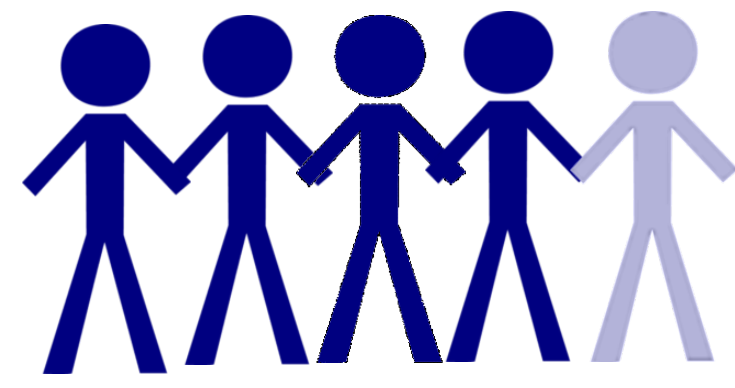
HIV Diagnosis on First Test and Infection Stage among HIV+ Visible Minority MSM in British Columbia

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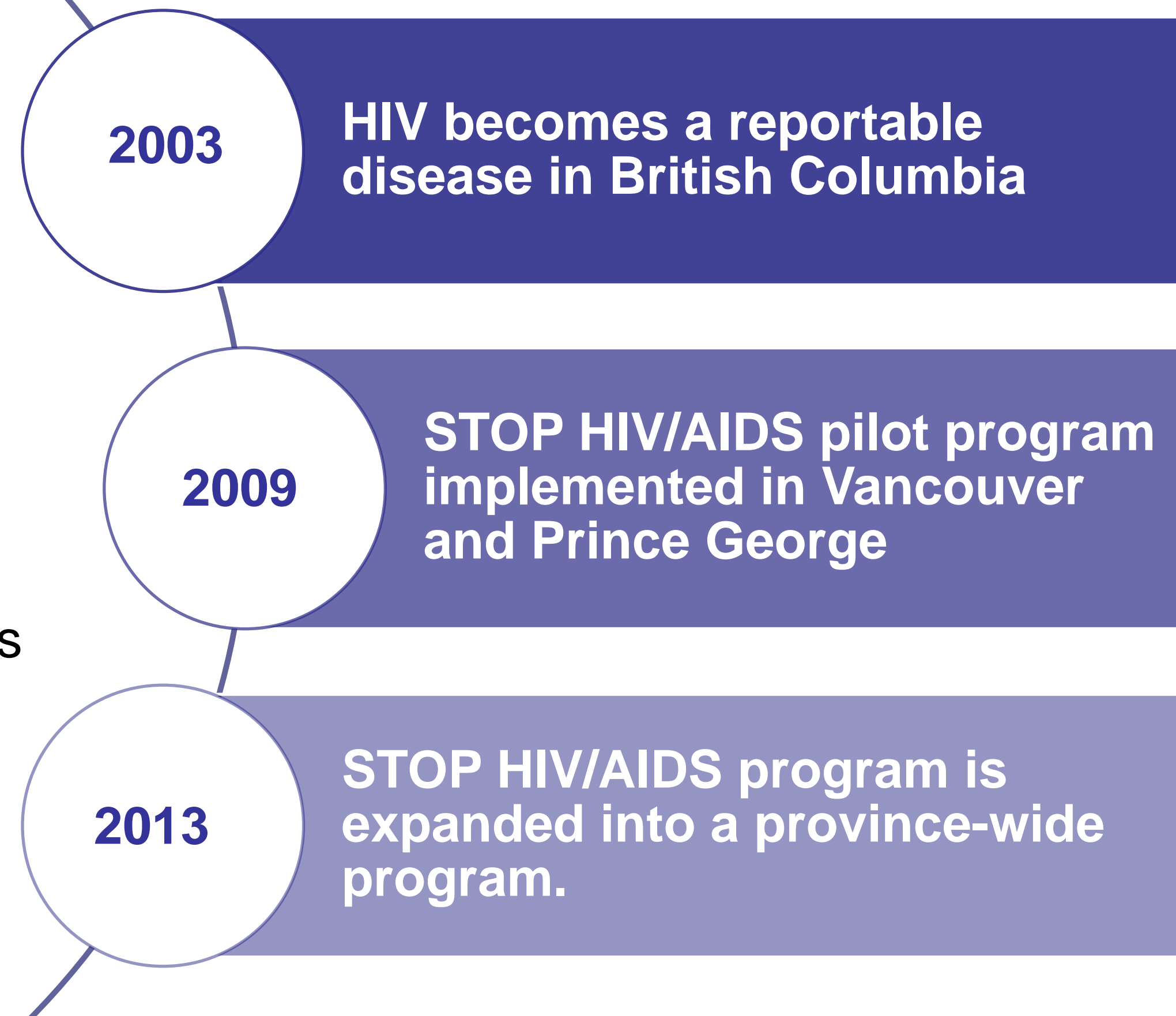


Background

- In Canada, 1 in 5 people living with HIV are unaware of their status
- Although rates of new HIV infections continue to decline in the province, more than half of new HIV diagnoses are among MSM and increasingly, among MSM who identify as visible minorities.
- Little is known about the burden of HIV on visible minority MSM in British Columbia.
- The provincial Seek and Treat for Optional Prevention of HIV/AIDS (STOP HIV/AIDS) program is aimed at increasing reach and engagement in HIV prevention and testing as well as linkage to care and treatment.
- HIV positive diagnosis on a client's first test and stage of infection at time of diagnosis can help identify potential gaps in HIV prevention and testing in BC.



Time line for STOP HIV/AIDS program in BC



Methods

- MSM newly diagnosed with HIV during 2003-2015 were linked with their previous HIV testing data from the BCCDC Public Health Laboratory.
- MSM were categorized as visible minorities (VM) or non-visible minorities (nonVM) based on self-identified ethnicity using Statistics Canada's definition as "persons, other than aboriginal peoples, who are non-Caucasian in race or non-white in colour". Self-reported ethnicity is a limitation and may not represent one's racialized status.
- Logistic regressions were used to examine associations between VM status and HIV positive diagnosis on first test, acute stage and advanced stage of infection.
- To examine trends between last negative and first positive test (inter-test intervals), Poisson regressions were calculated with VM status.

Results

Demographics

- 1,963 male clients were diagnosed from 2003 to 2015 who identified HIV exposure as MSM and whose visible minority status was known.
- Median age was 38 years (IQR: 30-46 years).

		n (%)
VM Status	Visible minority	472 (24.0)
	Non-visible minority	1,491 (76.0)
Age group	<35 years	799 (40.7)
	≥35 years	1,164 (59.3)
Diagnosed during STOP (after 2008)	Yes	979 (49.9)
	No	984 (50.1)
HIV+ diagnosis on first test	Yes	686 (35.0)
	No	1,277 (65.0)
Acute Stage of Infection <i>(defined as a previous negative within 180 days prior to first positive or by laboratory findings suggestive of acute infection)</i>	Yes	380 (19.4)
	No	928 (47.3)
	Unknown	655 (33.4)
Advanced Stage of Infection <i>(defined as CD4+ < 200 at diagnosis)</i>	Yes	215 (11.0)
	No	1,093 (55.7)
	Unknown	655 (33.4)

Predicting HIV+ Diagnosis on First Test, Acute Stage and Advanced Stage of Infection

		aORs	CI
HIV+ diagnosis on first test	VM status (visible minority)	1.80***	1.44, 2.24
	Age group (<35 years)	0.78*	0.64, 0.95
	STOP (after 2008)	0.66***	0.55, 0.80
Acute Stage of Infection	VM status (visible minority)	0.99	0.75, 1.32
	Age group (<35 years)	2.17***	1.70, 2.77
	STOP (after 2008)	1.10	0.85, 1.43
Advanced Stage of Infection	VM status (visible minority)	1.43*	1.01, 2.03
	Age group (<35 years)	0.38***	0.27, 0.54
	STOP (after 2008)	0.85	0.63, 1.16

*p<.05; **p<.01; ***p<.001

- Visible minorities had greater odds of being diagnosed as HIV+ on their first test as well as being diagnosed at an advanced stage of infection.
- Younger MSM were less likely to be diagnosed on their first test and at an advanced stage of infection. They were more likely to be diagnosed in acute stage of infection.
- MSM were more likely to be diagnosed HIV+ on their first test prior to the start of the STOP HIV/AIDS program.

Predicting Inter-test Intervals

- Median Inter-test Interval was 17 months (IQR: 7-47 months).
- VM status did not significantly predict inter-test intervals.

Conclusion

- As expected, a larger proportion of MSM were diagnosed as HIV+ on their first test prior to the STOP program. The expansion of routine testing has resulted in more regular HIV testing than before the STOP program.
- Younger MSM test routinely for HIV and are less likely to be diagnosed on their first test. They are more likely to be diagnosed in an acute stage and less likely to be diagnosed in advanced stages.
- The findings suggest that building stronger relationships with VM-MSM communities are needed to encourage engagement in HIV testing and to ensure early diagnosis and linkage to care. However, once engaged with HIV testing, inter-test intervals show no differences between VM and nonVM groups.

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Conflict of Interest Disclosure:
I have no conflicts of interest.