# HIV TESTING: PAST, PRESENT AND FUTURE

### Yesterday

- "If you can't treat me, you can't test me"
- Testing became available in 1985: ELISA test for antibodies, followed by confirmatory Western Blot
- In 1983 my partner was tested in a research project
- Early issues of confidentiality
- Public Health not always our friend
- Importance of pre and post test counselling

### Yesterday

- First tests developed required developments of antibodies to the virus
- Delays of 6 to 12 weeks before results available and/or confirmed
- Required going to a laboratory
- Blood can only be drawn by a regulated Health Care Professional
- People often lost to care
- Further delays for people in remote or rural settings

## Yesterday

- No test for HCV before 1990
- □ Test refined in 1992
- □ In 2011, estimated 245,987 with chronic HCV
- □ In 2014, 2,570 new HIV infections
- □ In 2012, 118,280 new STIs
- On the rise 2005-2014, 25-50% co-infection with HIV

"Currently, there are not enough local, regional or national campaigns to raise awareness about HIV risk, promote testing and educate people about benefits of treatment — for care and for prevention."

- Sean Rourke

- □ The shortest window period between exposure and an accurate result = 4 weeks using a 4<sup>th</sup> generation antibody test (usually within 2 to 6 weeks)
- 4<sup>th</sup> gen tests also look for antigens which are part of the virus and present in the blood
- Newer tests including POCT are still antibody tests including DBS for use in remote/rural settings, especially in Indigenous communities
- Nucleic acid test (NAT) look for the virus but are expensive and not routinely used

#### Optimism in the Sector



Estimated number of persons	low range	point estimate	high range
Living with HIV	53,980	65,040	76,100
Diagnosed with HIV	47,230	52,220	57,440
On treatment	36,470	39,790	43,140
Suppressed virus	32,430	35,350	38,260

People living with HIV (not diagnosed): 7,750 to 18,660

Point estimate = 12,820

"Reaching the first target will require efforts to increase the uptake of HIV testing by addressing issues such as risk perception, accessibility of services, community knowledge and awareness" (PHAC, 2016)

What are we doing about this 15%???



- Currently out of 1.5M tests in Canada, only 5% are
   POC (cf US with 50-60% POC)
- Point-of-care (POC) testing and self-testing options can dramatically increase rates of HIV testing and significantly reduce numbers of those undiagnosed.
- We need to bring the tests to the people, not the people to the test
- To reach the undiagnosed we need to raise awareness and reduce stigma

#### HIV/AIDS



Number of countries adopting HIV selftesting policies rises sharply 25 July 2017 | Geneva 48 40 16 2017 2017 2016 Dr. John Kim - National HIV/AIDS Labs, NML



- Stigma of criminalization of HIV non-disclosure continues to drive the epidemic underground
- We don't know the exact numbers of undiagnosed
- Estimates are at 15% of those living w HIV
- Our approaches must be population specific
- We still offer anonymous testing but we need to grapple with issues related to confidentiality of test results and reporting to PH

#### Today and Tomorrow

- Need tailored approaches for ACB and other communities of colour
- Are we making it easy for women? For heterosexuals to test?
- Are we making it easier for gbMSM to test, especially "repeat" or frequent testers who may not need counseling?

#### Tomorrow

- HIV self-testing study hoping to launch June 1<sup>st</sup> in Toronto, Montreal, Winnipeg, Saskatoon and Victoria
- Will provide HC with self test data on 1000 Canadians
- Policy work for guidelines for POC and self-testing has begun behind the scenes
- In about 3-4 weeks, HC will announce that HIV INSTI POC can be delivered by lay people – peers, volunteers – no more restrictions for medical professional only to administer

#### Tomorrow

- Rapid expansion of test availability to include more ASOs, pharmacies, community centres
- Self tests expected to be approved by HC by fall
- Policy work to create guidelines are being developed for MoH and Public Health
- Regulatory hurdles are being addressed for every province: fee schedules and billing codes
- Bulk buying will bring prices down
- Self test will be available and reimbursed in pharmacies or sold at retail (reasonably priced)

#### Vision for Tomorrow

- What should our VISION be for testing in the next 5 years?
- HIV infections are rare, down from 550 to 144/year
- Those diagnosed are linked immediately to care and treatment ("the sooner the better")
- Individuals achieve optimal health (U=U)
- gbMSM and other populations have access to rapid testing at sexual health hubs

#### **VISION** put forward

#### CANADA ENDS THE HIV EPIDEMIC BY 2025

To end the HIV epidemic in Canada, we need to sharpen our focus and efforts, set goals and targets to measure our progress and success, and implement and scale-up coordinated solutions in prevention, testing, care and treatment, and stigma reduction



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