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September 9, 2021

# THE GETAKIT PROJECT

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ONTARIO  
HIV TREATMENT  
NETWORK



uOttawa





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# Disclosures

- **Funding:** Ontario HIV Treatment Network
- **Conflicts of Interest:** None
- POB would like to thank the OHTN for his research chair in public health & HIV prevention
- **Acknowledgements:** Jennifer Lindsay, Nikki Ho, Lauren Orser, Marie-Odile Grayson, Vickie Paulin, Megan Francoeur, Sarah Lachance

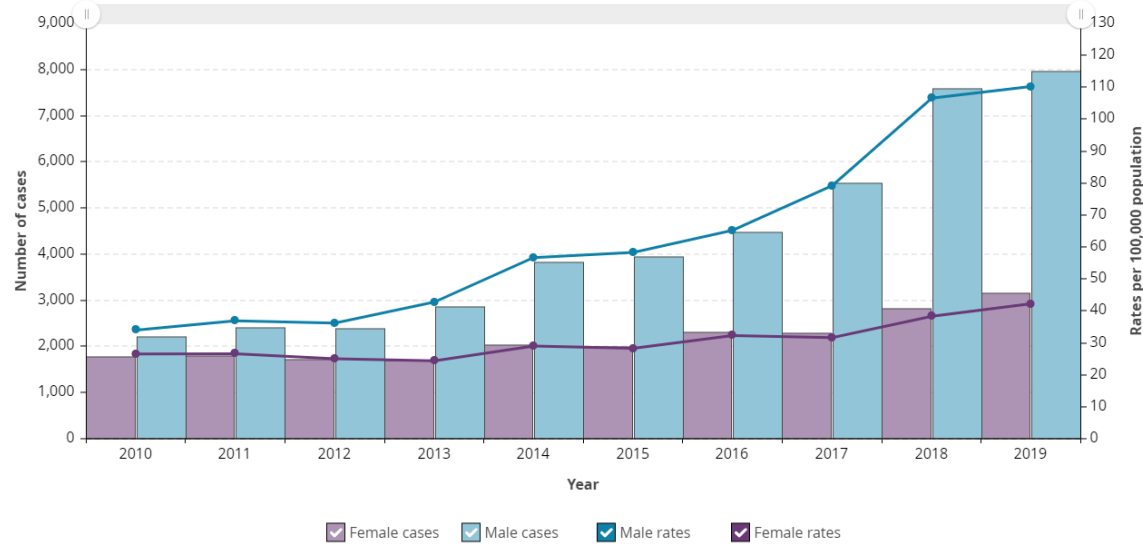


# STBBI Epidemiology

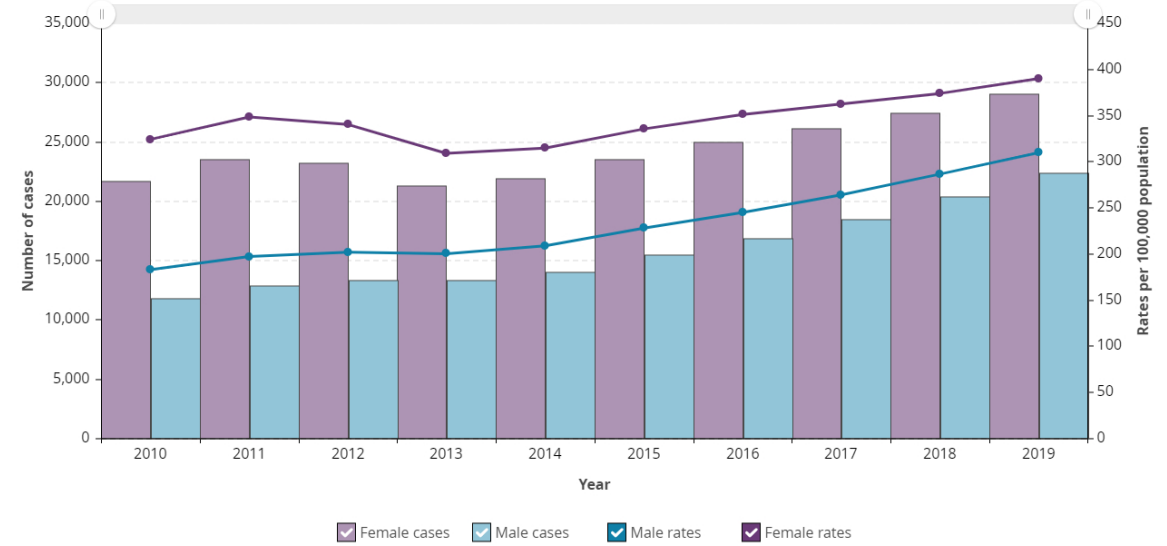


# Infectious Disease Trends in Ontario

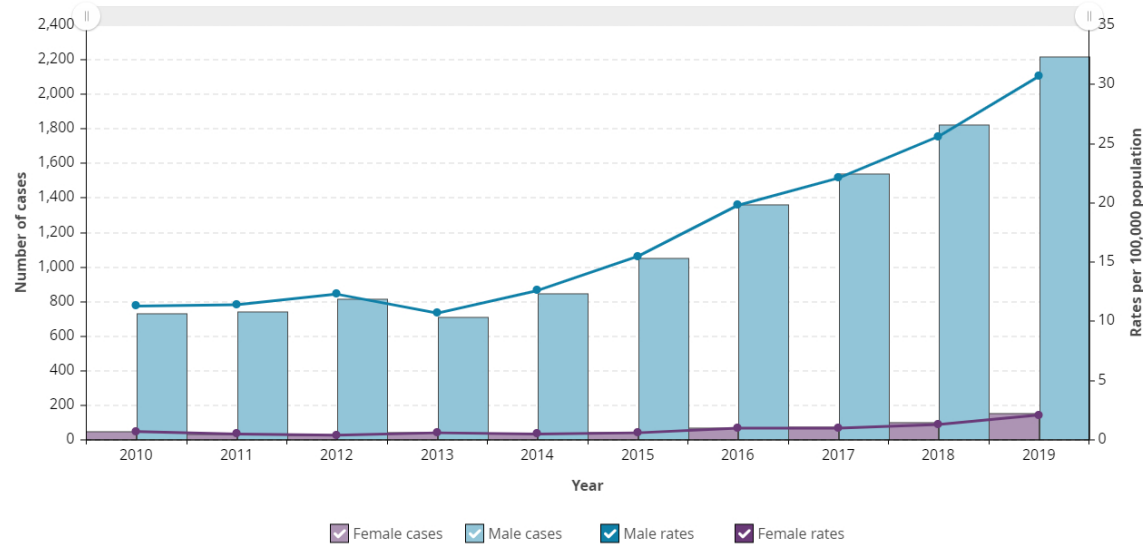
### Gonorrhea rates and cases for all ages, by sex, in Ontario



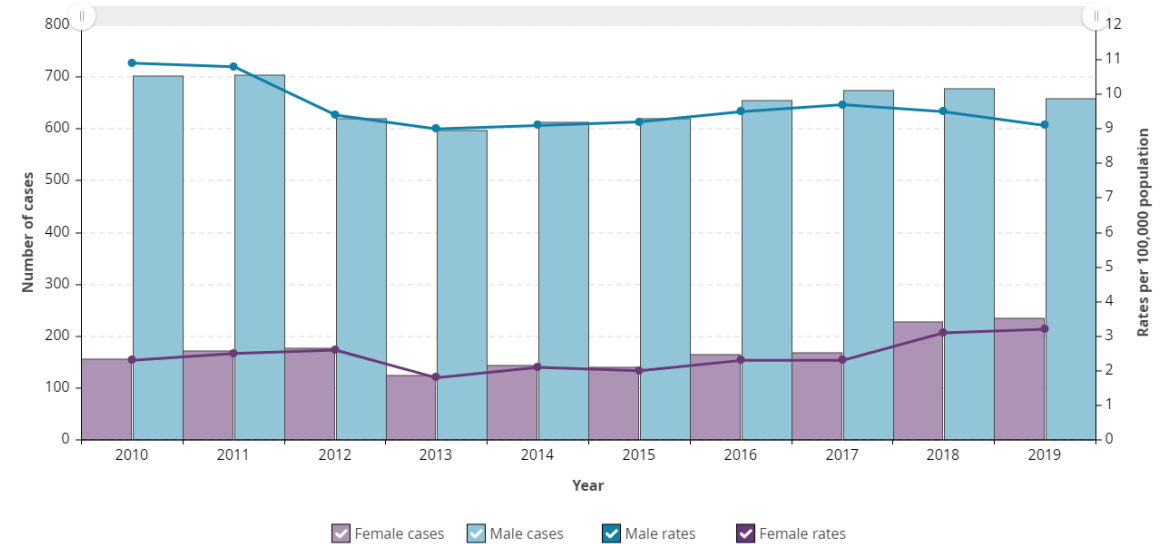
### Chlamydia rates and cases for all ages, by sex, in Ontario



### Syphilis, infectious rates and cases for all ages, by sex, in Ontario

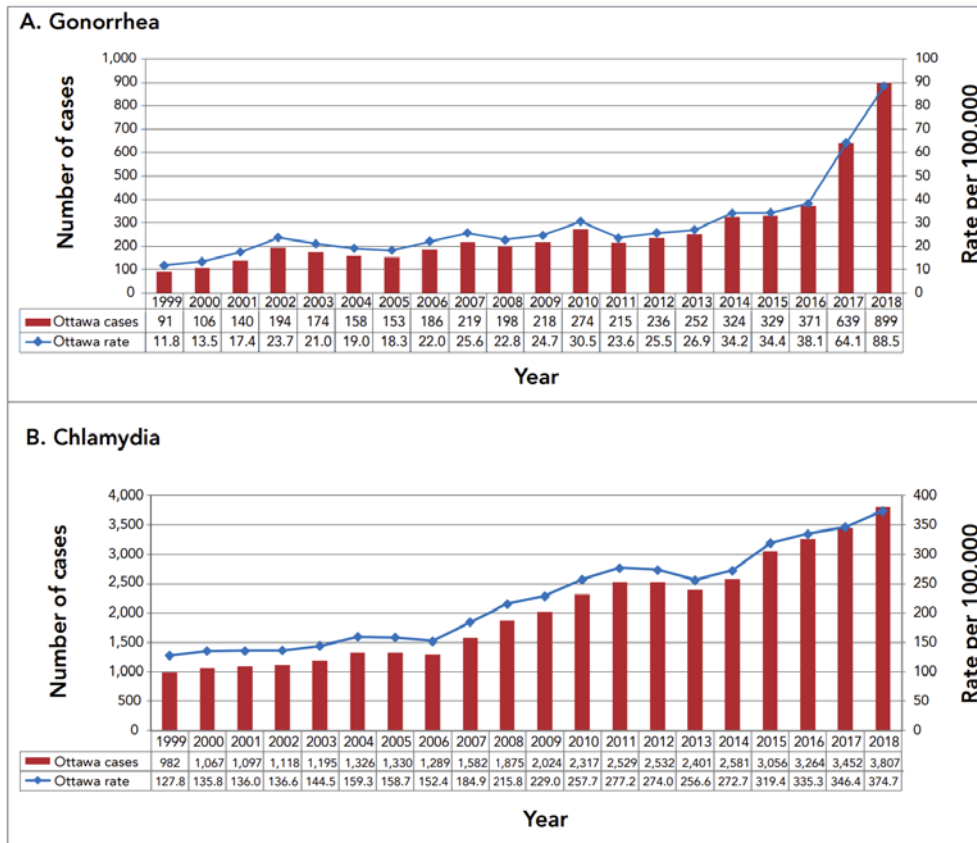


### HIV rates and cases for all ages, by sex, in Ontario



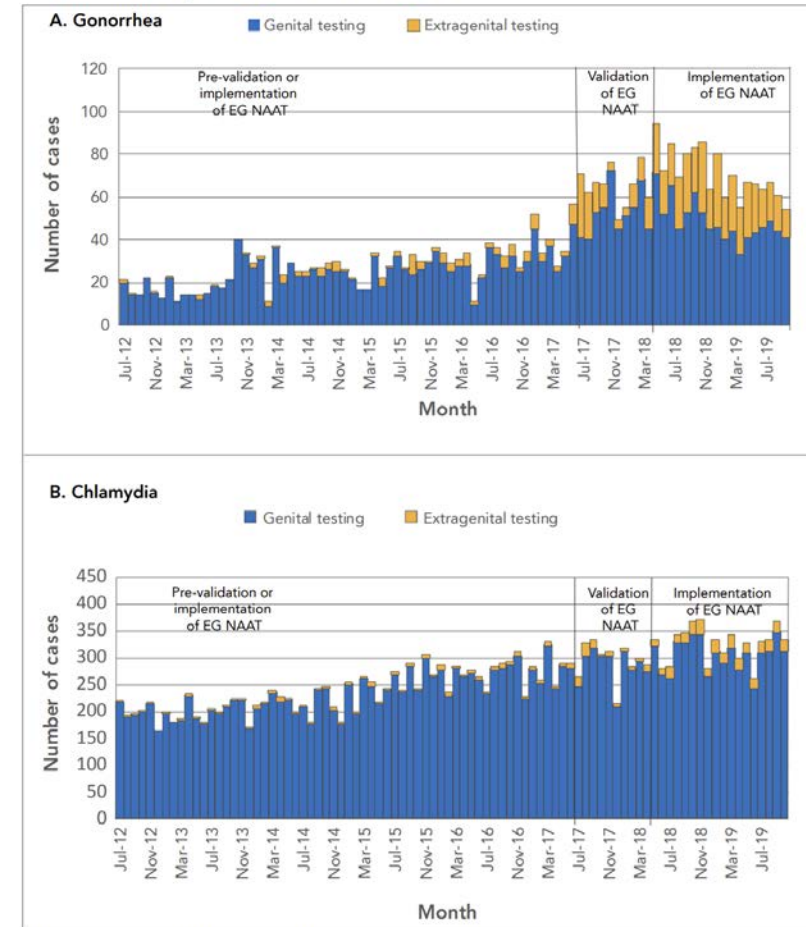
# Extragenital testing increases case detection of gonorrhoea and chlamydia: The impact of implementing nucleic acid amplification testing

Figure 1: Number and rate of diagnosis of gonorrhoea and chlamydia, Ottawa, 1999–2018



Data notes: Data downloaded from integrated Public Health Information System (iPHIS), November 8, 2019 by Ottawa Public Health (OPH). 2019 count includes reports through September 30, 2019; the 2019 rate is adjusted for partial year

Figure 2: Case-finding by genital or extragenital testing, Ottawa, July 2012–October 2019



Abbreviation: EG NAAT, extragenital nucleic acid amplification testing

# Extragenital testing increases case detection of gonorrhoea and chlamydia: The impact of implementing nucleic acid amplification testing

**Table 2: Detection of gonorrhoea or chlamydia by site of infection, gbMSM, Sexual Health Clinic<sup>a</sup>, Ottawa, July 1, 2012–June 30, 2017**

Cases	Gonorrhoea			Chlamydia		
	Number of cases	Average annual number of cases	Percent of all cases	Number of cases	Average annual number of cases	Percent of all cases <sup>b</sup>
All cases	258	51.6	100.0%	414	82.8	100.0%
Total with known site	258	51.6	100.0%	413	82.6	99.8%
Genital only	140	28	54.3%	215	43	51.9%
Genital and extragenital	37	7.4	14.3%	27	5.4	6.5%
Extragenital only	81	16.2	31.4%	171	34.2	41.3%
Pharyngeal	14	2.8	5.4%	18	3.6	4.3%
Rectal	61	12.2	23.6%	142	28.4	34.3%
Pharyngeal and rectal	6	1.2	2.3%	11	2.2	2.7%
Other	0	0	0.0%	1	0.2	0.2%

Abbreviation: gbMSM, gay, bisexual, and other men who have sex with men

<sup>a</sup> Data source: Ministry of Health and Long-term Care, integrated Public Health Information System, extracted by Ottawa Public Health, November 19, 2019

<sup>b</sup> Does not include one case where site was unknown

**Table 3: Detection of gonorrhoea or chlamydia by site of infection, gbMSM, Sexual Health Clinic<sup>a</sup>, Ottawa, May 1, 2018–October 31, 2019**

Cases	Gonorrhoea			Chlamydia		
	Number of cases	Average annual number of cases	Percent of all cases	Number of cases	Average annual number of cases	Percent of all cases <sup>b</sup>
All cases	348	219.8	100.0%	332	209.7	100.0%
Total with known site	348	219.8	100.0%	330	208.4	99.4%
Genital only	41	25.9	11.8%	75	47.4	22.6%
Genital and extragenital	64	40.4	18.4%	40	25.3	12.0%
Extragenital only	243	153.5	69.8%	215	135.8	64.8%
Pharyngeal	106	66.9	30.5%	19	12.0	5.7%
Rectal	72	45.5	20.7%	152	96.0	45.8%
Pharyngeal and rectal	65	41.1	18.7%	44	27.8	13.3%
Other	0	0.0	0.0%	2	1.3	0.6%

Abbreviation: gbMSM, gay, bisexual, and other men who have sex with men

<sup>a</sup> Data source: Ministry of Health and Long-term Care, integrated Public Health Information System, extracted by Ottawa Public Health, November 19, 2019

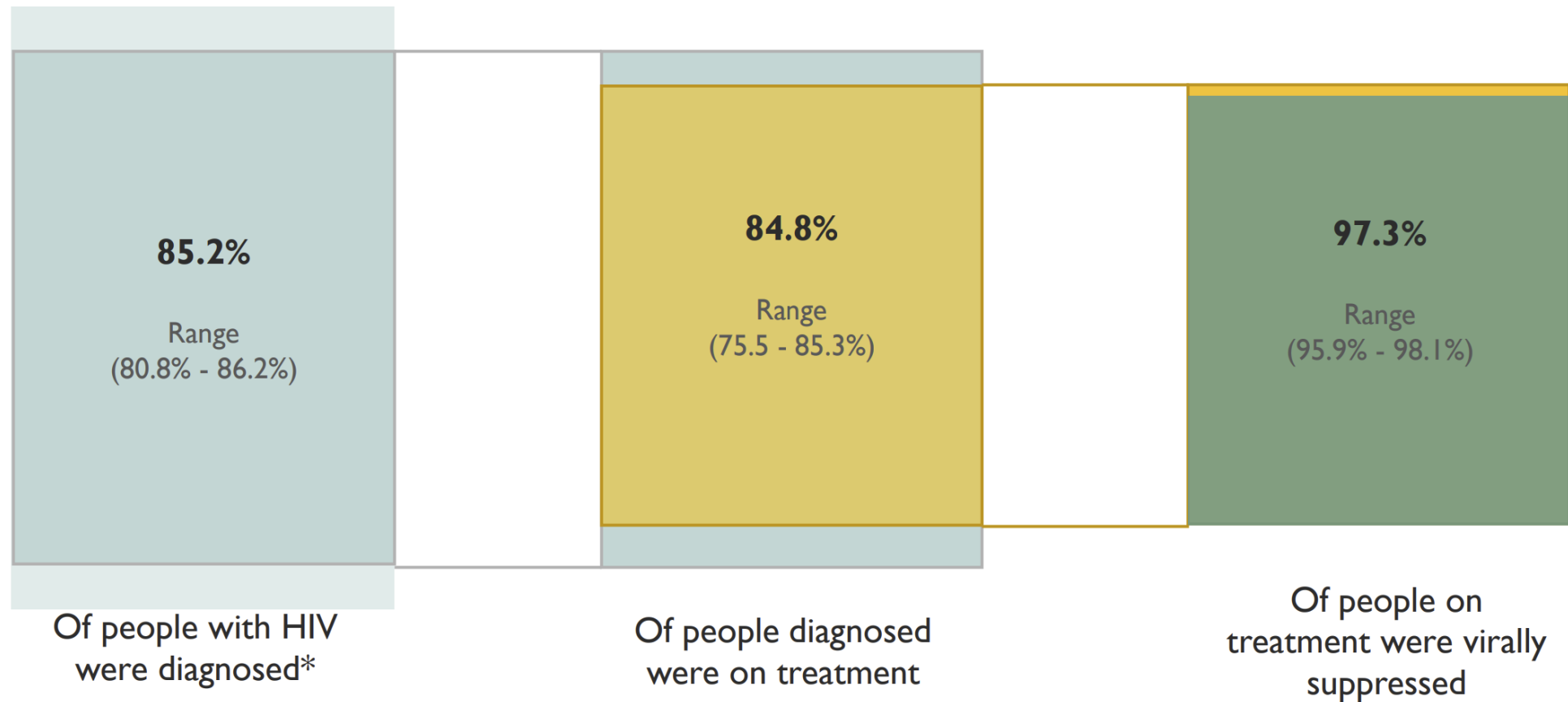
<sup>b</sup> Does not include two cases where site was unknown



# HIV care cascade in Ontario: Linkage to care, in care, on antiretroviral treatment, and virally suppressed, 2018



**Figure 1.2** 90-90-90 Estimates, Ontario, 2018





**(HIV Self-Test Pilot)**

# Overview

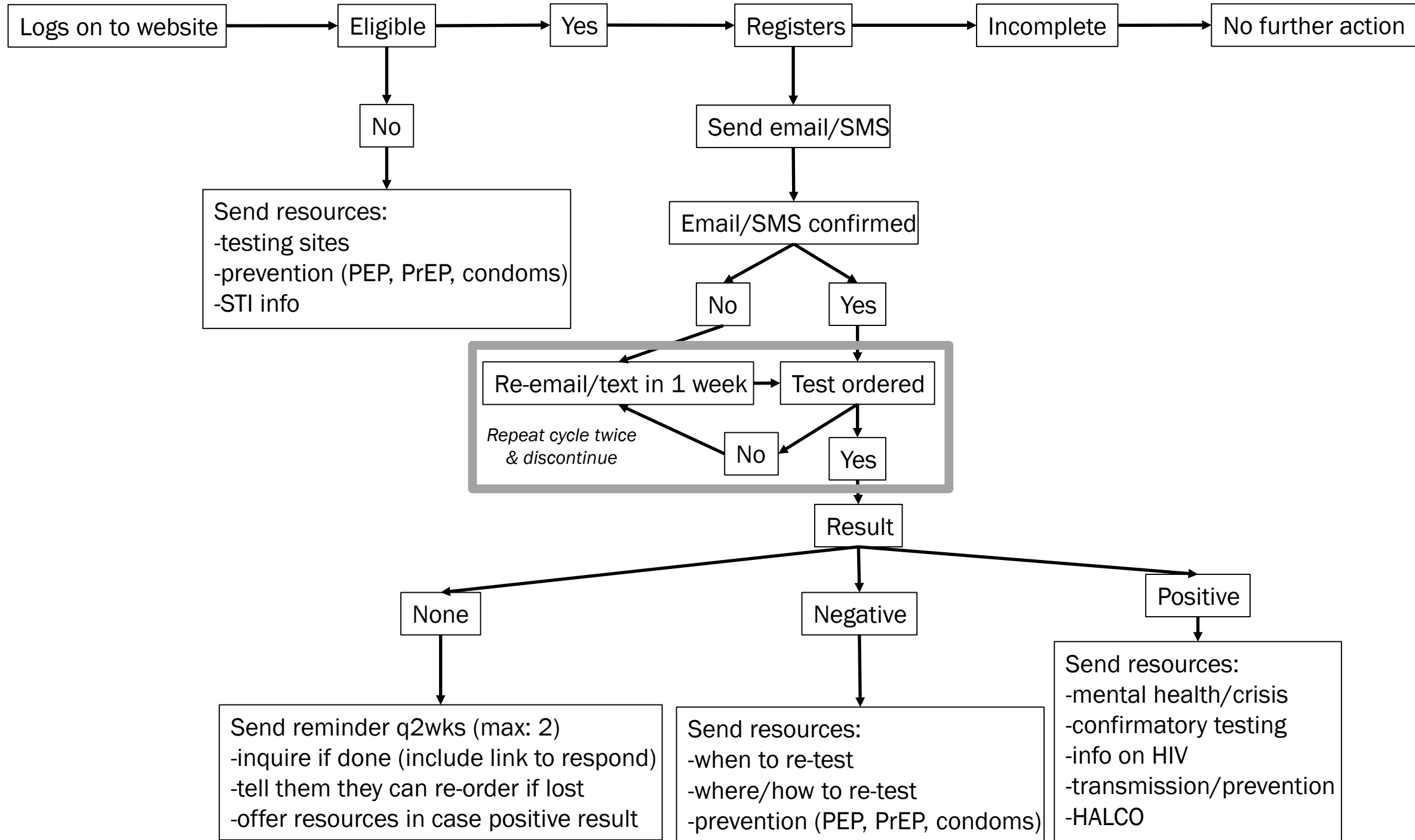
*What is GetaKit?*

- A study to evaluate mail-out delivery of free HIV self-tests

*We want to know:*

- How many people use GetaKit?
- Who uses GetaKit?
- What are the test results associated with GetaKit?
- Are participants with positive results linked to confirmatory testing and care?





# Order an HIV test. Do it at home. Get your results.

GetaKit is a study that offers mail-out delivery of free HIV self-test kits in Ontario.

## You're eligible if you are:

- 16 or older
- HIV negative, or unsure of your status
- Not enrolled in an HIV vaccine trial
- Not diagnosed with a bleeding disorder

If you have symptoms of HIV, or if one of your partners has been recently diagnosed with HIV, or if you think you need PEP, [there may be better resources](#).

[Let's get started](#)[Report a test result](#)



GetaKit.ca



When you're ready let's get started.



Lorsque vous êtes prêt, commençons.



Contents of your HIV Self Test kit.



Contenu de votre trousse d'autotest pour le VIH.

NOTHING GETS IN THE WAY OF YOUR HIV SELF TEST KIT. YOU CAN GET IT ANYWHERE YOU WANT. IT'S FREE. IT'S FAST. IT'S PRIVATE. IT'S YOURS.

Il n'y a rien qui empêche de passer votre test VIH. Vous pouvez l'obtenir n'importe où. C'est gratuit. C'est rapide. C'est discret. C'est à vous.



### Instructions.

**Step 1 (Étape 1):** Wash your hands with soap and water for 20 seconds. Dry your hands thoroughly.

**Step 2 (Étape 2):** Peel the top layer off the test card. Use the lancet to prick your finger.

**Step 3 (Étape 3):** Squeeze your finger and apply the blood to the test card. Wait for the results to appear.

**Marche à suivre.**



## HUMAN IMMUNODEFICIENCY VIRUS (HIV)

**What is HIV?**  
HIV is a virus that weakens the immune system (your body's defense against illness). It can be passed from someone with transmissible HIV to another person without HIV. HIV can be found in the blood, semen (including pre-cum), vaginal fluids, rectal fluids and breast milk of people with HIV. Without treatment, HIV can make your immune system too weak to fight infections – which can lead to AIDS.

**Am I at risk for HIV?**

Higher Risk	Lower Risk
<ul style="list-style-type: none"> <li>• Anal sex</li> <li>• Vaginal or front hole sex</li> <li>• Needle sharing</li> </ul>	<ul style="list-style-type: none"> <li>• Oral and rimmed sex</li> <li>• Sharing sex toys</li> <li>• Blood on cuts or scrapes</li> </ul>

**Would I know if I had HIV?**

- Most people do not have symptoms of HIV
- The best way to know your HIV status is to get tested
- Some people do have symptoms, which usually last for longer than 5 days, and can include: fever, rash, night sweats, feeling tired, sore throat, headache, swollen lymph nodes, joint or muscle pain, stomach upset (nausea, diarrhea), or losing weight
- If you have any of these symptoms, make sure you get tested for HIV by blood draw

**How do I get tested for HIV?**

Rapid test	Blood draw test
<ul style="list-style-type: none"> <li>• This test you are doing now</li> <li>• Results can be seen right away</li> <li>• Blood taken from finger</li> <li>• 99.9% accurate</li> <li>• Takes up to 3 months to see HIV after contact</li> <li>• If negative, repeat the test in 3 months</li> <li>• If positive, you need to do a blood test to confirm at the Sexual Health Clinic as soon as possible at 513-246-4641</li> </ul>	<ul style="list-style-type: none"> <li>• Done by a healthcare provider</li> <li>• Results take up to 2 weeks to come back</li> <li>• Sent to a lab for testing</li> <li>• Almost 100% accurate</li> <li>• Takes up to 6 weeks to see HIV after contact</li> <li>• If positive, you will be contacted by a public health nurse and linked to HIV services/medication</li> </ul>

**Are there benefits of doing an HIV test?**

- If HIV-positive, early HIV detection and treatment can lead to better long-term health outcomes when you are linked to services including HIV support, care, and prevention
- Knowing your status and getting treatment can protect others from getting HIV
- If HIV negative, you have HIV prevention options like PrEP, PEP, condoms & harm reduction

**Are there risks of doing an HIV test?**

- Possible negative reaction or stigma from friends, family, or partners
- Stress of coping with HIV as a long-term condition

**Where can I get more information?**

- Ottawa Public Health: <https://www.ottawapublichealth.ca/en/public-health/topics/aids-and-hiv.aspx>
- The AIDS Committee of Ottawa (ACO): <http://aco.cao.ca/>
- MAX Ottawa: <http://maxottawa.org/>
- CATE – Canada's source for HIV and Hep C information: <https://www.cate.ca/>



## HIV self-testing in Ottawa, Canada used by persons at risk for HIV: the GetaKit study

Patrick O'Byrne<sup>1\*</sup>, Alexandra Musten<sup>2</sup>, Amanda Vandyk<sup>1</sup>, Nikki Ho<sup>1</sup>, Lauren Orser<sup>1</sup>, Marlene Haines<sup>1</sup>, Vickie Paulin<sup>3</sup>

CCDR 2021; 47-9/10

Table 2: Characteristics of eligible participants for Getakit.ca program

Characteristic	Description	N	%
Member of a priority population (n=399)	Yes	283	71
	No	116	29
Age (years) (n=395)	25 years or younger	110	28
	26 to 49 years old	257	65
	50 years and older	28	7
Ethnicity (n=399)	Arab	16	4
	Black	23	6
	Indigenous	16	4
	Latin	13	3
	Mixed	22	6
	South Asian	13	3
	Southeast Asian	25	6
	White	264	66
Gender (n=395)	Men (includes trans men)	270	68
	Women (includes transgender women)	115	29
	Gender non-conforming	10	3
Sexual orientation (n=390)	Gay (all genders)	287	74
	gbMSM	229	57
	Straight	103	26

Table 5: Characteristics of participants who reported their HIV self-test results

Reporting and status of HIV results	Details	Number of participants	%
Reported their HIV results through GetaKit.ca website (n=399)	Yes	228	57.1
	No	171	43
HIV status after GetaKit testing (n=228)	Negative	177	77.6
	Positive	1	<1
	Unknown (invalid test result)	47	20.6
	Declined to disclose result	3	1

Abbreviation: HIV, human immunodeficiency virus



# Order a test. Do it at home. Get your results.

GetaKit is a study about the mail-out delivery of free HIV self-test kits in Ontario.

Please select the best web site for you to order an HIV self-test:



**GetaKit  
Ottawa &  
Surrounding  
Regions**

GETAKIT.CA/OTTAWA      ENGLISH/FRENCH



**GetaKit  
by  
Black CAP**

GETAKIT.CA/BLACKCAP      ENGLISH/FRENCH



**GetaKit by  
AIDS  
Committee  
of Durham  
Region**

GETAKIT.CA/ACDR      ENGLISH/SPANISH



**GetaKit by**



**GetaKit**





Home Contact Resources Français Español

Order a test. Do it at home.  
Get your results.

GetaKit is a study about the mail-out delivery of free HIV self-test kits in Ontario.  
Please select the best web site for you to order an HIV self-test.

**GetaKit by Ottawa & Surrounding Regions**

**GetaKit by Black CAP**

**GetaKit by AIDS Committee of Durham Region**

**GetaKit by Gilbert Centre**

**GetaKit by the Centre for Spanish-Speaking Peoples**

**GetaKit by Asian Community AIDS Services**

**GetaKit by PARN**

**GetaKit by the AIDS Committee of Toronto**

**GetaKit by AIDS Committee of Ottawa**

**GetaKit by Positive Living Niagara**

**GetaKit by MAX Ottawa**

**GetaKit by Regional HIV/AIDS Connection**

**GetaKit by the AIDS Network**

- Durham Region (AIDS Committee of Durham Region)
- Hamilton (The AIDS Network)
- Peterborough (Peterborough AIDS Resource Network)
- London (Regional HIV/AIDS Connection)
- Niagara Region (Positive Living Niagara)
- Ottawa
  - AIDS Committee of Ottawa
  - Max Ottawa
  - Ottawa
- Toronto
  - AIDS Committee of Toronto
  - Asian Community AIDS Services
  - Black CAP
  - Centre for Spanish-Speaking Peoples
- Simcoe / Muskoka (Gilbert Centre)



(STI Expansion)

# STI Expansion

- Expand GetaKit to include STI testing
  - Gonorrhea
  - Chlamydia
  - Syphilis
  - HIV
  - Hepatitis C
  
- Evaluate uptake and outcomes



# Case Example 1

- 24yo Black cis-female presents to clinic for routine testing.
- No symptoms. No concerns.
- Last sexual contact ~3 weeks ago with new cis-male partner.
- Routinely engages in oral (give/receive) and vaginal sex. No condom use.
- Last tested ~2 years ago. Has had new partners since.
- Has Mirena in situ for 3 years. Amenorrheic for ~2 years.
- What services are indicated according to guidelines?



# Case Example 1 – Indicated Services

- Gonorrhea/chlamydia NAAT (self-vaginal)
- Syphilis serology
- HIV serology
  
- Repeat serology outside window periods



**Table 4: Comparison of Hologic® Aptima Combo 2® Assay Specimens vs. Patient Infected Status in Females for *Chlamydia trachomatis* and *Neisseria gonorrhoeae* Nucleic Acid Amplification Testing<sup>1</sup>**

	Sensitivity	Specificity
<i>Chlamydia trachomatis</i> Endocervical Swab	94.2 %	97.6 %
<i>Chlamydia trachomatis</i> Urine	94.7 %	98.9 %
<i>Chlamydia trachomatis</i> Clinician-collected Vaginal Swab	96.6 %	96.8 %
<i>Chlamydia trachomatis</i> Patient-collected Vaginal Swab	98.4%	96.8%
<i>Neisseria gonorrhoeae</i> Endocervical Swab	99.2 %	98.7 %
<i>Neisseria gonorrhoeae</i> Urine	91.3 %	99.3 %
<i>Neisseria gonorrhoeae</i> Clinician-collected Vaginal Swab	96.0 %	99.2 %
<i>Neisseria gonorrhoeae</i> Patient-collected Vaginal Swab	100%	99.5%

<sup>1</sup> Hologic® Aptima Combo 2® Assay package insert. San Diego, CA Hologic, Inc.; 2019-02.

## Chlamydia trachomatis/Neisseria gonorrhoeae (CT/GC) – Nucleic Acid Amplification Testing – Swabs



Rectal and pharyngeal testing is recommended in case of unprotected sexual exposure at oral and anal sites only for the following groups:

- men who have sex with men (MSM);
- sex workers and their contacts;
- patients who are known contacts of those infected with CT or GC.

At present, for women, there is insufficient evidence to support a policy of routine screening at rectal and pharyngeal sites for chlamydia and gonorrhea. However, this may represent a relative lack of studies examining extragenital transmission in this group. As a result, if there is clinical concern regarding rectal or pharyngeal infection with chlamydia or gonorrhea in a woman presenting to care, testing at these sites can be offered.

# Case Example 2

- 42yo white cis-male presents to clinic for routine STI screen. No symptoms. No concerns.
- Last sexual contact 5 days ago with new cis-male partner. Has trans-female partners as well.
- Routinely engages in oral (give/receive) and anal sex (top/bottom). No condom use.
- Last tested ~4 years ago. Has had new partners since.
- Past history includes rectal chlamydia (~18 mos ago) and early latent syphilis (~7 months ago).
- What services are indicated according to guidelines?



# Case Example 2 – Indicated Services

- Gonorrhea/chlamydia NAAT (pharynx, rectum, urine)
- Syphilis serology
- HIV serology
- Hepatitis C serology (consider)
  
- Hepatitis A vaccination
- Nonvalent HPV vaccination
- PrEP





Comprehensive clinical practice guidelines are available for providers in prescribing PrEP to reduce the risk for HIV infection (80). Among HIV-negative sexually active men and women, bacterial STIs are key indicators of risk for HIV acquisition. Studies have documented the risk for HIV acquisition among MSM within 1 year after infection with rectal gonorrhea or chlamydia (one in 15 men), primary or secondary syphilis (one in 18), and among men with no rectal STI or syphilis infection (one in 53) (81–83). Sexually active adults and adolescents should be screened for STIs (e.g., chlamydia, gonorrhea, and syphilis) in accordance with recommendations, and persons with infection should be offered PrEP. The USPSTF recommends that persons at risk for HIV acquisition be offered PrEP (84). Persons at risk for HIV acquisition include HIV-negative persons whose sexual partner or partners have HIV infection (especially if viral load is detectable or unknown), persons who have had gonorrhea or syphilis during the previous 6 months, and injecting drug users who share injection equipment (84).



## Human papillomavirus vaccine: Canadian Immunization Guide



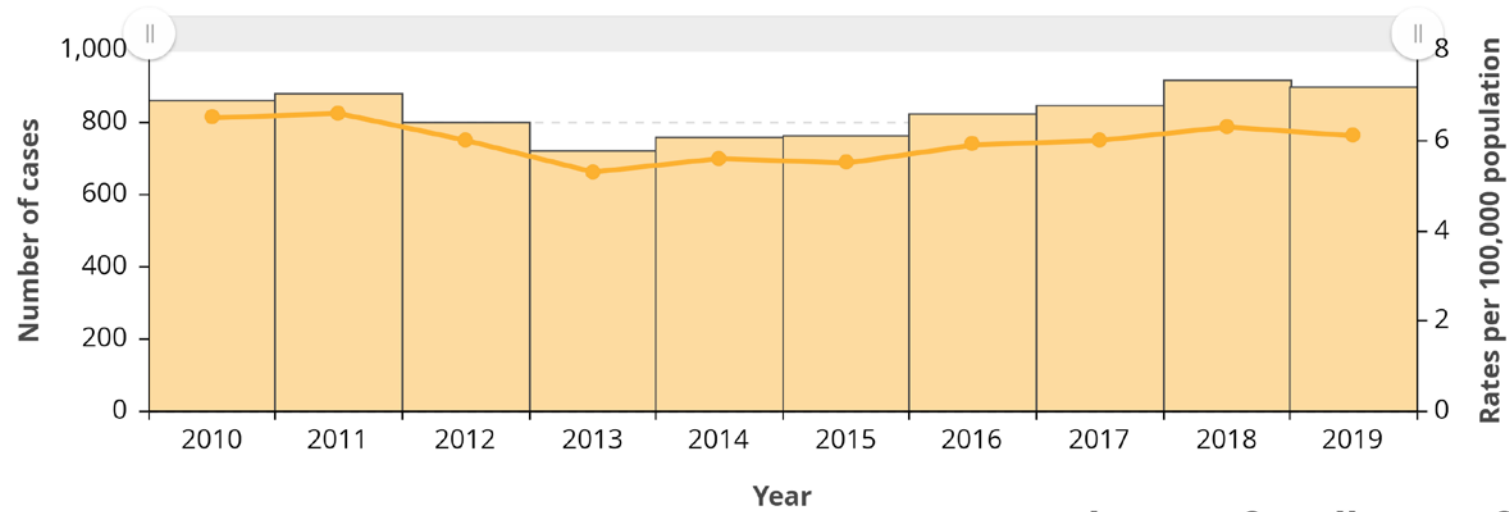
Government  
of Canada

Gouvernement  
du Canada

### Men who have sex with men (MSM)

Compared to the general population, MSM have a disproportionately high burden of HPV infection, particularly high-risk HPV types 16 and 18. Infection with high-risk HPV types is associated with anal cancer and its precursor, particularly among MSM who are HIV-positive. Early receipt of HPV4 or HPV9 vaccine will confer maximum benefit, because MSM may become infected with HPV more rapidly, due to the high rate of infection in the MSM population. HPV4 or HPV9 vaccine is recommended for men less than 27 years of age who have sex with men. Although there are no data on the efficacy of HPV4 or HPV9 vaccine in men 27 years and older who have sex with men, immunization with HPV4 or HPV9 vaccine should be strongly considered because of their increased risk of HPV related diseases. HPV vaccination prior to onset of sexual activity and exposure to HPV is recommended to maximize the benefit of the vaccine.

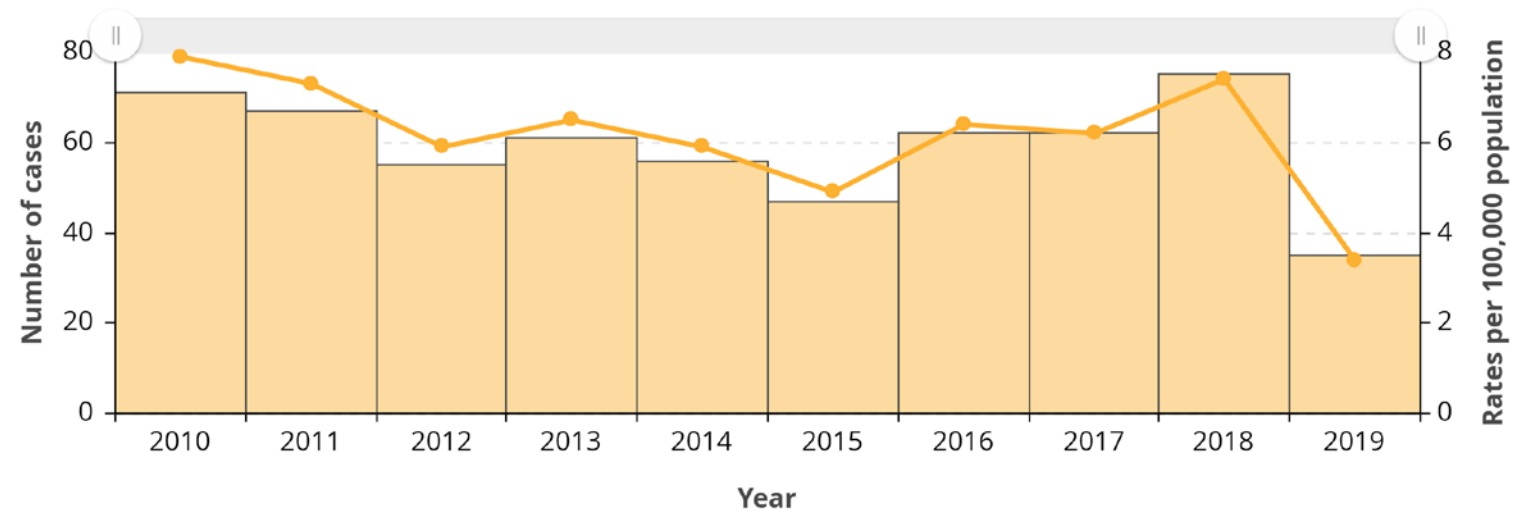
## HIV rates and cases for all ages, for all sexes, in Ontario



## Infectious Disease Trends in Ontario

Public Health Ontario | Santé publique Ontario

## HIV rates and cases for all ages, for all sexes, in Ottawa Public Health





## Section 2: Canadian Guidelines on Sexually Transmitted Infections – Primary care and sexually transmitted infections

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### Section 2 - Primary Care and Sexually Transmitted Infections

#### Prevention, Diagnosis and Clinical Management of Sexually Transmitted Infections in the Primary Care Setting

It is important for practitioners to recognize that sexually transmitted infection (STI) risks will vary from person to person and should be viewed as dynamic across the lifespan.

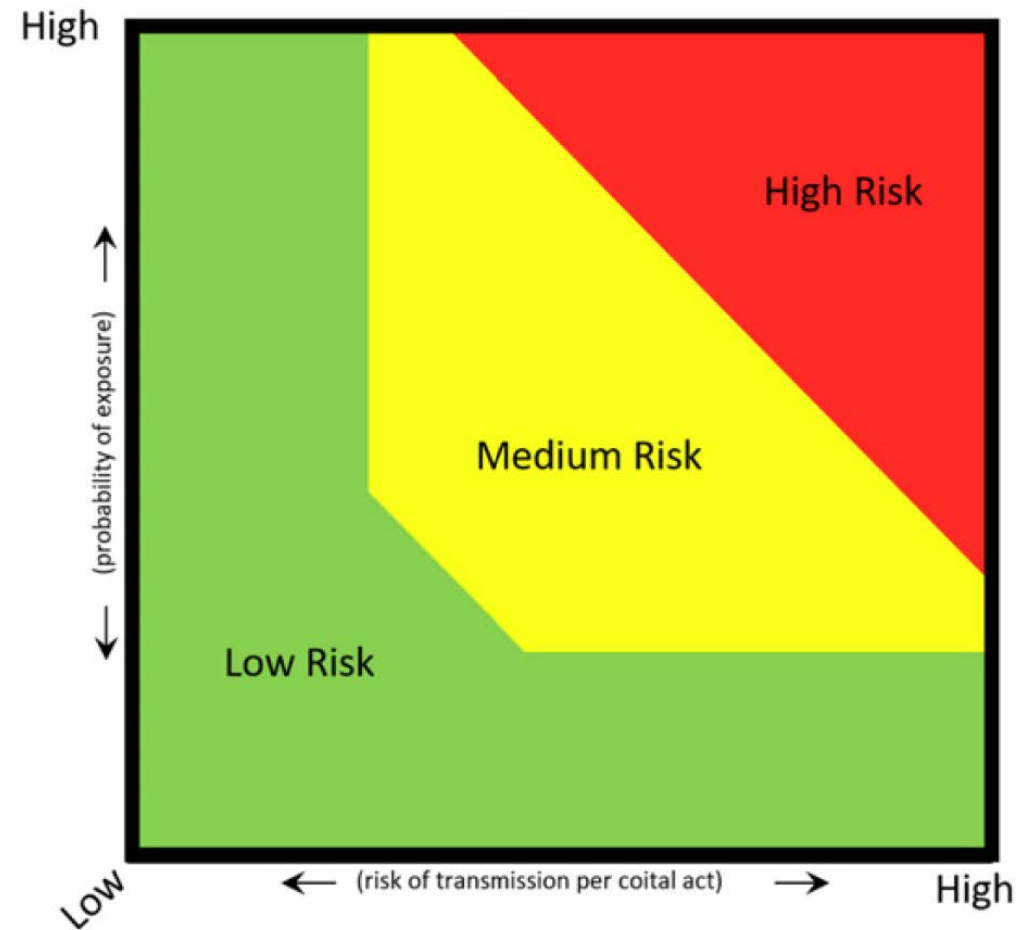
#### 2. Knowing about STI Risk Factors and Epidemiology

Identifying the index of suspicion of STI infection in a patient requires the health care practitioner to understand the epidemiologic trends of STIs, as well as the risk factors associated with STI transmission and infection.



# Automated STI/HIV risk assessments: Testing an online clinical algorithm in Ottawa, Canada

Patrick O'Byrne<sup>1</sup>, Alexandra Musten<sup>2</sup>, Lauren Orser<sup>1</sup> and  
Scott Buckingham<sup>3</sup>



**Figure 1.** STI/HIV risk matrix. STI: sexually transmitted infection.



# Automated STI/HIV risk assessments: Testing an online clinical algorithm in Ottawa, Canada

Patrick O'Byrne<sup>1</sup>, Alexandra Musten<sup>2</sup>, Lauren Orser<sup>1</sup> and  
Scott Buckingham<sup>3</sup>

Test Qualification Thresholds						
HIV (sero)	CTGC(EG)	Syphilis	CTGC(genital)	HIV (self-test)	Hepatitis	COVID
25	43.5	21.4	39.9	30	15	50
<b>Selected Population</b>					Risk from partners	
Woman ▾	Cis ▾	Sex with men ▾	South Asian ▾	More than 12 mo ▾	None ▾	Age 16-29 ▾
Group	Test	Test Required	Final Score	Pop. Multiplier	Pop. Score	Question Score
HIV	HIV Serology	Yes	30.1	10.75	16	2.8
HIV	HIV Self-Test	No	9.675	10.75	16	0.9
CTGC	Oral	No	11.97	85.5	45	0.14
CTGC	Rectal	No	-307.8	85.5	45	-3.6
CTGC	Vaginal	Yes	467.685	85.5	45	5.47
CTGC	Urine	No	0	85.5	45	0
Syphilis	Syphilis	Yes	38.1625	10.75	16	3.55
Hepatitis	Hep C	No	4.25	4.25	10	1

# Questions / Comments

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