A white computer keyboard is visible in the upper right corner of the image. A black stethoscope is positioned diagonally across the right side of the image, with its chest piece resting on the keyboard and its earpieces extending towards the bottom right. The background is a plain, light-colored surface.

Preventing and Managing Sexually Transmitted Infections McGill Annual Refresher Course for Family Physicians December 4, 2019

Dr. Robert Carlin, MDCM, CCFP, FCFP
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CLSC Métro, GMF-U Village Santé, CIUSSS Centre-Ouest

Disclosure for Dr. Robert Carlin

- **Question 1:** Do you intend to make therapeutic recommendations for medications that have not received regulatory approval (i.e. “off-label” use of medication)?

Yes, noted twice in presentation

- **Question 2:** Have you had an affiliation (financial or otherwise) with a pharmaceutical, medical device or communications organization?

No

Objectives for Workshop

Understand

Understand various forms of stigma and develop strategies to create inclusive spaces (approximately 15 minutes)

Develop

Develop skills to manage common STBBIs seen by the Family Physician in Montreal (approximately 30 minutes)

Understand

Understand prevention options available for HIV and other STBBIs (approximately 15 minutes)



Learners' Rights

- Participate
- Pass
- Privacy
- Respect
- Fun

Pre-Lecture Survey

- Would you consider yourself comfortable to extremely comfortable talking about sexual health? Not at all?
- Would you consider yourself comfortable to extremely comfortable talking about harm reduction strategies? Not at all?
- Would you consider yourself aware to extremely aware of STBBI treatment and prevention? Not at all?

A Few Definitions

- STBBIs – sexually transmitted and blood borne infections includes chlamydia, genital herpes, gonorrhoea, hepatitis B, hepatitis C, HIV, human papillomavirus, syphilis, public lice, syphilis, trichomoniasis, and others

A Few Definitions

- Harm reduction – examples: condom distribution, education programs, naloxone programs, needle exchange programs, peer support programs, supervised injection facilities
- Sex-positivity – recognizes sexuality as a central to the human experience, attempts to remove some of the shame often associated with sexuality

A Few Definitions

- Trauma-informed care –
- “In trauma-informed services, safety and empowerment for the service user are central, and are embedded in policies, practices, and staff relational approaches. Service providers cultivate safety in every interaction and avoid confrontational approaches. Trauma-informed approaches are similar to harm-reduction-oriented approaches, in that they both focus on safety and engagement.”

A Few Definitions

Trauma-informed care –

“A key aspect of trauma-informed services is to create an environment where service users do not experience further traumatization or re-traumatization (events that reflect earlier experiences of powerlessness and loss of control) and where they can make decisions about their treatment needs at a pace that feels safe to them.”

Short Exercise

- Think of the most important person in your life.
- Remember this name.
- Think of the three most important things in your life (i.e. activities, hobbies, pets).
- Remember these three things.

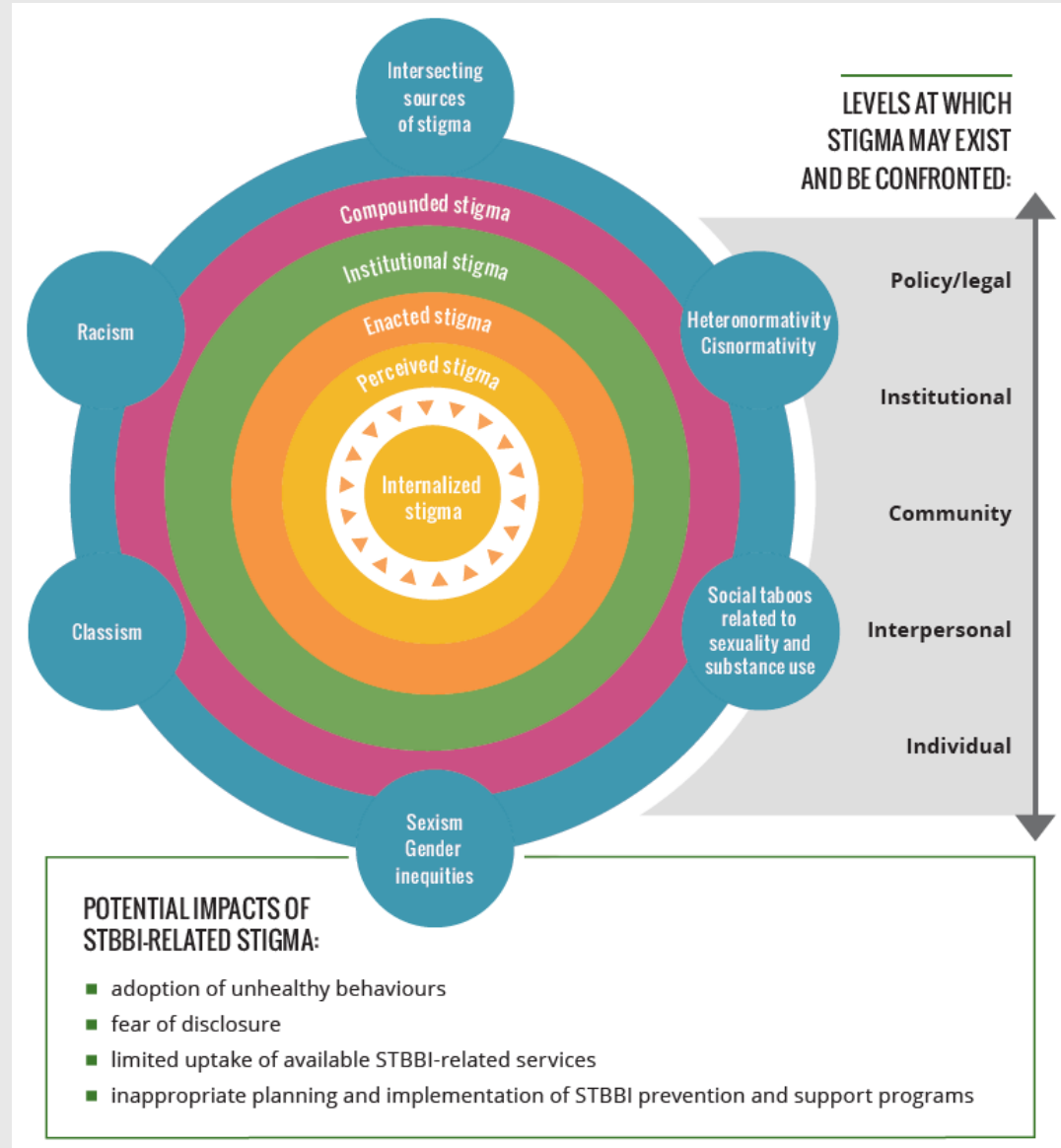
Talk to your neighbor - 2 min

- Describe what you did this past weekend.
- You CANNOT mention the most important person and three most important things in your life.



How did you feel?

- What did you share?
- Do you feel that you got to know your neighbour?
- Did you accidentally talk about anything on your list? Did you feel stressed? Did you have to “police” what you said?
- Do you think that your patients censor themselves? Around gender identity, relationships, sexual orientation, sexual practice, substance use?



What can you do?

1. Clarify your values
2. Use correct terminology and inclusive language
3. Avoid assumptions (gender, orientation, sexual activity, knowledge)
4. Be aware of your body language
5. Respect your patients' right to privacy and confidentiality
6. Ensure patients understand limits to confidentiality
7. Consider your professional obligations
8. Create and maintain inclusive and affirming spaces

Inclusive Spaces

SEE:

What are some indicators within your workplace that would signify that it is an inclusive space for all people?

What are some barriers?

HEAR:

Is the language used within your workplace inclusive and respectful?

Is there space for private conversations?

FEEL:

How do people feel within your service setting?

How do you know?



Epidemiology

How many Quebecers are diagnosed with an STBBI each year?

What percentage of all MADOs (Maladies à déclaration obligatoire) in Québec are STBBI's?

Are any populations particularly at risk for STIs in Quebec?

Epidemiology

- 40 000 Quebecers receive a diagnosis of a STBBI that includes one of the following infections:
 - Chlamydia
 - Gonorrhea
 - Syphilis
 - Lymphogranuloma venereum
 - HIV (human immunodeficiency virus)
 - Hepatitis B and C

Epidemiology

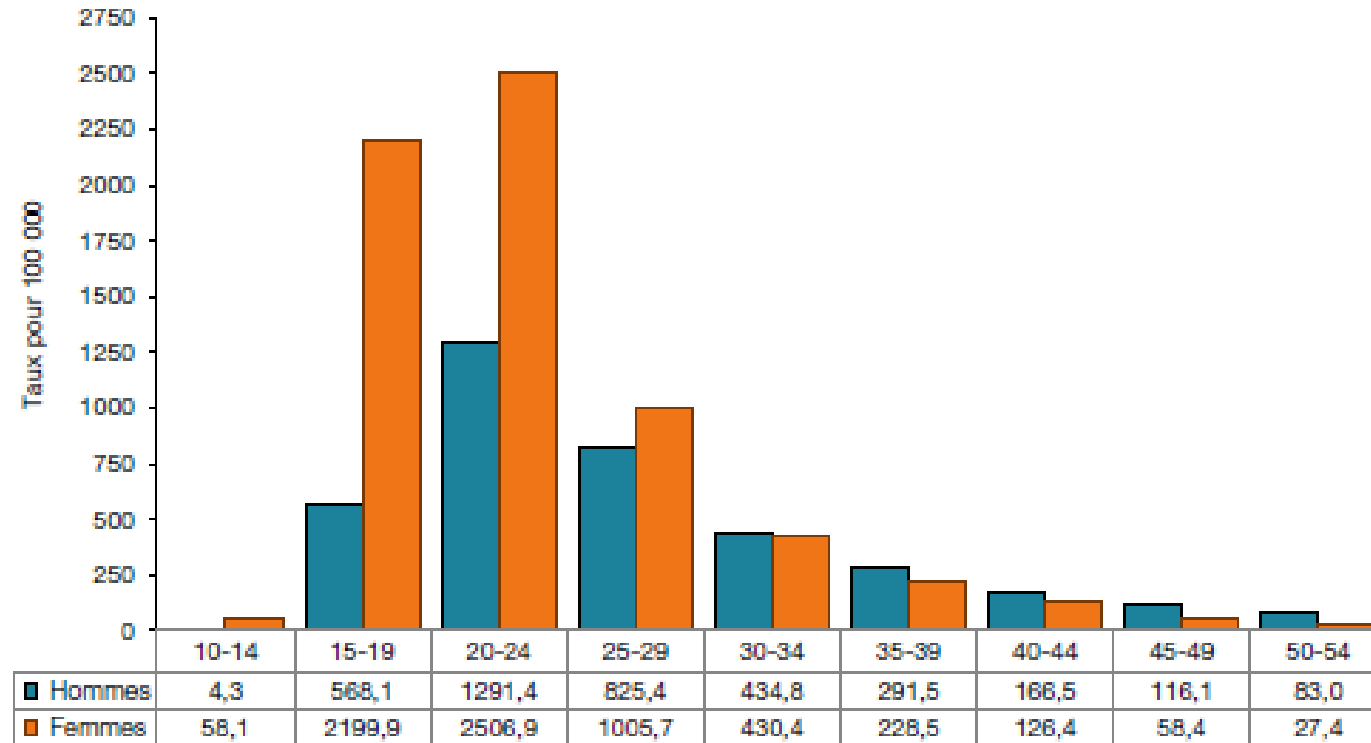
75% of all MADOs in Quebec are STBBIs

Epidemiology – Populations at Risk

- young people aged 15 to 24;
- young people in difficulty (for example, street youth);
- men who have sex with men;
- people who use drugs by injection or inhalation;
- persons who are incarcerated or have been imprisoned;
- people from a region where HIV infection is endemic;
- people who are indigenous;
- people who are sex workers;
- trans people.

CHLAMYDIA

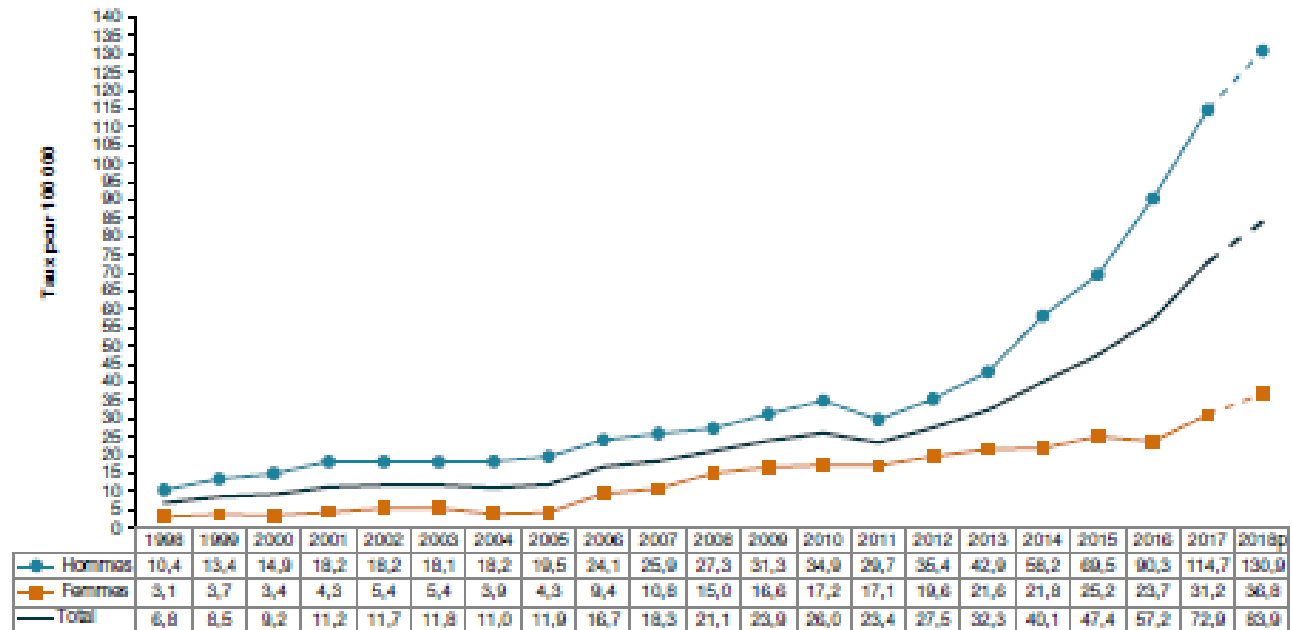
Figure 2 Infection à *Chlamydia trachomatis* : taux d'incidence des cas déclarés, selon l'âge et le sexe, Québec, 2017



Notes : Taux exprimé pour 100 000 personnes.

Données extraites du Fichier des maladies à déclaration obligatoire (MADO).

Figure 5 Infection gonococcique : taux d'incidence des cas déclarés selon le sexe, Québec, de 1998 à 2018p

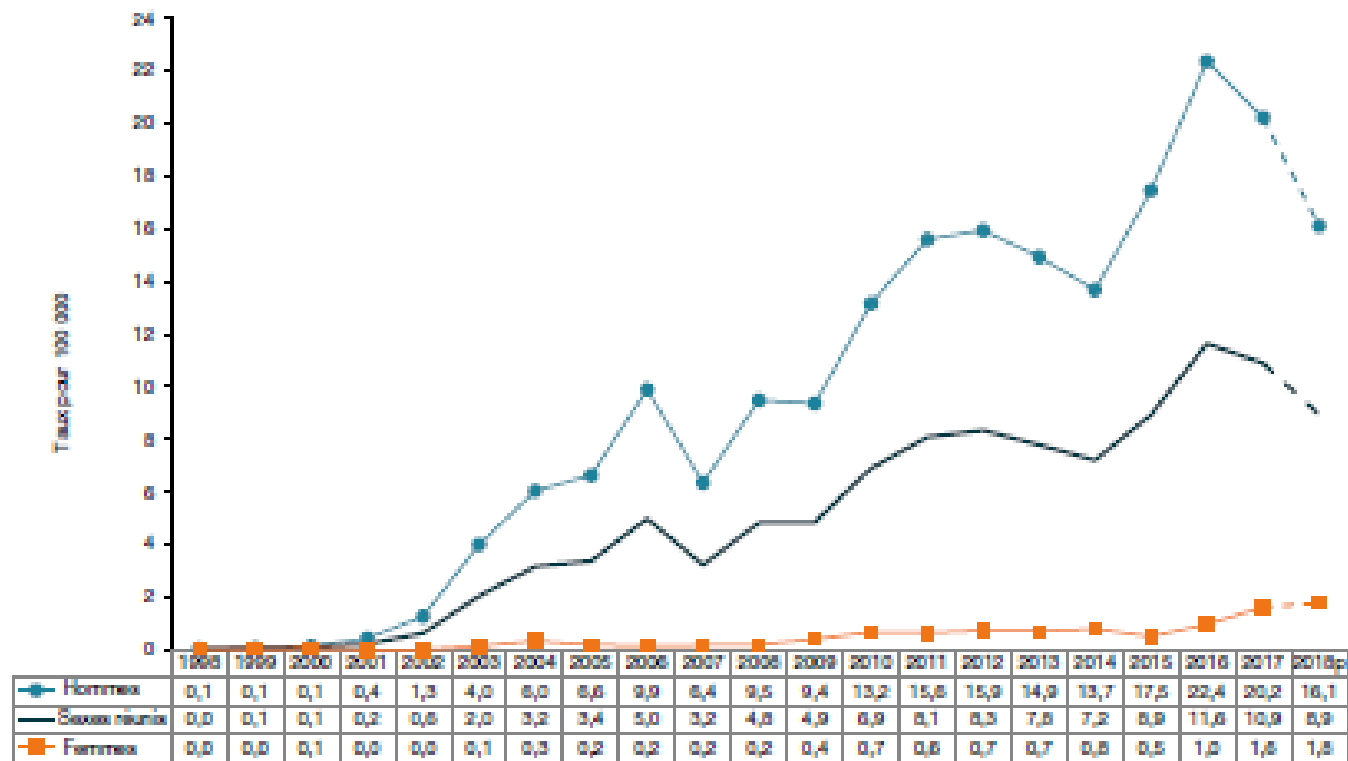


Notes : Taux exprimé pour 100 000 personnes. Pour 2018, il s'agit du taux projeté à partir du nombre de cas survenus au cours des 222 premiers jours de l'année CDC.

Données du Fichier des maladies à déclaration obligatoire (MADO).

GONORRHEA

Figure 9 Syphilis infectieuse : taux d'incidence des cas déclarés, selon le sexe, Québec, de 1998 à 2018p



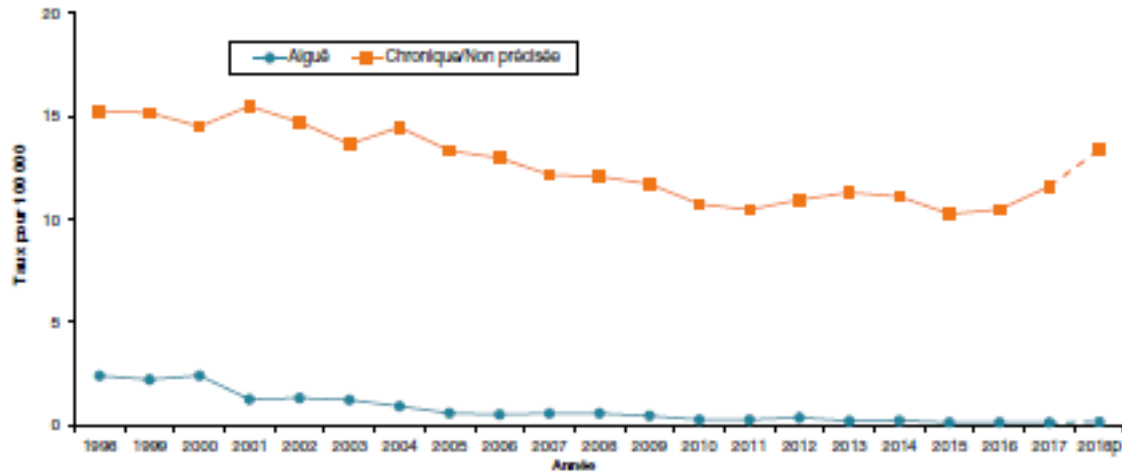
Notes : Taux exprimé pour 100 000 personnes. Pour 2018, il s'agit du taux projeté à partir du nombre de cas survenus au cours des 222 premiers jours de l'année CDC.

Comprend tous les cas de syphilis infectieuse (primaire, secondaire et latente de moins d'un an).

Données du Fichier des maladies à déclaration obligatoire (MADO)

SYPHILIS

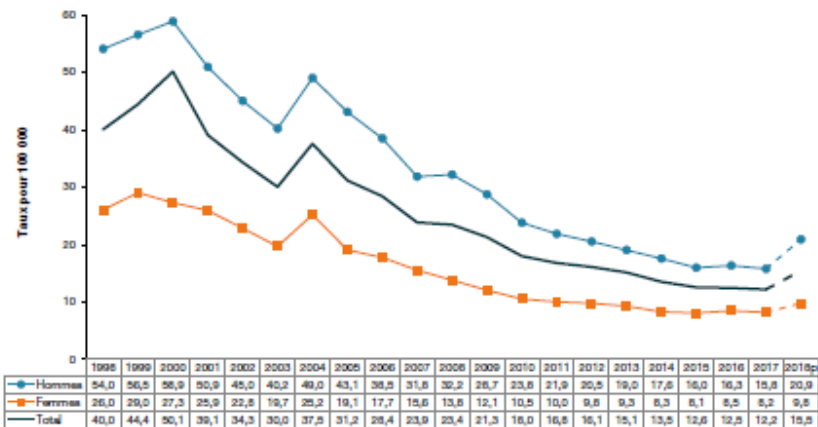
Figure 18 Hépatite B (aiguë, chronique et non précisée) : taux brut d'incidence des cas déclarés, Québec, de 1998 à 2018p



Notes : Taux exprimé pour 100 000 personnes. Pour 2017, il s'agit du taux projeté à partir du nombre de cas survenus au cours des 222 premiers jours de l'année.

Données extraites du Fichier des maladies à déclaration obligatoire (MADO).

Figure 19 Hépatite C : taux d'incidence des cas déclarés, selon le sexe, Québec, de 1998 à 2018p



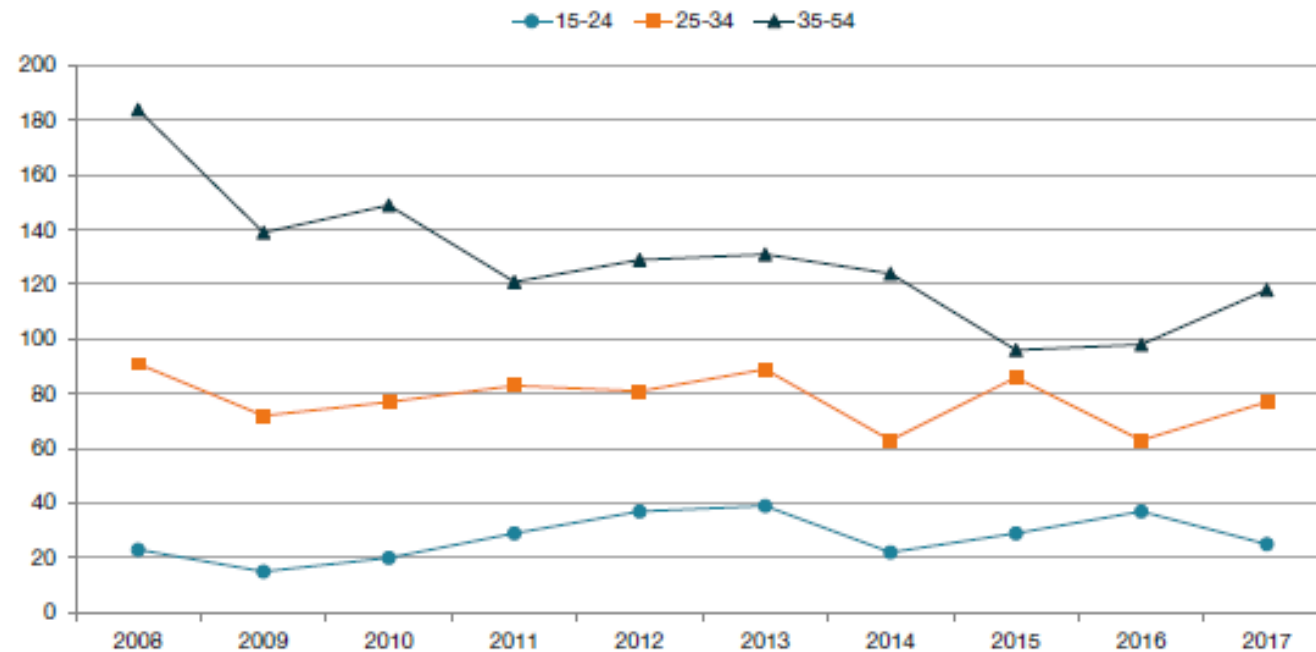
Notes : Taux exprimé pour 100 000 personnes. Pour 2017, il s'agit du taux projeté à partir du nombre de cas survenus au cours des 222 premiers jours de l'année CDC.

Données du Fichier des maladies à déclaration obligatoire (MADO).

HEPATITIS B AND HEPATITIS C

HIV

Figure 23 Infection par le VIH : nombre de nouveaux diagnostics selon les groupes d'âge, chez les hommes de 15 à 54 ans, Québec, de 2008 à 2017



Données provisoires tirées du Programme de surveillance du VIH au Québec (INSPQ), octobre 2018.

The logo for STI ITS features the letters 'STI' stacked above 'ITS' in a bold, green, sans-serif font. The background is a light grey with a subtle pattern of white hexagons.

STI
ITS

The word 'Canada' is written in a black, serif font. A small Canadian flag is positioned above the letter 'a'.

Canada

The logo for INESS features the word 'INESS' in a bold, grey, sans-serif font. The final 'S' is stylized in blue. Below the text is the tagline 'LE SAVOIR PREND FORME' in a smaller, grey, sans-serif font.

INESS
LE SAVOIR PREND FORME

Clinical Apps and Websites

- <https://www.canada.ca/en/public-health/services/infectious-diseases/sexual-health-sexually-transmitted-infections/canadian-guidelines/sexually-transmitted-infections.html>
- <https://www.inesss.qc.ca/nc/en/publications/publications/publication/guides-dusage-optimal-sur-le-traitement-pharmacologique-des-itss-mise-a-jour-condylomes-mars-201.html>

Case # 1

Part A

- L. K. (age 22) presents with dysuria, urethral discomfort, and urethral discharge. There are no symptoms of urinary frequency, hematuria, or other urinary symptoms.
 - What is your diagnosis?
 - What are possible organisms involved?
 - What testing is available and should be done?
 - What treatment and recommendations should be offered?

Urethritis

- What are possible organisms involved?
 - chlamydia, gonorrhea
 - if testing results are negative and symptoms persist, consider *Mycoplasma genitalium* or *Trichomonas vaginalis*
- What testing is available and should be done?
 - NAAT (nucleic acid amplification test)
 - sites (urine, +/- pharyngeal, rectal according to exposure)
 - gram stain and culture from urethral swab

Urethritis

- What treatment and recommendations should be offered?

1ST CHOICE:

cefixime 800 mg PO in a single dose OR ceftriaxone 250 mg IM in a single dose (latter preferred if male sexual partners)

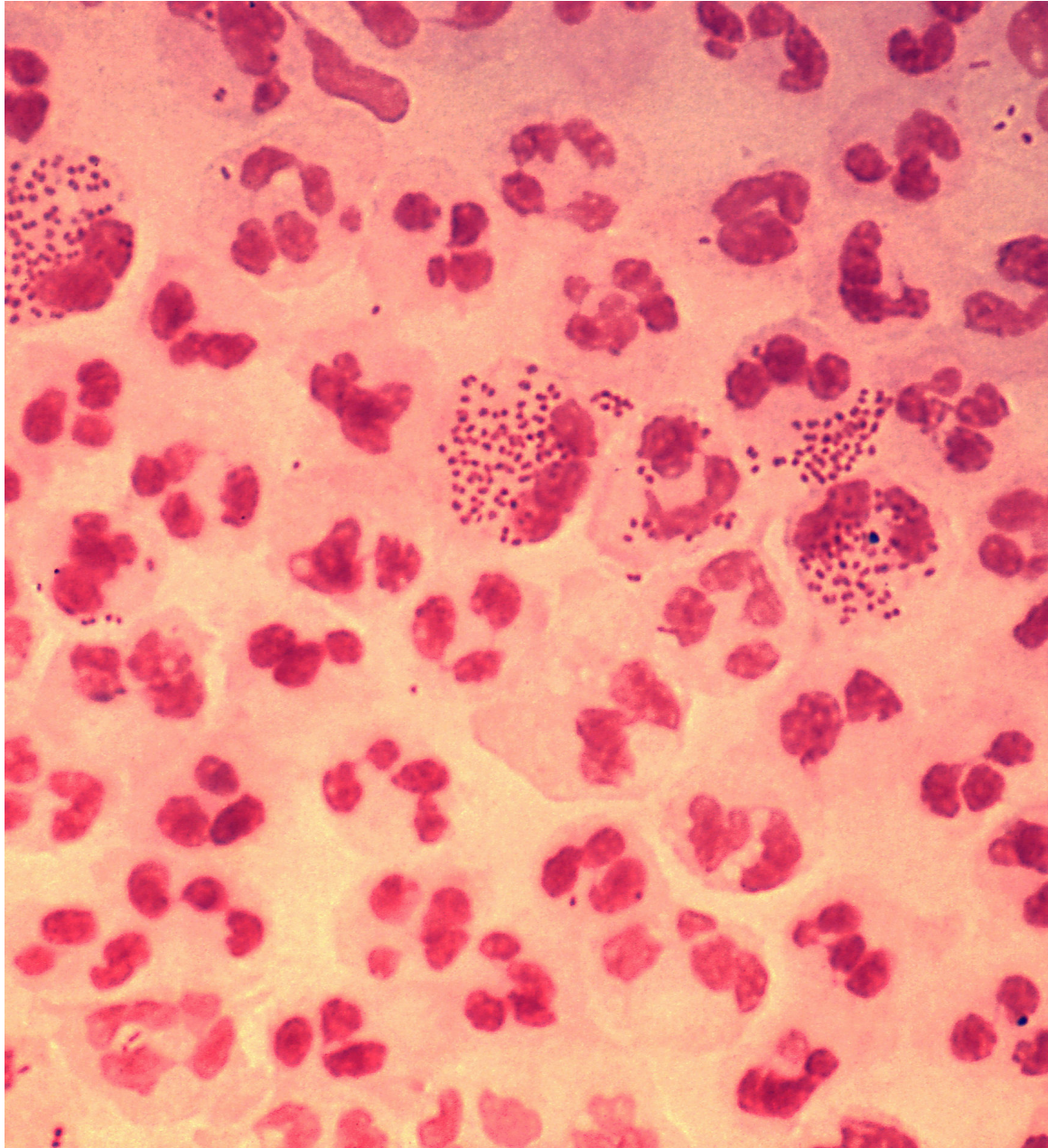
AND

azithromycin 1 g PO in a single dose

Code K (free medication)

Urethritis

- What treatment and recommendations should be offered?
 - abstain from sexual contact for 7 days AND until symptoms resolve (barrier method for ALL sexual activities as alternative, if concerns about adherence to abstinence)
 - discuss partner notification
 - offer further screening
 - review vaccination status



Case # 1, Part B

- L. K. (age 22) NAAT (urinary sample) result is positive for both chlamydia and gonorrhea. Culture is positive for gonorrhea with resistance to ciprofloxacin, but not cephalosporins. A rectal and throat swab are negative.
 - Would you change your treatment?
 - What partner follow-up is recommended?

Urethritis: gonorrhea & chlamydia

- Would you change your treatment?
 - No, but this needs to be declared as a MAD0 at this point.
 - What partner follow-up is recommended?
 - support with partner notification
 - explain reason for partner notification
 - identify partners to notify
 - prepare the person to notify their partners
 - intervene for patient unable to notify their partners
- *** confidential and anonymous ***

Contact: gonorrhoea & chlamydia

- assessment, screening, and preventive treatment
- if asymptomatic ...

1ST CHOICE:

cefixime 800 mg PO in a single dose (if no oral exposure) OR ceftriaxone 250 mg IM in a single dose (consider po, if oral exposure and throat specimen for NAAT & culture done)





AND

azithromycin 1 g PO in a single dose

code L (free medication); code M (accelerated treatment)

Contact: gonorrhoea & chlamydia

Testing in an asymptomatic partner for chlamydia (CT) and gonorrhoea (NG):

		CT - Prélèvement chez un partenaire asymptomatique		NG - Prélèvement chez un partenaire asymptomatique			
							
Exposition	Analyse	TAAN		Culture	TAAN	Culture	TAAN
	Génitale	1 ^{er} choix : vaginal 2 ^e choix : endocervical 3 ^e choix : urinaire	urinaire		endocervical	1 ^{er} choix : vaginal 2 ^e choix : endocervical 3 ^e choix : urinaire	urétral
Anale	rectal		rectal				
Orale	aucun prélèvement recommandé		pharyngé				

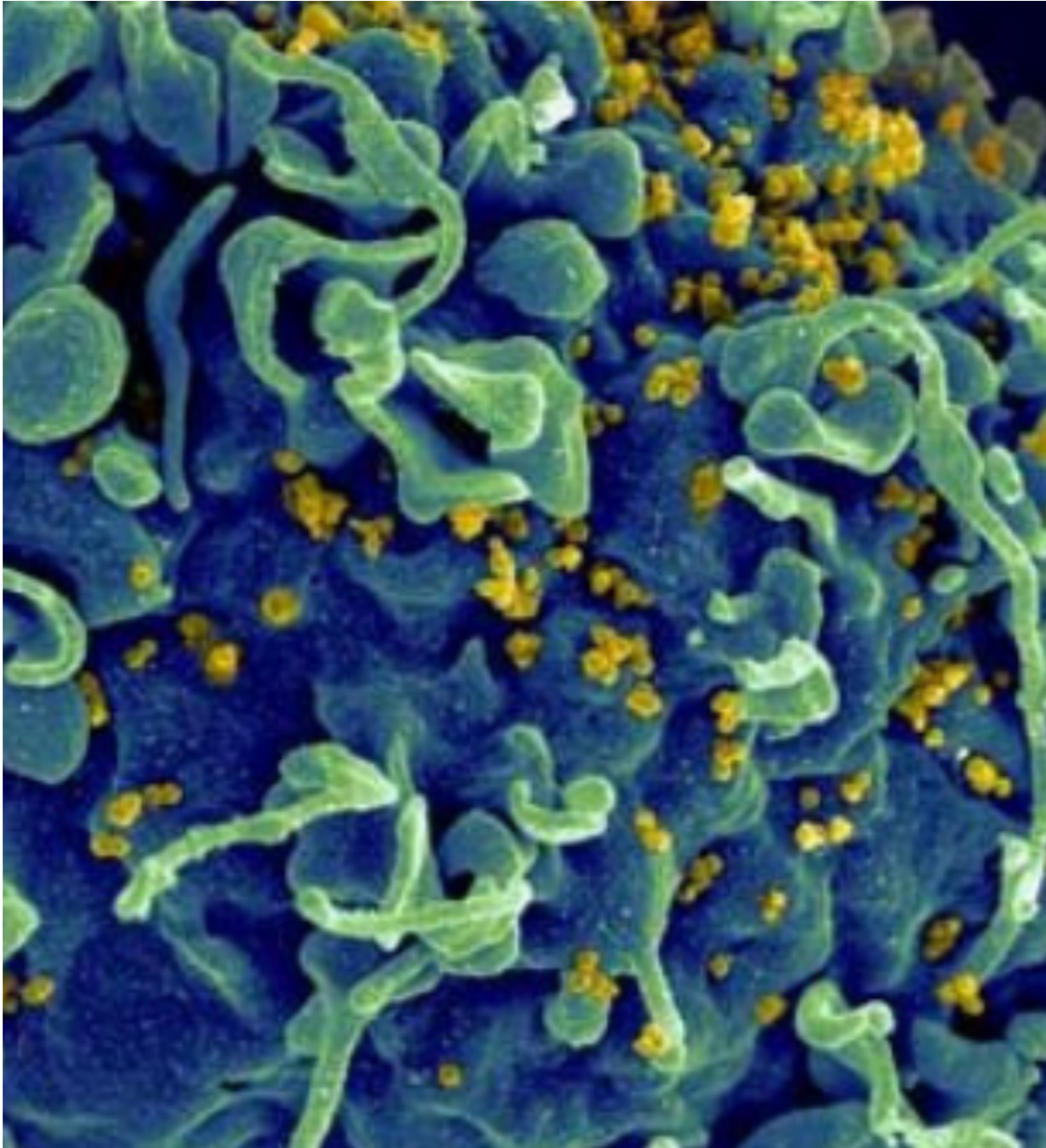
Contact: gonorrhoea & chlamydia

Expedited partner treatment (EPT) / Traitement accéléré des partenaires (TAP):

- THREE conditions:
 - after discussion with patient infected, appears unlikely that contact will consult for clinical assessment
 - no contraindications to EPT
 - patient infected able to give treatment and information to contact without compromising personal safety
- Exclusions:
 - Chlamydia (LGV, rectal infections, known allergy, partner known to have symptoms, partner less than 14 years, preferred treatment is not single dose oral)
 - Gonorrhoea (resistant strain, oral exposure for partner, known allergy, partner known to have symptoms, partner less than 14 years, preferred treatment is not single dose oral)
- Last choice for pregnant women and male-to-male transmission

Follow-up: gonorrhea & chlamydia

- Is a test of cure recommended?
 - Chlamydia – persistence of symptoms or signs, pregnancy, adherence issues, alternative treatment, rectal infection treated with azithromycin, LGV genotype
 - NAAT 3 weeks after END of treatment
 - Gonorrhea - persistence of symptoms or signs, pregnancy, adherence issues, alternative treatment even if sensitive, any pharyngeal, known resistance to treatment (or in partner)
 - Pharyngeal: culture 3 days to 2 weeks after END of treatment or NAAT and culture 2 weeks after END of treatment
 - Non-pharyngeal: NAAT and culture 2 weeks after END of treatment; culture with NAAT, if persistent symptoms



HIV – U.S. Survey ... 2019

41% of HIV-negative 18-22-year old individuals said they are “not at all” or “only somewhat” informed about HIV.

More than a quarter of HIV-negative 23–36-year old individuals avoided hugging or talking to an HIV-positive person.

30% said they would prefer not to interact socially with someone living with HIV.

#StopHIVStigma

BEING UNDETECTABLE

means people with HIV have effectively
no risk of transmitting HIV to their partners
through sex.



U=U

- Testimonials of people living with HIV
- <https://youtu.be/vqzEvlpxaRs>
- CATIE video – Can't Pass It On
- <https://youtu.be/mfBI4mbazTk>

PrEP (Pre-exposure Prophylaxis)

- **U.S. Preventive Services Task Force (USPSTF) 2019**

- recommends that clinicians offer preexposure prophylaxis (PrEP) with effective antiretroviral therapy to patients at high risk of HIV acquisition (A recommendation)

- **Health Canada Overall Benefit-Risk Assessment 2016**

- Once-daily oral Truvada, taken as part of a comprehensive risk-reduction program, significantly reduced new HIV-1 acquisitions compared with placebo in populations of high-risk MSMs and in sero-discordant heterosexual couples. The totality of the data supports the conclusion that the benefits of Truvada for PrEP outweigh the risks. The decision to prescribe Truvada for the prevention of sexual acquisition of HIV infection should carefully weigh the individual's risks for acquiring HIV, their understanding of the importance of adherence to medication, and their potential for development of renal or bone toxicity.

- **Experiences and needs of Canadian men-who-have-sex-with-men, 2017 survey results (CCDR 2019)**

- The gap between the proportion of men who were interested in PrEP (50%-60%) and those who actually used it (10.5%-12.5%) is significant and comprehensive STBBI testing was low.

Sources: <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/prevention-of-human-immunodeficiency-virus-hiv-infection-pre-exposure-prophylaxis>; <https://hpr-rps.hres.ca/reg-content/regulatory-decision-summary-detail.php?lang=en&linkID=RDS00107>; <https://www.canada.ca/en/public-health/services/reports-publications/canada-communicable-disease-report-ccdr/monthly-issue/2019-45/issue-11-november-7-2019/article-1-canadian-men-who-have-sex-with-men-survey-results.html>

Cases #5

- Q. T. has sought post-exposure prophylaxis at a nearby sexual health clinic after several “accidents” involving unprotected anal sex with casual partners.
 - Is PrEP recommended?
- Y. U. is in a closed relationship with an HIV+ partner who has regular medical follow-up and viral load less than 40 copies/ml. Neither partner have had any recent sexually transmitted infections. They have not used any drugs other than cannabis and alcohol in the past 5 years. They use condoms for anal sex.
 - Is PrEP recommended?
- <https://wwwn.cdc.gov/hivrisk/estimator.html#-mb|rai.con.prep.art>

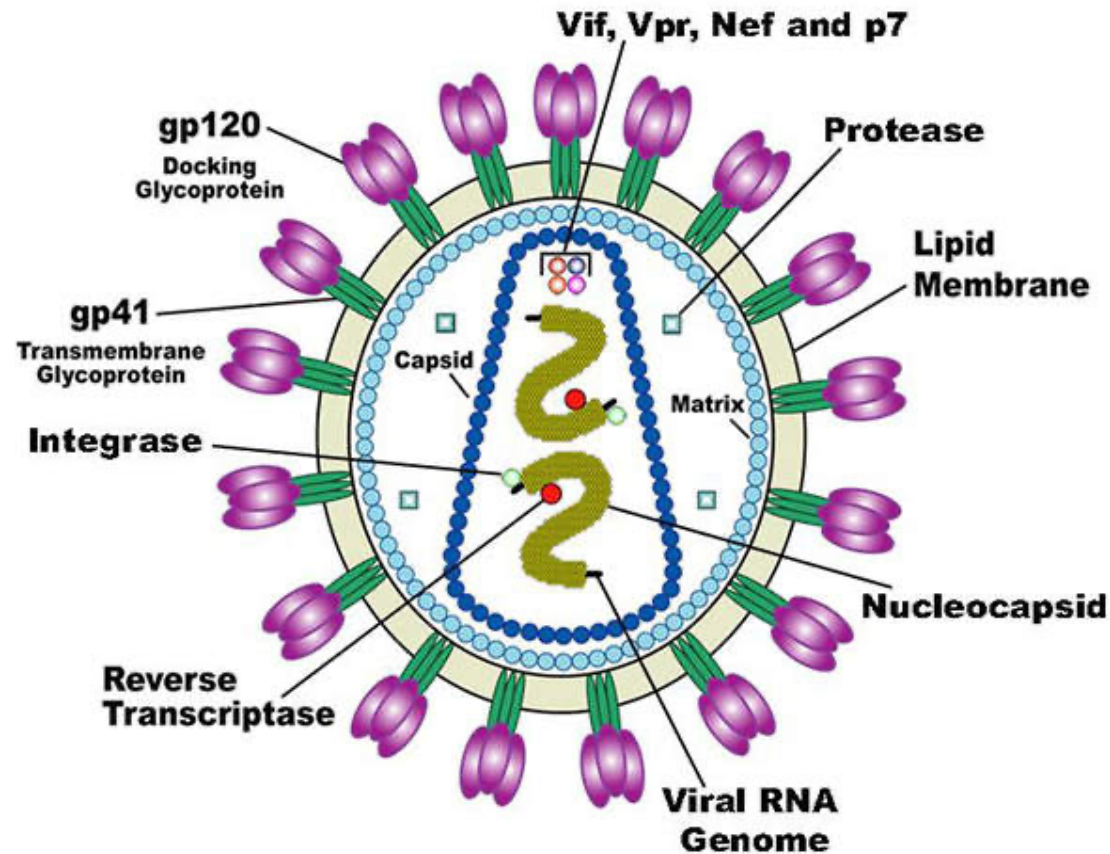
PrEP Indications

- Men who have sex with men (MSM) (*strong recommendation; high quality of evidence*) and transgender women (*strong recommendation; moderate quality of evidence*), who report condomless anal sex within the last six months and who have any of the following:
 - Infectious syphilis or rectal bacterial sexually transmitted infection (STI), particularly if diagnosed in the preceding 12 months;
 - Recurrent use of nonoccupational post-exposure prophylaxis (nPEP) (more than once);
 - Ongoing sexual relationship with HIV-positive partner with substantial risk of transmissible HIV; or
 - High-incidence risk index (HIRI)-MSM risk score ≥ 11 .
- PrEP is not recommended in the context of a stable closed relationship with a single partner with no or negligible risk of having transmissible HIV (*strong recommendation; moderate quality of evidence*).

PrEP Indications

- Heterosexual exposure
 - Recommend PrEP for the HIV-negative partner in heterosexual serodiscordant relationships reporting condomless vaginal or anal sex where the HIV-positive partner has a substantial risk of having transmissible HIV (*strong recommendation; high quality of evidence*).
 - PrEP may be considered for the HIV-negative partner in heterosexual serodiscordant relationships reporting condomless vaginal or anal sex, where the HIV-positive partner has a low but non-negligible risk of having transmissible HIV (*weak recommendation; moderate quality of evidence*).
- People who inject drugs (PWID) exposure (off label)
 - PrEP may be considered for PWID if they share injection drug use paraphernalia with a person with a non-negligible risk of HIV infection (*weak recommendation; moderate quality of evidence*).

PrEP Treatment



- Regimen for use as PrEP:
 - tenofovir disoproxil fumarate/ emtricitabine (TDF/FTC) 300/200 mg once daily (*strong recommendation; high quality of evidence*).
- As an alternative,
 - TDF/FTC 300/200mg administered “on demand”(two pills taken together 2 to 24 hours before first sexual exposure, followed by one pill daily until 48 hours after last sexual activity) may be considered in MSM (*weak recommendation; high quality of evidence*).

Sources: <https://www.cmaj.ca/content/cmaj/189/47/E1448.full.pdf>

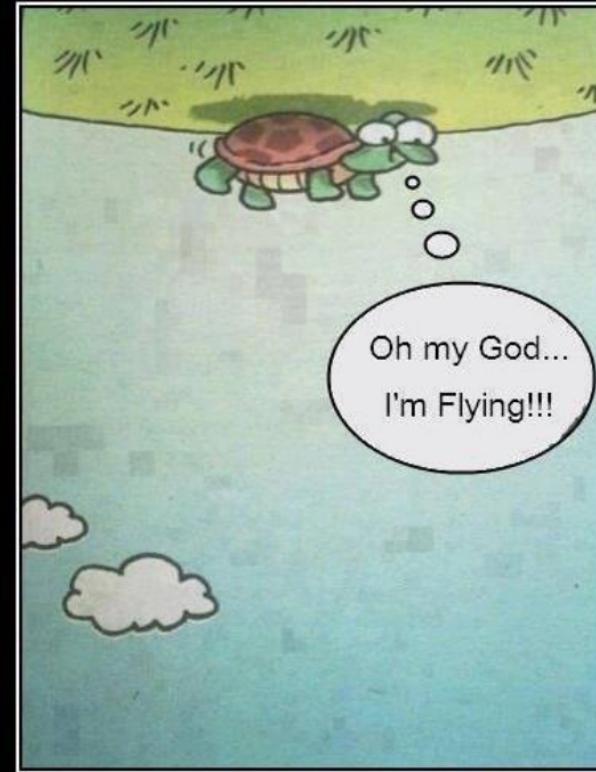
PrEP Monitoring

- Baseline:
 - serology HIV, hepatitis A, hepatitis B, hepatitis C, syphilis; screening for gonorrhea and chlamydia; complete blood count; ALT; creatinine; urinalysis; +/- pregnancy
- 30 days (if symptomatic or abnormal at baseline):
 - serology HIV; creatinine
- Every 3 months:
 - serology HIV, syphilis; screening for gonorrhea and chlamydia; creatinine; +/- pregnancy
- Always:
 - indication, adherence, other prevention strategies, symptoms of seroconversion

PEP (off label)

- Within 72 hours of a moderate or a high risk exposure with a person who has a substantial risk of having transmissible HIV (consider for low but non-negligible risk)
- Two nucleoside reverse transcriptase inhibitors:
 - TDC/FTC 300/200 mg po once daily (preferred)
- Third agent:
 - raltegravir 400mg po twice daily (strong recommendation)

THANKS
MERCI



Optimism is the best
Way to see life

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