



*Opioid Agonist Therapy 101:
An Introduction to Clinical Practice Workshop*

HIV and Hepatitis C

Special Considerations for the Management of Opioid Use Disorder

Laurie Ireland MD CCFP

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Faculty/Presenter Disclosure

► **Faculty:**

► **Relationships with commercial interests:**

► **None**

A dark blue arrow points to the right from the left edge of the slide. Several thin, light blue curved lines originate from the left side and sweep across the slide towards the right.

Objectives

At the end of this learning activity, the participant will be able to:

- Discuss special considerations in the management of the individual with opioid use disorder and HIV and/or Hepatitis C



Outline

HIV, Hepatitis C, Co-infection

- Natural History
- Epidemiology
- Testing Recommendations
- Treatment in context Opiate Agonist Therapy
- Drug-Drug Interactions
- Prevention



Helena

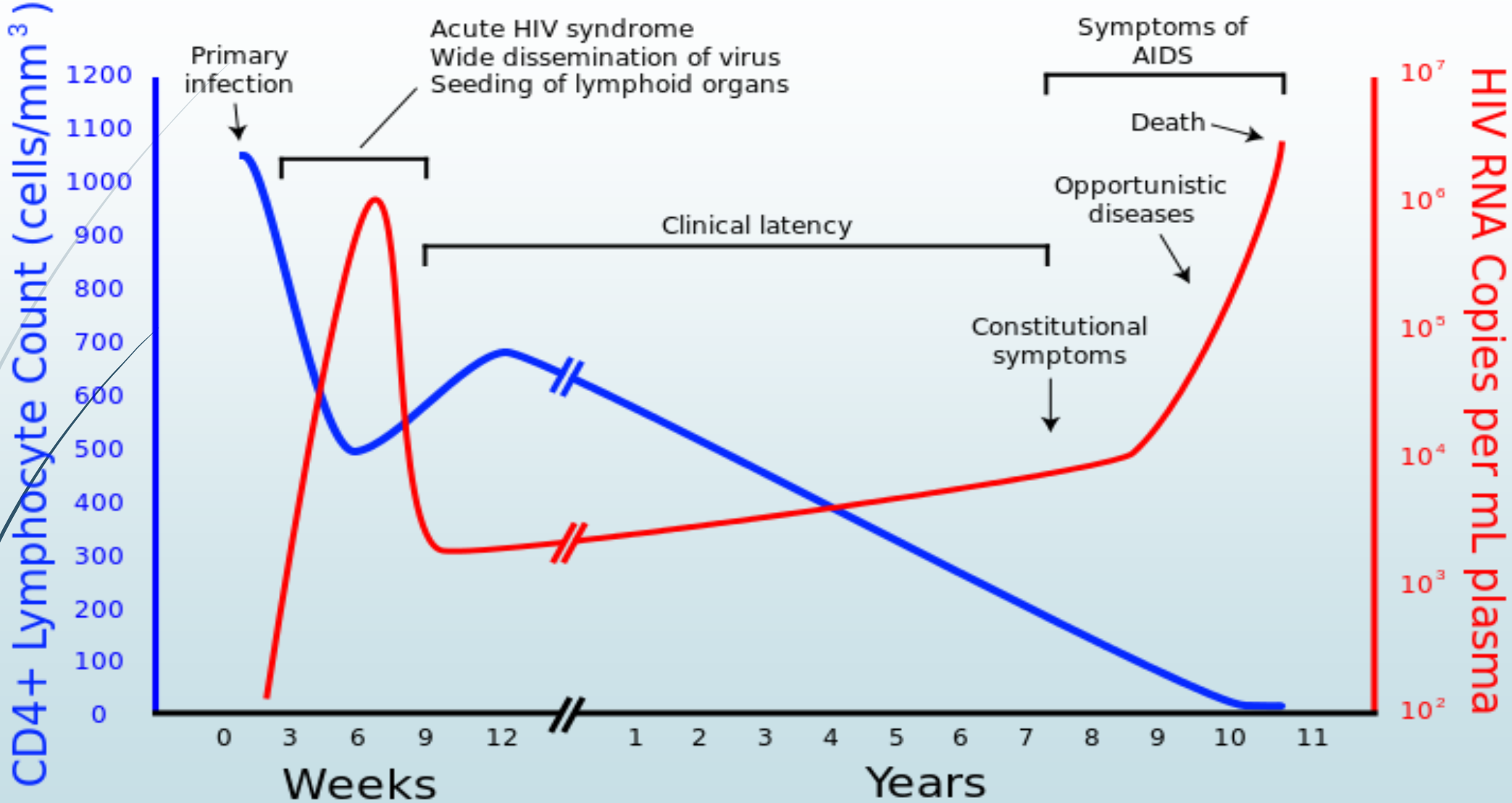
- 28 yo woman came in for STBBI testing
- She is worried because her boyfriend was recently diagnosed with HIV, not using condoms
- Discloses escalating use of oxycodone/acetaminophen over the last year, snorting up to 20 per day
- Boyfriend has started to inject morphine
- Asking to start Opiate Agonist Therapy (OAT)
- Stabilized over 1 week on daily dispensed Buprenorphine/naloxone 12/3 mg
- HIV test result is positive

Human Immunodeficiency Virus (HIV)

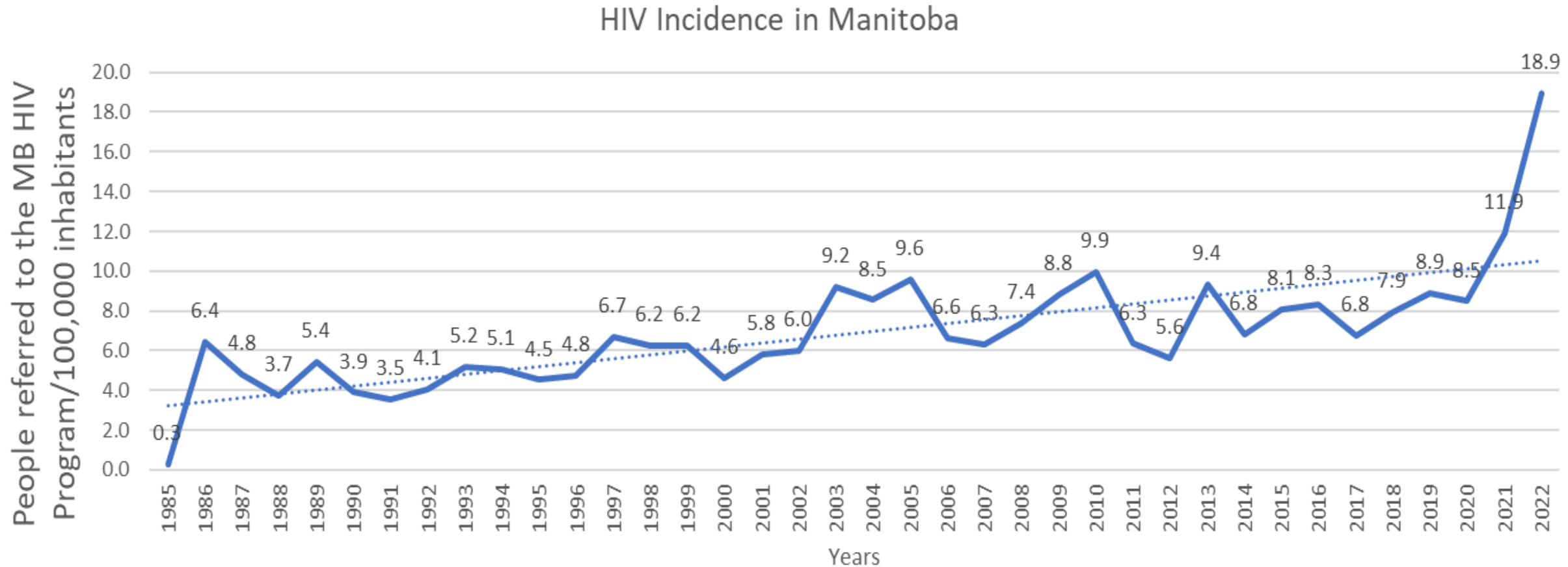
- ▶ HIV is a retrovirus, 2 RNA
- ▶ Spread through blood, genital or rectal fluids, and breast milk
- ▶ Primarily transmitted through unprotected sex or sharing needles or drug use equipment with someone with HIV

- ▶ HIV infects T-helper or CD4 cells
- ▶ CD4 cells direct & coordinate immune system to fight infection
- ▶ As CD4 cells decrease, the body loses its ability to fight infections
- ▶ Without treatment at risk opportunistic infections and death

HIV Natural History



HIV is increasing in Manitoba



HIV rate in Canada, 2021: 3.8/100,000 (PHAC)

For all people who entered the Manitoba HIV Program between 2018 and 2021:



Around 50% were female



Nearly 50% of females and 25% of males experienced houselessness



Around 65% of females and 35% of males self-reported injection drug use



Heterosexual sex and injection drug use were the most common modes of self-reported HIV acquisition



6 in 10 self-identified as heterosexual and 2 in 10 self-identified as gay, bisexual or men who have sex with men (gbMSM)



Around 70% of people who reported drug use, reported using methamphetamine



8 in 10 people had at least one STBBI prior to diagnosis with HIV



Around 80% of people had at least one other comorbid condition at entry into care



7 in 10 self-identified as Indigenous

MANITOBA HIV PROGRAM

HIV TESTING GUIDELINES

Know the HIV status of all patients in your care.

We recommend that health care providers know the HIV status of all patients under their care.

Specifically, we recommend that providers offer an HIV test

- Routinely, every five years, to all patients aged 12-70 years
- **Routinely, every year, to all patients aged 12-70 years who belong to populations with a higher burden of HIV infection**
 - **gbMSM**
 - **PWID**
 - **Multiple partners**
- **More frequently if high risk, e.g with recurrent STIs**
- Once for patients older than 70 years of age, if HIV status is not known

MB HIV Program Referral

1-866-449-0165

My HIV test is positive, now what?

Finding out you have HIV may be a shock. You are not alone. There is help. With treatment, care and support, you can live long and well with HIV. Here's what else you need to know.

For more information, contact:

- The Manitoba HIV Program: www.mbHIV.ca or 1-866-449-0165
- CATIE: www.catie.ca/ or 1-800-263-1638
- Street Connections: www.streetconnections.ca
- Sexuality Education Resource Centre Manitoba (SERC): www.serc.mb.ca/
- Canadian HIV/AIDS Legal Network: www.hivlegalnetwork.ca/
- Manitoba Harm Reduction Network: www.mhrn.ca
- Sex Friendly Manitoba: www.sexfriendlymb.ca
- Workplace Disclosure Decision Guide: www.disclosureguide.realizecanada.org/
- Financial support for people living with HIV with the PH/A Fund Guidelines: www.ninecircles.ca/wp-content/uploads/2018/12/PHA-Fund-Guidelines.pdf



1 HIV can be treated. With treatment and support, people living with HIV can live long and healthy lives. HIV treatment is usually very simple, has few side effects, and can prevent HIV from passing to others. This is done by lowering the amount of virus in your body to an undetectable level. When a person's virus becomes undetectable (measured by a blood test), they:

- Cannot pass HIV to their sex partners
- Have a lower chance of passing HIV when sharing equipment for injecting drugs
- Will not pass HIV to a baby during pregnancy or delivery

U = U: Undetectable = Untransmittable

It is important to get care and treatment as soon as you can.

2 Make sure you are referred to the Manitoba HIV Program. The person who gave you your test result will refer you to the Manitoba HIV Program so that you can start your HIV care.

If you had a reactive test result from a point of care or HIV self-test, you should see a healthcare provider for confirmatory lab testing. **You can also refer yourself to the Manitoba HIV Program. Call 1-866-449-0165.**

3 You can keep yourself and others safe. HIV can be passed to others during sex, by sharing equipment to use drugs, or during pregnancy, birth or breastfeeding. You can help stop HIV from passing to others by:

- Practicing safer sex if you do have sex
- Using new equipment every time if you inject drugs or choosing different ways of using drugs
- Taking your HIV medication regularly
- Feeding your baby formula with support from the Manitoba HIV Program Infant Formula Program
- Using pre-exposure prophylaxis (PrEP) for your HIV-negative sex partner(s)

4 A public health nurse may contact you. The nurse will provide you with information about HIV. They will also talk to you about people you may have had contact with and the importance of them being tested for HIV. You do not need to provide your name to people you have had contact with.

5 You don't have to tell everyone you have HIV, but you do have a legal duty to tell your sex partner(s) you have HIV before some kinds of sex. Find out more at HIV Legal Network: www.hivlegalnetwork.ca

This content was originally published by CATIE, Canada's information source for HIV and hepatitis C information.

www.mbHIV.ca
1-866-449-0165



MANITOBA HIV PROGRAM REFERRAL FORM

*The testing practitioner is responsible for communicating HIV test results to the patient.
All patients who test positive for HIV should be referred to the Manitoba HIV program with client consent.*

Today's date (dd/mmm/yyyy): / /		
PATIENT INFORMATION		
Last name:	Street address:	
First name:	City/town:	
MB Health #:	Postal code:	
PHIN:	Primary phone number:	
Date of birth (dd/mmm/yyyy): / /	Can we leave a confidential voice message? <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Secondary phone number:	
Sex at birth: <input type="checkbox"/> Male <input type="checkbox"/> Female	Can we leave a confidential voice message? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Gender identity:	Email:	
<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Non-binary <input type="checkbox"/> Two spirit	Social media handle:	
<input type="checkbox"/> Other	Client preferred language:	
<input type="checkbox"/> Prefer not to specify	Interpreter required: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Specimen date of positive HIV test (dd/mmm/yyyy): / /	Notes related to contacting client (alternate contact, community services, etc):	
Site of HIV test:		
New HIV diagnosis: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Acute symptoms:		
Medical history (attach HIV antigen/antibody report and other relevant investigations):		
PROVIDER INFORMATION		
Referring provider first and last name:	Phone number:	Fax number:
Client requests (select one):		
<i>Both primary care and HIV care at:</i>		
<input type="checkbox"/> Nine Circles Community Health Centre, 705 Broadway, Winnipeg		
<input type="checkbox"/> 7 th St. Health Access Centre, Brandon		
<i>HIV care only at (patient must have a primary care provider):</i>		
<input type="checkbox"/> Health Sciences Centre Ambulatory Clinic, Winnipeg		
<input type="checkbox"/> 7 th St. Health Access Centre, Brandon		
First and last name of provider who will provide primary care:	Phone number:	Fax number:

REFER CLIENTS BY FAX TO: 204-318-3181

1-866-449-0165
www.mbHIV.ca
06/2023

Advances in HIV Treatment



- ▶ 1987 – AZT first treatment
- ▶ 1996 – Highly Active Antiretroviral Therapy (HAART)
- ▶ Today: combination pills – as little as one pill once daily
- ▶ Treatment recommended for all
- ▶ Chronic manageable disease
- ▶ Life Expectancy approximately 90% of general population in Canada
- ▶ Lower life expectancy for women, people who inject drugs, Indigenous ancestry, CD4 count < 350 at time of treatment start
- ▶ Undetectable means untransmittable, U=U

Life expectancy of HIV-positive individuals on combination antiretroviral therapy in Canada.

[Patterson S^{1,2}, et al; CANOC collaboration.](#)

Trends in life expectancy of HIV-positive adults on antiretroviral therapy across the globe: comparisons with general population.

[Curr Opin HIV AIDS](#). 2016 May 31.

[Wandeler G¹, Johnson LF, Egger M.](#)



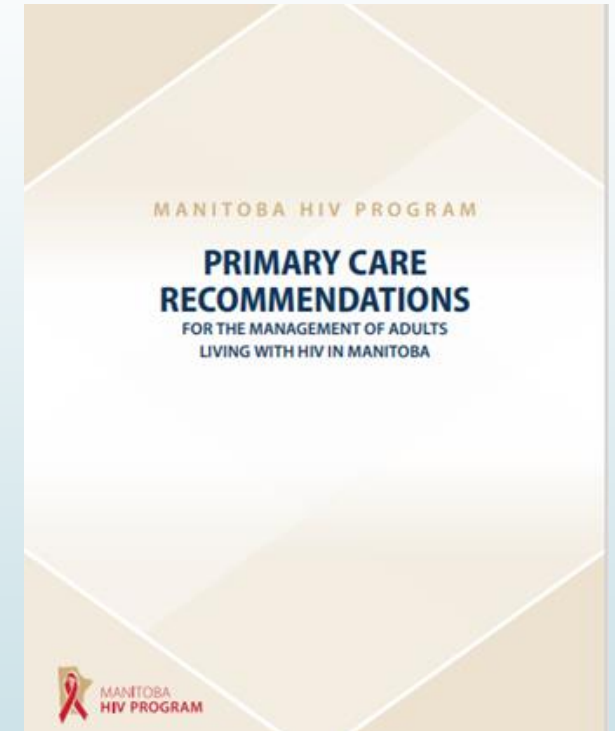
HIV Management

Adapted from BC HIV Primary Care Guidelines

Baseline Evaluation	<ul style="list-style-type: none">• Investigations to:<ul style="list-style-type: none">• Assess immune system (CD4 Count)• Rule out coinfections, opportunistic infections, and comorbidities• Guide need for prophylaxis• Guide treatment selection
Goals of Treatment	<ul style="list-style-type: none">• Restore and improve immunologic function• Suppress HIV Viral Load• Prevent Transmission
When to Initiate Treatment	<ul style="list-style-type: none">• Treatment recommended for all as soon as possible after diagnosis

<http://www.cfenet.ubc.ca/guidelines/>
<https://mbhiv.ca/healthcare-providers/guidelines/>

Coming soon:



Prophylaxis against Opportunistic Infections

CASE: CD4 count was 175 (13%) cells/ml, initiated prophylaxis with Septra SS one tab once daily

- ▶ <200 (15%) Pneumocystis Jirovecii Pneumonia (PJP) prophylaxis
 - ▶ Sulfamethoxazole/Trimethoprim. DS or SS 1 tab once daily OR
 - ▶ Dapsone 100 mg once daily
- ▶ <100 (10%) Toxoplasmosis prophylaxis (if Ab+)
 - ▶ Sulfamethoxazole/Trimethoprim DS 1 tab once daily
- ▶ <50 (5%) Mycobacterium Avium Intracellulare (MAI) prophylaxis
 - ▶ Azithromycin 1200 mg q weekly OR
 - ▶ 600 mg 2x/wk OR Azithromycin 250 mg 5x/wk
 - ▶ Only required if not starting a suppressive regimen

HIV Treatment: Antiretroviral Therapy (ART)

Backbone of 2 drugs, 1 Class	Plus Additional 1 drug, different class
2 Nucleoside Reverse Transcriptase Inhibitors (NRTIs)	1 Non-nucleoside Reverse Transcriptase Inhibitor (NNRTI), OR
	1 Protease Inhibitor (PI), OR
	1 Integrase Inhibitor

For more information:

<https://clinicalinfo.hiv.gov/en/guidelines>

<https://www.bccfe.ca/therapeutic-guidelines/guidelines-antiretroviral-arv-treatment-adult-hiv-infection>

Drug-Drug Interactions

<http://www.hiv-druginteractions.org/checker>

Case: Started on Single Tablet Regimen Biktarvy (Tenofovir Alafenamide, Emtricitabine and Bictegravir)

The screenshot displays the HIV Drug Interactions checker interface. The main search area shows 'biktarvy' in the HIV Drugs field and 'septra' in the Co-medications field. The results list two potential interactions: Bicttegravir/Emtricitabine/Tenofovir alafenamide (BIC/FTC/TAF) and Trimethoprim/Sulfamethoxazole. A detailed summary and description of the interaction are shown in a pop-up window.

Quality of evidence: Very Low *i*

Summary:
Coadministration has not been studied but based on metabolism and clearance a clinically significant interaction is unlikely. Buprenorphine undergoes both N-dealkylation to form norbuprenorphine (via CYP3A4) and glucuronidation (via UGT2B7 and UGT1A1). Bicttegravir does not inhibit or induce CYP450 or UGTs enzymes; emtricitabine and tenofovir alafenamide do not interact with buprenorphine's metabolic pathway.

Description:
Based on drug interaction studies conducted with Biktarvy or the components of Biktarvy, no clinically significant drug interactions are expected with buprenorphine.
Biktarvy Summary of Product Characteristics, Gilead Sciences Ltd, June 2019.

[Open in new tab](#)

MB HIV Program Pharmacist: 204-787-4005 (or for patients of Nine Circles: 204-940-6022)
Available for consultation for persons living with HIV in MB

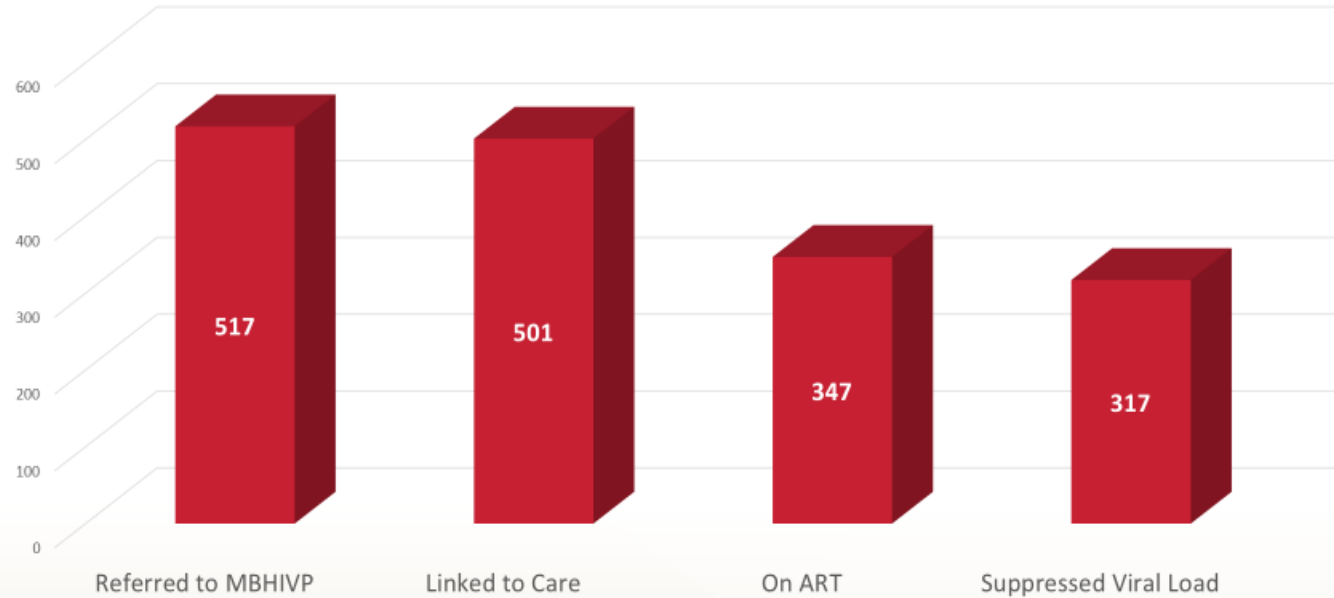
HIV Follow-up Monitoring

- ▶ Repeat labs 1 month after treatment start
- ▶ HIV Viral Load suppression (undetectable or < 20 cp/ml) within 3-6 months
- ▶ HIV Follow up q 3-6 months, often more frequently for OAT
 - ▶ Adherence
 - ▶ Meds, review for Drug-drug interactions
 - ▶ May see with some ART and Antacids, Erectile dysfunction medications, Anticonvulsants, Inhaled corticosteroids, OCPs, +Cations (Ca and iron supps)
 - ▶ Transmission risks, sexual activity, substance use, disclosure recommendations
 - ▶ Reproductive health/contraceptive needs
 - ▶ BW Monitoring: CD4 and Viral Load, CBC, lytes, creat, LE, U/A, U ACR
 - ▶ Regular STBBI screening, annually or more frequently guided by risk activity, including oral and rectal swabs
 - ▶ Primary care screening and immunizations for PLHIV

<http://www.cfenet.ubc.ca/guidelines/>

<https://mbhiv.ca/healthcare-providers/guidelines/>

2018–2021 HIV Cascade of Care



- Nearly 20% not engaged in care, 2018–2021
- >30% had detectable viral loads = community transmission



www.mbHIV.ca

Source: Manitoba HIV Program.

OAT improves Treatment Uptake and Outcomes

- ▶ People who use drugs are less likely to receive antiretroviral therapy (ART)
- ▶ Good evidence OAT with buprenorphine or methadone:
 - Increases retention in care
 - Increases ART uptake
 - Improves ART adherence
 - Increases viral suppression

Review > [Curr HIV/AIDS Rep.](#) 2019 Feb;16(1):1-6. doi: 10.1007/s11904-019-00436-7.

Medications for Treatment of Opioid Use Disorder among Persons Living with HIV

[Laura Fanucchi](#)^{1 2}, [Sandra A Springer](#)^{3 4}, [P Todd Korthuis](#)⁵

Affiliations + expand

PMID: 30684117 PMCID: PMC6420833 DOI: 10.1007/s11904-019-00436-7

[Free PMC article](#)

EDITOR'S CHOICE

Impact of Opioid Substitution Therapy on Antiretroviral Therapy Outcomes: A Systematic Review and Meta-Analysis

[Andrea J. Low](#) ✉, [Gitau Mburu](#), [Nicky J. Welton](#), [Margaret T. May](#), [Charlotte F. Davies](#), [Clare French](#), [Katy M. Turner](#), [Katharine J. Looker](#), [Hannah Christensen](#), [Susie McLean](#), [Tim Rhodes](#), [Lucy Platt](#), [Matthew Hickman](#), [Andy Guise](#), [Peter Vickerman](#)

Clinical Infectious Diseases, Volume 63, Issue 8, 15 October 2016, Pages 1094–1104,
<https://doi-org.uml.idm.oclc.org/10.1093/cid/ciw416>

Helena

- ▶ Started Biktarvy (Tenofovir Alafenamide, Emtricitabine and Bictegravir) i tablet once daily administered alongside buprenorphine/naloxone at community pharmacy
- ▶ No expected interactions, No dose adjustment was needed
- ▶ HIV viral load suppressed at < 20 copies/ml within 3 months
- ▶ Remains stable for over ~2 years on ART with suppressed viral load and no opiate or other drug use
- ▶ CD4 count increased 400- 450 cells/mm³, discontinued Septra
- ▶ Then more frequently missing appointments in clinic
- ▶ Urine +amphetamines, and disclosing active IDU
- ▶ + Hepatitis C AB, + Core antigen



Hepatitis C

- ▶ RNA Flavivirus
- ▶ 6 Major genotypes, Genotype 1 accounts for 60% of cases in Canada
- ▶ IDU is main mode of Hepatitis C transmission (80% of new infections)
- ▶ Infects liver, leads to progressive liver disease
- ▶ 25% will clear the virus, 75% will progress to chronic Infection
 - ▶ 10-15% will develop cirrhosis
 - ▶ 2-4 % will develop liver failure or hepatocellular carcinoma
- ▶ Treatment can cure disease

Hepatitis C Epidemiology

- ▶ Globally, an estimated 130-150 million people have chronic Hepatitis C virus infection
- ▶ Approximately 500,000 people die each year from Hepatitis C-related liver disease
- ▶ In 2020, a total of 6,736 cases of hepatitis C (acute, chronic, and unspecified combined) were reported in CDA, for a rate of 18.4 cases per 100,000
- ▶ Approximately 200,000 people living with chronic Hepatitis C in Canada,
 - ▶ Approximately 44% are unaware of their infection
- ▶ In MB 593 reported cases in 2021

Canadian Liver Foundation @: http://www.liver.ca/liver-disease/types/viral_hepatitis/Hepatitis_C.aspx

WHO @: <https://www.who.int/news-room/fact-sheets/detail/hepatitis-c>

<https://www.gov.mb.ca/health/publichealth/surveillance/stbbi/index.html>

Hepatitis C Testing Recommendations

Population Based Screening

- ▶ Born between 1945-1975

Risk-Based Screening:

- ▶ Current or past injection drug use
- ▶ Received health care or personal services where lack of infection prevention and control practices
- ▶ Blood transfusion, blood products or organ transplant before 1992 in Canada
- ▶ History of incarceration
- ▶ Born or resided in a region where hepatitis C prevalence is > 3%,
- ▶ Born to a mother who is HCV-infected
- ▶ History of sexual contact or sharing personal care items with someone HCV-infected
- ▶ HIV infection, particularly men who have sex with men
- ▶ Chronic hemodialysis treatment
- ▶ Elevated alanine aminotransferase

<http://www.hepatology.ca/>

<https://www.cmaj.ca/content/190/22/E677>

Hepatitis C Management

The management of chronic hepatitis C: 2018 guideline update from the Canadian Association for the Study of the Liver

Hemant Shah, Marc Bilodeau, Kelly W. Burak, Curtis Cooper, Marina Klein, Alnoor Ramji, Dan Smyth and Jordan J. Feld; for the Canadian Association for the Study of the Liver
CMAJ June 04, 2018 190 (22) E677-E687; DOI: <https://doi.org/10.1503/cmaj.170453>

Adapted from the 2018 Canadian Guidelines on the Management of Hepatitis C

Baseline Assessment	<ul style="list-style-type: none">• Investigations to:<ul style="list-style-type: none">• Assess extent liver disease• Rule out coinfections, other forms liver disease• Guide treatment selection
Goals of Treatment	<ul style="list-style-type: none">• Cure• Prevent Transmission• Reduced morbidity, mortality & prolong duration and quality of survival
When to Initiate Treatment	<ul style="list-style-type: none">• Treatment recommended for all

Suggested work-up before beginning HCV therapy

Category	Investigation	Considerations
Routine bloodwork	<ul style="list-style-type: none"> • Complete blood count • Liver enzymes (alanine transaminase, aspartate transaminase, alkaline phosphatase) • Liver function (bilirubin, INR, albumin) • Creatinine 	<ul style="list-style-type: none"> • Low platelets and elevated bilirubin or INR are suggestive of cirrhosis • Renal function is important to determine safety of some regimens
Serology to exclude other infections	<ul style="list-style-type: none"> • HIV • Hepatitis B (HBsAg, anti-HBs, anti-HBc) 	<ul style="list-style-type: none"> • If HIV-positive, treatment for HIV must take drug interactions into consideration • If HBsAg-positive or anti-HBc-positive, see section on HBV coinfection (risk of HBV reactivation) (Appendix 1)
Serology to exclude other common liver diseases	<ul style="list-style-type: none"> • Transferrin saturation (hemochromatosis) • IgG 	<ul style="list-style-type: none"> • Elevated immunoglobulin G may reflect cirrhosis or possibly autoimmune hepatitis
Staging of liver disease	<ul style="list-style-type: none"> • APRI* • FibroTest (serum panel)† • Ultrasound* • Transient elastography† 	<ul style="list-style-type: none"> • All persons with HCV must have evaluation of fibrosis to exclude cirrhosis. • Normal ultrasound does not exclude cirrhosis.²¹ • APRI < 0.7 has a very high negative predictive value to exclude cirrhosis²²
HCV-specific	<ul style="list-style-type: none"> • HCV genotype and HCV RNA • Resistance testing (may be useful in select circumstances) 	<ul style="list-style-type: none"> • To select appropriate regimen, and consideration for addition of ribavirin.

Note: anti-HBc = hepatitis B core antibody, anti-HBs = hepatitis B surface antibody, APRI = Aspartate Aminotransferase to Platelet Ratio Index, HBsAg = hepatitis B virus surface antigen, HBV = hepatitis B virus, HCV = hepatitis C virus, HIV = human immunodeficiency virus, IgG = immunoglobulin G, INR = international normalized ratio.

*All persons with HCV should have a baseline ultrasound and evaluation of fibrosis.

†Where available, use noninvasive technologies (e.g., transient elastography [Fibroscan], shear-wave elastography, MR-Elastography, or FibroTest).

Hepatitis C Treatment - Cure

Direct Acting Agents (DAAs) now on Manitoba Formulary:

- **Maviret (Glecaprevir/Pibrentasvir - Genotype 1, 2, 3, 4, 5, 6**
- **Epclusa (Velpatasvir/Sofosbuvir) – Genotype 1, 2, 3, 4, 5, 6**
- Zepatier (Elbasvir/Grazoprevir) – Genotype 1, 4
- Harvoni (Ledipasvir/Sofosbuvir) – Genotype 1
- Sovaldi (Sofosbuvir) - Genotype 2, 3 (used with Ribavirin or Daclatasvir/Sofosbuvir)
- Daclinz (Daclatasvir/Sofosbuvir) – Genotype 3 (used with Sofosbuvir)
- Vosevi (Sofosbuvir/Velpatasvir/Volilaprevir) - Genotype 1, 2, 3, 4, 5, 6

Criteria Pharmacare:

- Prescribed by a hepatologist, gastroenterologist, or infectious disease specialist
- Laboratory confirmed Hepatitis C genotype 1,2,3,4,5,6 or mixed genotype
- Quantitative Hepatitis C RNA viral load level within last 6 months
- Some agents have additional criteria (e.g. Fibrosis Score, HIV, Hep B, CKD, DM)

NIHB Coverage:

- Prescribed by a hepatologist, gastroenterologist, or infectious disease specialist, or prescriber experienced in the treatment of Hepatitis C

>90, up to 99% Cure Rates with DAAs

Hepatitis C Treatment for PWID

- Recent or active IDU should not be seen as an absolute contraindication to HCV therapy.
- Strong evidence from various settings in which persons who inject drugs have demonstrated adherence to treatment and low rates of reinfection, countering arguments that have been commonly used to limit treatment access in this patient population
- Ideally, treatment of HCV-infected persons who inject drugs should be delivered in a multidisciplinary care setting
- Combining HCV treatment with supply distribution and opioid agonist therapy programs in this population has shown great value in decreasing the burden of HCV disease.

Meta-Analysis > Clin Infect Dis. 2021 Jul 1;73(1):e107-e118. doi: 10.1093/cid/ciaa612.

Association Between Opioid Agonist Therapy and Testing, Treatment Uptake, and Treatment Outcomes for Hepatitis C Infection Among People Who Inject Drugs: A Systematic Review and Meta-analysis

Jason Grebely¹, Lucy Tran², Louisa Degenhardt², Alexander Dowell-Day², Thomas Santo², Sarah Larney², Matthew Hickman³, Peter Vickerman³, Clare French³, Kerryn Butler^{2,4}, Daisy Gibbs², Heather Valerio¹, Phillip Read⁵, Gregory J Dore¹, Behzad Hajarizadeh¹

Affiliations + expand

PMID: 32447375 PMCID: PMC8246796 DOI: 10.1093/cid/ciaa612

Hepatitis C virus treatment for prevention among people who inject drugs: Modeling treatment scale-up in the age of direct-acting antivirals

Martin NK, Vickerman P, Grebely J, Hellard M, Hutchinson SJ, Lima VD, et al. **Hepatitis C virus treatment for prevention among people who inject drugs: Modeling treatment scale-up in the age of direct-acting antivirals.** Hepatology. 2013;58(5):1598-1609.

Hepatitis C Treatment in MB

- ▶ Viral Hepatitis Investigative Unit, HSC, Ph: 204-787-3630, Fax 204-787-7086
- ▶ Mount Carmel Clinic, Ph: 204-589-9428, Fax: 204-582-6006
- ▶ eConsult Hepatology – Hepatitis C Treatment advice
 - ▶ Email to register: servicedesk@sharedhealthmb.ca

Helena

- ▶ Hepatology recommended Hepatitis C Treatment with with Epclusa (Velpatasvir/Sofosbuvir) and reviewed by HIV Pharmacist for any drug-drug interactions
- ▶ Expect cure with 12 weeks of treatment

<https://www.hep-druginteractions.org/checker>

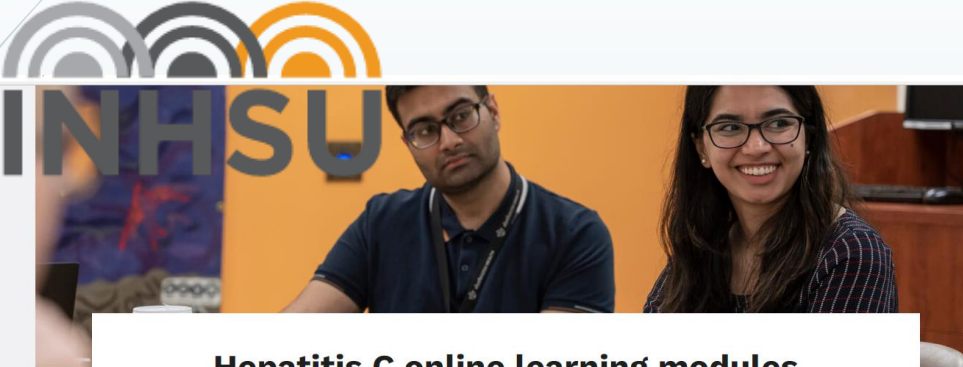
New Indication and Primary Drug: Bulevirtide for Hepatitis D

Looking for interactions with COVID-19 therapies, including Paxlovid? [Click here for covid19-druginteractions.org](https://www.hep-druginteractions.org/covid19-druginteractions.org)

HEP Drugs	Co-medications	Drug Interactions
<input type="text" value="epclusa"/>	<input type="text" value="buprenorphine"/>	<input type="checkbox"/> Check HEP/HEP drug interactions <input type="button" value="Switch to table view"/>
<input checked="" type="radio"/> A-Z <input type="radio"/> Indication <input type="radio"/> Trade	<input checked="" type="radio"/> A-Z <input type="radio"/> Class	<input type="button" value="Reset Checker"/>
<input checked="" type="checkbox"/> Sofosbuvir/Velpatasvir ⓘ	<input checked="" type="checkbox"/> Bictegravir/Emtricitabine/Tenofovir alafenamide (BIC/FTC/TAF) ⓘ	<input type="button" value="No Interaction Expected"/>
<input checked="" type="checkbox"/> Sofosbuvir/Velpatasvir ⓘ	<input checked="" type="checkbox"/> Buprenorphine ⓘ	<input type="text" value="Sofosbuvir/Velpatasvir"/>
	<input checked="" type="checkbox"/> Buprenorphine ⓘ	<input type="text" value="Bictegravir/Emtricitabine/Tenofovir alafenamide (BIC/FTC/TAF)"/>
		<input type="text" value="More Info"/> ▾
		<input type="button" value="No Interaction Expected"/>
		<input type="text" value="Sofosbuvir/Velpatasvir"/>

Hepatitis C Resources

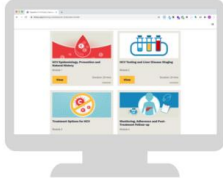
<https://www.inhsu.org/online-learning-modules/>



Hepatitis C online learning modules

Confidently assess, treat and manage hepatitis C with our free-to-access online learning modules.

Our online learning modules improve your understanding of hepatitis C in four key areas including epidemiology, assessment, treatment and management. These modules are suited to medical practitioners, nurses, allied health or other health professionals looking to increase their country-specific knowledge on hepatitis C.



Tailored for 10 countries

We recognise the importance of tailoring education to specific countries and languages and have 10 country-specific courses to choose from.

Canada

[Start learning for free](#)

<https://www.hcvguidelines.org/>



HCV Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C

Home Test, Evaluate, Monitor Treatment-Naive Treatment-Experienced Unique & Key Populations About

Start Here: Choose a patient profile from the menu above.

Welcome to HCVGuidelines.org

The AASLD and IDSA in partnership with the panel have created an updated web experience to facilitate easier and faster access to this important resource. Please select a patient profile from the menu above, click on a guidance section below, or use the search box to begin.

- Contents and Introduction - *Select a Page*
- Testing, Evaluation, and Monitoring of Hepatitis C - *Browse Topics*
- Initial Treatment of HCV Infection - *Choose Patient Genotype*
- Retreatment of Persons in Whom Prior Therapy Has Failed
- Management of Unique & Key Populations - *Review Recommendations*

Using the Guidance on Your Mobile Device

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New and updated:
Updated Testing Recommendations
Review new HCV screening guidance from the AASLD and IDSA.

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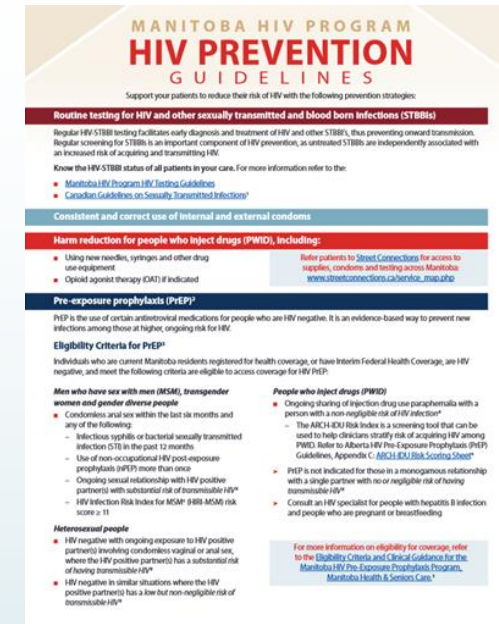
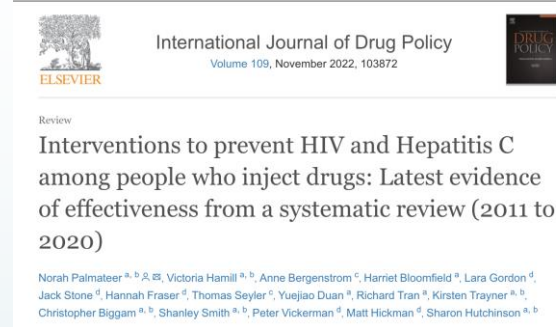
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Recent Announcements

- 29 Sep What's New, Updates and Changes to the Guidance
- 12 Mar What's New, Updates and Changes to the Guidance

Prevention HIV and Hepatitis C

- Condoms
- Supply distribution
- Addictions Treatment
- Opiate Agonist Therapy
- Antiviral based interventions
 - ART to prevent onward transmission HIV
 - Hep C treatment to prevent onward transmission Hep C
 - PrEP for prevention new infection in HIV negative at high risk
 - Tenofovir DF + Emtricitabine (Truvada) i tab once daily
 - Covered by FNIHB, on pharmacare formulary (part 2 benefit), ~ \$250/month
 - Register to become a PrEP prescriber:
https://www.gov.mb.ca/health/publichealth/cdc/docs/prep_prescriber_regform.pdf
 - Guidelines for use:
 - <https://mbhiv.ca/wp-content/uploads/2021/11/MB-HIV-Pgm-Prevention-Guidelines-FINAL.pdf> (within this document is a link to MB PrEP eligibility criteria)
 - PEP (post-exposure prophylaxis)
 - https://www.gov.mb.ca/health/publichealth/cdc/protocol/hiv_postexp.pdf



PrEP underutilized for PWID

Potential success alongside OAT

Review > [J Subst Abuse Treat.](#) 2022 Jan;132:108506. doi: 10.1016/j.jsat.2021.108506.
Epub 2021 May 31.

Pre-exposure prophylaxis (PrEP) indication and uptake among people receiving buprenorphine for the treatment of opioid use disorder

Lori Beck¹, Anna Beth Parlier-Ahmad², Caitlin E Martin³

Affiliations + expand

PMID: 34098202 PMCID: [PMC8630078](#) DOI: [10.1016/j.jsat.2021.108506](#)

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[J Prim Care Community Health.](#) 2022 Jan-Dec; 13: 21501319211063999. PMCID: [PMC8796077](#)
PMID: [35068243](#)
Published online 2022 Jan 22. doi: [10.1177/21501319211063999](#)

Evidence of Potential Discriminatory HIV Pre-Exposure Prophylaxis (PrEP) Prescribing Practices for People Who Inject Drugs Among a Small Percentage of Providers in the U.S.

[Benedikt Pleuhs](#),¹ [Colleen B. Mistler](#),² [Katherine G. Quinn](#),¹ [Julia Dickson-Gomez](#),¹
[Jennifer L. Walsh](#),¹ [Andrew E. Petroll](#),¹ and [Steven A. John](#)¹

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[Curr HIV/AIDS Rep.](#) Author manuscript; available in PMC 2022 Aug 1.

PMCID: [PMC8286349](#)

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NIHMSID: [NIHMS1712954](#)

[Curr HIV/AIDS Rep.](#) 2021 Aug; 18(4): 328–338.

PMID: [33907971](#)

Published online 2021 Apr 27. doi: [10.1007/s11904-021-00556-z](#)

The Past, Present, and Future of PrEP implementation Among People Who Use Drugs

[Katie B. Biello](#),^{1,2,3,4} [Matthew J. Mimiaga](#),^{4,5,6,7} [Pablo K. Valente](#),^{1,3} [Nimish Saxena](#),⁴ and [Angela R. Bazzi](#)^{8,9}

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Review > [J Acquir Immune Defic Syndr.](#) 2015 Jun 1;69 Suppl 2(0 1):S169–75.
doi: 10.1097/QAI.0000000000000641.

Biomedical HIV Prevention Including Pre-exposure Prophylaxis and Opiate Agonist Therapy for Women Who Inject Drugs: State of Research and Future Directions

[Kimberly Page](#)¹, [Judith Tsui](#), [Lisa Maher](#), [Kachit Choopanya](#), [Suphak Vanichseni](#),
[Philip A Mock](#), [Connie Celum](#), [Michael Martin](#)

Affiliations + expand

PMID: 25978484 PMCID: [PMC4491435](#) DOI: [10.1097/QAI.0000000000000641](#)

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Summary

- ▶ Test for HIV and Hepatitis C and other Sexually Transmitted Infections
- ▶ Rescreen at risk populations annually or more frequently if high risk
- ▶ PWUD do well on antiretroviral therapy for HIV
- ▶ Opiate agonist therapy improves engagement in care, adherence to treatment and outcomes for people with opioid use disorder and HIV
- ▶ Hepatitis C can be cured and treatment should be offered to all people who qualify including PWUD/ PWID and those on OAT
- ▶ Drug-Drug interactions may be significant and expert consultation is available

Questions?
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