



HEPATITIS B AND ITS IPAC IMPLICATION

CoP MEETING - RVH IPAC HUB

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VIRAL HEPATITIS

- Infection that causes liver inflammation and damage.
- Five types of hepatitis viruses – A, B, C, D, and E.
- Viral Hepatitis A and E are non-bloodborne, fecal-oral transmitted viruses with no chronic state in most cases.*
 - Hepatitis E can also spread via blood transfusion and can cause chronic state in immunocompromised people.
- Viral Hepatitis B, C, and D are **bloodborne** viruses with chronic carrier states.
- Highly effective vaccines available for Hepatitis A and B only in Canada.



HEPATITIS B in CANADA

2019 Surveillance Data

4,912 total number of hepatitis B cases reported in 2019, for a rate of **13.1 per 100,000 people**

Chronic
3,790 cases
10.2/100,000 people



Unspecified
944 cases
4.7/100,000 people

Acute
178 cases
0.5/100,000 people

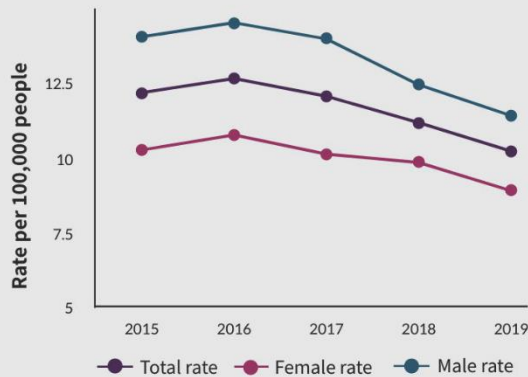


Chronic hepatitis B rates are **highest** among males and females **30 - 39 years old**



56% of total hepatitis B cases are among males

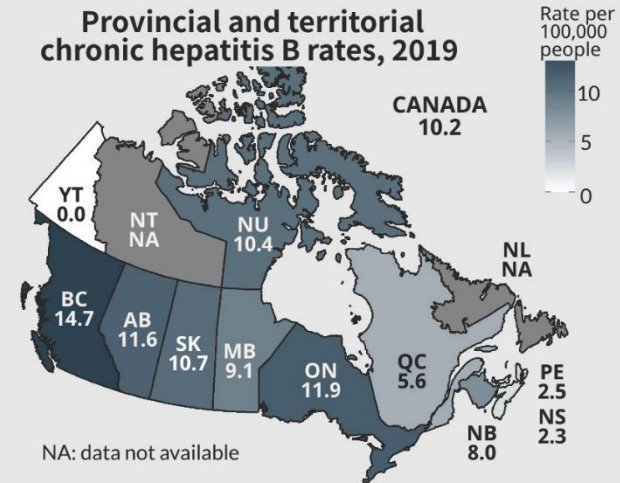
Reported chronic hepatitis B rates, overall and by sex, 2015-2019



8% Decrease in chronic hepatitis B rates since 2018

10% Decrease in acute hepatitis B rates since 2018

Provincial and territorial chronic hepatitis B rates, 2019



Data source: Canadian Notifiable Disease Surveillance System.
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HEPATITIS B VIRUS (HBV)

- Is an enveloped DNA virus – highly infectious but relatively easy to kill
- Can spread through:
 - Direct contact with infected blood and bodily fluids
 - Sexual contact
 - Perinatal exposure of an infant from an infected mother
 - Sharing needles, getting tattoos, body piercing or acupuncture
 - Sharing personal items: toothbrushes, razors, and **glucose monitors**
- HBV **cannot** spread through sneezing, coughing, hugging, or breastfeeding.

LIVE POLL

What is IPAC best practice when using **fingerstick devices** to monitor blood glucose levels in residents/clients?

Open a new browser window and go to link:

Pollev.com/mustansirdiwan481

LIVE POLL

What is IPAC best practice when using **fingerstick devices** to monitor blood glucose levels in residents/clients?

- A. Can use reusable fingerstick devices on multiple residents if cleaned after every use.
- B. Can use reusable fingerstick devices on multiple residents if cleaned and disinfected after every use.
- C. Should use fingerstick device only once even if reusable.
- D. Fingerstick devices should never be used for more than one resident/client.



ELSEVIER

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Brief report

Hepatitis B outbreak associated with a home health care agency serving multiple assisted living facilities in Texas, 2008-2010

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HOW SOMEONE CAN GET HEPATITIS B:

BLOOD

DIRECT BLOOD TO BLOOD CONTACT



Mother to child during birth



Tattoos, piercings, barbers, scarification, circumcision practices



Sharing needles

SEX

DIRECT CONTACT WITH SEXUAL FLUIDS



Sexual transmission

There is a risk during any type of sexual contact



Household contact

Sharing hygiene equipment (razors, toothbrushes, earrings etc.)

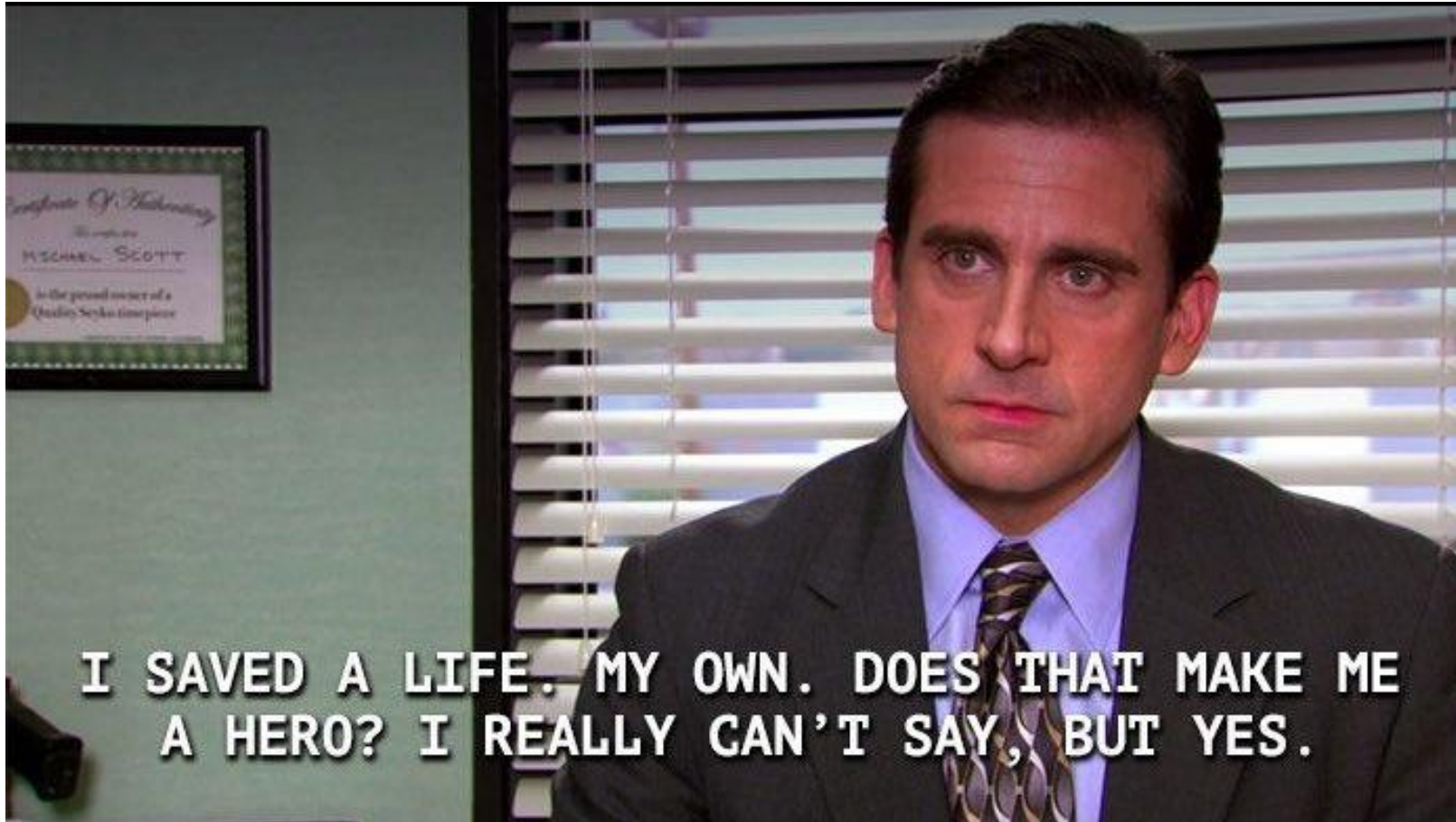


Unsterile healthcare practices

ACUTE VS CHRONIC

- Acute stage occurs within the first 6 months of exposure
 - Majority of adults recover and become immune for life
 - Are not contagious anymore after acute infection resolves
 - People with acute HBV usually have only mild symptoms
- For some, infection can develop into a chronic infection (chronic carriers)
 - Most remain contagious for life **even when** there are no visible symptoms
 - Risk factors include immature T-cell immunity (children) or being immunocompromised (HIV, organ transplant recipients, comorbidities)
 - Risk of serious illness: cirrhosis and liver cancer

IMMUNIZATION



RECOMMENDED IPAC MEASURES

- Get vaccinated if at risk and not yet immunized
 - HB vaccine is 95% to 100% effective pre-exposure
 - Reactions to HB vaccine are generally mild and transient
 - Adults at risk can receive either a monovalent HB vaccine or a HAHB vaccine
 - Usually 3 doses administered: 0, 1, 6 months
- Use routine practices at all times
 - Point-of-care risk assessment, hand hygiene, aseptic technique
 - Cleaning and disinfection of non-critical patient care equipment, safe disposal of sharps, safe handling of soiled linen.

BLOOD GLUCOSE MONITORING

- Fingertick devices should **never** be used for more than one person.
- Use dedicated glucometers for clients/residents whenever possible.
- In settings where assisted monitoring of blood glucose is performed, single-use, auto-disabling fingertick devices should be used.
- Insulin pens should be assigned to individual persons and labeled appropriately. They should never be used for more than one person.
- Wear gloves during blood glucose monitoring and perform hand hygiene immediately after removal of gloves.

CLEANING AND DISINFECTION

- 1:10 dilution of household bleach can be used for disinfecting blood spills and dried blood **after** the surface is cleaned. Recommended contact time is 10 minutes.
- Accelerated hydrogen peroxide (AHP) one-step cleaning and disinfectant wipes (0.5%) can kill HBV with general contact time of 1 minute.
- Quats (quaternary ammonium compounds) wipes can kill HBV with a contact time of usually 4-5 minutes depending on the product used.



I HAD AN EXPOSURE. NOW WHAT?

- **No** action needed if the person has documented immunity.
- One dose of HB vaccine should be given to susceptible individuals as soon as possible.
- One dose of Hepatitis B Immune Globulin (HBIG) may also be indicated within 48 hrs after exposure.
 - HBIG provides immediate short-term passive immunity for additional protection.
- HB vaccine and HBIG are highly effective as post-exposure prophylaxis (PEP).

THINGS TO CONSIDER

- Routine booster doses of HB vaccine are **not** recommended for immunocompetent persons with previously documented immunity.
- Immunocompromised individuals may require booster doses.
- HBV cannot penetrate intact skin.
- A person with chronic hepatitis B infection may not have symptoms.
- Educate clients on high risk behaviour.
- Suspect or confirmed HBV must be **reported** to the local MOH.

QUESTIONS?



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