

Session #2

# Public Health Update:

*Hepatitis C & ECHO+*

January 24, 2023

13:30 - 15:00



# Outline

1. MOH Update: Respiratory viruses in Alberta
  - *Dr. Chris Sarin*
  
2. Hepatitis C & Extension for Community Health Outcomes+
  - *Dr. Samuel Lee*
  - *Kate Dunn*
  
3. MOH Update: The Impact of Hepatitis C in Alberta First Nations
  - *Dr. Chris Sarin*
  
4. Reporting & Treatment: Hepatitis C Practices and Resources
  - Christina Smith, RN
  
5. Questions

# MOH Update: Respiratory Viruses in Alberta

Dr. Chris Sarin

*Senior Medical Officer of Health*

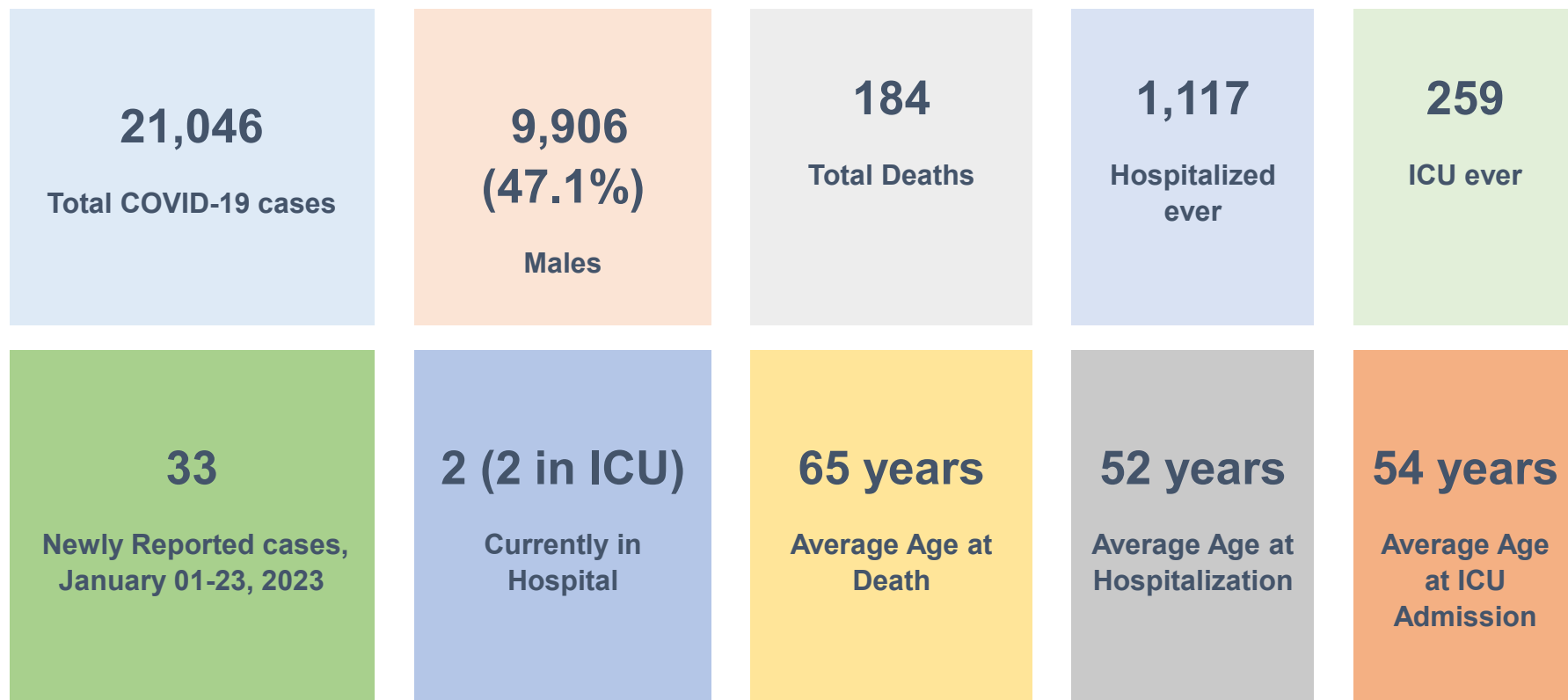


# MOH Update: Respiratory Viruses

- As of early January 2023, the Public Health Agency of Canada (PHAC) is reporting a decline in influenza activity, with both influenza and RSV returning to seasonal norms at the national level.
- COVID-19 Omicron subvariant XBB.1.5 is reporting to be more transmissible and contagious, however has not been associated with increased severe outcomes.
- A new, more transmissible variant could lead to more cases and higher healthcare usage. Even mild cases can impact daily activities like going to work, school, and socializing.
- Bivalent boosters, available in First Nations across Alberta, continue to provide the best protection against the most severe outcomes of COVID-19.
- Primary respiratory viruses of concern in Alberta:
  - COVID-19
  - Respiratory Syncytial Virus (RSV)
  - Seasonal influenza

# Overview of Confirmed COVID-19 Cases in First Nations Communities on Reserve in Alberta

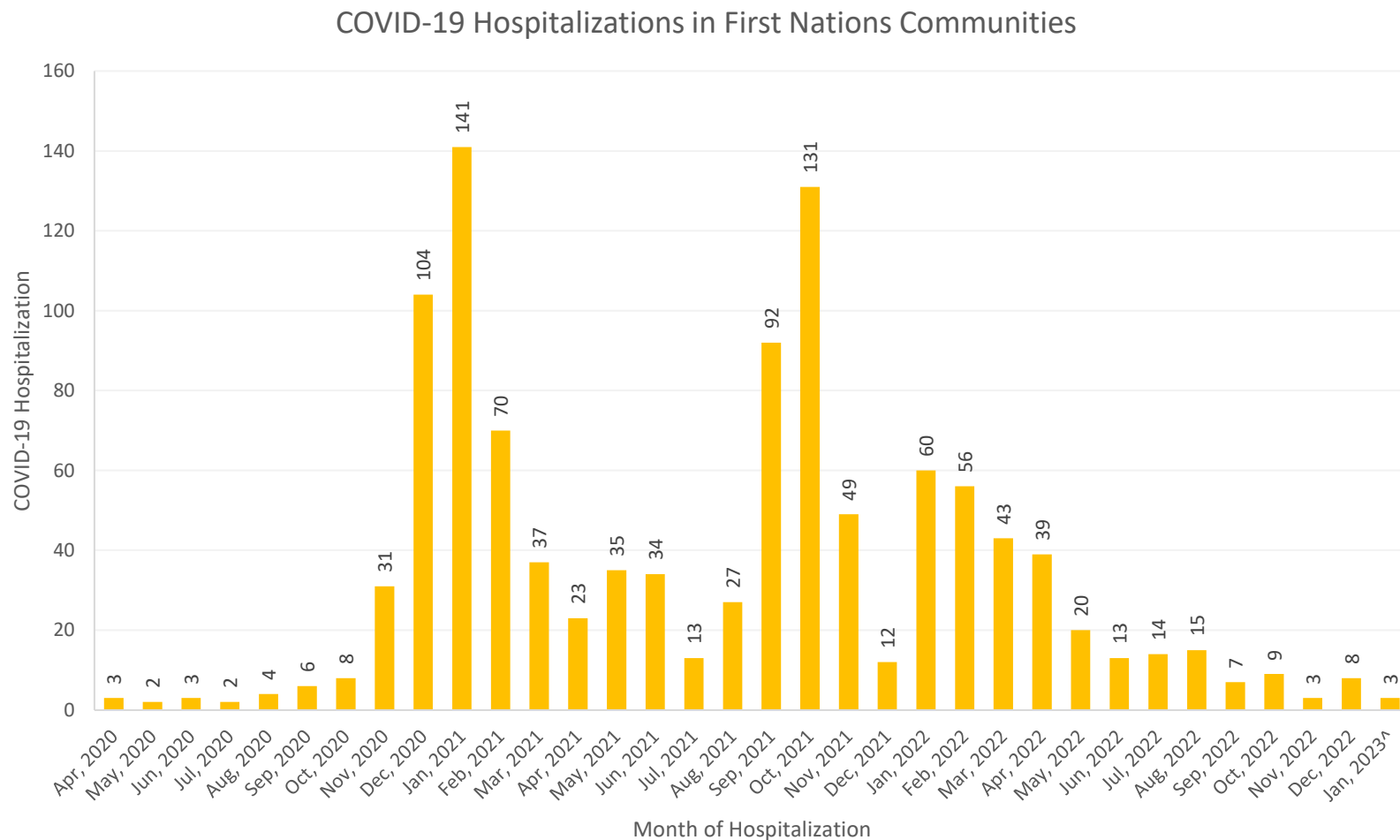
Source: FNIHB COVID-19 ER System via Synergy in Action (January 24, 2023)



These do not include cases confirmed with only rapid antigen test in communities

# COVID-19 Hospitalizations in First Nations Communities on Reserve by Hospitalization Month, January 23, 2023

Source: FNIHB COVID-19 ER System via Synergy in Action (January 24, 2023)

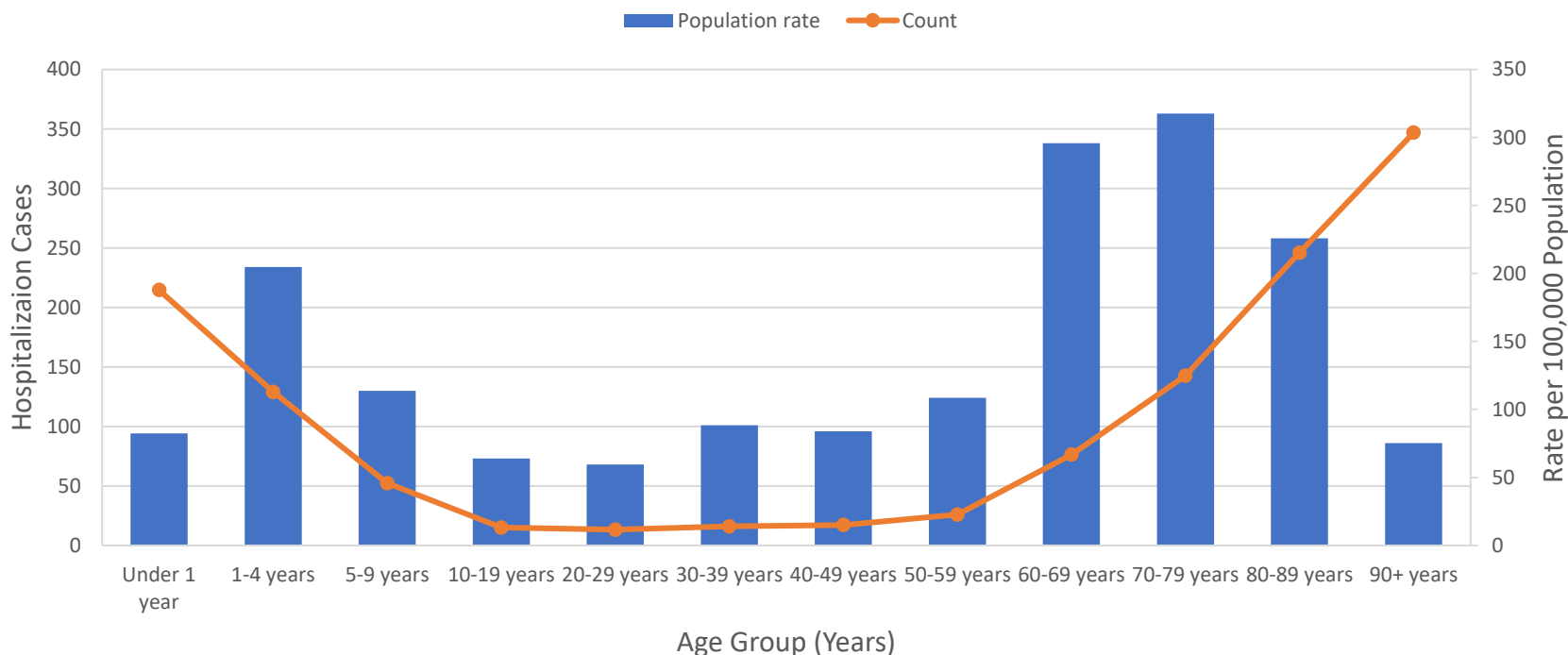


^Data may be incomplete

# Influenza in Alberta

- As of January 24, 2023, 45 hospitalizations and 8 death due to influenza have been reported among First Nations people living on-reserve in Alberta

Number and Rate of Hospitalizations among Lab-Confirmed Influenza Cases by Age Group, Alberta, 2022-23



# Hepatitis C & Extension for Community Health Outcomes+ (ECHO+)

Dr. Sam Lee

*Professor and Hepatologist, University of Calgary, Director Project ECHO+ HCV*

Kate Dunn

*Community Engagement ECHO+ Alberta*





Indigenous Services Canada  
ECHO Advisory Circle 24/1/23

# Hepatitis C Review 2023



Dr. Sam Lee  
Calgary Liver Unit  
Director, Project ECHO HCV



UNIVERSITY OF  
CALGARY



# Acknowledgment

- I acknowledge being an uninvited settler on land that is the traditional, unceded territory of the Blackfoot and the people of the Treaty 7 region which includes the Siksika, Piikani, Kainai, Tsuu T'ina and Stoney Nakoda First Nations. This region is also home to the Métis Nation of Alberta, Region III.



# Speaker disclosures

- Research support: Abbvie, Gilead, Novartis
- Consultant: Abbvie, Gilead, Intercept, Oncoustics, Pendopharm, Justice Canada (HCV file)
- Speakers Bureau: Abbvie, Gilead, Intercept, London Drugs

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## TYPES OF VIRAL HEPATITIS

A: fecal-oral, acute only

B: parenteral, acute/chronic

C: parenteral, acute/chronic

D: parenteral, acute/chronic, only with B (uncommon in Canada)

E: fecal-oral, acute only (not in Canada)

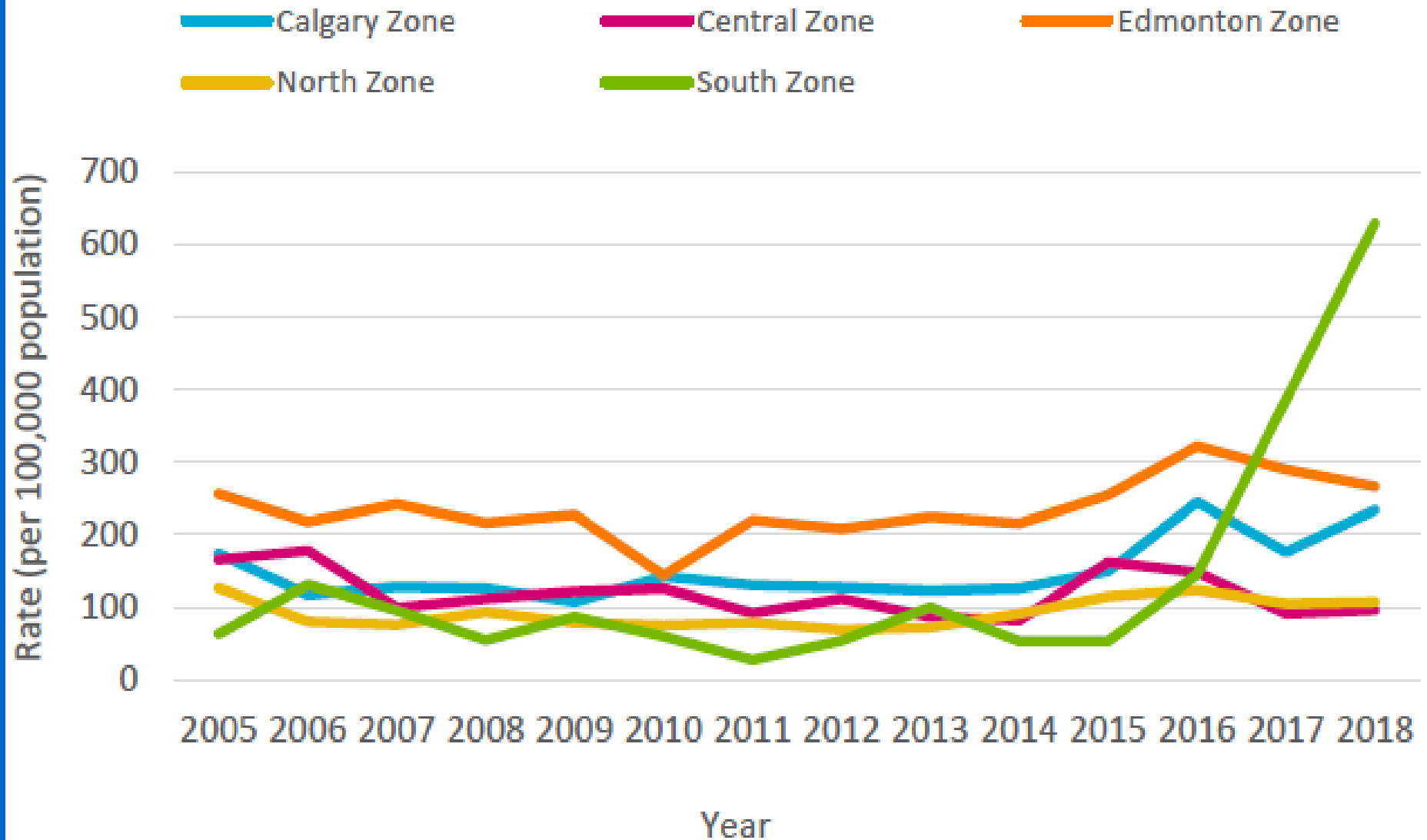
Non-ABCDE: acute only, uncommon, transmissions unknown

# Hepatitis C in Canada

- 2019 PHAC est. 387,000 anti-HCV pos (1.0%)
- 7x more common in Indigenous (est. 7.3%)
- Perhaps 1/4 of gen population unaware of infection, 1/3 in 'boomers', much higher in Indigenous, but no estimate.

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# Why is HCV so common in Indigenous people?



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- 
- 

Can Liver J 2018; 3:1

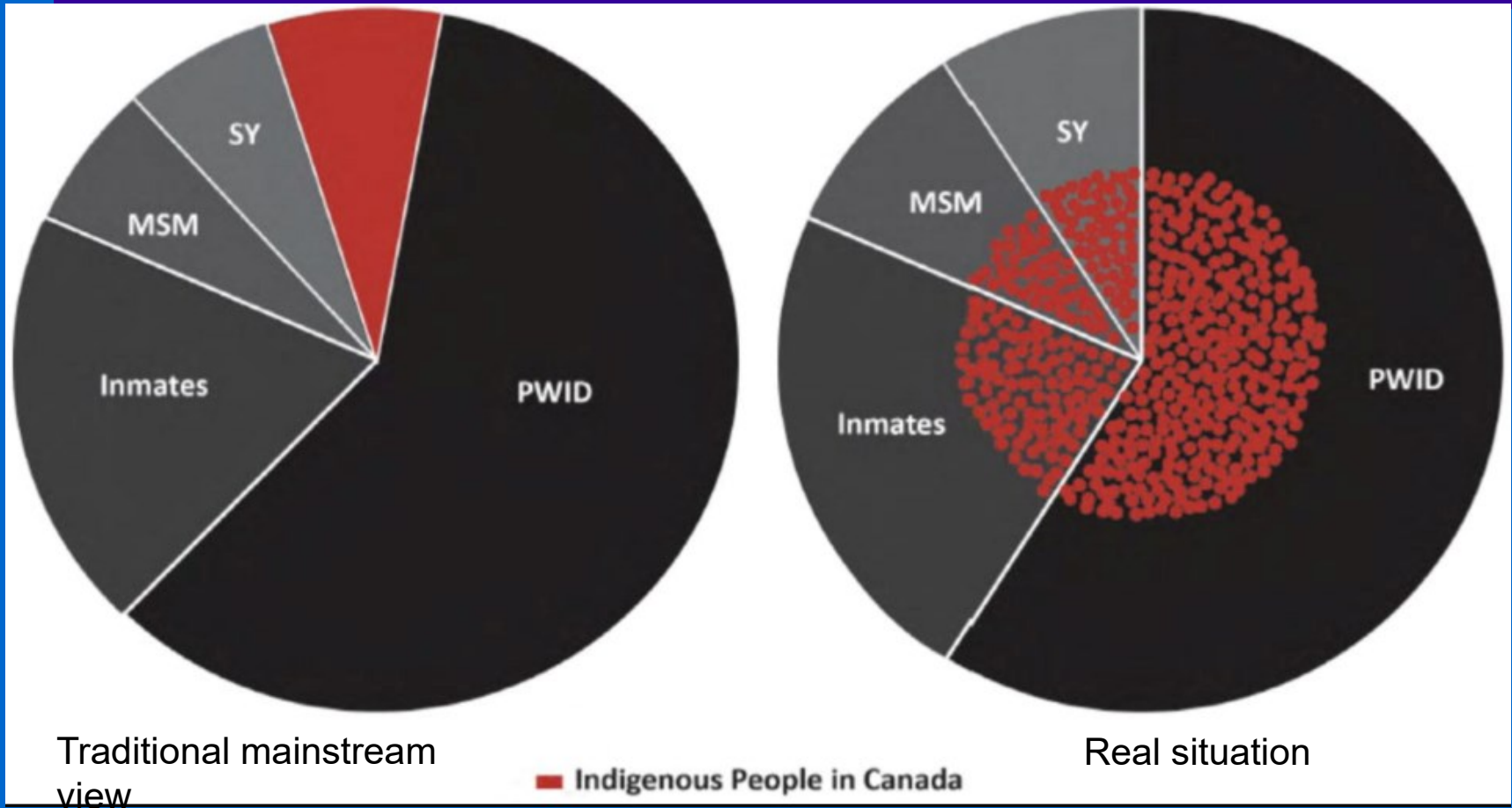
## **In the eyes of Indigenous people in Canada: exposing the underlying colonial etiology of hepatitis C and the imperative for trauma-informed care**

Sadeem T Fayed MPH(c)<sup>1</sup>, Alexandra King MD, FRCPC<sup>2</sup>, Malcolm King PhD, FCAHS<sup>2</sup>, Chris Macklin MPH(c)<sup>1</sup>, Jessica Demeria<sup>3</sup>, Norma Rabbitskin BN, RN<sup>4</sup>, Bonnie Healy RN<sup>5</sup>, Stewart Gonzales (Sempulyan) BSW<sup>6</sup>

Correspondence: Dr Alexandra King, member Nipissing FN, Cameco Chair in Indigenous Health, Dept of Medicine, University of Saskatchewan. [Alexandra.king@usask.ca](mailto:Alexandra.king@usask.ca)

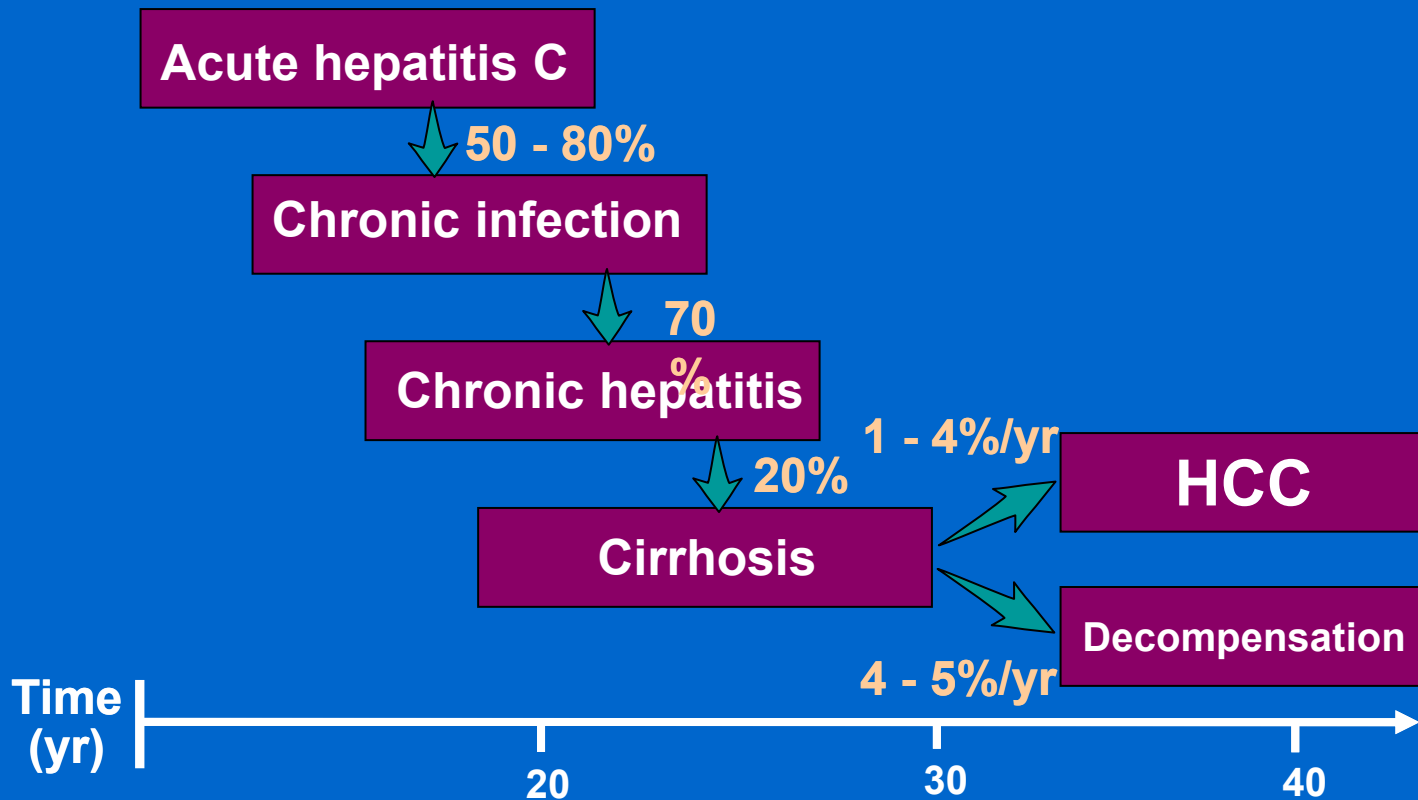


# 'Mainstream' vs real view



Indigenous people are over-represented in all risk groups except MSM. Fayed et al. Can Liv J 2018

## Outcome Following Hepatitis C Infection

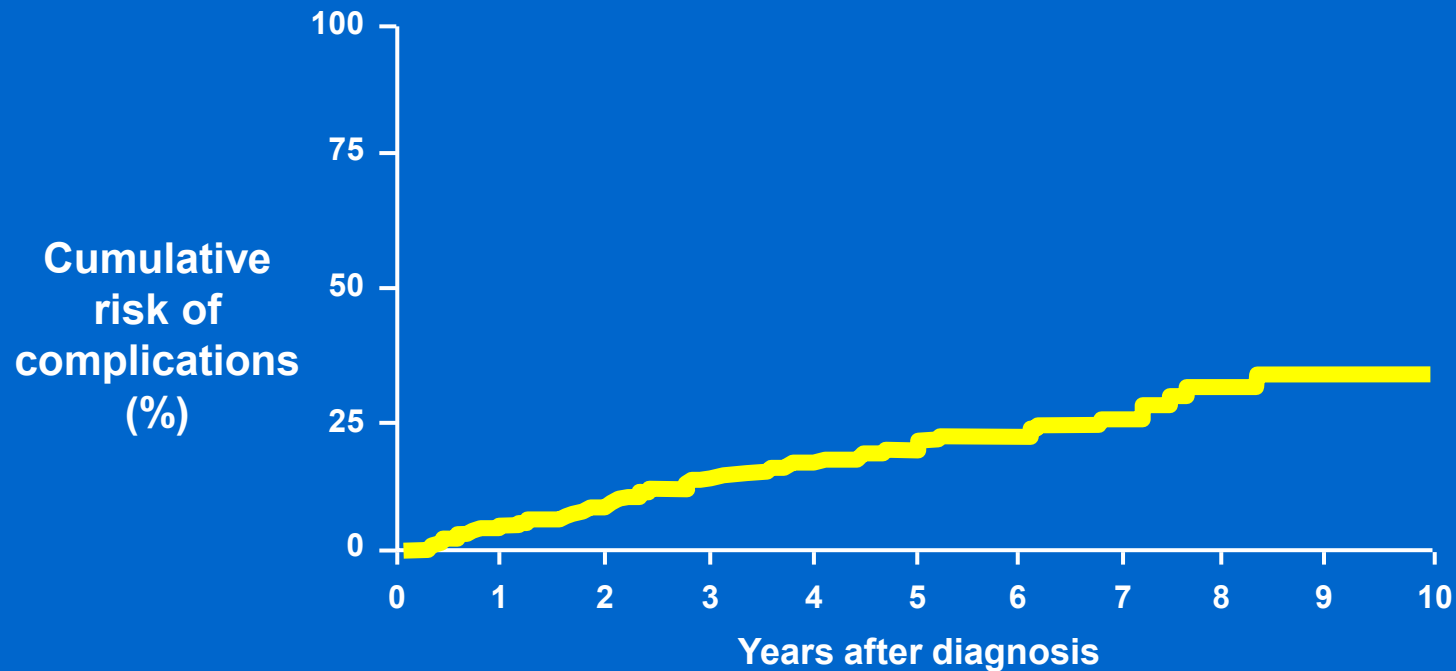


# Course of chronic hepatitis C

- 3 words: **slow, slow, slow**
- Approximately 5-30% develop cirrhosis in 30 years
- in young female nondrinkers, perhaps  $< 10\%$  develop cirrhosis
- moderate and heavy alcohol use increase risk of cirrhosis
- PATIENTS MUST LIMIT ALCOHOL INTAKE!

# Natural History of HCV

## Cirrhosis



Adapted from Fattovich G et al. *Gastroenterology*. 1997;112:466-467.



# Screening

•  
•  
•

**Q** Which patients should be screened for HCV?

**A**

- Symptomatic patients
- Patients with risk factors
- Universal age-based (>40 years old)
- All Indigenous persons >16?**

## Tests Used in Chronic HCV

- Hepatitis C antibody tests
- HCV RNA tests
- ~~Genotyping~~
- ~~Liver biopsy~~
- ~~Fibroscan~~

# Algorithm for management

Anti-HCV positive



Reflexive HCV RNA and  
genotype



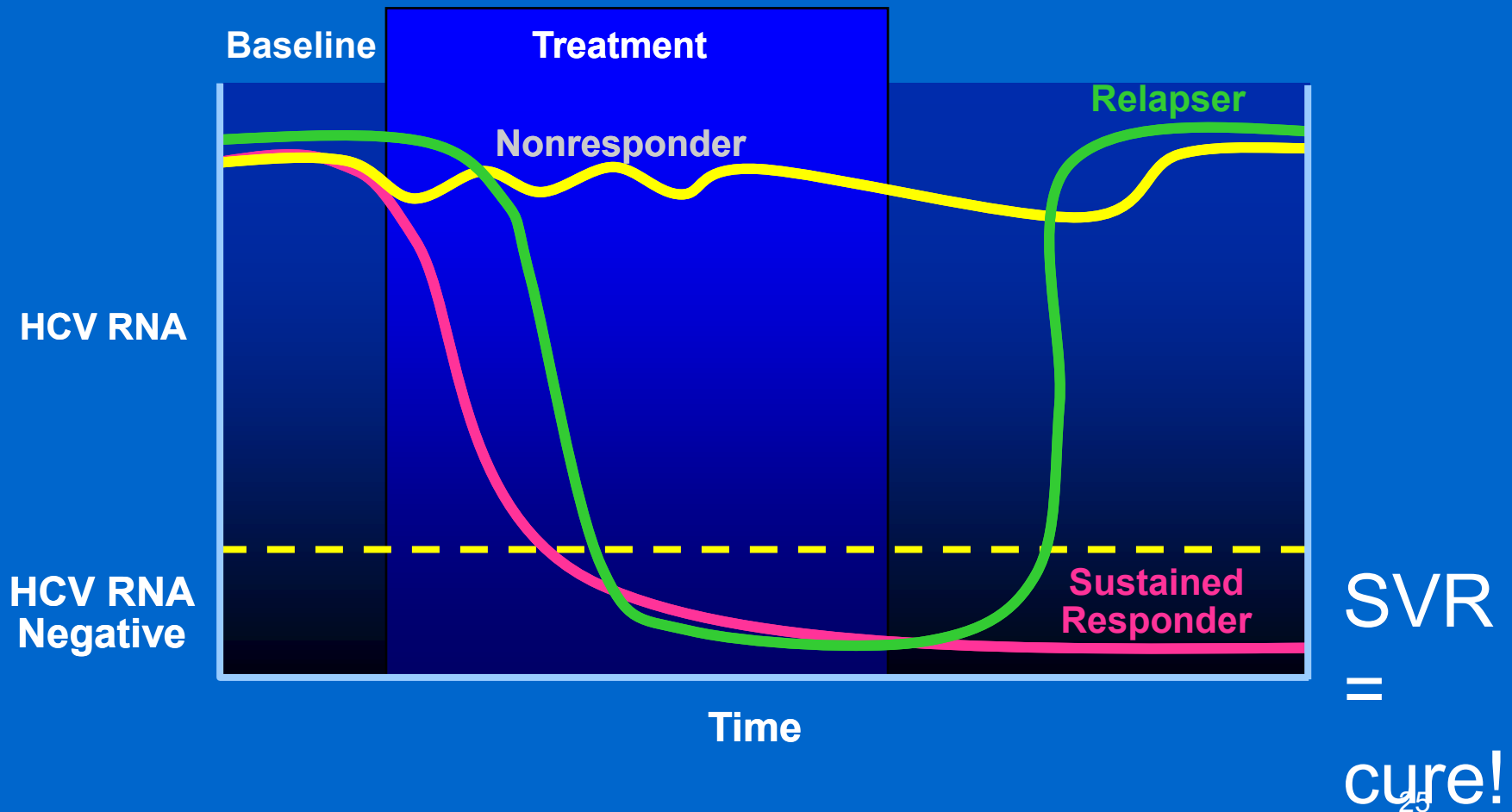
Negative -  
reassurance



Positive – treat  
with DAA



# Patterns of Response to HCV Treatment



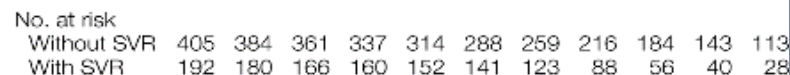
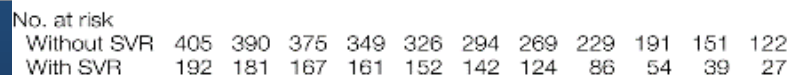
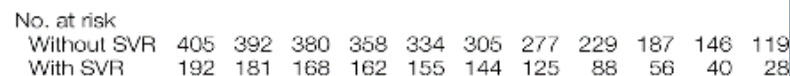
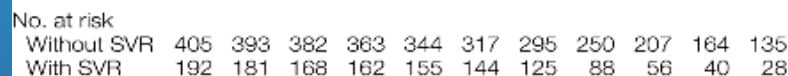
# Goals of HCV Treatment

## Primary

- Eradicate the virus (patients are **cured**)

## Secondary

- Prevent progression to cirrhosis
- Reduce incidence of liver cancer
- Reduce need for transplantation
- Enhance survival



# DAA therapies have similar efficacy

- Epclusa, Maviret pangenotypic, similar efficacy
- Simplified test-and-treat strategy for remote communities (pangenotypics)?

# Major advances in HCV drug development have made disease eradication a possibility

1986

1998

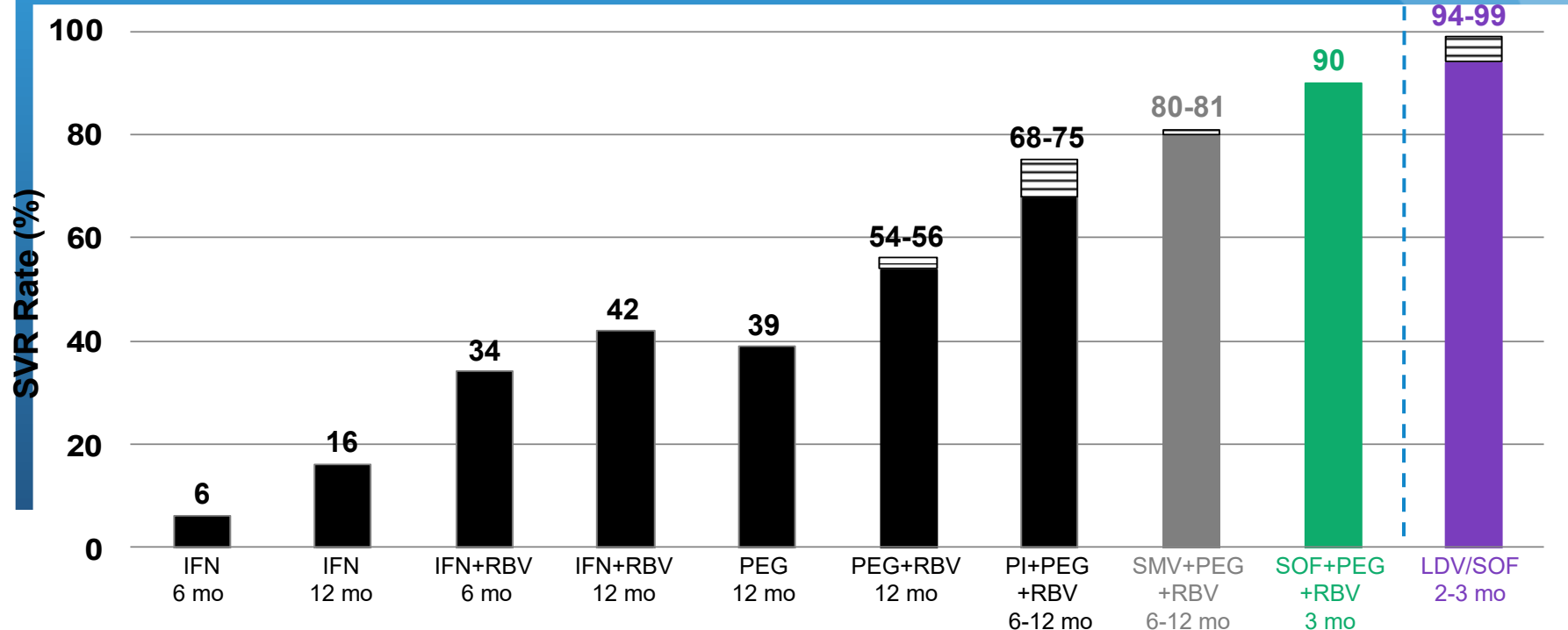
2001

2002

2011

2013

2014\*





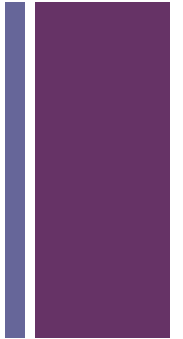
# Project ECHO

Extension for Community Health Outcomes

Alberta Report 2015-19

Dr. Samuel Lee

# + Goals of Project ECHO



- Develop capacity to safely and effectively treat HCV in all areas of Alberta
- Build a community of expertise in HCV care using hub and spoke model of tele-medicine



# Timelines



**August 2015**

Replication Training in  
New Mexico



**October 28, 2015**

First Project-ECHO HCV  
Sessions



**August – October 2015**

Initial Spoke Identification Site  
Ready

**October 2015 – Present**

Ongoing sessions 1 hour q2weeks via  
videoconferencing







# Project ECHO HCV Alberta 2019





# Structure of Bi-weekly Sessions



- Hub site connects with spokes through ZOOM videoconferencing for 1h sessions q-2wks
  - Current participation: 5-9 sites per session; 4-9 cases presented per session
- Hub site personnel: hepatologist; nurse; pharmacist; administrative; tech support
- Prior to sessions, de-identified patient case information submitted to hub site
- During sessions, cases discussed in multidisciplinary format. Management plan developed.



# HCV Rx is tailor-made for telehealth



- Distant specialist appointment hard for many patients
- HCV Rx is simple, no side effects, very high cure rates
- Scripts written by NPs, fam docs, pharmacists
- **Patients never have to leave local community**

## HCV: conclusions

- Common chronic viral infection
- More cases in Indigenous people
- Curable by antiviral Rx; no side effects
- New drugs have increased cure rate to >95%
- Screening needs to increase
- ECHO allows access to care for underserved Indigenous populations

**What is Hepatitis C?**

**Why does it matter to my  
Community?**

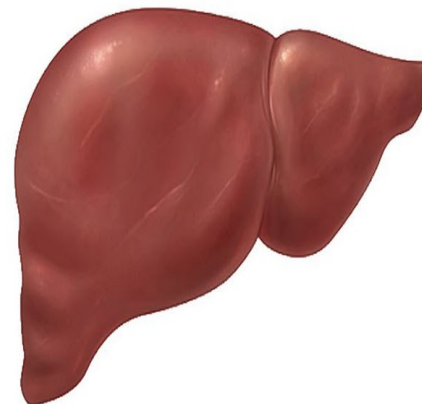
**How can we make a difference?**



- **Filters blood coming from digestive system**
- **Makes proteins that help digest food and stop bleeding**
- **Stores vitamins and minerals**
- **Boosts the immune system**
- **Changes medications into usable form**
- **Filters toxins, alcohol, drugs and other chemicals**

# What Does My Liver Do?

Normal Liver



Liver with Cirrhosis



# What is Hepatitis C (HCV)?

- Hepatitis A, B, C
- Blood to Blood Transmission
- Risk Groups;

Born 1945-1975

Received blood transfusion

Tattoo/piercing by unlicensed

Dental work - nonsterile

Sharing Needles, Pipes,  
Straws

Hep C is passed  
blood to blood.  
Know the risks.

Hepatitis C is passed on when the blood of a person with Hep C gets into the bloodstream of another person. By knowing how Hep C enters the body, everyone can take steps to stay safe.



There are different kinds of hepatitis. Know the ABCs.



Not just needles. Everything new, every time. Prevent Hep C.



Living with Hep C? Take care of your liver. And yourself.



Treatment can cure Hep C. Know your options.



Hepatitis C. You can have it and not know it. Get tested.



Canada's source for  
HIV and hepatitis C  
information

Learn more at [www.catie.ca](http://www.catie.ca)

@CATIEinfo

CA111 Ordering Centre No: A111-70149-C

# What Does It Feel Like?

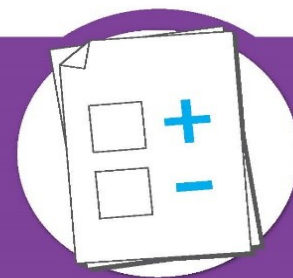
You may not have any symptoms, or you may start to feel;

- Tiredness
- Headaches
- Joint/Muscle Pain
- Nausea
- Forgetfulness
- Belly Pain
- Depression
- Anxiety
- Itchy skin

## Hepatitis C.

You can have it and not know it. Get tested.

A person can have hepatitis C for many years without having symptoms or feeling sick. The only way to know if you have Hep C is to get tested.



**Hep C is passed blood to blood.**  
Know the risks.



**There are different kinds of hepatitis.**  
Know the ABCs.



**Not just needles. Everything new, every time.**  
Prevent Hep C.



**Living with Hep C? Take care of your liver.**  
And yourself.



**Treatment can cure Hep C.**  
Know your options.





# What Can We Do About Hepatitis?

- Get Screened
- Get Treated
  - 1-3 pills/day
  - 8-12 weeks
- Get Cured
- Get Talking

**TREATMENT  
CURES  
OVER 95% OF  
PEOPLE WITH  
HEPATITIS C**

**Talk to your nurse or doctor about your treatment options**



Association of Health Professionals has been made possible through a grant in contribution from the Ontario Ministry of Health and Long-Term Care and the Health Information Agency of Germany. The views expressed here do not necessarily represent those of our funders.

# What is elimination according to the WHO?

Global Health Sector Strategy – HCV targets at a glance



## Incidence targets

30% reduction in new HCV infections by 2020  
90% reduction in new HCV infections by 2030



## Mortality targets

10% reduction in mortality by 2020  
65% reduction in mortality by 2030



## Harm reduction

Increase in sterile needle and syringes provided per PWID/year from 20 in 2015 to:

- 200 by 2020
- 300 by 2030



## Testing targets

90% of people aware of HCV infection by 2030



## Treatment targets

80% of people treated by 2030

# HEPATITIS C IN CANADA



1%

OF CANADIANS HAVE BEEN  
INFECTED WITH **HCV** IN THEIR  
**LIFETIME** (2011)<sup>1</sup>

OF THOSE

43%

are found in **former and  
current persons who  
inject drugs**



while

35%

are found in **foreign-born  
populations**<sup>1</sup>



Up to **246,000** Canadians are  
living with **CHRONIC HEPATITIS C VIRUS (HCV)**  
**INFECTION** (2011)<sup>1</sup>



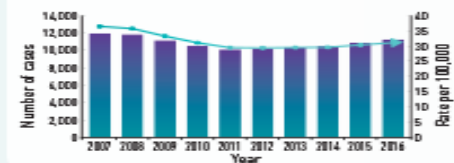
An estimated **44%**  
are **unaware** of their  
infection

**AVERAGE ANNUAL RATES OF REPORTED HCV  
CASES PER 100,000 (2012–2016)<sup>2</sup>**

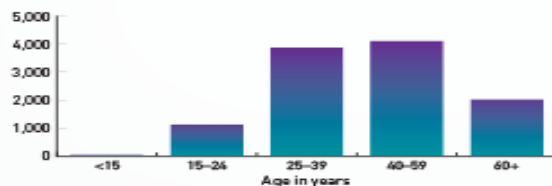


**1 in 4** prevalence of HCV  
among **FEDERAL INMATES**  
(2005–2012)<sup>2</sup>

**TRENDS IN REPORTED HCV CASES  
(2007–2016)<sup>3</sup>**



**NUMBER OF REPORTED HCV CASES BY AGE (2016)<sup>3</sup>**



**REPORTED HCV CASES BY SEX  
(2007–2016)<sup>3</sup>**

**63%  
MALES**



**37%  
FEMALES**

## REFERENCES:

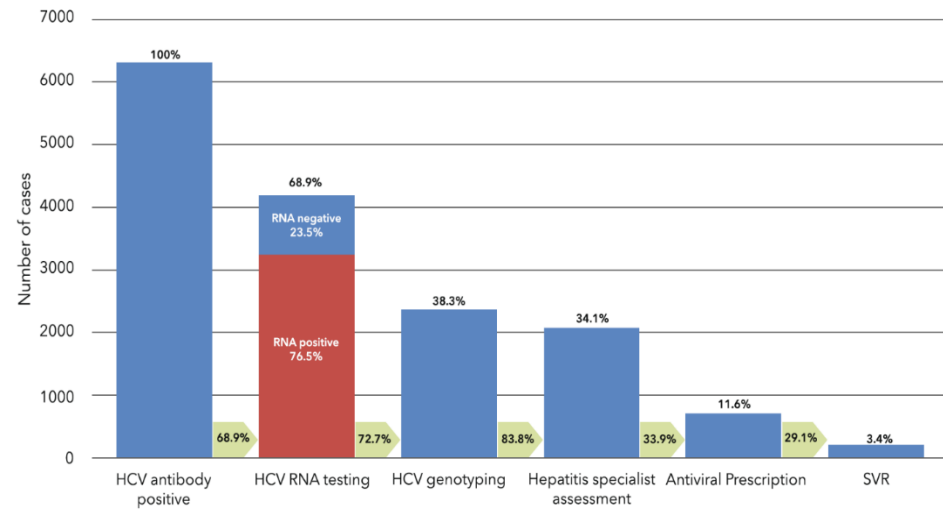
1. Trubnikov M, Van P, Archibald C. (2014). Estimated prevalence of Hepatitis C Virus infection in Canada, 2011. CDDR; 40(19):429–436.
2. CSC. (2016). Health Services Quick Facts: Hepatitis C Virus (HCV) Age, Gender and Indigenous Ancestry.
3. PHAC. (2017). Canadian Notifiable Diseases Surveillance System.



Public Health  
Agency of Canada

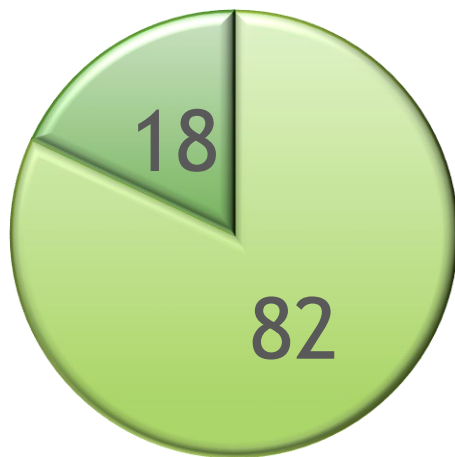
Agence de la santé  
publique du Canada

Canada



Only 3.4%  
Achieving Cure

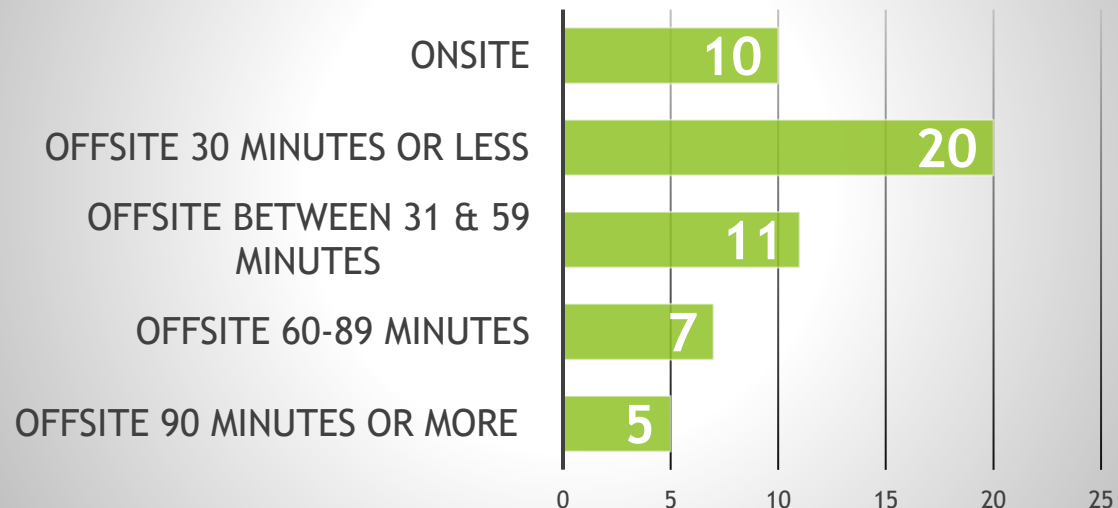
Access to Lab Services Reported by  
Indigenous Communities in Alberta



■ Barriers in Accessing Lab for  
HCV Screening

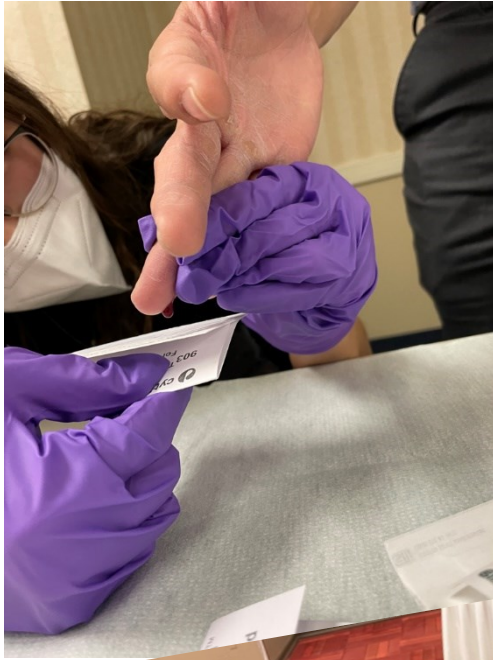
## Lab Access Barriers

Lab / Pharmacy Access for Indigenous  
Communities in Alberta (n=53)





# DBS (Dried Blood Spot) Screening







**Instagram: life4liver**  
**FaceBook: echoalberta**





# DocuStory Video







# Take the opportunity to Support Wellness



- Get Screened!
- Get Cured!
- Get Talking

- Increase awareness
- Create a micro-elimination plan
- Build partnerships
- Engage community
- Build a team
- Set an example-get screened
- Talk about it!

# Resources

- ▶ CATIE.ca (Canada's resource for HIV and Hepatitis C information)
  - ▶ Training modules & webinars
  - ▶ Printed posters, pamphlets, postcards (free and free shipping)
- ▶ INHSU.org
  - ▶ Training modules & webinars
  - ▶ Resource toolkit
- ▶ Canadian Liver Foundation - liver.ca
  - ▶ DocuStory hosted
  - ▶ Information
- ▶ ECHO - Email: [echoplusalberta@gmail.com](mailto:echoplusalberta@gmail.com) phone: 587-581-9019
  - ▶ Instagram: life4liver
  - ▶ FaceBook: echoalberta

# **MOH Update: Hepatitis C in Alberta First Nations**

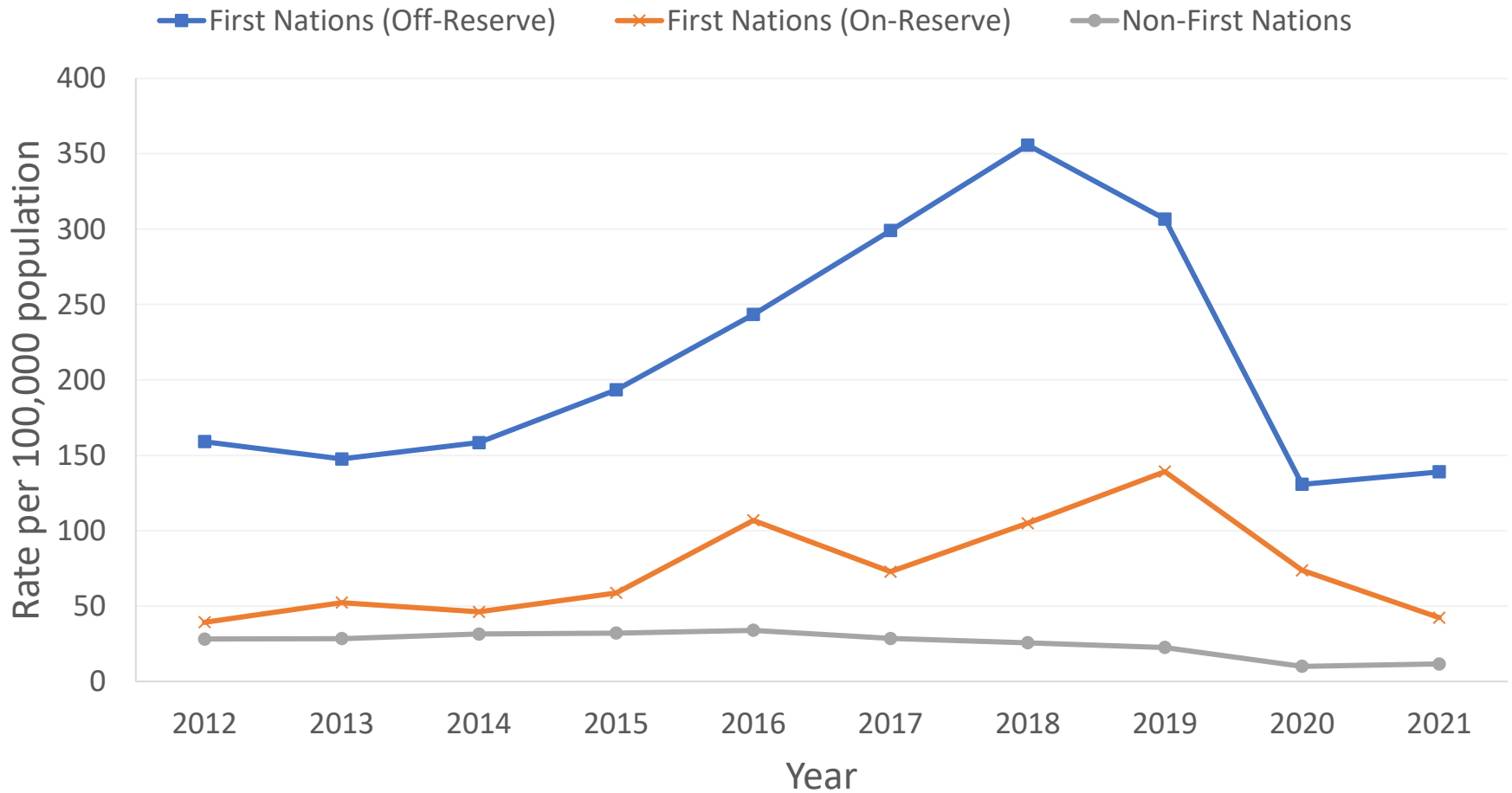
Dr. Chris Sarin

*Senior Medical Officer of Health*



# Rate of New Hepatitis C, by Population Group – Alberta, 2012 - 2021

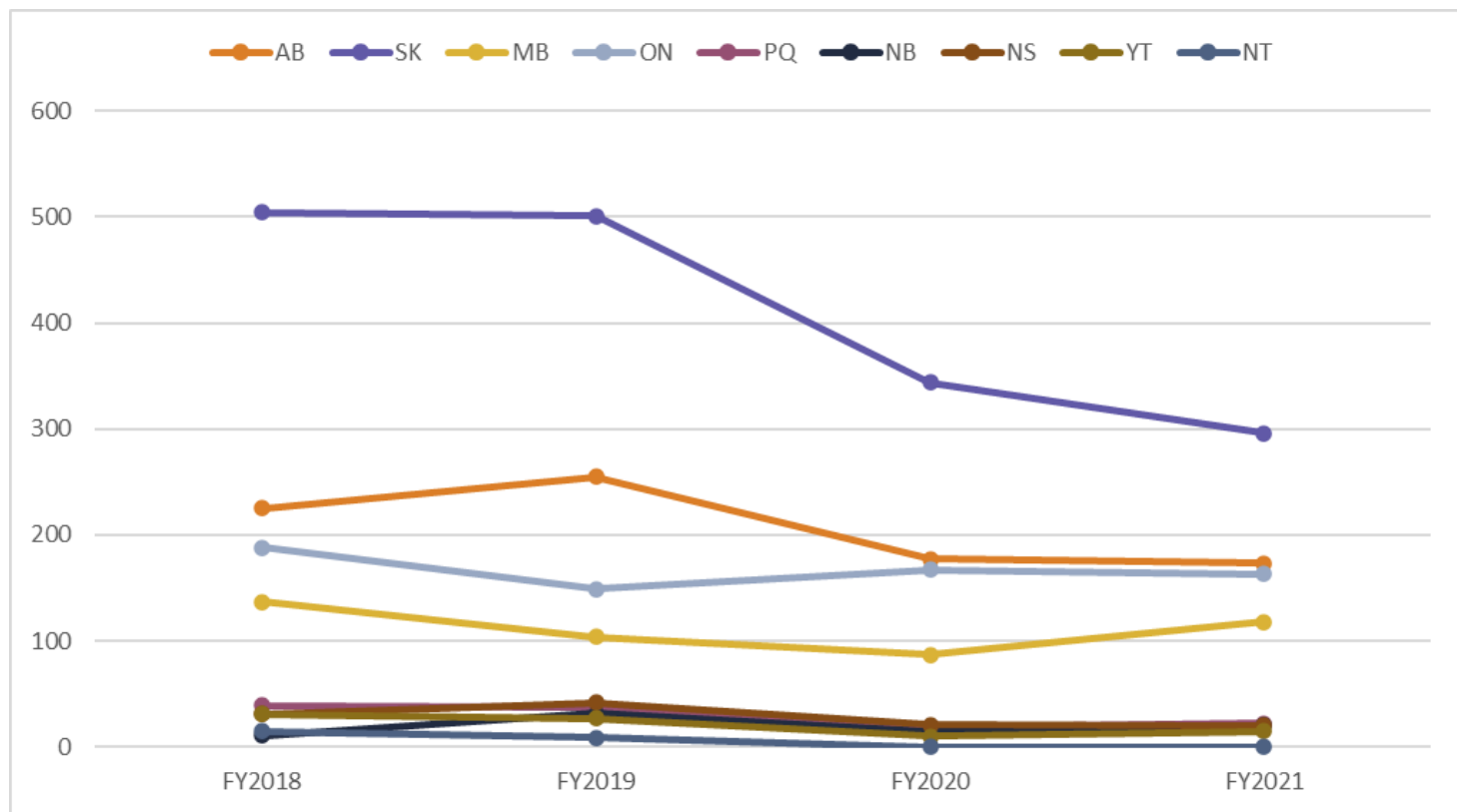
Data Source: Alberta Health, Analytics and Performance Reporting Branch, Interactive Health Data Application and FNIHB NDR reports



# Hepatitis C Medication Claims by Province (for All Providers)

Data Source: Non-Insured Health Benefits Health Information and Claims Processing Services system

- While there has been a steady decline since 2019, Alberta has the second highest Hepatitis C medication claims through NIHB.



# Hepatitis C & First Nation Populations in Alberta

## **Between 2012 – 2021 (graphic representation on next slide):**

- 2,430 new hepatitis C cases were reported among First Nations people living in Alberta, averaging 243 cases per year.
- 570 new hepatitis C were reported among First Nations people living on-reserves in Alberta, averaging 57 cases per year.
- In 2021, the rate of new hepatitis C among First Nations people living on-reserve was more than three times the rate of non-First Nations people.
- Significant decrease in the number of reported new hepatitis C cases in 2020 and 2021 may be due to decrease in testing activities because of the Covid 19 pandemic. In general, less people sought non-COVID-19 related healthcare services during that period.

## **Hepatitis C During the COVID-19 Pandemic (on reserve)**

- Between 2020 – 2022, 131 new hepatitis C cases were reported among First Nations people living on-reserves:
  - 59 new cases in 2020
  - 35 new cases in 2021
  - 37 new cases in 2022

# Reporting & Treatment: Hepatitis C Practices And Resources

Christina Smith, RN

*Manager, Communicable Disease Control, ISC-AB*



# Hepatitis C Reporting Process

- A lab report is generated that indicates an individual has the hepatitis C virus
- The ordering practitioner receives a copy of the lab result and contacts the client to relay the result
- AHS CDC Team receives the lab report
  - AHS recognizes the individual resides in a First Nations community in Alberta and forwards the lab to FNIHB CDC inbox
  - Note: If the test was ordered under Dr. Sarin, or he was cc'd on it, the CDC inbox would receive a copy of the lab at the same time as AHS
- FNIHB CDC Team reviews Netcare and SHIP to determine if the hepatitis C infection is chronic or acute, and forwards the lab with instructions to the community health nurse

(con't)



## Hepatitis C Reporting Process (con't)

- The community health nurse contacts the client to confirm they have received lab results
- The community health nurse:
  - Completes the *Hepatitis C Data Collection Form* (found on OneHealth)
  - Completes the *Checklist for Hepatitis C Counselling* (found on OneHealth)
  - Completes a *Report of Notifiable Disease (NDR)* (On CHIP)
    - Is sent to the FNIHB CDC inbox
- The community health nurse confirms with the individual that they have been connected to one of the Hepatitis C clinics (or hepatologist) for follow up (list found on OneHealth).
- FNIHB CDC Team reviews the NDR and submits it to Alberta Health
  - Note: Alberta Health notifies the FNIHB CDC Team of any outstanding NDRs

# CDC Contacts for Hepatitis C Lab Reports or NDRs

- Primrose Sotocinal
  - Phone: 780-224-7293
  - Email: [primrose.sotocinal@sac-isc.gc.ca](mailto:primrose.sotocinal@sac-isc.gc.ca)
- Nicole Allam
  - Phone: 431-242-0112
  - Email: [nicole.allam@sac-isc.gc.ca](mailto:nicole.allam@sac-isc.gc.ca)

**Questions?**

**VCHELP@FNTN.CA**



# Acknowledgements

Dr. Sam Lee, Professor and Hepatologist, University of Calgary, Director  
Project ECHO+ HCV

Kate Dunn, Community Engagement ECHO+ Alberta

Dr. Chris Sarin, Senior Medical Officer of Health – FNIHB

Christina Smith, Registered Nurse - FNIHB

Ibrahim Agyemang, Senior Epidemiologist – FNIHB

TSAG Telehealth Team (Michelle Hoeber, Brooke Bustillo and team)

FNIHB Technical Team