

Indigenous Services Canada
ECHO Advisory Circle 24/1/23

Hepatitis C Review 2023



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Director, Project ECHO HCV





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)

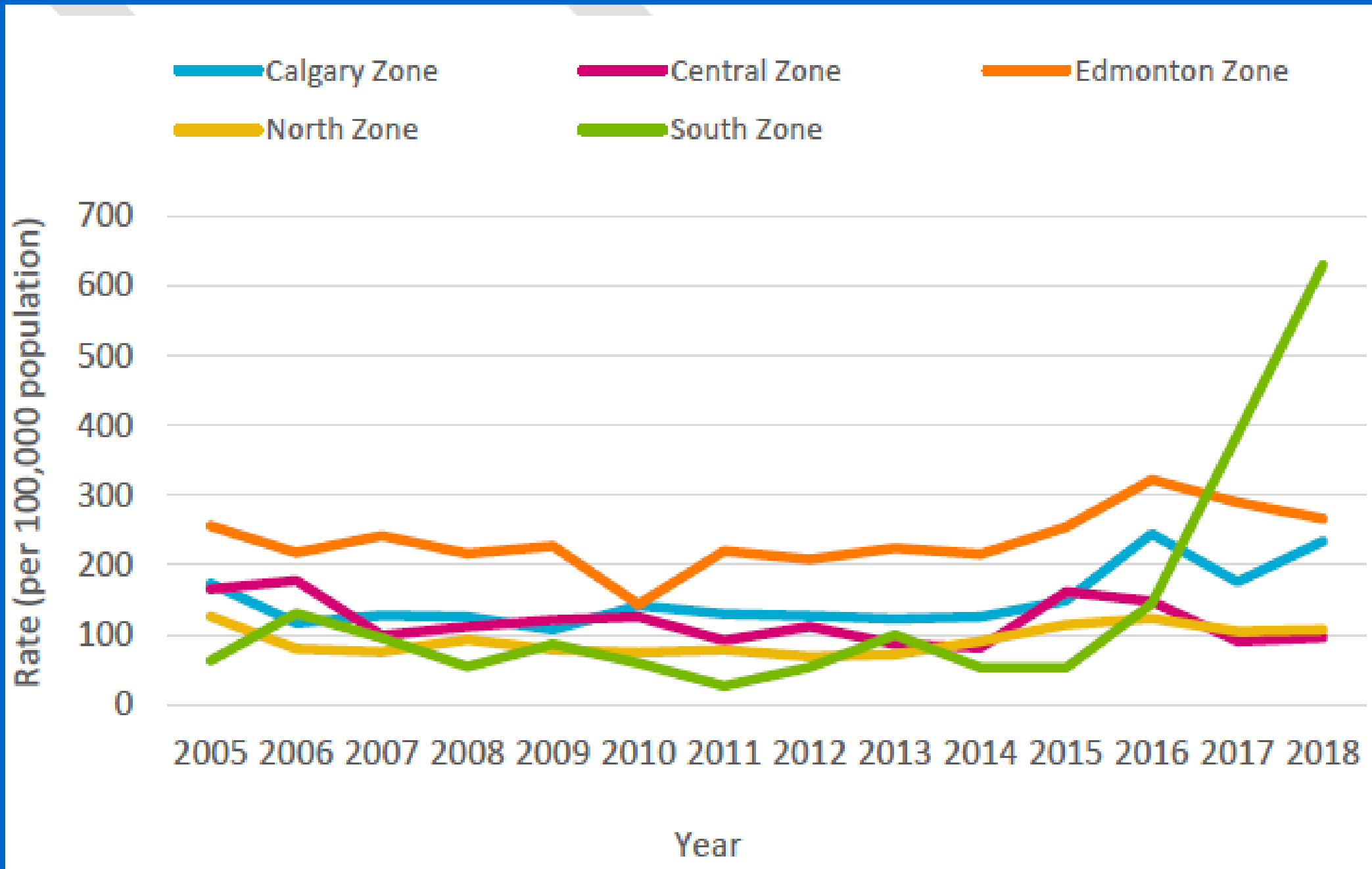
Non-ABCDE: acute only, uncommon, transmissions unknown

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

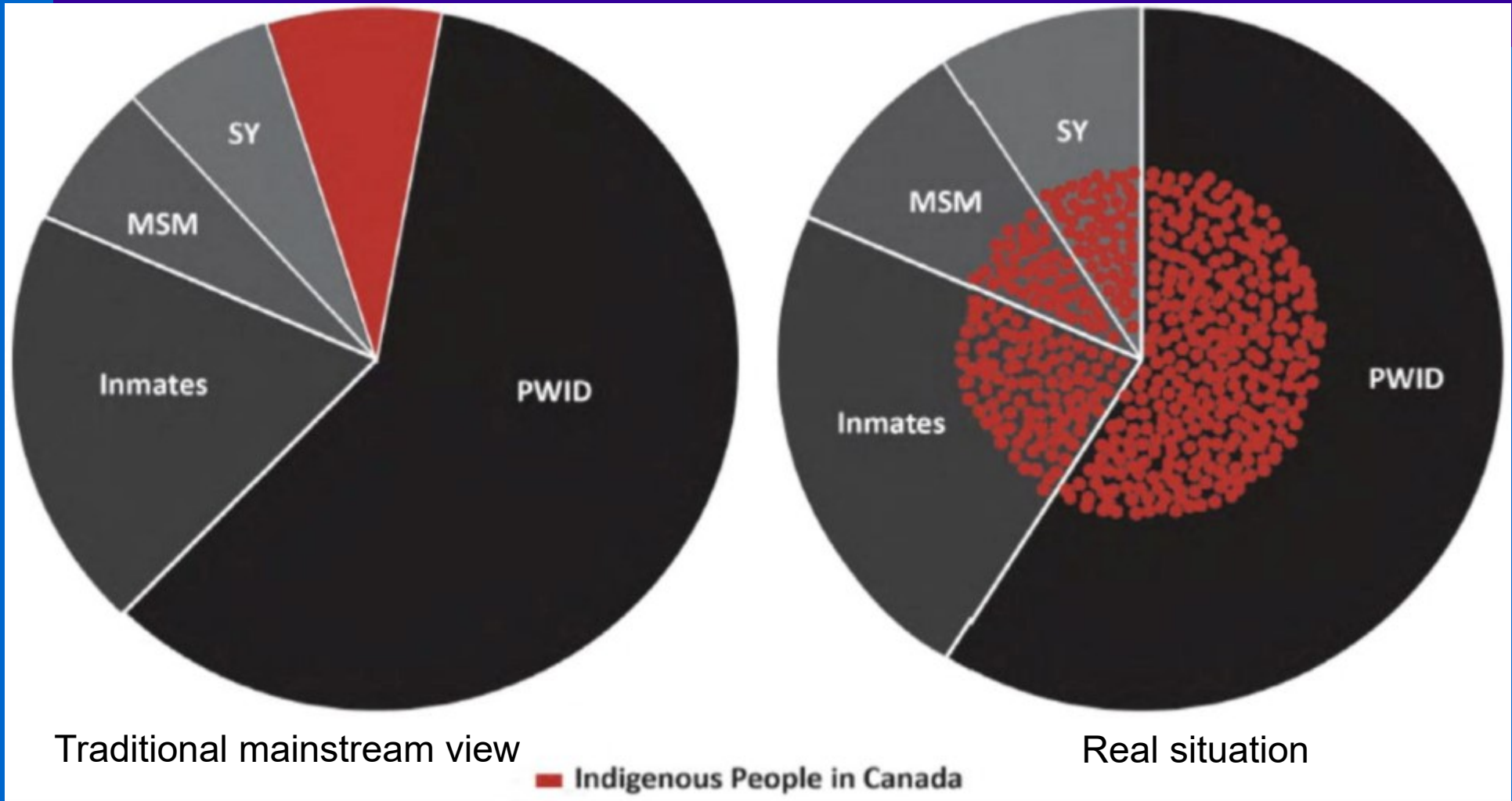
In the eyes of Indigenous people in Canada: exposing the underlying colonial etiology of hepatitis C and the imperative for trauma-informed care

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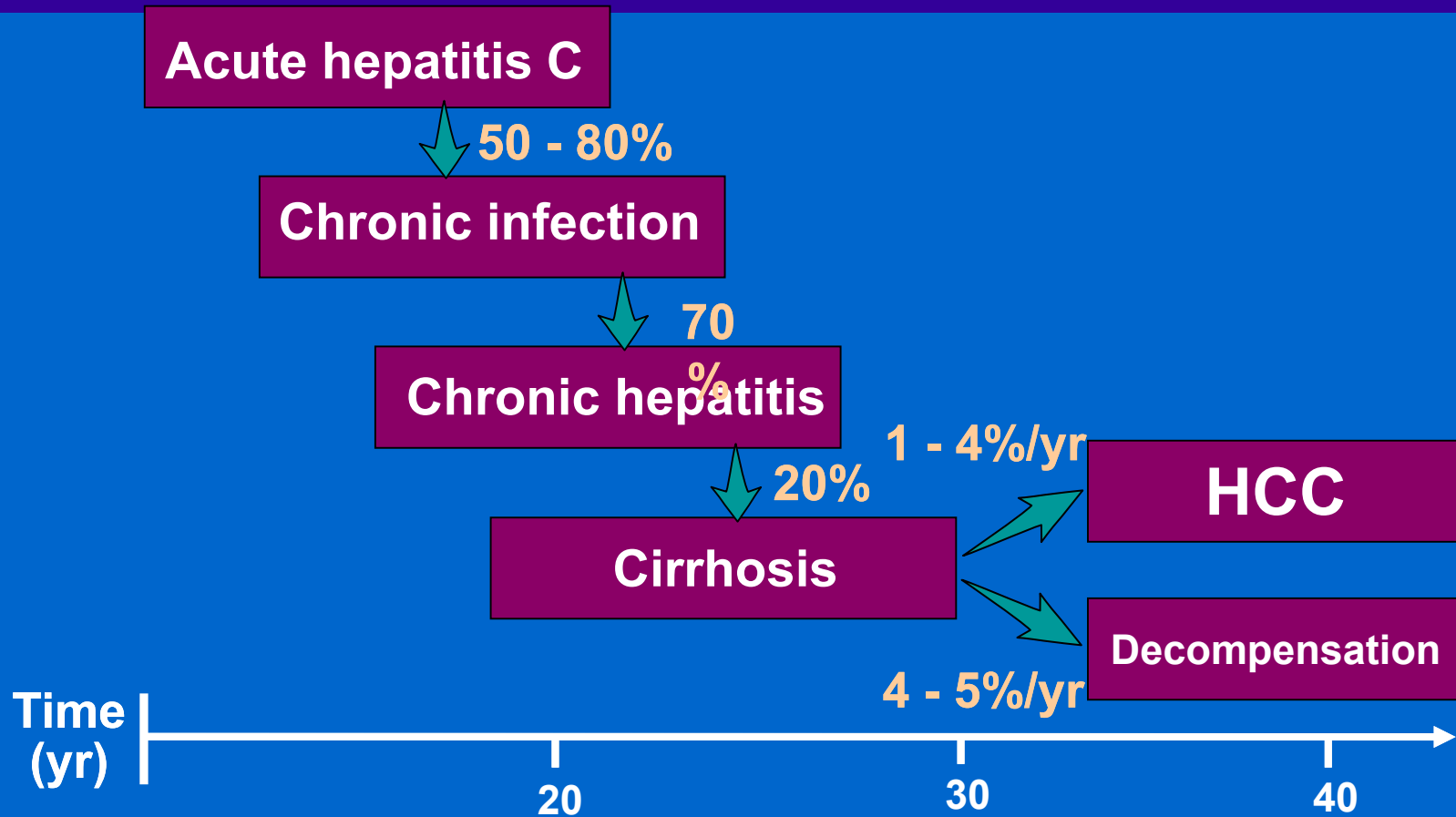
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'Mainstream' vs real view



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

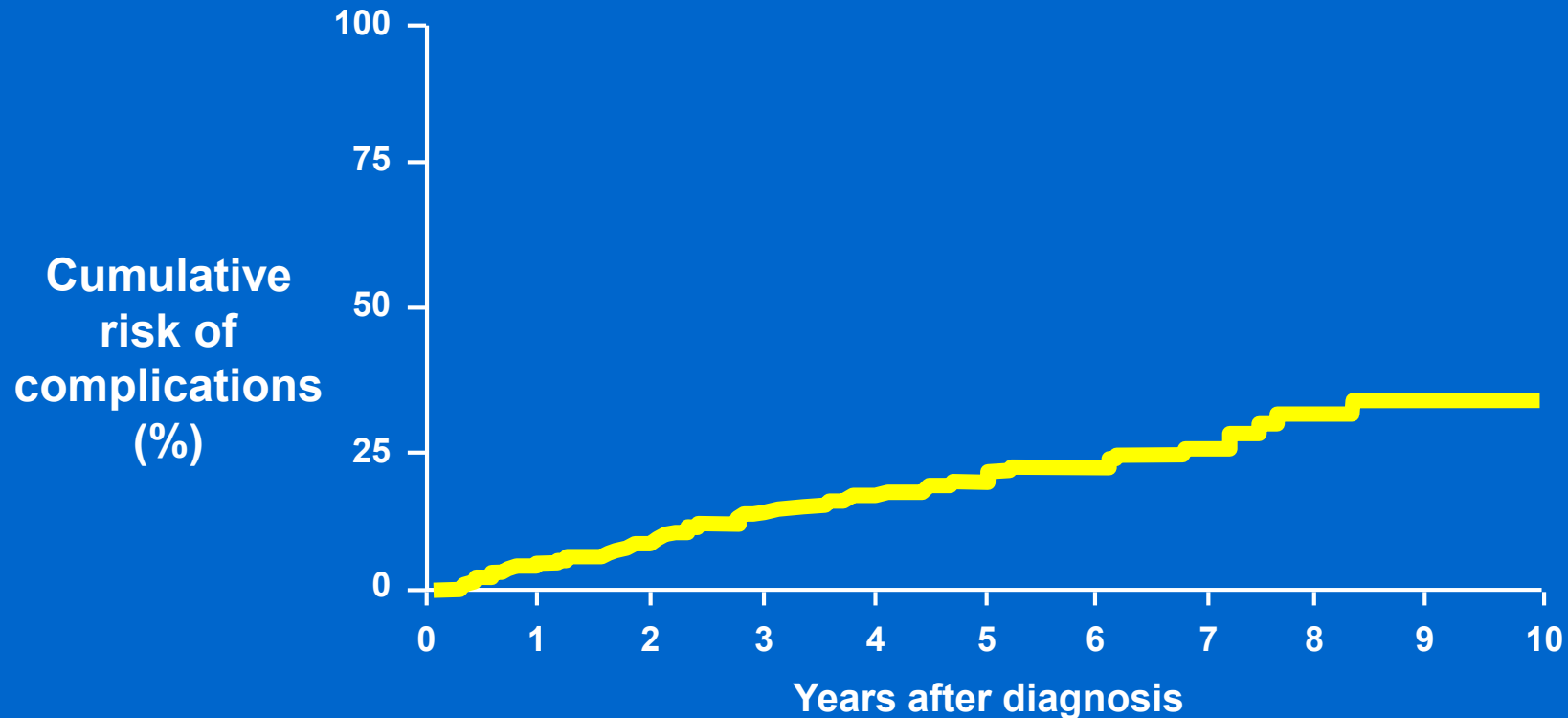
Outcome Following Hepatitis C Infection



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

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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

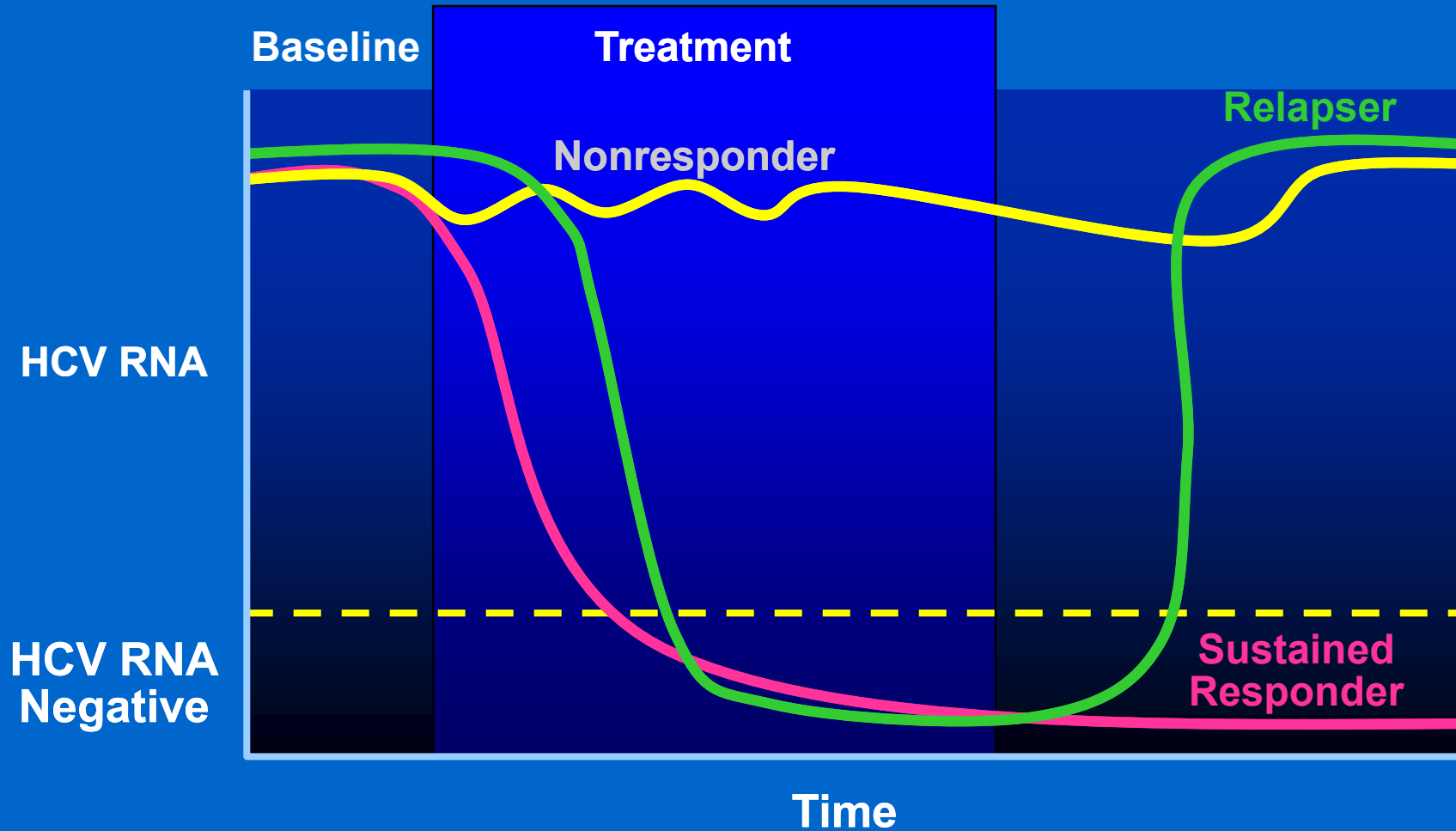


Negative -
reassurance



Positive – treat
with DAA

Patterns of Response to HCV Treatment



SVR =
cure!

Goals of HCV Treatment

Primary

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

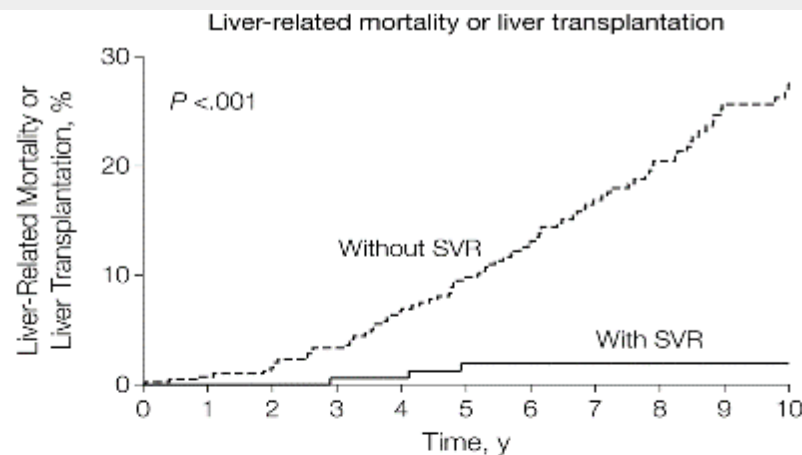
Secondary

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

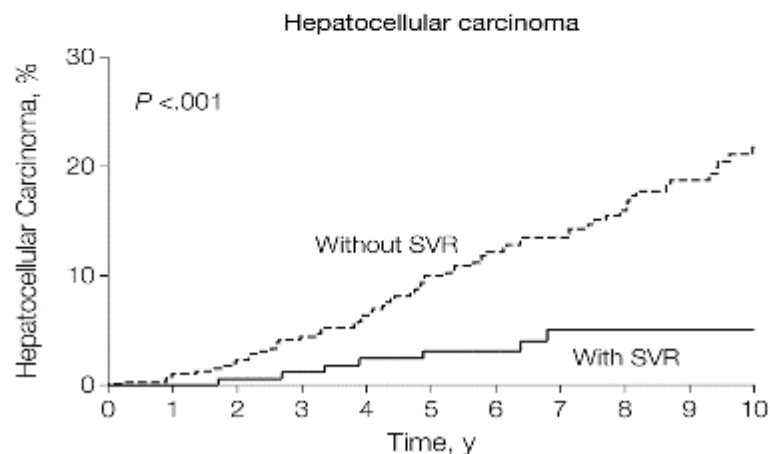
From: Association Between Sustained Virological Response and All-Cause Mortality Among Patients With Chronic Hepatitis C and Advanced Hepatic Fibrosis. Van der Meer et al. JAMA Dec 2012



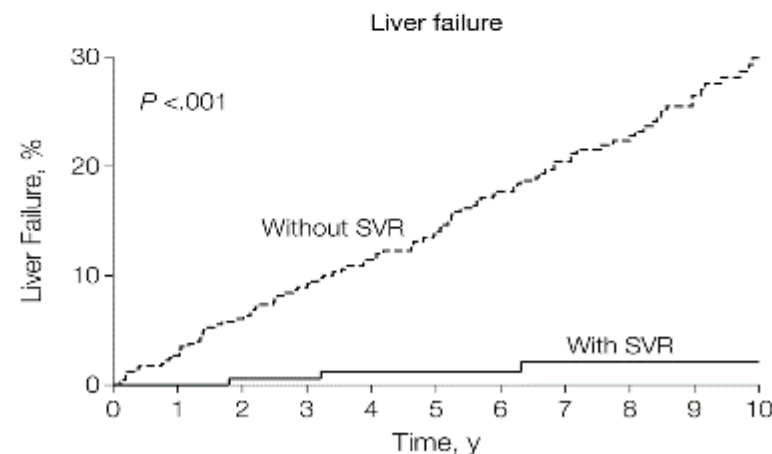
No. at risk		0	1	2	3	4	5	6	7	8	9	10
Without SVR	405	393	382	363	344	317	295	250	207	164	135	
With SVR	192	181	168	162	155	144	125	88	56	40	28	



No. at risk		0	1	2	3	4	5	6	7	8	9	10
Without SVR	405	392	380	358	334	305	277	229	187	146	119	
With SVR	192	181	168	162	155	144	125	88	56	40	28	



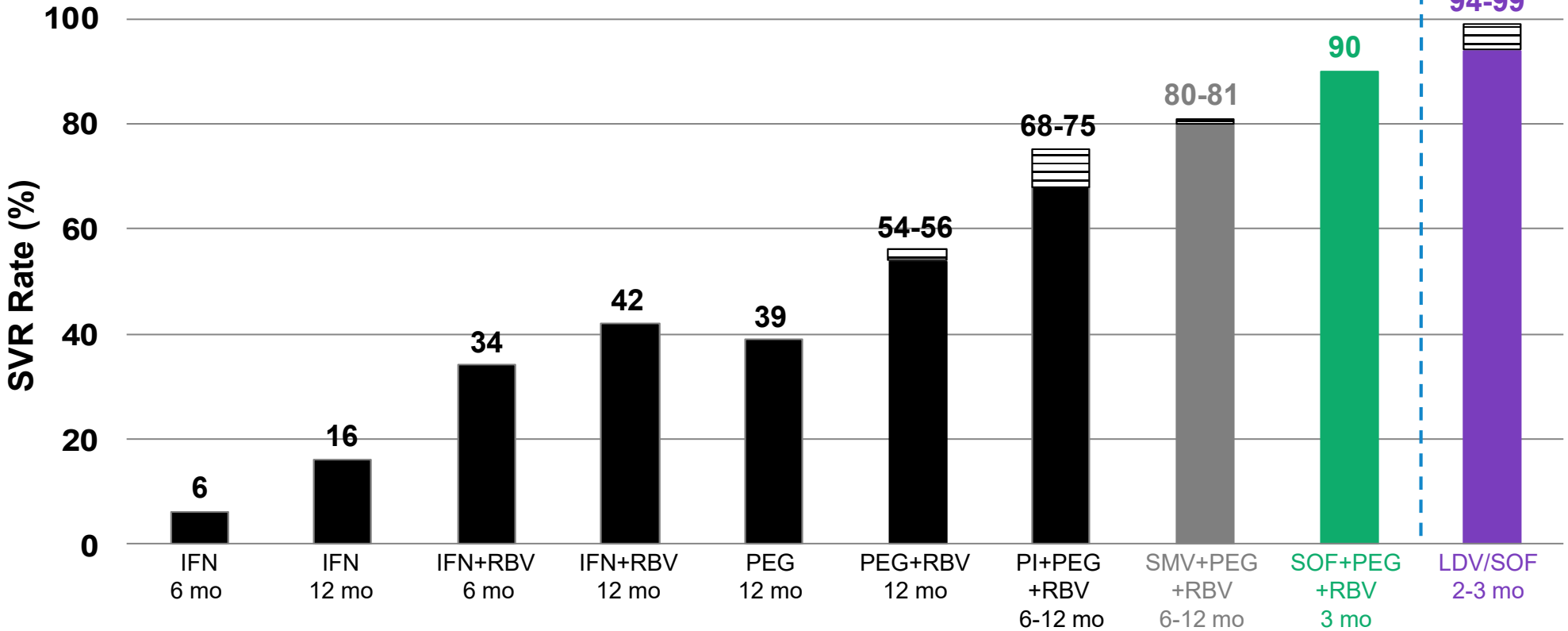
No. at risk		0	1	2	3	4	5	6	7	8	9	10
Without SVR	405	390	375	349	326	294	269	229	191	151	122	
With SVR	192	181	167	161	152	142	124	86	54	39	27	



No. at risk		0	1	2	3	4	5	6	7	8	9	10
Without SVR	405	394	361	337	314	288	259	216	184	143	113	
With SVR	192	180	166	160	152	141	123	88	56	40	28	

Chronic Hepatitis B Virus Infection Treatment Evolution

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

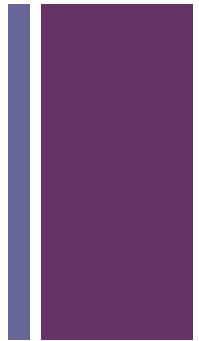
October 2015 – Present

Ongoing sessions 1 hour q2weeks via
videoconferencing





Project ECHO HCV Alberta 2019



Active Spoke Locations:

- Yellowknife, NT
- Grand Prairie, AB
- Ft. McMurray, AB
- Lethbridge, AB
- Medicine Hat
- Fernie, BC
- Innisfail, AB
- Blood reserve
- Sunchild, Ochise reserves
- Maskwacis reserve
- Siksika reserve
- Piikani reserve
- Stoney Nakoda
- Saddle Lake



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