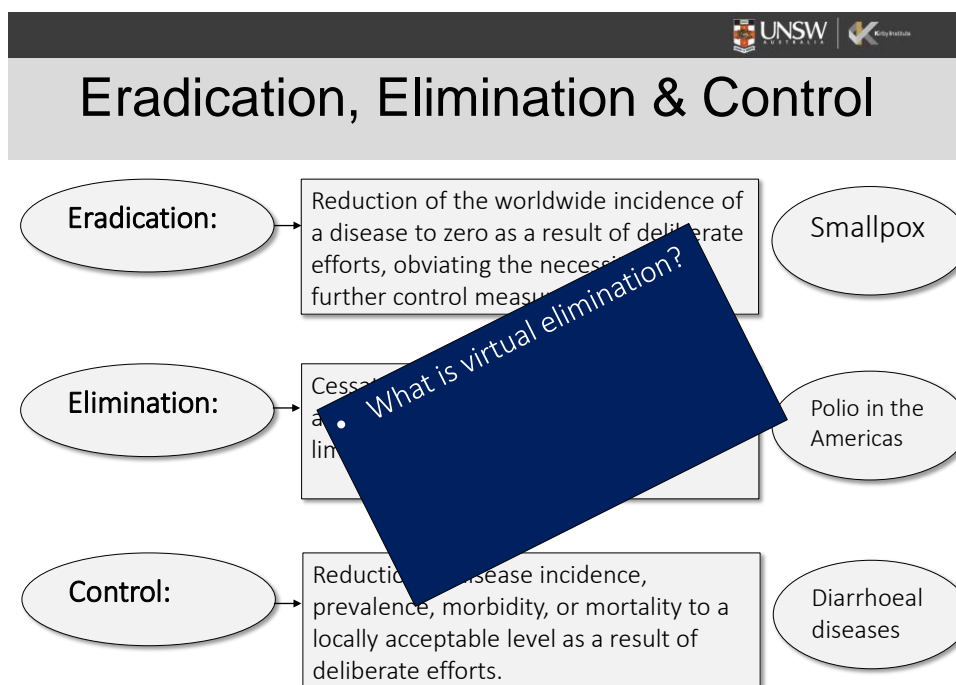




Tracking Progress Towards virtual HIV elimination

A/Professor Rebecca Guy, Kirby Institute



WHO Elimination targets for HIV

“90-90-90” by 2020:



- 90% of all people living with HIV will know their HIV status.
- 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy.
- 90% of all people receiving antiretroviral therapy will have viral suppression

Eliminate mother to child transmission by 2020:



- Prevention target: Zero new HIV infections among infants
- Impact criteria for validation: ≤ 50 new paediatric infections per 100,000 live births

Australia's targets for HIV, 2014-2017

- Reduce sexual transmission of HIV by 50 per cent by 2015
- Sustain the **low general population rates** of HIV in Aboriginal and Torres Strait Islander people and communities
- Sustain the **virtual elimination** of HIV amongst sex workers
- Sustain the **virtual elimination** of HIV amongst people who inject drugs
- Sustain the **virtual elimination** of mother-to-child HIV transmission
- Increase treatment uptake by people with HIV to 90 per cent
- Maintain effective prevention programs targeting sex workers and for people who inject drugs.

Virtual



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About 834,000,000 results (0.49 seconds)

Virtual may refer to: **Virtual** reality (virtuality), computer programs with an interface that gives the user the impression that they are physically inside a simulated space.

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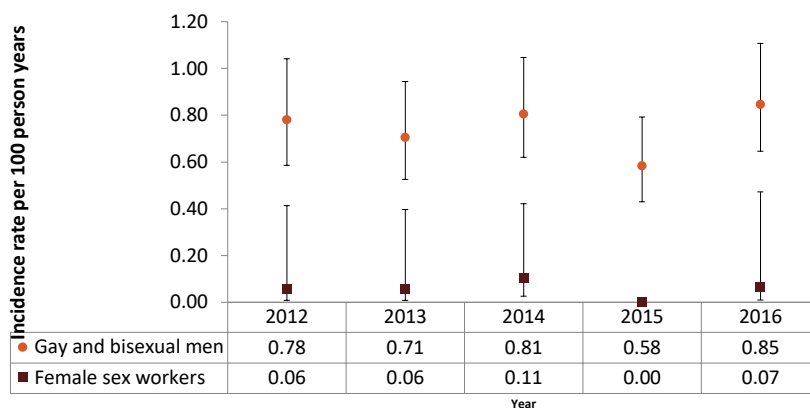
World Health Organization, 2016

Systems to track progress towards elimination

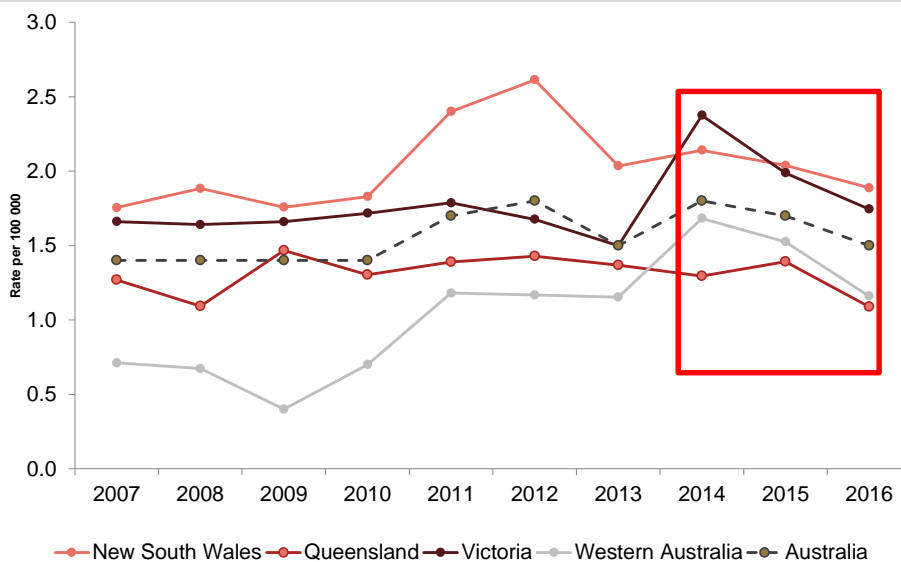
Define what elimination means

- 80% reduction in new diagnoses in 5 years? OR
- Incidence below a very low threshold



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(1) Focus on newly acquired infections



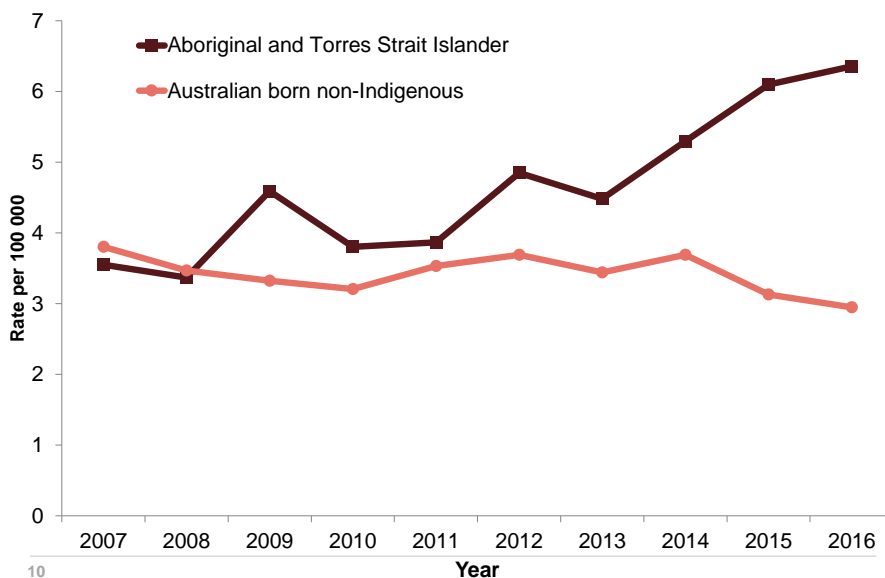
8

(2) Measure preventable infections

- 2012-2016
 - **1363 late diagnoses – CD4 count <350 cells/ul**
 - People born in Southeast Asia and sub-Saharan Africa
 - 63% arrived in Australia <5 years of diagnosis (2016 data)
 - Probably acquired HIV before arriving in Australia
 - Early testing and treatment important
 - Not preventable by Australia HIV prevention programs

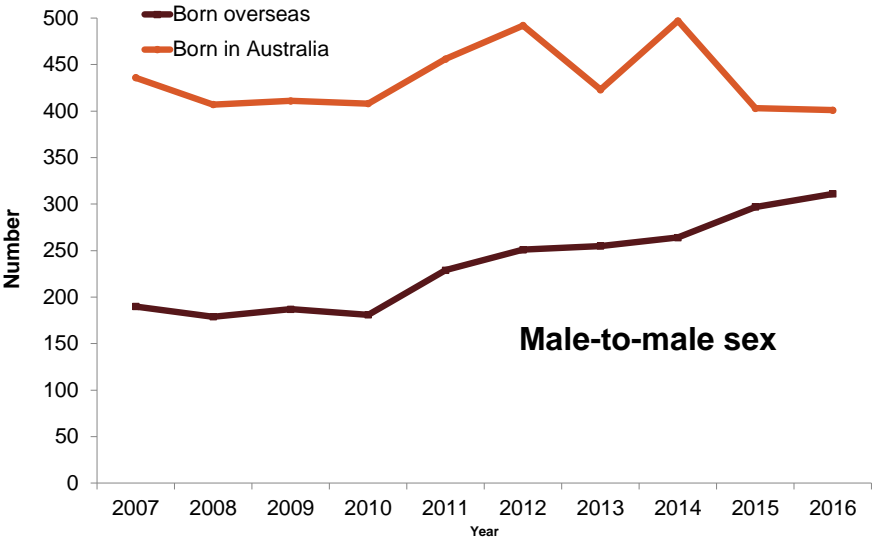
9

(3) Identify disparities



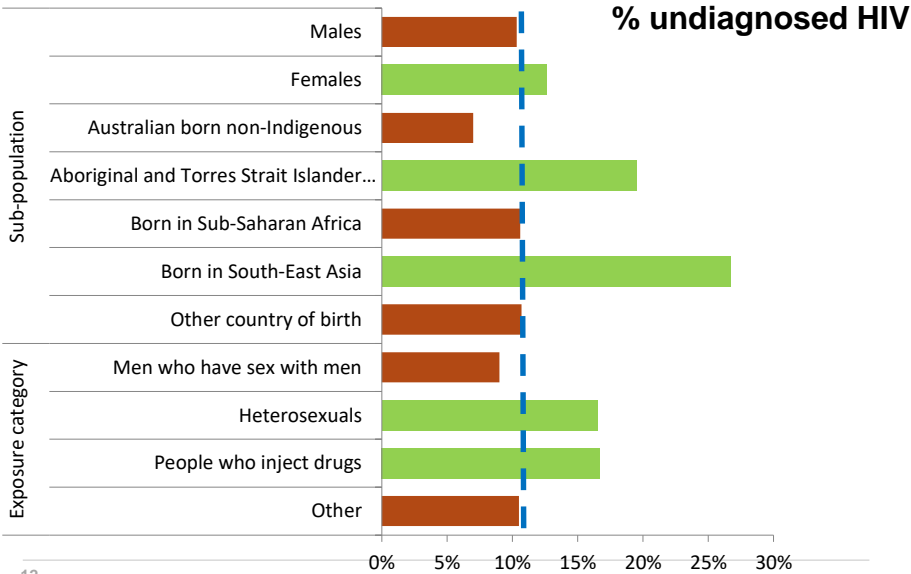
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(3) Identify disparities



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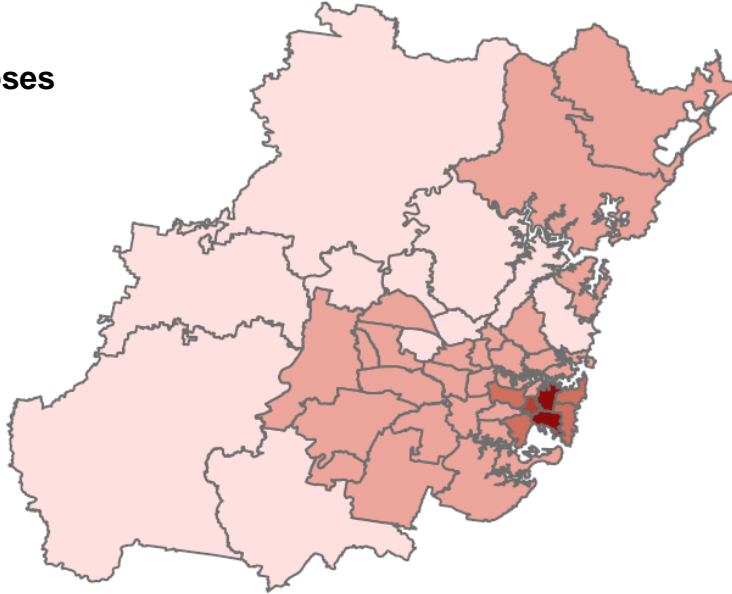
(3) Identify disparities



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(3) Identify disparities

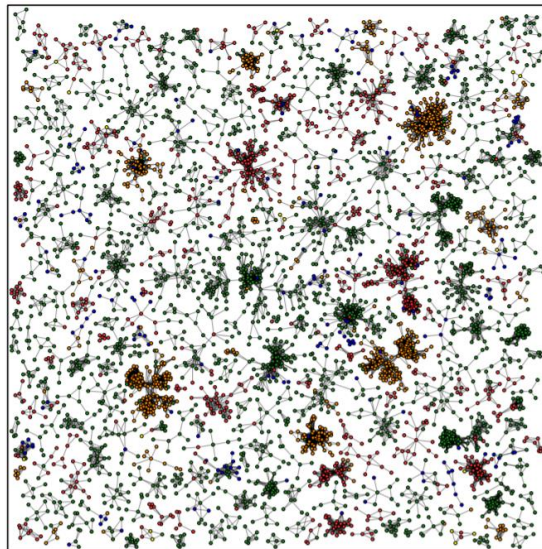
HIV diagnoses
2014-2016
Sydney



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(4) Monitor HIV clusters

Phylogenetic
clusters of HIV
transmission
British
Columbia
versus
Saskatchewan



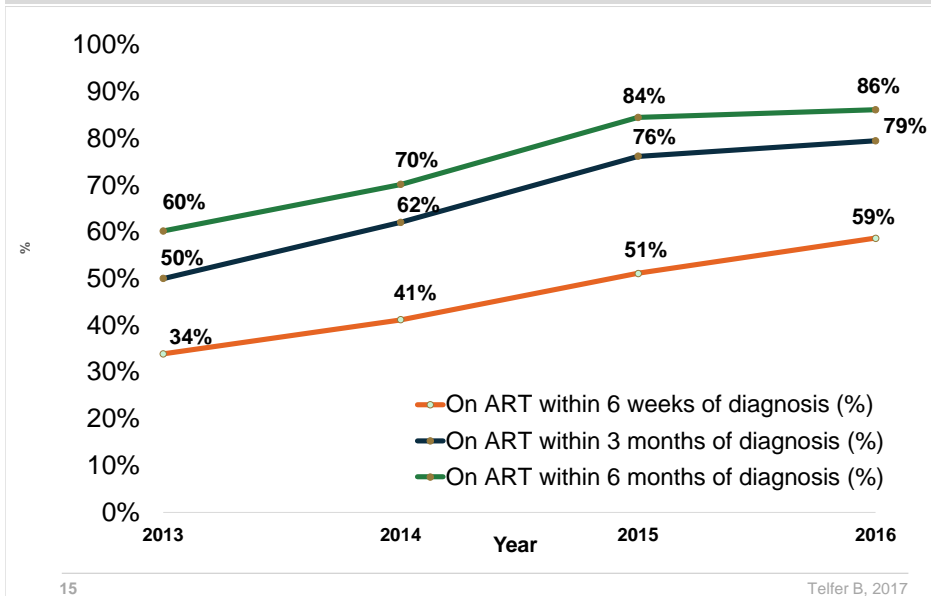
Green = British Columbia

Orange = Saskatchewan

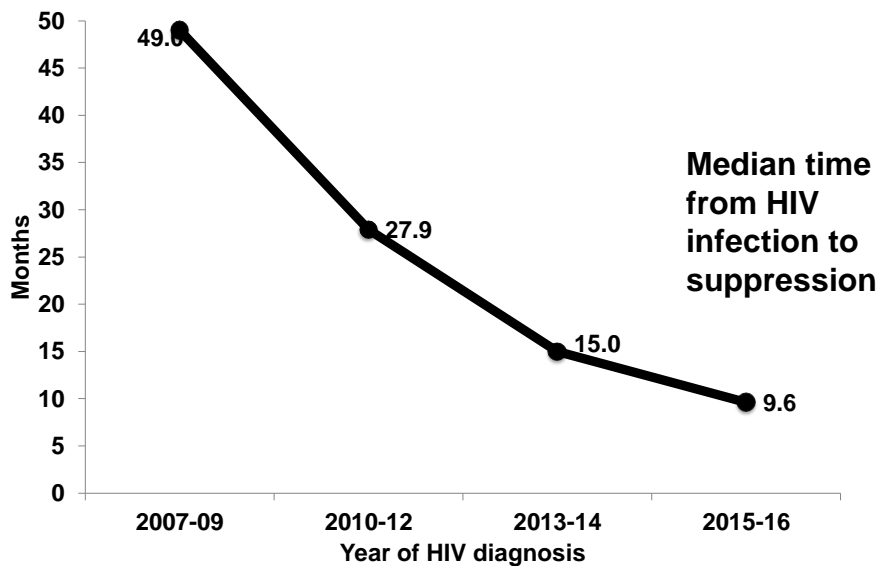
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Joy JB et al 2017

(5) Timely process indicators



(6) Using routine clinical data



(7) Barriers to accessing services

- Social determinants, culture stigma and discrimination, mental health, many others
- As prevention scales up, barriers exacerbate
- Repeated surveys and interviews for specific population groups



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Summary

1. Define elimination
2. Monitor
 1. Newly acquired infections
 2. Preventable infections
 3. Disparities – sub groups, geography
 4. Clusters
 5. Process indicators
 6. Use routine clinical data
 7. Barriers



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