



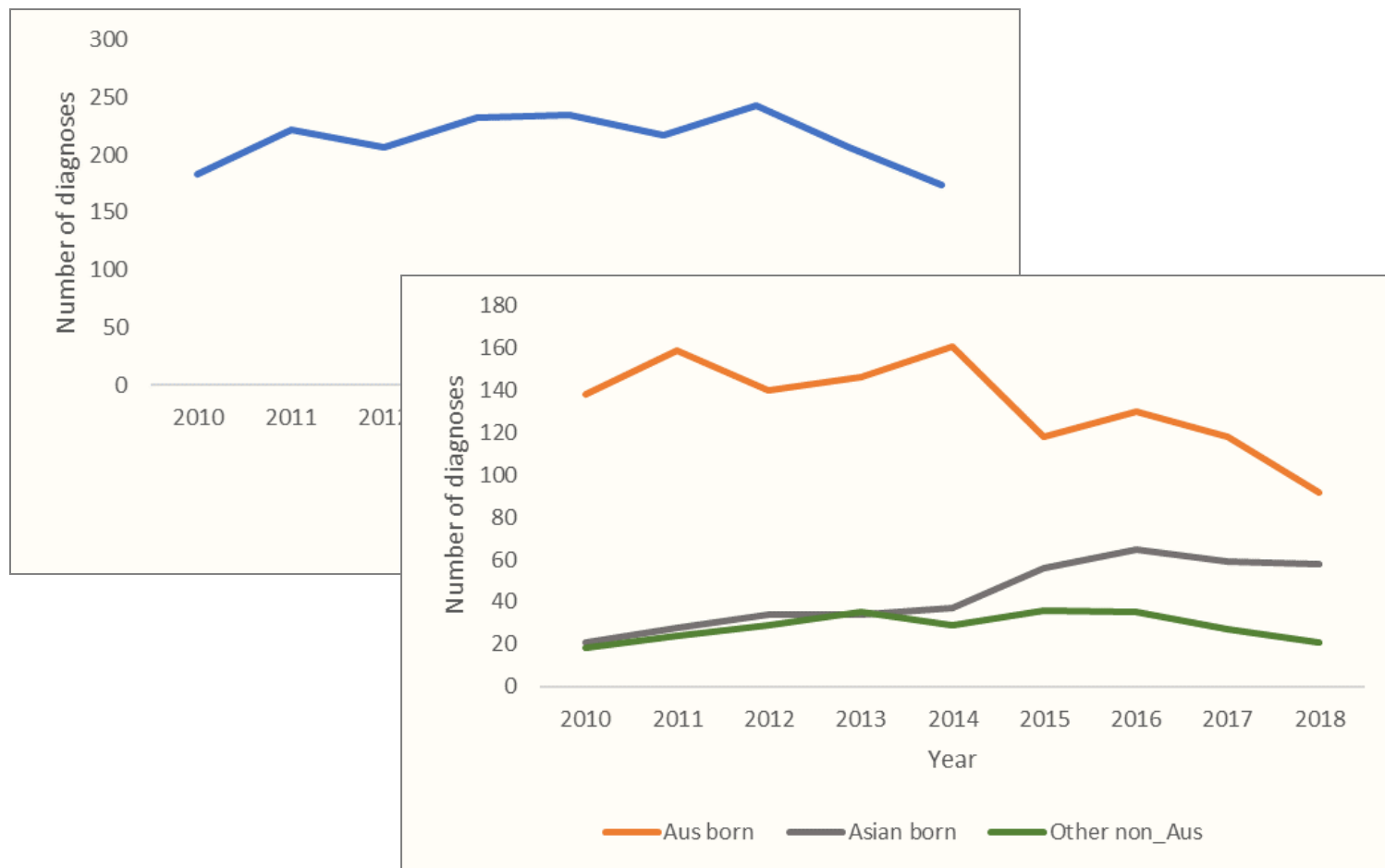
**Burnet Institute**

Medical Research. Practical Action.

HIV-1 epidemiology and subtype diversity in the  
Australian-born and newly-arrived Asian-born  
men who have sex with men populations in  
Victoria, Australia 2015-2018

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# HIV diagnoses among MSM in Victoria, 2010-2018



# Newly-arrived Asian-born MSM

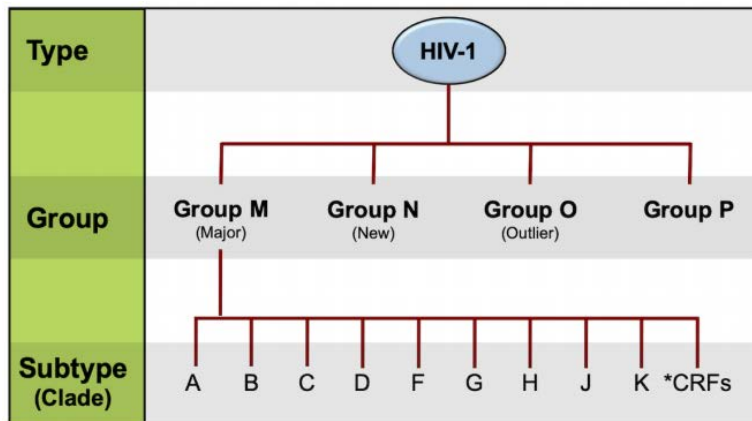


- Increasing temporary migrant population
- Top 10 countries of origin for international students:
  1. China
  2. India
  3. Malaysia
  4. Vietnam
  5. Sri Lanka
  6. Nepal
  7. Colombia
  8. Indonesia
  9. Thailand
  10. Pakistan
- Barriers to prevention, diagnosis, treatment
- Countries where male to male sex is stigmatized or criminalised
- Lack connection to local gay culture and community – resources, collective knowledge

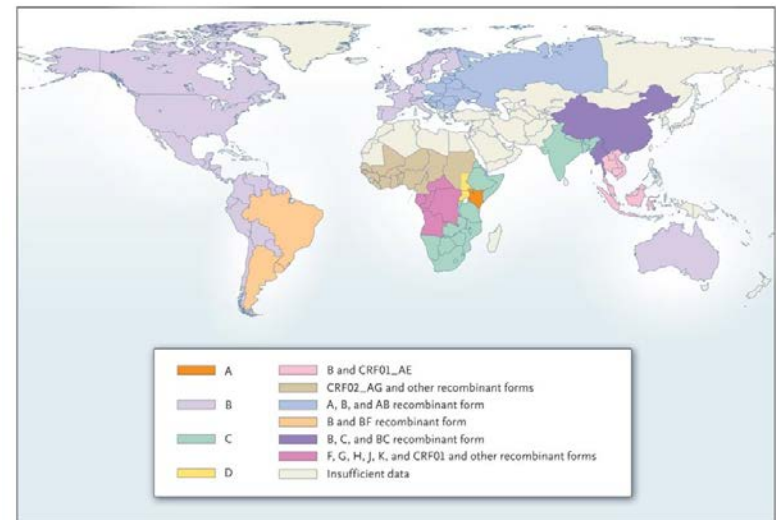


# HIV-1 Subtype analysis

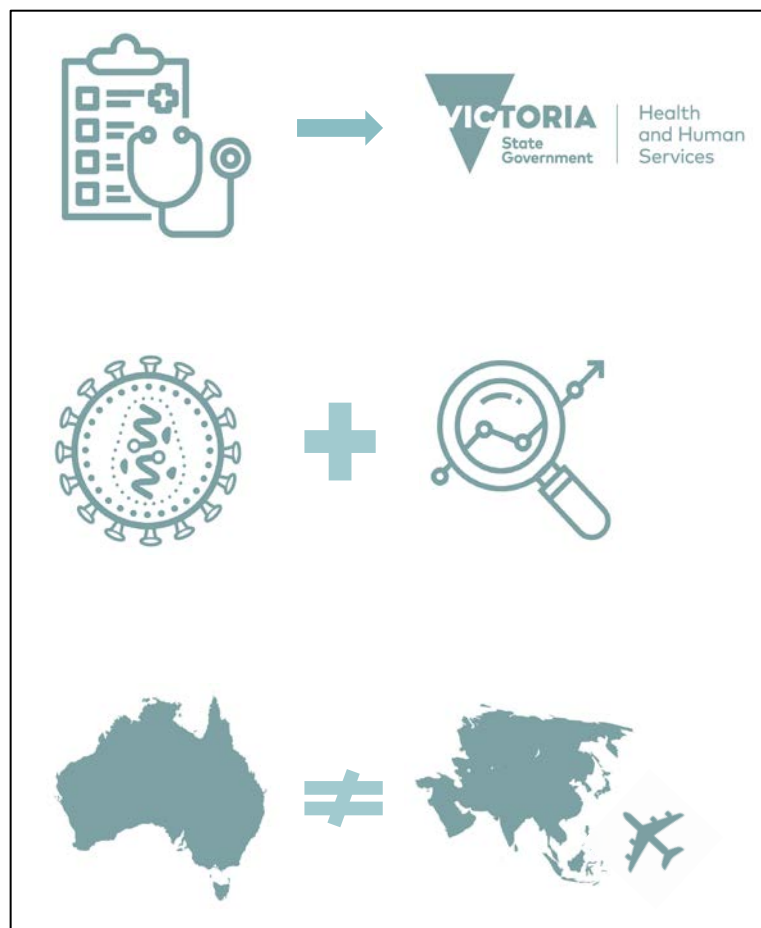
- Local HIV transmission between populations
- Geographic origin of infections
  - HIV-1 Groups and subtypes



\*CRFs = Circulating Recombinant Forms



# Methods and study population



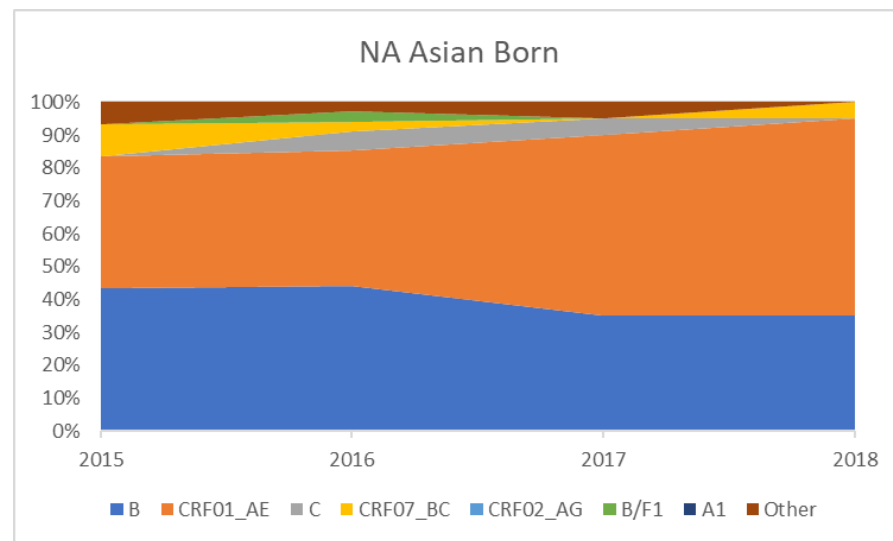
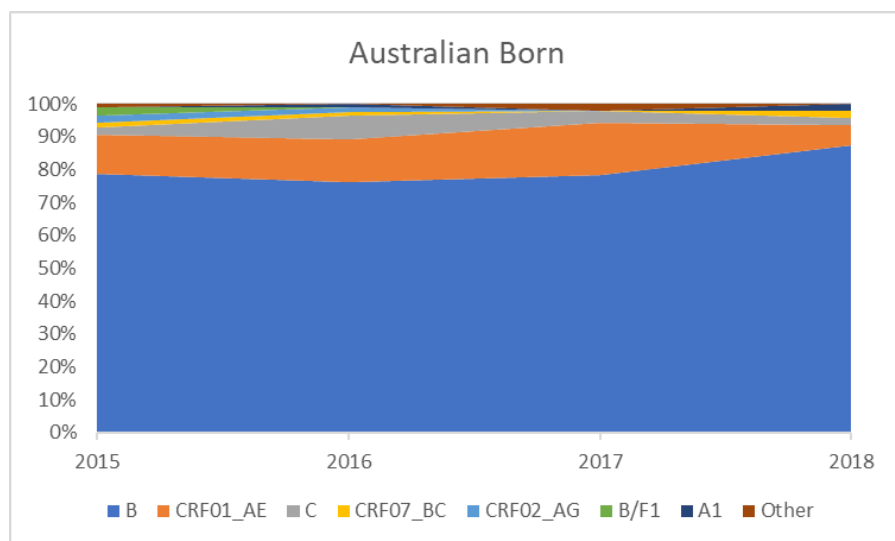
- Newly-diagnosed MSM HIV cases notified in Victoria 2015-2018
- Subtyping and linked epidemiological data available
- N=444
  - Australian-born n=305
  - newly-arrived Asian-born n=139

## Results – demographics of locally acquired cases

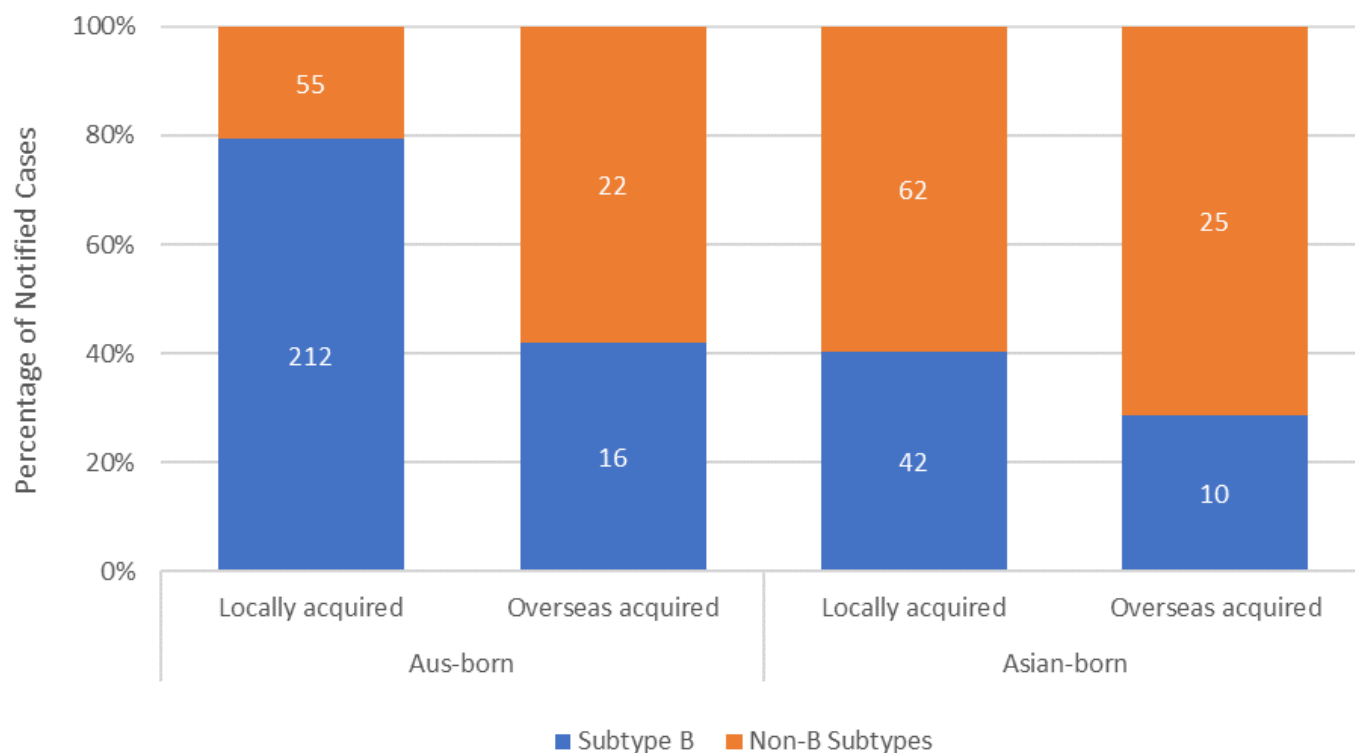
- 84% locally acquired, 28% Asian born
- Asian born MSM vs Australian born MSM
  - younger at diagnosis (29 v 32 years)
  - 39% spoke LOTE at home
  - More in inner-Melbourne (46% vs 34%) and
  - Fewer in regional Victoria (1% vs 14%)



# HIV-1 subtypes in locally-acquired cases: Australian born compared to Asian-born



# HIV-1 subtypes – locally-acquired vs overseas-acquired



# Discussion

- Local transmission in both populations is mostly assortative based on ethnicity
- Sexual mixing and local transmission between the two populations
- Education and prevention strategies needed
- Inclusive programs
- Ongoing monitoring and further analyses of benefit



# Acknowledgements

- Victorian Department of Health and Human Services,
  - Health protection, Epidemiology and Surveillance
  - HIV surveillance team
  - Contact tracers and public health officers
- Victorian Infectious Diseases Reference Laboratory
  - State Reference Laboratory for HIV Characterisation Doherty Institute
- Notifying medical practitioners

