

# **What does elimination of HIV transmission mean for Australia, and how might we measure it?**

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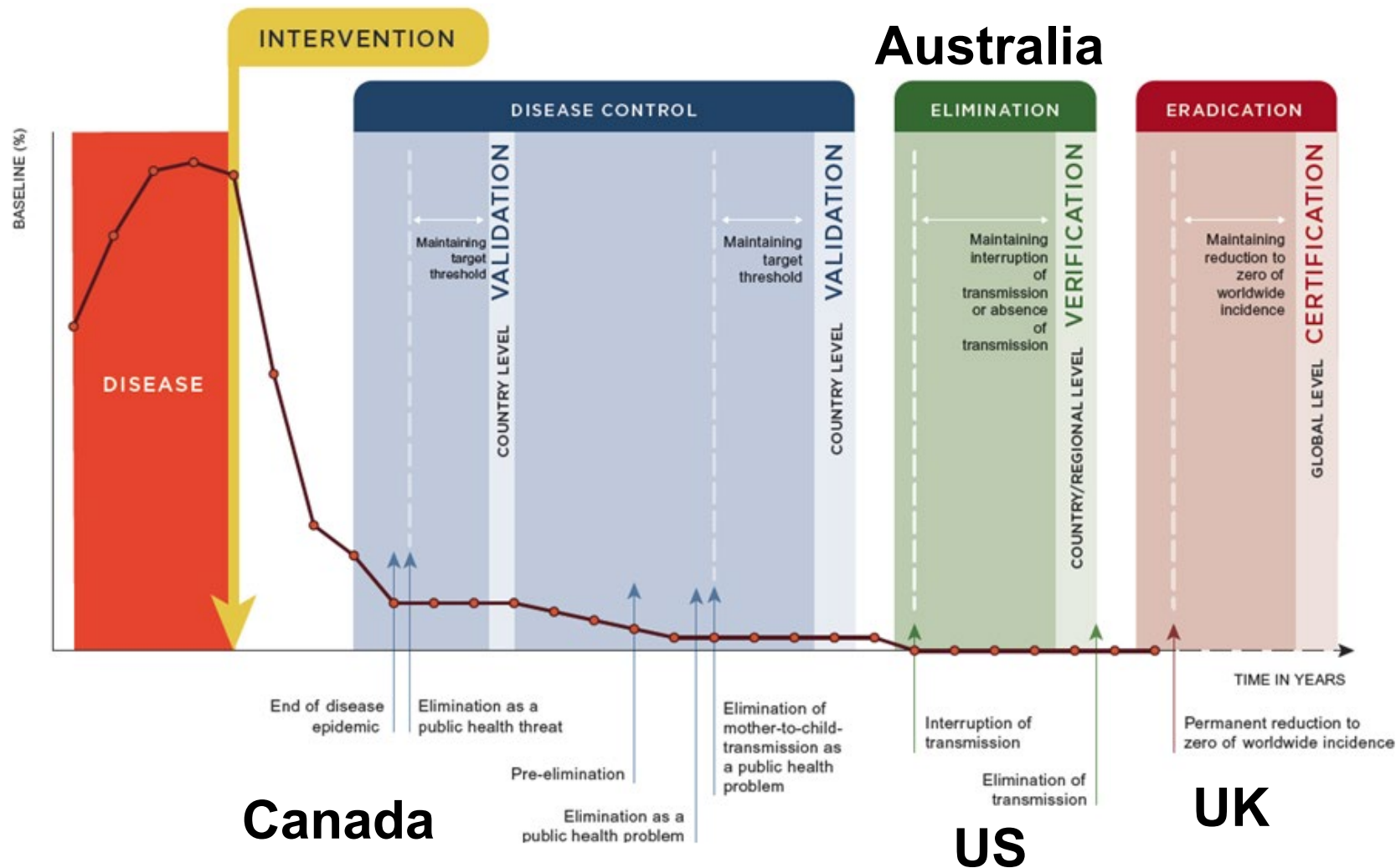
# Acknowledgement of Country

I acknowledge the traditional owners of the land I am on today, the Gadigal People of the Eora Nation, and pay my respects to the Elders past, present, and emerging

# International targets

- Global target to eliminate HIV by 2030
- USA
  - Reduce new infections by 75% in 5 years and 90% in 10 years
  - Elimination by 2030
- UK
  - Eradicating transmission by 2030
- Canada
  - End the HIV epidemic in 5 years (2023)
- **Australia**
  - **Virtually eliminate HIV transmission by 2022**

# Disease control, elimination and eradication



# What does virtual elimination mean?

- Not an epidemiological term
- 1. Elimination as a public health problem**
  - 2. Elimination of transmission**

# Elimination as a public health problem

- What constitutes a public health problem?
  - High burden of disease
  - Loss of quality of life
  - High financial cost
  - Feasibility to act at a community level

# Elimination as a public health problem

- What constitutes a public health problem?
  - High burden of disease – 29,045 PLHIV in Australia
  - Loss of quality of life – 63% in HIV Futures 9 reported ‘good’ quality of life
  - High financial cost – \$436,403 lifetime cost
- Feasibility to act at a community level – public health policy and prevention strategies

# Elimination of transmission

- Zero new cases of HIV?
- The absence of **sustained endemic** community transmission
- Differentiating locally acquired vs. overseas acquired cases of HIV?
  - Exclude those acquired HIV before arriving in Australia?
- Timeline?

# Impact targets, National HIV Strategy, 2018-2022

- Reduce the incidence of HIV transmissions in men who have sex with men<sup>1</sup>
- Reduce the incidence of HIV transmission in other priority populations<sup>1</sup>
- Sustain virtual elimination in sex workers, PWID, and from MTCT

# Impact targets, National HIV Strategy, 2018-2022

- Reduce the incidence of HIV transmissions in men who have sex with men – 0.29 per 100 PY in 2018 (53% decrease compared to 2016)
- Reduce the incidence of HIV transmission in other priority populations
- Sustain virtual elimination in sex workers (incidence of 0.05 in 2018), PWID (1.7% in 2018, 0.7% if MSM excluded), and from MTCT

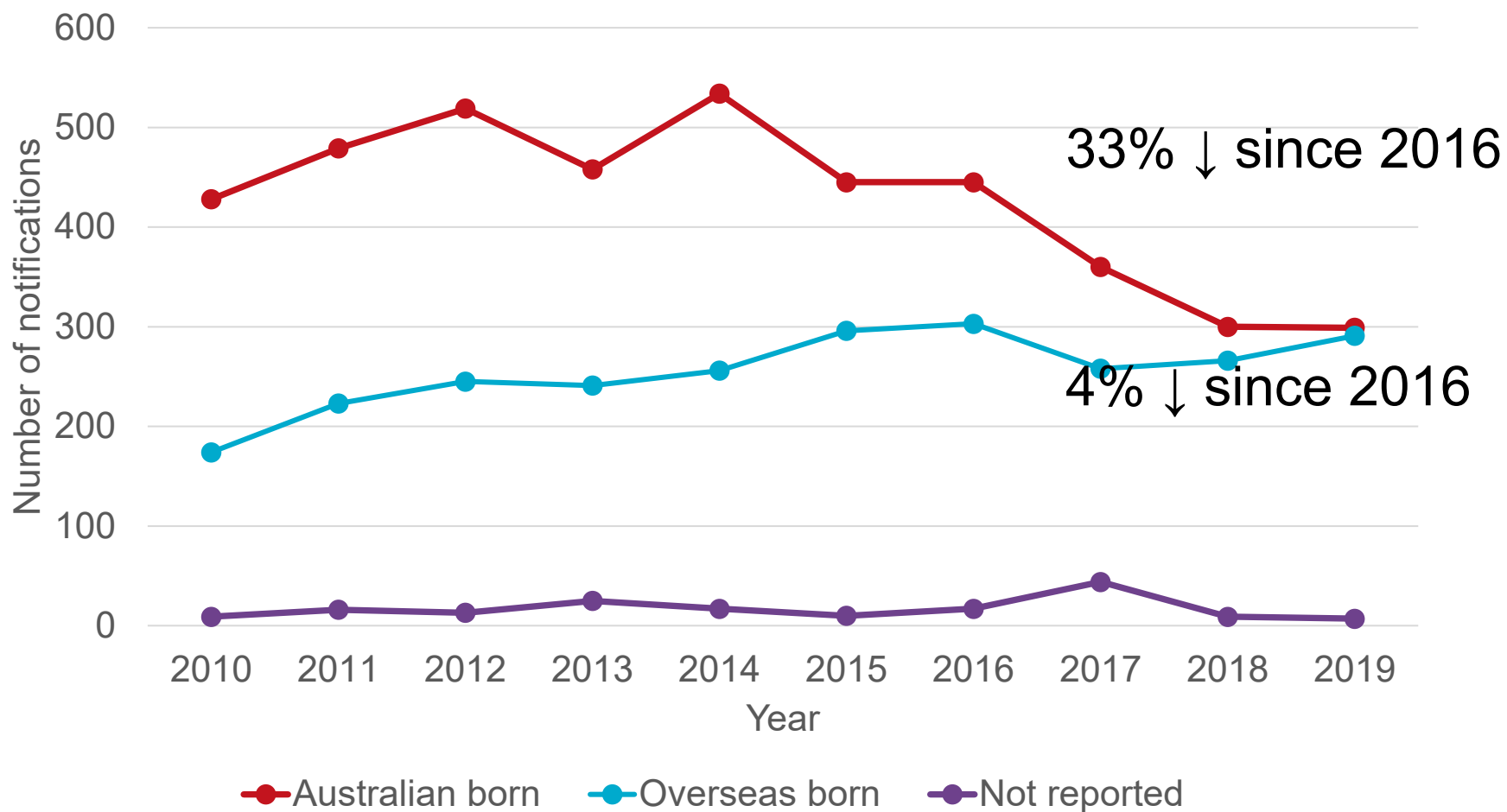
# Process targets, National HIV Strategy, 2018-2022

- 95% diagnosed
- 95% on treatment
- 95% with undetectable viral load
- Increase PrEP coverage to 75%
- 75% report good quality of life
- Reduce reported stigma by 75%<sup>1</sup>

# Process targets, National HIV Strategy, 2018-2022

- 95% diagnosed – 90% in 2019<sup>1</sup>
- 95% on treatment – 91% in 2019
- 95% with undetectable viral load – 97% in 2019
- Increase PrEP coverage to 75% – 21% in 2019<sup>2</sup>
- 75% report good quality of life – 63% in 2019<sup>3</sup>
- Reduce reported stigma by 75%

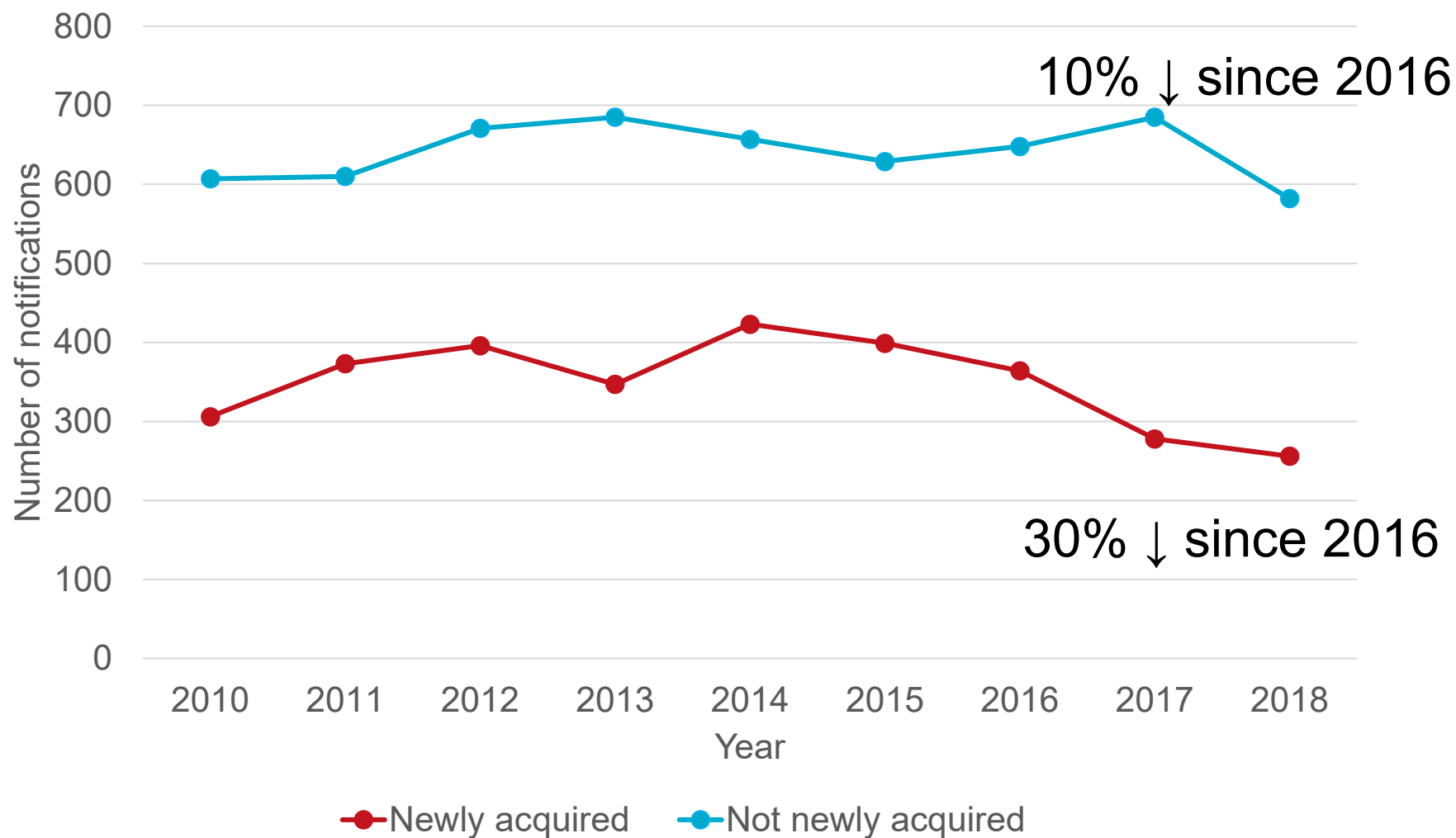
# MSM HIV notifications, by place of birth, 2010-2019



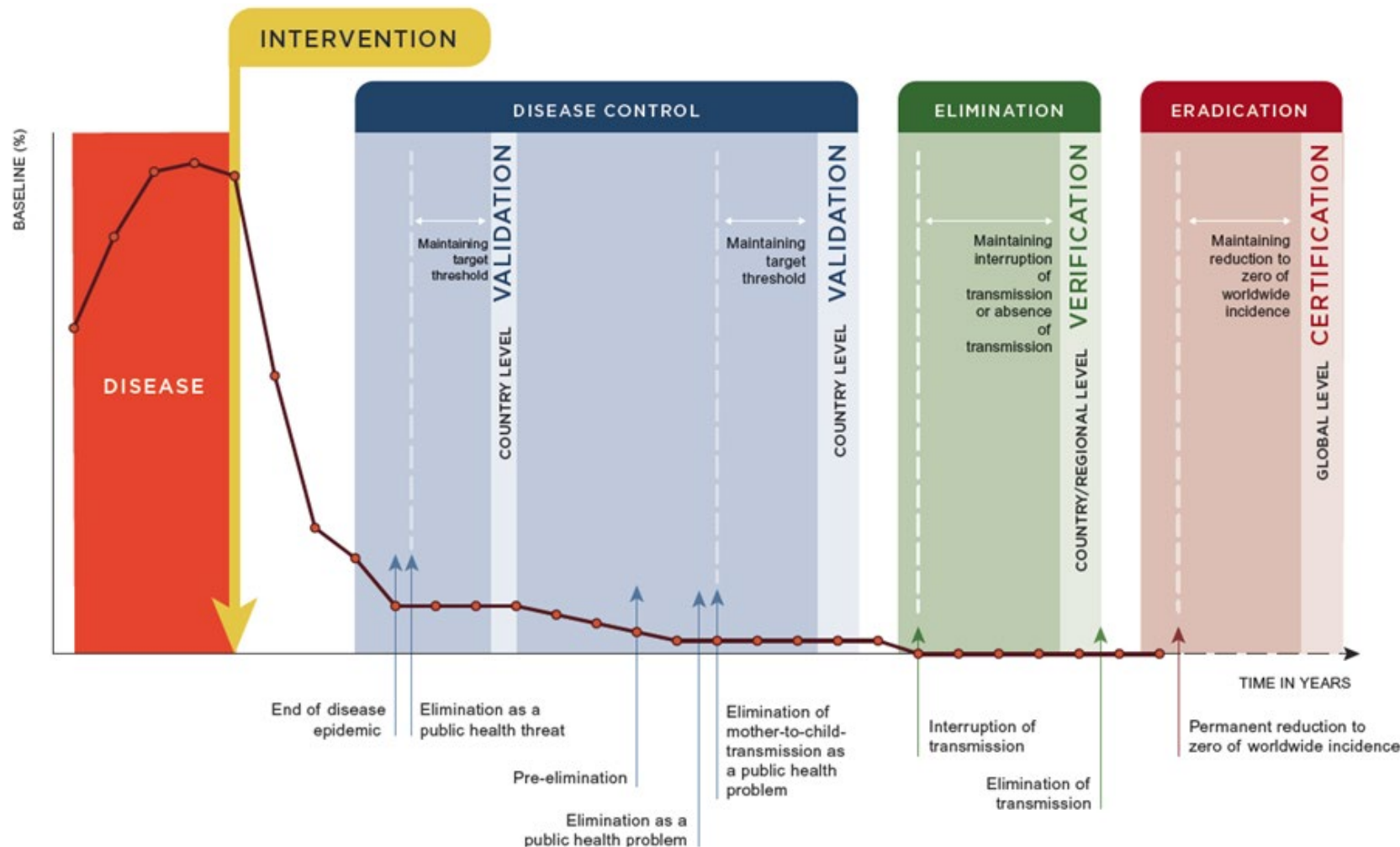
# Measuring elimination of transmission

- Require more granular data to interpret trends in HIV notifications
- Likely place of acquisition of HIV
  - CD4 count decline
  - Testing history
  - Year of arrival in Australia
- Role for genotyping surveillance?
- Focus on newly acquired vs all notifications

# HIV notifications, 2010-2018



# Disease control, elimination and eradication



# What happens if we do achieve elimination of HIV transmission in Australia?

- Doesn't mean we can reduce effort
- Still a significant population living with HIV in Australia
- Phase of maintenance of a high level of accessible prevention and treatment services
- Ongoing surveillance and monitoring

# Acknowledgements

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