### HIV NOTIFICATIONS

in heterosexuals, Aboriginal and Torres Strait Islanders, people who inject drugs, and female sex workers in NSW, 2015-2019

AUTHORS: Phillip Keen, Steven Nigro, and Andrew Grulich

12 October 2020



HIV notifications in heterosexuals, Aboriginal and Torres Strait Islanders, people who inject drugs, and female sex workers in NSW, 2015-2019.

Phillip Keen<sup>1</sup>, Steven J. Nigro<sup>2</sup>, and Andrew E. Grulich<sup>1</sup> on behalf of the NSW HIV Prevention Partnership Project\*.

<sup>1</sup>Kirby Institute, UNSW Sydney, Sydney, Australia.

<sup>2</sup>Health Protection NSW, NSW Ministry of Health, Sydney, Australia.

\*The investigators on the NSW HIV Prevention Partnership Project Study are Professor Andrew E. Grulich, Dr Christine Selvey, Professor Rebecca Guy, Associate Professor Garrett Prestage, Associate Professor Iryna Zablotska, Ms Jo Holden, Mr Tim Duck, Mr Craig Cooper, Ms Karen Price, Professor Martin Holt, Professor John de Wit, Professor John Kaldor, Professor Anthony Kelleher, and Professor David Wilson. The late Mr Alan Brotherton, the late Professor David A Cooper, and the late Adjunct Associate Professor Levinia Crooks were also investigators on the grant. The project steering committee included these investigators and Mr Bill Whittaker, Mr Phillip Keen, Dr Denton Callander, Mr Daniel Madeddu, Dr Heather-Marie Schmidt, Ms Barbara Telfer, Ms Karen Price, Dr Mark Boyd, Dr Benjamin R Bavinton, Mr Scott McGill, Dr Prital Patel, Ms Cherie Power, Dr Angie Pinto, Dr Steven Nigro, Mr Neil Fraser, Ms Tina Gordon, Ms Carolyn Murray, Ms Jane Costello, and Mr Lance Feeney.

### **Acknowledgements:**

HIV notifications data: Notifiable Conditions Information Management System (NCIMS), Health Protection NSW, NSW Health. Analyses of HIV notifications data were conducted by Dr Steven Nigro.

© The Kirby Institute for Infection and Immunity in Society 2020

This publication is available at: kirby.unsw.edu.au/report/HIV-notifications-in-non-GBM-populations-in-NSW-2015-2019

**Funding:** This report was supported by funding from an NHMRC Partnership Grant (GNT1092852), the NSW Ministry of Health, and UNSW Sydney. The Kirby Institute receives funding from the Australian Government Department of Health and is affiliated with the Faculty of Medicine, UNSW Sydney. No pharmaceutical industry grants were received for this study.

ISBN: 978-0-7334-3942-1

**Suggested citation:** Keen P, Nigro SJ, and Grulich AE on behalf of the NSW HIV Prevention Partnership Project (2020). HIV notifications in heterosexuals, Aboriginal and Torres Strait Islanders, people who inject drugs, and female sex workers in NSW, 2015-2019. Kirby Institute, UNSW Sydney: Sydney, Australia. DOI: http://doi.org/10.26190/5f7e9b7b6cdf8

### **Kirby Institute**

Wallace Wurth Building
UNSW Sydney, NSW, 2052
T: +61 (2) 9385 0900 | F: +61 (2) 9385 0920
E: recpt@kirby.unsw.edu.au | W: kirby.unsw.edu.au

### Contents

Acknowledgements	2
1. Executive Summary	
2. HIV diagnoses in people reporting heterosexual exposure	
3. HIV diagnoses in Aboriginal and Torres Strait Islander people	
4. HIV diagnoses in people who inject drugs	

### 1. Executive Summary

This report provides an overview of HIV diagnoses in heterosexual people, Aboriginal and Torres Strait Islander people, and people who inject drugs during the NSW HIV Strategy 2016-2020, with analyses based on data available to end 2019. A report on trends in gay, bisexual and other men who have sex with men (GBM) has been reported elsewhere.

The purpose of this report is to provide an understanding of the current context of HIV diagnoses in heterosexual people, Aboriginal and Torres Strait Islander people, and people who inject drugs, to support ongoing work by the NSW Ministry of Health to develop a new 5-year HIV strategy.

The NSW HIV Strategy 2016-2020 had a highly ambitious goal "to virtually eliminate HIV transmission in NSW by 2020", and to "sustain the virtual elimination of HIV transmission in people who inject drugs".

The focus of analysis was on NSW HIV notifications data (1).

Heterosexual people: New HIV notifications among people reporting heterosexual exposure remained stable between 2015 and 2019, both among Australian-born and overseas-born people. The stable number of new HIV notifications among Australian-born heterosexuals is in contrast to the significant decline in new HIV notifications among Australian-born men who have sex with men (MSM) that has been observed over the same period (1). It is important to note in relation to some of the stratifications of data presented among heterosexual people, the numbers involved are small and vary considerably from year to year, so caution should be exercised in interpreting what may appear to be large differences in percentage terms.

**Aboriginal and Torres Strait Islander people:** Between 2015 and 2019, HIV diagnoses among Aboriginal and Torres Strait Islander people remained low. New HIV notifications among Aboriginal and Torres Strait Islander men who have sex with men rose slightly, but remain very low among people who reported injecting drug use or heterosexual exposure.

**People who inject drugs:** Between 2015 and 2019 new HIV notifications among people who inject drugs remained very low. This report highlights that the virtual elimination of HIV transmission in people who inject drugs has been sustained in NSW.

**Female sex workers:** HIV incidence among female sex workers seen at publicly funded sexual health clinics in NSW was 0.07 per 100 person years between 2014 and 2018 (2). The incidence of HIV among women involved in sex work in NSW is extremely low—among the lowest in the world—due to highly successful HIV prevention for this priority population. This report highlights that the virtual elimination of HIV transmission in female sex workers has been sustained in NSW.

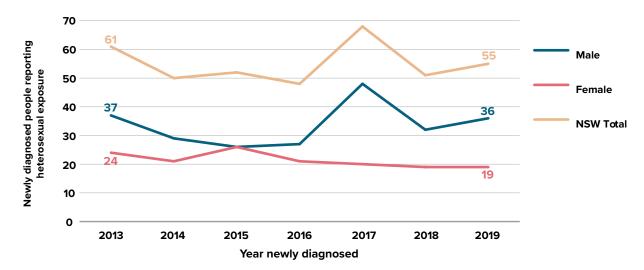
### Implications for the next NSW HIV Strategy

While the number of HIV diagnoses in heterosexual people, in Aboriginal and Torres Strait Islander people, and in people who inject drugs has remained low and stable, this is in the context of a substantial decline in diagnoses in GBM.

# 2. HIV diagnoses in people reporting heterosexual exposure

**All HIV diagnoses:** Between 2015 and 2019, HIV diagnoses among all people reporting heterosexual exposure remained approximately stable, at between 50 and 65 per year. Based on small numbers, new HIV notifications among males rose by 38%, to 36 in 2019, and new HIV notifications among females declined by 27%, to 19 in 2019 (Figure 1).

Figure 1. All new HIV diagnoses in people reporting heterosexual exposure



**HIV** diagnoses by country of birth: Between 2015 and 2019, HIV diagnoses among Australian-born people reporting heterosexual exposure varied between 17 and 25 per year, except in 2017, when 39 cases were diagnosed. Among overseas-born people, HIV diagnoses varied between 26 and 35 per year (Figure 2). Data stratified by region of birth and by male and female gender are shown in Figure 3, and are further stratified among overseas-born people by year of arrival in Figure 4. Small numbers preclude any definitive interpretation of time trends, except to say there were no strong trends of either an increase or decrease.

Figure 2. All new HIV diagnoses in people reporting heterosexual exposure, by Australian-born and overseas-born

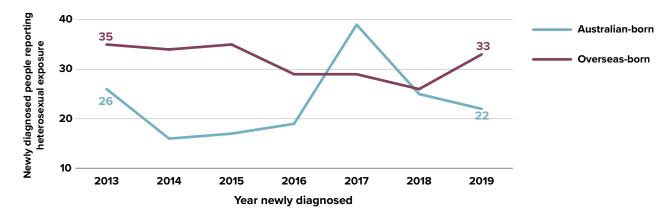


Figure 3. New HIV diagnoses in Australian-born and overseas-born people reporting heterosexual exposure, stratified by male and female gender

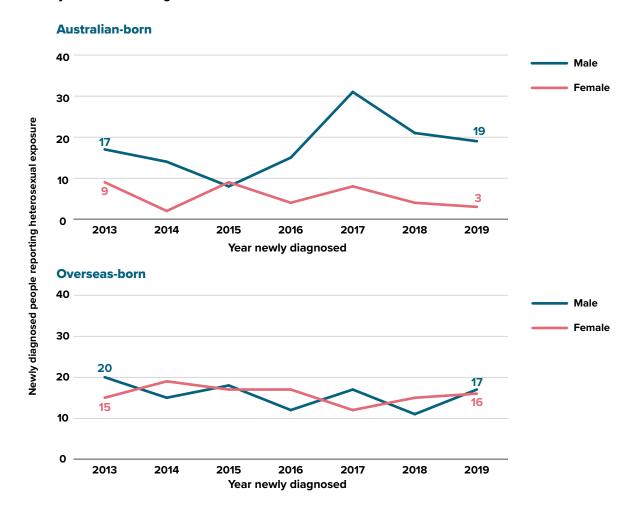
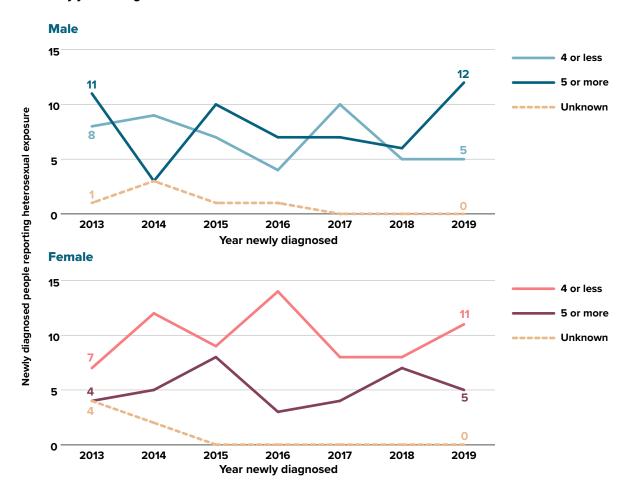
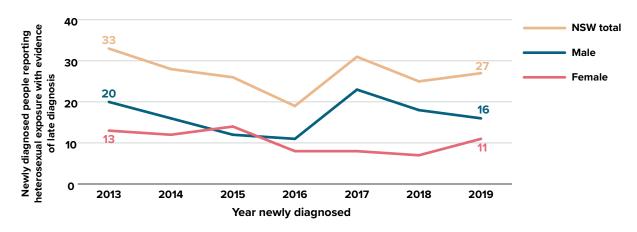


Figure 4: New HIV diagnoses among overseas-born people reporting heterosexual exposure by male and female gender and by years living in Australia



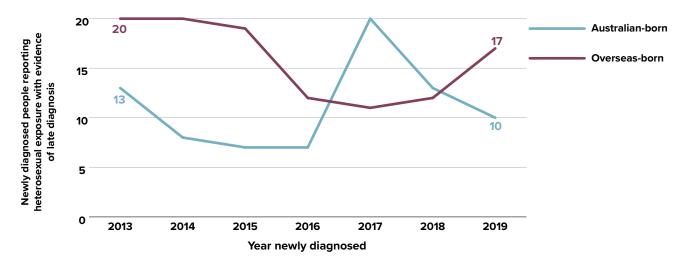
HIV diagnoses with evidence of late HIV diagnosis among people reporting heterosexual exposure: Between 2015 and 2019, HIV diagnoses among people reporting heterosexual exposure with evidence of late HIV diagnosis varied between 11 and 23 in males and 7 and 14 in females (Figure 5).

Figure 5. New HIV notifications with evidence of late HIV diagnosis among people reporting heterosexual exposure, by male and female gender



HIV diagnoses with evidence of late HIV diagnosis among people reporting heterosexual exposure by place of birth: Between 2015 and 2019, HIV diagnoses among people reporting heterosexual exposure with evidence of late HIV diagnosis varied between 7 and 13 each year among Australian-born people, except in 2017 when there were 20 diagnoses. In overseas-born people there were between 11 and 19 late diagnoses each year (Figure 6).

Figure 6. New HIV notifications with evidence of late HIV diagnosis among people reporting heterosexual exposure, by Australian-born and overseas-born



HIV diagnoses with evidence of late HIV diagnosis among people reporting heterosexual exposure by place of birth, and by male and female gender: Between 2015 and 2019, HIV diagnoses among people reporting heterosexual exposure with evidence of late HIV diagnosis born in Australia varied between 4 and 11 among males, except 2017 when 16 diagnoses were recorded, and between 1 and 4 among females. Among those born overseas, diagnoses varied between 5 and 8 in males and between 4 and 11 in females. Among people born overseas, diagnoses varied between 6 and 8 per year among people who had been living in Australia for four years or less, and between 5 and 10 among those who had been living in Australia for five years or more (Figures 7-8).

Figure 7. New HIV notifications with evidence of late HIV diagnosis among people reporting heterosexual exposure, by Australian-born and overseas-born and by gender

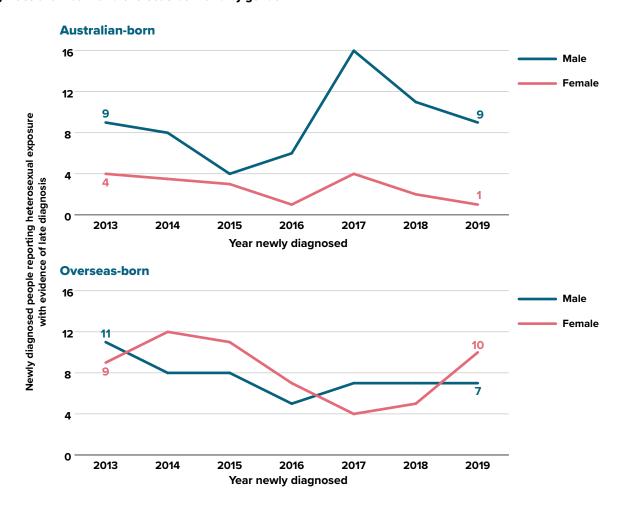
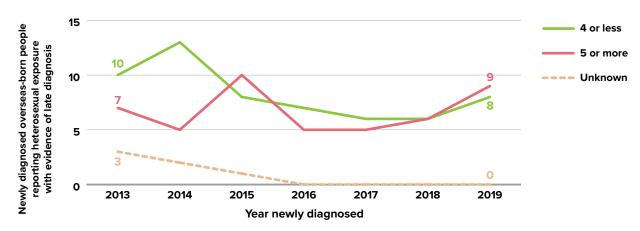


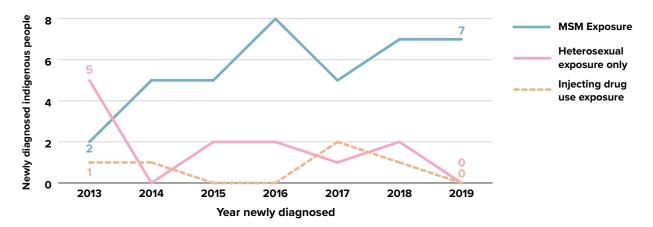
Figure 8. New HIV notifications with evidence of late HIV diagnosis among overseas-born people reporting heterosexual exposure, by time since arrival in Australia



## 3. HIV diagnoses in Aboriginal and Torres Strait Islander people

Between 2015 and 2019, new HIV notifications among Aboriginal and Torres Strait Islander men who have sex with men (MSM) varied between 5 and 8 per year, and remained very low (between 0 and 2 per year) among people who reported heterosexual exposure or injecting drug use exposure (Figure 9).

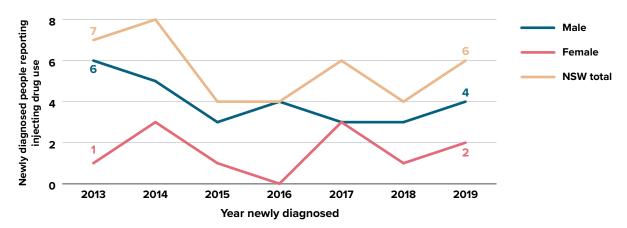
Figure 9: New HIV notifications in Aboriginal and Torres Strait Islander people by HIV exposure category





Between 2015 and 2019 new HIV notifications among people who inject drugs remained low. There were between 4 and 6 new diagnoses in total per year (Figure 10).

Figure 10. All new HIV notifications among people reporting injecting drug use exposure, and by male and female gender



### **References**

- 1. NSW Ministry of Health. NSW HIV Surveillance Data reports Sydney, 2019 [Available from: https://www.health.nsw.gov.au/endinghiv/Pages/tools-and-data.aspx]
- 2. Data from the ACCESS network, Kirby Institute, 15 May 2020.

