



# Investigating Human Immunodeficiency Virus antenatal testing within the Tasmanian Health Service: A mixed method study

Owen L<sup>1,2</sup>, Bullock P<sup>1</sup>, Hargraves S<sup>1</sup>, Thompson E<sup>1</sup>, Bennet-Daly G<sup>3</sup>, Nguyen A<sup>2</sup>, Ayton J<sup>2</sup>.

<sup>1</sup> Tasmanian Health Service, State-wide Sexual Health Service, <sup>2</sup> The University of Tasmania, School of Medicine, College of Health & Medicine, Private Bag 34, Hobart, Tasmania, 7001, <sup>3</sup> The University of Tasmania, School of Nursing, College of Health & Medicine, Locked Bag 13222, Launceston, Tasmania.

## Background

- Without interventions, the risk of mother-to-child transmission of HIV is estimated to be between 15-45%, whilst with interventions the risk is below 2%.<sup>1</sup>
- RACGP and RANZCOG recommend that all pregnant women are offered routine HIV testing as part of their antenatal workup so that interventions can be implemented as soon as possible if required.<sup>2,3</sup>
- Antenatal HIV testing rates in Tasmania were unreported and thought to be low.
- In early 2018, the state-wide antenatal referral template used by general practitioners (GPs) to refer patients into the public antenatal sector was revised, with one of the key changes being HIV testing labelled as 'recommended' rather than 'optional'.
- In addition, education was provided to healthcare professionals across the state, over a number of months.

### Study aims

- To report antenatal HIV testing rates in Tasmania.
- To explore the barriers and enablers of antenatal HIV testing.

## Methods

This is a mixed method study.

### Quantitative

- De-identified quantitative data was extracted from the Tasmanian Health Service (THS) Obstetrix™ database from 2012-18, inclusively.
- This included the baby's year of birth and the mother's HIV screening status, year of birth, postcode, geographical region, health service, and financial care status.
- Data was analysed using STATA version 15.1 to generate percentages and estimate trends.
- In addition, regression analysis of data will be undertaken.

### Qualitative

- 19 semi-structured interviews have been conducted with Tasmanian GPs, obstetricians and midwives across the state to explore the perceived barriers and motivators of antenatal HIV testing.
- Thematic analysis is currently underway.

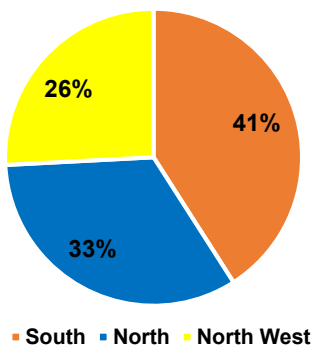
## Results

### Quantitative

A sample size of N=39,949.

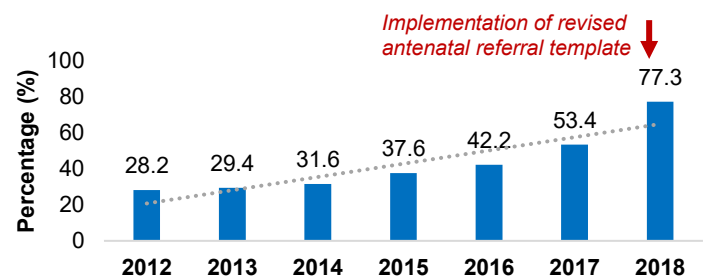
**Table 1.** Percentage of pregnant women per age group (years) in Tasmania from 2012-18 (inclusive).

| Age (years)    | <17  | 18-24 | 25-34 | 35-44 | 45>  |
|----------------|------|-------|-------|-------|------|
| Percentage (%) | 0.09 | 11.31 | 54.20 | 32.20 | 2.20 |



**Figure 1.** Geographical region of pregnant women in Tasmania from 2012-18 (inclusive).

Data over the past 6 years showed a trend of increasing antenatal HIV testing rates within the public sector, state-wide (figure 2). There was an increase of 2.74 fold since 2012.



**Figure 2.** Percentage of pregnant women screened for HIV during their antenatal care per year in Tasmania from 2012-18 (inclusive).

### Qualitative

Preliminary analysis suggested the following themes:

#### Barriers

- Outdated pre- & post-test counselling requirements
- 'Social biases' towards certain groups of women
- Stigma around HIV

#### Enablers

- Standardised procedures
- Uniform education
- Free screening

## Conclusion

- Antenatal HIV testing rates in the Tasmanian public sector have been significantly below national recommended guidelines, over the past 6 years. Testing rates have increased by 45% since 2017. The implementation of an improved referral template and educating health professionals appears to have facilitated this increase.
- By identifying the barriers and enablers behind antenatal HIV testing amongst healthcare professionals, we can inform the revisions of recommended practices and educational strategies to support clinicians to make HIV screening a routine practice for all pregnant women in Tasmania.

**AUTHOR INFORMATION:** Amy Nguyen  
Honours Student, University of Tasmania.  
Email: amy.nguyen@utas.edu.au



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