

Elimination of Donovanosis —Are We There Yet?

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Introduction

- Donovanosis is a notifiable sexually transmitted infection in Australia diagnosed exclusively in 3 jurisdictions, namely, Western Australia (WA), Northern Territory (NT) and Queensland (QLD).
- Donovanosis used to be endemic in remote Indigenous communities in these 3 jurisdictions, but has become rare in the last 10 years (see Fig. 1).
- This decrease was mainly due to the development of effective treatment, convenient diagnostic tests and the implementation of a national eradication project between 2001-2004.¹
- This project aimed to investigate Australia's progress towards the elimination of donovanosis.

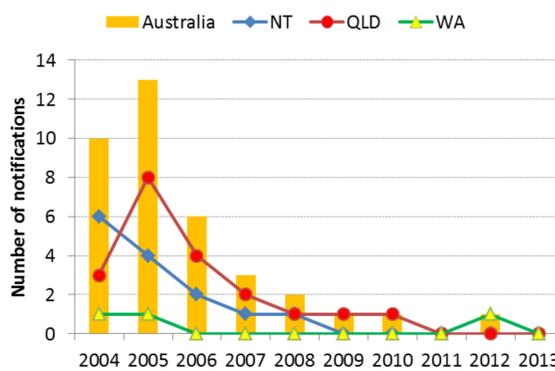
Methods

- The definition for elimination is that no new case of donovanosis was notified in Australia for 3 consecutive years.¹
- We first examined testing data to rule out lack of testing as the cause for low numbers of diagnoses. Annual numbers of nucleic acid tests (NAT) for donovanosis for the period 2008-2012 were collected from the laboratories that performed such tests for WA, QLD and NT.
- Donovanosis notification data were retrieved from the national surveillance system (<http://www9.health.gov.au/cda/source/cda-index.cfm>).
- Positivity rates were calculated by dividing the number of notifications with the number of NATs performed.
- In order to assess if there was appropriate testing guidelines for donovanosis, we examined the relevant management guidelines for genital ulcers regarding diagnosis and treatment.

Results

- There were 2 or less notifications annually in 2008-2010 and 2012.
- There were > 500 tests performed annually in the 3 jurisdictions during the period 2008-2012 (except 2008). The total number of tests increased during the period, mainly in WA and NT (see Fig. 2).
- The positivity rates were 1.0% or lower in all 3 jurisdictions, and the overall rate <0.4% during the 5-year period (see Fig. 3).
- There were appropriate guideline documents to guide clinicians on the diagnosis and treatment of genital ulcers in all 3 jurisdictions (See Table 1).

Fig. 1: Notifications of Donovanosis in Australia, 2004-2013



Data source: <http://www9.health.gov.au/cda/source/cda-index.cfm>

Fig. 2: Number of Tests for Donovanosis, 2008-2012

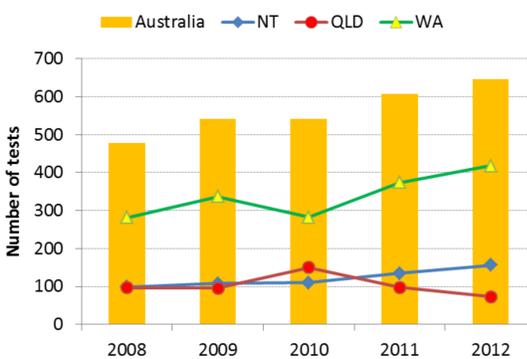


Fig. 3: Positivity Rate for Donovanosis Testing, 2008-2012

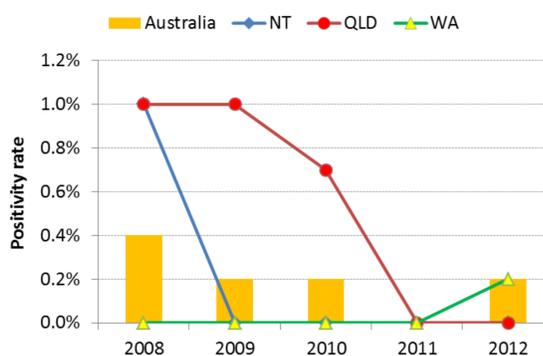


Table 1: A survey on clinical and disease control guideline documents for donovanosis in WA, NT and QLD for the period 2008-2012

Item	WA	NT	QLD
Guideline documents	'Silverbook. Guidelines for managing sexually transmitted infections'	'CARPA Standard Treatment Manual'; 'Women's Business Manual'; 'NT guidelines for the management of sexually transmitted infections in the primary health care setting'	'Primary Clinical Care Manual'
Indication for donovanosis testing	All genital ulcers not typical of herpes simplex		
Recommended tests	Dry swab for NAT and impression smear for microscopy, from lesion		
Indication for presumptive treatment	All non-painful, non-blistering genital ulcers	All genital ulcers not completely typical of herpes	All non-painful, non-blistering genital ulcers
Contact tracing	Examine sexual partners		
Dedicated public health response	No standard procedure		

Discussion & Conclusions

- The low numbers of donovanosis notifications in 2008-2012 meant that elimination of donovanosis has not been achieved yet. They did not appear to be due to lack of testing.
- Although all guidelines from the 3 jurisdictions ask clinicians to test patients with non-blistering genital ulcers for both syphilis and donovanosis, clinicians' compliance with this is not known.
- Therefore, in order to determine whether donovanosis has been eliminated in Australia, further study is required to determine whether people with non-blistering genital ulcers present for health care and clinician's adherence to their jurisdiction's guidelines for managing non-blistering genital ulcers.

Reference:

1. Bowden FJ. Donovanosis in Australia: going, going... Sex Transm Infect. 2005;81(5):365-6.

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