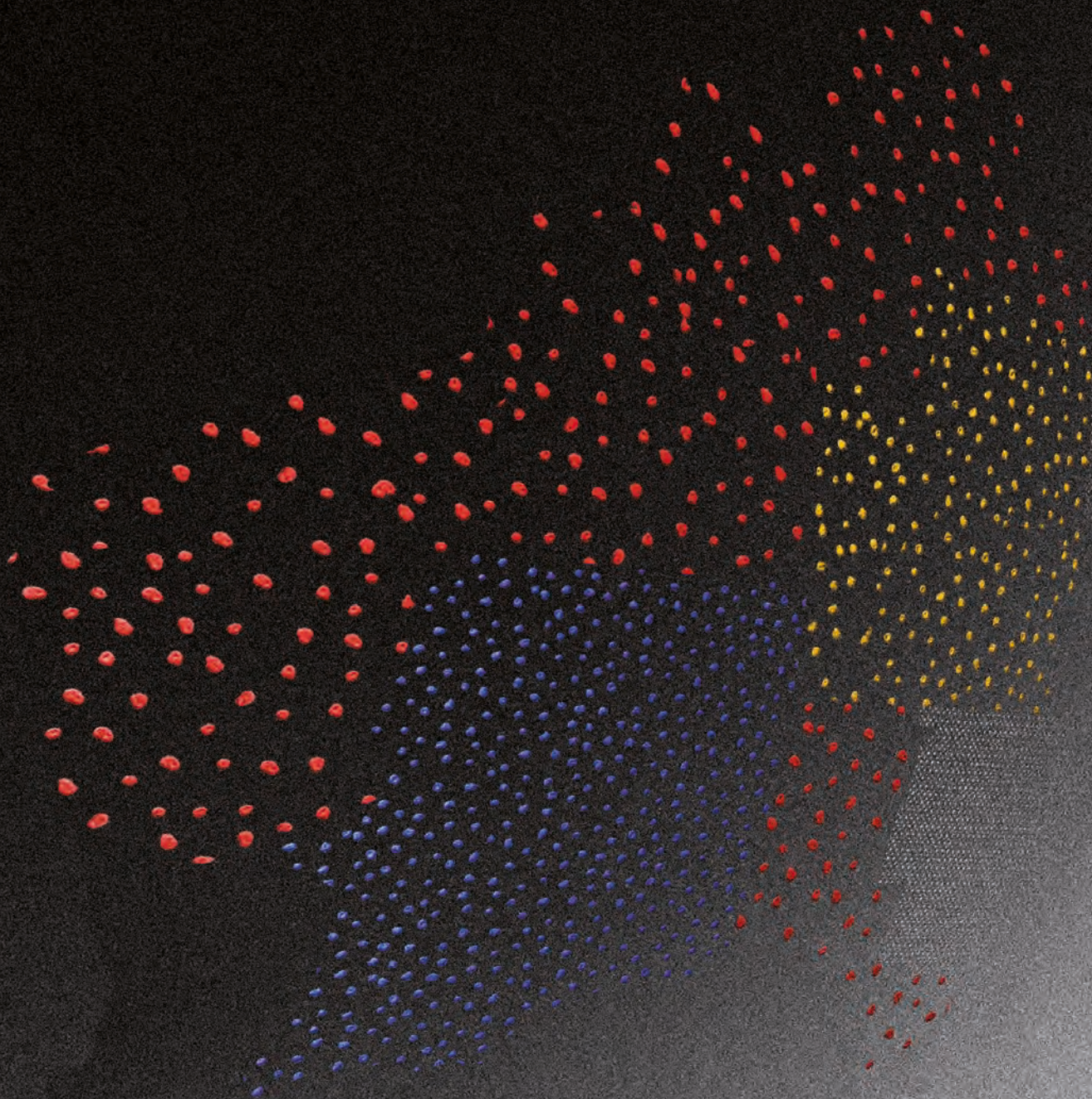


# Australian Trachoma Surveillance Report

# 2012



Edited by National Trachoma Surveillance and Reporting Unit



Australian Government  
Department of Health



UNSW  
AUSTRALIA



Kirby Institute



## Australian Trachoma Surveillance Report 2012

**ISSN 1839-2210**

*Suggested citation:*

Australian Trachoma Surveillance Report 2012. The Kirby Institute for infection and immunity in society, The University of New South Wales, NSW.

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The Kirby Institute for infection and immunity in society.  
Centre for Immunology Building, Cnr Boundary and West Streets, Darlinghurst NSW 2010 Australia

Telephone: **02 9385 0900** Facsimile: **02 9385 0920** International prefix: **61 2** Email: [recept@kirby.unsw.edu.au](mailto:recept@kirby.unsw.edu.au)



# Australian Trachoma Surveillance Report 2012

The Kirby Institute, University of New South Wales  
June 2013

# Contents

List of Tables.....	3
List of Figures.....	4
Acknowledgements.....	6
Technical terms and definitions.....	8
Abbreviations.....	9
Executive summary.....	10
Background.....	12
Methodology.....	13
Results.....	15
National results 2012.....	15
Northern Territory results 2012.....	23
South Australia results 2012.....	32
Western Australia results 2012.....	40
Queensland results 2012.....	48
Discussion.....	51
Reference List.....	53
Appendix 1: World Health Organization Trachoma Grading Card.....	54
Appendix 2: Data Collection Forms.....	56
Appendix 3: De-identified community trachoma prevalence trends by regions.....	60

# List of Tables

<i>Table 1.1</i>	Trachoma screening coverage, trachoma prevalence and clean face prevalence among at-risk Aboriginal communities in 2012 by jurisdiction, Australia.....	21
<i>Table 1.2</i>	Trachoma treatment coverage among at-risk Aboriginal communities in 2012 by jurisdiction, Australia.....	21
<i>Table 1.3</i>	Trichiasis screening coverage, prevalence and treatment among Aboriginal adults aged over 40 years in 2012, Australia.....	22
<i>Table 2.1</i>	Trachoma screening coverage, trachoma prevalence and clean face prevalence in the Northern Territory in 2012 by region.....	29
<i>Table 2.2</i>	Trachoma treatment coverage in the Northern Territory in 2012.....	29
<i>Table 2.3</i>	Treatment coverage for second treatment of trachoma in hyperendemic communities in the Northern Territory in 2012.....	30
<i>Table 2.4</i>	Trichiasis screening coverage, prevalence and treatment among Aboriginal adults aged over 40 years in 2012 in the Northern Territory.....	30
<i>Table 2.5</i>	Health promotion activities by region in the Northern Territory in 2012.....	31
<i>Table 3.1</i>	Trachoma screening coverage, trachoma prevalence and clean face prevalence in South Australia in 2012 by region.....	38
<i>Table 3.2</i>	Treatment coverage in South Australia in 2012 by region.....	38
<i>Table 3.3</i>	Trichiasis screening coverage, prevalence and treatment among Aboriginal adults aged over 40 years in 2012 in South Australia.....	39
<i>Table 3.4</i>	Health promotion activities in South Australia in 2012.....	39
<i>Table 4.1</i>	Trachoma screening coverage, trachoma prevalence, and clean face prevalence in Western Australia in 2012 by region.....	46
<i>Table 4.2</i>	Treatment coverage in Western Australia in 2012 by region.....	46
<i>Table 4.3</i>	Trichiasis screening coverage, prevalence and treatment among Aboriginal adults aged over 40 years in 2012 in Western Australia.....	47
<i>Table 4.4</i>	Health promotion activities in Western Australia in 2012.....	47
<i>Table 5.1</i>	Trachoma screening coverage, trachoma prevalence, and clean face prevalence in Queensland in 2012.....	50
<i>Table 5.2</i>	Health promotion activities in Queensland in 2012.....	50

# List of Figures

<i>Figure 1.1</i>	Trachoma prevalence in children aged 5-9 years, number of communities screened and number of at-risk communities in Australia, 2012.....	15
<i>Figure 1.2</i>	Number of communities screened by year and jurisdiction, Australia, 2007 – 2012.....	16
<i>Figure 1.3</i>	Population screening coverage of children aged 5-9 years by year and jurisdiction, Australia, 2007 – 2012.....	16
<i>Figure 1.4</i>	Proportion of screened children aged 5-9 years who had a clean face by year and jurisdiction, Australia, 2007 – 2012.....	17
<i>Figure 1.5</i>	Proportion of communities screened meeting clean face target in children aged 5-9 years by year and jurisdiction, Australia, 2007 – 2012.....	17
<i>Figure 1.6</i>	Trachoma prevalence among screened children aged 5-9 years by year and jurisdiction, Australia, 2007 – 2012.....	18
<i>Figure 1.7</i>	Proportion of screened communities in which no trachoma was reported among children aged 5-9 years by year and jurisdiction, Australia, 2007 – 2012.....	18
<i>Figure 1.8</i>	Proportion of screened communities with endemic trachoma among children aged 5-9 years by year and jurisdiction, Australia, 2007 – 2012.....	19
<i>Figure 1.9</i>	Proportion of screened at-risk communities according to level of trachoma prevalence in 5-9 year old children in 2012, by jurisdiction, Australia.....	19
<i>Figure 1.10</i>	Trachoma prevalence among 5-9 year old children in screened at-risk communities in 2012 by sex and jurisdiction, Australia.....	20
<i>Figure 2.1</i>	Trachoma prevalence in children aged 5-9 years, number of communities screened and number of at-risk communities in the Northern Territory in 2012.....	25
<i>Figure 2.2</i>	Number of communities screened by year and region in the Northern Territory, 2007 – 2012.....	26
<i>Figure 2.3</i>	Population screening coverage of children aged 5-9 years in regions containing at least one at-risk community by year and region in the Northern Territory, 2007 – 2012.....	26
<i>Figure 2.4</i>	Proportion of screened children aged 5-9 years who had a clean face by year and region in the Northern Territory, 2007 – 2012.....	27
<i>Figure 2.5</i>	Trachoma prevalence among screened children aged 5-9 years by year and region in the Northern Territory, 2007 – 2012.....	27
<i>Figure 2.6</i>	Trachoma prevalence among children 5-9 years in screened at-risk communities in 2012 by Northern Territory region.....	28
<i>Figure 2.7</i>	Trachoma prevalence among 5-9 year old children in screened at-risk communities in 2012 by sex and Northern Territory region.....	28
<i>Figure 3.1</i>	Trachoma prevalence in children aged 5-9 years, number of communities screened and number of communities at-risk in 2012 in South Australia.....	34
<i>Figure 3.2</i>	Number of communities screened by year and region in South Australia, 2007 – 2012.....	35
<i>Figure 3.3</i>	Population screening coverage of children aged 5-9 years over all regions containing at least one at-risk community by year and region in South Australia, 2007 – 2012.....	35
<i>Figure 3.4</i>	Proportion of screened children aged 5-9 years who had a clean face by year and region in South Australia, 2007 – 2012.....	36
<i>Figure 3.5</i>	Trachoma prevalence among screened children aged 5-9 years by year and region in South Australia, 2007 – 2012.....	36
<i>Figure 3.6</i>	Trachoma prevalence among children aged 5-9 years in screened at-risk communities in 2012 by region in South Australia.....	37
<i>Figure 3.7</i>	Trachoma prevalence of 5-9 year old children in screened at-risk communities in 2012 by sex and region in South Australia.....	37



<i>Figure 4.1</i>	Trachoma prevalence in children aged 5-9 years, number of communities screened and number of communities at-risk in 2012 in Western Australia.....	42
<i>Figure 4.2</i>	Number of communities screened by year and region in Western Australia, 2007 – 2012.....	43
<i>Figure 4.3</i>	Population screening coverage of children aged 5-9 years over all regions containing at least one at-risk community by year and region in Western Australia, 2007 – 2012.....	43
<i>Figure 4.4</i>	Proportion of screened children aged 5-9 years who had a clean face by year and region in Western Australia, 2007 – 2012.....	44
<i>Figure 4.5</i>	Trachoma prevalence among screened children aged 5-9 years by year and region in Western Australia, 2007 – 2012.....	44
<i>Figure 4.6</i>	Trachoma prevalence among children aged 5-9 years in screened at-risk communities in 2012 by region in Western Australia.....	45
<i>Figure 4.7</i>	Trachoma prevalence of 5-9 year old children in screened at-risk communities in 2012 by sex and region in Western Australia.....	45
<i>Figure 5.1</i>	Trachoma prevalence in children aged 5-9 years, number of communities screened and number of at-risk communities in Queensland in 2012.....	49
<i>Figure A.1</i>	Trachoma prevalence of screened children aged 5-9 years by year and de-identified community in North Alice Springs Remote region, Northern Territory, 2007 – 2012.....	60
<i>Figure A.2</i>	Trachoma prevalence of screened children aged 5-9 years by year and de-identified community in South Alice Springs Remote region, Northern Territory, 2007 – 2012.....	60
<i>Figure A.3</i>	Trachoma prevalence of screened children aged 5-9 years by year and de-identified community in Barkly region, Northern Territory, 2007 – 2012.....	61
<i>Figure A.4</i>	Trachoma prevalence of screened children aged 5-9 years by year and de-identified community in Darwin Rural region, Northern Territory, 2007 – 2012.....	61
<i>Figure A.5</i>	Trachoma prevalence of screened children aged 5-9 years by year and de-identified community in East Arnhem region, Northern Territory, 2007 – 2012.....	62
<i>Figure A.6</i>	Trachoma prevalence of screened children aged 5-9 years by year and de-identified community in Katherine region, Northern Territory, 2007 – 2012.....	62
<i>Figure A.7</i>	Trachoma prevalence of screened children aged 5-9 years by year and de-identified community in Anangu Pitjantjatjara Yankunytjatjara (APY) Lands region, South Australia, 2007 – 2012.....	63
<i>Figure A.8</i>	Trachoma prevalence of screened children aged 5-9 years by year and de-identified community in Eyre and Western region, South Australia, 2007 – 2012.....	63
<i>Figure A.9</i>	Trachoma prevalence of screened children aged 5-9 years by year and de-identified community in Goldfields region, Western Australia, 2012.....	64
<i>Figure A.10</i>	Trachoma prevalence of screened children aged 5-9 years by year and de-identified community in West Kimberly region, Western Australia, 2012.....	64
<i>Figure A.11</i>	Trachoma prevalence of screened children aged 5-9 years by year and de-identified community in East Kimberly region, Western Australia, 2012.....	65
<i>Figure A.12</i>	Trachoma prevalence of screened children aged 5-9 years by year and de-identified community in Midwest region, Western Australia, 2012.....	65
<i>Figure A.13</i>	Trachoma prevalence of screened children aged 5-9 years by year and de-identified community in Pilbara region, Western Australia, 2007 – 2012.....	66

# Acknowledgements

## The National Trachoma Surveillance and Control Reference Group

Name	Position	Committee Role
Jenean Spencer	Assistant Secretary Operational Policy Branch, Office for Aboriginal and Torres Strait Islander Health, Department of Health and Ageing	Chair OATSIH Representative
Stephanie Mackney	Director, Eye, Ear and Dental Health Section, Office for Aboriginal and Torres Strait Islander Health, Department of Health and Ageing	OATSIH Representative
David Scrimgeour	Public Health Medical Officer Aboriginal Health Council of South Australia	National Aboriginal Community Controlled Health Organisation Representative
Tricia Elarde	National Coordinator – Ear and Hearing Health Workforce Project, National Aboriginal Community Controlled Health Organisation	National Aboriginal Community Controlled Health Organisation Representative
Hugh Taylor	Harold Mitchell Chair of Indigenous Eye Health, Melbourne School of Population and Global Health, University of Melbourne	Expert Representative
Donna Mak	Professor and Head, Population and Preventive Health, University of Notre Dame, Fremantle	Expert Representative
Vicki Krause	Director, Centre for Disease Control, Northern Territory Department of Health	Communicable Diseases Network Australia Representative
Stephen Lambert	Acting Senior Director, Communicable Diseases Unit, Chief Health Officer Branch Queensland Department of Health	Queensland Department of Health Representative
Paula Spokes	Manager Surveillance, Communicable Disease Branch, Health Protection New South Wales, New South Wales Department of Health	New South Wales Department of Health Representative
Charles Douglas	Public Health Medical Officer Centre for Disease Control, Northern Territory Department of Health	Northern Territory Department of Health Representative
Lucy Angley	Principal Project Manager Aboriginal Health, Country Health, South Australia Department of Health	South Australia Department of Health Representative
Sandra Crowe	Area Director, Population Health Western Australia Country Health Service	Western Australia Department of Health Representative
John Kaldor	Professor of Epidemiology, Public Health Interventions Research Group The Kirby Institute, UNSW	National Trachoma Surveillance and Reporting Unit Representative
Carleigh Cowling	Senior Surveillance Officer, The Kirby Institute, UNSW	National Trachoma Surveillance Reporting Unit Representative



## National Trachoma Surveillance and Reporting Unit

Name	Position	Committee Role
John Kaldor	Professor of Epidemiology, Public Health Interventions Research Group The Kirby Institute, UNSW	Chief Investigator
David Wilson	Associate Professor and Head, Surveillance and Evaluation Program for Public Health, The Kirby Institute, UNSW	Surveillance Expert
Bette Liu	Senior Lecturer, School of Public Health and Community Medicine, UNSW Scientific Head of Research Assets, The Sax Institute	Epidemiology Expert
James Ward	Deputy Director, Head Preventative Health, Baker IDI Central Australia	Indigenous Health Expert
Tom Snelling	Consultant in infectious diseases, Princess Margaret Hospital NHMRC Frank Fenner research fellow Telethon Institute for Child Health Research, Centre for Child Health Research, UWA	Paediatric Infectious Diseases Expert
Carleigh Cowling	Senior Surveillance Officer, The Kirby Institute, UNSW	Surveillance Officer

## Jurisdictional contributors to trachoma data collection

### Northern Territory

- Aboriginal Community Controlled Health Services
- Aboriginal Medical Services Alliance of the Northern Territory
- Centre for Disease Control, Northern Territory Department of Health
- Healthy School-Age Kids Program: Top End and Central Australia

### South Australia

- Aboriginal Community Controlled Health Services
- Aboriginal Health Council of South Australia
- Country Health South Australia, South Australia Health

### Western Australia

- Aboriginal Community Controlled Health Services
- Communicable Diseases Control Directorate, Department of Health, Western Australia
- Goldfields Population Health Unit
- Kimberley Population Health Unit
- Midwest Population Health Unit
- Pilbara Population Health Unit

### Queensland

- Deadly Ears Program, Department of Health, Queensland

# Technical terms and definitions

Definitions are based on the 2006 CDNA **Guidelines for the public health management of trachoma in Australia**.<sup>1</sup>

## **Active trachoma:**

The presence of chronic inflammation of the conjunctiva caused by infection with *Chlamydia trachomatis*; includes World Health Organization grades trachomatous inflammation - follicular (TF) and trachomatous inflammation - intense (TI).

## **At-risk communities:**

Communities classified by jurisdictions as being at higher risk of trachoma (generally based on prevalence above 5% in age group 5-9 years).

## **Clean face:**

Absence of dirt, dust and crusting on cheeks and forehead.

## **Community screening coverage:**

The number of communities screened for trachoma as a proportion of communities designated by jurisdictions to be at risk of trachoma.

## **Contacts:**

Includes all members of the household or households in which a person with active trachoma regularly sleeps. However, where the community prevalence was greater than 10%, this term includes all members of the community, not only household members.

## **Endemic trachoma:**

Prevalence of active trachoma of 5% or more in children aged 1-9 years or a prevalence of trichiasis of at least 0.1% in the adult population.

## **Hyperendemic trachoma:**

Prevalence of active trachoma of 20% or more in children aged 1-9 years.

## **Prevalence of active trachoma:**

Proportion of people found in a screening program to have active trachoma.

## **Screening coverage:**

The proportion of people in a population examined for trachoma or trichiasis through a screening program.

## **Trachomatous inflammation - follicular (TF):**

Presence of five or more follicles in the upper tarsal conjunctiva, each at least 0.5 mm in diameter, as observed through a loupe.

## **Trachomatous inflammation - intense (TI):**

Pronounced inflammatory thickening of the tarsal conjunctiva that obscures more than half of the normal deep tarsal vessels.

## **Trachomatous trichiasis (TT):**

Evidence of the recent removal of in-turned eyelashes or at least one eyelash rubbing on the eyeball.

## **Treatment coverage:**

The proportion of people requiring treatment for trachoma under guidelines who actually received treatment.

# Abbreviations

**ABS**

Australian Bureau of Statistics

**ACCHS**

Aboriginal Community Controlled Health Service

**AHCSA**

Aboriginal Health Council of South Australia

**CDC**

Centre for Disease Control, NT Department of Health

**CDNA**

Communicable Diseases Network Australia

**CHSA**

Country Health South Australia

**DoHA**

Commonwealth Department of Health and Ageing

**EH& CDSSP**

Eye Health and Chronic Disease Specialist Support Program

**HSAK**

Healthy School-Age Kids Program

**MSOAP**

Medical Specialist Outreach Assistance Program

**NACCHO**

National Aboriginal Community Controlled Health Organisation

**NT**

Northern Territory

**N/R**

Not Reported

**NTSRU**

National Trachoma Surveillance and Reporting Unit

**OATSIH**

Office for Aboriginal and Torres Strait Islander Health

**QLD**

Queensland

**SA**

South Australia

**SAFE**

Surgery, antibiotics, facial cleanliness and environmental improvement

**TSCRG**

Trachoma Surveillance and Control Reference Group

**TF**

Trachomatous inflammation – follicular

**TI**

Trachomatous inflammation – intense

**TT**

Trachomatous trichiasis

**UNSW**

University of New South Wales

**WA**

Western Australia

**WHO**

World Health Organization



# Executive summary

Trachoma screening and management data for 2012 were provided to the National Trachoma Surveillance and Reporting Unit by the Northern Territory (NT), South Australia (SA), Western Australia (WA) and Queensland (Qld). Data were analysed by region in the NT, SA and WA, with five regions in the NT, four in SA and four in WA. Queensland screened six communities and its data was aggregated for analysis. Jurisdictional authorities had designated 204 remote Aboriginal communities as being at risk of endemic trachoma in 2012.

## Screening coverage

- A total of 195 (96%) of 204 at-risk communities were screened for trachoma during 2012 (Table 1.1).
- Within these communities, 5,426(71%) of an estimated 7,676 resident children aged 5-9 years were screened.
- Screening coverage in children aged 5-9 years in at-risk communities was 67% for the NT, 79% for SA, 73% for WA and 64% for Qld (Table 1.1).
- Screening coverage of 5-9-year-old children in 2012 increased in NT, SA and WA (Figure 1.3)

## Clean face prevalence

- A total of 5,473 children aged 5-9 years in 193 at-risk communities were assessed for clean faces during 2012 (Table 1.1).
- The overall prevalence of clean faces in children aged 5-9 years was 79%, with 75% in the NT, 90% in SA, 81% in WA and 70% in Qld (Table 1.1, Figure 1.4).
- The proportion of screened communities with over 80% of children aged 5-9 years having a clean face was 58% in the NT, 89% in SA, 57% in WA and 33% in Qld (Figure 1.5).

## Trachoma prevalence

- The overall prevalence of active trachoma among children aged 5-9 years in screened communities was 4%, with 4% in the NT and WA, 2% in SA, and nil in Qld (Table 1.1).
- The prevalence of trachoma in 5-9-year-old children decreased since the last report in NT, SA and WA (Figure 1.6).
- Of all communities that screened 5-9-year-old children, 63% (121/193) had no trachoma detected (Figure 1.9).
- In 25% (48/193) of all communities that screened 5-9-year-old children endemic levels of trachoma (over 5%) were found (Figure 1.9).
- In 8% (15/193) of all communities that screened 5-9-year-old children, hyperendemic levels of trachoma (over 20% prevalence of trachoma) were found (Figure 1.9).
- The proportion of screened communities with no trachoma detected increased in the NT by 20%, in SA by 21% and in WA by 3% in 2012 compared to 2011.
- The proportion of screened communities with endemic trachoma (> 5% prevalence) decreased in the NT, SA and WA in 2012 compared to 2011 (Figure 1.8).
- Follicles consistent with Trachomatous inflammation – follicular were observed in one community in Qld, however PCR tests results were negative for *Chlamydia trachomatis*.

## Treatment coverage

- Trachoma cases requiring treatment were detected in 87 of 195 communities screened (Table 1.2).
- Of all cases detected that required treatment, 95% received treatment (Table 1.2).
- Estimated treatment coverage of contacts was 81% overall, 79% in the NT, 97% in SA and 93% in WA (Table 1.2).
- No treatment was required for Qld (Table 1.2).

## Trichiasis

- Trichiasis screening coverage of adults over 40 years of age increased in the NT, WA and SA.
- A total of 4,468 (31%) adults of an estimated at-risk population of 13,406 were reported to have been screened for trichiasis across the NT, SA and WA (Table 1.3).
- Overall trichiasis prevalence among those screened was 2% with 61 cases reported in the NT, 11 in SA, and 22 in WA.
- Trichiasis surgery was reported as undertaken for 16 people with trichiasis in 2012.

## Health promotion activities

- Of the at-risk communities screened, health promotion activities were reported to be taking place in 133 communities across all jurisdictions.

# Background

Trachoma is one of the major causes of preventable blindness globally.<sup>2</sup> It is an eye infection caused by the bacteria *Chlamydia trachomatis* serotypes A, B, Ba and C. The infection can be transmitted through close facial contact, hand-to-eye contact, via fomites (towels, clothing and bedding) or by flies. Trachoma generally occurs in dry, dusty environments and is linked to poor living conditions. Overcrowding of households, limited water supply for bathing and general hygiene, poor waste disposal systems and high numbers of flies have all been associated with trachoma. Children generally have the highest prevalence of trachoma and are believed to be the main reservoirs of infection, because the infection in children has a longer duration than in adults.

Infection with the relevant *C. trachomatis* serotype causes inflammation of the conjunctiva. Diagnosis of trachoma is by visual inspection, and the detection of follicles (white spots) and papillae (red spots) on the inner upper eye lid. Repeated infections with *C. trachomatis*, especially during childhood, may lead to scarring with contraction and distortion of the eyelid, which may in turn cause the eyelashes to rub against the cornea; this condition is known as trichiasis and can lead to blindness.<sup>1,3</sup> Scarring of the cornea due to trichiasis is irreversible. However, if early signs of in-turned eyelashes are found, then surgery is usually effective in preventing further damage to the cornea.

Trachoma is usually treated by a single dose of azithromycin. Best public health practice involves treatment of all members of the household in which a case resides, whether or not they have evidence of trachoma. Depending on the prevalence of trachoma in a community, treatment may also be extended to all children aged 6 months to 14 years, or to all members of the community, excluding or including infants less than 6 months of age.<sup>4</sup>

The Alliance for the Global Elimination of Blinding Trachoma by 2020 (GET 2020) initiative, supported by the World Health Organization (WHO), advocates the implementation of the SAFE strategy, with its key components of Surgery (to correct trichiasis), Antibiotic treatment, Facial cleanliness and Environmental improvements. This strategy is ideally implemented through a primary care model within a community framework, ensuring consistency and continuity in screening, control measures, data collection and reporting, as well as the building of community capacity.<sup>5,6</sup>

## Trachoma control in Australia

Australia is the only high income country where trachoma is endemic. It occurs primarily in remote and very remote Aboriginal communities in the Northern Territory (NT), South Australia (SA) and Western Australia (WA). In 2008, cases were also found in New South Wales (NSW) and Queensland (Qld), where trachoma was believed to have been eliminated.<sup>4,7,8</sup> In 2009, the Australian Government invested in the *Closing the Gap - Improving Eye and Ear Health Services for Indigenous Australians* measure which included committing \$16 million over a 4-year period towards eliminating trachoma in Australia. The funding is for improving and expanding screening and control activities, as well as establishing a strong framework for monitoring and evaluation. As a result, an increased level of funding was provided to NT, SA and WA for trachoma control activities from 1 July 2010 and to Qld and NSW in 2012.

The surveillance and management of trachoma is guided by the Communicable Disease Network of Australia (CDNA) *2006 Guidelines for the public health management of trachoma in Australia*.<sup>1</sup> This document was developed in the context of the WHO SAFE strategy and makes recommendations for improving data collection, collation and reporting systems.

## The National Trachoma Surveillance and Reporting Unit

The National Trachoma Surveillance and Reporting Unit (NTSRU) is responsible for data collation, analysis and reporting related to the ongoing evaluation of trachoma control strategies in Australia. It operates under contract with the Australian Government's Department of Health and Ageing. The primary focus from 2006 until and including 2011 (report produced in 2012) has been the three jurisdictions (NT, SA and WA) funded by the Australian Government to undertake trachoma control activities. In 2012 the Qld Department of Health was funded to undertake a baseline screening of remote communities to establish whether trachoma was public health concern in Qld. These data are included in the 2012 report along with WA, NT and SA data. From the end of 2010, the NTSRU has been managed by The Kirby Institute at the University of New South Wales.<sup>9</sup> It was previously managed by The Centre for Eye Research Australia (2006 to 2008)<sup>10,11,12</sup> and the Centre for Molecular, Environmental, Genetic and Analytic Epidemiology, The University of Melbourne (2009).<sup>13</sup>



# Methodology

Each jurisdiction undertook screening and treatment for trachoma according to its respective protocols, and in the context of the national 2006 CDNA *Guidelines for the public health management of trachoma in Australia*, which recommend specific treatment strategies depending on the prevalence of trachoma detected through screening.<sup>1</sup>

In 2006, when the National Trachoma Management Program was initiated, each jurisdiction identified at-risk communities from historical prevalence data and other knowledge. Over time, additional communities have been reclassified as being at-risk. Screening for trachoma focuses on the at-risk communities, but a small number of other communities designated as not-at-risk have also been screened, generally if there is anecdotal information suggesting the presence of active trachoma.

The WHO trachoma grading criteria (Appendix 1) were used to diagnose and classify individual cases of trachoma in all jurisdictions except Qld. Data collection forms (Appendix 2) for data collection at the community level were developed by the National Trachoma Surveillance and Control Reference Group, based on the CDNA Guidelines. Completed forms were forwarded from the jurisdictional coordinators to the NTSRU for checking and analysis. Information provided to the NTSRU at the community level for each calendar year included:

- Number of Aboriginal children aged 1-14 years screened for clean faces and the number with clean faces, by age group;
- Number of Aboriginal children aged 1-14 years screened for trachoma and the number with trachoma, by age group;
- Number of episodes of treatment for active trachoma, household contacts and other community members, by age group;
- Number of Aboriginal adults screened for trichiasis, number with trichiasis, and the number who had surgery for trichiasis;
- Community level implementation of WHO SAFE strategies.

## Northern Territory

Trachoma screening and management in the NT was undertaken through collaboration between the Department of Health (Centre for Disease Control and Health Development) and Aboriginal Community Controlled Health Services (ACCHS). Trachoma screening was incorporated into the Healthy School-Age Kids (HSAK) program<sup>14</sup> annual check and conducted by either local primary health-care services or community-controlled services, with support from the Centre for Disease Control (CDC) Trachoma Team. Following screening, treatment was generally undertaken by primary health-care services with support from the CDC Trachoma Team when requested.

In 2012, community screening for trichiasis was undertaken primarily by clinic staff, ACCHS, or by optometrists or ophthalmologists from the Regional Eye Health Service based in Alice Springs. In two large communities in the NT, mass trichiasis screening of all Indigenous adults aged over 40 years was conducted with assistance from CDC Trachoma Team staff.

## South Australia

In 2012, Country Health South Australia was responsible for managing the SA trachoma screening and treatment program. Country Health South Australia contracted with local health service providers, Aboriginal community-controlled health services, the Aboriginal Health Council of South Australia and Nganampa Health Service to ensure coverage of screening services in all at-risk rural and remote areas. Additional screening activities were undertaken by the Eye Health and Chronic Disease Specialist Support Program (EH&CDSSP), coordinated by the Aboriginal Health Council of South Australia and supported by the Medical Specialist Outreach Assistance Program (MSOAP). This program provides regular visits to SA remote Aboriginal communities by optometrists and ophthalmologists. Trichiasis screening was undertaken opportunistically for adults by both the EH&CDSSP team and the trachoma screening service providers, and is also undertaken routinely as part of the Adult Annual Health Checks. Country Health South Australia has changed regional structure in years 2011 and 2012 and therefore data from these reports cannot be directly compared with previous reports.

## Western Australia

Trachoma screening and management in WA is the responsibility of Population Health Units (PHUs) in the Kimberley, Goldfields, Pilbara and Midwest health regions. In collaboration with the local primary health-care providers, the PHUs screened communities in each region within a 2-week period, usually at the end of August or early September. People identified with active trachoma were treated at the time of screening.

Trichiasis screening was undertaken in conjunction with adult influenza vaccinations. Screening of the target population also occurs with the Visiting Optometrist Scheme (VOS) program in the Kimberley region.

In 2011, the government of WA changed the definition of community, specifically amalgamating several previously distinct communities into one single community. This definition alters trends presented in reports from 2010 – 2012.

## Queensland

In 2012 Qld undertook a one-off screening exercise in six remote communities in three regions that were considered to be potentially at risk. This screening was undertaken by the Queensland Health's Deadly Ears Program and supported by an ophthalmologist. Queensland screened according to CDNA Guidelines for areas of low prevalence or endemicity, which recommend using the WHO grading system to identify possible trachoma cases.

No trichiasis screening was required to be undertaken.

## Data analysis

For the purpose of this report, a community is defined as 'a specific location where people reside and where there is at least one school.' Community coverage is defined as the number of at-risk communities screened for trachoma as a proportion of those that were identified to possibly have trachoma. Individual screening coverage is the proportion of children in the target age group in a region that was actually screened.

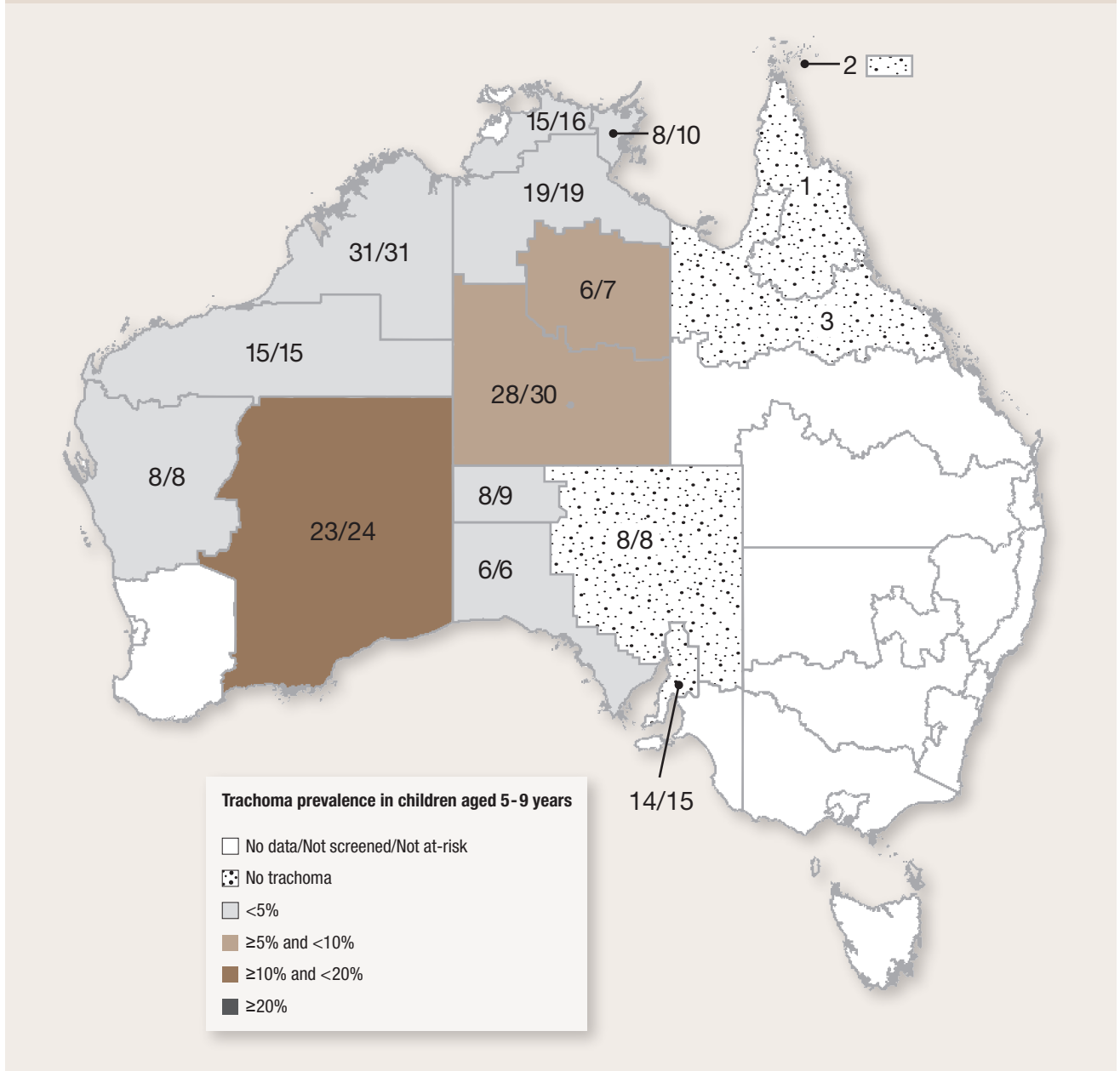
In 2012, population data for trachoma screening coverage were provided by each jurisdiction. For communities where population data were not provided, coverage estimates were based on the 2011 Australian census projected forward.<sup>15</sup> The population for communities in previous years was derived from projected data from the 2006 Australian census using Australian Bureau of Statistics (ABS) standard estimates of population increase (1.6%, 1.8%, 2.1% and 2.6% in the NT, WA, SA and Qld respectively). Population estimates for trichiasis screening coverage were based on the projected 2011 Australian census data. Population estimates based on the 2011 census do not account for population movements within communities, regions and jurisdictions. Prevalence of active trachoma was calculated using the number of children screened as the denominator.

Trachoma data were analysed in the age groups 1-4, 5-9 and 10-14 years. Comparisons over time were limited to the 5-9-year age group, for which screening coverage has been consistently high. Data from 2006 were excluded from assessment of time trends as collection methods in this first year differed from those subsequently adopted.

# Results

## National results 2012

**Figure 1.1** Trachoma prevalence in children aged 5-9 years, number of communities screened and number of at-risk communities in Australia, 2012



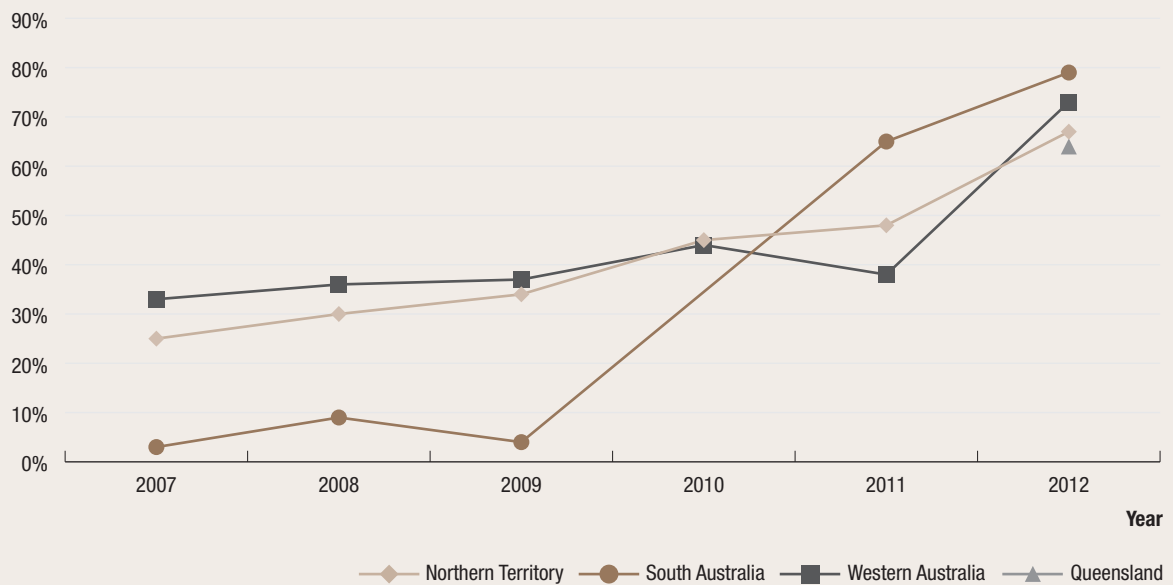


**Figure 1.2** Number of communities screened\* by year and jurisdiction, Australia, 2007 – 2012



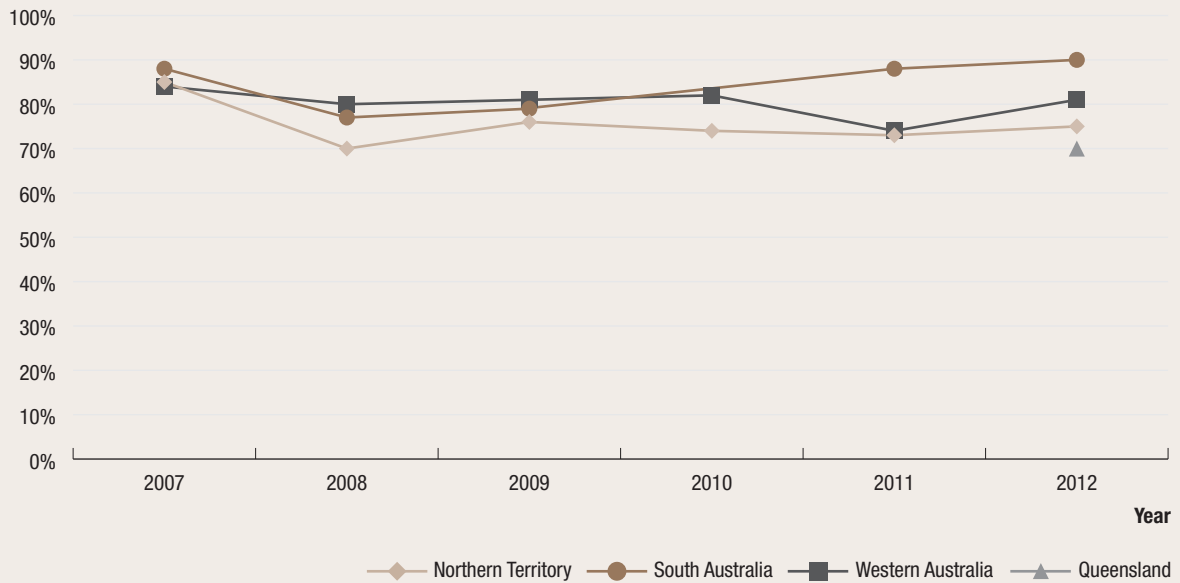
\* Including communities screened but not at risk

**Figure 1.3** Population screening coverage\* of children aged 5-9 years by year and jurisdiction, Australia, 2007 – 2012



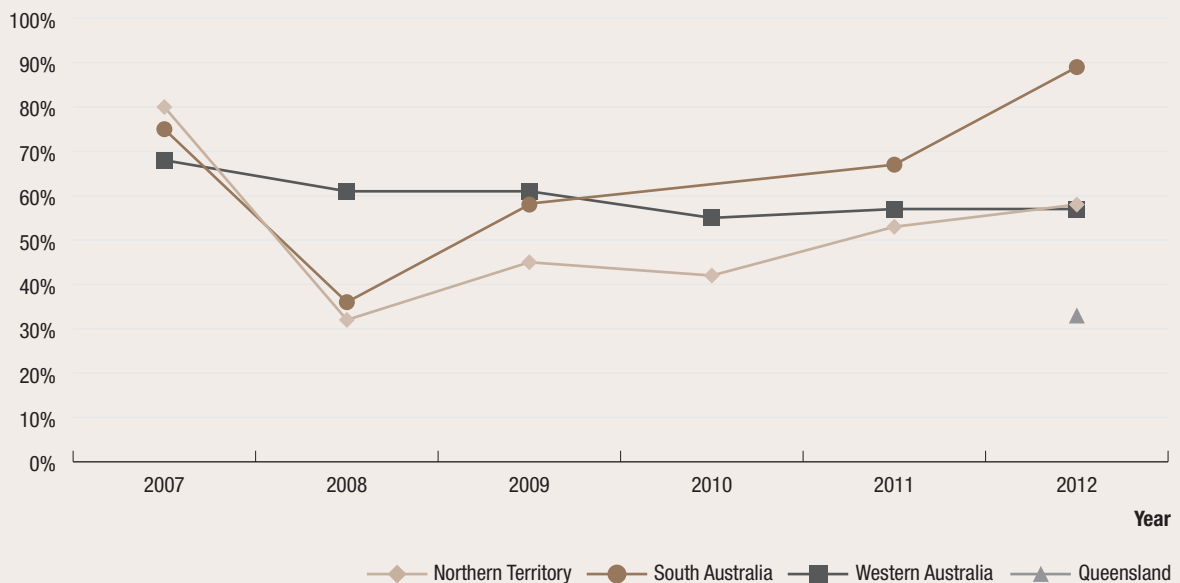
\* Calculated as the number of children screened (in at-risk and not-at-risk communities) in region containing at least one at-risk community divided by the estimated region's population

**Figure 1.4** Proportion of screened children\* aged 5-9 years who had a clean face by year and jurisdiction, Australia, 2007 – 2012



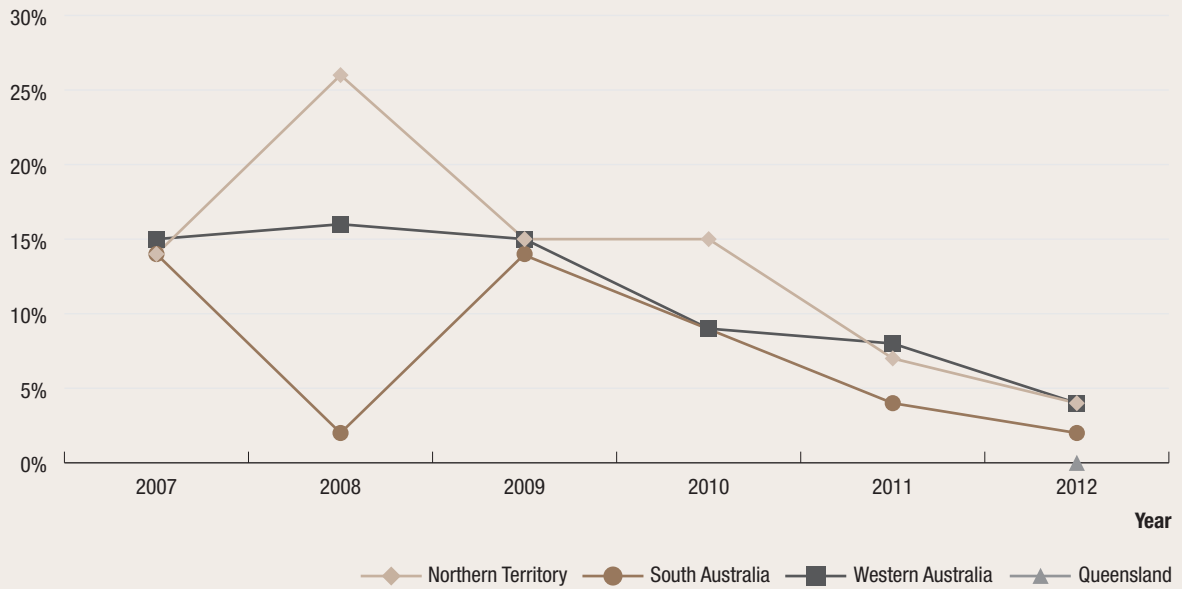
\* Including children in communities screened but not at risk

**Figure 1.5** Proportion of communities screened meeting clean face target\* in children aged 5-9 years by year and jurisdiction, Australia, 2007 – 2012



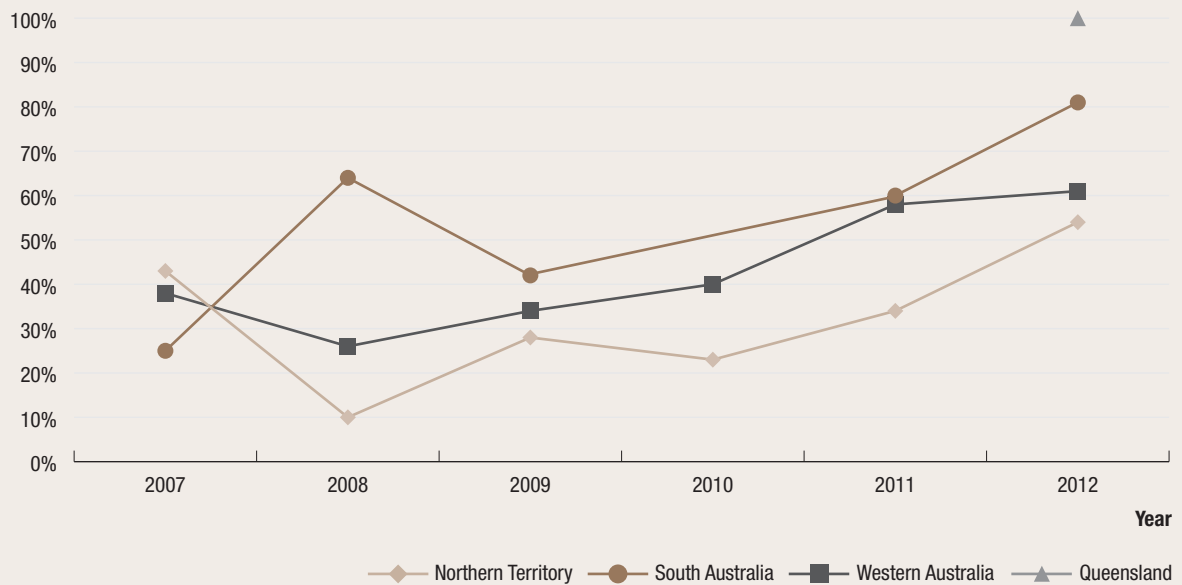
\* Clean face target is at least 80% of children within the community having a clean face at time of screening (Mariotti SP, Pruss A. The SAFE strategy. Preventing trachoma. A guide for environmental sanitation and improved hygiene. WHO/PBD/GET/00.7/Rev1. Geneva: World Health Organization; 2000)

**Figure 1.6** Trachoma prevalence among screened\* children aged 5-9 years by year and jurisdiction, Australia, 2007 – 2012



\* Including children in communities screened but not at risk

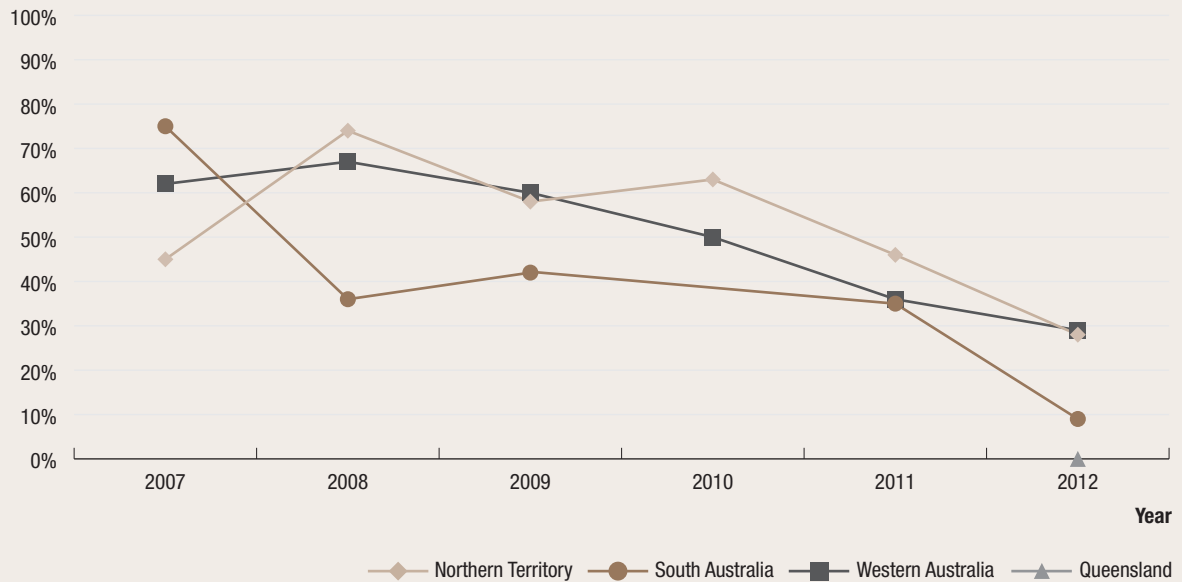
**Figure 1.7** Proportion of screened\* communities in which no trachoma was reported among children aged 5-9 years by year and jurisdiction, Australia, 2007 – 2012



\* Including communities screened but not at risk



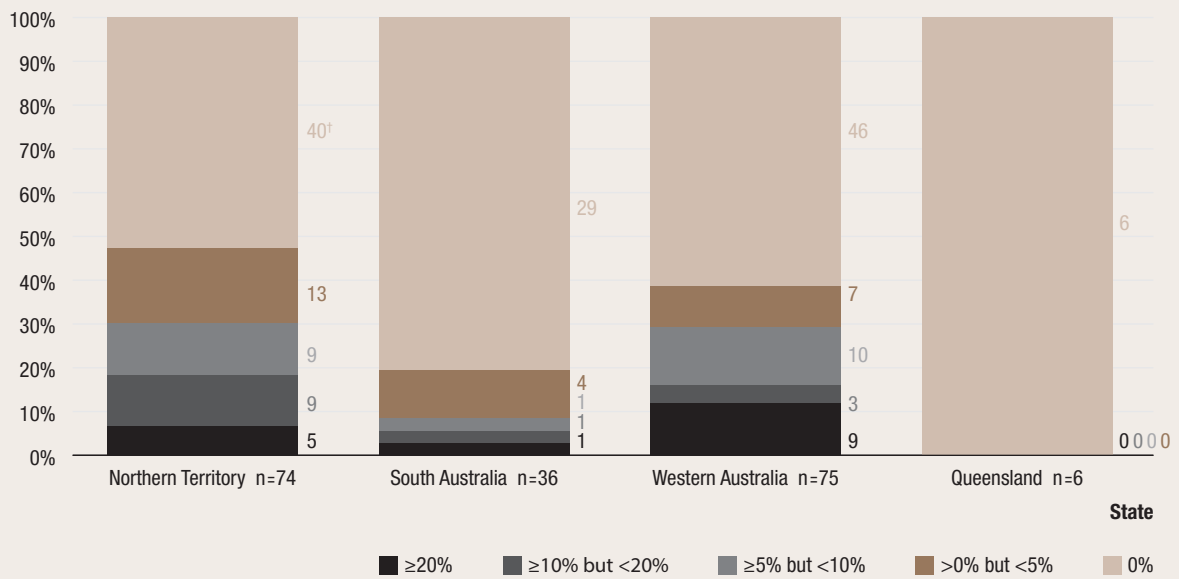
**Figure 1.8** Proportion of screened communities\* with endemic trachoma† among children aged 5-9 years by year and jurisdiction, Australia, 2007 – 2012



\* Including communities screened but not at risk

† Prevalence greater than 5%

**Figure 1.9** Proportion of screened at-risk communities\* according to level of trachoma prevalence in 5-9 year old children in 2012, by jurisdiction, Australia



\* Two communities in Western Australia did not screen children in the 5-9 year age group.

† Number of communities

**Figure 1.10** Trachoma prevalence among 5-9 year old children in screened at-risk communities in 2012 by sex and jurisdiction, Australia

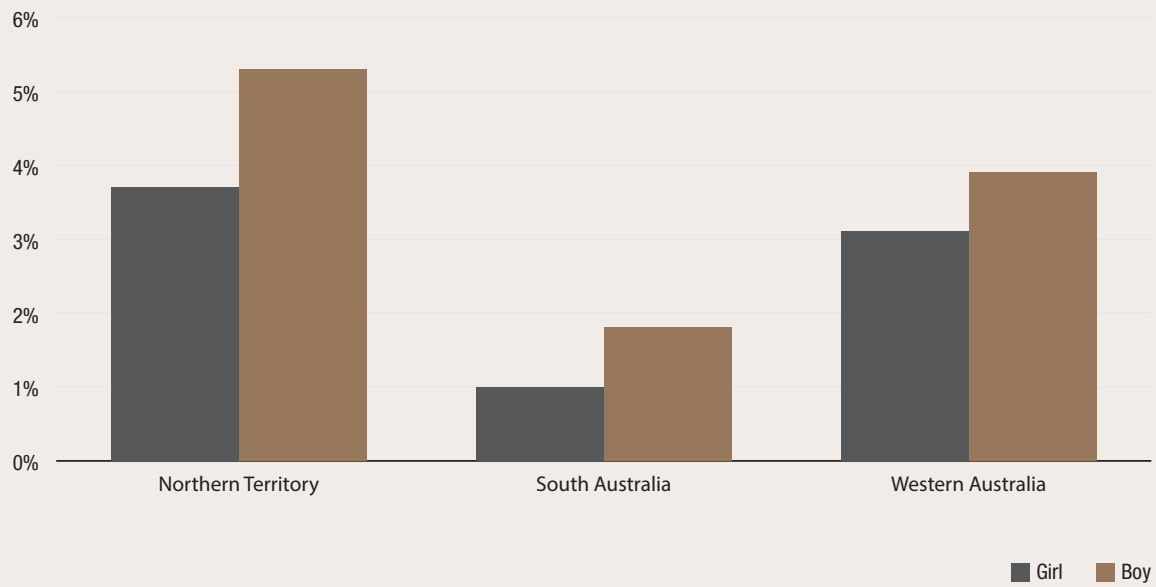


Table 1.1 Trachoma screening coverage, trachoma prevalence and clean face prevalence among at-risk Aboriginal communities in 2012 by jurisdiction, Australia

	Northern Territory				South Australia				Western Australia				Queensland				Total			
<b>Number of communities at risk</b>	<b>82</b>				<b>38</b>				<b>78</b>				<b>6</b>				<b>204</b>			
<b>Number of communities screened</b>	<b>76</b>				<b>36</b>				<b>77</b>				<b>6</b>				<b>195</b>			
<b>Age group (years)</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>1-14</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>1-14</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>1-14</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>1-14</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>1-14</b>
<b>ABS estimated number of Aboriginal children at risk</b>	3,492	3,981	3,359	10,832	942	961	855	2,758	1,965	2,097	1,896	5,958	380	414	286	1,080	6,779	7,453	6,396	20,628
Jurisdiction Estimated number of Aboriginal children at risk	3,091	3,893	3,733	10,717		1,176			524	2,306	1,387	4,217	224	385	96	705	3,839	7,760	5,216	15,639
Children examined for clean face	446	2,640	1,895	4,981	14	930	323	1,267	254	1,709	811	2,774	1	194	52	247	715	5,473	3,081	9,269
Children with clean face	293	1,972	1,719	3,984	9	843	320	1,172	179	1,379	713	2,271	1	136	50	187	482	4,330	2,802	7,614
Clean face prevalence	66%	75%	91%	80%	75%	90%	99%	93%	70%	81%	88%	82%	100%	70%	96%	76%	67%	79%	91%	82%
Children examined for trachoma	362	2,610	1,908	4,880	14	933	322	1,269	244	1,689	793	2,726	1	194	52	247	621	5,426	3,075	9,122
Trachoma screening coverage	12%	67%	51%	46%		79%			47%	73%	57%	65%	0.4%	50%	54%	35%	16%	70%	59%	58%
Children with active trachoma	24	117	35	176	0	13	1	14	6	71	34	111	0	0	0	0	30	201	70	301
<b>Active trachoma prevalence</b>	<b>7%</b>	<b>4%</b>	<b>2%</b>	<b>4%</b>	<b>0%</b>	<b>2%</b>	<b>0.3%</b>	<b>1%</b>	<b>2%</b>	<b>4%</b>	<b>4%</b>	<b>4%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>5%</b>	<b>4%</b>	<b>2%</b>	<b>3%</b>
<b>Trachoma prevalence 1-9 years (weighted by population)*</b>	<b>6%</b>				<b>1%</b>				<b>3%</b>				<b>0%</b>				<b>4%</b>			

\* Calculated as the proportion of children with active trachoma in age groups 1-4 and 5-9 years, weighted by the estimated population sizes of each age group. This calculation accounts for uneven coverage with respect to age groups

Table 1.2 Trachoma treatment coverage among at-risk Aboriginal communities in 2012 by jurisdiction, Australia

	Northern Territory					South Australia					Western Australia					Queensland					Total				
<b>Number of communities at risk</b>	<b>82</b>					<b>38</b>					<b>78</b>					<b>6</b>					<b>204</b>				
<b>Number of communities screened</b>	<b>76</b>					<b>36</b>					<b>77</b>					<b>6</b>					<b>195</b>				
<b>Number of communities requiring treatment</b>	<b>43</b>					<b>9</b>					<b>35</b>					<b>0</b>					<b>87</b>				
<b>Number of communities treated according to CDNA guidelines*</b>	<b>41</b>					<b>8</b>					<b>26</b>										<b>75</b>				
<b>Age group (years)</b>	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15+</b>	<b>All</b>	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15+</b>	<b>All</b>	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15+</b>	<b>All</b>	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15+</b>	<b>All</b>	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15+</b>	<b>All</b>
Active cases requiring treatment	24	117	35		176	0	13	1		14	6	71	34		111						30	201	70		301
Active cases who received treatment	23	114	33		170		13	1		14	6	68	29		103						29	195	63		287
% Active cases received treatment	96%	97%	94%		97%		100%	100%		100%	100%	96%	85%		93%						97%	97%	90%		95%
Estimated contacts requiring treatment	572	619	581	2,532	4,304	9	21	10	63	103	91	135	112	301	639						672	775	703	2,896	5,046
Number of contacts who received treatment	450	557	474	1,911	3,392	9	20	10	61	100	75	126	103	290	594						534	703	587	2,262	4,086
% estimated contacts received treatment	79%	90%	82%	75%	79%	100%	95%	100%	97%	97%	82%	93%	92%	96%	93%						79%	91%	83%	78%	81%
<b>Estimated overall treatment coverage</b>	<b>79%</b>	<b>91%</b>	<b>82%</b>	<b>75%</b>	<b>80%</b>	<b>100%</b>	<b>97%</b>	<b>100%</b>	<b>97%</b>	<b>97%</b>	<b>84%</b>	<b>94%</b>	<b>90%</b>	<b>96%</b>	<b>93%</b>						<b>80%</b>	<b>92%</b>	<b>84%</b>	<b>78%</b>	<b>82%</b>

\* Communicable Diseases Network Australia. *Guidelines for the public health management of trachoma in Australia*. March 2006



**Table 1.3 Trichiasis screening coverage, prevalence and treatment among Aboriginal adults aged over 40 years in 2012, Australia**

	Northern Territory	South Australia	Western Australia	Total
<b>Number of communities at risk</b>	82	38	78	198
<b>Number of communities screened for trichiasis</b>	42 (51%)*	14 (37%)	52 (69%)	108 (52%)
<b>Adult population of at-risk communities</b>	7,030	2,246	4,130	13,406
Adults examined (% of estimated population at risk)	1,278 (18%)	1,061 (47%)	2,129 (52%)	4,468 (31%)
With trichiasis (% of adults examined)	61 (5%)	11 (1%)	22 (1%)	94 (2%)
Offered ophthalmic consultation	49	11	22	82
Surgery in past 12 months	5	2	9	16

\* Twenty-eight further communities were screened in the NT, however findings were not made available to the NTSRU

## Northern Territory results 2012

### Screening coverage

- At-risk community coverage of trachoma screening over the five regions with endemic trachoma in the NT was 93%, with 76 out of 82 at-risk communities screened (Table 2.1).
- Between 2011 and 2012 an increase in the number of communities screened is observed in the Katherine region and a slight decrease in the Barkly region. Screening coverage has plateaued in all other regions over the last 3 years (Figure 2.2).
- The proportion of children aged 5-9 years screened in the 76 at-risk communities was 67% with screening coverage ranging from 47% to 86% (Table 2.1, Figure 2.3).
- The screening coverage of children aged 5-9 years in at-risk communities has increased in all regions of the NT since 2008 (Figure 2.3).
- Screening was undertaken in the Town Camps of Alice Springs Urban region; however that data was not made available to the NTSRU.

### Clean face prevalence

- The overall prevalence of clean faces among 5-9-year-old children screened in the NT was 75%. The highest levels were found in the Darwin Rural region (Table 2.1, Figure 2.4).

### Trachoma prevalence

- The prevalence of trachoma in children aged 5-9 years screened in the NT was 4%. Prevalence ranged from 1% in East Arnhem and Darwin Rural regions to 9% in Alice Springs Remote region (Table 2.1, Figure 2.5).
- No active trachoma was detected in 53% (40/76) of communities screened (Figure 2.6), an increase in the proportion of communities screened with no active trachoma from 34% in 2011.
- A decreasing trend continues in the percentage of communities with endemic trachoma (prevalence greater than 5%), from 63% in 2010, to 46% in 2011 to 28% in 2012 (Figure 1.8).
- A decreasing trend since 2008 in trachoma prevalence among 5-9-year old children is observed in all regions of the NT (Figure 2.5).
- The greatest decrease in trachoma prevalence among 5-9-year children between 2011 and 2012 was observed in Alice Springs Remote region with a prevalence of 9% in 2012 compared with 14% in 2011 (Table 2.1, Figure 2.5).
- The highest prevalence of trachoma among children aged 5-9 years was 37%, recorded within a community in the Alice Springs Remote region where more than 50 children aged 5-9 years were screened.
- Verbal reports regarding Camps of Alice Springs Urban region were that trachoma prevalence was less than 5%.

### Treatment coverage

- Treatment for trachoma was required for 43 of the 76 at-risk communities screened (Table 2.2).
- Of the cases of active trachoma detected at screening, 97% received treatment (Table 2.2).
- Azithromycin was used to treat 79% of the contact population (Table 2.2).
- Of the 43 communities requiring treatment, 41 communities were treated according to CDNA Guidelines.
- Six communities received a second community-wide treatment of azithromycin, with overall treatment coverage of 70% in these six communities for the second treatment (Table 2.3).

## Trichiasis

- Trichiasis screening data was provided for 51% (42/82) of at-risk communities, with 18% (1,278/7,030) of the at-risk population screened (Table 2.4).
- It is understood that screening was undertaken in a further 28 communities, however data was not made available to the NTRSU
- Trichiasis was detected in 5% of the adults screened (Table 2.4).
- Five cases of trichiasis were reported to have received surgery (Table 2.4).

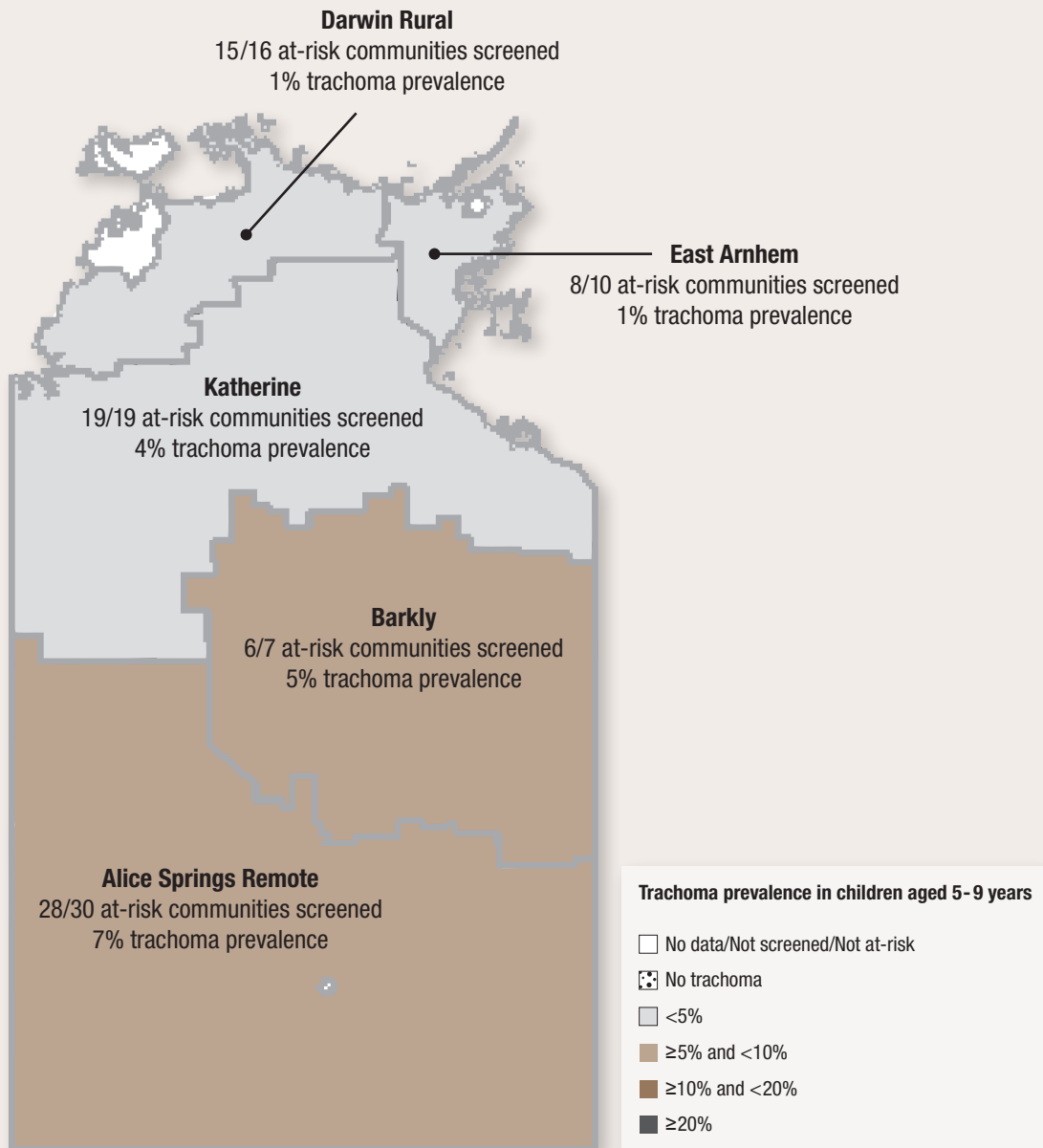
## Health promotion

- Health promotion activities were reported in 23% (19/82) communities at risk, with an overall 45 health promotion initiatives reported (Table 2.5).
- Of the health promotion initiatives reported, 38% (17/45) activities were directed at children; 36% (16/45) used a group presentation method and 40% (18/45) reported delivering activities 2-4 times throughout the year (Table 2.5).

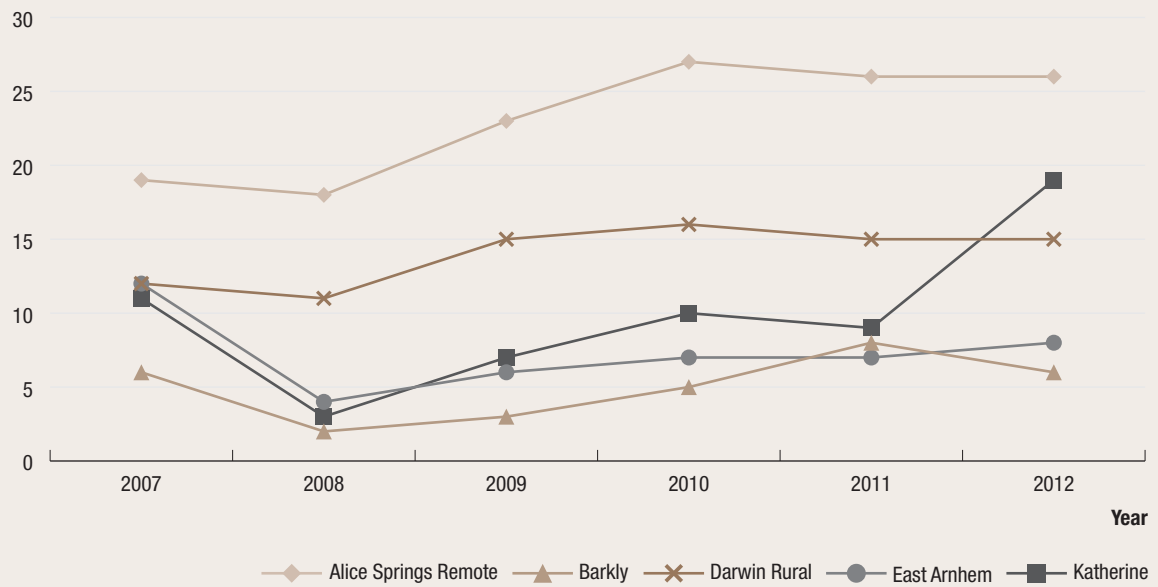


Figure 2.1

Trachoma prevalence in children aged 5-9 years, number of communities screened and number of at-risk communities in the Northern Territory in 2012

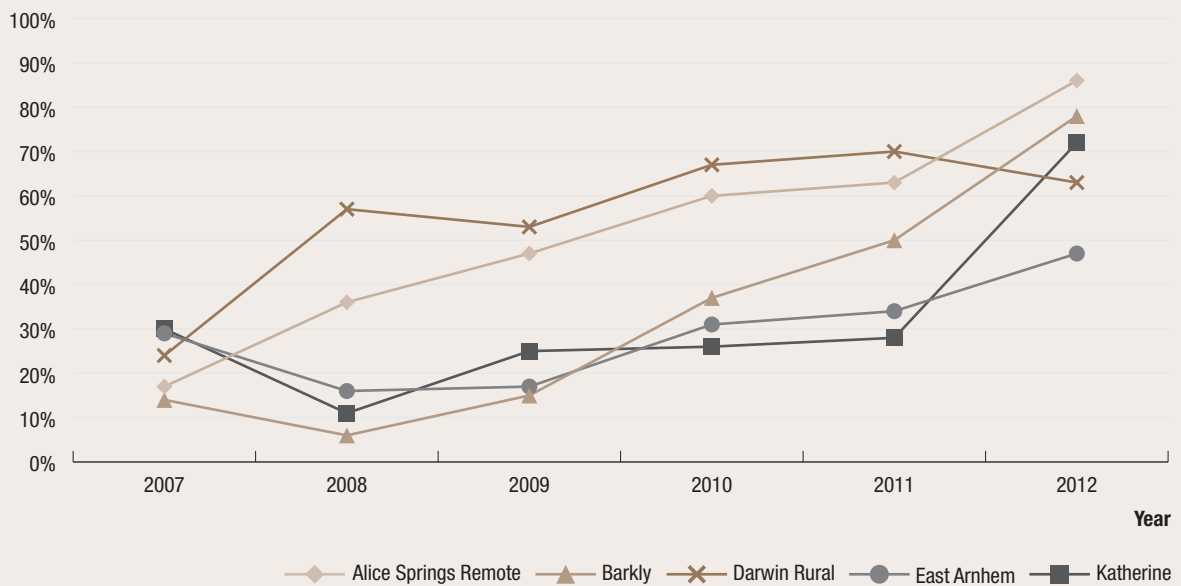


**Figure 2.2** Number of communities screened\* by year and region in the Northern Territory, 2007 – 2012



\* Including communities screened but not at risk

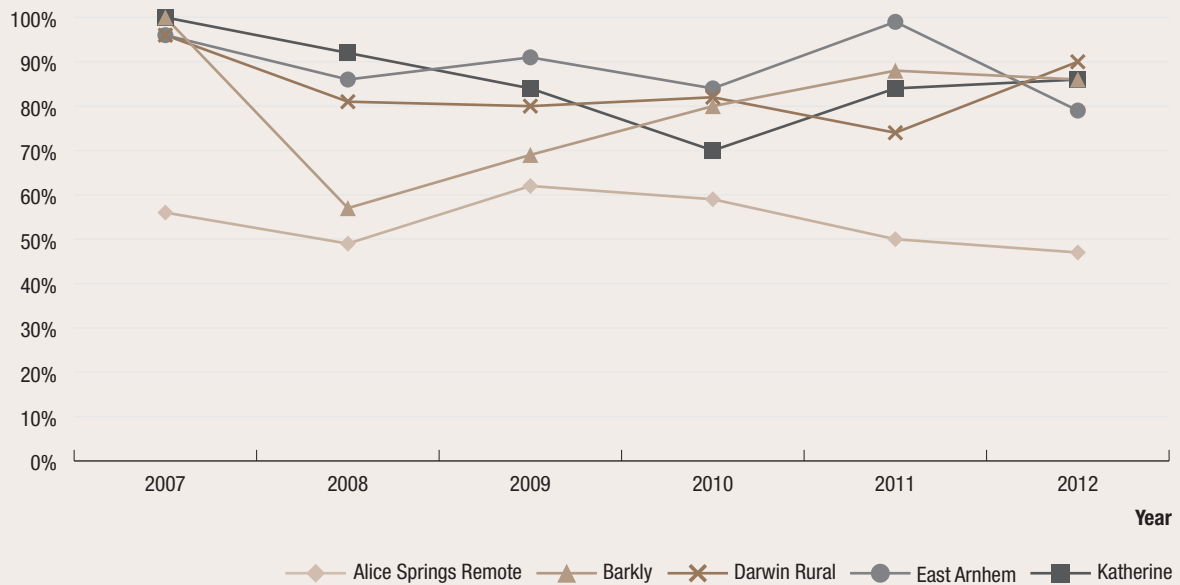
**Figure 2.3** Population screening coverage\* of children aged 5-9 years in regions containing at least one at-risk community by year and region in the Northern Territory, 2007 – 2012



\* Including children in communities screened but not at risk

Figure 2.4

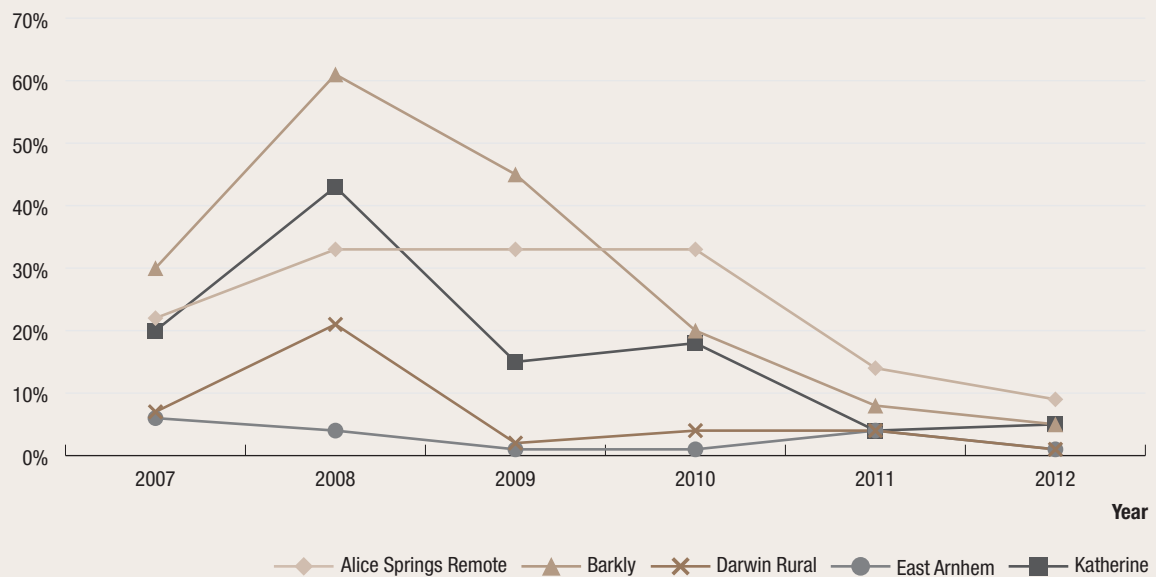
Proportion of screened\* children aged 5-9 years who had a clean face by year and region in the Northern Territory, 2007 – 2012



\* Including children in communities screened but not at risk

Figure 2.5

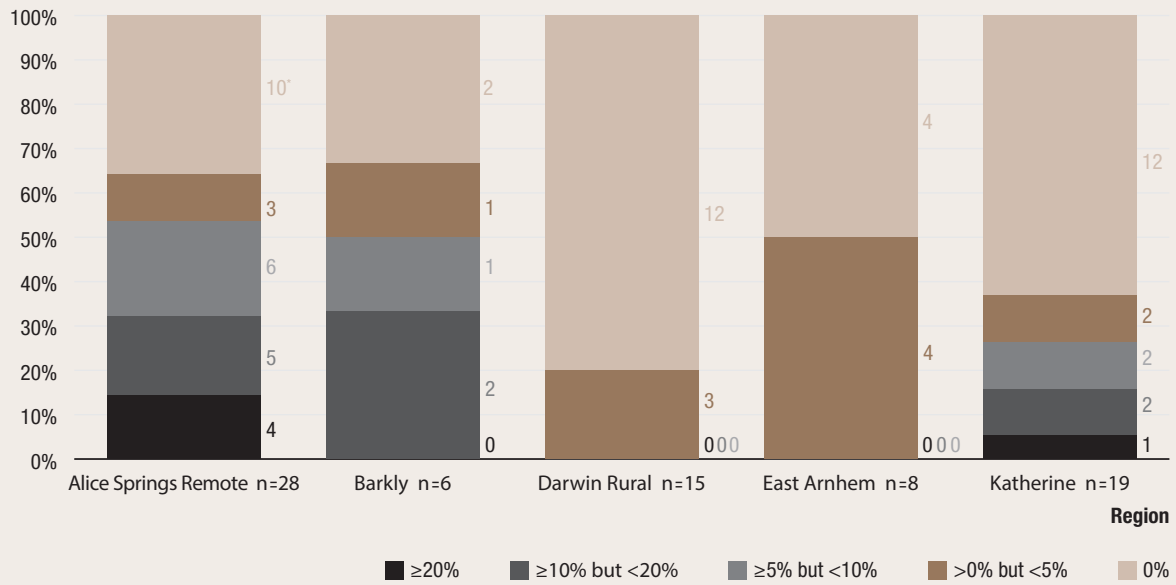
Trachoma prevalence among screened\* children aged 5-9 years by year and region in the Northern Territory, 2007 – 2012



\* Including children in communities screened but not at risk



**Figure 2.6** Trachoma prevalence among children 5-9 years in screened at-risk communities in 2012 by Northern Territory region



\* Number of communities

**Figure 2.7** Trachoma prevalence among 5-9 year old children in screened at-risk communities in 2012 by sex and Northern Territory region

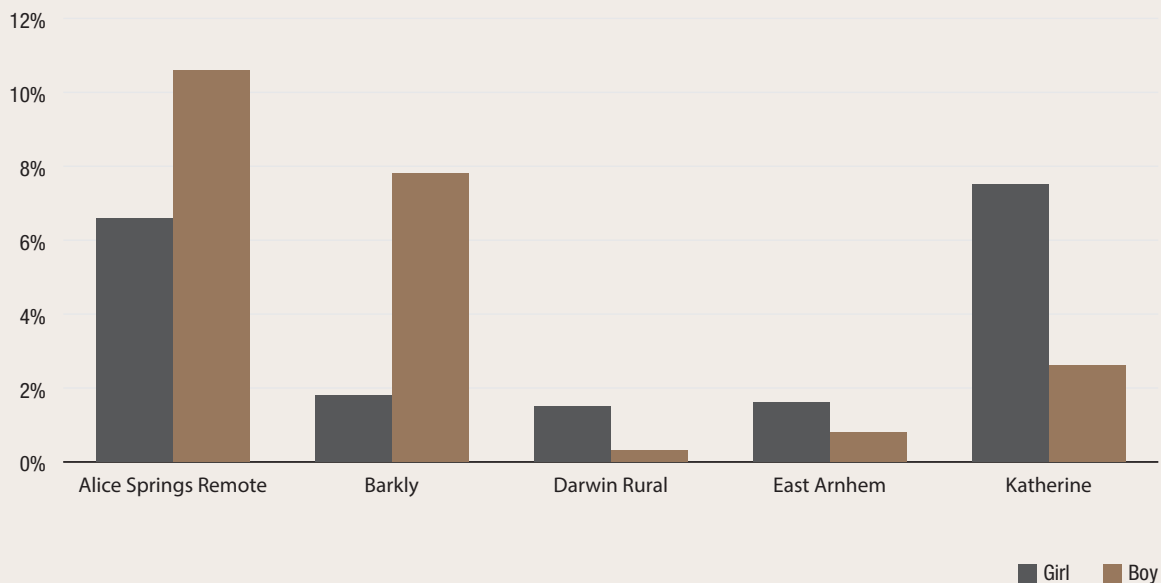


Table 2.1 Trachoma screening coverage, trachoma prevalence and clean face prevalence in the Northern Territory in 2012 by region

	Alice Springs Remote				Barkly				Darwin Rural				East Arnhem				Katherine				Total							
Number of communities at risk	30				7				16				10				19				82							
Number of communities screened	28				6				15				8				19				76							
Age group (years)	1-4	5-9	10-14	1-14	1-4	5-9	10-14	1-14	1-4	5-9	10-14	1-14	1-4	5-9	10-14	1-14	1-4	5-9	10-14	1-14	1-4	5-9	10-14	1-14	1-4	5-9	10-14	1-14
ABS estimated number of Aboriginal children at risk	823	843	728	2,394	158	226	163	547	1,049	1,244	976	3,269	776	980	859	2,615	686	688	633	2007	3,492	3,981	3,359	10,832				
Jurisdiction Estimated number of Aboriginal children at risk	573	879	735	2,187	48	186	130	364	861	1,143	1,064	3,068	903	939	1,010	2,852	706	746	794	2,246	3,091	3,893	3,733	10,717				
Children examined for clean face	143	773	499	1,415	27	152	117	296	131	711	555	1,397	14	452	337	803	131	552	387	1,070	446	2,640	1,895	4,981				
Children with clean face	56	364	401	821	19	131	115	265	100	641	524	1,265	9	359	311	679	109	477	368	954	293	1,972	1,719	3,984				
Clean face prevalence	39%	47%	80%	58%	70%	86%	98%	90%	76%	90%	94%	91%	64%	79%	92%	85%	83%	86%	95%	89%	66%	75%	91%	80%				
Children examined for trachoma	81	757	499	1,337	15	146	116	277	138	723	574	1,435	9	445	335	789	119	539	384	1,042	362	2,610	1,908	4,880				
Trachoma screening coverage	14%	86%	68%	61%	31%	78%	89%	76%	16%	63%	54%	47%	1%	47%	33%	28%	17%	72%	48%	46%	12%	67%	51%	46%				
Children with active trachoma	7	69	18	94	2	8	5	15	5	7	3	15	0	6	1	7	10	27	8	45	24	117	35	176				
Active trachoma prevalence	9%	9%	4%	7%	13%	5%	4%	5%	4%	1%	1%	1%	0%	1%	0%	1%	8%	5%	2%	4%	7%	4%	2%	4%				
Trachoma prevalence 1-9 years (weighted by population)*	9%				9%				2%				1%				7%				6%							

\* Calculated as the proportions of children with active trachoma in age groups 1-4 and 5-9 years, weighted by the estimated population sizes of each age group. This calculation accounts for uneven coverage with respect to age groups

Table 2.2 Trachoma treatment coverage in the Northern Territory in 2012

	Alice Springs Remote					Barkly					Darwin Rural					East Arnhem					Katherine					Total				
Number of communities at risk	30					7					16					10					19					82				
Number of communities screened	28					6					15					8					19					76				
Number of communities requiring treatment	18					5					7					5					8					43				
Number of communities treated according to CDNA guidelines*	17					5					6					5					8					41				
Age group (years)	0-4	5-9	10-14	15+	All	0-4	5-9	10-14	15+	All	0-4	5-9	10-14	15+	All	0-4	5-9	10-14	15+	All	0-4	5-9	10-14	15+	All	0-4	5-9	10-14	15+	All
Active cases requiring treatment	7	69	18		94	2	8	5		15	5	7	3		15	0	6	1		7	10	27	8		45	24	117	35		176
Active cases received treatment	7	67	17		91	2	8	5		15	4	6	2		12	0	6	1		7	10	27	8		45	23	114	33		170
% Active cases received treatment	100%	97%	94%		97%	100%	100%	100%		100%	80%	86%	67%		80%	100%	100%	100%		100%	100%	100%	100%		100%	96%	97%	94%		97%
Estimated contacts requiring treatment	378	432	390	1,715	2,915	19	29	13	69	130	25	19	14	66	124	18	15	22	92	147	132	124	142	590	988	572	619	581	2,532	4,304
Total number of contacts who received treatment	282	388	306	1,149	2,125	19	29	13	68	129	24	16	10	59	109	18	15	22	92	147	107	109	123	543	882	450	557	474	1,911	3,392
% estimated contacts received treatment	75%	90%	78%	67%	73%	100%	100%	100%	99%	99%	96%	84%	71%	89%	88%	100%	100%	100%	100%	100%	81%	88%	87%	92%	89%	79%	90%	82%	75%	79%
Estimated overall treatment coverage	75%	91%	79%	67%	74%	100%	100%	100%	99%	99%	93%	85%	71%	89%	87%	100%	100%	100%	100%	100%	82%	90%	87%	92%	90%	79%	91%	82%	75%	80%

\* Communicable Diseases Network Australia. Guidelines for the public health management of trachoma in Australia. March 2006.

**Table 2.3 Treatment coverage for second treatment of trachoma in hyperendemic communities in the Northern Territory in 2012**

	Alice Springs Remote					Darwin Remote					Total				
Number of communities that received second treatment in a calendar year	4					2					6				
Age group (years)	0-4	5-9	10-14	15+	All	0-4	5-9	10-14	15+	All	0-4	5-9	10-14	15+	All
Estimated Number of contacts requiring treatment	90	105	83	369	647	360	592	548	3,353	4,853	450	697	631	3,722	5,500
Number of cases and contacts who received a second treatment	79	105	76	296	556	371	406	323	2,181	3,281	450	511	399	2,477	3,837
Estimated overall second treatment coverage	88%	100%	92%	80%	86%	103%	69%	59%	65%	68%	100%	73%	63%	67%	70%

**Table 2.4 Trichiasis screening coverage, prevalence and treatment among Aboriginal adults aged over 40 years in 2012 in the Northern Territory**

	Alice Springs Remote	Barkly	Darwin Rural	East Arnhem	Katherine	Total
Number of communities at risk	30	7	16	10	19	82
Number of communities screened for trichiasis	11 (37%)	0 (0%)	16 (100%)	7 (70%)	8 (42%)	42 (51%)*
Adult population of at-risk communities	1,773	274	2,090	1,810	1,083	7,030
Adults examined (% of estimated population at risk)	175 (10%)	0 (0%)	879 (42%)	41 (2%)	183 (17%)	1,278 (18%)
With trichiasis (% of adults examined)	26 (15%)		32 (4%)	0	3 (2%)	61 (5%)
Offered ophthalmic consultation	17	0	32	0	0	49
Surgery in past 12 months	5	0	0	0	0	5

\* Twenty-eight further communities were screened across all regions, however findings were not made available to the NTSRU

**Table 2.5 Health promotion activities by region in the Northern Territory in 2012**

	Alice Springs Remote		Barkly		Darwin Rural		East Arnhem		Katherine		Total	
<b>Number of communities at-risk</b>	30		7		16		10		19		82	
<b>Number of communities who reported health promotion activities</b>	6		1		3		0		9		19	
<b>Methods of Health Promotion</b>												
One-on-one discussion	2	12%			3	43%			5	29%	10	22%
Presentation to group	5	29%			3	43%			8	47%	16	36%
Interactive group session	5	29%	2	100%	1	14%			4	24%	12	27%
Social Marketing	3	18%									3	7%
Print material	2	12%									2	4%
Mass Media	1	6%									1	2%
Sporting/community events	1	6%									1	2%
Other											0	0%
<b>Total number of programs</b>	<b>19</b>		<b>2</b>		<b>7</b>		<b>0</b>		<b>17</b>		<b>45</b>	
<b>Target audience</b>												
Health professionals/staff	2	12%			1	14%			1	6%	4	9%
Children	6	35%	1	50%	3	43%			7	41%	17	38%
Youth	2	12%							3	18%	5	11%
Teachers/childcare/preschool staff	3	18%	1	50%	1	14%			3	18%	8	18%
Caregivers/parents	1	6%			1	14%			3	18%	5	11%
Community members	4	24%			1	14%					5	11%
Community educators/health promoters	1	6%			0	0%					1	2%
Interagency members	0	0%			0	0%						
<b>Frequency of health promotion activities</b>												
Once	3	18%									3	7%
Occasional *	9	53%	2	100%	7	100%					18	40%
Regular†	4	24%									4	9%
Ongoing/routine	3	18%									3	7%

\* 2 -4 times per year

† 5-12 times per year



# Results

## South Australia results 2012

- The 2011 and 2012 regional data reported is different to that reported in previous years. Communities screened in previous years have been reclassified in this report for consistency with 2012 reporting.
- Data collected to February 2013 in SA were included in this year's report.
- Some trend figures do not include data collected in 2010 due to differences in age ranges reported in 2010.

### Screening coverage

- An increase in the number of at-risk communities screened was observed across all regions in SA in 2012 (Figure 3.2).
- At-risk community coverage of trachoma screening over the four at-risk regions was 95% with 36 out of 38 at-risk communities screened (Table 3.1).
- The proportion of children screened aged 5-9 years in at-risk regions was 79% with screening coverage ranging from 56% to 92% (Table 3.1, Table 3.3).
- Compared to 2011, the screening rates of children aged 5-9 years in at-risk communities decreased in the Far North region, and increased in all other regions in SA in 2012 (Figure 3.3).

### Clean face prevalence

- The overall prevalence of clean faces among screened children aged 5-9 in SA was 90%, ranging from 77% to 100% (Table 3.1, Figure 3.4).

### Trachoma prevalence

- The overall prevalence of trachoma in children screened aged 5-9 years in SA was 2% (Table 3.1).
- No active trachoma was detected in 81% (29/36) of at-risk communities screened in the 5-9 year age group (Figure 3.6).
- A decreasing trend in the number of communities in SA with trachoma prevalence greater than 5% has been observed since 2008 (Figure 1.8).
- No trachoma was detected in the Far North, and York and Mid North regions in the 5-9 year age group (Figure 3.6); however one case of trachoma was detected in the 10-14 year age group in the York and Mid North region (Table 3.1).
- Comparing 2011 to 2012, lower trachoma prevalence among 5-9-year-old children is observed in both Anangu Pitjantjatjara Yankunytjatjara (APY) Lands, and Eyre and Western regions (Figure 3.5).
- The highest prevalence of trachoma among children aged 5-9 years was 20% within a community in the APY Lands where less than 10 children were screened.

## Treatment coverage

- Treatment was required for 9 of the 36 communities screened (Table 3.1, Table 3.2).
- Of the active cases requiring treatment for trachoma, 100% received treatment (Table 3.2).
- Azithromycin was used to treat the estimated 97% of the population requiring treatment (Table 3.2).

## Trichiasis

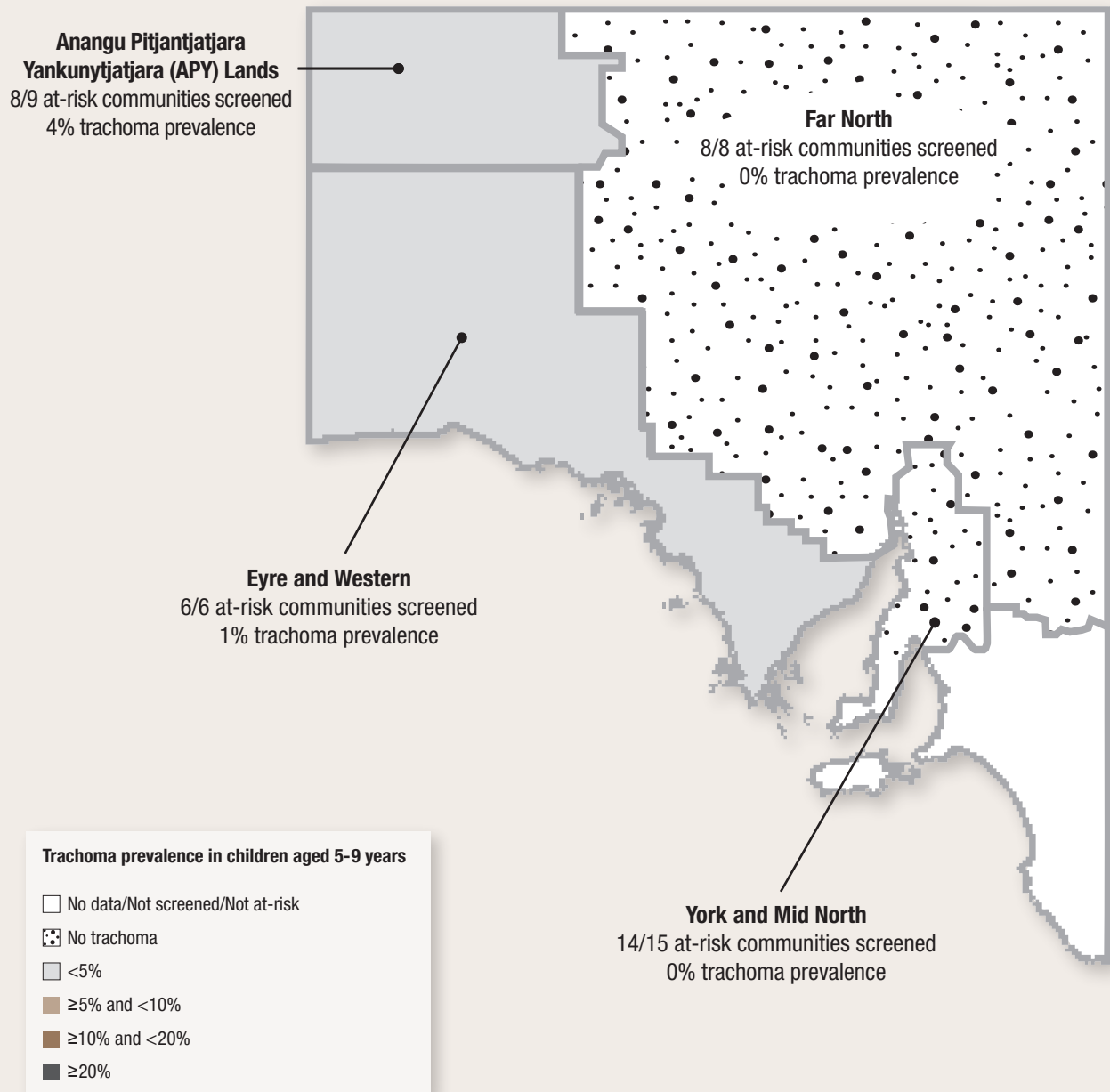
- Trichiasis screening was undertaken in all at-risk regions in SA in 2012, with 14 at-risk communities screened and 47% (1,061/2,246) of adults in these communities screened (Table 3.3).
- Trichiasis was detected in 1% (11/1,061) of adults screened (Table 3.3).

## Health promotion

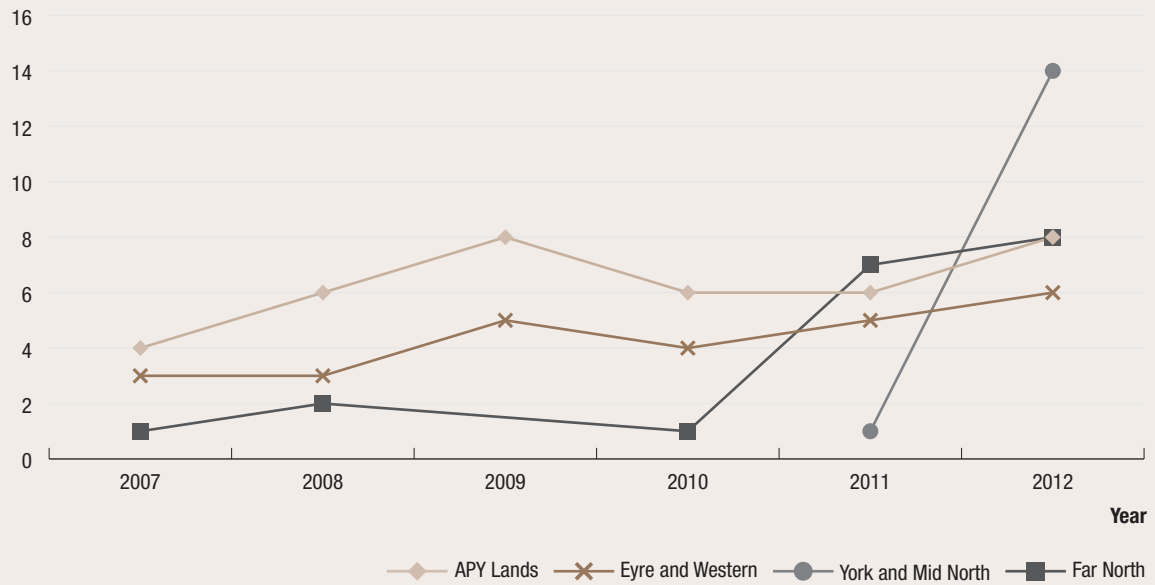
- Health promotion activities were reported in 92% (35/38) of at-risk communities, with an overall 112 health promotion initiatives reported.
- Of the health promotion programs reported, 44% (49/112) of activities were directed at children and 44% (49/112) used a one-on-one discussion method.
- Of the health promotion programs reported, 48% (54/112) of programs were delivered once only, 48% (54/112) of programs were delivered 2-4 times throughout the year, and 4% (4/112) reported that programs were delivered 5-12 times throughout 2012 (Table 3.4).

Figure 3.1

Trachoma prevalence in children aged 5-9 years, number of communities screened and number of communities at-risk in 2012 in South Australia

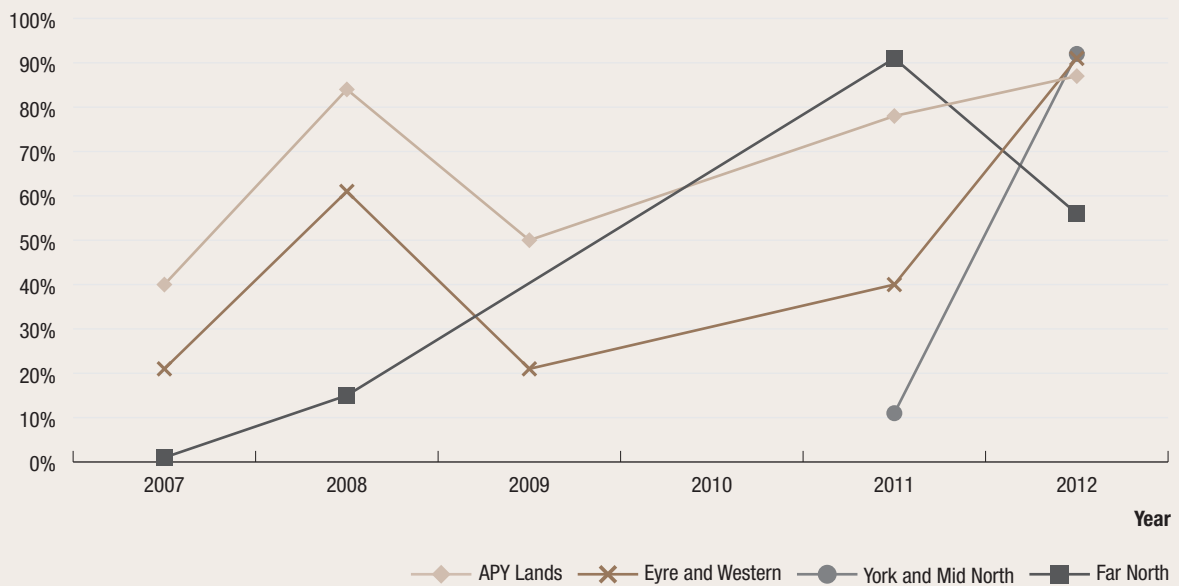


**Figure 3.2** Number of communities screened\* by year and region in South Australia, 2007 – 2012



\* Including communities screened but not at risk

**Figure 3.3** Population screening coverage of children aged 5-9 years over all regions containing at least one at-risk community by year and region in South Australia, 2007 – 2012





**Figure 3.4** Proportion of screened\* children aged 5-9 years who had a clean face by year and region in South Australia, 2007 – 2012



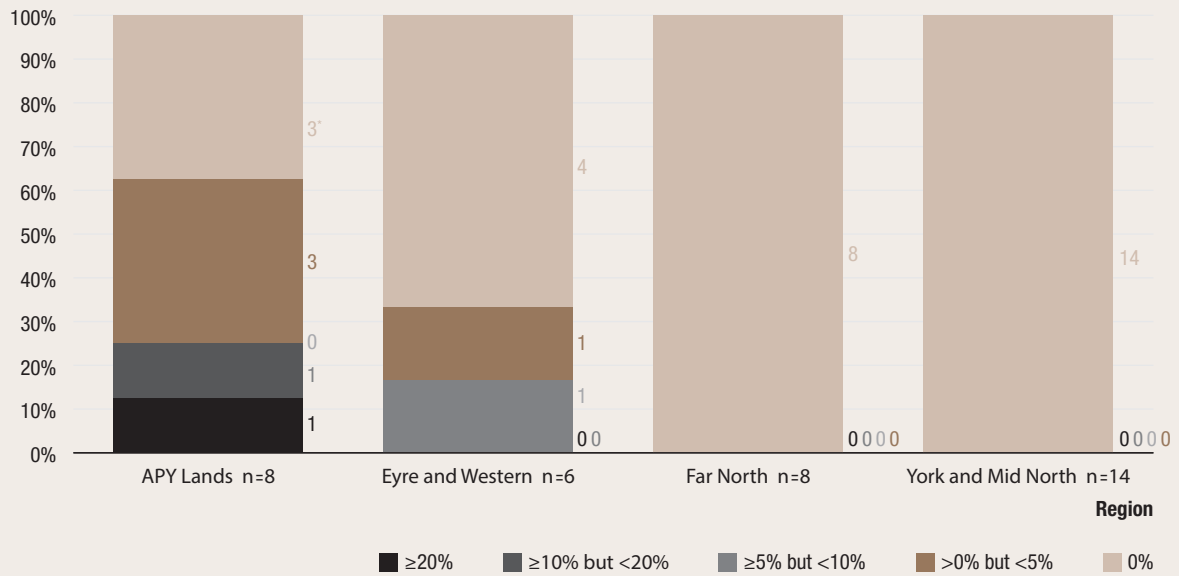
\* Including children in communities screened but not at risk

**Figure 3.5** Trachoma prevalence among screened\* children aged 5-9 years by year and region in South Australia, 2007 – 2012



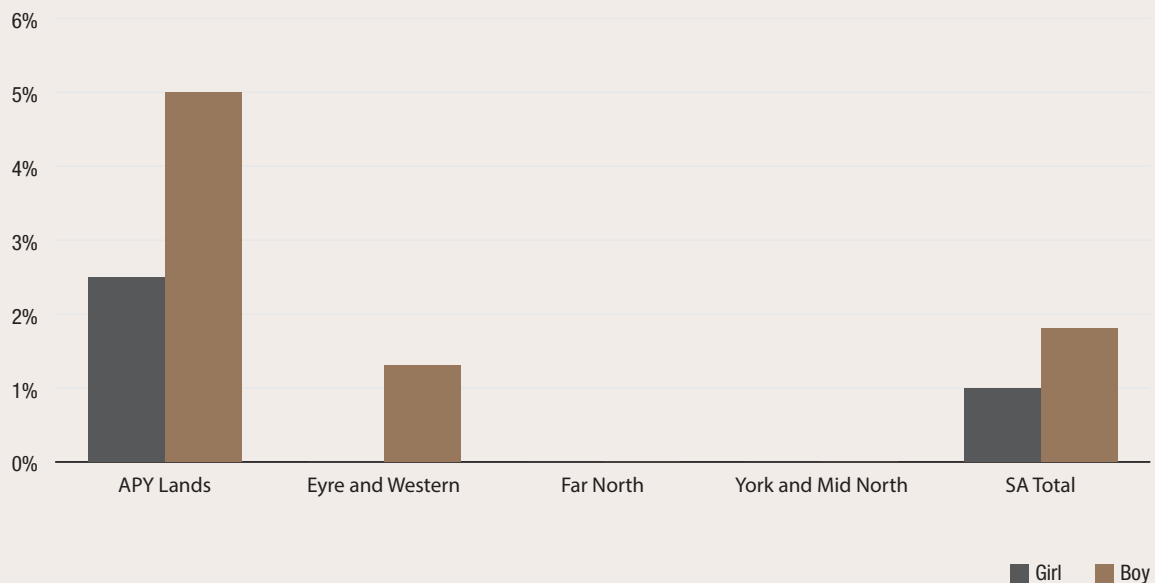
\* Including children in communities screened but not at risk

**Figure 3.6** Trachoma prevalence among children aged 5-9 years in screened at-risk communities in 2012 by region in South Australia



\* Number of communities

**Figure 3.7** Trachoma prevalence of 5-9 year old children in screened at-risk communities in 2012 by sex and region in South Australia



**Table 3.1 Trachoma screening coverage, trachoma prevalence and clean face prevalence in South Australia in 2012 by region**

	APY Lands				Eyre/Western				Far North				York and Mid North				Total			
<b>Number of communities at risk</b>	<b>9</b>				<b>6</b>				<b>8</b>				<b>15</b>				<b>38</b>			
<b>Number of communities screened</b>	<b>8</b>				<b>6</b>				<b>8</b>				<b>14</b>				<b>36</b>			
<b>Age group (years)</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>1-14</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>1-14</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>1-14</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>1-14</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>1-14</b>
<b>ABS estimated number of Aboriginal children at risk</b>	190	228	173	591	313	317	289	919	208	202	168	578	231	214	225	670	942	961	855	2,758
Jurisdiction Estimated number of Aboriginal children at risk	279				380				359				158				1,176			
Children examined for clean face	0	242	0	242	6	344	67	417	8	199	161	368	0	145	95	240	14	930	323	1,267
Children with clean face	186		186		3	313	64	380	6	199	161	366	0	145	95	240	9	843	320	1,172
Clean face prevalence	77%		77%		50%	91%	96%	91%	75%	100%	100%	99%	100%		100%	100%	75%	90%	99%	93%
Children examined for trachoma	0	242	0	242	6	344	67	417	8	202	161	371	0	145	94	239	14	933	322	1,269
Trachoma screening coverage	87%				91%				56%				92%				79%			
Children with active trachoma	10		10		0	3	0	3	0	0	0	0	0	0	1	1	0	13	1	14
Active trachoma prevalence	4%		4%		0%	1%	0%	1%	0%	0%	0%	0%	0%		0%	0.2%	0%	2%	0.3%	1%
Trachoma prevalence 1-9 years (weighted by population)*	1%				0%				0%				0%				1%			

\* Calculated as the proportions of children with active trachoma in age groups 1-4 and 5-9 years, weighted by the estimated population sizes of each age group. This calculation accounts for uneven coverage with respect to age groups

**Table 3.2 Treatment coverage in South Australia in 2012 by region**

	APY Lands					Eyre/Western					Far North					York and Mid North					Total				
<b>Number of communities at risk</b>	<b>9</b>					<b>6</b>					<b>8</b>					<b>15</b>					<b>38</b>				
<b>Number of communities screened</b>	<b>8</b>					<b>6</b>					<b>8</b>					<b>14</b>					<b>36</b>				
<b>Number of communities requiring treatment</b>	<b>6</b>					<b>2</b>					<b>0</b>					<b>1</b>					<b>9</b>				
<b>Number of communities treated according to CDNA guidelines</b>	<b>5</b>					<b>2</b>					<b>N/A</b>					<b>1</b>					<b>8</b>				
<b>Age group (years)</b>	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15+</b>	<b>All</b>	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15+</b>	<b>All</b>	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15+</b>	<b>All</b>	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15+</b>	<b>All</b>	<b>0-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15+</b>	<b>All</b>
Active cases requiring treatment	0	10	0		10	0	3	0		3	0	0	0		0	0	0	1		1	0	13	1		14
Active cases received treatment	0	10	0		10	0	3	0		3	0	0	0		0	0	0	1		1	0	13	1		14
% Active cases received treatment	100%				100%	100%									100%					100%					
Estimated contacts requiring treatment according to jurisdictional interpretation of the guidelines	8	12	8	55	83	1	9	2	7	19	0	0	0		0	0	0	0	1	1	9	21	10	63	103
Number of contacts who received treatment	8	11	8	53	80	1	9	2	7	19	0	0	0		0	0	0	0	1	1	9	20	10	61	100
% estimated contacts received treatment	100%	92%	100%	96%	96%	100%	100%	100%	100%	100%						100%					100%	95%	100%	97%	97%
Estimated overall treatment coverage	100%	95%	100%	96%	97%	100%	100%	100%	100%	100%						100%					100%	97%	100%	97%	97%

\* Communicable Diseases Network Australia. Guidelines for the public health management of trachoma in Australia. March 2006

**Table 3.3 Trichiasis screening coverage, prevalence and treatment among Aboriginal adults aged over 40 years in 2012 in South Australia**

	APY Lands	Eyre/Western	Far North	York and Mid North	Total
Number of communities at risk	9	6	8	15	38
Number of communities screened for trichiasis	1 (11%)	4 (67%)	4 (50%)	5 (33%)	14 (37%)
Adult population of at-risk communities	485	436	832	493	2,246
Adults examined (% of estimated population at risk)	287 (59%)	227 (52%)	350 (42%)	197 (40%)	1,061 (47%)
With trichiasis (% of adults examined)	10 (3%)	0 (0%)	1 (0.3%)	0 (0%)	11 (1%)
Offered ophthalmic consultation	10	0	1	0	11
Surgery in past 12 months	2	0	0	0	2

**Table 3.4 Health promotion activities in South Australia in 2012**

	APY Lands		Eyre and Western		Far North		York and Midnorth		Total	
Number of communities at-risk	9		6		8		15		38	
Number of communities who reported health promotion activities	8		5		8		14		35	
<b>Methods of Health Promotion</b>										
One-on-one discussion	8	50%	10	31%	12	43%	19	53%	49	44%
Presentation to group	0	0%	7	22%	4	14%	0	0%	11	10%
Interactive group session	0	0%	7	22%	1	4%	0	0%	8	7%
Social Marketing	0	0%	5	16%	0	0%	0	0%	5	4%
Print material	8	50%	2	6%	10	36%	17	47%	37	33%
Mass Media	0	0%	0	0%	0	0%	0	0%	0	0%
Sporting/community events	0	0%	1	3%	0	0%	0	0%	1	1%
Other	0	0%	0	0%	1	4%	0	0%	1	1%
<b>Total number of programs</b>	<b>16</b>		<b>32</b>		<b>28</b>		<b>36</b>		<b>112</b>	
<b>Target audience</b>										
Health professionals/staff	0	0%	6	19%	2	7%	33	92%	41	37%
Children	16	100%	11	34%	22	79%	0	0%	49	44%
Youth	0	0%	3	9%	2	7%	0	0%	5	4%
Teachers/childcare/preschool staff	0	0%	6	19%	2	7%	2	6%	10	9%
Caregivers/parents	0	0%	5	16%	0	0%	1	3%	6	5%
Community members	0	0%	1	3%	0	0%	0	0%	1	1%
Community educators/health promoters	0	0%	0	0%	0	0%	0	0%	0	0%
Interagency members	0	0%	0	0%	0	0%	0	0%	0	0%
<b>Frequency of health promotion activities</b>										
Once	16	100%	4	13%	20	71%	14	39%	54	48%
Occasional *	0	0%	24	75%	8	29%	22	61%	54	48%
Regular†	0	0%	4	13%	0	0%	0	0%	4	4%
Ongoing/routine	0	0%	0	0%	0	0%	0	0%	0	0%

\* 2 -4 times per year

† 5-12 times per year



# Results

## Western Australia results 2012

### Screening coverage

- At-risk community coverage of trachoma screening in the four regions with endemic trachoma in WA was 99%, with 77 out of 78 at-risk communities screened for trachoma (Table 4.1).
- An increase of the number of communities screened was observed in the Goldfields region since 2011. However in 2011, 10 communities in this region were amalgamated into one distinct community for the purpose of presenting data in this report (Figure 4.2).
- The number of communities screened across Kimberley and Midwest regions was constant between 2011 and 2012 (Figure 4.2).
- The proportion of children aged 5-9 years screened in at-risk regions was 73% (range 63 - 82%) (Table 4.1, Figure 4.3).
- A substantial increase in trachoma screening among 5-9 year of children was observed in all regions since 2011 and since screening data collection began in 2007 (Figure 4.3).

### Clean face prevalence

- The overall prevalence of clean faces among 5-9-year-old children screened in WA was 81%. The highest rate was found in the Pilbara region (94%) (Table 4.1, Figure 4.4).

### Trachoma prevalence

- The prevalence of trachoma among children aged 5-9 years who were screened in WA was 4%. Prevalence ranged from 2% to 10% (Table 4.1).
- No active trachoma was detected in 61% (46/75) (Figure 4.6) of communities screened that screened children aged 5-9 years, an increase from 58% (40/69) in 2011.
- A decreasing trend continues in the percentage of communities with trachoma prevalence greater than 5% (Figure 1.8), from 60% in 2009, to 50% in 2010, to 36% in 2011 and 29% in 2012.
- Compared to 2011, trachoma prevalence in all regions in WA decreased in 2012 (Figure 4.5).
- The highest prevalence of trachoma among children 5-9 years was 54% within a community in the Kimberley region where less than 20 children were screened.

### Treatment coverage

- Treatment for trachoma was required for 35 of the 77 screened at-risk communities (Table 4.2).
- Of the active cases of trachoma detected at screening, 93% were treated with azithromycin (Table 4.2).
- Azithromycin was used to treat the estimated 93% of the population requiring treatment, however population data were not provided for six communities that treated active cases only (Table 4.2).
- Of the 35 communities requiring treatment, 26 received treatment according to CDNA guidelines (Table 4.2).

## Trichiasis

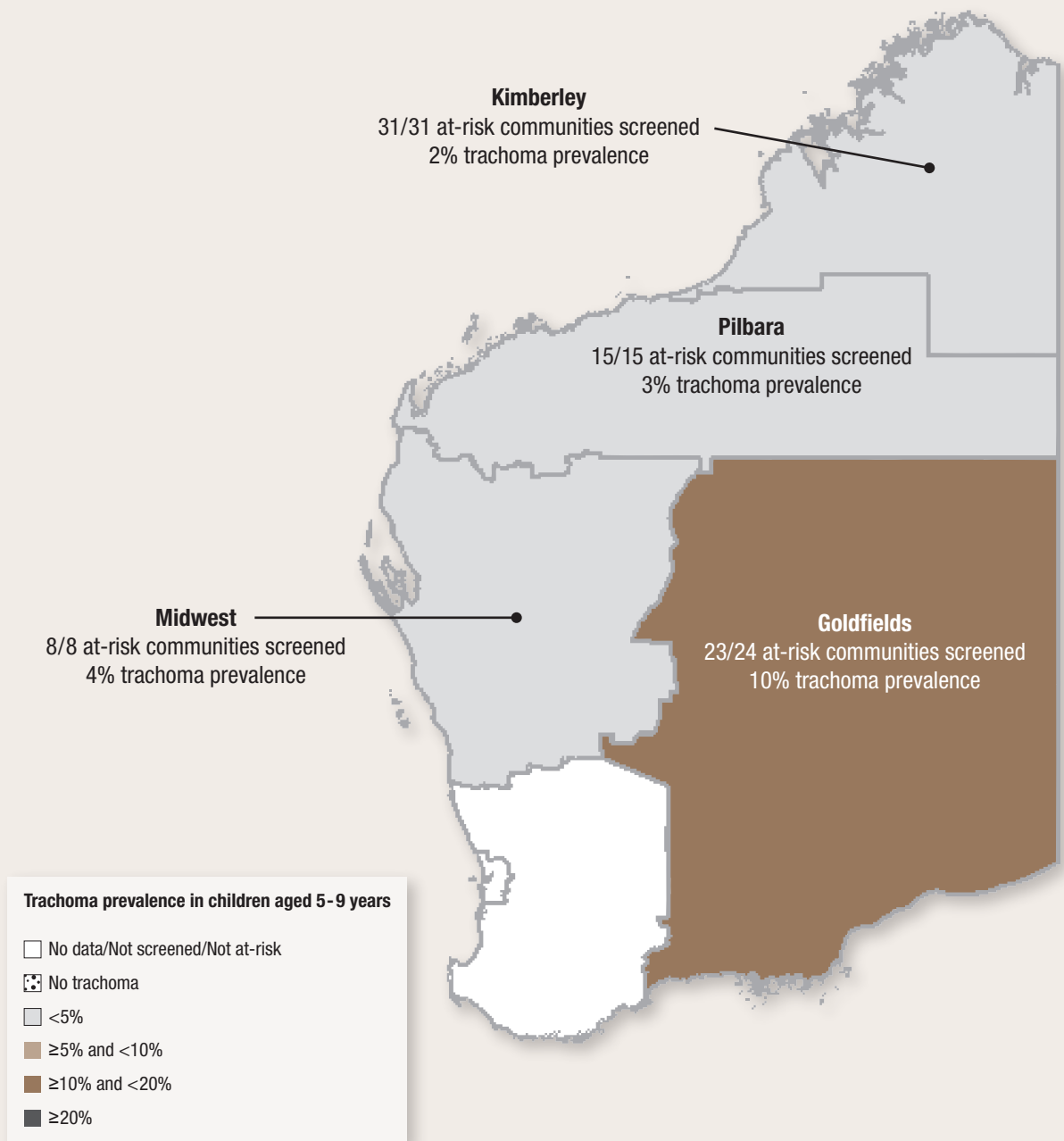
- Trichiasis screening was undertaken in all regions of WA, with 52% (2,129/4,130) of the estimated at-risk population screened (Table 4.3).
- Trichiasis was detected in 1% (22/2,129) of adults screened (Table 4.3).
- Nine cases of trichiasis were reported to have received surgery in the last 12 months (Table 4.3).

## Health promotion

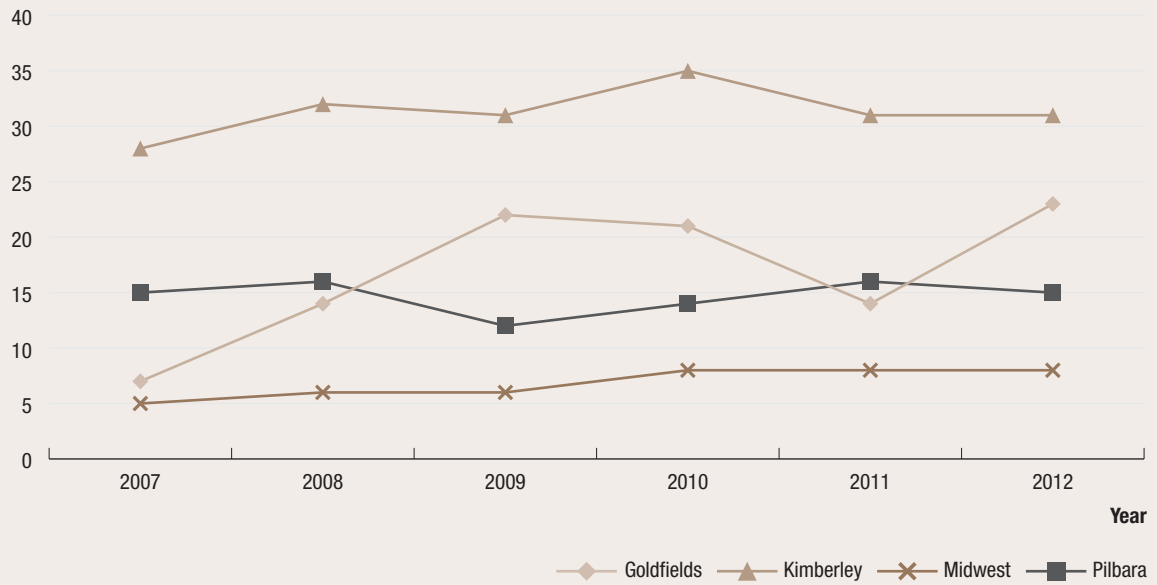
- Health promotion activities were reported in 93% (73/78) of at-risk communities, with an overall 263 health promotions initiatives reported (Table 4.4).
- Of the initiatives reported, 42% (110/263) were directed toward children and 28% (74/263) used an interactive group session method.
- Of the initiatives reported, 70% (183/263) reported delivering these programs 2-4 times in the year, and 10% (26/263) reported these programs were a routine and ongoing initiative within at-risk communities.

Figure 4.1

Trachoma prevalence in children aged 5-9 years, number of communities screened and number of communities at-risk in 2012 in Western Australia

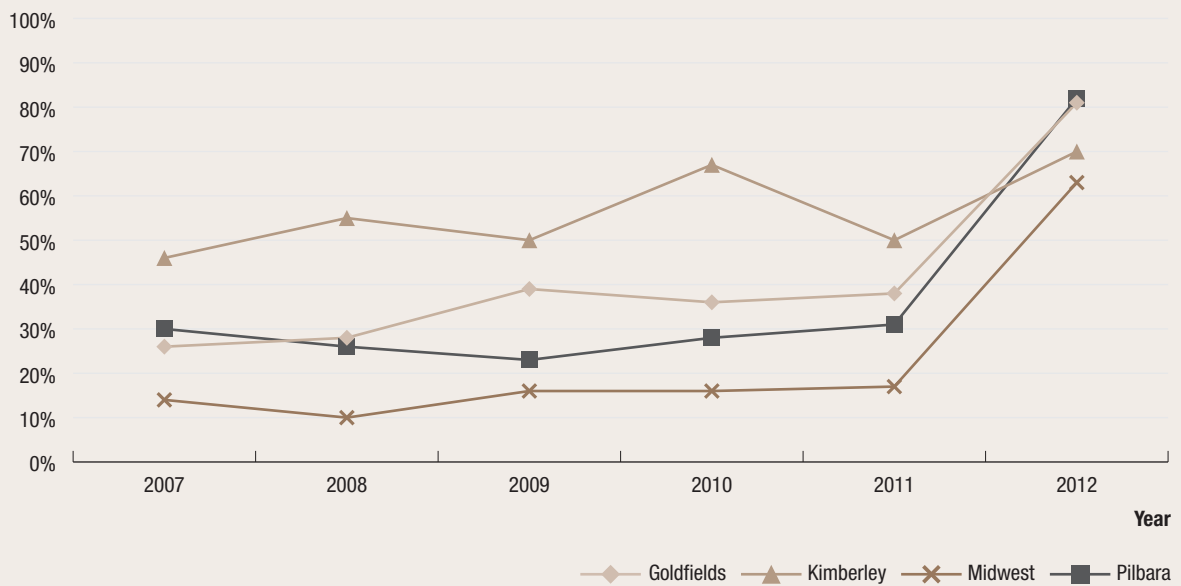


**Figure 4.2** Number of communities screened\* by year and region in Western Australia, 2007 – 2012



\* Including communities screened but not at risk

**Figure 4.3** Population screening coverage\* of children aged 5-9 years over all regions containing at least one at-risk community by year and region in Western Australia, 2007 – 2012

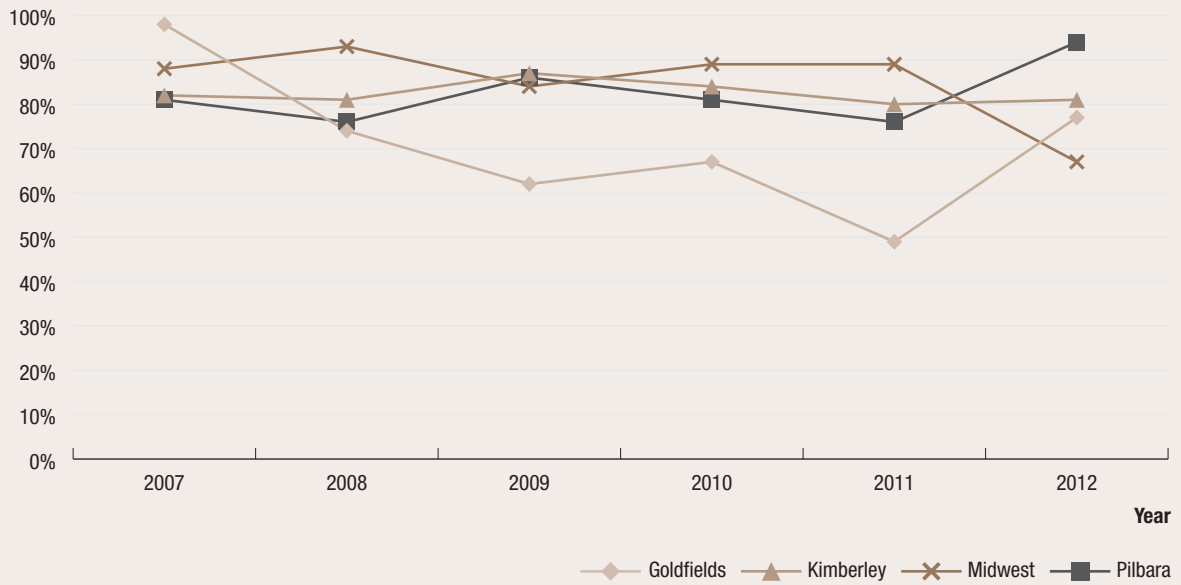


\* Including children in communities screened but not at risk



Figure 4.4

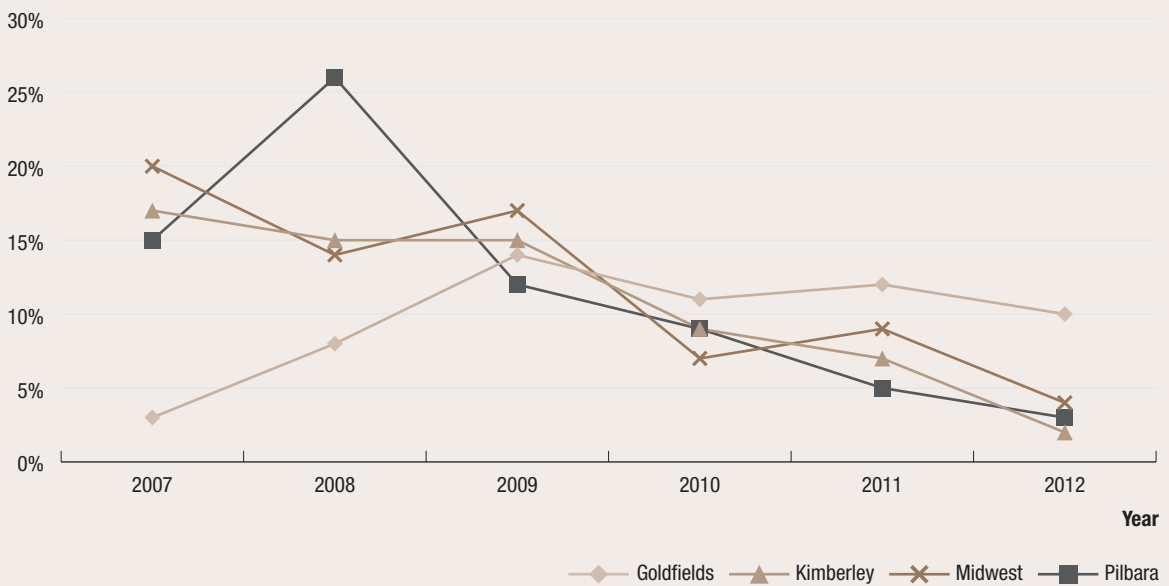
Proportion of screened children\* aged 5-9 years who had a clean face by year and region in Western Australia, 2007 – 2012



\* Including children in communities screened but not at risk

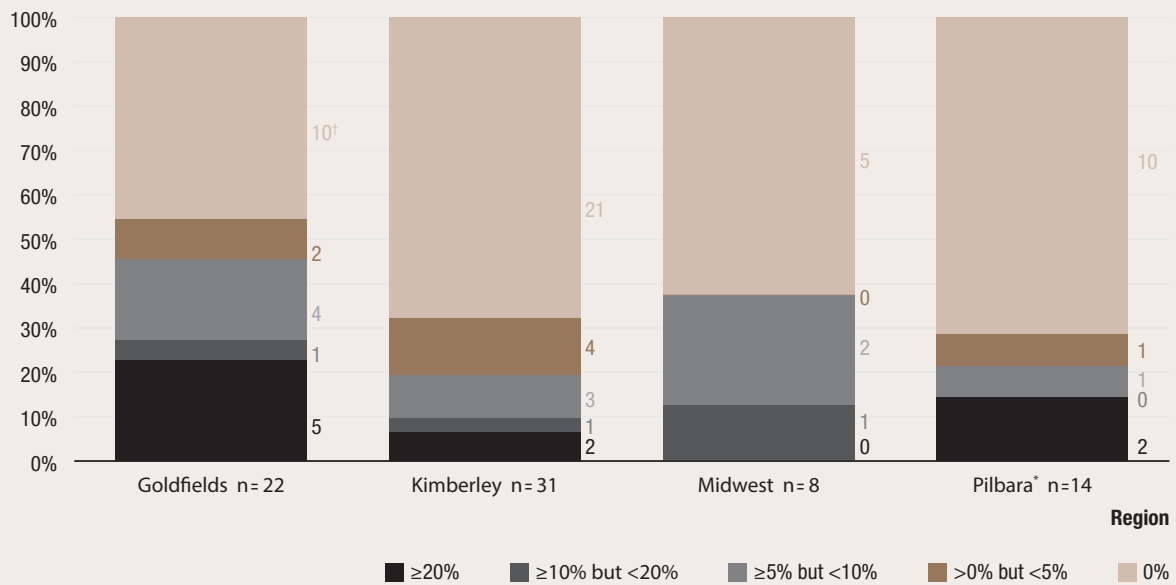
Figure 4.5

Trachoma prevalence among screened\* children aged 5-9 years by year and region in Western Australia, 2007 – 2012



\* Including children in communities screened but not at risk

**Figure 4.6** Trachoma prevalence among children aged 5-9 years in screened at-risk communities in 2012 by region in Western Australia



\* One community in both Goldfields and Pilbara did not screen children in the 5-9 year age group

† Number of communities

**Figure 4.7** Trachoma prevalence of 5-9 year old children in screened at-risk communities in 2012 by sex and region in Western Australia

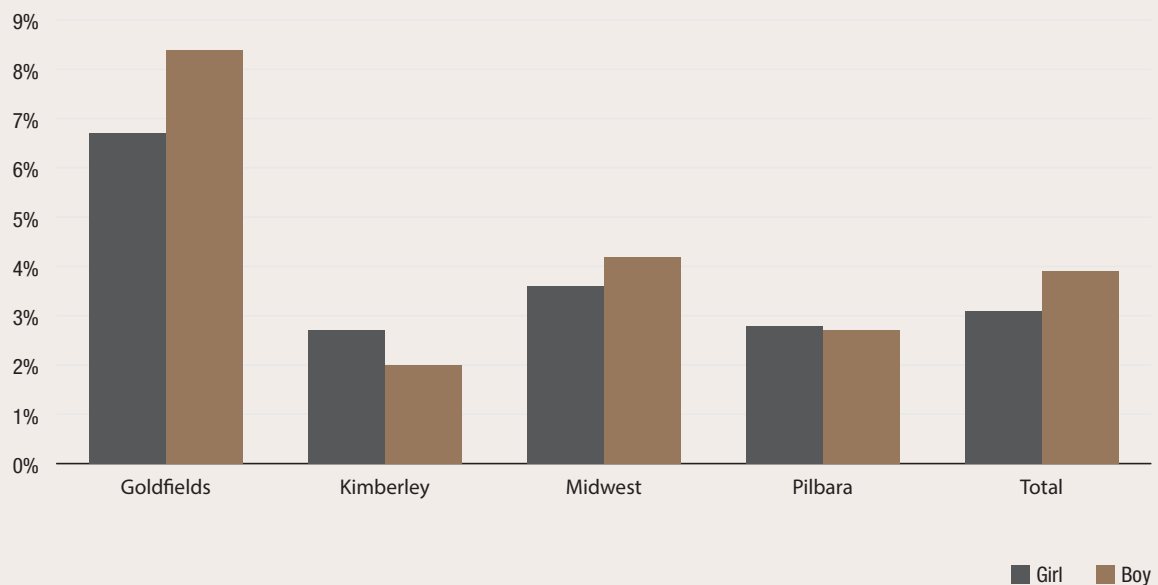


Table 4.1 Trachoma screening coverage, trachoma prevalence, and clean face prevalence in Western Australia in 2012 by region

	Goldfields				Kimberley				Midwest				Pilbara				Total			
Number of communities at risk	24				31				8				15				78			
Number of communities screened	23				31				8				15				77			
Age group (years)	1-4	5-9	10-14	1-14	1-4	5-9	10-14	1-14	1-4	5-9	10-14	1-14	1-4	5-9	10-14	1-14	1-4	5-9	10-14	1-14
<b>ABS estimated number of Aboriginal children at risk</b>	586	567	540	1,693	898	1,027	896	2,821	115	128	140	383	366	375	320	1,061	1,965	2,097	1,896	5,958
Jurisdiction Estimated number of Aboriginal children at risk	151	448	361	960	204	1,379	622	2,205	53	210	183	446	116	269	221	606	524	2,306	1,387	4,217
Children examined for clean face	60	365	221	646	96	992	260	1,348	20	132	131	283	78	220	199	497	254	1,709	811	2,774
Children with clean face	35	281	197	513	67	804	237	1,108	14	88	87	189	63	206	192	461	179	1,379	713	2,271
Clean face prevalence	58%	77%	89%	79%	70%	81%	91%	82%	70%	67%	66%	67%	81%	94%	96%	93%	70%	81%	88%	82%
Children examined for trachoma	60	365	221	646	86	972	242	1,300	20	132	131	283	78	220	199	497	244	1,689	793	2,726
Trachoma screening coverage	40%	81%	61%	67%	42%	70%	39%	59%	38%	63%	72%	63%	67%	82%	90%	82%	47%	73%	57%	65%
Children with active trachoma	3	37	22	62	1	23	5	29	1	5	4	10	1	6	3	10	6	71	34	111
Active trachoma prevalence	5%	10%	10%	10%	1%	2%	2%	2%	5%	4%	3%	4%	1%	3%	2%	2%	2%	4%	4%	4%
Trachoma prevalence 1-9 years (weighted by population)*	8%				2%				4%				2%				3%			

\* Calculated as the proportions of children with active trachoma in age groups 1-4 and 5-9 years, weighted by the estimated population sizes of each age group. This calculation accounts for uneven coverage with respect to age groups

Table 4.2 Treatment coverage in Western Australia in 2012 by region

	Goldfields					Kimberley					Midwest					Pilbara					Total				
Number of communities at risk	24					31					8					15					78				
Number of communities screened	23					31					8					15					77				
Number of communities requiring treatment	15					11					4					5					35				
Number of communities treated according to CDNA guidelines*	10					11					0					5					26				
Age group (years)	0-4	5-9	10-14	15+	All	0-4	5-10	10-15	15+	All	0-4	5-9	10-14	15+	All	0-4	5-9	10-14	15+	All	0-4	5-9	10-14	15+	All
Active cases requiring treatment	3	37	22		62	1	23	5		29	1	5	4		10	1	6	3		10	6	71	34		111
Active cases received treatment	3	36	19		58	1	22	3		26	1	4	4		9	1	6	3		10	6	68	29		103
% Active cases received treatment	100%	97%	86%		94%	100%	96%	60%		90%	100%	80%	100%		90%	100%	100%	100%		100%	100%	96%	85%		93%
Estimated contacts requiring treatment (according to jurisdictional interpretation of the guidelines)	22	28	14	103	167	62	93	75	172	393	0	3	4	0	7	7	11	19	26	63	91	135	112	301	639
Number of contacts who received treatment†	21	28	14	98	161	58	87	69	166	372	0	0	1	0	1	7	11	19	26	63	75	126	103	290	594
% Estimated contacts received treatment†	95%	100%	100%	95%	96%	94%	94%	92%	97%	95%		0%	25%		14%	100%	100%	100%	100%	100%	82%	93%	92%	96%	93%
Estimated overall treatment coverage (total)†	96%	98%	92%	95%	96%	94%	94%	90%	97%	94%	100%	50%	63%		59%	100%	100%	100%	100%	100%	84%	94%	90%	96%	93%

\* Communicable Diseases Network Australia. Guidelines for the public health management of trachoma in Australia. March 2006

† Three communities in both Goldfield and Midwest regions did not provide estimates for contacts requiring treatment, and active cases only were treated

**Table 4.3 Trichiasis screening coverage, prevalence and treatment among Aboriginal adults aged over 40 years in 2012 in Western Australia**

	Goldfields	Kimberley	Midwest	Pilbara	Total
<b>Number of communities at risk</b>	<b>24</b>	<b>31</b>	<b>8</b>	<b>15</b>	<b>78</b>
<b>Number of communities screened for trichiasis</b>	5 (21%)	25 (81%)	8 (100%)	14 (93%)	54 (69%)
<b>Estimated adult population of at risk communities (ABS)</b>	1,280	1,860	269	721	4,130
Adults examined (% of estimated population at risk)	64 (5%)	1,383 (74%)	377 (140%)	305 (42%)	2,129 (52%)
With trichiasis (% of adults examined)	0 (0%)	12 (1%)	0 (0%)	10 (3%)	22 (1%)
Offered ophthalmic consultation	0	12	0	10	22
Surgery in past 12 months	0	6	0	3	9

**Table 4.4 Health promotion activities in Western Australia in 2012**

	Goldfields		Kimberley		Midwest		Pilbara		Total	
<b>Number of communities at-risk</b>	<b>24</b>		<b>31</b>		<b>8</b>		<b>15</b>		<b>78</b>	
<b>Number of communities who reported health promotion activities</b>	<b>20</b>		<b>31</b>		<b>8</b>		<b>14</b>		<b>73</b>	
<b>Methods of Health Promotion</b>										
One-on-one discussion	0	0%	5	6%	0	0%	33	47%	38	14%
Presentation to group	0	0%	44	49%	0	0%	6	9%	50	19%
Interactive group session	37	40%	13	15%	12	100%	12	17%	74	28%
Social Marketing	11	12%	1	1%	0	0%	0	0%	12	5%
Print material	36	39%	21	24%	0	0%	6	9%	63	24%
Mass Media	0	0%	4	4%	0	0%	6	9%	10	4%
Sporting/community events	0	0%	0	0%	0	0%	7	10%	7	3%
Other	8	9%	1	1%	0	0%	0	0%	9	3%
<b>Total number of programs</b>	<b>92</b>		<b>89</b>		<b>12</b>		<b>70</b>		<b>263</b>	
<b>Target audience</b>										
Health professionals/staff	0	0%	2	2%	0	0%	5	7%	7	3%
Children	47	51%	43	48%	6	50%	14	20%	110	42%
Youth	0	0%	0	0%	0	0%	0	0%	0	0%
Teachers/childcare/preschool staff	27	29%	18	20%	6	50%	8	11%	59	22%
Caregivers/parents	0	0%	0	0%	0	0%	9	13%	9	3%
Community members	10	11%	10	11%	0	0%	20	29%	40	15%
Community educators/health promoters	8	9%	16	18%	0	0%	8	11%	32	12%
Interagency members	0	0%	0	0%	0	0%	6	9%	6	2%
<b>Frequency of health promotion activities</b>										
Once	8	9%	12	13%	0	0%	0	0%	20	8%
Occasional*	57	62%	74	83%	12	100%	40	57%	183	70%
Regular†	10	11%	2	2%	0	0%	22	31%	34	13%
Ongoing/routine	17	18%	1	1%	0	0%	8	11%	26	10%

\* 2 -4 times per year

† 5-12 times per year

# Results

## Queensland results 2012

### Screening coverage

- Six potentially at-risk communities were selected and screened as a mapping exercise in Qld in 2012.
- Community screening coverage for trachoma in children aged 5-9 years in these six communities was 64% (194/301) (Table 5.1).

### Clean face prevalence

- The overall prevalence of clean faces among 5-9-year-old children screened in Qld was 70% (136/194) (Table 5.1).

### Trachoma prevalence

- No trachoma was reported in any of the six communities screened (Table 5.1).
- In one community in the Torres Strait, follicles were observed in eight children. PCR swabs were taken from the eight children and household contacts. Results from the PCR test were all negative for *Chlamydia trachomatis*.

### Treatment coverage

- Treatment for trachoma was not required for any of the six communities screened (Table 5.1); however azithromycin was administered to the eight children found with trachoma like follicles in the Torres Strait and household contacts prior to the results of the PCR test being available.

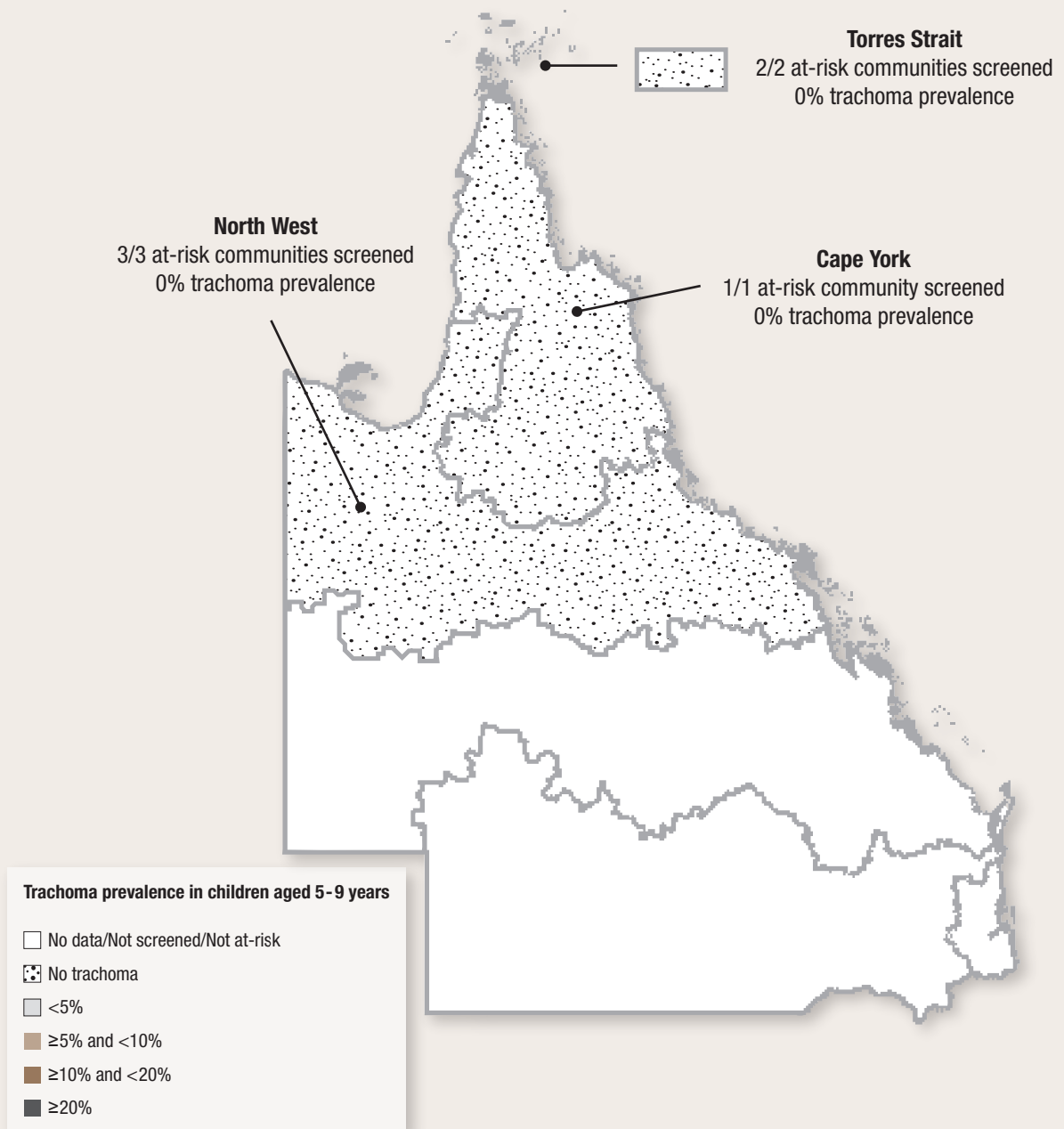
### Health promotion

- Health promotion activities were reported in all six communities deemed potentially at-risk (Table 5.2).



Figure 5.1

Trachoma prevalence in children aged 5-9 years, number of communities screened and number of at-risk communities in Queensland in 2012



**Table 5.1 Trachoma screening coverage, trachoma prevalence, and clean face prevalence in Queensland in 2012**

<b>Age group (years)</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>1-14</b>
<b>Number of communities at risk</b>	<b>6</b>			
<b>Number of communities screened</b>	<b>6</b>			
<b>ABS estimated number of Aboriginal children at risk</b>	390	425	293	1,108
Jurisdiction Estimated number of Aboriginal children at risk	258	301	123	682
Children examined for clean face	1	194	50	245
Children with clean face	1	136	50	187
Clean face prevalence	100%	70%	100%	76%
Children examined for trachoma	1	194	52	247
Trachoma screening coverage	0.4%	64%	42%	36%
Children with active trachoma	0	0	0	0
Active trachoma prevalence	0%	0%	0%	0%
Trachoma prevalence 1-9 years (weighted by population)*	0%			

\* Calculated as the proportions of children with active trachoma in age groups 1-4 and 5-9 years, weighted by the estimated population sizes of each age group. This calculation accounts for uneven coverage with respect to age groups

**Table 5.2 Health promotion activities in Queensland in 2012**

<b>Number of communities at-risk</b>	<b>6</b>
<b>Number of communities who reported health promotion activities</b>	<b>6</b>
<b>Methods of Health Promotion</b>	
One-on-one discussion	
Presentation to group	✓
Interactive group session	
Social Marketing	✓
Print material	✓
Mass Media	✓
Sporting/community events	✓
Other	
<b>Target audience</b>	
Health professionals/staff	
Children	✓
Youth	✓
Teachers/childcare/preschool staff	
Caregivers/parents	✓
Community members	✓
Community educators/health promoters	
Interagency members	
<b>Frequency of health promotion activities</b>	
Once	
Occasional <sup>‡</sup>	
Regular <sup>†</sup>	✓
Ongoing/routine	

\* 2 -4 times per year

† 5-12 times per year

# Discussion

## Screening coverage

Screening coverage was measured as both the proportion of at-risk communities screened and the proportion of 5-9 year-old children screened in at-risk communities, predominantly through primary school-based initiatives. Screening of older (10-14-year-old) and younger (1-4-year-old) children also takes place, but less consistently, and in 2012 many regions chose to focus screening exercises solely on the 5-9-year age group. In 2012 population estimates provided by jurisdictions were used to calculate proportions. The manner in which the populations were calculated differed among jurisdictions, with some jurisdictions using school enrolment lists, Health Information populations lists, or a combination of both and local knowledge. The 2011 Australian Bureau of Statistics (ABS) census projected population estimates were included in the tables to provide a comparison. Population estimates were generally similar for the 5-9-year age group except in Qld. In 2012 all regions, increased trachoma screening coverage of 5-9-year-old children except Darwin Rural region in the NT and Far North region in SA, compared to 2011 data. A higher screening coverage provides confidence that those screened are representative of the community at risk, and results are therefore an accurate reflection of the prevalence of disease within the community.

The number of at-risk communities screened has increased in the NT, SA and WA. It is expected, however, that this will plateau and in some regions decrease in future years. A number of communities screened for the first time in 2012 did not have trachoma, and therefore do not qualify as being at-risk for future years.

The *Guidelines for the public health management of trachoma in Australia* is currently undergoing review. The new guidelines will allow hyperendemic communities to focus resources on treatment without the need for repeat screening for up to 3 years. If endorsed, this strategy will affect the number of communities screened and the regional screening coverage of children. The impact of this strategy may not be apparent for several years.

## Trachoma prevalence

Endemic trachoma is defined by WHO as a prevalence of active trachoma of 5% or more in children aged 1-9 years. In past years the National Trachoma Surveillance and Reporting Unit (NTSRU) has been able to estimate the prevalence using population weights. Due to the poor screening coverage of the 1-4-year age group, it was considered that the results reported were not representative of that age group. In Australia, the prevalence in the 5-9-year age group is accepted as a sufficient measure of the prevalence of trachoma within at-risk communities.

Across all four jurisdictions in 2012, the prevalence of trachoma in 5-9-year-old children was 4%. This is a decrease from the 2011 national prevalence of trachoma in 5-9-year-old children of 7%.<sup>9</sup> At a regional level in 2012, the prevalence of trachoma in children aged 5-9 years ranged from 0% to 4%.

Queensland detected no trachoma in any of the six communities screened. Follicles consistent with Trachomatous inflammation – follicular were observed in one community, however PCR tests results taken from children with follicles and their household contacts were negative for *Chlamydia trachomatis*. Subsequently, Queensland has concluded that trachoma is not a public health concern for Queensland.

In all other jurisdictions screened, a decreasing trend in trachoma prevalence is observed since 2009. Decreasing trends in the NT, SA and WA were also observed in the number of communities found to have a prevalence greater than 5% (endemic trachoma) in screened children aged 5-9 years, and there was an increasing trend in the number of communities that reported no trachoma in screened children aged 5-9 years. It may be timely to review the risk classifications of communities that reported no evidence of trachoma, presently or historically, such as three in the Darwin Rural region, four in the Katherine region (NT); one in Eyre and Western region, seven in the Far North region, all of the York and Mid North region (SA); two in the Goldfields region, two in the Midwest region and three in the Kimberley region (WA).

The target set by both WHO and CDNA for elimination of blinding trachoma is community prevalence in children aged 1-9 years of less than 5% over a period of 5 years. Several communities designated as at-risk have reported a prevalence of less than 5% over the past 4 years, and are therefore on track to be designated not at-risk if this status is maintained for one more year.

As these communities are reclassified as being not at-risk, future prevalence trends may increase for a period of time as the at-risk population becomes more concentrated.

In 2012 the NTSRU collected prevalence data by sex. These data had not been collected in previous years. There is evidence in many trachoma endemic countries that women are disproportionately more likely to be at risk of trachoma,

and become blind due to trichiasis.<sup>16</sup> However, the national results from 2012 illustrate that males in all endemic Australian jurisdictions had a higher prevalence of trachoma compared to females.

## Trachoma treatment

CDNA guidelines recommend the treatment of active cases and their household contacts. When prevalence is greater than 10% and cases are not clustered within a few households, community-wide treatment is suggested. The approach to community-wide treatment differs across jurisdictions. In the NT, the recommendation is taken to mean the entire community, whereas SA and WA choose to treat all children aged between 6 months and 14 years. The differences in approach are a response to the average number of contacts per active case in each jurisdiction: in the NT 1:24, 1:7 in SA and 1:6 in WA.

Ninety-five percent of active cases received treatment.

In 2012 jurisdictions supplied estimates of the populations requiring treatment. These estimates were influenced by the interpretation of the current treatment guidelines. For six communities in WA in which only active cases were treated, estimates of the number of household contacts or community members requiring treatment were not obtained; therefore treatment coverage was overestimated for WA. Nationwide, 75 of the 87 communities that required treatment were treated according to their jurisdictional interpretation of the current CDNA treatment guidelines.

The NT also undertook 6-monthly treatment of all members of the community in six communities that detected hyperendemic levels of trachoma and achieved an overall coverage level of 70% for the second treatment.

## Trichiasis

Coverage of screening for trichiasis among Aboriginal adults aged over 40 years in the NT, SA and WA increased in 2012; however coverage remained low, with screening rates of 18% in the NT, 47% in SA and 52% in WA. Of the adults screened in communities designated as at risk for trachoma, 2% (94/4,468) prevalence levels include only data collected in communities currently designated “at-risk”, and do not take into account the possibility that endemic areas may have changed over time.

In 2012, sixteen cases of trichiasis surgery were reported in NT (5), SA (2) and WA (9).

## Facial cleanliness

Facial cleanliness is a major component of the SAFE strategy, recognising that the presence of nasal and ocular discharge significantly correlates to the risk for both acquiring and transmitting trachoma. The proportion of 5-9-year-old children screened who had clean faces increased slightly in all jurisdictions compared to 2011. WHO has set targets for communities to reach a rate of 80% facial cleanliness.<sup>17</sup> This target was achieved by 58% of all screened communities nationally.

## Program delivery and monitoring

Significant improvements in program delivery have been reported in 2012 with increased coverage of screening and treatment delivery and health promotion activities. Data quality also improved in all jurisdictions; however, as many regions chose to focus on the 5-9-year age group, data regarding the 1-4-year age group were not comprehensive. The NTSRU in 2011 developed a web-based data entry system that minimised duplicates and inconsistent entry. This database is being enhanced to allow improved accessibility in the field and report generation for jurisdictions.

In 2011, CDNA initiated a review of the 2006 CDNA *Guidelines for the public health management of trachoma in Australia*. The revised guidelines are expected to be endorsed by CDNA in 2013. This revised document aims to reduce the ambiguity and provide clear guidance on screening and treatment methods.

## Progress towards Australia's elimination target

As a signatory to the WHO Alliance of the Global Elimination of Blinding Trachoma by the year 2020 (GET 2020), Australia is committed to ensuring that trachoma levels continue to decrease to below endemic levels in at-risk communities. This report has shown significant decreases in trachoma prevalence in NT, SA and WA. With the implementation of new guidelines in 2013 and sustained efforts, as reported in 2012, Australia remains on course to eliminate trachoma by 2020.

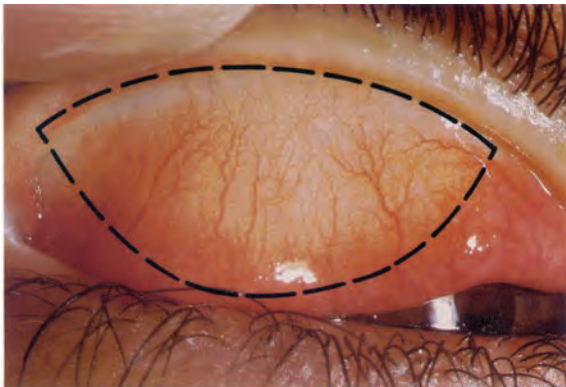


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# Appendix 1: World Health Organization Trachoma Grading Card



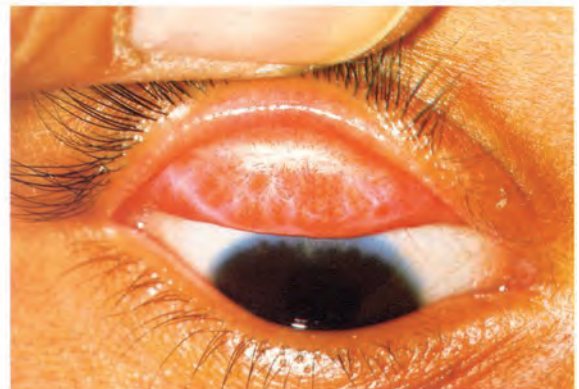
*Normal tarsal conjunctiva (x 2 magnification). The dotted line shows the area to be examined.*



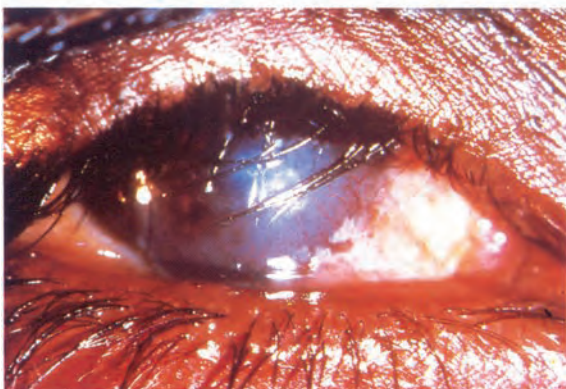
*Trachomatous inflammation – follicular (TF).*



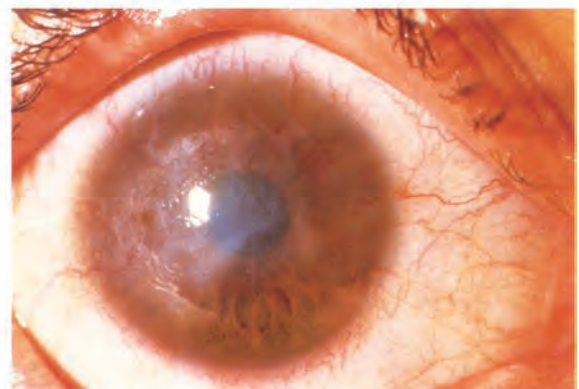
*Trachomatous inflammation – follicular and intense (TF + TI).*



*Trachomatous scarring (TS)*



*Trachomatous trichiasis (TT)*



*Corneal opacity (CO)*



# Appendix 2: Data Collection Forms

## Summary form 1: Active cases of trachoma

<b>State/Territory</b>	
<b>Region:</b>	
<b>Community:</b>	
<b>School:</b>	
<b>Date/s of screening:</b>	

### Male children screened for trachoma

	Age (in years)		
	1-4	5-9	10-14
<b>M1. Estimated number of Aboriginal children in the community/school</b>			
<b>M2. Number of children examined for trachoma</b>			
<b>M3. Number of children with TI</b>			
<b>M4. Number of children with TF</b>			
<b>M5. Number of children with active trachoma (TF and/or TI)</b>			
<b>M6. Number of children with TS</b>			
<b>M7. Number of children examined for clean face</b>			
<b>M8. Number of children with clean face</b>			
<b>M9. Number of children with absence of clean face and active trachoma</b>			
<b>M10. Number of children requiring treatment with azithromycin</b>			
<b>M11. Number of active cases who received treatment with azithromycin in total</b>			
<b>M12. Number of active cases who received treatment with azithromycin within two weeks of screening</b>			

### Female children screened for trachoma

	Age (in years)		
	1-4	5-9	10-14
<b>F1. Estimated number of Aboriginal children in the community/school</b>			
<b>F2. Number of children examined for trachoma</b>			
<b>F3. Number of children with TI</b>			
<b>F4. Number of children with TF</b>			
<b>F5. Number of children with active trachoma (TF and/or TI)</b>			
<b>F6. Number of children with TS</b>			
<b>F7. Number of children examined for clean face</b>			
<b>F8. Number of children with clean face</b>			
<b>F9. Number of children with absence of clean face and active trachoma</b>			
<b>F10. Number of children requiring treatment with azithromycin</b>			
<b>F11. Number of active cases who received treatment with azithromycin in total</b>			
<b>F12. Number of active cases who received treatment with azithromycin within two weeks of screening</b>			



## Summary form 2: Household and community treatment

<b>State/Territory</b>	
<b>Region:</b>	
<b>Community:</b>	
<b>School:</b>	
<b>Date/s of screening:</b>	

### All Children Screened for trachoma

	Age (in years)		
	0 - 4	5 - 9	10 - 14
1. Number of ALL children examined for trachoma			
2. Number of ALL children with active trachoma (TF and/or TI)			
3. Active trachoma prevalence in children			
4. Were cases obviously clustered in several households in the community (please tick)?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Treatment Strategy (please tick one only):	<input type="checkbox"/> Household <input type="checkbox"/> Community <input type="checkbox"/> Active Cases only <input type="checkbox"/> No treatment given <input type="checkbox"/> No treatment required (prevalence=0)		

### CDNA guidelines recommendation for treatment:

- *If prevalence >10% in children & no clustering: Community treatment required:  
Treat Aboriginal children 6 months to 14 years in community and all household contacts aged 6 months and over all*
- *All other situations: Household treatment required  
Treat all household contacts aged 6 months and over*

### Treatment of Household contacts and community members (not including active cases)

6. Number of households requiring treatment										
7. Number of households treated										
8. Date of first treatment										
9. Date of last treatment										
	Age (in years)									
	0		1-4		5-9		10-14		15 +	
	M	F	M	F	M	F	M	F	M	F
10. Number of household and community contacts requiring treatment with azithromycin										
11. Number of household and community contacts who received treatment with azithromycin										
12. Number of household and community contacts who received treatment with azithromycin within two weeks of screening										
13. Number of household and community contacts who received treatment with azithromycin within two weeks of commencement of treatment.										
14. Treatment delayed due to (Please tick):	<input type="checkbox"/> Sorry business <input type="checkbox"/> Weather <input type="checkbox"/> Other									

### Summary Form 3: Trichiasis

<b>State/Territory</b>	
<b>Region:</b>	
<b>Community:</b>	
<b>Date/Year of screening</b>	

	Sex/Age (in years)					
	Male			Female		
	15-39	40-49	50+	15-39	40-49	50+
Number of Aboriginal adults in age group						
Number of Aboriginal adults examined for trichiasis						
Number of Aboriginal adults with trichiasis						
Number of Aboriginal adults with trichiasis who were offered ophthalmological consultation within 6 months of the previous screening						
Number of Aboriginal adults with trichiasis who declined ophthalmological consultation within 6 months of the previous screening						
Number of Aboriginal adults who underwent trichiasis surgery in the last year						



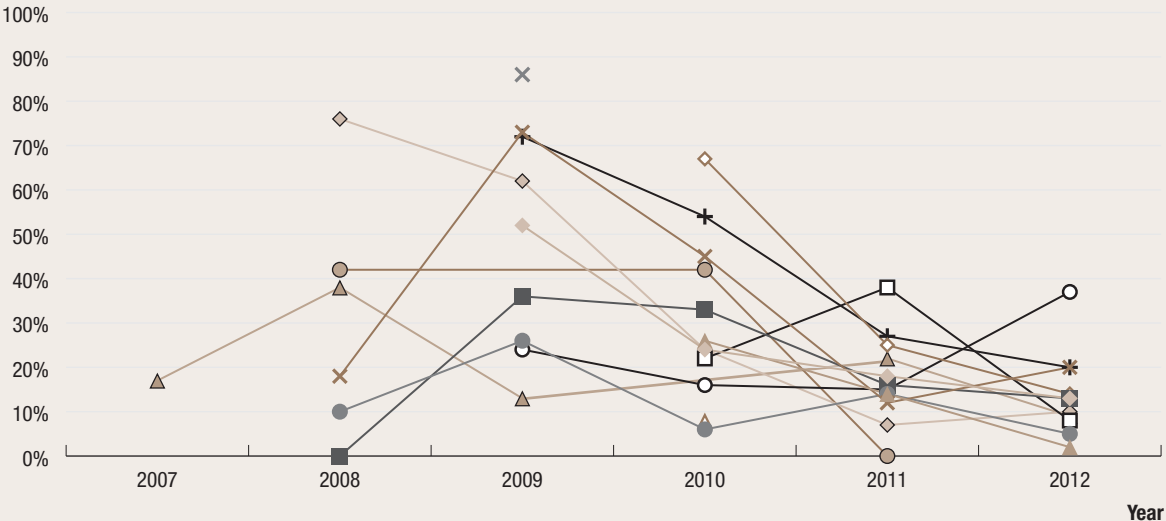
### Summary Form 4: Health Promotion

<b>State/Territory</b>	<b>Community:</b>
<b>Region:</b>	<b>School:</b>

Program Name						
<b>Method</b>	<input type="checkbox"/> One-on-one <input type="checkbox"/> Presentation to group <input type="checkbox"/> Interactive group session <input type="checkbox"/> Social marketing/internet <input type="checkbox"/> Print Material <input type="checkbox"/> Mass media <input type="checkbox"/> Sporting/ community events <input type="checkbox"/> Other	<input type="checkbox"/> One-on-one <input type="checkbox"/> Presentation to group <input type="checkbox"/> Interactive group session <input type="checkbox"/> Social marketing/internet <input type="checkbox"/> Print Material <input type="checkbox"/> Mass media <input type="checkbox"/> Sporting/ community events <input type="checkbox"/> Other	<input type="checkbox"/> One-on-one <input type="checkbox"/> Presentation to group <input type="checkbox"/> Interactive group session <input type="checkbox"/> Social marketing/internet <input type="checkbox"/> Print Material <input type="checkbox"/> Mass media <input type="checkbox"/> Sporting/ community events <input type="checkbox"/> Other	<input type="checkbox"/> One-on-one <input type="checkbox"/> Presentation to group <input type="checkbox"/> Interactive group session <input type="checkbox"/> Social marketing/internet <input type="checkbox"/> Print Material <input type="checkbox"/> Mass media <input type="checkbox"/> Sporting/ community events <input type="checkbox"/> Other	<input type="checkbox"/> One-on-one <input type="checkbox"/> Presentation to group <input type="checkbox"/> Interactive group session <input type="checkbox"/> Social marketing/internet <input type="checkbox"/> Print Material <input type="checkbox"/> Mass media <input type="checkbox"/> Sporting/ community events <input type="checkbox"/> Other	<input type="checkbox"/> One-on-one <input type="checkbox"/> Presentation to group <input type="checkbox"/> Interactive group session <input type="checkbox"/> Social marketing/internet <input type="checkbox"/> Print Material <input type="checkbox"/> Mass media <input type="checkbox"/> Sporting/ community events <input type="checkbox"/> Other
<b>Target Audience</b>	<input type="checkbox"/> Health professional staff <input type="checkbox"/> Children/school students <input type="checkbox"/> Youth <input type="checkbox"/> Teachers/childcare or preschool staff <input type="checkbox"/> Care givers - e.g. Mothers <input type="checkbox"/> Community members <input type="checkbox"/> Community educators or health promoters <input type="checkbox"/> Interagency members	<input type="checkbox"/> Health professional staff <input type="checkbox"/> Children/school students <input type="checkbox"/> Youth <input type="checkbox"/> Teachers/childcare or preschool staff <input type="checkbox"/> Care givers - e.g. Mothers <input type="checkbox"/> Community members <input type="checkbox"/> Community educators or health promoters <input type="checkbox"/> Interagency members	<input type="checkbox"/> Health professional staff <input type="checkbox"/> Children/school students <input type="checkbox"/> Youth <input type="checkbox"/> Teachers/childcare or preschool staff <input type="checkbox"/> Care givers - e.g. Mothers <input type="checkbox"/> Community members <input type="checkbox"/> Community educators or health promoters <input type="checkbox"/> Interagency members	<input type="checkbox"/> Health professional staff <input type="checkbox"/> Children/school students <input type="checkbox"/> Youth <input type="checkbox"/> Teachers/childcare or preschool staff <input type="checkbox"/> Care givers - e.g. Mothers <input type="checkbox"/> Community members <input type="checkbox"/> Community educators or health promoters <input type="checkbox"/> Interagency members	<input type="checkbox"/> Health professional staff <input type="checkbox"/> Children/school students <input type="checkbox"/> Youth <input type="checkbox"/> Teachers/childcare or preschool staff <input type="checkbox"/> Care givers - e.g. Mothers <input type="checkbox"/> Community members <input type="checkbox"/> Community educators or health promoters <input type="checkbox"/> Interagency members	<input type="checkbox"/> Health professional staff <input type="checkbox"/> Children/school students <input type="checkbox"/> Youth <input type="checkbox"/> Teachers/childcare or preschool staff <input type="checkbox"/> Care givers - e.g. Mothers <input type="checkbox"/> Community members <input type="checkbox"/> Community educators or health promoters <input type="checkbox"/> Interagency members
<b>Estimated Coverage %</b>						
<b>Frequency</b>	<input type="checkbox"/> Occasional (2-4 times/year) <input type="checkbox"/> Regular (5-12 times/year) <input type="checkbox"/> Ongoing/routine (daily/weekly) <input type="checkbox"/> please specify duration	<input type="checkbox"/> Occasional (2-4 times/year) <input type="checkbox"/> Regular (5-12 times/year) <input type="checkbox"/> Ongoing/routine (daily/weekly) <input type="checkbox"/> please specify duration	<input type="checkbox"/> Occasional (2-4 times/year) <input type="checkbox"/> Regular (5-12 times/year) <input type="checkbox"/> Ongoing/routine (daily/weekly) <input type="checkbox"/> please specify duration	<input type="checkbox"/> Occasional (2-4 times/year) <input type="checkbox"/> Regular (5-12 times/year) <input type="checkbox"/> Ongoing/routine (daily/weekly) <input type="checkbox"/> please specify duration	<input type="checkbox"/> Occasional (2-4 times/year) <input type="checkbox"/> Regular (5-12 times/year) <input type="checkbox"/> Ongoing/routine (daily/weekly) <input type="checkbox"/> please specify duration	<input type="checkbox"/> Occasional (2-4 times/year) <input type="checkbox"/> Regular (5-12 times/year) <input type="checkbox"/> Ongoing/routine (daily/weekly) <input type="checkbox"/> please specify duration
<b>Comments</b>						

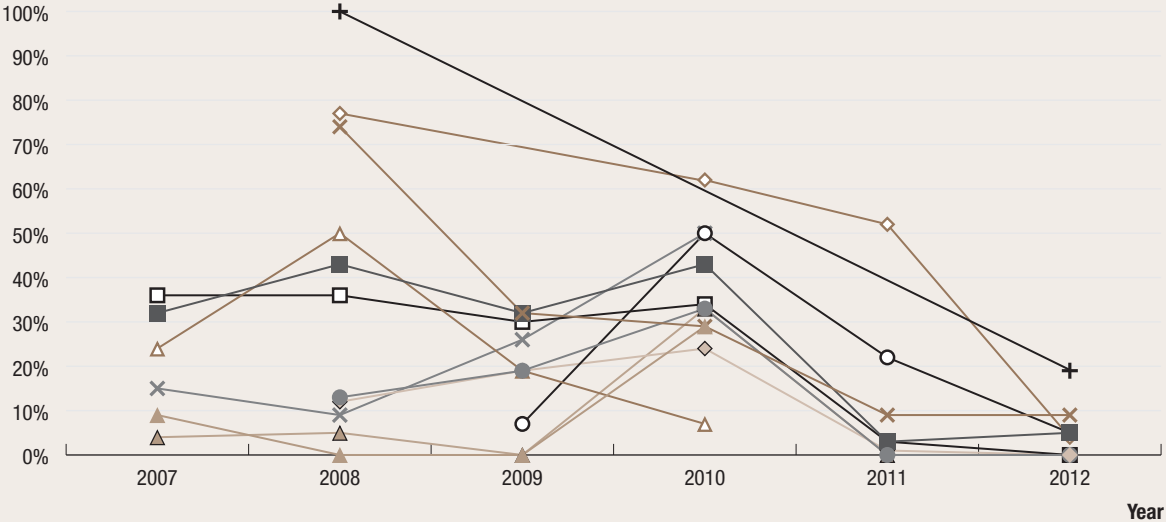
# Appendix 3: De-identified community trachoma prevalence trends by regions

**Figure A.1** Trachoma prevalence of screened children aged 5-9 years by year and de-identified community\* in North Alice Springs Remote region, Northern Territory, 2007 – 2012



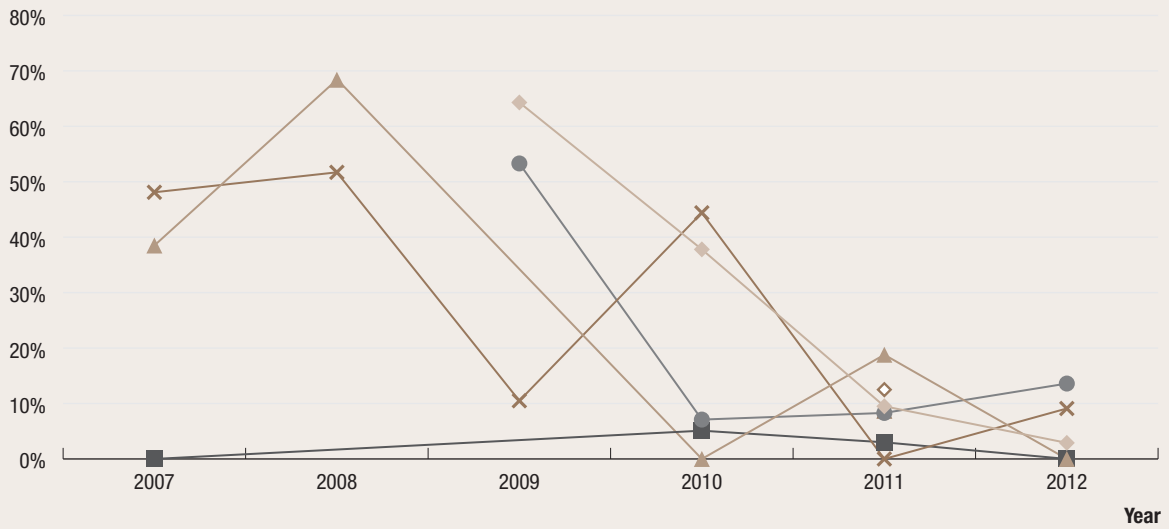
\* Where more than 10 children were screened

**Figure A.2** Trachoma prevalence of screened children aged 5-9 years by year and de-identified community\* in South Alice Springs Remote region, Northern Territory, 2007 – 2012



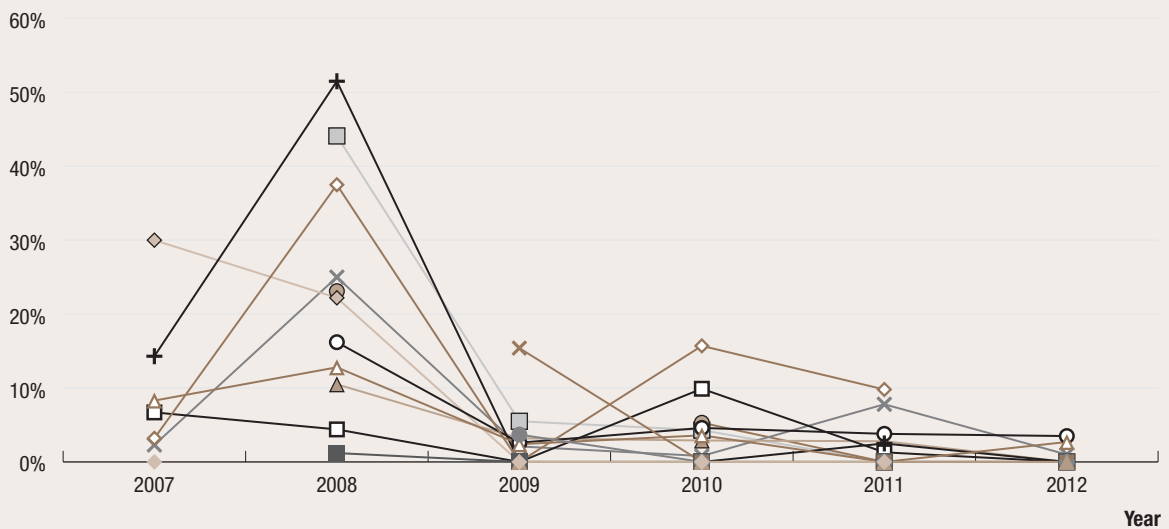
\* Where more than 10 children were screened

**Figure A.3** Trachoma prevalence of screened children aged 5-9 years by year and de-identified community\* in Barkly region, Northern Territory, 2007 – 2012



\* Where more than 10 children were screened

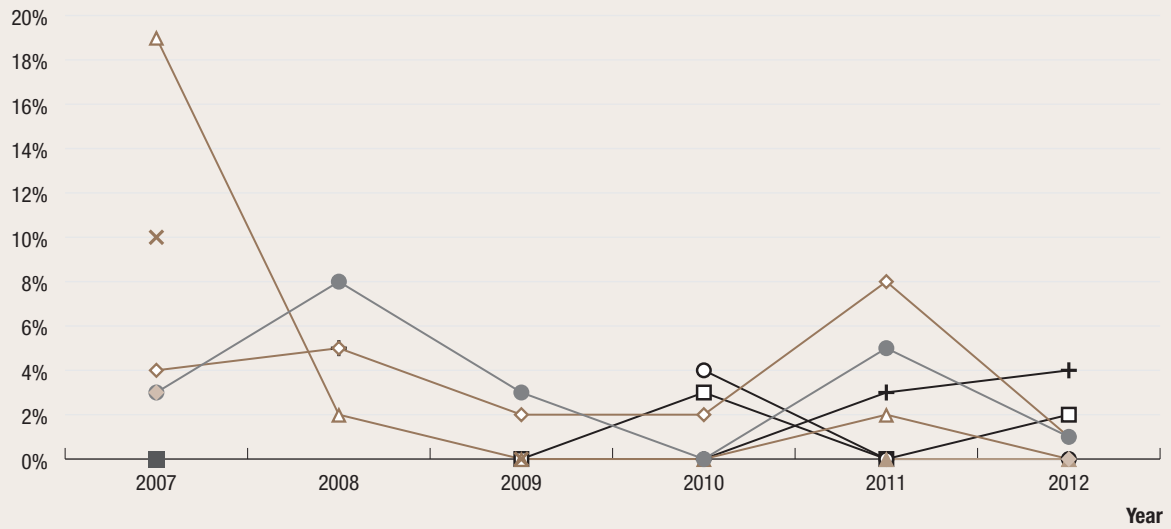
**Figure A.4** Trachoma prevalence of screened children aged 5-9 years by year and de-identified community\* in Darwin Rural region, Northern Territory, 2007 – 2012



\* Where more than 10 children were screened

Figure A.5

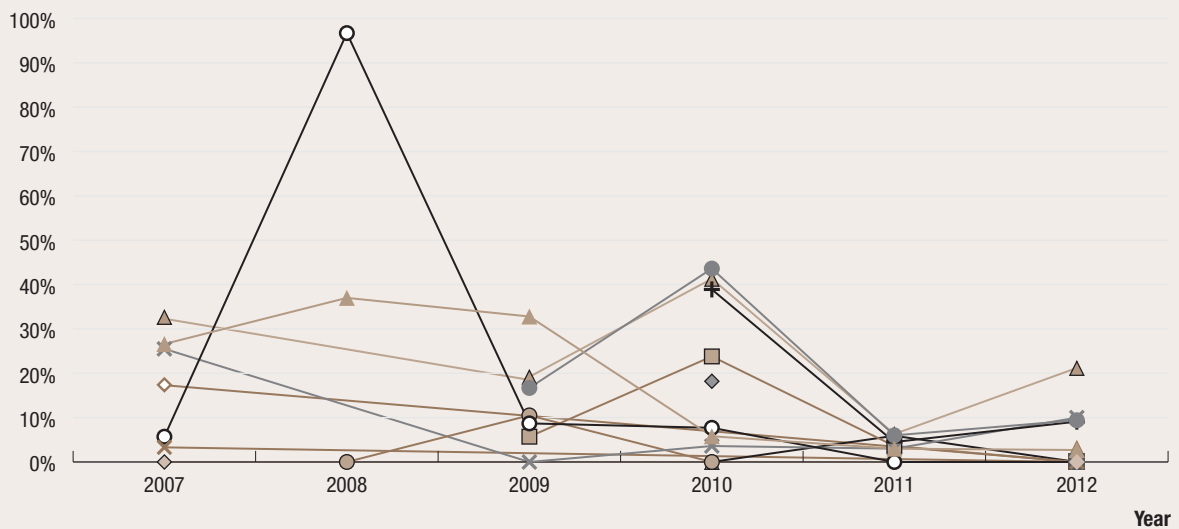
Trachoma prevalence of screened children aged 5-9 years by year and de-identified community\* in East Arnhem region, Northern Territory, 2007 – 2012



\* Where more than 10 children were screened

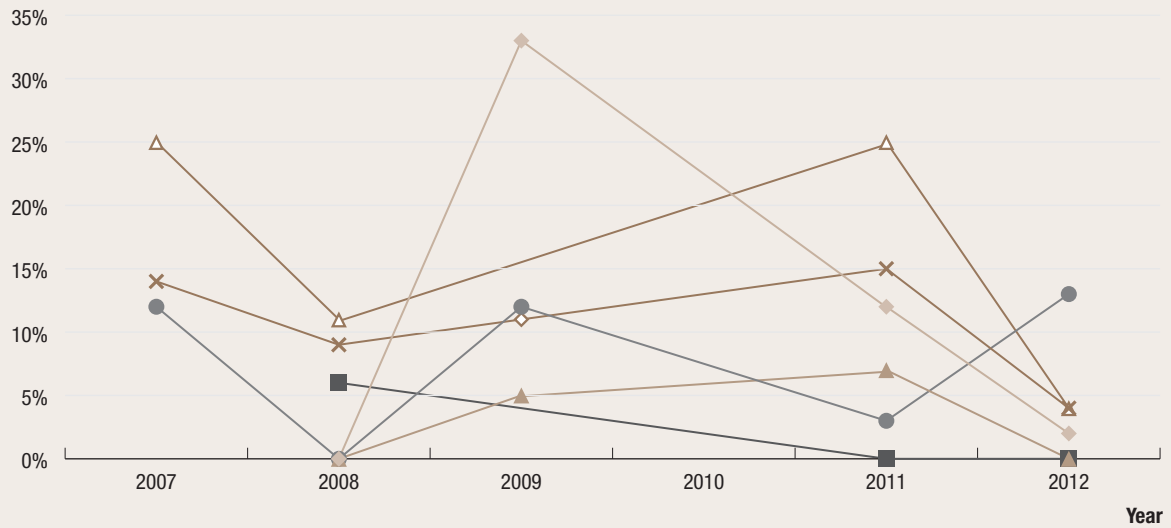
Figure A.6

Trachoma prevalence of screened children aged 5-9 years by year and de-identified community\* in Katherine region, Northern Territory, 2007 – 2012



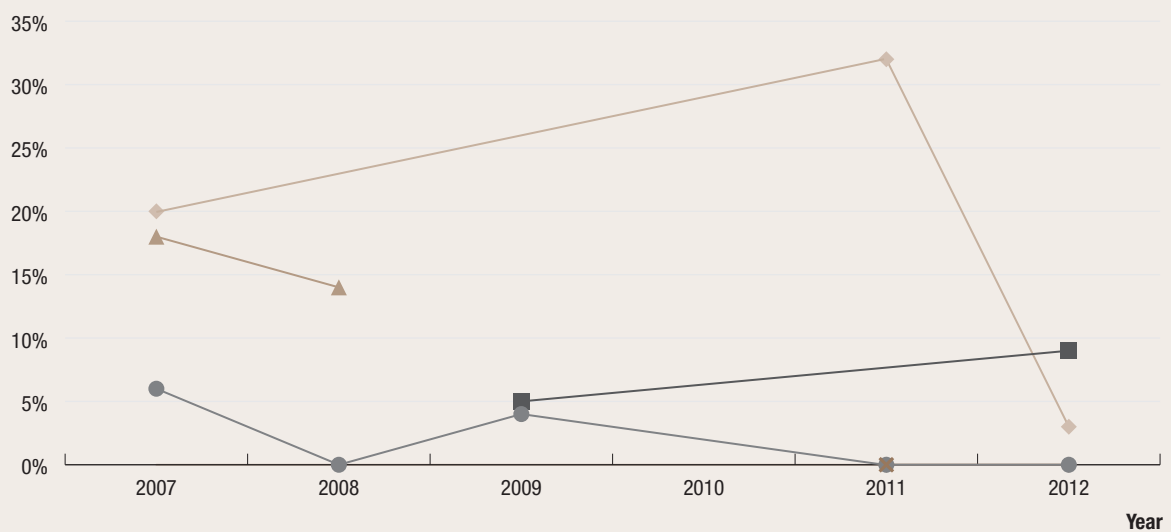
\* Where more than 10 children were screened

**Figure A.7** Trachoma prevalence of screened children aged 5-9 years by year and de-identified community\* in Anangu Pitjantjatjara Yankunytjatjara (APY) Lands region, South Australia, 2007 – 2012



\* Where more than 10 children were screened

**Figure A.8** Trachoma prevalence of screened children aged 5-9 years by year and de-identified community\* in Eyre and Western region, South Australia, 2007 – 2012

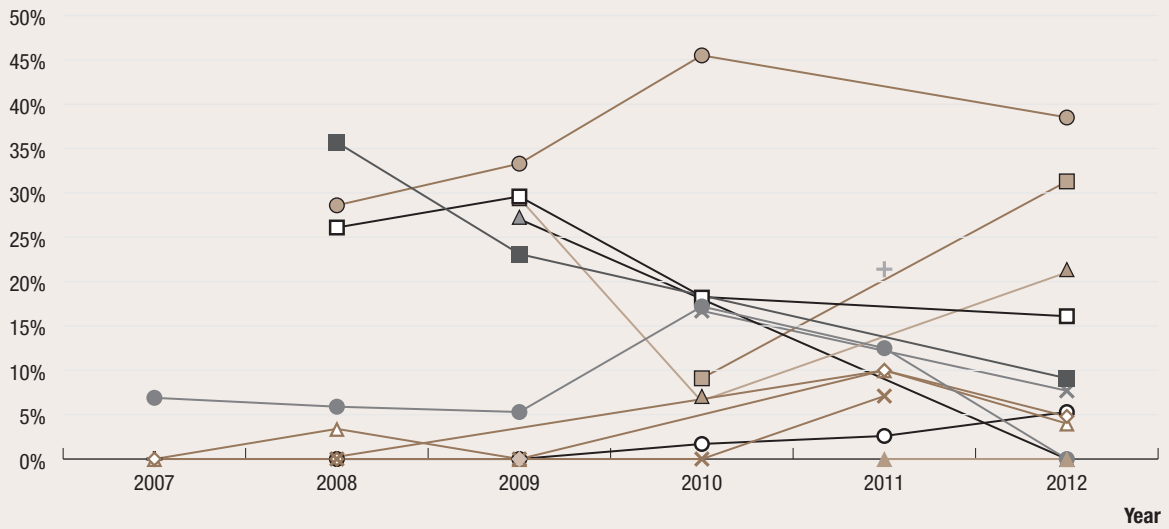


\* Where more than 10 children were screened



Figure A.9

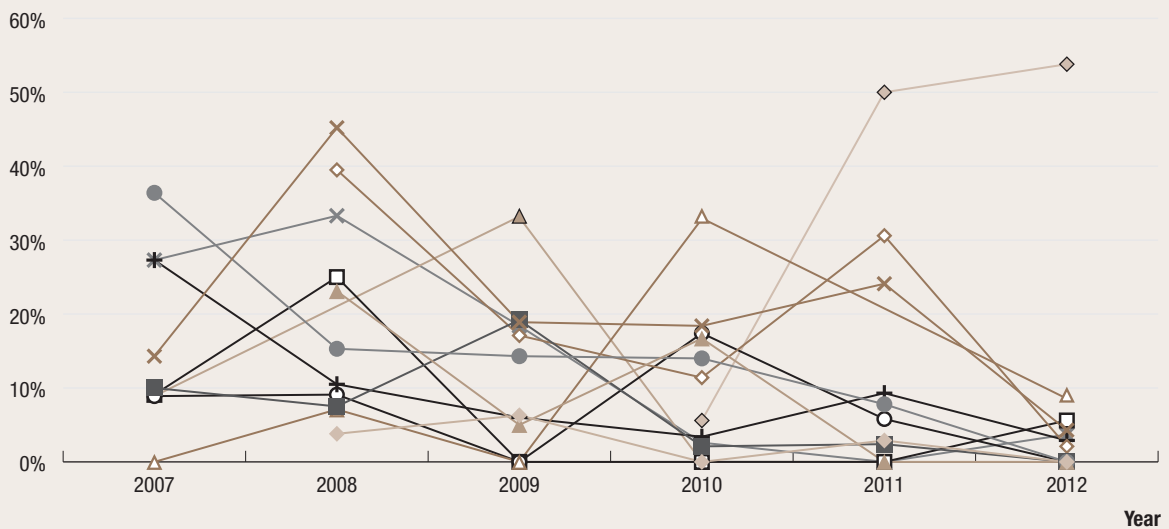
Trachoma prevalence of screened children aged 5-9 years by year and de-identified community\* in Goldfields region, Western Australia, 2012



\* Where more than 10 children were screened

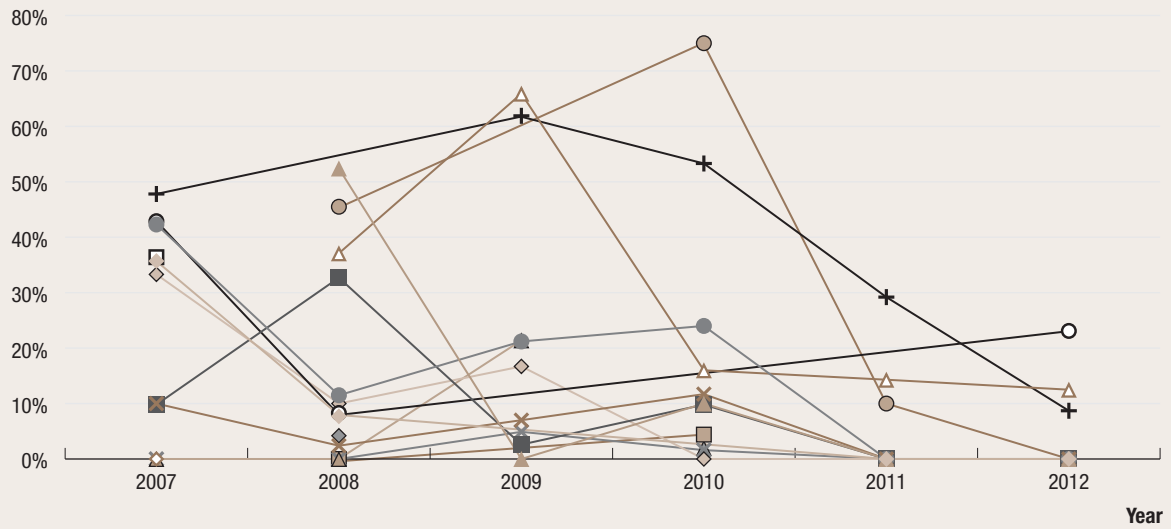
Figure A.10

Trachoma prevalence of screened children aged 5-9 years by year and de-identified community\* in West Kimberly region, Western Australia, 2012



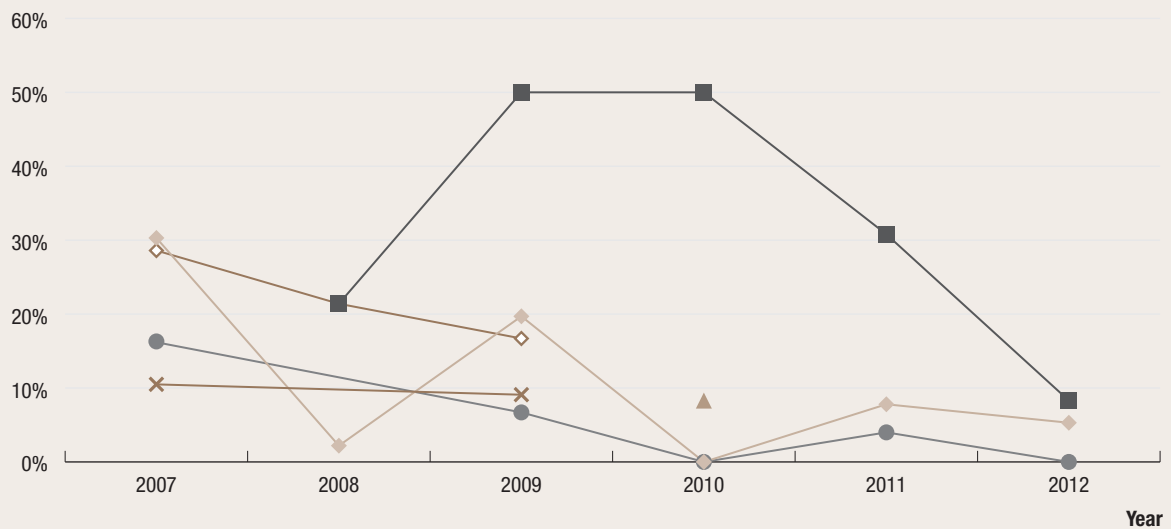
\* Where more than 10 children were screened

**Figure A.11** Trachoma prevalence of screened children aged 5-9 years by year and de-identified community\* in East Kimberly region, Western Australia, 2012



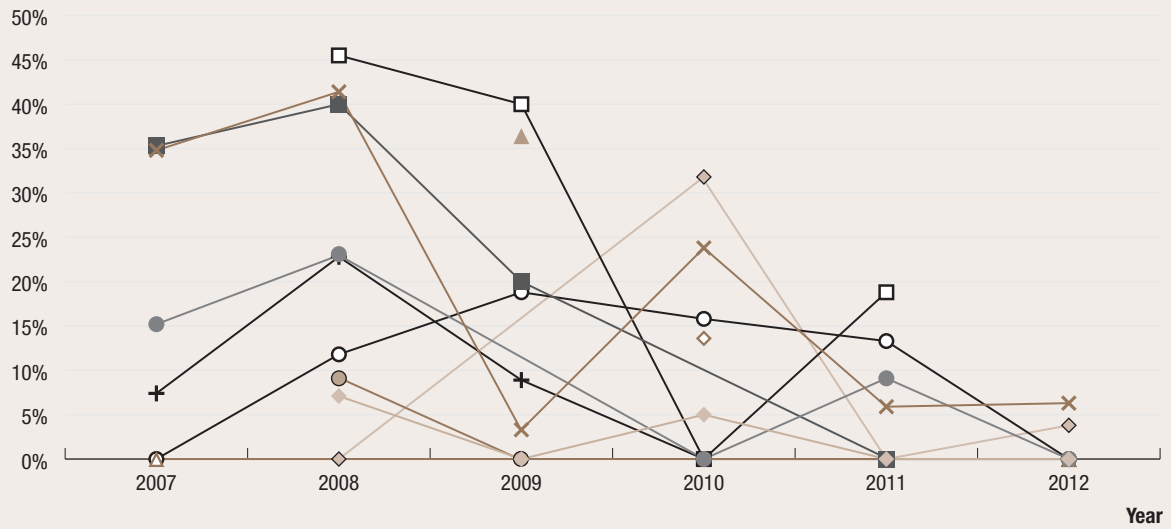
\* Where more than 10 children were screened

**Figure A.12** Trachoma prevalence of screened children aged 5-9 years by year and de-identified community\* in Midwest region, Western Australia, 2012



\* Where more than 10 children were screened

**Figure A.13** Trachoma prevalence of screened children aged 5-9 years by year and de-identified community\* in Pilbara region, Western Australia, 2007 – 2012



\* Where more than 10 children were screened









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All information in this publication is correct as at November 2013