

Australian Trachoma Surveillance Report 2018

The Kirby Institute, UNSW Sydney

WHO Collaborating Centre in Trachoma, 2019

Prepared by the National Trachoma Surveillance and Reporting Unit

The Kirby Institute, UNSW Sydney on behalf of Australian organisations involved in trachoma control activities, under a funding agreement with the Australian Government.

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Acknowledgements

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Technical terms and definitions

Definitions are from the Communicable Diseases Network Australia's (CDNA) 2014 *National guidelines for the public health management of trachoma in Australia*.¹

Active trachoma

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

At-risk communities

Communities classified by jurisdictions as being at higher risk of trachoma based on 1) no recent data, but historical evidence of endemicity; 2) data of active trachoma prevalence of 5% or more in children aged 5-9 years in the last 5 years; or 3) data of less than 5% active trachoma prevalence but with a recorded prevalence of active trachoma of 5% or above in the past 5 years.

Clean face

Absence of nasal and ocular discharge on the face.

Community-wide treatment

The antibiotic treatment of all people in the community who weigh more than 3 kg living in houses with children under 15 years of age.

Contacts

Anyone who is living and sleeping in the same house as a child with trachoma. If the child lives or sleeps in multiple households, then all members of each household are regarded as contacts.

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

Proportion of Aboriginal and Torres Strait Islander children aged 5-9 years in a community who were screened for trachoma at the time of community screening.

Trachomatous inflammation - follicular (TF)

Presence of five or more follicles in the central part of 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 upper 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

Proportion of Aboriginal and Torres Strait Islander people in a community who weigh more than 3 kg and live in a house with one or more children aged below 15 years who were treated for trachoma during an episode of community-wide treatment.

Abbreviations

ABS	Australian Bureau of Statistics
APY	Anangu Pitjantjatjara Yankunytjatjara
ACCHS	Aboriginal Community Controlled Health Services
AHCSA	Aboriginal Health Council of South Australia
CDC	Centre for Disease Control, NT Department of Health
CDNA	Communicable Diseases Network Australia
EH&CDSSP	Eye Health and Chronic Disease Specialist Support Program
MBS	Medicare Benefits Schedule
NSW	New South Wales
NT	Northern Territory
NTSCRG	National Trachoma Surveillance and Control Reference Group
NTSRU	National Trachoma Surveillance and Reporting Unit
PCR	Polymerase chain reaction
QLD	Queensland
SA	South Australia
SAFE	Surgery, Antibiotics, Facial cleanliness and Environment
WA	Western Australia
WACHS	WA Country Health Service
WHO	World Health Organization

Preface

This report was prepared by the National Trachoma Surveillance and Reporting Unit (NTSRU) in collaboration with the National Trachoma Surveillance and Control Reference Group (NTSCRG) and jurisdictional health departments funded to undertake trachoma control activities by the Australian Government Department of Health, which also funds the NTSRU.

Trachoma program data for 2018 were provided by the Northern Territory (NT), Queensland (QLD), South Australia (SA) and Western Australia (WA). Program activities, including data collection and analysis, were guided by the *CDNA National guidelines for the public health management of trachoma in Australia*.¹

The report contains a short description of methods used by the jurisdictions to undertake trachoma surveillance and control, and the methods of data analysis used by the NTSRU. The main findings of the report are presented as tables and figures, with supporting text.

The report is available online at [Australian Trachoma Surveillance Reports - The Kirby Institute UNSW](http://kirby.unsw.edu.au/report-type/australian-trachoma-surveillance-reports) [<kirby.unsw.edu.au/report-type/australian-trachoma-surveillance-reports>]

Executive summary

Plateauing of trachoma prevalence continued in 2018 in all jurisdictions except SA where there has been a steady decrease to 0.5%. There was a decrease in 2018 in the number of communities designated at risk for trachoma, but a small increase in the number of communities with endemic trachoma (63 in 2018 compared to 60 in 2017). There has been resurgence in some communities that had previously been thought to have eliminated trachoma. The proportion of children with clean faces declined in 2018 in all jurisdictions except WA.

Endemic levels of trachoma and poor facial cleanliness can only be addressed by the strengthening of health promotion strategies, environmental health improvements and health service activities to comprehensively implement all aspects of the SAFE strategy.

Summary of findings

Trachoma program coverage

- In 2018, jurisdictions designated 120 remote Indigenous communities as at risk of endemic trachoma (Table 1.1).
- The number of communities at risk of trachoma in Australia has continued to decline since 2009. From 2017 to 2018 the number of at-risk communities declined from 130 to 120.
- Of 120 communities designated by jurisdictions to be at risk at the start of 2018, 115 (96%) were determined to require screening, antibiotic distribution or both according to the Guidelines, with 13 requiring antibiotic treatment but not screening as per Guidelines (Table 1.1).
- The remaining 5 at-risk communities did not require screening or treatment as their previous year's prevalence was under 5%.
- Of the communities that required screening and/or treatment, 91% (105/115) received the required screening and/or treatment (Table 1.1).
- In the NT 8 communities that required screening and 2 communities that required treatment did not receive the appropriate services due to logistical issues.

Screening coverage

- Jurisdictions undertook screening for 92% (94/102) of the communities determined to require screening in 2018 (Table 1.1, Table 1.2).
- Within screened communities, 2045 (88%) of an estimated 2327 resident children aged 5-9 years were screened (Table 1.2). This was a higher coverage than in 2017 (88% compared to 83%).
- Screening coverage of children aged 5-9 years in the screened communities was 85% for the NT, 87% for SA, 93 % for WA and 97% for QLD (Table 1.2, Figure 1.4).

Clean face prevalence

- A total of 2531 children aged 5-9 years in at-risk communities were examined for clean faces (Table 1.2).
- The overall prevalence of clean faces in children aged 5-9 years was 73%, with 74% in the NT, 82% in SA, 63% in WA and 80% in QLD, with the prevalence of clean faces decreasing since 2017 in all jurisdictions except WA (Table 1.2, Figure 1.5).

Trachoma prevalence

- Overall trachoma prevalence in 5-9-year olds has increased slightly, from 3.8% in 2017 to 3.9% 2018 (Table 1.2).

- The overall prevalence of active trachoma in children aged 5-9 years in jurisdictions was 0.5% in SA, 2.8% in QLD, 4.6% in WA and 5.1% in the NT (Table 1.2).
- No trachoma was reported in children aged between 5-9 years in 34 (30%) of the 112 at-risk communities (not including 8 at-risk communities that did not receive required screening in 2018 in the NT) (Table 1.3). This was a decrease from 2017 with 39% of no trachoma in at-risk communities.
- Trachoma was at endemic levels (prevalence above 5% in 5-9-year olds) in 63 (56%) of the 112 at-risk communities (not including 8 at-risk communities that did not receive required screening in 2018) (Table 1.3). This was an increase from 2017 where 47% of at-risk communities had endemic levels of trachoma.
- Hyperendemic levels of trachoma (above 20%) were found in 13 (12%) of the 112 at-risk communities (not including 8 at-risk communities that did not receive required screening in 2018) (Table 1.3). This is a slight decrease from 2017 where 13% at-risk communities reported hyperendemic levels of trachoma. Population sizes of these communities ranged from 5 -110 children with 7 communities under 20 children and 5 over 20 children in the community.

Antibiotic distribution and coverage

- Antibiotic distribution took place in 71 communities of 73 corresponding to 97% of those requiring antibiotics according to the Guidelines (Table 1.4).
- Two communities in the NT that were due for treatment of the whole of community did not receive the required treatment in 2018 (Table 1.4).
- Treatment coverage for active cases detected in screening activities undertaken in 2018 was 99% (222/224) (Table 1.5).
- Treatment coverage for community members requiring treatment was 79%, however this number does not include the community members from the 2 communities that did not receive treatment. This number also does not include communities that opted for case and household treatment, rather than community-wide treatment, with additional focus on health and environmental promotion and improvements.
- The jurisdictional trachoma programs delivered a total of 6576 doses of azithromycin in 2018 (Table 1.5). Fewer doses of azithromycin were delivered in 2018 compared to 2017 (9297 doses).
- In 2018 437 community members declined antibiotic treatment.

Trachoma-related trichiasis

- Overall 16006 adults aged 15 years and over in an estimated population of 46733 were screened for trichiasis in 131 at-risk and previously at-risk communities (Table 1.6).
- The prevalence of trichiasis in screened adults aged 15 years and older was 0.1% and 0.3% in adults aged 40 years and older, a decrease from 0.3% and 0.5% respectively in 2017 (Table 1.6).
- There were 29 cases of trichiasis detected in adults aged 15 years and older (Table 1.6).
- Surgery for trachoma-related trichiasis in the past 12 months was reported to have been undertaken for 10 people in 2018 (Table 1.6).

Health promotion and environmental health improvement activities

- Public health and environmental health teams conducted health promotion activities in at least 130 remote Indigenous communities. These included over 250 activities including school visits, soap distribution and bathroom assessments.

Background

Trachoma is a disease of the eye, caused by infection with the *Chlamydia trachomatis* bacteria, particularly its serovars A, B, Ba and C. It is the world's leading infectious cause of preventable blindness. Based on reporting by the World Health Organization (WHO) in February 2018, trachoma remains endemic in 41 countries in which approximately 1.9 million people have visual impairment due to trachoma, worsening the quality of life in those who are already disadvantaged. Transmission of ocular *C. trachomatis* occurs through close facial contact, hand-to-eye contact, via contamination of personal items such as towels, clothing and bedding and possibly by flies. Trachoma generally occurs in dry, dusty environments and is strongly associated with poor living conditions and sanitation. Crowding 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 prevalence. Children have more frequent and longer-lasting episodes of infection than adults and are believed to be the main community reservoirs of infection.²⁻⁴

Infection with *C. trachomatis* causes inflammation of the conjunctival tissue in the eye, leading to clinically recognisable trachoma. Diagnosis is by visual inspection, and the detection of follicles (white spots) and papillae (red spots) on the inner upper eyelid. Repeated infections with *C. trachomatis*, especially during childhood, may lead to scarring of the eyelid, causing it to contract and distort, leading to the eyelashes turning inwards, trichiasis, and scratching of the outer surface of the cornea. The resulting damage to the cornea by trichiasis is the main pathway by which trachoma leads to vision loss and blindness.^{1, 5, 6} Trichiasis scarring is irreversible but if early signs of in-turned eyelashes are found, surgery to the eyelid is usually effective in preventing further damage to the cornea.

WHO, through the Global Alliance for the Elimination of Trachoma by 2020 (GET 2020), advocates the SAFE strategy for trachoma control. The SAFE acronym highlights the key components of the strategy, which are Surgery for trichiasis, Antibiotic treatment regimens via the use of azithromycin at the individual, household or community levels, the promotion of Facial cleanliness and Environmental improvements. The strategy is designed to be implemented within a community health framework to ensure consistency and continuity of approach in the required screening, control measures, data collection and reporting, as well as building community capacity.⁷⁻⁹

WHO guidelines recommend that clinical trachoma is treated by a single dose of the antibiotic azithromycin. When prevalence exceeds 5% in children aged 1-9 years, guidelines recommend mass drug administration to the entire community on a regional or district basis. Australian guidelines differ slightly from WHO's recommendation to treat the whole community^{10,11} in that they provide for treatment at the household level at a lower prevalence, and define community coverage based on the treatment of households with at least one child aged 15 or under.

Trachoma control in Australia

Australia is the only high-income country with endemic trachoma. It occurs primarily in remote and very remote Indigenous communities in the NT, SA and WA. In 2008, cases were also found in NSW and QLD, where trachoma was thought to have been eliminated. People with trichiasis are present in all jurisdictions.^{10,12} The National Trachoma Management Program was initiated in 2006. In 2009, the Australian Government's *Closing the Gap - Improving Eye and Ear Health Services for Indigenous Australians* initiative committed \$16 million over a 4-year period towards eliminating trachoma in Australia. In 2013, a further \$16.5 million and in 2017 a further \$20.8 million to continue, improve and expand trachoma control and health promotion initiatives in jurisdictions with endemic trachoma were committed by the Australian Government. Funding was also provided to jurisdictions with a previous history of trachoma to ascertain the need for control programs. Since 2006 the Australian Government has funded the National Trachoma Surveillance and Report Unit to provide a national mechanism for monitoring and evaluating trachoma control.¹³

The surveillance and management of trachoma in 2018 in all jurisdictions were guided by the CDNA 2014 *National guidelines for the public health management of trachoma in Australia*.¹ The 2014 guidelines were an update to the 2006 version,¹⁴ with one of the main changes being the option of not screening all endemic communities every year, so that jurisdictions could instead use resources for antibiotic distribution and health promotion activities. The guidelines were developed in the context of the WHO SAFE strategy and make recommendations for control strategies, data collection, reporting and analysis.

The National Trachoma Surveillance and Reporting Unit

NTSRU is responsible for data collection, analysis and reporting related to the ongoing evaluation of trachoma control strategies in Australia. The NTSRU has been managed by the Kirby Institute, UNSW Sydney since 2010,¹⁵⁻²² with the Centre for Eye Research Australia²³⁻²⁵ and the Centre for Molecular, Environmental, Genetic and Analytic Epidemiology at the University of Melbourne,²⁶ responsible for earlier years. The NTSRU operates under a contract between UNSW Sydney and the Australian Government Department of Health.

Methodology

To produce the data presented in this report, each jurisdiction undertook screening and antibiotic distribution for trachoma under the guidance of the 2014 *National Guidelines*, which recommend specific treatment strategies depending on the prevalence of trachoma detected through screening.¹

In 2006, when the National Trachoma Management Program was initiated, each jurisdiction identified communities determined to be at risk of trachoma based on historical prevalence data and other sources of knowledge. Over time, additional communities have been classified as being at risk, while some others have been reclassified as not at risk. Trachoma control activities focus on the communities designated at risk, but a small number of other communities designated as not at risk have also been included in screening activities, generally if there is anecdotal information suggesting the presence of active trachoma, or close geographic or cultural proximity to endemic communities.

The [WHO Simplified Trachoma Grading criteria](http://www.who.int/trachoma/resources/SAFE_documents/en/) (see <www.who.int/trachoma/resources/SAFE_documents/en/>) were used to diagnose and classify individual cases of trachoma in all jurisdictions. Data collection forms for use at the community level were developed by the NTSRU, based on the CDNA guidelines. Completed forms were forwarded by jurisdictional coordinators to the NTSRU for checking and analysis. Information provided to the NTSRU at the community level for each calendar year include:

- Number of Indigenous children aged 1-14 years screened for clean faces and the number with clean faces, by age group
- Number of Indigenous 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 Indigenous adults screened for trichiasis, number with trichiasis, and the number who had surgery for trichiasis
- Community-level implementation of health promotion activities.

The target group for screening activities in all regions is Indigenous children aged 5-9 years. This age group was chosen because of ready accessibility through schools, feasibility of eye examination and a presumption of similar levels of trachoma compared to younger age groups. Screening in communities has also included children 1-4 and 10-14 years, but efforts in previous years were not made to achieve substantial coverage in these age groups. In 2018 significant efforts were made to

reach high screening coverage in the 1-4 age group, leading to prevalence rates in that age group being confidently estimated.

Northern Territory

From 2013, the NT followed the screening and treatment schedule recommended in the 2014 CDNA *National Guidelines*. Trachoma screening and management in the NT were undertaken through collaboration between the Department of Health (Centre for Disease Control and Primary Health Care [Outreach/Remote]); Department of Education (Remote Schools) and Aboriginal Community Controlled Health Services (ACCHS). Trachoma screening is generally undertaken as a stand-alone exercise by the trachoma team and program partners with some support from local primary health-care centres or community controlled services. The NT uses school enrolment lists, electronic health records and local knowledge to determine the number of children aged 5-9 years present in the community at the time of screening. Following screening, treatment is undertaken by the trachoma team and program partners with support from primary health-care services.

In 2018, screening for trichiasis was undertaken opportunistically primarily by clinic staff during adult health checks, or by optometrists or ophthalmologists from the regional eye health services.

South Australia

In SA, the Trachoma Elimination Program is coordinated by Country Health SA Local Health Network. A combination of opportunistic, community-wide and routine screening was undertaken. The Eye Health and Chronic Disease Specialist Support Program, coordinated by Aboriginal Health Council of South Australia, provided opportunistic screening by visiting optometrists and ophthalmologists. Aboriginal Community Controlled Health Organisations delivered community-wide screening in schools as well as routine screening through adult and child health checks. Embedding screening and treatment practices in local health services for the sustainable elimination of trachoma has been a key focus. Since 2014 the nine Anangu Pitjantjatjara Yankunytjatjara (APY) Lands communities have been aggregated and reported as a single community for the purpose of trachoma surveillance due to the small populations of each community and the kinship links resulting in frequent mobility between these communities. An interagency State Trachoma Reference Group provides guidance and opportunities to advocate for improved service provision.

Western Australia

Trachoma screening and management in WA is the responsibility of the WA Country Health Service (WACHS) Population Health Units in the Kimberley, Goldfields, Pilbara and Midwest health regions. An interagency State Trachoma Reference Group has been established to provide program oversight. The WA State Trachoma Reference Group has established a set of operational principles which guide the program and provide consistent practice across the four endemic regions.

In collaboration with local primary health-care providers, the WACHS-Population Health Units screen communities in each region within a 4-week period, in August and September. People identified with active trachoma are treated at the time of screening. In communities with a prevalence above 5%, treatment of household contacts (and, if indicated, the overall community) is carried out in line with the WHO guidelines. In 2018, each region determined the screening denominator based on the school register, which is updated by removing names of children known to be out of the community and by adding names of children who are present in the community at the time of the screening. In conjunction with screening, an environmental assessment is carried out in the communities and, for some regions, health promotion activities are also included during the visit.

In 2011, WACHS amalgamated ten previously distinct communities in the Goldfields region and reported them as a single community for the purpose of trachoma surveillance because of the small populations and kinship links resulting in frequent mobility between these communities. From 2016,

four communities in the Pilbara region are similarly reported as one. These reporting changes may influence trends presented in WA reports from 2010-2018.

Western Australia trichiasis methodology overview

The *2014 CDNA National Guidelines for the Public Health Management of Trachoma* is the overarching guideline used for trichiasis screening with the WHO Simplified Trachoma Grading criteria used to diagnose and classify individual cases of trachomatous trichiasis. Each of the four trachoma endemic regions identified communities to be at risk of trichiasis based on both current and historical trachoma prevalence data. Screening occurs at different times of the year and is incorporated into other community programs such as the annual influenza program. The priority target group for screening activities in the four regions is Aboriginal and Torres Strait Islander adults aged 40 years and over at the time of screening. Regional Population Health Units report on screening of children from 15 years of age, and the Aboriginal Medical Service (Adult Health Check MBS Item 715) and the Visiting Optometrist Service both report on adults aged 40 years and over.

Regional specific information

Kimberley: trichiasis screening is conducted by the Public Health Team before trachoma screening when in community to provide education, during trachoma screening, during the influenza vaccination campaign and by visiting optometry services and health clinic staff in remote communities.

Clients are referred by the service provider to the ophthalmology clinics and regular optometrists. Trichiasis referrals to ophthalmology services are triaged by the optometrist's service in liaison with the ophthalmologist who visits every three months. The Visiting optometrist group manages the priority of recall, and specialist clerks use their individual recall systems.

For follow-up post-surgery, Lions Outback Vision (LOV) ensures that the information from specialists in Perth is conveyed to the appropriate community clinic, and adds this information to the optometric database for follow-up in communities.

Pilbara: screening is conducted by the Public Health Team at the time of trachoma screening, or during the influenza vaccination campaign or by the primary health care provider during the Adult Health Check MBS Item 715.

If required, referrals are made to the general practitioner (GP) or visiting specialists. The GP will also refer to a visiting specialist if required. The referring clinician is responsible for following up on the referral outcome.

Midwest: screening is conducted either by the Public Health Team earlier in the year or by the primary health care provider during the Adult Health Check MBS Item 715.

Referrals to the ophthalmologist are made through the patient's primary health care provider (Aboriginal Community Controlled Health Organisation [ACCHO] or private GP). The Public Health Unit does not have access to these referrals.

If trichiasis is found during screening by a member of the Public Health team, the patient is referred to an ophthalmology service within the region.

Goldfields: screening is conducted by the Public Health Team at the time of trachoma screening or a health promotion visit, or during the influenza vaccination campaign or by the primary health care provider during the Adult Health Check MBS Item 715.

If trichiasis is suspected during screening by a member of the Public Health team, patients are referred to their local primary health care provider for referral to an ophthalmology service (or through another preferred pathway such as a client's optometrist). All suspected cases found by primary health care services are referred to the ophthalmology service for review.

Referrals to the ophthalmologist are made via the patient's primary health care provider (Aboriginal Community Controlled Health Organisation [ACCHO] or private GP or optometrist). The Public Health Unit does not have access to these referrals nor the outcome of the consultation.

New South Wales

There were no communities designated at risk in NSW in 2018. Historical data provided derive from NSW Health, focused on screening in potentially at-risk communities in north western and far western NSW, with the most recent screening conducted in 2014. No trichiasis screening was conducted in NSW in 2018.

Queensland

The Communicable Diseases Branch within the Queensland Department of Health coordinates trachoma prevention and control activities across Queensland in collaboration with Hospital and Health Services. In Queensland, trachoma screening includes review by an ophthalmologist who conducts a more detailed examination beyond that required for the WHO simplified grading tool. This examination includes looking for Herbert's pits and corneal pannus and collecting conjunctival swabs for laboratory testing.

The remote communities of the Torres Strait Islands have had an uninterrupted ophthalmic service for the past 30 years. In addition to ophthalmic services, a visiting optometrist has been providing outreach optometry services to residents of the Torres Strait Islands for the past 11 years. The optometrist visits most communities twice a year performing comprehensive eye exams that include a check for trachomatous trichiasis.

In 2018, trachoma screening occurred in three communities in the north-western Queensland region and one community in the Torres Strait Islands.

Data analysis

For the purpose of this report, a community is defined as a geographic location where people reside and where there is at least one school. Community coverage is defined as the number of communities screened for trachoma as a proportion of those that were identified as at risk. Individual screening coverage is the proportion of resident children in the target age group who were screened.

Data on resident population numbers were derived by each jurisdiction using enrolment lists from schools and health clinics and from local advice. This method has been used since 2012. For 2007 to 2011 estimates were projected from the 2006 Australian census using Australian Bureau of Statistics (ABS) standard estimates of population increase (1.6%, 1.8% and 2.1% in the NT, WA and SA, respectively). The 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 group aged 5-9 years. Data from 2006 were excluded from assessment of time trends as collection methods in this first year differed substantially from those subsequently adopted.

Calculations for trachoma prevalence

Three distinct methods were used to calculate trachoma prevalence. The observed prevalence, estimated prevalence and overall prevalence reported in subsequent sections of the document were calculated as follows. The *observed prevalence* of active trachoma was calculated using only the data from screening activities undertaken during the reporting year. Since implementation of the 2014 *National Guidelines*, at-risk communities have not been required to undertake annual screening for

trachoma. Therefore, for communities not screened in 2018 an *estimated prevalence* of active trachoma was calculated by carrying forward the most recent prevalence data, following a method endorsed by the NTSCRG. This method is likely to result in an over-estimate of current prevalence, particularly for communities receiving community-wide treatment with antibiotics. Finally, the *overall prevalence* of active trachoma was calculated by combining data from at-risk communities screened during 2018, the most recent prevalence from at-risk communities that did not screen in 2018 and the most recent prevalence carried forward from communities that were judged by jurisdictions to have eliminated trachoma and were therefore removed from the at-risk register. Community-specific data for communities amalgamated for reporting purposes were used or carried forward until the year of amalgamation.

Discussion and interpretation of findings

The results of trachoma screening in 2018 are at once encouraging and cause for continuing focus on control. The declining prevalence of trachoma in some regions has been accompanied by an increase in others. The big gains from community level use of azithromycin have been sustained, such that trachoma prevalence in children remains at levels less than one fifth of those observed when the program first began in Australia in 2006. However, it is equally clear that the elimination of trachoma from all communities will only come about through a continuing emphasis on health promotion, supported by access to clean, safe washing facilities, to minimise the risk of the repeat chlamydial infections that are the fundamental cause of trachoma. These F and E elements of the SAFE strategy largely overlap with recommendations for the control of other infectious diseases in remote communities, a link that has been increasingly recognised and used to support program activities.

Australia has committed to elimination of trachoma as a public health problem by 2020. This goal remains ambitious yet achievable, provided we can continue to strengthen the public health and environmental measures that are recognised to be the key to control of trachoma.

Screening coverage

Screening coverage has been presented in this report as both the proportion of at-risk communities screened, and the proportion of children aged 5-9 years screened in these communities. Before the revision of the guidelines in 2014, jurisdictions were encouraged to screen all at-risk communities annually, so the proportion of communities screened provided an indication of how well this goal had been achieved. Under the revised guidelines, jurisdictions can choose to focus resources on control activities, including antibiotic distribution, rather than repeated annual screening in high prevalence communities. At the other end of the spectrum, communities with low levels of trachoma do not require annual screening. Therefore the proportion of communities screened should be viewed as an indicator of process, and not of the quality or success of the program. In contrast, the proportion of children aged 5-9 years assessed for trachoma in communities that have undertaken screening is an important performance measure, with the guidelines aiming for coverage of at least 85%. In 2018 overall coverage in screened communities was 85%, and at least 85% coverage was achieved in 89% of the communities. In 2018 jurisdictions also increased screening activities in the 1-4-year-old age group, to ensure consistency with global standards of measuring prevalence in 1-9-year olds, and attained an overall screening coverage of 65%. Screening was implemented in 92% of communities for which it was required on the basis of the guidelines, with eight communities not screened in the Northern Territory due to logistical issues. These communities will be screened early in 2019.

Trachoma prevalence

Trachoma prevalence at a regional and jurisdictional level in the high-risk communities was calculated by including the most recent prevalence estimates from all communities considered at risk at any time since 2007. Across all four jurisdictions, the overall prevalence of trachoma among children 5-9 years in 2017 was 3.9%, a slight increase from 3.8% in 2017. At a regional level, the prevalence of trachoma in children aged 5-9 years in at-risk communities ranged from 0% to 12.2%.

Endemic trachoma is defined by WHO as prevalence of active trachoma at 5% or higher in children aged 1-9 years. With very limited screening coverage of the children aged 1-4 years in previous years in Australia, the data obtained for this age group cannot be assumed to be representative, so they have not been incorporated in the estimate. For the purpose of demonstrating elimination according to WHO criteria, the jurisdictional teams committed to undertaking more comprehensive assessments in 1-4-year olds in a limited number of communities in 2018, to allow the prevalence in 1-9-year olds to be calculated.

Trachoma control programs in Australia in all jurisdictions except Queensland undertook trachoma grader training to ensure rigorous and accurate trachoma grading. This is particularly important in communities where trachoma prevalence is decreasing, with fewer children affected, and an increased likelihood of false-positive findings. Ongoing attention to training graders is required to ensure the integrity of future screening activities. A register for trained graders is being developed to provide a mechanism to document training process for the WHO dossier and transferability of staff between jurisdictions.

Treatment for trachoma

Antibiotic distribution is a major component of the SAFE strategy. While coverage in 2018 remained high at 79% of community members requiring treatment under the guidelines, it has declined from last year's coverage of 82%. This is in part due to the number of people declining treatment. The number of those declining treatment was officially recorded for the first time in 2018 with 5% (437/8079) of community members considered to require treatment, declining the offer. This however does not include communities that declined community-wide treatment, opting for case and household treatment and intensifying focus on health promotion and environmental improvements. The implications of undertaking this strategy for trachoma control is not yet understood and therefore ongoing surveillance is imperative.

Trachoma-related trichiasis

Overall, 7993 adults aged 40 years and older were reported to be screened for trichiasis compared to 8206 in 2017 and 5774 in 2016. Among those screened in 2018, 23 were found to have trichiasis, and 10 episodes of trichiasis surgery were reported.

Data from Visiting Optometrist Services (VOS) were also received from Western Australia illustrating a high level of population outreach with referral systems in place. One case of trichiasis was detected through this service. It is expected that data from VOS in other jurisdictions will be made available to the NTSRU for the 2019 report.

Facial cleanliness

The proportion of screened children aged 5-9 years who had clean faces has remained at similar levels to previous years, with slight decreasing trends in all jurisdictions except in Western Australia where there was an increase after a dramatic decrease in 2017. Although much has been done to promote normalisation of facial cleanliness in communities, more work is needed to ensure that children have access to safe and functional washing facilities, and health promotion messaging continues.

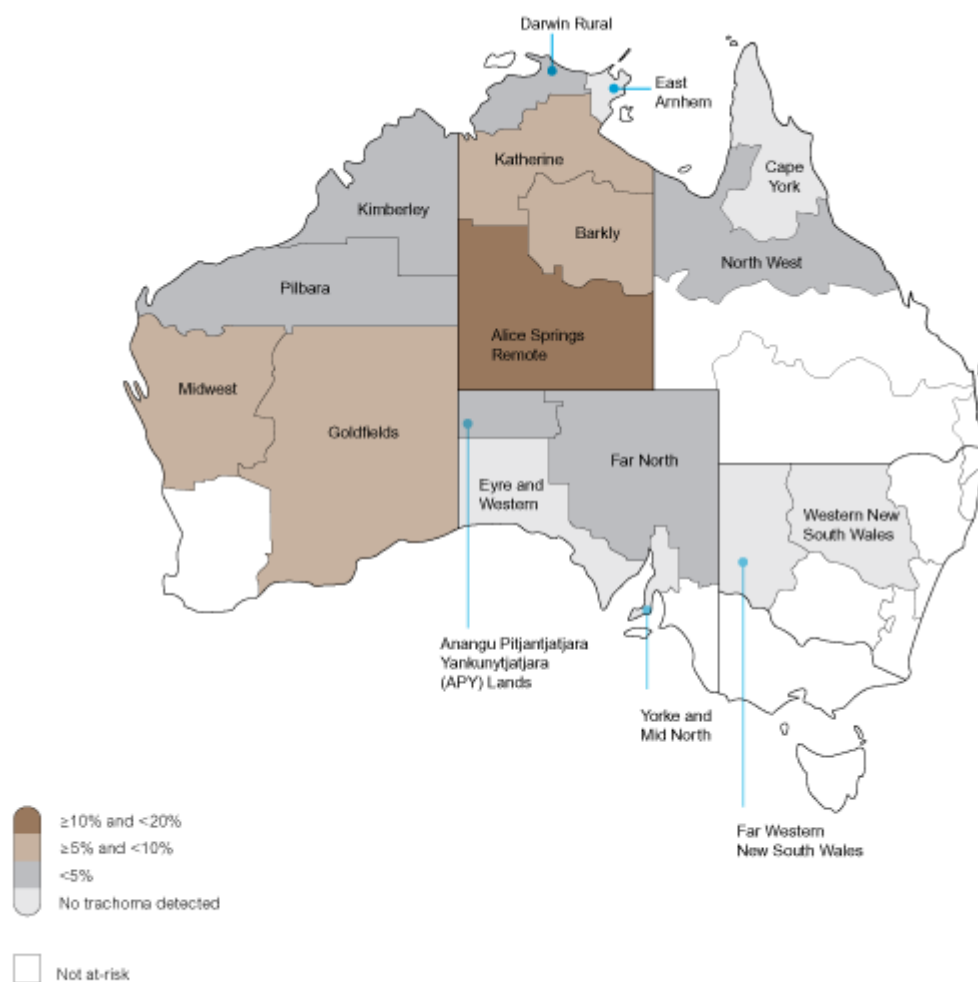
Health promotion and environmental health activities

Jurisdictions have continued to support and document health promotion activities that focus on improving hygiene-related practices, particularly facial cleanliness in children. The Australian Government Department of the Prime Minister and Cabinet has initiated discussions and forums collaborating with jurisdictional Departments of Health, Housing and Education to focus on the provision of functioning washing facilities in remote communities and the promotion of facial cleanliness. The new Project Agreements for Australian Government funding of jurisdictional trachoma control activities for 2017-18 to 2020-21 require the monitoring of all of the SAFE strategy elements including environmental health improvement activities. Western Australia reported on broad activities undertaken in remote communities. No jurisdiction has established a mechanism for systematically documenting and reporting on progress in environmental health improvement activities at the community or regional level. The NTSCRG will continue to provide guidance on surveillance and monitoring issues related to both health promotion and environmental health.

National results

Figures and Tables

Figure 1.1 Overall trachoma prevalence in children aged 5-9 years in all at-risk communities by region, Australia 2018*



*Most recent estimates carried forward in communities that did not screen in 2018

Figure 1.2 Number of communities designated at risk by jurisdiction, Australia 2007 – 2018

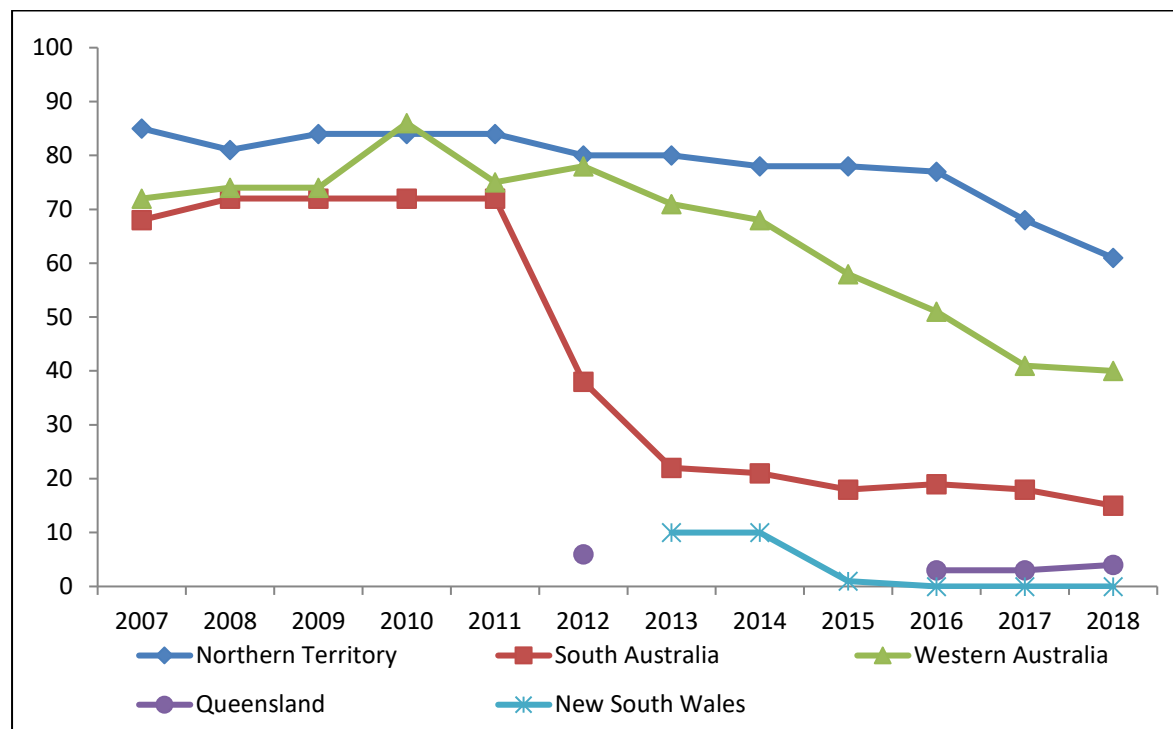


Figure 1.3 Number of at-risk communities according to trachoma control strategy implemented by jurisdiction, Australia 2018

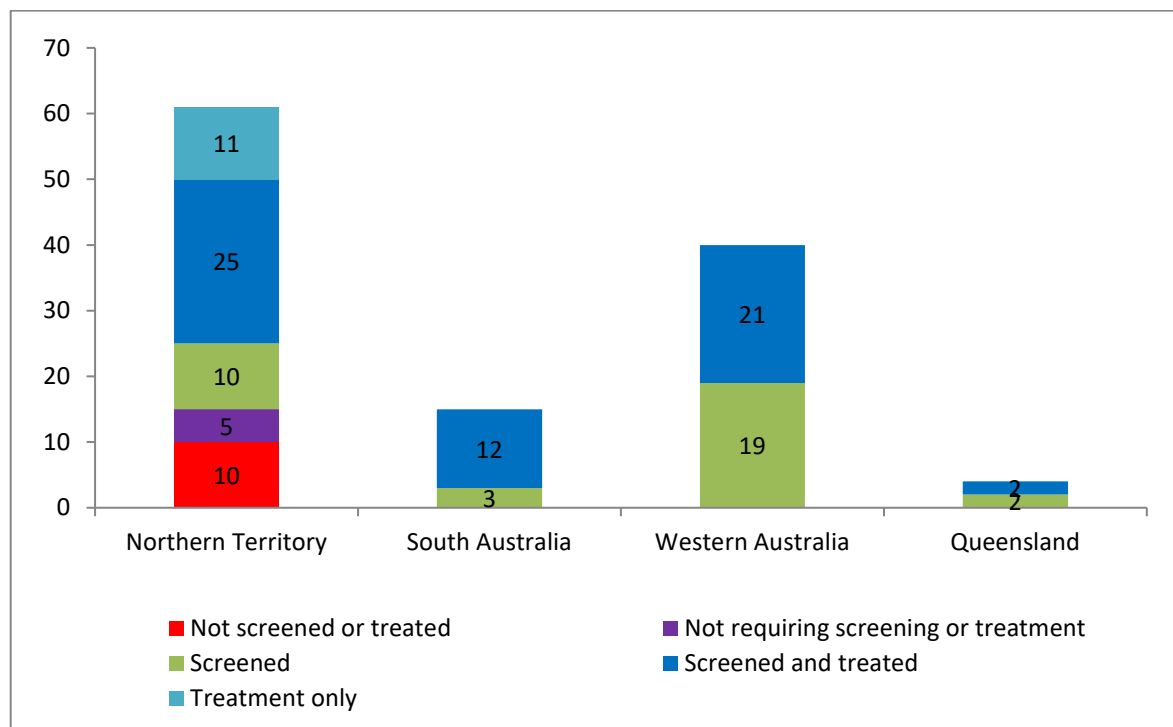


Figure 1.4 Population screening coverage in children aged 5-9 years in communities that were screened for trachoma by jurisdiction, Australia 2018

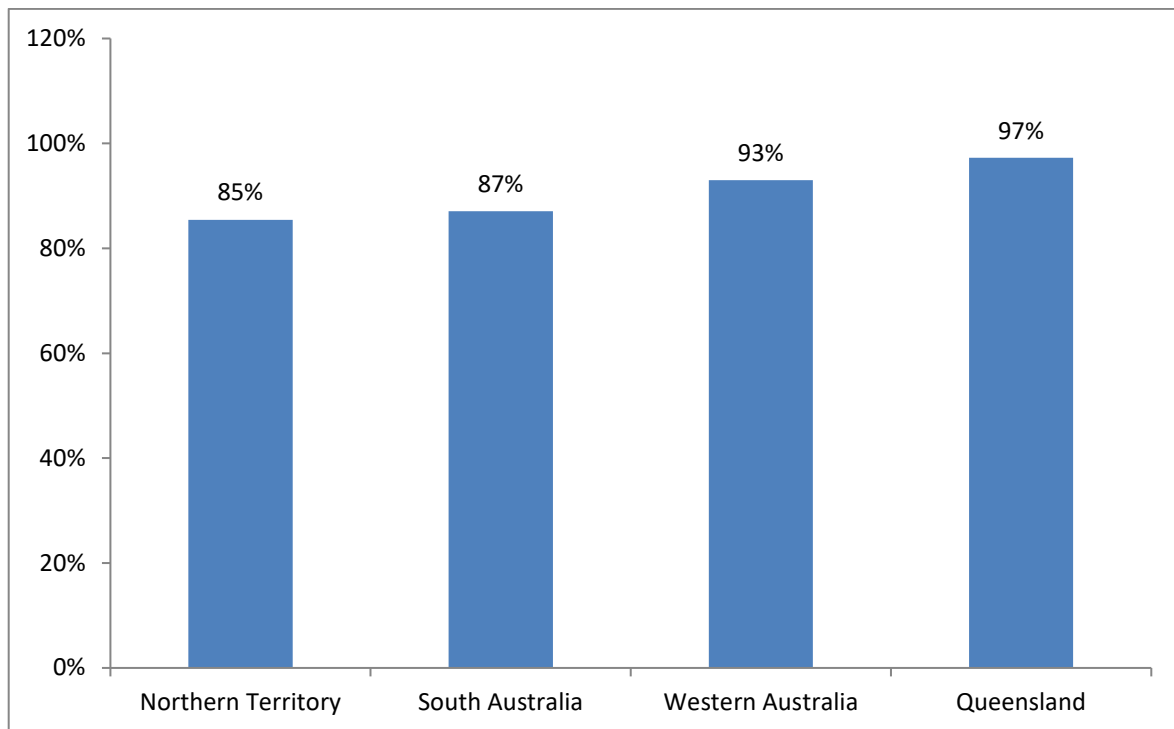


Figure 1.5 Proportion of screened children aged 5-9 years who had a clean face by jurisdiction, Australia 2007-2018

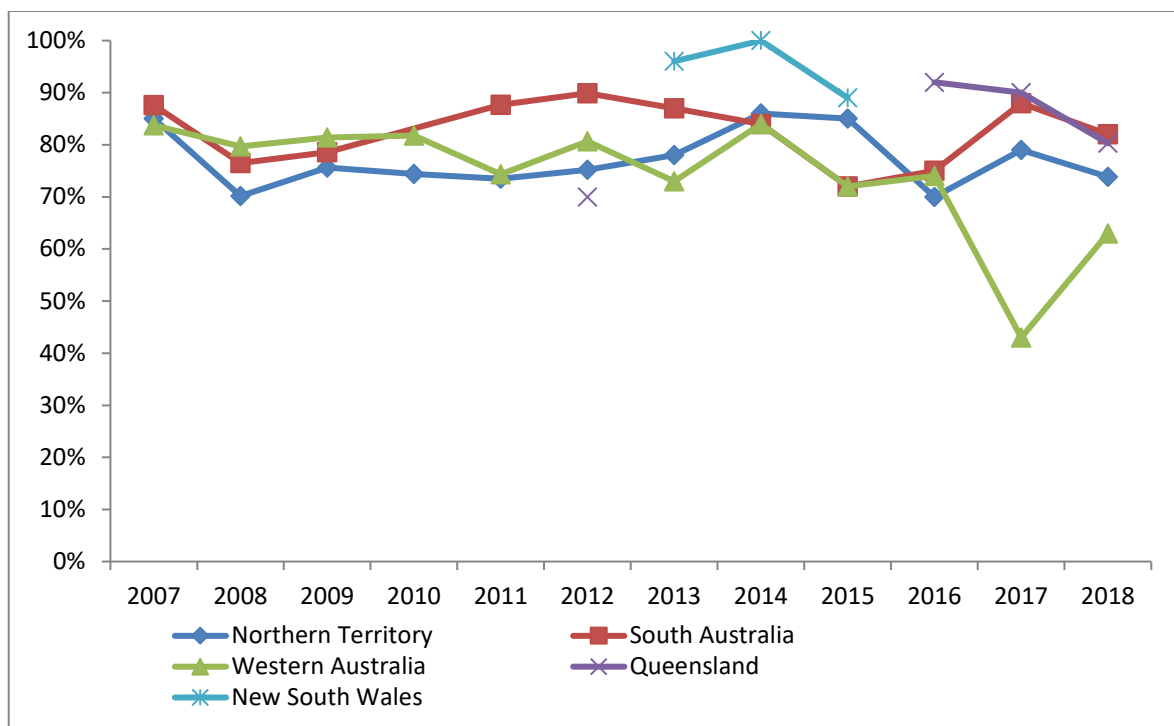


Figure 1.6a Observed prevalence of active trachoma among screened children aged 5-9 years by jurisdiction, Australia 2007-2018

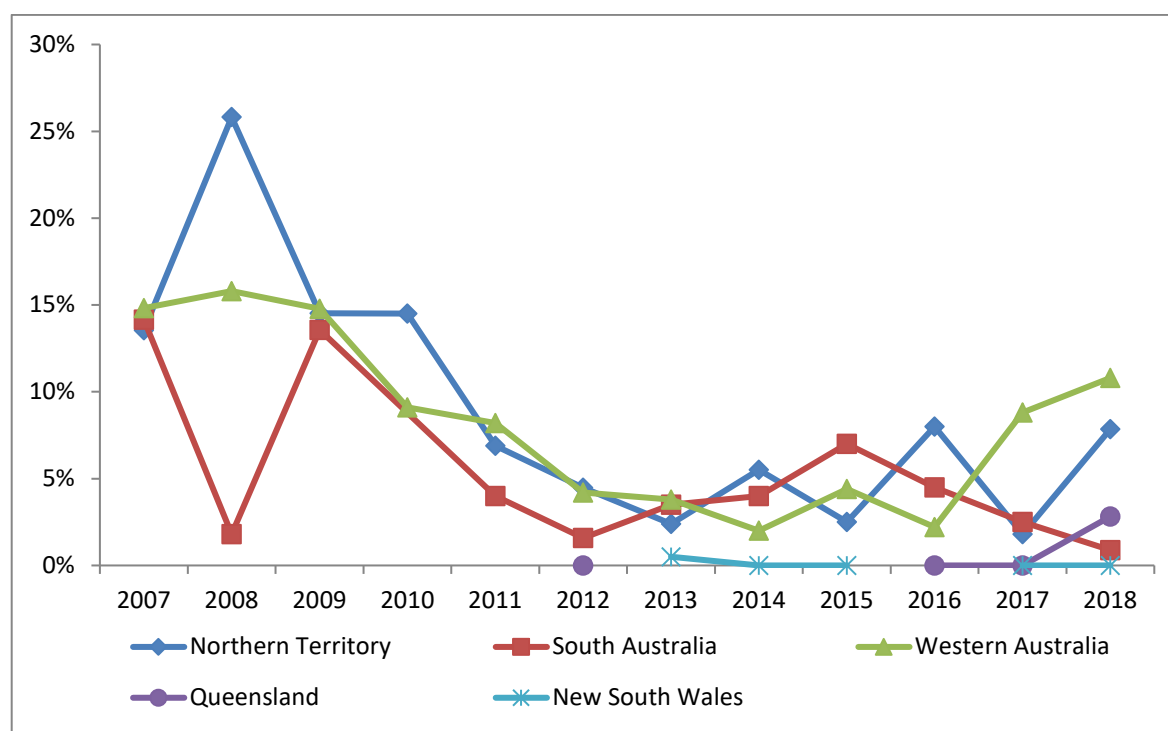
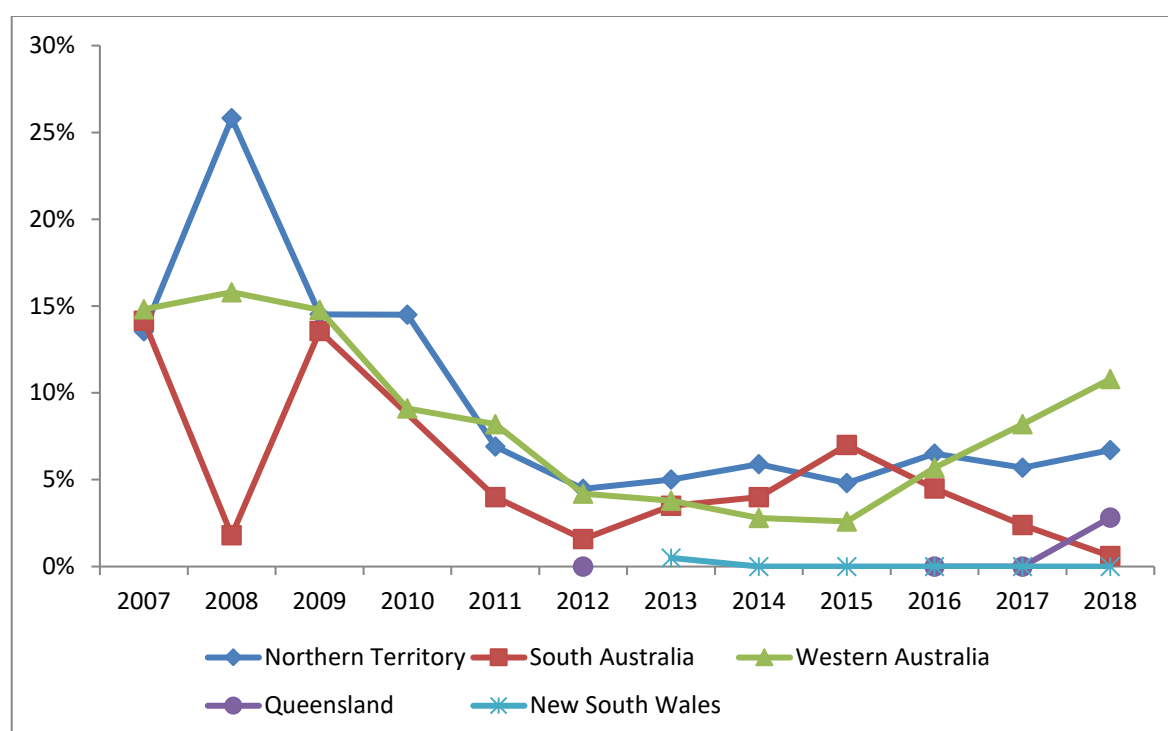
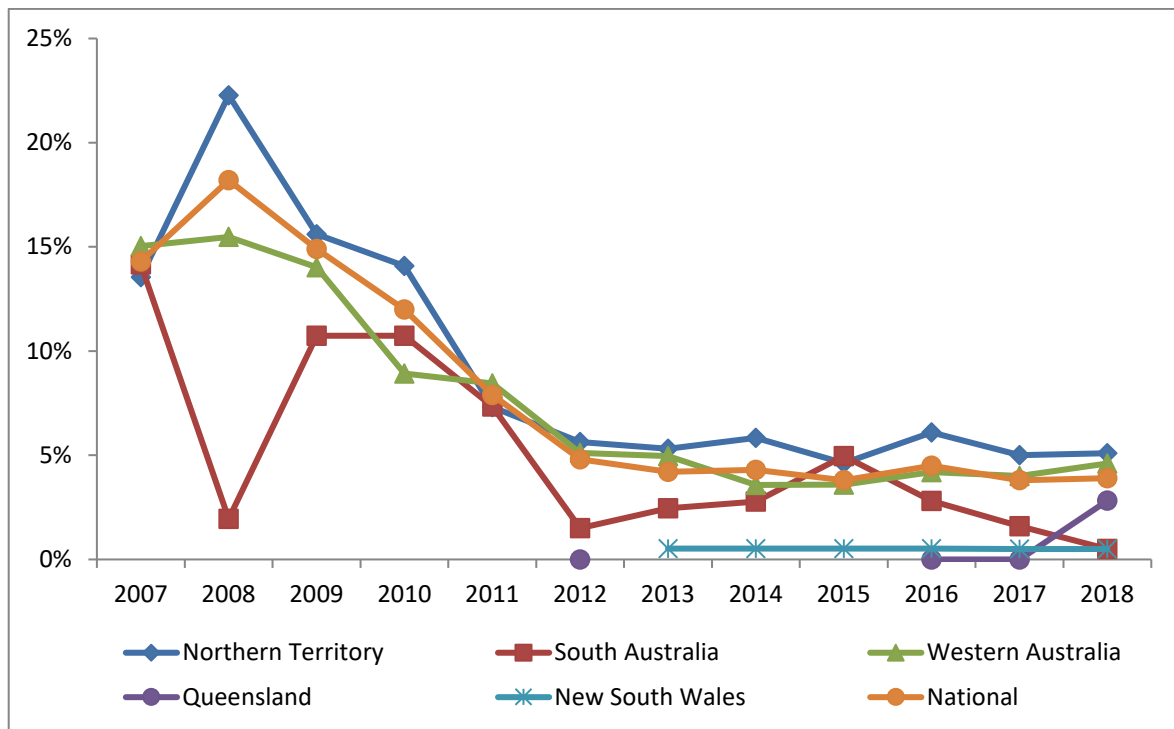


Figure 1.6b Estimated prevalence of active trachoma among children aged 5-9 years by jurisdiction, Australia* 2007-2018.



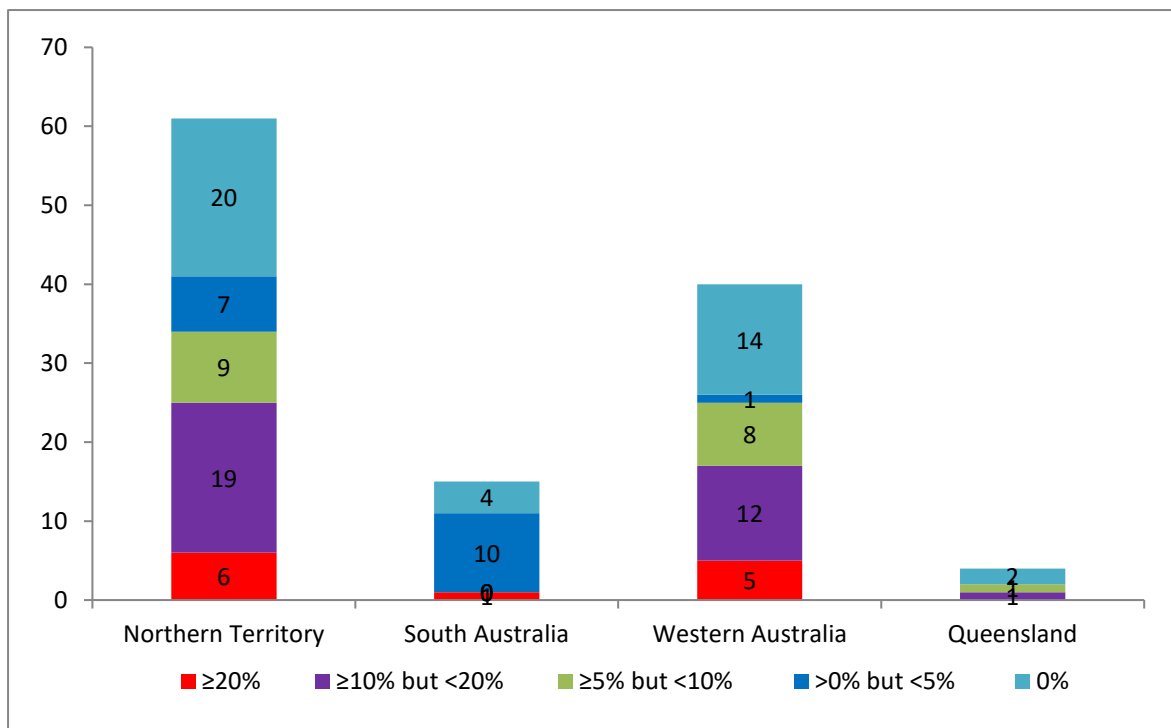
* Most recent estimates carried forward in at-risk communities that did not screen in 2018

Figure 1.6c Overall prevalence of active trachoma among children aged 5-9 years by jurisdiction, Australia* 2007-2018



* Most recent estimates carried forward in all communities that were considered at risk at some time since 2007

Figure 1.7 Number of at-risk communities* according to level of trachoma prevalence in children aged 5-9 years by jurisdiction, Australia 2018



* Including at-risk communities that did and did not screen in 2018

Figure 1.8 Proportion of at-risk communities with zero prevalence of trachoma by jurisdiction, Australia 2007-2018

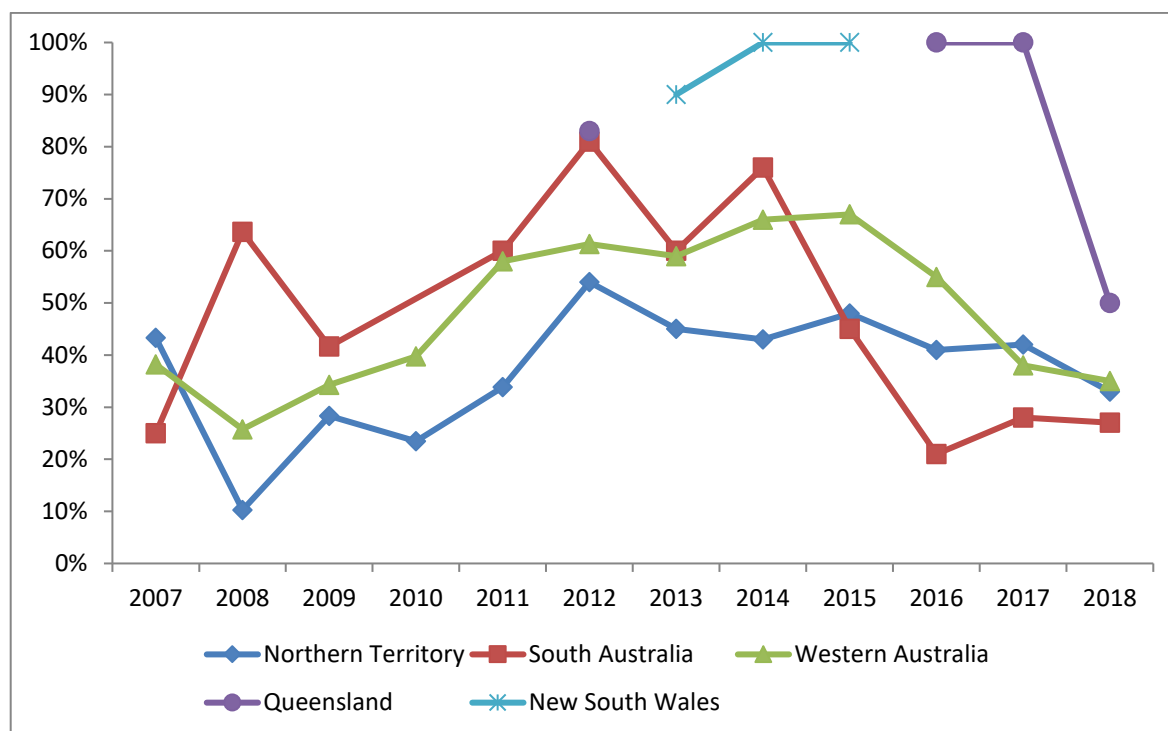


Figure 1.9 Proportion of at-risk communities with endemic (> 5%) levels of trachoma by jurisdiction, Australia 2007-2018

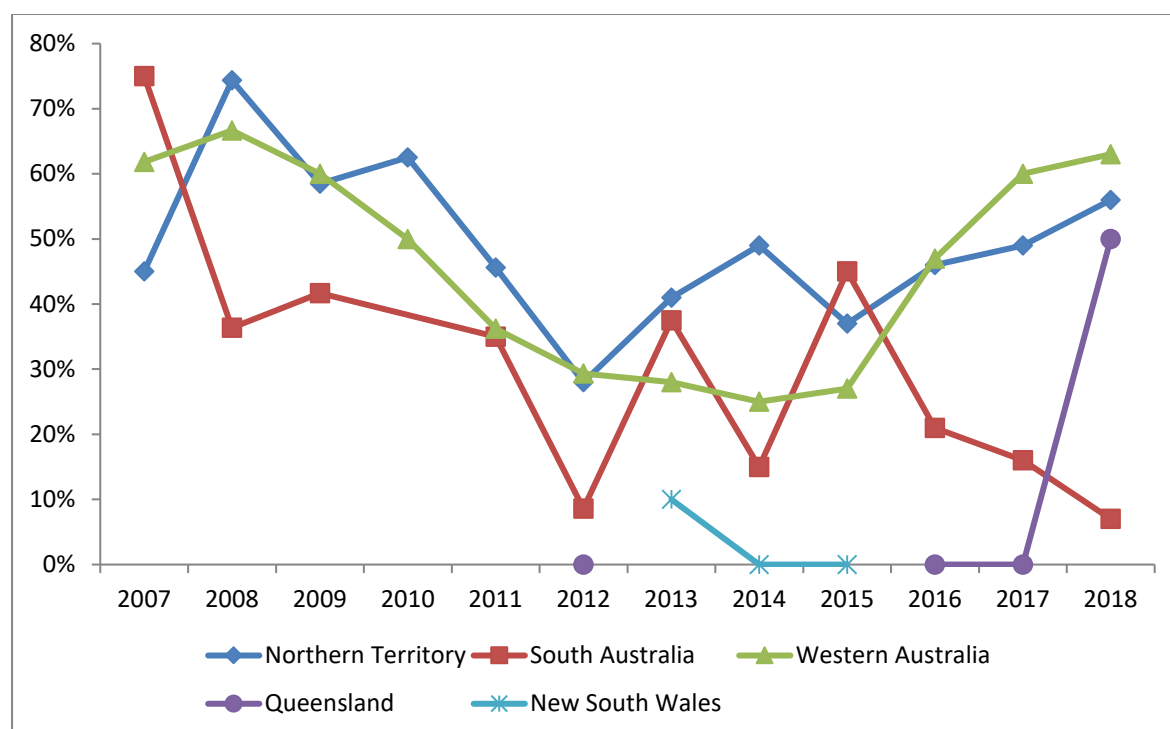


Figure 1.10 Number of doses of azithromycin administered for the treatment of trachoma by jurisdiction, Australia 2007-2018

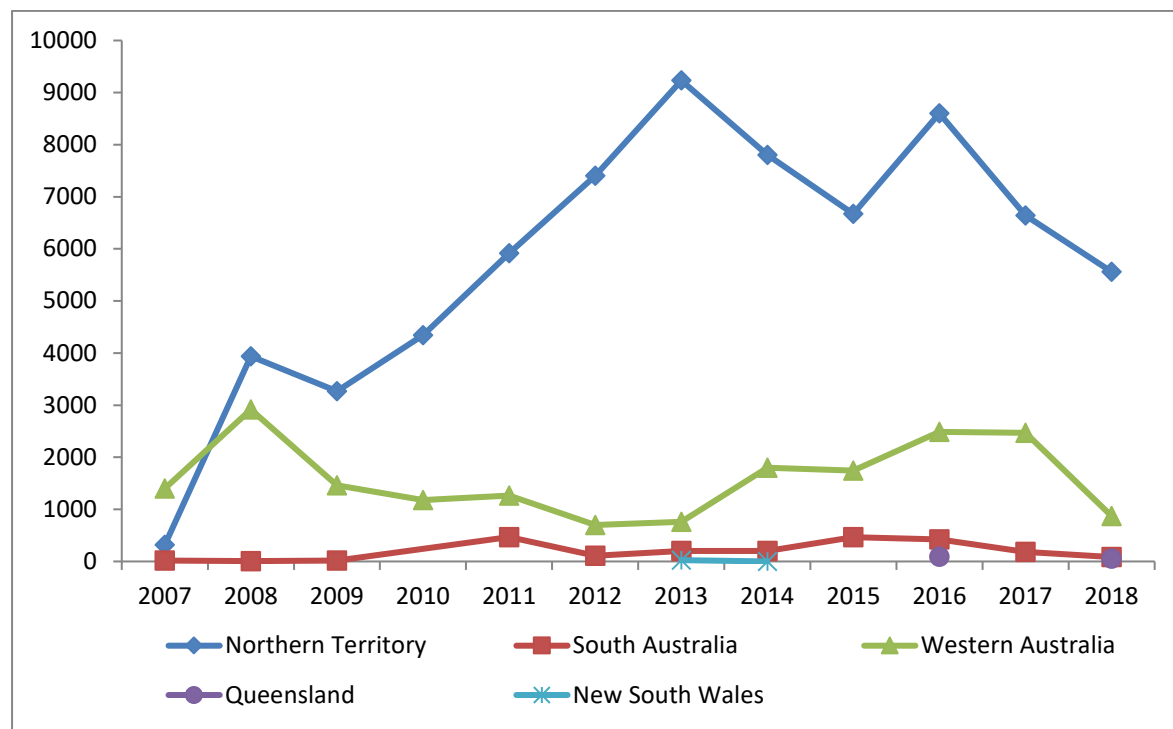


Table 1.1 Trachoma control delivery in at-risk* communities by jurisdiction, Australia 2018

Number of communities	Northern Territory	South Australia	Western Australia	Queensland	Total
At risk * (A)	61	15	40	4	120
Requiring screening for trachoma (B)	43	15	40	4	102
Screened for trachoma (C)	35	15	40	4	94
Requiring treatment without screening (D) †	13	0	0	0	13
Received treatment without screening (E) †	11	0	0	0	11
Screened and/or treated for trachoma (F = C+E)	46	15	40	4	105
Requiring neither screening or treatment for trachoma (G=A-B-D)	5	0	0	0	5

* As defined by each jurisdiction

† As per Guidelines

Table 1.2 Trachoma screening coverage, trachoma prevalence and clean face prevalence in children aged 5-9 years by jurisdiction, Australia 2018

	Northern Territory	South Australia	Western Australia	Queensland	Total
Number of communities screened	35	15	40	4	94
Children examined for clean face	1499	416	545	71	2531
Children with clean face	1107	342	344	57	1850
Clean face prevalence (%)	74	82	63	80	73
Estimated number* of Indigenous children in communities†	1223	463	568	73	2327
Children screened for trachoma	1045	403	526	71	2045
Trachoma screening coverage (%)	85	87	93	97	88
Children with active trachoma	82	3	57	2	144
Observed prevalence of active trachoma (%) ‡	7.8	0.7	10.8	2.8	7.0
Estimated prevalence of active trachoma (%) ‡	6.7	0.7	10.8	2.8	6.5
Overall prevalence of active trachoma (%) ‡	5.1	0.5	4.6	2.8	3.9

* Jurisdictional estimate

† Communities that were screened for trachoma in 2018

‡ Methods of calculating prevalence rates on page 21

Table 1.3 Number and proportion * of at-risk communities according to level of trachoma prevalence in children aged 5-9 years, Australia 2007-2018

	2007		2008		2009		2010		2011		2012		2013		2014		2015		2016		2017		2018	
Communities at-risk †	229		233		232		244		203		196		183		177		157		150		130		120	
Communities not screened ‡	106		102		116		89		51		9		20		0		8		8		1		8	
Communities screened §	123		121		116		152		152		187		163		177		149		142		129		112	
≥20%	3 2	26 %	5 4	45 %	2 6	22 %	4 4	29 %	2 1	14 %	15	8%	1 4	9%	1 7	10 %	1 6	11 %	1 5	11 %	1 7	13 %	1 3	12 %
≥10% but <20%	2 2	18 %	1 4	12 %	1 3	11 %	2 3	15 %	2 0	13 %	13	7%	2 0	12 %	3 6	20 %	2 7	18 %	2 9	20 %	3 0	23 %	3 4	30 %
≥5% but <10%	1 1	9%	1 4	12 %	1 2	10 %	1 5	10 %	2 0	13 %	20	11 %	2 1	13 %	1 2	7%	1 6	11 %	1 2	8%	1 3	10 %	1 6	14 %
>0% but <5%	7	6%	1 2	10 %	2 4	21 %	1 6	11 %	1 9	13 %	24	13 %	1 7	10 %	1 3	7%	1 6	11 %	2 1	15 %	1 9	15 %	1 5	13 %
0%	5 1	41 %	2 7	22 %	4 1	35 %	5 4	36 %	7 2	47 %	11 5	61 %	9 1	56 %	9 9	56 %	7 4	50 %	6 5	46 %	5 0	39 %	3 4	30 %

* Based on current or most recent year

† As defined annually by each jurisdiction

‡ Or treated as required per Guidelines

§ Screened or receiving ongoing annual treatment as per Guidelines

Table 1.4 Treatment strategies by jurisdiction, Australia 2018

Number of communities	Northern Territory	South Australia	Western Australia	Queensland	Total
Required treatment for trachoma	38	12	21	2	73
Treated for trachoma	36	12	21	2	71
Screened and treated	25	12	21	2	60
Received treatment only	11	0	0	0	11
Received 6-monthly treatment	0	0	0	0	0
Did not require treatment	23	3	19	2	47
Treated active trachoma and households	15	12	19	2	48
Community-wide treatment	21	0	2	0	23
Not treated according to CDNA guidelines	2	0	0	0	2

Table 1.5 Trachoma treatment coverage, Australia 2018

	Northern Territory					South Australia					Western Australia					Queensland					Total				
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
Requiring treatment for active trachoma	34	82	4		120	1	3	8		12	30	59	0		89	1	2	0		3	66	146	12		224
Received treatment for active trachoma	34	82	4		120	1	3	8		12	30	57	0		87	1	2	0		3	66	144	12		222
Received treatment for active trachoma (%)	100	100	100		100	100	100	100		100	100	97			98	100	100	100		100	100	99	100		99
Estimated community members* requiring treatment	773	923	820	4563	7079	7	5	12	51	75	88	133	112	539	872	4	16	8	25	53	872	1077	952	5178	8079
Number of community members* who received treatment	652	863	693	3233	5441	7	5	12	51	75	86	131	108	460	785	4	16	8	25	53	749	1015	821	3769	6354

	Northern Territory					South Australia					Western Australia					Queensland					Total				
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
Estimated community members who received treatment (%)	84	93	85	71	77	100	100	100	100	100	98	98	96	85	90	100	100	100	100	100	86	94	86	73	79
Number of community members who declined treatment	53	20	26	266	365	0	0	0	0	0	1	0	4	67	72	0	0	0	0	0	54	20	30	333	437
Total number of doses of azithromycin delivered	686	945	697	3233	5561	8	8	20	51	87	116	188	108	460	872	5	18	8	25	56	815	1159	833	3769	6576
Doses administered in communities that were treated without screening*	348	504	393	1991	3236	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	348	504	393	1991	3236

	Northern Territory					South Australia					Western Australia					Queensland					Total				
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
Doses administered 6-monthly*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Estimated overall treatment coverage (%)	85	94	85	71	77	100	100	100	100	100	98	98	96	85	91	100	100	100	100	100	87	95	86	73	79

* Estimated as per Guidelines

Table 1.6 Trachoma-related trichiasis screening coverage, prevalence and treatment among Indigenous adults, Australia 2018

	Northern Territory		South Australia		Western Australia		Queensland		Total		
Number of communities screened for trichiasis	75		16		36		4		131		
Age group (years)	15-39	40+	15-39	40+	15-39	40+	15-39	40+	15-39	40+	15+
Estimated population in region *	19507	11770	3418	2372	5943	3414	155	154	29023	17710	46733
Adults examined †	7107	6476	647	960	180	474	79	83	8013	7993	16006
<i>With trichiasis</i>	0	15	1	6	0	1	0	0	1	22	23
With trichiasis (%)	0.0	0.2	0.0	0.6	0.0	0.2	0.0	0.0	0.0	0.3	0.1
Surgery in past 12 months‡	0	8	0	2	0	0	0	0	0	10	10

* Population estimate limited to trachoma endemic regions and does not take into account changing endemic regions over time and transiency between regions

† Number of adults examined limited to numbers reported. This number may not account for all adults who may be examined in routine adult health checks, and may also include multiple screening

‡ Surgery cases may include cases identified in previous years

Jurisdictional-specific results

Northern Territory results

Trachoma program coverage

- In 2018, the NT identified 61 communities across five regions as being at risk of trachoma (Table 2.1, Figure 2.2).
- Of these at-risk communities 92% (56/61) required screening or treatment for trachoma according to current guidelines, with 21% (13/61) requiring treatment but not screening (Table 2.1, Figure 2.3).
- Of the communities that required screening and/or treatment, 82% (46/56) received the required service (Table 2.1).
- Logistical issues in the Katherine region led to 8 communities that required screening and 2 communities that required treatment not receiving these services. These communities were scheduled to be screened early in 2019.
- The remaining 5 at-risk communities across the NT did not require screening or treatment as their previous year's prevalence was under 5% (see Methodology section) (Table 2.1, Figure 2.3).

Screening coverage

- In 2018, the NT identified 43 communities in the 5 regions requiring screening for trachoma with 35 of those screened (Table 2.1).
- The proportion of children aged 5-9 years screened in the 35 communities was 85%, ranging from 72% in the Barkly region to 96% in East Arnhem region (Table 2.2, Figure 2.4).

Clean face prevalence

- Clean face prevalence was assessed in all communities that were screened and in most communities that received treatment without screening for trachoma in 2018.
- The overall prevalence of clean faces among children aged 5-9 years in the communities assessed was 74%, ranging from 62% in Barkly region, to 94% in Darwin Rural and Katherine regions (Table 2.2, Figure 2.5).

Trachoma prevalence

- The observed prevalence of active trachoma in those aged 5-9 years in 35 communities that were screened in 2018 was 7.8% (82/1045). Prevalence ranged from 0% in East Arnhem to 14.1% in Alice Springs Remote region (Table 2.2, Figure 2.6a).
- The estimated prevalence of active trachoma in those aged 5-9 years using most recent data carried forward in all 61 at-risk communities was 6.7%, ranging from 0% in Darwin Rural and East Arnhem regions to 13.6% in Alice Springs Remote region (Table 2.2, Figure 2.6b).
- The overall prevalence of active trachoma in those aged 5-9 years was 5.1%, ranging from 0% in East Arnhem to 12.2% in Alice Springs Remote region (Table 2.2, Figure 2.6c).
- No trachoma was reported in 26% (14/53) of the screened or treated at-risk communities (Table 2.3)
- Endemic levels of trachoma ($\geq 5\%$) were reported in 66% (35/53) of the at-risk communities (Table 2.3)
- Hyperendemic levels of trachoma ($\geq 20\%$) were reported in 13% (7/53) of the at-risk communities (Table 2.3)

Treatment delivery and coverage

- Trachoma treatment strategies were applied in 36 communities (Table 2.4)
- Treatment was delivered to active trachoma cases and household contacts in 15 communities, and community wide in 21 communities as per CDNA Guidelines (Table 2.4).
- Two communities in the Katherine region did not receive the treatment which was required by the CDNA Guidelines due to logistical issues (Table 2.4).
- Total treatment coverage for those with active trachoma and community members, and community-wide treatment in all regions requiring treatment was 77% with 5561 doses of azithromycin delivered (Table 2.5, Figure 2.8).

- In 2018 the NT recorded 365 people who declined treatment with 287 in the Alice Springs Remote region, 23 in the Barkly region and 55 in the Katherine region (Table 2.5).

Trichiasis

- Reporting for trichiasis screening was available for 75 communities (Table 2.6).
- Overall 13 583 adults aged 15 years and older were reported to be screened (Table 2.6).
- The prevalence of trichiasis in adults aged 15 years and over was 0.1%, and 0.3% in adults aged 40 years and over (Table 2.6).
- Surgery for trichiasis was reported to be undertaken for 8 adults (Table 2.6).

Health promotion

Health promotion activities were reported to have occurred in 53 communities in the Alice Springs Remote, Barkly, Darwin Rural, East Arnhem, and Katherine regions (Table 2.7).

A total of 136 health promotion activities were reported (Table 2.7).

The health promotion strategy in the NT continues to be built around Milpa the Trachoma goanna and the Clean Faces, Strong Eyes message. The message and mascot Milpa are widely recognised and reinforced through a range of resources, media and activities. Indigenous Eye Health, the University of Melbourne (IEH) together with NT Centre for Disease Control (CDC) and the Ngumbin Reference Group Katherine West Health Board developed the original set of educational tools called the Trachoma Story Kit which was launched in 2010. These resources have been made available for local adaptations and have been revised over time. In 2018, 73 Trachoma Story Kits provided free of charge funded by the Australian Department of Health were delivered to the NT.

Education and health literacy

The partnership between NT Department of Education, CDC and IEH continued on the Clean Faces, Strong Eyes project including a focus on infrastructure supported with extra funding for upgrades to nine schools. IEH partnered with the NT Education Hearing Advisor to work in 6 schools in the Barkly and Alice Springs remote regions. This work involved visits to schools, more intensive sessions with teaching staff including Aboriginal Teacher Assistants and education sessions with the children about nose blowing, washing hands and faces and the importance of good hygiene for good health. A continuum approach (NT Education Department framework) introduces a range of proficiency levels to assist principals and teachers identify areas of knowledge, resources, routine hygiene practices and health hardware necessary to deliver improved outcomes.

Environmental health

IEH, CDC and the Department of the Prime Minister and Cabinet worked together over several months to organise a workshop on environmental improvements in February 2018 in Alice Springs. Around 40 people attended including community leaders and representatives of relevant departments and organisations such as Health, the Community Controlled sector, Housing, Council and Education. A diverse stakeholder input was instrumental in enabling an agreement to work together to improve timely maintenance of washing (bathroom) facilities in remote communities. A working group was established that meets bi-monthly. This group is chaired and supported by IEH. Important achievements include: Trachoma 101 sessions with housing maintenance staff, development and distribution of the Safe Bathroom Checklist resource which is both a conversation starter and a tool to encourage reporting of maintenance issues.

Community events and activities

There was engagement through art, sport, music and dance, with Milpa and Clean Faces, Strong Eyes a part of every event and activity. On one day in February 2018, five simultaneous football clinics with Melbourne Football Club's entire women's squad and support staff were held. This event involved 40 people travelling in 15 4WD cars and two light planes to five Central Australian remote communities. Over 300 people participated in the clinics including children, families and staff. Health promotion education sessions including nose blowing and hand and faces washing were combined with talks with the players and coaches and football skills clinics. An extra football clinic with about

70 participants was held in May in another remote community school to coincide with the men's AFL match in Alice Springs. Milpa and Gerry the Germ were involved in education and hygiene sessions with three different age groups.

Each of these activities is a part of the multi-pronged trachoma elimination health promotion strategy, drawing on well-known common branding, program mascot Milpa and the repeated key messages, all of which link to and reinforce other media and resources. The AFL football players also feature in new community service announcements each year which are played several times a week on Indigenous TV and radio (Imparja, ICTV and CAAMA radio) and are promoted in social media such as Facebook.

Art, dance and music activities in 2018 included Indigenous Hip Hop Projects (IHHP) and art murals created by remote community members in four communities in Central Australia and one in the Barkly region. These projects involved hygiene and education sessions with Milpa and IHHP dancers at schools, early learning settings and with community groups. The creation of spectacular large community art murals featuring local dreaming stories creates an impressive community focal point with links to Milpa and Clean Faces Strong Eyes. There are now 13 art murals that have been painted in communities. Other communities are now requesting murals in order to achieve the sense of community pride resulting from working together. Three music videos including Milpa were created with communities in Alice Springs Remote region, two with IHHP and the other with MusoMagic. Milpa also visited several schools with IHHP for dance workshops combined with education sessions.

Milpa has partnered with Healthy Harold on a road trip of the Katherine region to combine forces for education sessions around healthy living and social media promotion.

Partnerships

The Australian Trachoma Alliance has worked with a number of communities to develop community plans looking at ways to raise awareness about clean faces and access to washing facilities.

The Rotary Club of Melbourne test ran its novel interactive 1000 litre water trailer with games and music as a health promotion attraction in one community in the NT after initial testing in the APY Lands in SA. Rotary has also partnered with communities and organisations to support the provision of health hardware including mirrors, and they are providing grants for wash troughs and washing machines.

iTalk resource

CDC has developed an iTalk resource to provide information about screening and treatment in a short video used on a tablet and in several languages to better inform community members about the program.

Monitoring and evaluation

IEH contributed to a survey conducted by Indigenous Community Television (ICTV) in local communities between April and August 2018. The survey was conducted through CAPI (Computer Assisted Personal Interviewing) by local Indigenous interviewers using tablets provided by market research agency McNair YellowSquares. A total of 387 surveys were conducted with Indigenous Australians from over 46 communities (not all in the NT). The findings indicate that 81% of people had seen the Clean Faces Strong Eyes – Trachoma CSA (Community Service Announcements), 93% of people said the CSA made them stop and think, 95% paid attention because Aboriginal people featured in the CSA, 88% of respondents believed the program encouraged them to change what they do or how they behave and 90% said that the program encouraged them to talk about this issue.

Figures and Tables – Northern Territory

Figure 2. 1 Overall trachoma prevalence in children aged 5-9 years in all at-risk communities by region, Northern Territory 2018

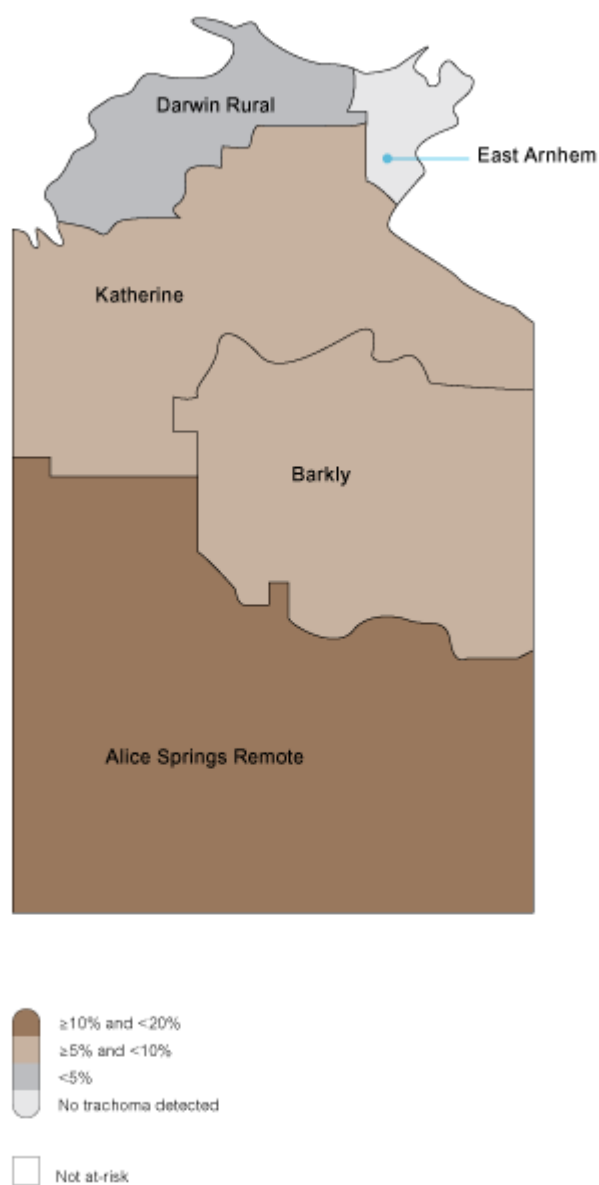


Figure 2. 2 Number of at-risk communities by region, Northern Territory 2007- 2018

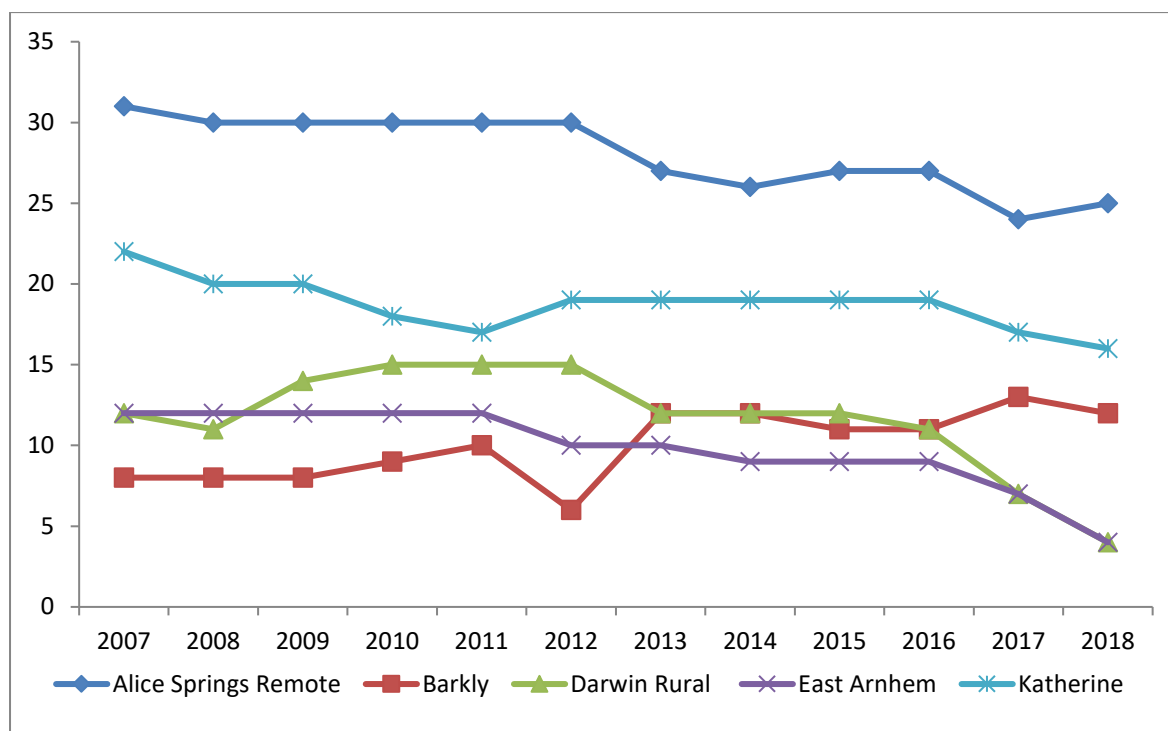


Figure 2. 3 Number of at-risk communities by region and trachoma control strategy, Northern Territory 2018

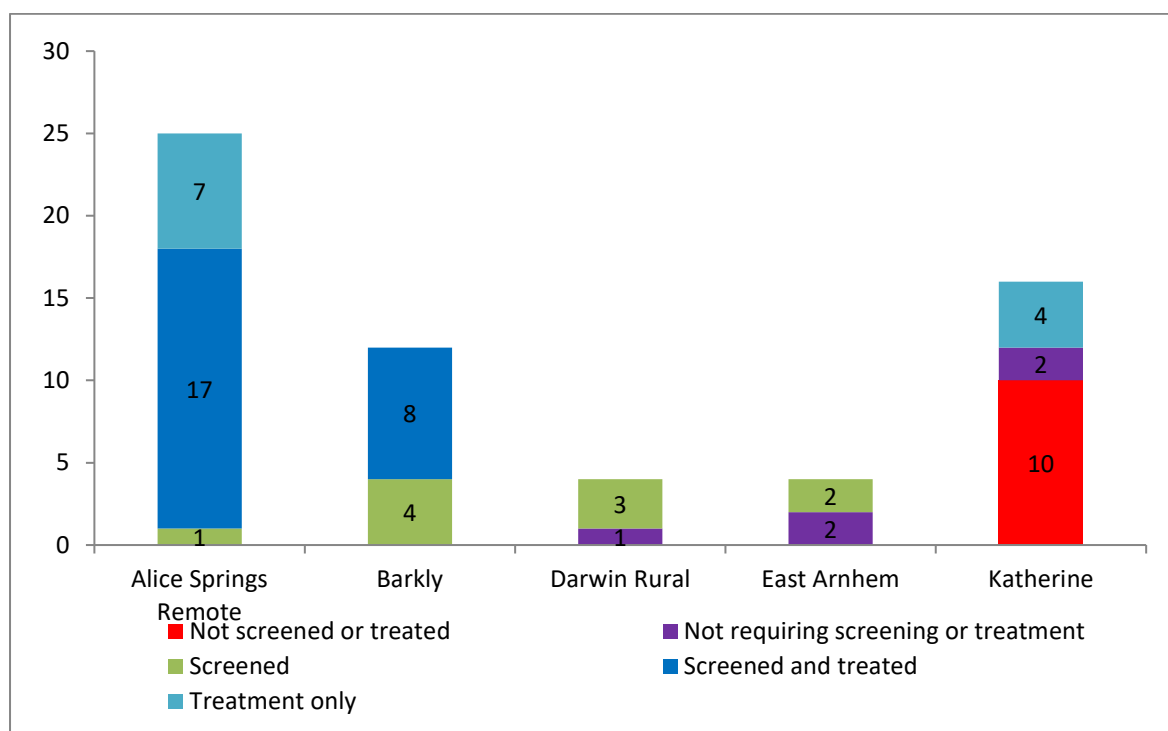


Figure 2.4 Population screening coverage of children aged 5-9 years in communities that required screening for trachoma by region, Northern Territory 2018

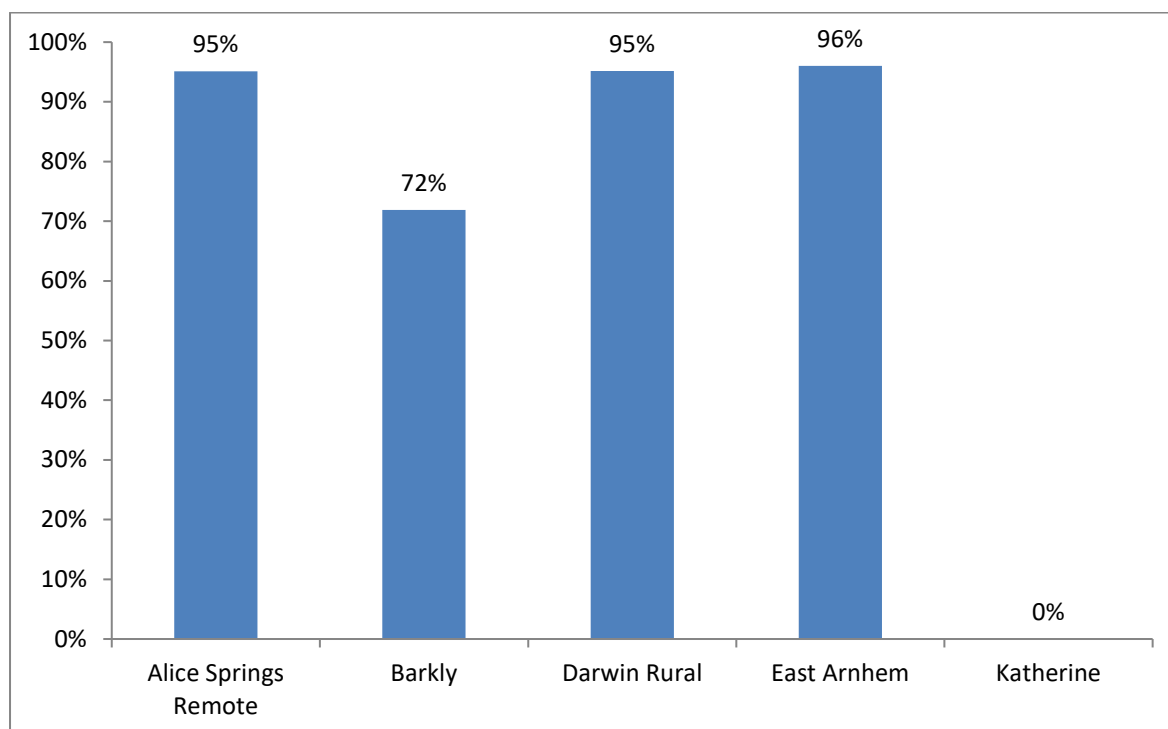


Figure 2.5 Proportion of screened children aged 5-9 years who had a clean face by region, Northern Territory 2007- 2018

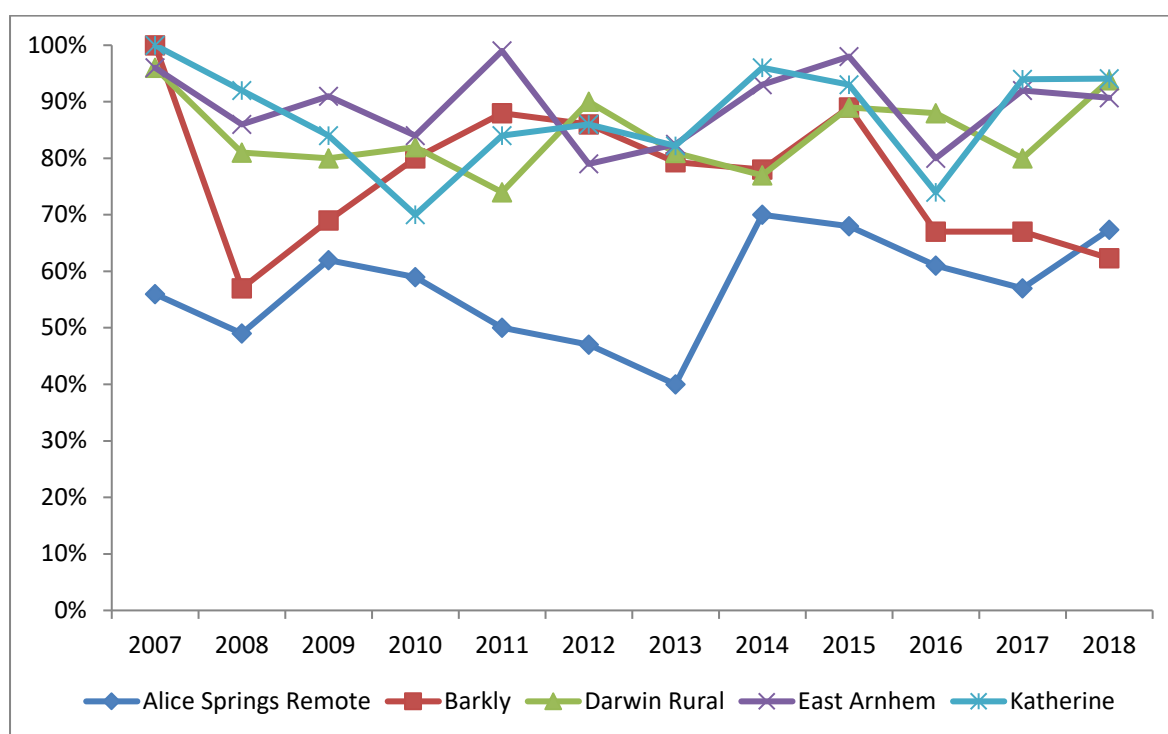


Figure 2.6a Observed prevalence of active trachoma among children aged 5-9 years in communities that were screened by region, Northern Territory 2007- 2018

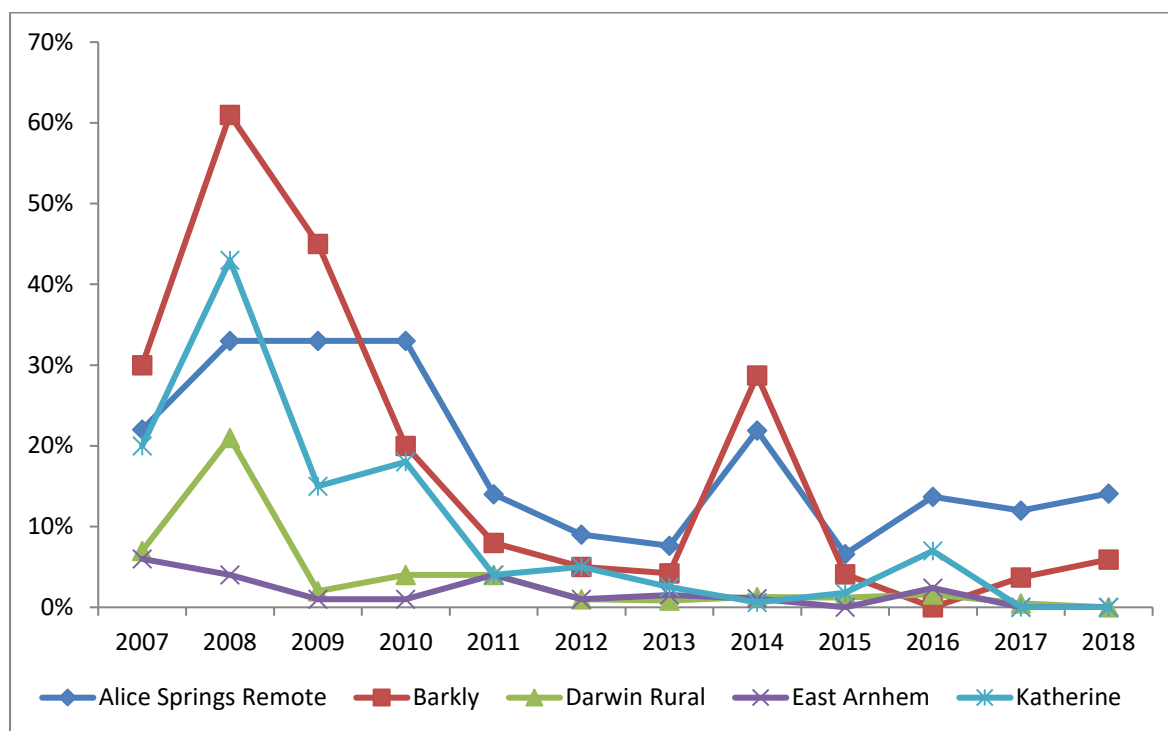
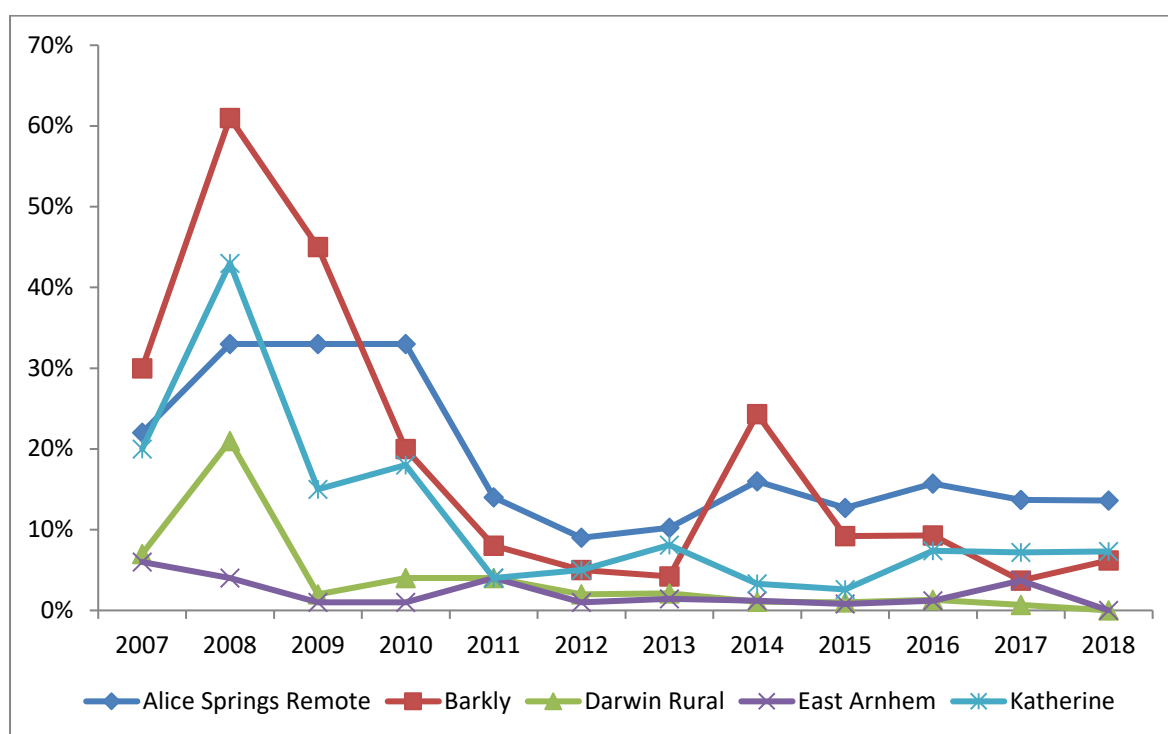
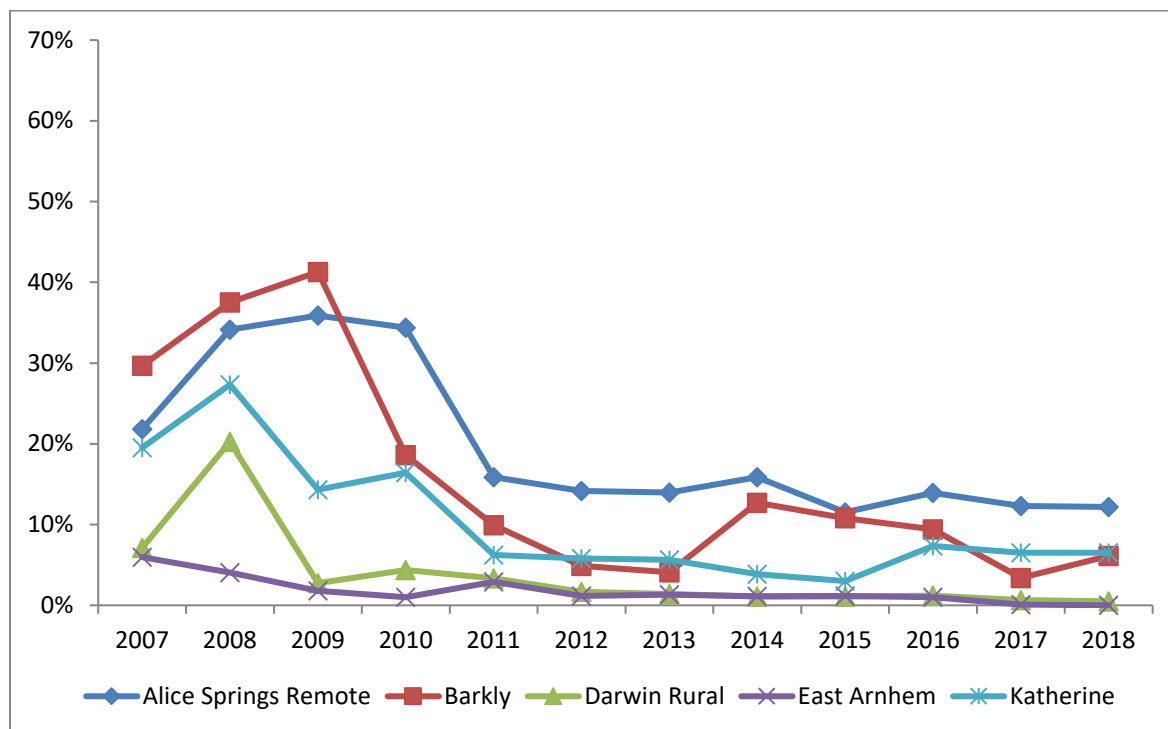


Figure 2.6b Estimated prevalence of active trachoma among children aged 5-9 years in all at-risk communities* by region, Northern Territory 2007- 2018



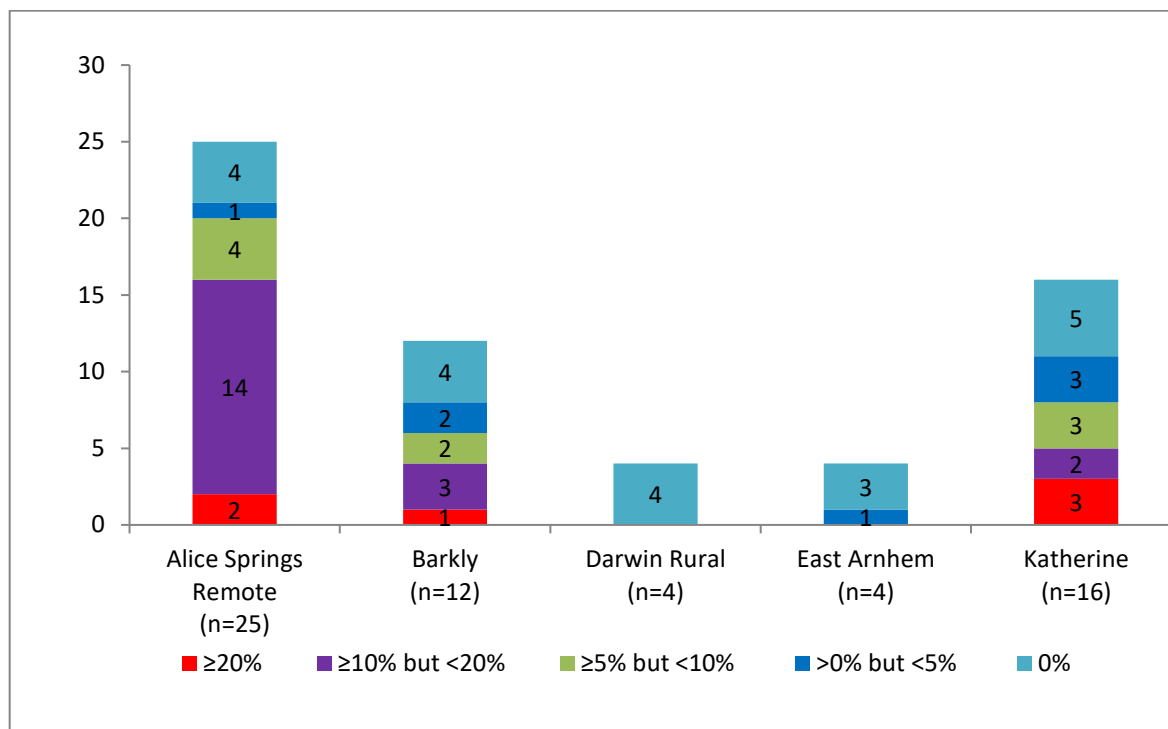
* Most recent estimates carried forward in at-risk communities that did not screen in 2018

Figure 2.6c Overall prevalence of active trachoma* among children aged 5-9 years by region, Northern Territory 2007- 2018



* Calculated carrying forward most recent data in all communities considered at risk of trachoma at some time since 2007

Figure 2.7 Number of at-risk communities* according to level of trachoma prevalence in children aged 5-9 years by region, Northern Territory 2018



* Most recent estimates carried forward in at-risk communities that did not screen in 2018

Figure 2.8 Number of doses of azithromycin administered for the treatment of trachoma by region, Northern Territory 2007- 2018

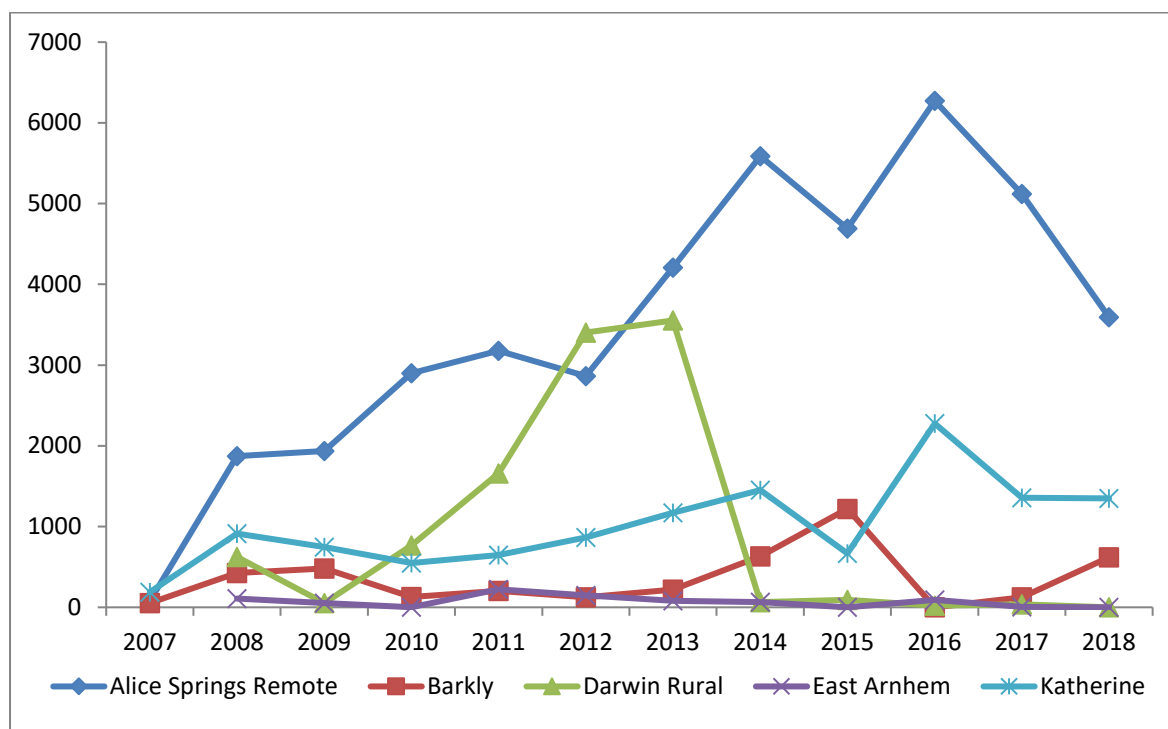


Table 2.1 Trachoma control delivery in at-risk* communities by region, Northern Territory 2018

Number of communities	Alice Springs Remote	Barkly	Darwin Rural	East Arnhem	Katherine	Total
At risk * (A)	25	12	4	4	16	61
Requiring screening for trachoma (B)	18	12	3	2	8	43
Screened for trachoma (C)	18	12	3	2	0	35
Requiring treatment without screening † (D)	7	0	0	0	6	13
Received treatment without screening † (E)	7	0	0	0	4	11
Screened and/or treated for trachoma (F = C+E)	25	12	3	2	4	46
Requiring neither screening or treatment for trachoma (G=A-B-D)	0	0	1	2	2	5

* As defined by each jurisdiction

† As per Guidelines

Table 2.2 Trachoma screening coverage, trachoma prevalence and clean face prevalence by region, Northern Territory 2018

	Alice Springs Remote				Barkly				Darwin Rural				East Arnhem				Katherine				Total			
Number of communities screened	18				12				3				2				0				35			
Age group (years)	0-4	5-9	10-14	0-14	0-4	5-9	10-14	0-14	0-4	5-9	10-14	0-14	0-4	5-9	10-14	0-14	0-4	5-9	10-14	0-14	0-4	5-9	10-14	0-14
Children examined for clean face	508	674	406	1588	119	369	71	559	3	81	0	84	35	172	61	268	140	203	115	458	805	1499	653	2957
Children with clean face	206	454	388	1048	39	230	68	337	3	76	0	79	32	156	60	248	118	191	114	423	398	1107	630	2135
Clean face prevalence (%)	41	67	96	66	33	62	96	57	100	94		94	91	91	98	93	84	94	99	92	49	74	96	72
Estimated number* of Indigenous children in communities†	365	448	284	1097	192	516	201	909	73	83	74	230	160	176	139	475	0	0	0	0	790	1223	698	2711
Children screened for trachoma	270	426	91	787	102	371	54	527	3	79	0	82	33	169	64	266	0	0	0	0	408	1045	209	1662
Trachoma screening coverage (%)	74	95	32	72	53	72	27	58	4	95	0	36	21	96	46	56					52	85	30	61
Children with active trachoma†	21	60	4	85	13	22	0	35	0	0	0	0	0	0	0	0	0	0	0	0	34	82	4	120

	Alice Springs Remote				Barkly				Darwin Rural				East Arnhem				Katherine				Total			
Number of communities screened	18				12				3				2				0				35			
Age group (years)	0-4	5-9	10-14	0-14	0-4	5-9	10-14	0-14	0-4	5-9	10-14	0-14	0-4	5-9	10-14	0-14	0-4	5-9	10-14	0-14	0-4	5-9	10-14	0-14
Observed prevalence of active trachoma† (%)	7.8	14.1	4.4	0.0	12.7	5.9	0.0	6.6	0.0	0.0		0.0	0.0	0.0	0.0	0.0					8.3	7.8	1.9	2.1
Estimated prevalence of active trachoma† (%)		13.6				6.2				0				0				7.3				6.7		
Overall prevalence of active trachoma† (%)		12.2				6.1				0.5				0.0				6.5				5.1		

* Jurisdiction provides estimate for children aged 5-9 years only; number of children in communities aged 0-4 and 10-14 years are based on convenience sampling

† In communities that were screened for trachoma in 2018

‡ Methods of calculating prevalence rates on page 22

Table 2.3 Number and proportion of at-risk communities according to level of trachoma prevalence* in children aged 5-9 years, Northern Territory 2007-2018

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Communities at-risk †	89	87	86	86	86	82	80	78	78	77	68	61
Communities not screened ‡	25	25	33	21	19	4	12	0	8	8	1	8

	2007		2008		2009		2010		2011		2012		2013		2014		2015		2016		2017		2018	
Number of communities §	60		43		53		64		65		76		68		78		70		69		67		53	
≥20%	12	20%	25	58%	19	36%	27	42%	9	14%	5	7%	5	7%	14	18%	11	16%	11	16%	10	15%	7	13%
≥10% but <20%	8	13%	6	14%	8	15%	4	6%	9	14%	9	12%	14	21%	14	18%	11	16%	13	19%	12	18%	21	40%
≥5% but <10%	4	7%	4	9%	3	6%	9	14%	11	17%	9	12%	9	13%	10	13%	7	10%	8	12%	9	13%	7	13%
>0% but <5%	7	12%	4	9%	9	17%	9	14%	14	22%	13	17%	9	13%	6	8%	10	14%	9	13%	8	12%	4	8%
0%	29	48%	4	9%	14	26%	15	23%	22	34%	40	53%	31	46%	34	44%	31	44%	28	41%	28	42%	14	26%

* Based on current or most recent year

† As defined annually by each jurisdiction

‡ Or treated as required per Guidelines

§ Screened or receiving ongoing annual treatment as per Guidelines

Table 2.4 Treatment strategies by region, Northern Territory 2018

	Alice Springs Remote	Barkly	Darwin Rural	East Arnhem	Katherine	Total
Required treatment for trachoma	24	8	0	0	6	38
Treated for trachoma*	24	8	0	0	4	36
Screened and treated	17	8	0	0	0	25
Received treatment only	7	0	0	0	4	11
Received 6-monthly treatment	0	0	0	0	0	0
Did not require treatment	1	4	4	4	10	23
Treated active trachoma and households	10	5	0	0	0	15
Community-wide treatment	14	3	0	0	4	21
Not treated according to CDNA Guidelines*	0	0	0	0	2	2

* Two communities in the Katherine region did not receive the treatment which was required by the CDNA Guidelines due to staffing shortages

Table 2.5 Trachoma treatment coverage by region,* Northern Territory 2018

	Alice Springs Remote					Barkly					Darwin Rural					East Arnhem					Katherine					Total									
	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					
Requiring treatment for active trachoma	21	60	4		85	13	22	0		35	0	0	0		0	0	0	0		0	0	0	0		0	34	82	4		120					
Received treatment for active trachoma	21	60	4		85	13	22	0		35																					34	82	4		120
Received treatment for active trachoma (%)	100	100	100		100	100	100			100																						100	100	100	
Estimated community members* requiring treatment	517	573	561	3120	4771	91	123	88	404	706											165	227	171	1039	1602	773	923	820	4563	7079					
Number of community members* who received treatment	438	542	471	2058	3509	79	117	70	318	584											135	204	152	857	1348	652	863	693	3233	5441					
Estimated community members who received treatment (%)	85	95	84	66	74	87	95	80	79	83											82	90	89	82	84	84	93	85	71	77					

	Alice Springs Remote					Barkly					Darwin Rural					East Arnhem					Katherine					Total				
	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
Number of community members who declined treatment	42	13	21	211	287	5	6	1	11	23											6	1	4	44	55	53	20	26	266	365
Total number of doses of azithromycin delivered	459	602	475	2058	3594	92	139	70	318	619											135	204	152	857	1348	686	945	697	3233	5561
Estimated overall treatment coverage (%)	85	95	84	66	74	88	96	80	79	84											82	90	89	82	84	85	94	85	71	77

* Includes household contacts and community members requiring and receiving mass drug administration (MDA)

Table 2.6 Trichiasis screening coverage, prevalence and treatment among Indigenous adults by region, Northern Territory 2018

	Alice Springs Remote		Barkly		Darwin Rural		East Arnhem		Katherine		Total		
Number of communities screened for trichiasis	25		6		15		10		19		75		
Age group (years)	15-39	40+	15-39	40+	15-39	40+	15-39	40+	15-39	40+	15-39	40+	15+
Estimated population in region*	6613	4618	753	361	4727	2555	4362	2419	3052	1817	19507	11770	31277
Number of adults examined	2830	2692	323	255	2175	1663	917	656	862	1210	7107	6476	13583
Number of adults with confirmed trichiasis	0	10	0	0	0	2	0	1	0	2	0	15	15
With trichiasis (%)	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.2	0.0	0.2	0.1
Surgery in past 12 months †	0	7	0	1	0	0	0	0	0	0	0	8	8

* Population estimate limited to trachoma endemic regions and does not take into account changing endemic regions over time and transiency between regions

† Surgery cases may include cases identified in previous years

Table 2.7 Health promotion activities by region, Northern Territory 2018

	Alice Springs Remote	Barkly	Darwin Rural	East Arnhem	Katherine	Total
Number of communities that reported health promotion activities	26	15	2	2	8	53
Number of programs reported	73	32	2	2	27	136
Methods of health promotion						
One-on-one discussion	69	21	2	2	19	113
Presentation to group	32	21	0	0	19	72
Interactive group session	19	7	0	0	11	37
Social marketing	6	2	0	0	11	19
Print material/mass media	15	2	0	0	8	25
Sporting/community events	8	2	0	0	0	10
Other	6	2	0	0	0	8
Target audience						
Health professionals/staff	16	6	0	0	8	30
Children	68	29	2	1	11	111
Youth	25	7	0	0	9	41
Teachers/childcare/preschool staff	59	28	0	0	11	98
Caregivers/parents	40	16	2	2	12	72
Community members	31	17	0	1	8	57
Community educators/health promoters	12	7	0	0	0	19
Interagency members	13	7	0	0	4	24
Frequency of health promotion activities						
Once	2	1	0	0	2	5
Occasional *	67	31	2	2	25	127

	Alice Springs Remote	Barkly	Darwin Rural	East Arnhem	Katherine	Total
Regular†	0	0	0	0	0	0
Ongoing/routine	4	0	0	0	0	4

* 2-4 times per year.

† 5-12 times per year.

South Australia results

Trachoma program coverage

- In 2018 SA identified 15 communities in three regions as being at risk of trachoma (Table 3.1, Figure 3.2).
- Due to no evidence of active trachoma, Yorke and Mid North region is no longer considered at risk of trachoma.
- All at-risk communities that required screening were screened for trachoma (Table 3.1)

Screening coverage

- Trachoma screening coverage of children aged 5-9 years in the 15 at-risk communities screened was 87%, ranging from 77% in the Far North region to 95% in the Eyre and Western regions (Table 3.2, Figure 3.4).

Clean face prevalence

- Clean face prevalence was assessed in all communities that were screened.
- The overall prevalence of clean faces among children aged 5-9 years in the screened communities was 82%, ranging from 60% in the Eyre and Western region to 93% in the Far North region (Table 3.2, Figure 3.5).

Trachoma prevalence

- The observed prevalence of active trachoma in children aged 5-9 years screened was 0.7% (3/403). Prevalence ranged from 0% Eyre and Western region to 1.4% Far North region (Table 3.2, Figure 3.6a).
- The estimated prevalence of active trachoma in 5-9-year olds using most recent data carried forward in all 15 at-risk communities was 0.7%. Prevalence ranged from 0% Eyre and Western region to 1.4% Far North region (Table 3.2, Figure 3.6b).
- The overall prevalence of active trachoma was 0.5%, ranging from 0% in the Eyre and Western region to 1.2% in the Far North (Table 3.2, Figure 3.6c)
- No trachoma was reported in 27% (4/15) of the at-risk communities (Table 3.3, Figure 3.7).
- Endemic levels of trachoma ($\geq 5\%$) were reported in 7% (1/15) of the at-risk communities (Table 3.3, Figure 3.7).

Treatment delivery and coverage

- Trachoma treatment strategies were applied in 12 communities (Table 3.4).
- Treatment was delivered for active trachoma cases and household contacts in the 12 communities (Table 3.4).
- Total treatment coverage for active trachoma cases and community members in all regions requiring treatment was 100% with 87 doses of azithromycin delivered (Table 3.5, Figure 3.8).

Trichiasis

- Screening for trichiasis was undertaken in 16 communities (Table 3.6).
- Overall 1607 adults aged 15 years and over were screened (Table 3.6).
- The prevalence of trichiasis in adults aged 15 years and over was 0.4%, and 0.6% in adults aged 40 years with 7 cases of trichiasis detected (Table 3.6).
- Surgery for trichiasis was reported to be undertaken for 2 adults (Table 3.6).

Health promotion

Health promotion activities were reported to have occurred in 10 communities in the APY Lands, Eyre and Western and Far North regions (Table 3.7).

The Health promotion strategy in SA continues to be built around Milpa the Trachoma goanna and the “Clean Faces, Strong Eyes” message. The message and mascot Milpa are widely recognised and reinforced through a range of resources, media and activities.

In 2018, a number of resources including posters, stickers, wrist bands were delivered to SA and these are provided free of charge funded by the Australian Department of Health. Milpa costumes have been used in a number of regions to support health promotion activities.

Ceduna Koonibba Aboriginal Health Service, Pika Wiya Aboriginal Health Service, Nganampa Health Council, Tullawon Health Services and the Aboriginal Health Council of SA have all supported trachoma elimination in their regions. Hygiene health promotion has been conducted at many community events across the regions including at sporting, community, cultural and school events. Spotless donated linen which was distributed to three regions as part of health promotion visits.

APY Lands

The establishment of Aboriginal Community Advisory Committees on the APY Lands brings key community members together to build local capacity, develop local solutions and to reinforce the eye health messages in community. A partnership with Aboriginal Community Services (ACS) in the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands in SA was established to support trachoma elimination with a workforce of local Anangu in a program called Uwankuru Palya Ngalkulpai – Better Vision to All. There are monthly meetings with local communities in around three communities as part of this project.

Indigenous Eye Health visited the APY Lands in April to run education sessions in schools and clinics in collaboration with ACS and the ‘Kuru Ngukintjuku’ program.

A new Rotary interactive water trailer was trialled in the APY Lands by IEH with groups of children in 4 communities. The trailer and water sprays were enjoyed by the children and provided another opportunity to reinforce the clean faces and good hygiene messages. The Rotary interactive water trailer was also used at a Community cultural meeting in APY Lands in July.

IEH conducted Trachoma education and health promotion training in November for 10 ACS staff working in 4 APY Lands communities. The aim was to build the capacity of local staff who support trachoma elimination through the Uwankuru Palya Ngalkulpai – Better Vision to All Program. The sessions included a Milpa training session with three Milpas and minders and trachoma education and community capacity building.

SA Trachoma Environmental Health Improvements Workshop

In October 2018 a Trachoma Environmental Health Improvements workshop was held in Adelaide. This meeting was organised by a working group with representatives from:

- Aboriginal Health Council of South Australia (AHCSA)
- Department of the Prime Minister and Cabinet (PM&C)
- Indigenous Eye Health, The University of Melbourne (IEH)
- Country Health SA
- Environmental Health Directorate SA
- SA Housing Authority
- Nganampa Health Council

The Environmental Health Improvements Workshop brought together key agencies, sectors and services in South Australia to discuss key issues and to identify appropriate, effective and sustainable solutions that will help eliminate trachoma and address numerous persistent hygiene-related health issues. Key speakers presented current issues to over 50 attendees. The result was establishment of a cross-sectoral Environmental Working Group and a list of priorities for further action. The Working Group met in December and continues to meet regularly.

Media and social marketing

Community Service Announcements (CSAs) are broadcast across the border from the Northern Territory into South Australia via CAAMA Radio, Imparja TV and ICTV. CSAs and videos in Pitjantjatjara language made by PY Media (local media organisation), continued on radio, TV and online through social media to provide ongoing community trachoma education. The most engaging post on the IEH Facebook in 2018 was the APY Lands Trachoma Message (video) it reached 2,460 people, had 1104 views, 119 reactions and 329 click-throughs.

Figures and Tables – South Australia

Figure 3.1 Trachoma prevalence in children aged 5-9 years in all at-risk communities by region, South Australia, 2018



Figure 3.2 Number of at-risk communities by region, South Australia 2007-2018

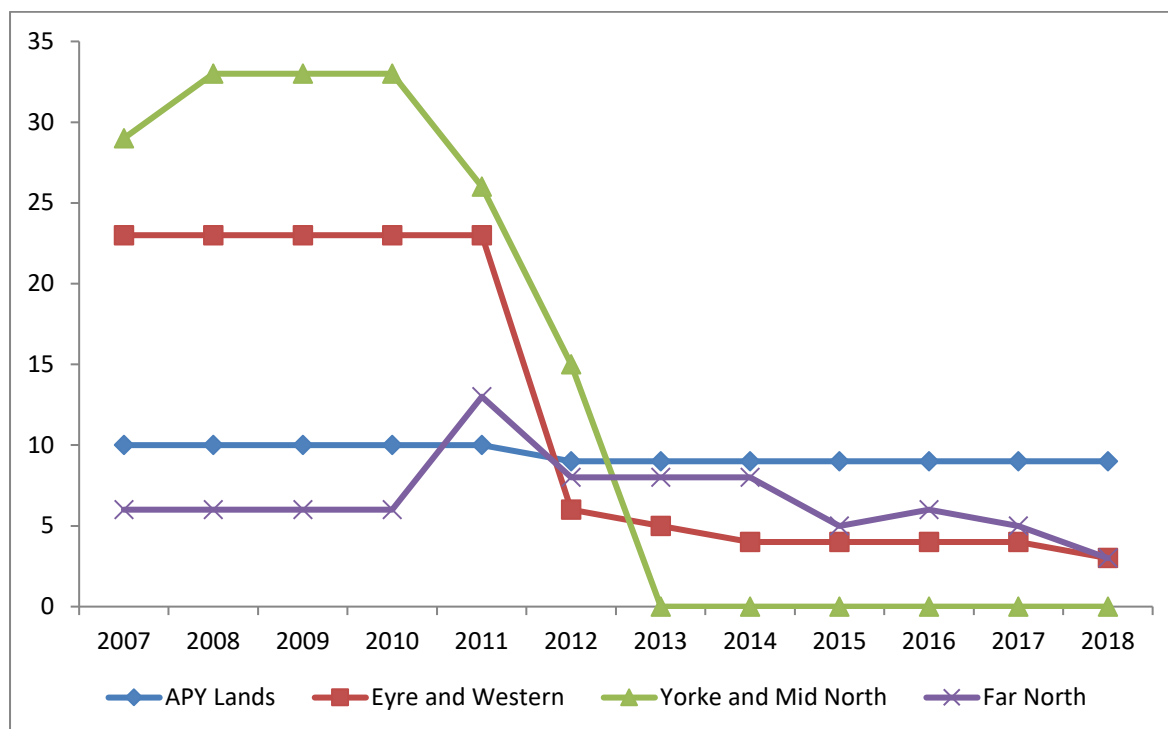


Figure 3.3 Number of at-risk communities according to trachoma control strategy implemented by region, South Australia 2018

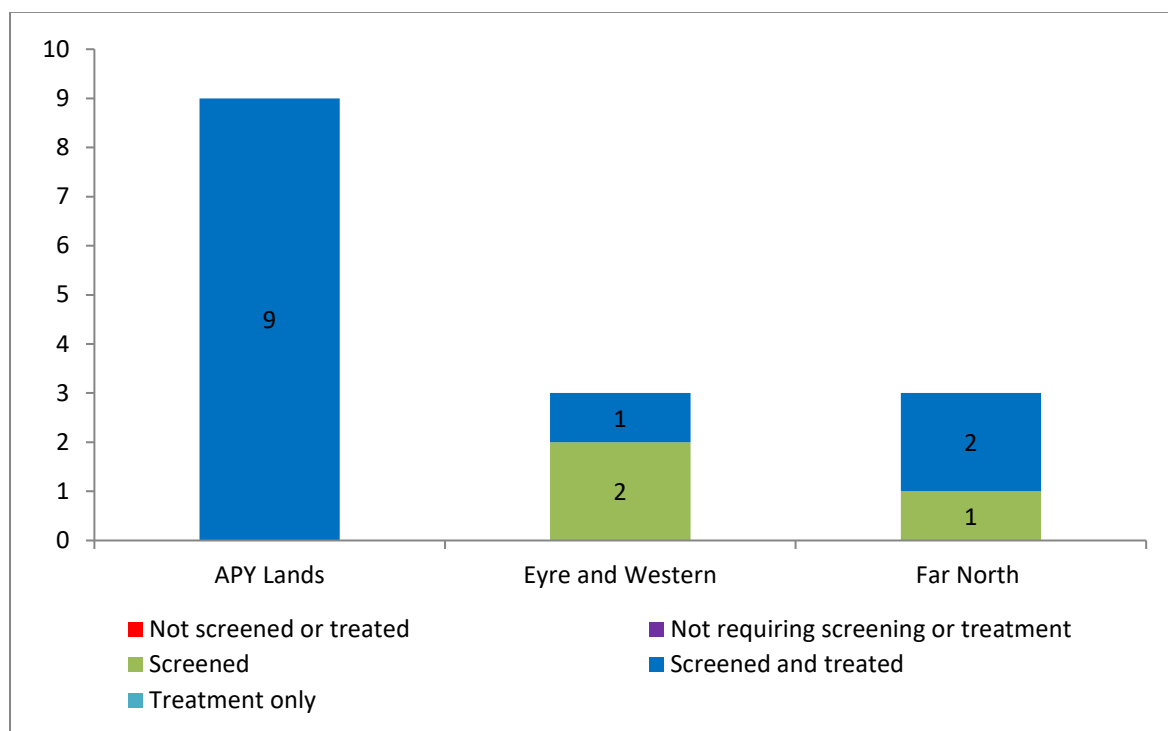


Figure 3.4 Population screening coverage of children aged 5-9 years in at-risk communities that required screening for trachoma by region, South Australia 2018

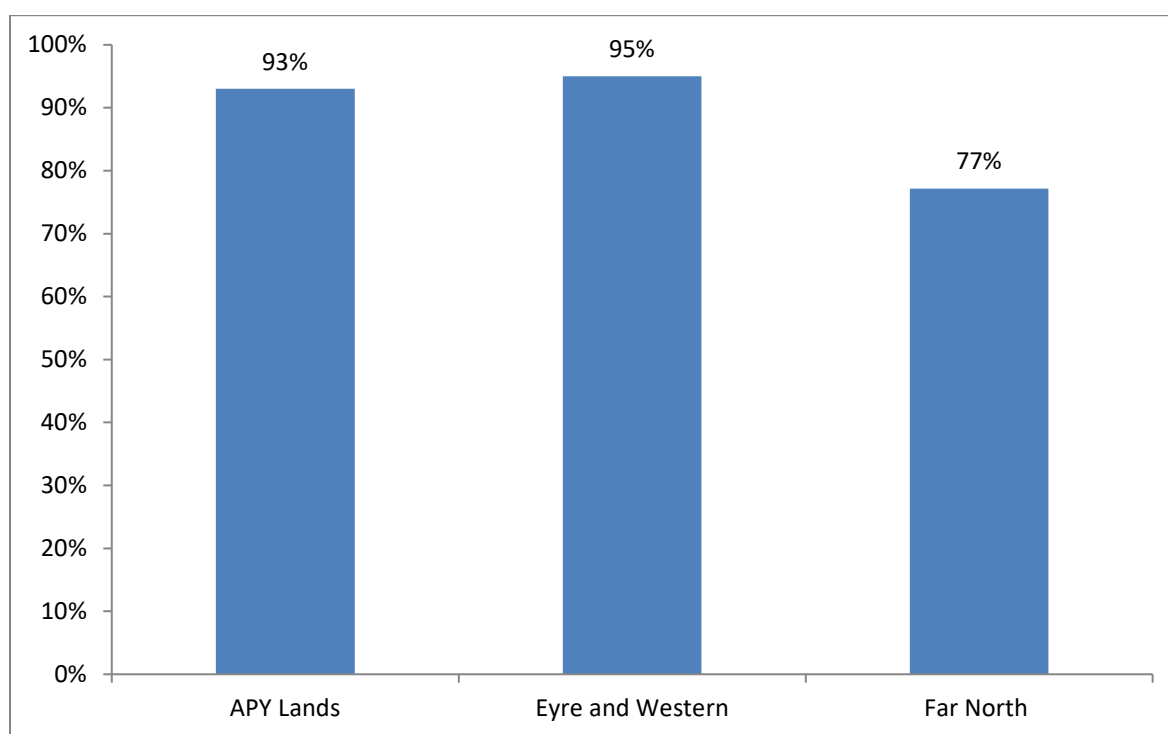


Figure 3.5 Proportion of screened children aged 5-9 years who had a clean face by region, South Australia 2007-2018

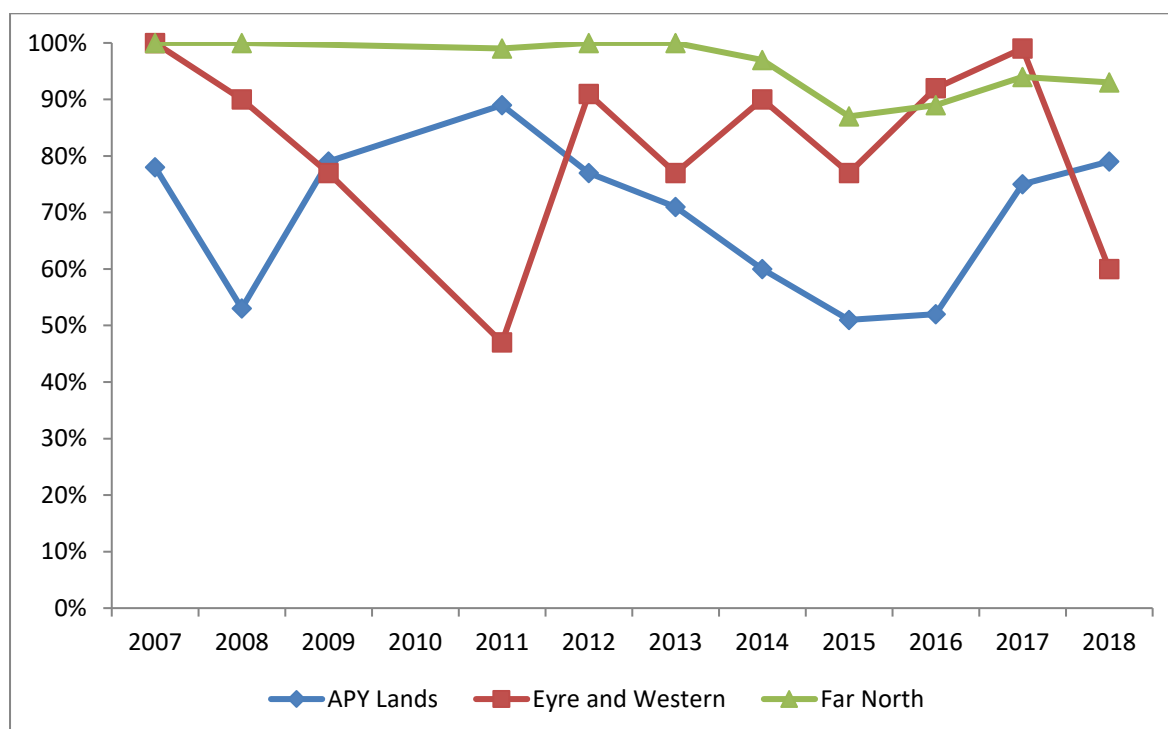


Figure 3.6a Observed prevalence of active trachoma among children aged 5-9 years in at-risk communities by region, South Australia 2007-2018

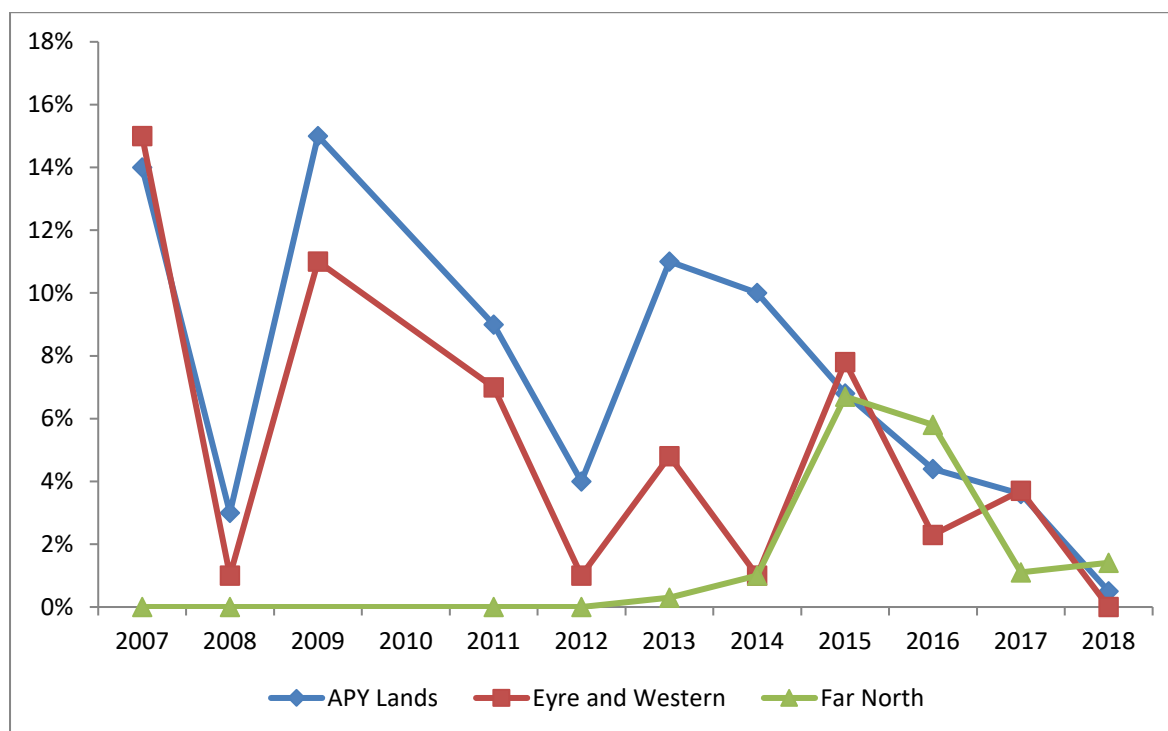
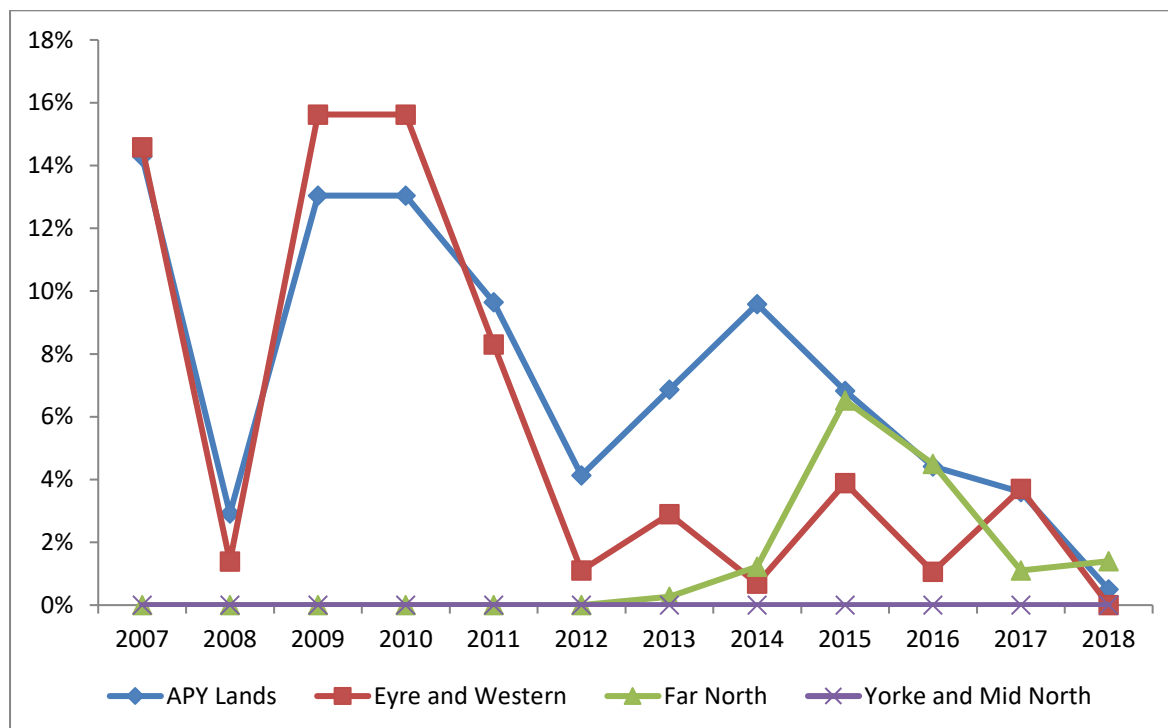
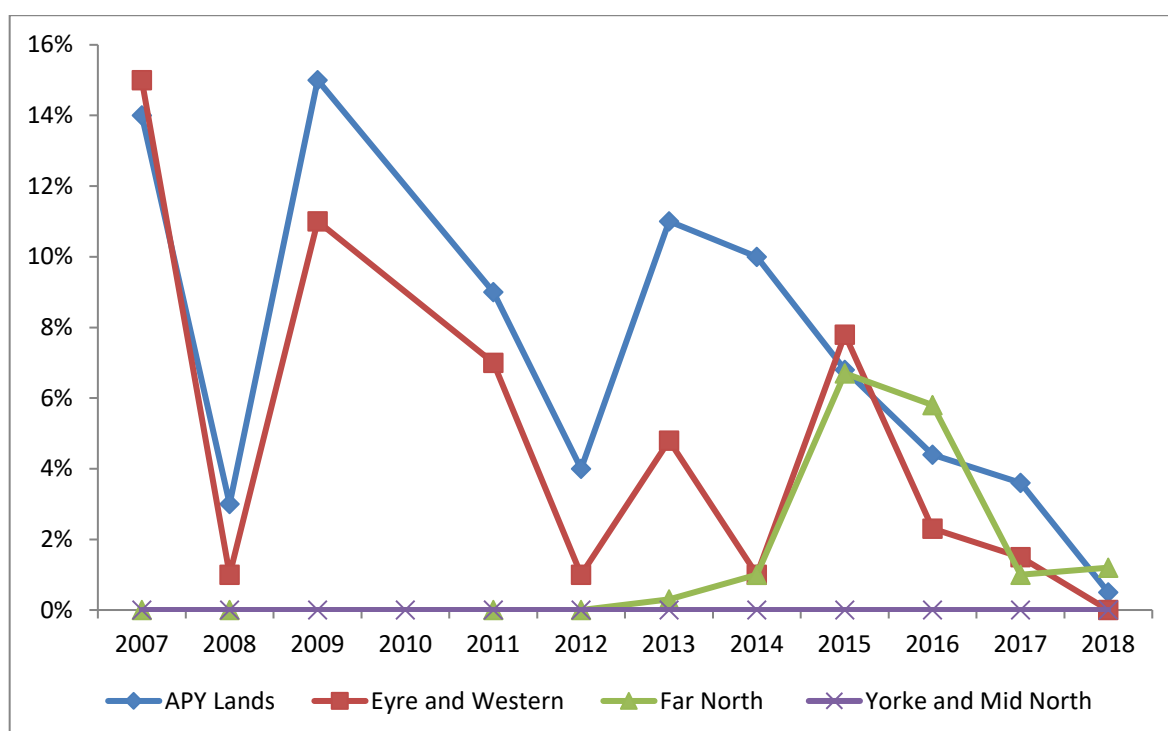


Figure 3.6b Estimated prevalence of active trachoma among children aged 5-9 years in all at-risk communities* by region, South Australia 2007-2018



* Most recent estimates carried forward in at-risk communities that did not screen in 2018

Figure 3.6c Overall prevalence of active trachoma among children aged 5-9 years in all communities* by region, South Australia 2007-2018



* Calculated carrying forward most recent data in all communities considered at risk of trachoma at some time since 2007

Figure 3.7 Number of at-risk communities according to level of trachoma prevalence in children aged 5-9 years by region, South Australia 2018

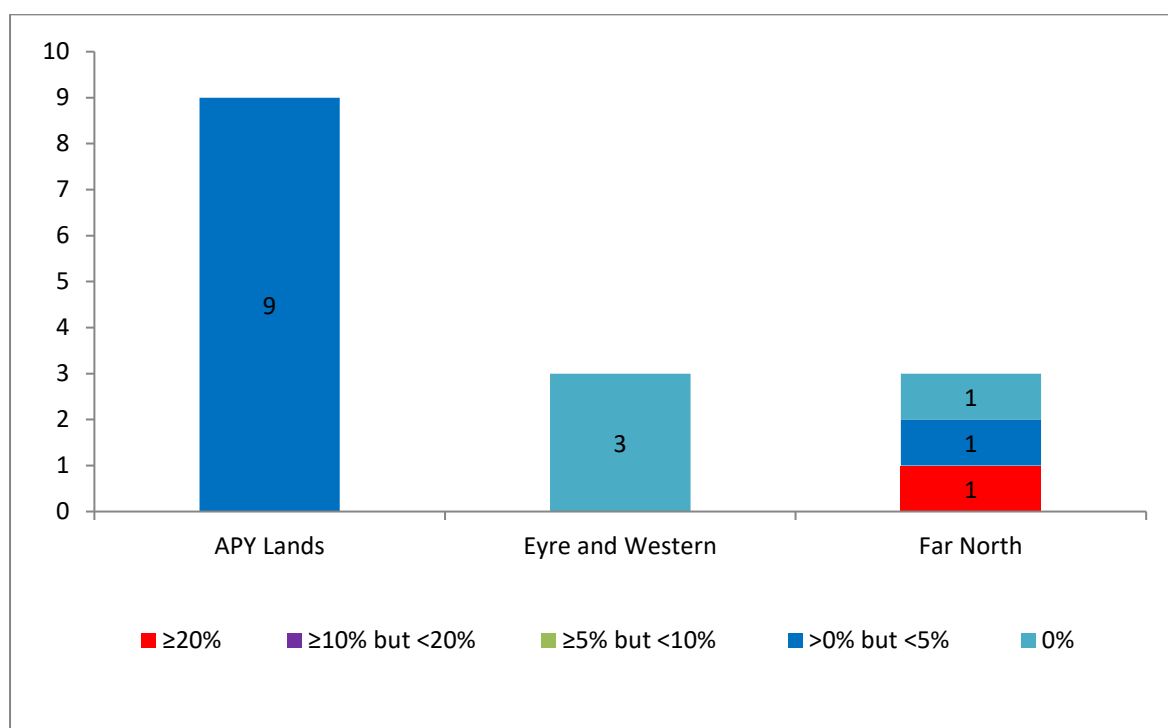


Figure 3.8 Number of doses of azithromycin administered for the treatment of trachoma by region, South Australia 2007-2018

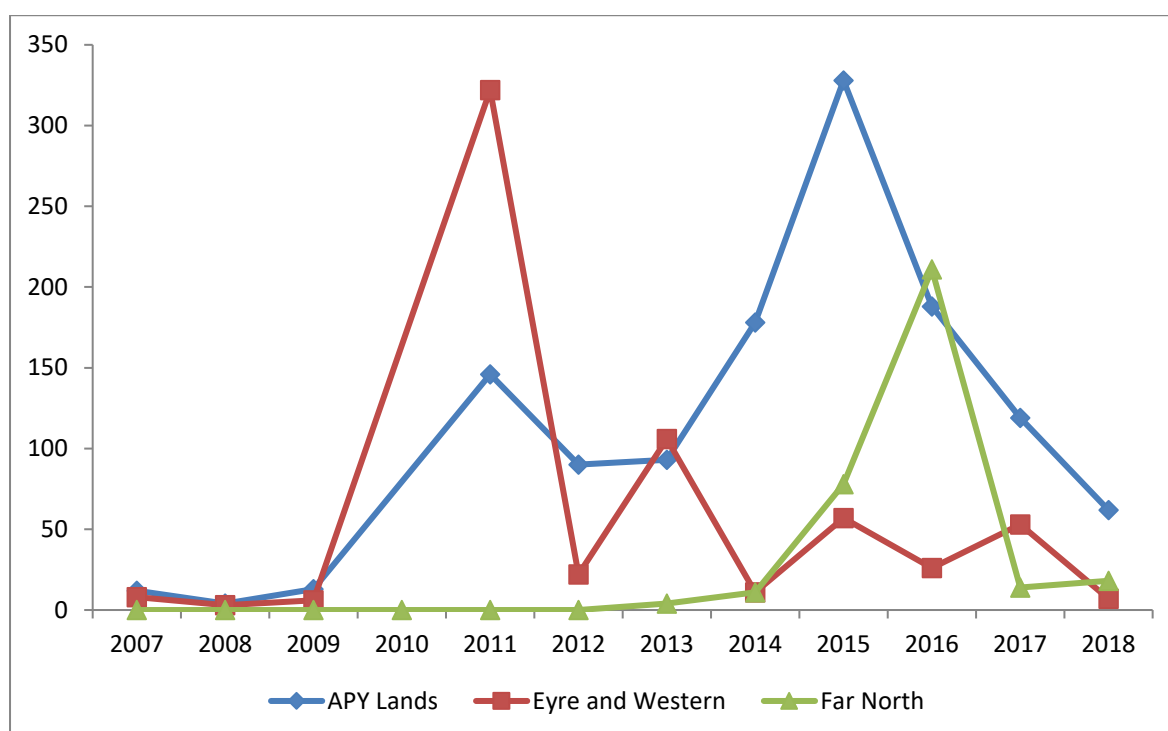


Table 3.1 Trachoma control delivery in at-risk* communities by region, South Australia 2018

Number of communities	APY Lands	Eyre and Western	Far North	Total
At risk * (A)	9	3	3	15
Requiring screening for trachoma (B)	9	3	3	15
Screened for trachoma (C)	9	3	3	15
Requiring treatment without screening † (D)	0	0	0	0
Received treatment without screening † (E)	0	0	0	0
Screened and/or treated for trachoma (F = C+E)	9	3	3	15
Requiring neither screening or treatment for trachoma (G=A-B-D)	0	0	0	0

* As defined by each jurisdiction

† As per guidelines

APY: Anangu Pitjantjatjara Yankunytjatjara

Table 3.2 Trachoma screening coverage, trachoma prevalence and clean face prevalence by region, South Australia 2018

	APY Lands				Eyre and Western				Far North				Total			
Number of communities screened	9				3				3				15			
Age group (years)	0-4	5-9	10-14	0-14	0-4	5-9	10-14	0-14	0-4	5-9	10-14	0-14	0-4	5-9	10-14	0-14
Children examined for clean face	173	219	241	633	13	40	41	94	7	157	109	273	193	416	391	1000
Children with clean face	109	172	233	514	2	24	17	43	6	146	95	247	117	342	345	804
<i>Clean face prevalence (%)</i>	63	79	97	81	15	60	41	46	86	93	87	90	61	82	88	80
Estimated number* of Indigenous children in communities†	250	235	267	752	44	44	55	143	8	184	77	269	302	463	399	1164
Children screened for trachoma	173	219	242	634	20	42	41	103	6	142	95	243	199	403	378	980
<i>Trachoma screening coverage (%)</i>	69	93	91	84	45	95	75	72	75	77	123	90	66	87	95	84
<i>Children with active trachoma‡</i>	1	1	6	8	0	0	1	1	0	2	1	3	1	3	8	12
<i>Observed prevalence of active trachoma‡ (%)</i>	0.6	0.5	2.5	1.3	0.0	0.0	2.4	1.0	0.0	1.4	1.1	1.2	0.5	0.7	2.1	1.2
<i>Estimated prevalence of active trachoma‡ (%)</i>		0.5				0				1.4				0.7		

	APY Lands				Eyre and Western				Far North				Total			
Number of communities screened	9				3				3				15			
Age group (years)	0-4	5-9	10-14	0-14	0-4	5-9	10-14	0-14	0-4	5-9	10-14	0-14	0-4	5-9	10-14	0-14
<i>Overall prevalence of active trachoma‡ (%)</i>		0.5				0.0				1.2				0.5		

* ABS estimate

† Communities that were screened for trachoma in 2018

‡ Methods of calculating the different prevalence rates on page 22 APY: Anangu Pitjantjatjara Yankunytjatjara

Table 3.3 Number and proportion* of at-risk communities according to level of trachoma prevalence in children aged 5-9 years, South Australia 2007-2018

	2007		2008		2009		2010		2011		2012		2013		2014		2015		2016		2017		2018	
Communities at-risk †	68		72		72		72		46		38		22		21		19		19		18		15	
Communities not screened ‡	60		61		60		60		27		2		6		0		0		0		0		0	
Number of communities §	8		11		12		11		19		36		16		21		19		19		18		15	
≥20%	2	25%	0	0%	3	25%	3	27%	2	11%	1	3%	2	13%	1	5%	2	11%	1	5%	1	5%	1	7%
≥10% but <20%	2	25%	1	9%	2	17%	1	9%	3	16%	1	3%	3	19%	9	43%	3	16%	1	5%	1	6%	0	0%
≥5% but <10%	2	25%	2	18%	1	8%	0	0%	2	11%	1	3%	1	6%	0	0%	9	47%	2	11%	3	17%	0	0%
>0% but <5%	0	0%	1	9%	1	8%	0	0%	1	5%	4	11%	0	0%	1	5%	1	5%	11	58%	10	56%	10	66%
0%	2	25%	7	64%	5	42%	7	64%	11	58%	29	81%	10	63%	10	48%	4	21%	4	21%	3	17%	4	27%

* Based on current or most recent year

† As defined annually by each jurisdiction

‡ Or treated as required per Guidelines

§ Screened or receiving ongoing annual treatment as per Guidelines

Table 3.4 Treatment strategies by region, South Australia 2018

	APY Lands	Eyre and Western	Far North	Total
Required treatment for trachoma	9	1	2	12
Treated for trachoma*	9	1	2	12
Screened and treated	9	1	2	12
Received treatment only	0	0	0	0
Received 6-monthly treatment	0	0	0	0
Did not require treatment	0	2	1	3
Treated active trachoma and households	9	1	2	12
Community-wide treatment	0	0	0	0
Not treated according to CDNA Guidelines*	0	0	0	0

* In 2018 APY Lands aggregated 9 communities into one community for presentation of data; details of the specific number of communities requiring treatment or treated were not supplied

APY: Anangu Pitjantjatjara Yankunytjatjara

Table 3.5 Trachoma treatment coverage by region, South Australia 2018

	APY Lands					Eyre and Western					Far North					Total				
	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
Requiring treatment for active trachoma	1	1	6		8	0	0	1		1	0	2	1		3	1	3	8		12
Received treatment for active trachoma	1	1	6		8	0	0	1		1	0	2	1		3	1	3	8		12
<i>Received treatment for active trachoma (%)</i>	100	100	100		100	100	100	100		100	100	100	100		100	100	100	100		100
Estimated community members* requiring treatment	6	3	6	39	54	0	0	3	3	6	1	2	3	9	15	7	5	12	51	75
Number of community members* who received treatment	6	3	6	39	54	0	0	3	3	6	1	2	3	9	15	7	5	12	51	75
<i>Estimated community members who received treatment (%)</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Number of community members who declined treatment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	APY Lands					Eyre and Western					Far North					Total				
	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
Total number of doses of azithromycin delivered	7	4	12	39	62	0	0	4	3	7	1	4	4	9	18	8	8	20	51	87
<i>Estimated overall treatment coverage (%)</i>	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

* Includes household contacts and community members requiring and receiving mass drug administration (MDA)

APY: Anangu Pitjantjatjara Yankunytjatjara

Table 3.6 Trichiasis screening coverage, prevalence and treatment among Indigenous adults by region, South Australia 2018

	APY Lands		Eyre and Western		Far North		Total		
Number of communities screened for trichiasis	9		4		3		16		
Age group (years)	15-39	40+	15-39	40+	15-39	40+	15-39	40+	15+
Estimated population in region*	1021	601	1161	759	1236	1012	3418	2372	5790
Adults examined†	479	335	38	340	130	285	647	960	1607
Number with trichiasis	1	2	0	2	0	2	1	6	7
Proportion with trichiasis (%)	0.2	0.6	0.0	0.6	0.0	0.7	0.0	0.6	0.4
Surgery in past 12 months‡	0	2	0	0	0	0	0	2	2

* Population estimate limited to trachoma endemic regions and does not take into account changing endemic regions over time and transiency between regions

† Number of adults examined limited to numbers reported. This number may not account for all adults who may be examined in routine adult health checks, and may also include multiple screening

‡ Surgery cases may include cases identified in previous years

Table 3.7 Health promotion activities by region, South Australia 2018

	APY Lands	Eyre and Western	Far North	Total
Number of communities that reported health promotion activities	5	4	1	10
Number of programs reported	5	11	1	17
Methods of health promotio				
One-on-one discussion		11	1	12
Presentation to group	9	2	1	12
Interactive group session	1	2	1	4
Social marketing	1	2	1	4
Print material/mass media	5	11	1	17
Sporting/community events		9	1	10
Other			0	0
Target audience				
Health professionals/staff	5	2	1	8
Children	9	9	1	19
Youth		10	1	11
Teachers/childcare/preschool staff	22	8	1	31
Caregivers/parents		11	1	12
Community members	3	11	1	15
Community educators/health promoters		1	0	1
Interagency members		3	1	4
Frequency of activities				
Once		0	1	1
Occasional *		5		5
Regular†		2		2

	APY Lands	Eyre and Western	Far North	Total
Ongoing/routine	5	4		9

* 2-4 times per year.

† 5-12 times per year.

APY: Anangu Pitjantjatjara Yankunytjatjara

Western Australia results

Trachoma program coverage

- In 2018 WA identified 40 communities in four regions as being at risk of trachoma (Table 4.1, Figure 4.2).
- Of these at-risk communities all communities required and received screening (Table 4.1, Figure 4.3).

Screening coverage

- The proportion of children aged 5-9 years screened in the 40 communities was 93%, ranging from 86% in the Midwest region to 100% in the Pilbara region (Table 4.2, Figure 4.4).

Clean face prevalence

- Clean face prevalence was assessed in all communities that were screened and in communities that undertook whole-of-community treatment.
- The overall prevalence of clean faces among children aged 5-9 years was 63%, ranging from 59% in the Goldfields region to 69% in the Pilbara region (Table 4.2, Figure 4.5).

Trachoma prevalence

- The observed prevalence of active trachoma in children aged 5-9 years in 40 communities that screened in 2018 was 10.8% (57/526). Prevalence ranged from 8.2% in the Pilbara region to 11.6% in the Kimberley region (Table 4.2, Figure 4.6a).
- The overall prevalence of active trachoma in children aged 5-9 years was 4.6% ranging from 2.6% in the Pilbara region to 9.9% in the Midwest region (Table 4.2, Figure 4.6c).
- No trachoma was reported in 35% (14/40) of the at-risk communities (Table 4.3, Figure 4.7).
- Endemic levels of trachoma ($\geq 5\%$) were reported in 63% (25/40) of the at-risk communities (Table 4.3, Figure 4.7).

Treatment delivery and coverage

- Trachoma treatment strategies were required in 21 communities (Table 4.4).
- Treatment was delivered for active trachoma cases and household contacts in 19 communities, and community wide in 2 communities as per Guidelines (Table 4.4).
- Total treatment coverage for active trachoma cases and community members, and community-wide treatment in all regions requiring treatment was 90% with 872 doses of azithromycin delivered (Table 4.5, Figure 4.8).

Trichiasis

- Data for trichiasis screening was provided from 3 distinct sources. Public health units undertook opportunistic screening of adults in remote communities during trachoma screening and treatment and flu vaccinations activities. Outputs from the MBS 715 adult health checks and visiting optometrist services (VOS) are also presented.
- One case of trichiasis was detected in the Goldfields region (Table 4.6a).

Health promotion

Health promotion activities were reported to have occurred in 63 communities in the Goldfields, Kimberley, Midwest and Pilbara regions (Table 4.7).

Squeaky Clean Kids (SCK) continues to be the trachoma program health promotion strategy for Western Australia. SCK was first implemented in 2016 and is now embedded in each of the four trachoma-endemic regions. The program aims to reduce trachoma prevalence by overcoming barriers to good hygiene practices in remote Aboriginal communities, such as providing free soap to households and community facilities to overcome the cost and availability of soap. The Clean Faces concept and practice are the main health promotion messages delivered as part of the overall message of the SCK program. The provision of free soap is available to all Aboriginal communities that are at-risk of trachoma and that consent to participate in the program. Bar soap was distributed to 79% of trachoma at-risk communities. The remaining communities that have consented to the program will receive soap in 2019.

Goldfields

School-based education sessions were provided to 15 Aboriginal communities that are at risk of trachoma in the Goldfields. A further four communities at risk of trachoma resurgence also received school-based education sessions. Health promotion and education sessions were provided to settings outside of schools and were delivered to 11 communities at risk of trachoma. These settings included clinics (5), women's groups (5), playgroups (3) and one community store and art centre (1). Resource use was targeted to the group attending the session and included hand-and-face washing techniques, craft activities, hand puppets, monster puppets, 'don't catch the germ' and memory games, songs, 'strong eye' champions, Indigenous Eye Health clinic and community flipchart, soap making, hygiene packs and environmental health hand-and-face washing stickers. The primary target group was school-aged children, with over 1000 interactions with students recorded as participating in activities. Further activities targeted groups outside of schools including 84 health professionals and community members.

Methods included 42 interactive group sessions, 2 group presentations, 12 individuals each receiving 2 one-on-one sessions, and the provision of resources including print material. Print materials were used in group sessions and distributed to schools, clinics and other organisations on 26 occasions. Evaluation of activities occurred for 100% of sessions and included participant surveys, observation of skills learnt and verbal comments.

During 2018 35 400 bars of hard soap and 96 liquid soap refills have been distributed to Aboriginal communities that are at risk of trachoma or trachoma resurgence across the Goldfields.

Pilbara

School-based education sessions were provided to six Aboriginal communities that are at-risk of trachoma in the Pilbara. A further seven communities at-risk of trachoma resurgence also received school-based education sessions. Health promotion or education sessions were provided to settings outside of schools including clinics, women's groups, playgroups and a Home and Community Care (HACC) Centre. Resources that have been used in the education sessions include hand-and-face washing techniques, 'healthy eyes' posters, soap making, No Germs on Me resources, Indigenous Eye Health posters, bucket sink, hygiene resources and packs, pre and post trachoma screening posters, flubber soap, 'germs in eyes' play doh activities, Germ UV light, environmental health hand-and-face washing stickers, Indigenous Eye Health Trachoma Story Kits, and baby doll washing. Resources were distributed to all schools in communities at risk of trachoma for daily hygiene programs. The primary target group were school-aged children with over 550 interactions with students recorded as participating in activities. Further activities targeted groups outside of schools including older youth, parents and caregivers of non-school-aged children and community members.

Methods included group presentations, interactive group sessions and the provision of resources including print material. Print materials were used in every group session and distributed to schools, clinics and other organisations. No Germs On Me – Hand washing posters and the Healthy Eyes posters were used repeatedly. The Healthy Eyes poster is Pilbara specific and is positively received throughout the region. Evaluation of activities occurred for 100% of sessions and included observation of skills learnt.

In addition to these health promotion activities during screening, the Health Promotion team worked alongside the Public Health Team and used the bucket sink resource to run hand-and-face washing sessions and to facilitate discussion about how trachoma is prevented using print materials in all communities at risk of trachoma. All at-risk communities were visited post screening and provided with feedback about rates of trachoma and clean faces.

During 2018 5280 bars of hard soap and 210 liquid soap refills have been distributed to Aboriginal communities that are at risk of trachoma or trachoma resurgence across the Pilbara.

Kimberley

School-based education sessions were provided to nine Aboriginal communities that are at-risk of trachoma in the Kimberley. A further seven communities at-risk of trachoma resurgence also received school-based education sessions. Health promotion and education sessions were provided to settings outside of schools; this included: seven communities at risk of trachoma and a further five communities at risk of trachoma resurgence. The settings varied and included clinics, women's groups, Men's Shed and community stores. Resources that have been used in the education sessions include hand-and-face washing techniques, IEHU trachoma story kit, Indigenous Eye Health community and school flipcharts, Healthy Eyes posters, hygiene packs, Indigenous Eye Health posters, environmental health hand-and-face washing stickers, Mabu Buru environmental brochures, No Germs on Me resources and pre and post screening posters. The primary target group was school-aged children, with over 860 interactions with students recorded as participating in activities.

Methods included group presentations, interactive group sessions and the provision of resources including print material and local radio health promotion messages. Evaluation of activities occurred for 100% of activities and included verbal comments to pre and post session knowledge questions.

A total of 24 360 bars of hard soap and 969 liquid soap refills have been distributed to Aboriginal communities that are at risk of trachoma or trachoma resurgence across the Kimberley.

Midwest

School-based education sessions were provided to 6 of Aboriginal communities that are at-risk of trachoma in the Midwest. One community at risk of trachoma resurgence also received school-based education sessions. Health promotion and education sessions were provided to settings outside of schools in two communities at risk of trachoma. The region has also estimated that more than 3000 community members were reached through the Bundiyyarra Gardantha magazine that included trachoma information. A further newsletter specific to one community at risk of trachoma resurgence, promoting the Clean Faces concept and practice through Squeaky Clean Kids, was distributed to 754 community members. Resources that have been used in the education sessions include hand-and-face washing techniques, baby doll washing, Don't Catch the Germ game, Germ UV light, hygiene resources, Indigenous Eye Health school flip chart, Milpa Indigenous Eye Health resources and soap making. All schools that were part of the 2018 trachoma screening received the Indigenous Eye Health school flip chart learning resource with education on how to use in the classroom setting. The primary target group was school-aged children, with over 200 interactions with students recorded as participating in activities. Further activities targeted groups outside of schools including youth and community members.

Methods included interactive group sessions and the provision of resources including print material. Evaluation of activities occurred for 100% of activities and included observation of skills learnt and verbal comments.

A Hip Hop video 'Mount Magnet Trachoma Free Scene' was written and filmed with school children from Mt Magnet. This was released in October 2018 in recognition of Mt Magnet being trachoma free. The video promotes key messages around trachoma control such as Clean Faces, Strong Eyes. The free soap provided as part of the Squeaky Clean Kids program is also promoted. To date the video has had over 1400 views on YouTube.

During 2018 7946 bars of hard soap and 555 liquid soap refills have been distributed to Aboriginal communities that are at risk of trachoma or trachoma resurgence across the Midwest.

Environmental improvements

The environmental health program in WA provided the following range of activities to support improved environmental health conditions in remote communities:

- Identification of communities at risk of trachoma
- A minimum environmental health visit to communities at risk of trachoma of at least two per year with a specific trachoma focus
- Community assessments conducted to determine the range of environmental health services the community needs or wants
- Environmental health services provided included:
 - safe bathroom assessments
 - plumbing repairs
 - pest control treatments
 - housing referrals for maintenance issues
 - hygiene promotion to community residents
 - solid soap distribution to homes
 - liquid soap installation and distribution for schools
 - mirror installation at schools and in homes
 - soap holders installation in homes
- Environmental health services supported trachoma screening teams in the Goldfields, Pilbara and Kimberley regions. Environmental health assessment of homes was offered to households with active cases of trachoma.

Of the homes that were assessed as part of trachoma screening and control activities:

- hot and cold water was available and taps were functional in at least 92% of all houses
- drains were functional in 95% of houses
- 31% of houses reported all occupants having their own towel
- 26% of homes had a new mirror installed at child height
- 60% of all assessments included a conversation about hand-and-face washing
- soap was present in the bathrooms in only 43% of houses.

Figures and Tables – Western Australia

Figure 4.1 Overall trachoma prevalence in children aged 5-9 years in all at-risk communities by region, Western Australia 2018



Figure 4.2 Number of at-risk communities by region, Western Australia 2007-2018

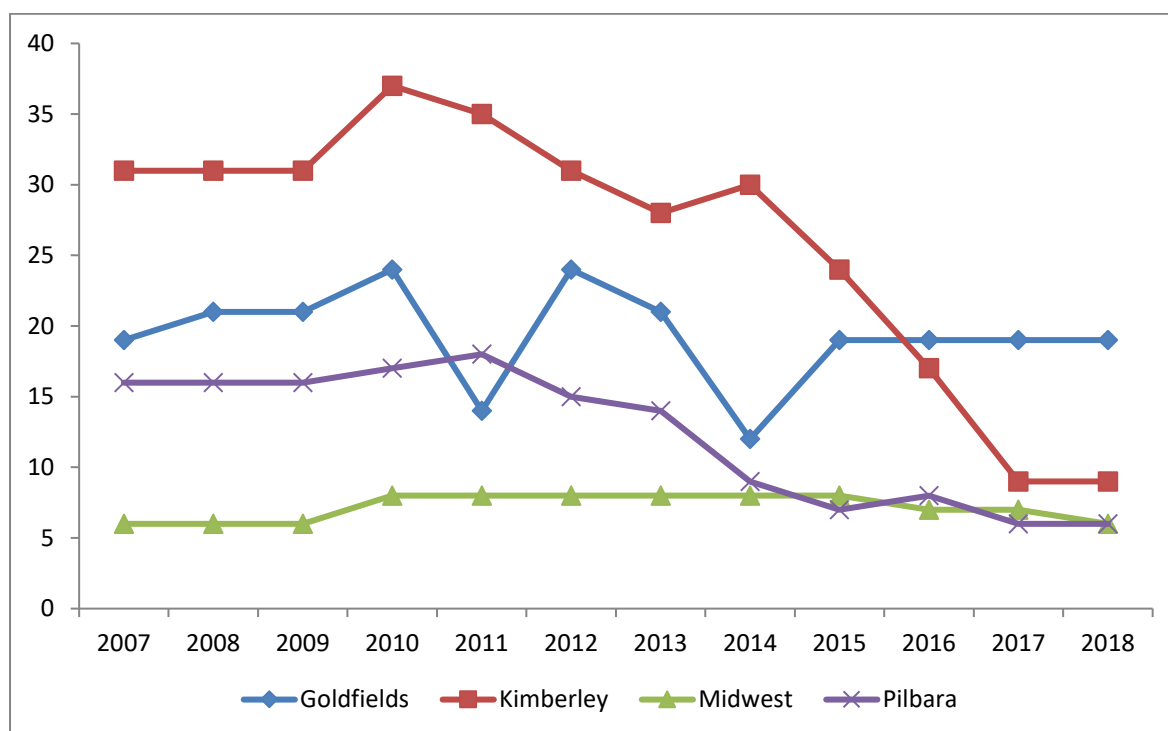


Figure 4.3 Number of at-risk communities according to trachoma control strategy implemented by region, Western Australia 2018

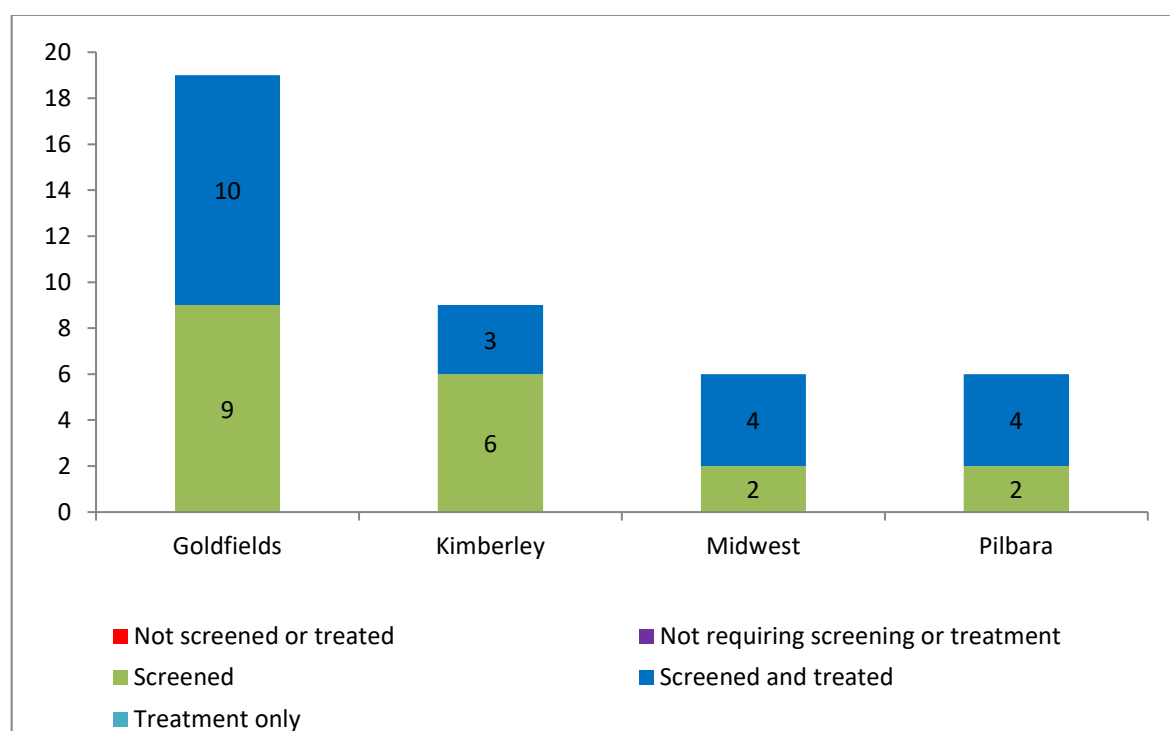


Figure 4.4 Population screening coverage in children aged 5-9 years in communities that required screening for trachoma by region, Western Australia 2018

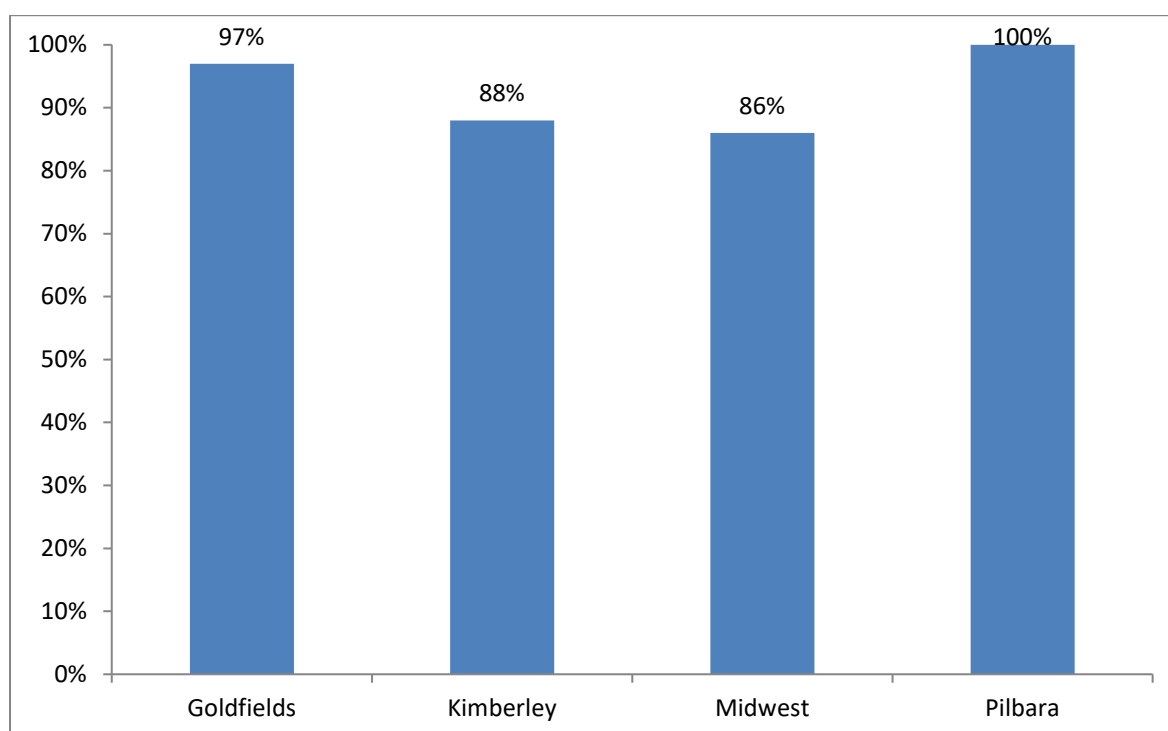


Figure 4.5 Proportion of screened children aged 5-9 years who had a clean face by region, Western Australia 2007-2018

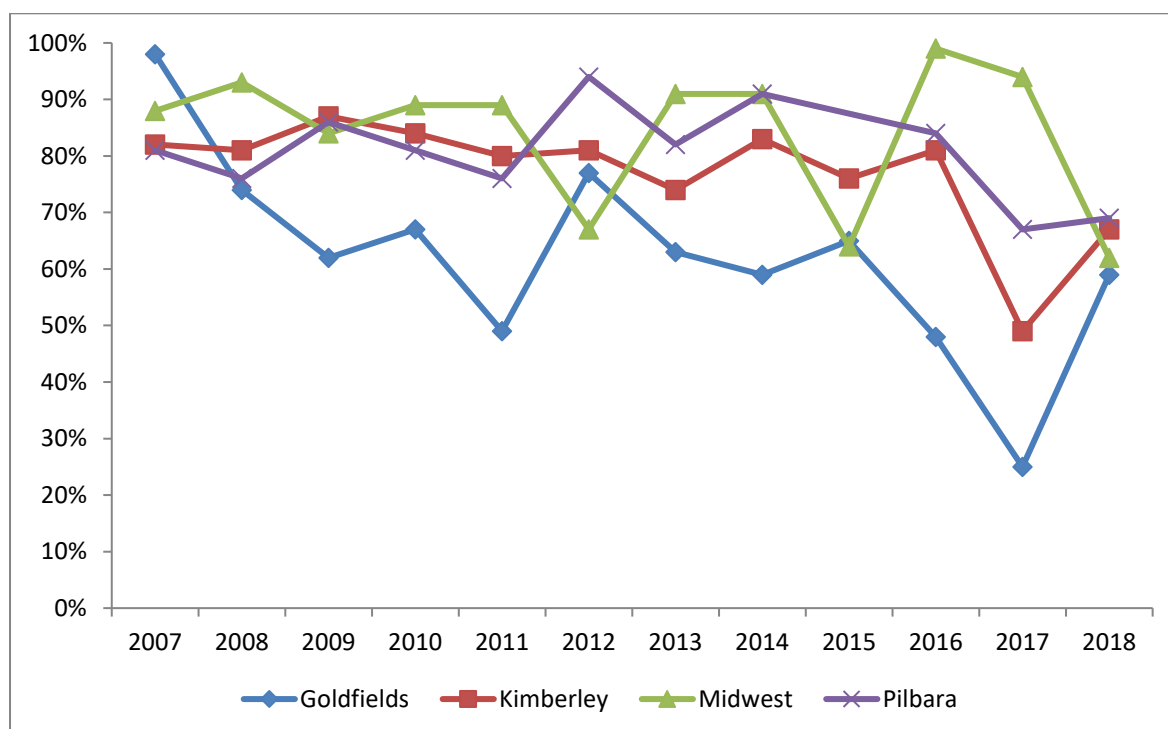


Figure 4.6a Observed prevalence of active trachoma among children aged 5-9 years in communities that were screened by region, Western Australia 2007-2018

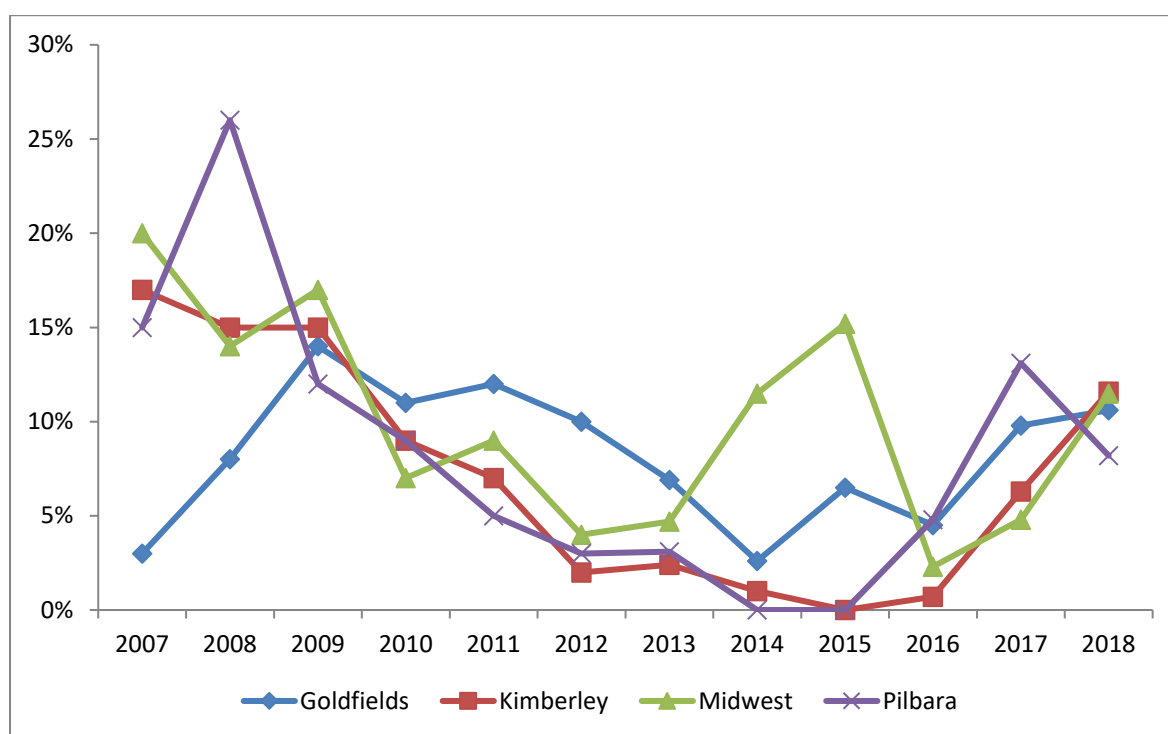
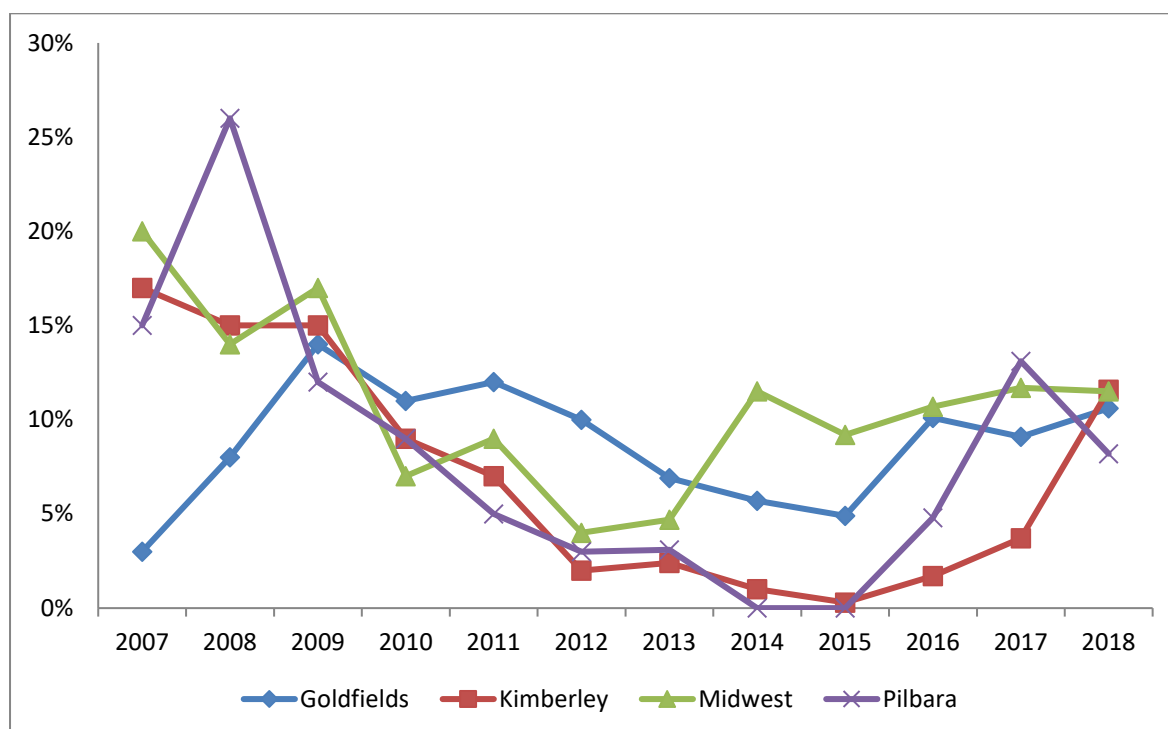
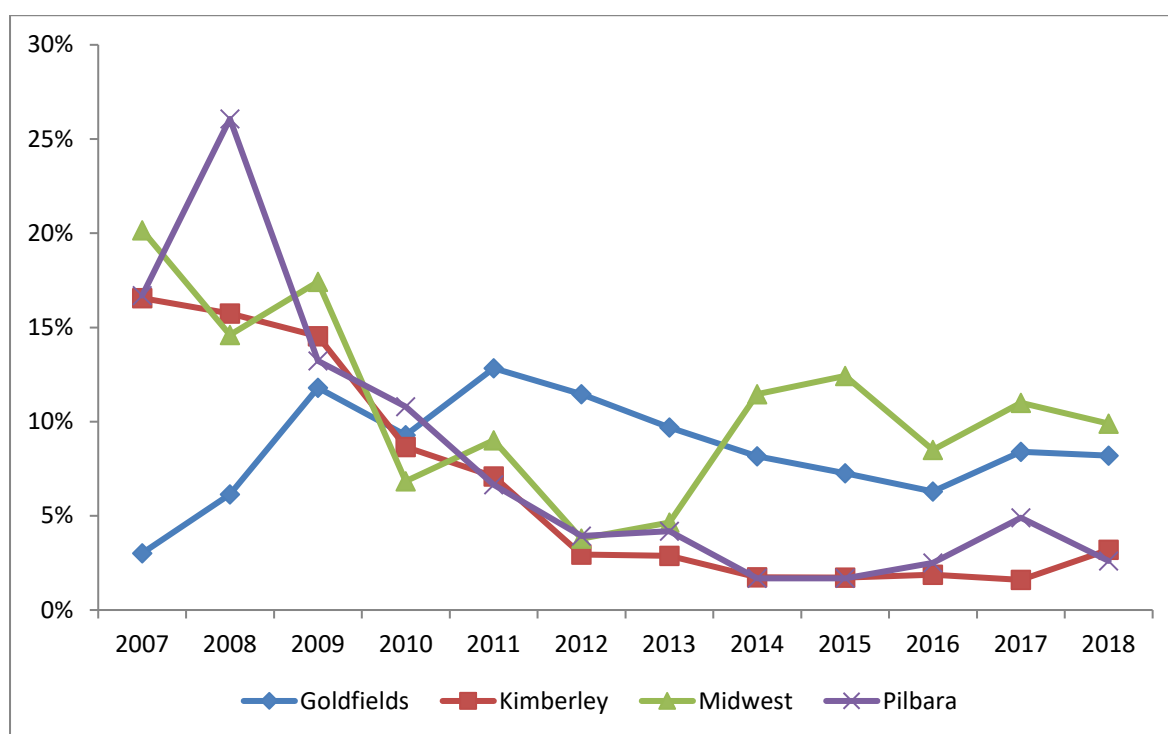


Figure 4.6b Estimated prevalence* of active trachoma among children aged 5-9 years in all at-risk communities by region, Western Australia 2007-2018



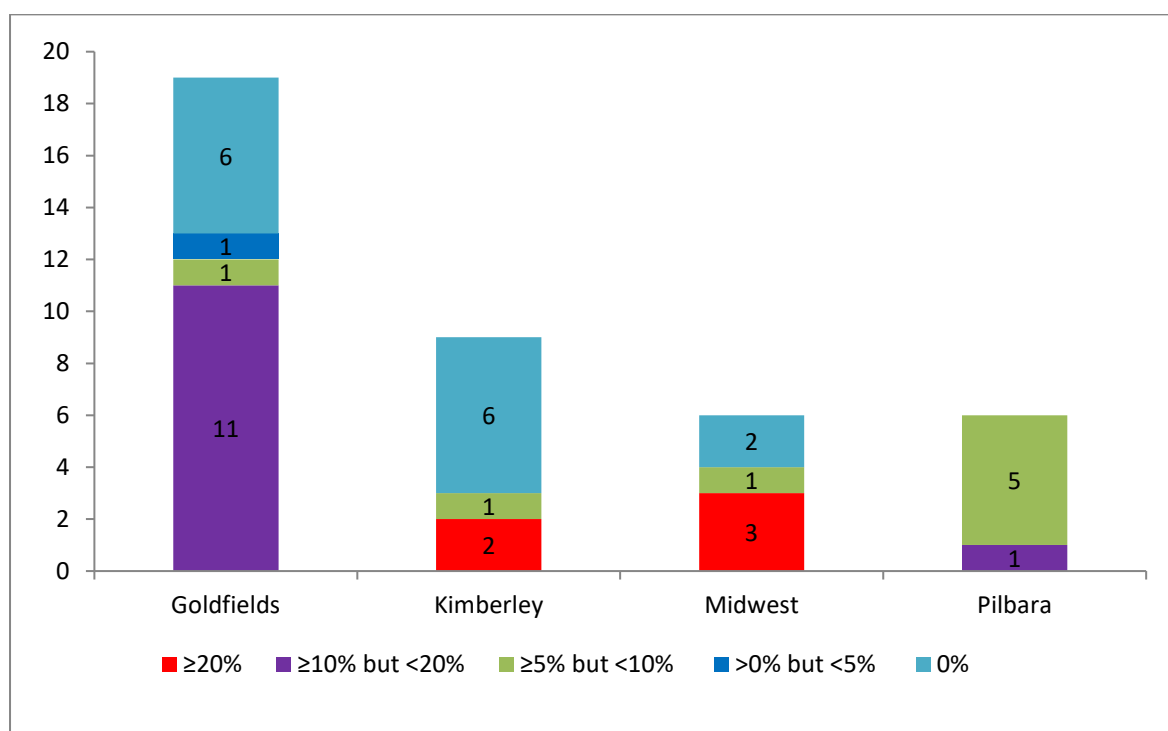
* Most recent estimates carried forward in at-risk communities that did not screen in 2016

Figure 4.6c Overall prevalence of active trachoma among children aged 5-9 years in all communities* by region, Western Australia 2007-2018



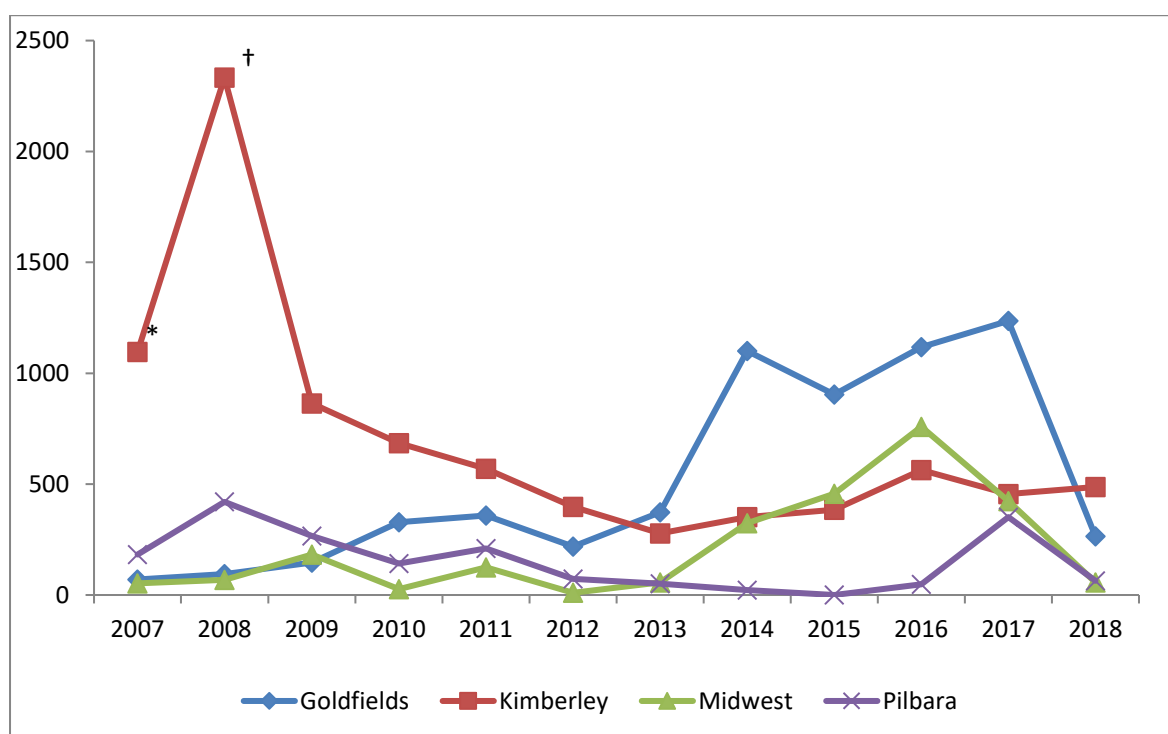
* Calculated carrying forward most recent data in all communities considered at risk of trachoma at some time since 2007

Figure 4.7 Number of at-risk communities* according to level of trachoma prevalence in children aged 5-9 years by region, Western Australia 2018



* Including at-risk communities that did and did not screen in 2016

Figure 4.8 Number of doses of azithromycin administered for the treatment of trachoma by region, Western Australia 2007-2018



* Treatments administered in the Kimberley in 2007 are likely to have been under-reported, as treatment data were not received from several communities

† In the Kimberley in 2008, 17 communities were reported to have received 'community-based treatment', compared with only seven in 2009

Table 4.1 Trachoma control delivery by region, Western Australia 2018

Number of communities	Goldfields	Kimberley	Midwest	Pilbara	Total
At risk (A)	19	9	6	6	40
Requiring screening for trachoma (B)	19	9	6	6	40
Screened for trachoma (C)	19	9	6	6	40
Requiring treatment without screening * (D)	0	0	0	0	0
Received treatment without screening * (E)	0	0	0	0	0
Screened and/or treated for trachoma (F = C+E)	19	9	6	6	40
Requiring neither screening or treatment for trachoma (G=A-B-D)	0	0	0	0	0

*Communities treated without screening in 2018 as per Guidelines

Table 4.2 Trachoma screening coverage, trachoma prevalence and clean face prevalence by region, Western Australia 2018

	Goldfields				Kimberley				Midwest				Pilbara				Total			
Number of communities screened	19				9				6				6				40			
Age group (years)	1-4	5-9	10-14	1-14	1-4	5-9	10-14	0-14	1-4	5-9	10-14	0-14	1-4	5-9	10-14	0-14	1-4	5-9	10-14	0-14
Children examined for clean face	150	226	0	376	77	180	40	297	69	90	0	159	29	49	1	79	325	545	41	911
Children with clean face	46	133	0	179	16	121	37	174	29	56	0	85	19	34	1	54	110	344	38	492
Clean face prevalence (%)	31	59		48	21	67	92	59	42	62		53	66	69	100	68	34	63	93	54
Age group (years)	1-4	5-9		1-9	1-4	5-9		1-9	1-4	5-9		1-9	1-4	5-9		1-9	1-4	5-9		1-9
Estimated number* of Indigenous children in communities†	156	232		388	79	186		265	69	101		170	25	49		74	329	568		897
Children screened for trachoma	149	226		375	71	164		235	66	87		153	25	49		74	311	526		837

	Goldfields				Kimberley				Midwest				Pilbara				Total			
Number of communities screened	19				9				6				6				40			
Age group (years)	1-4	5-9	10-14	1-14	1-4	5-9	10-14	0-14	1-4	5-9	10-14	0-14	1-4	5-9	10-14	0-14	1-4	5-9	10-14	0-14
Trachoma screening coverage (%)	96	97		97	90	88		89	96	86		90	100	100		100	95	93		93
Children with active trachoma†	10	24		34	17	19		36	3	10		13	0	4		4	30	57		87
Observed prevalence of active trachoma‡ (%)	6.7	10.6		9.1	23.9	11.6		15.3	4.5	11.5		8.5	0.0	8.2		5.4	9.6	10.8		10.4
Estimated prevalence of active trachoma‡ (%)		10.6				11.6				11.5				8.2				10.8		
Overall prevalence of active		8.2				3.2				9.9				2.6				4.6		

	Goldfields				Kimberley				Midwest				Pilbara				Total			
Number of communities screened	19				9				6				6				40			
Age group (years)	1-4	5-9	10-14	1-14	1-4	5-9	10-14	0-14	1-4	5-9	10-14	0-14	1-4	5-9	10-14	0-14	1-4	5-9	10-14	0-14
trachoma‡ (%)																				

* Jurisdiction provides estimate for children aged 5-9 years only; number of children in communities aged 0-4 and 10-14 years are based on convenience sampling

† In communities that were screened for trachoma in 2018

‡ Methods of calculating the different prevalence rates on page 22

Table 4.3 Number and proportion of at-risk communities* according to level of trachoma prevalence in children aged 5-9 years, Western Australia 2007-2018

	2007		2008		2009		2010		2011		2012		2013		2014		2015		2016		2017		2018	
Communities at-risk †	72		74		74		86		75		78		71		59		49		51		41		40	
Communities not screened ‡	17		7		5		8		7		3		2		0		0		0		0		0	
Number of communities §	55		67		69		78		68		75		69		59		49		51		41		40	
≥20%	18	33%	29	43%	22	32%	14	18%	10	15%	9	12%	7	10%	2	3%	3	6%	3	6%	6	15%	5	13%
≥10% but <20%	12	22%	7	10%	3	4%	18	23%	8	12%	3	4%	3	4%	4	7%	2	4%	15	29%	17	41%	12	30%

	2007		2008		2009		2010		2011		2012		2013		2014		2015		2016		2017		2018	
≥5% but <10%	5	9%	8	12%	8	12%	7	9%	7	10%	10	13%	10	14%	2	3%	0	0%	2	4%	1	2%	8	20%
>0% but <5%	0	0%	7	10%	14	20%	7	9%	4	6%	7	9%	8	12%	6	10%	5	11%	1	2%	1	2%	1	3%
0%	20	36%	16	24%	22	32%	32	41%	39	57%	46	61%	41	59%	45	76%	39	79%	30	59%	16	39%	14	35%

* Based on current or most recent year

† As defined annually by each jurisdiction

‡ Or treated as required per Guidelines

§ Screened or receiving ongoing annual treatment as per Guidelines

Table 4.4 Treatment strategies by region, Western Australia 2018

	Goldfields	Kimberley	Midwest	Pilbara	Total
Required treatment for trachoma	10	3	4	4	21
Treated for trachoma*	10	3	4	4	21
Screened and treated	10	3	4	4	21
Received treatment only	0	0	0	0	0
Received 6-monthly treatment	0	0	0	0	0
Did not require treatment	9	6	2	2	19
Treated active trachoma and households	10	1	4	4	19
Community wide treatment	0	2	0	0	2
Not treated according to CDNA Guidelines*	0	0	0	0	0

Table 4.5 Trachoma treatment coverage by region, Western Australia 2018

	Goldfields					Kimberley					Midwest					Pilbara					Total				
	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
Requiring treatment for active trachoma	10	26	0		36	17	19	0		36	3	10	0		13	0	4	0		4	30	59	0		89
Received treatment for active trachoma	10	26	0		36	17	19	0		36	3	8	0		11	0	4	0		4	30	57	0		87
<i>Received treatment for active trachoma (%)</i>	100	100			100	100	100			100	100	80			85		100			100	100	97			98
Estimated community members* requiring treatment	21	32	29	157	239	48	80	63	332	523	9	10	6	21	46	10	11	14	29	64	88	133	112	539	872
Number of community members* who received treatment	20	30	29	149	228	47	80	59	265	451	9	10	6	21	46	10	11	14	25	60	86	131	108	460	785

	Goldfields					Kimberley					Midwest					Pilbara					Total				
	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
<i>Estimated community members who received treatment (%)</i>	95	94	100	95	95	98	100	94	80	86	100	100	100	100	100	100	100	100	86	94	98	98	96	85	90
Number of community members who declined treatment	0	0	0	0	0	1	0	4	67	72	0	0	0	0	0	0	0	0	0	0	1	0	4	67	72
Total number of doses of azithromycin delivered	30	56	29	149	264	64	99	59	265	487	12	18	6	21	57	10	15	14	25	64	116	188	108	460	872
<i>Estimated overall treatment coverage (%)</i>	97	97	100	95	96	98	100	94	80	87	100	90	100	100	97	100	100	100	86	94	98	98	96	85	91

* Includes household contacts and community members requiring/receiving mass drug administration (MDA)

Table 4.6a Trichiasis screening coverage, prevalence and treatment* among Indigenous adults by region, Western Australia 2018

	Goldfields		Kimberley		Midwest		Pilbara		Total		
Number of communities screened for trichiasis	19		5		6		6		36		
Age group (years)	15-39	40+	15-39	40+	15-39	40+	15-39	40+	15-39	40+	15+
Estimated population in region*	697	489	3177	1824	546	299	1523	802	5943	3414	9357
Number of adults examined†	25	178	44	36		173	111	87	180	474	654
Number with trichiasis	0	1	0	0	0	0	0	0	0	1	1
Proportion with trichiasis (%)	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Surgery in past 12 months‡	0	0	0	0	0	0	0	0	0	0	0

- * Opportunistic screening during trachoma screening, treatment and flu vaccination activities

†Population estimate limited to trachoma endemic regions and does not take into account changing endemic regions over time and transiency between regions

‡Surgery cases may include cases identified in previous years

Table 4.6b Trichiasis screening coverage, prevalence and treatment from MBS715 data* among Indigenous adults by region, Western Australia 2018

	Goldfields	Kimberley	Midwest	Pilbara	Total
Age group (years)	40+	40+	40+	40+	40+
Estimated population in region†	489	1824	299	802	3414
Adults examined	922	2530	906	50	4408
Number with trichiasis	0	0	0	0	0
Proportion with trichiasis (%)	0.0	0.0	0.0	0.0	0.0

	Goldfields	Kimberley	Midwest	Pilbara	Total
Surgery in past 12 months	0	0	0	0	0

- * Data likely to include duplicate individual presentations, and individuals in urban settings.

†Population estimate limited to trachoma endemic regions and does not take into account changing endemic regions over time and transiency between regions

Table 4.6c Trichiasis screening coverage, prevalence and treatment from visiting optometrist services data among Indigenous adults by region, Western Australia 2018

	Goldfields	Kimberley	Midwest	Pilbara	Total
Age group (years)	40+	40+	40+	40+	40+
Estimated population in region*	489	1824	299	802	3414
Adults examined	126	1215	0	565	1906
Number with trichiasis	0	0	0	1	1
Proportion with trichiasis (%)	0.0	0.0	0.0	0.2	0.1
Surgery in past 12 months	0	0	0	0	0

* Population estimate limited to trachoma endemic regions and does not take into account changing endemic regions over time and transiency between regions

Table 4.7 Health promotion activities by region, Western Australia 2018

	Goldfields	Kimberley	Midwest	Pilbara	Total
Number of communities that reported health promotion activities	18	25	7	13	63
Total number of programs reported	28	38	11	17	94
Methods of health promotion					
One-on-one discussion	12	9	0	16	37
Presentation to group	2	25	0	0	27
Interactive group session	42	11	7	0	60
Social marketing	0	1	0	0	1
Print material/mass media	26	5	3	16	50
Sporting/community events	0	0	0	0	0
Other	0	0	0	0	0
Target audience					
Health professionals/staff	2	7	0	0	9
Children	19	26	8	9	62
Youth			2	7	9
Teachers/childcare/preschool staff	0	8	0	0	8
Caregivers/parents	0	0	0	0	0
Community members	9	6	2	5	22
Community educators/health promoters	0	0	0	0	0
Interagency members	0	0	0	0	0
Frequency of health promotion activities					
Once	11	37	3	0	51
Occasional *	17		7	17	41

	Goldfields	Kimberley	Midwest	Pilbara	Total
Regular†	0	1	0	0	1
Ongoing/routine	0	0	0	0	0

* 2-4 times per year.

† 5-12 times per year.

Table 4. 8 Soap distribution by region, Western Australia 2018

Region	Milpa Bar Soap	Liquid Soap Refills
Kimberley	24360	969
Pilbara	5280	210
Midwest	7946	555
Goldfields	35400	96
Total	72986	1830

Queensland Results

Trachoma program coverage

- In 2018 QLD undertook a mapping exercise in 3 communities in North West QLD and 1 community in the Torres Strait Islands identified as being potentially at risk of trachoma (Table 5.1).

Screening coverage

- Population screening coverage of children aged 5-9 years was 97% (Table 5.1).

Clean face prevalence

- The prevalence of clean faces among children aged 5-9 years was 80% (Table 5.1).

Trachoma prevalence

- The observed prevalence of active trachoma in children aged 5-9 years in the 4 communities that screened in 2018 was 2.8%. (Table 5.1).
- Two small communities in North West QLD were screened: in one community, a single child (5–9 years) with trachomatous inflammation (TF) was identified. Swabs from this child were PCR positive for *Chlamydia trachomatis*. In the second community, 2 children (one child 0–4 years; one child 5–9 years) were identified with TF. No *C. trachomatis* was identified in swabs from these 2 children.

Treatment delivery and coverage

- Trachoma treatment strategies were undertaken in 2 communities where TF was identified. Cases and household contacts were treated (Table 5.2).
- Total treatment coverage for TF cases and community members, and community-wide treatment in all regions requiring treatment was 100% with 56 doses of azithromycin delivered (Table 5.2).

Trachoma-related trichiasis

- Trichiasis screening was undertaken in 4 communities in 2018 with 162 adults screened for trichiasis (Table 5.3).
- No cases of trachoma-related trichiasis were detected.
- Further to the communities reported, the optometrist who services the Torres Strait Islands visits most communities twice a year performing comprehensive eye exams, including trichiasis evaluation. No cases of trachoma-related trichiasis in an individual whose childhood was spent in the Torres Strait Islands have been detected in the last 12 years
- The ophthalmologist who conducts clinics in the Torres Strait Islands reports that in the past 30 years he has performed no operations for trachoma-related trichiasis nor has he seen any corneal scarring or blindness caused by trachoma. This report includes individuals who spent their childhood in the Torres Strait Islands and elsewhere.

Health promotion

- Health promotion activities were reported to have occurred in 4 communities in north-western region of QLD and in the Torres Strait Islands (Table 5.4).
- A total of 11 health promotion activities were reported (Table 5.4).

Figures and Tables – Queensland

Table 5.1 Trachoma screening coverage, trachoma prevalence and clean face prevalence, Queensland 2018

	Queensland			
Number of communities screened	4			
Age group (years)	0-4	5-9	10-14	0-14
Children examined for clean face	25	71	38	134
Children with clean face	21	57	37	115
<i>Clean face prevalence (%)</i>	84	80	97	86
Estimated number* of Indigenous children in communities†	36	73	39	148
Children screened for trachoma	25	71	38	134
<i>Trachoma screening coverage (%)</i>	69	97	97	90
Children with active trachoma‡	1	2	0	3
<i>Observed prevalence of active trachoma‡ (%)</i>	4.0	2.8	0.0	0.0
Estimated prevalence of active trachoma‡ (%)		2.8		
<i>Overall prevalence of active trachoma‡ (%)</i>		2.8		

* Jurisdiction provides estimate for children aged 5-9 years only; number of children in communities aged 0-4 and 10-14 years are based on convenience sampling

† In communities that were screened for trachoma in 2018

‡ Methods of calculating the different prevalence rates on page 22

Table 5.2 Trachoma treatment coverage, Queensland 2018

	Queensland				
Numbers of communities treated for trachoma	2				
	0-4	5-9	10-14	15+	All
Requiring treatment for active trachoma	1	2	0		3
Received treatment for active trachoma	1	2	0		3
Received treatment for active trachoma (%)	100	100	100		100
Estimated community members requiring treatment	4	16	8	25	53
Number of community members who received treatment	4	16	8	25	53
Estimated community members who received treatment (%)	100	100	100	100	100
Number of community members that refused treatment	0	0	0	0	0
Total number of doses of azithromycin delivered	5	18	8	25	56
Estimated overall treatment coverage (%)	100	100	100	100	100

Table 5.3 Trichiasis screening coverage, prevalence and treatment among Indigenous adults, Queensland 2018

	Queensland		
Number of communities screened for trichiasis	4		
Age group (years)	15-39	40+	15+
Estimated population in region*	155	154	309
Adults examined†	79	83	162
Number with trichiasis	0	0	0
Proportion with trichiasis (%)	0.0	0.0	0.0
Surgery in past 12 months‡	0	0	0

* Population estimate limited to trachoma endemic regions and does not take into account changing endemic regions over time and transiency between regions

† Number of adults examined limited to numbers reported. This number may not account for all adults who may be examined in routine adult health checks, and may also include multiple screening

‡ Surgery cases may include cases identified in previous years

Table 5.4 Health promotion activities Queensland 2018

Queensland	
Number of communities that reported health promotion activities	4
Number of programs reported	11
Method of health promotion activities	
One-on-one discussion	9
Presentation to group	5
Interactive group session	0
Social marketing	0
Print material/mass media	9
Sporting/community events	0
Other	
Target audience	
Health professional/staff	7
Children	2
Youth	0
Teachers/childcare/preschool staff	9
Caregivers/parents	1
Community members	12
Community educators/health promoters	1
Interagency members	0
Frequency of health promotion activities	
Once	1
2-4 times per year	10
5-12 times per year	0

Queensland	
Ongoing/routine	0

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