Public Health Division
Diphtheria response

Webinar 28/05/2026

AHCSA

Government of South Australia

SA Health

We acknowledge and respect the Traditional Custodians whose ancestral land we are
meeting on here today.

We acknowledge the deep feelings of attachment and relationship
of Aboriginal people to country.

We also pay respects to the cultural authority of
Aboriginal people visiting/attending from other areas of South Australia/Australia present here.

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Presenters

Dr Louise Flood	Medical Lead, Communicable Disease Control Branch (CDCB) Specialist Services, PHD, CDCB
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Overview

- Background
- Epidemiology
- Overview of diphtheria
- Public health response
- Management of diphtheria
- Immunisation program
- Infection prevention and control
- Resources
- Questions

SA Health Disclaimer

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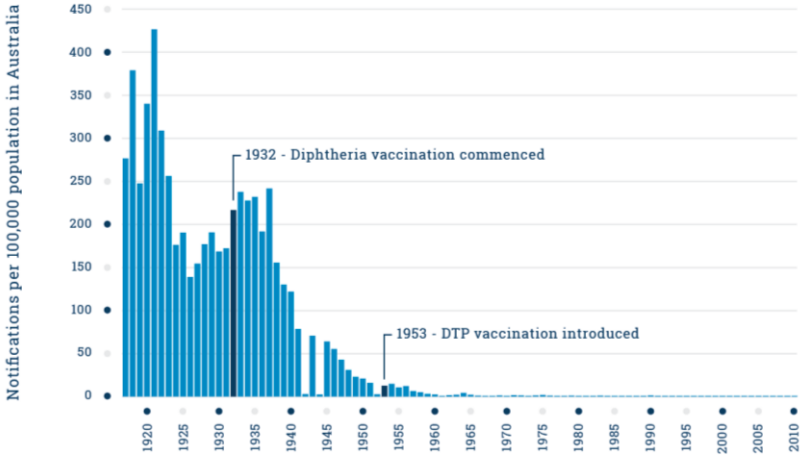
Diphtheria in Australia

- Previously common
  - Epidemics
- Vaccine preventable disease
- Vaccination program
  - School level program 1932
  - Infants in welfare centres 1940
  - DTP in 1953
- Prior to outbreak now rare
- Sporadic cases
  - International travel – importations from endemic regions
  - Undervaccinated populations



Haunting photo shows why vaccinations are a good thing | Metro News

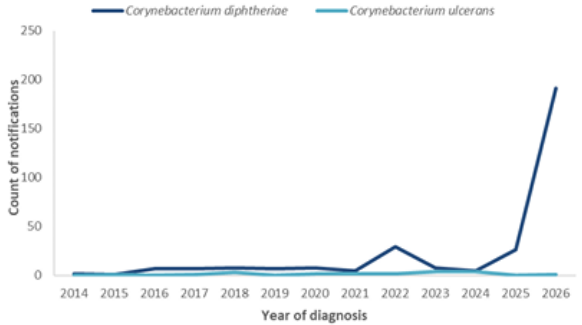
The infectious diseases that stole generations of Limestone Coast families - ABC News

Diphtheria | Sharing Knowledge About Immunisation | SKAI

Public health concern

- Diphtheria is of concern as
  - spread through respiratory droplets & close contact
  - contacts may be asymptomatic carriers
  - can be lethal
  - severe disease can progress rapidly
  - access to diphtheria antitoxin (DAT) is limited & time-critical
- Logistical challenges
  - specimen transport
  - isolation & transfer
  - antitoxin access
  - contact tracing
  - vaccination

Figure 4: Notifications of confirmed diphtheria* by species, Australia, 1 January 2014 to 11 May 2026



Diphtheria in Australia – Epidemiological update – 11 May 2026

Diphtheria outbreak

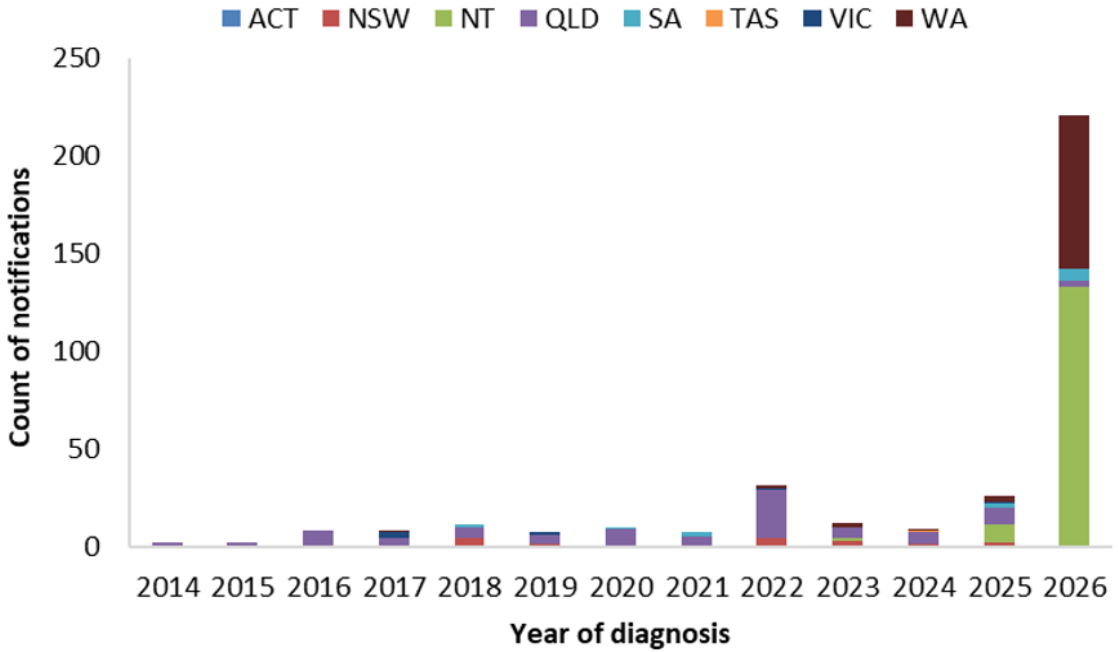
- Increasing since October 2025, with a marked increase since February 2026
- Most cases have occurred in NT and WA
- AusTrakka genomic analyses indicates recent cases in WA, NT, SA & QLD are genomically linked

National Surveillance Data

- Data from National Surveillance report using data extracted 18 May 2026
- 221 cases in 2026
- Most cases have occurred in NT (133 cases) & WA (79 cases)
- Most in outer regional or remote & very remote
- 94% among Aboriginal and/or Torres Strait Islander people
- 67.9% cutaneous, 31.7% respiratory, 0.4% unknown
- Median age 26 years (IQR 14 to 38 years)
- Age for respiratory diphtheria is lower than cutaneous diphtheria
- 86% of respiratory diphtheria and 72% pf cutaneous diphtheria vaccinated.

Epidemic curve

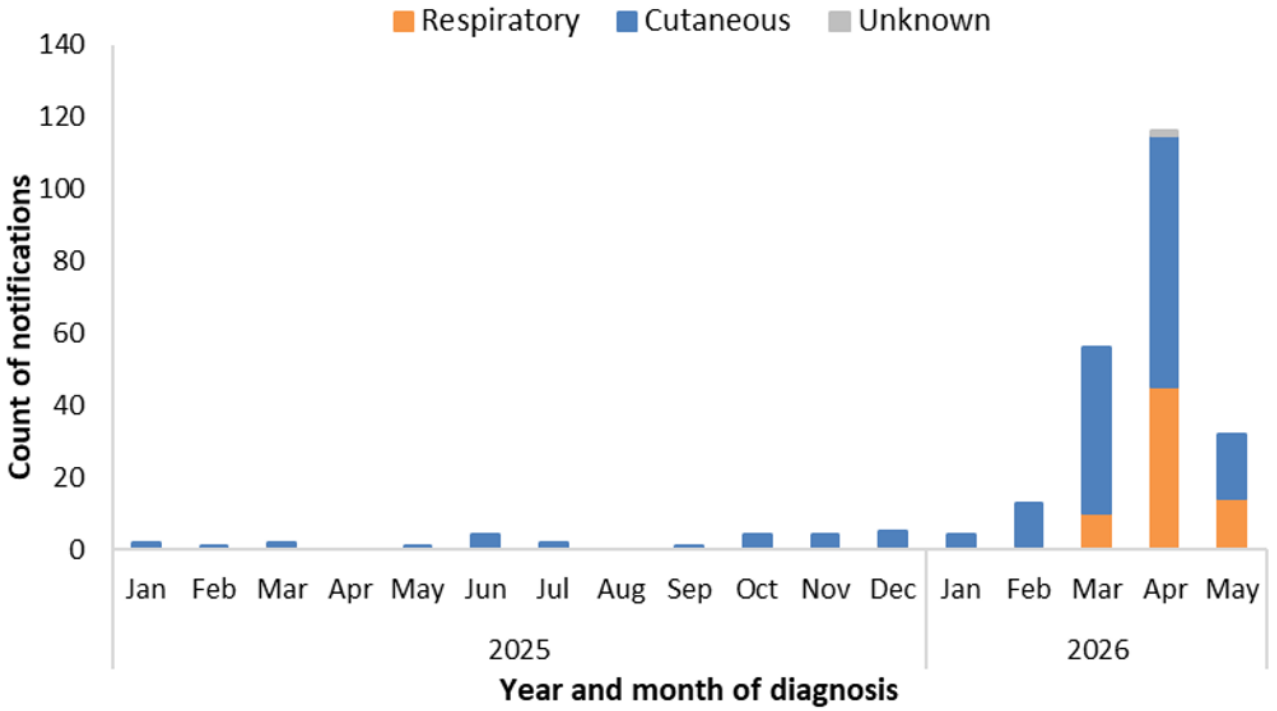
Figure 3: Notifications of diphtheria by year and jurisdiction, Australia, 1 January 2014 to 18 May 2026



[Diphtheria in Australia – Epidemiological update – 18 May 2026]

Epidemic curve

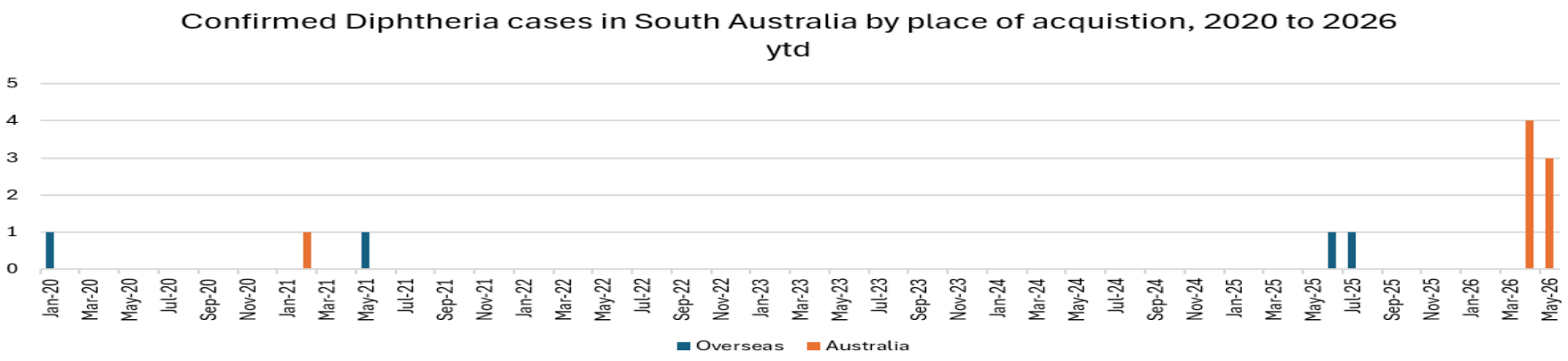
Figure 8: Notifications of diphtheria by clinical presentation and month, Australia, 1 January 2025 to 18 May 2026



[Diphtheria in Australia – Epidemiological update – 18 May 2026]

South Australian surveillance data

- The first case of diphtheria was notified on 9 April 2026
- As of 27 May 2026, there have been 7 cases notified, 4 respiratory and 3 cutaneous. *as per current case definition
- All 7 cases have been age-appropriately vaccinated.
- One case was hospitalised and received anti-toxin
- All cases have resided in Eyre and Far North (LHN).
- Age range 7 to 40 years with a median age of 16 years



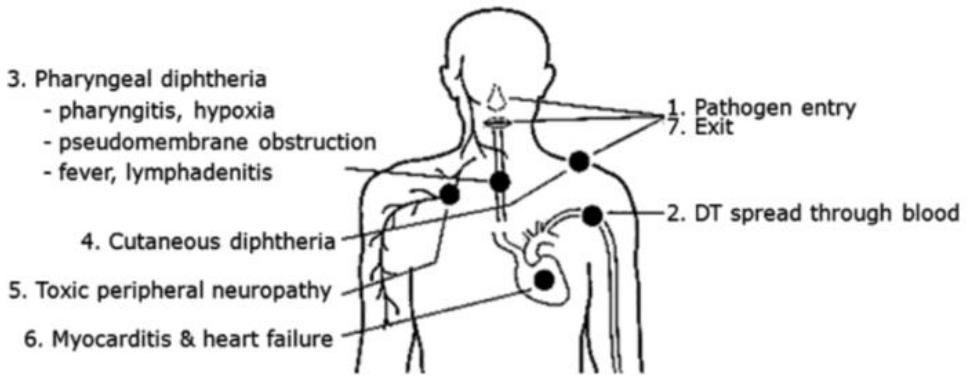
Diphtheria overview

- Agent
  - *Corynebacterium diphtheriae* & other Corynebacterium infected with a corynebacteriophage that expresses the toxin gene
- Transmission
  - Droplet, direct contact
- Incubation period
  - Usually 2-5 days (range 1-10 days)
- Infectious period (time during which an infected person can infect others)
  - Starts 7 days prior to symptom onset for respiratory cases
  - Starts from the date of skin infection onset for cutaneous cases
  - Without antibiotic therapy, usually less than 2 weeks but occasionally as long as 6 months
  - A person is no longer infectious after treatment with appropriate antibiotics

Image: Corynebacterium diphtheriae - Wikipedia

Clinical features

- Toxin mediated disease
- Impacts
  - Respiratory
  - Cutaneous
  - Cardiac
  - Neurological



Uthman, Shanow, et al. "Diphtheria disease and genes involved in formation of diphthamide, key effector of the diphtheria toxin." *Insight and control of infectious disease in global scenario* 2 (2012): 64.

Photo / image advisement

- The following few slides in this presentation contain images of people with diphtheria.

- Attendee discretion is advised for the next three slides.

Cutaneous diphtheria

- More common in tropical regions
- Chronic non-healing ulcer
  - Painful or mildly tender
  - Punched out appearance
  - Slow to heal
  - Purulent discharge may occur
- Grey/white membrane may cover the base
- Surrounding redness & crusting
- Common sites
  - Legs, feet, hands, areas of trauma or existing skin disease
- Lesions may carry large amounts of bacteria
- Patients may have respiratory colonisation
- Mixed infections are common (e.g *Staph aureus, Step pyogenes*)

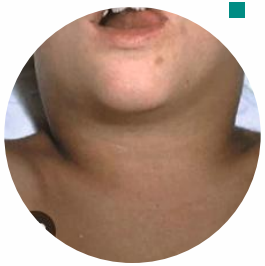
Cutaneous diphtheria infection – Wikipedia
https://www.clinicalmicrobiologyandinfection.org/action/showPdf?pii=S1198-743X%2822%2900042-8

Respiratory diphtheria

Sign	Incidence (n=6350)
Fever	84.7%
Difficulty swallowing	31%
Pseudomembrane	37%
Gross lymphadenopathy	31.1%

Respiratory diphtheria

- Pharyngitis
- Tonsilitis with exudate
- Cervical lymphadenopathy
- Severe disease
  - Bull neck
  - Pseudomembrane
  - Airway obstruction



Tackling diphtheria in Bangladesh — Shorthand Social

https://commons.wikimedia.org/w/index.php?curid=27093567

WHO EPI-WIN webinar: Managing diphtheria: the new WHO clinical management guidelines

Diphtheria - Dr Sanu P Moideen

Long term sequalae

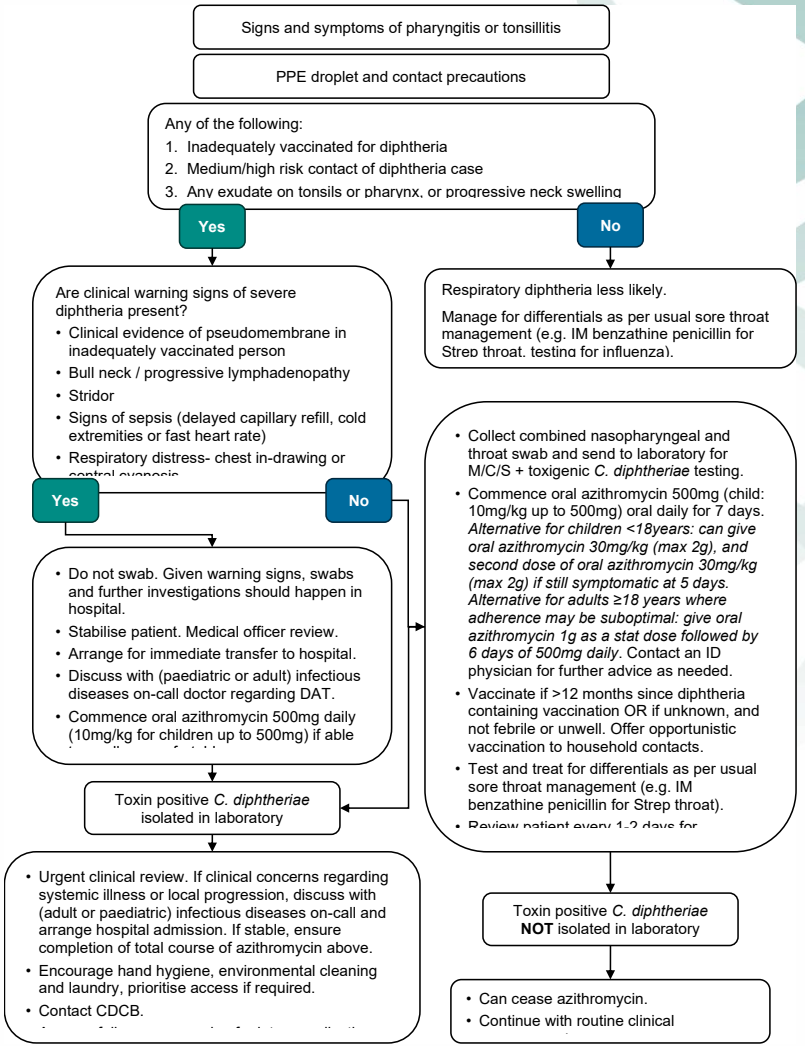
Complication	Incidence Rate (n=6350)
Neuropathy	5%
Renal dysfunction	1-2%
Cardiac symptoms	8%
Generalized weakness/weight loss	25%
Sudden Cardiac death	0.3%

Public health response

- Ensuring communications & engagement which is culturally appropriate
- Ensuring rapid identification & management of cases
- Ensuring rapid identification & management of contacts
- Providing delivery of vaccination to those at highest risk
- Providing advice re infection prevention & control
- Maintaining a sensitive surveillance system
- Providing timely reporting

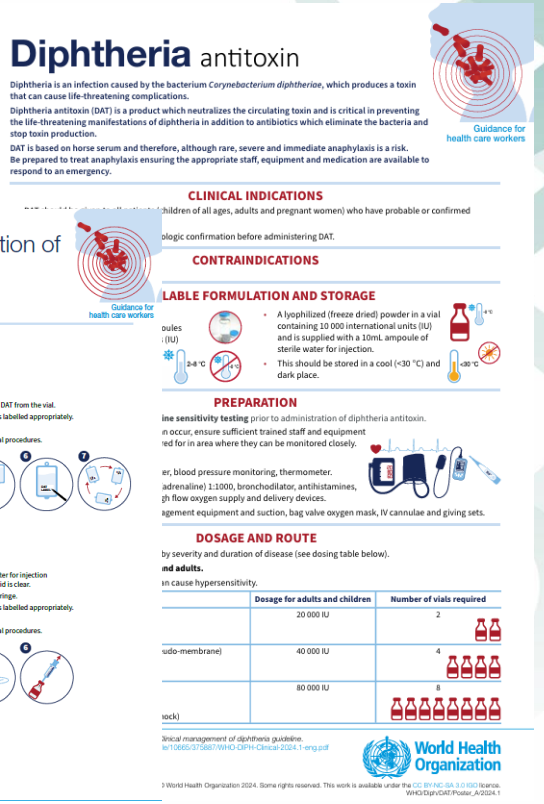
Case management

- Infection control
- Stabilise patient
  - Signs of severe diphtheria?
  - Is patient transfer required?
- Testing
- Antibiotics
  - Azithromycin
  - Amoxycillin (cutaneous diphtheria)
- Diphtheria antitoxin if needed
- Notification to CDCB 1300 232 272
- Regular review if not hospitalised
- Vaccination – during convalescence



Diphtheria antitoxin (DAT)

- Should be given promptly when indicated
- Administration can cause allergic reactions
- Only give in settings where anaphylaxis can be managed
- Ensure ID physician involved in decision to provide DAT
- Stored at
  - RAH – contact RAH pharmacy
  - RFDS Port Augusta



Diphtheria antitoxin

Diphtheria is an infection caused by the bacterium *Corynebacterium diphtheriae*, which produces a toxin that can cause life-threatening complications.

Diphtheria antitoxin (DAT) is a product which neutralizes the circulating toxin and is critical in preventing the life-threatening manifestations of diphtheria in addition to antibiotics which eliminate the bacteria and stop toxin production.

DAT is based on horse serum and therefore, although rare, severe and immediate anaphylaxis is a risk. Be prepared to treat anaphylaxis ensuring the appropriate staff, equipment and medication are available to respond to an emergency.

Guidance for health care workers

CLINICAL INDICATIONS

CONTRAINDICATIONS

LABLE FORMULATION AND STORAGE

PREPARATION

DOSAGE AND ROUTE

Preparation and administration of **Diphtheria** antitoxin

Guidance for health care workers

Give the entire treatment dose of antitoxin in a single IV administration.

Dilution – liquid form:

- Perform hand hygiene and wear appropriate personal protective equipment.
- Obtain the required number of single-use vials for the dose (see dosing table).
- Warm antitoxin to 32–34 °C before injection.
- Prepare an infusion bag containing 250 mL of 0.9% w/v sodium chloride.
  - Using a sterile needle and syringe for each vial, withdraw the correct amount of DAT from the vial.
  - Add the DAT from the syringes to the infusion bag and ensure the infusion bag is labelled appropriately.
  - Gently invert the infusion bag several times to mix the solution. Do not shake.
- Dispose of any unused medicinal product or waste material in accordance with local procedures.

Dilution – lyophilized (freeze dried) form:

- Perform hand hygiene and wear appropriate personal protective equipment.
- Obtain the required number of single-use vials for the dose (see dosing table).
- Prepare an infusion bag containing 250 mL of 0.9% w/v sodium chloride.
  - Using a sterile needle and syringe for each vial, withdraw the accompanying water for injection and inject into the vial of lyophilized DAT and gently invert the vial until the liquid is clear.
  - Withdraw the correct amount of DAT from the vials using a sterile needle and syringe.
  - Add the DAT from the syringes to the infusion bag and ensure the infusion bag is labelled appropriately.
  - Gently invert the infusion bag several times to mix the solution. Do not shake.
- Dispose of any unused medicinal product or waste material in accordance with local procedures.

	Dosage for adults and children	Number of vials required
	20 000 IU	2
	40 000 IU	4
	80 000 IU	8

World Health Organization

[WHO Diphtheria antitoxin 2 February 2024]

Testing

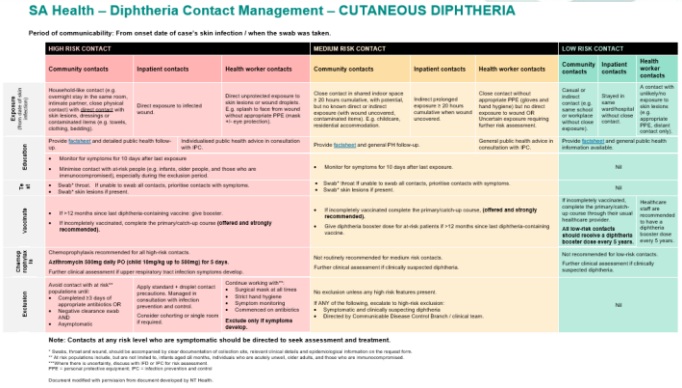
- Standard, contact & droplet precautions
- Delay swabbing if any warning signs
- Take
  - combined nasopharyngeal swab
  - wound swab
- Ideally two samples from each case
  - Suitable samples oropharyngeal or throat swabs, nasal and nasopharyngeal swabs, skin ulcer swabs, pseudomembrane tissue, sputum and sterile site samples
- Ideally swab prior to antibiotic commencing
- Send in Amie's transport media
- State 'culture for diphtheria' & provide relevant clinical notes (e.g. severe tonsilitis)
- Mark as URGENT & send to SA Pathology
- Laboratory will undertake culture & PCR for toxin

Isolation and exclusion

- Exclude cases of respiratory diphtheria
  - From work, school and childcare until completion of appropriate antibiotics and clearance testing returns a negative result
  - Where possible, cases should have two nasopharyngeal and/or throat swabs at least 24 hours after completion of the antibiotic course, & at least 24 hours apart
- Exclude cases of cutaneous diphtheria
  - From work, school and childcare until wounds are healing or clinically improving, can be covered with an occlusive waterproof dressing, have completed recommended vaccination and at least 72 hours of appropriate antibiotics

Contact management

- CDCB will guide the response
- Identify high and medium risk contacts
  - Household, healthcare
- Throat swab & wounds (if any)
- Antibiotics
  - Azithromycin
- Quarantine high risk 3 days if possible
- Asymptomatic HCW contacts on antibiotics able to work with mask
- Vaccination if >12 months since diphtheria containing vaccination



SA Health – Diphtheria Contact Management – CUTANEOUS DIPHTHERIA

Period of communicability: From onset date of case's skin infection / when the swab was taken.

	HIGH RISK CONTACT			MEDIUM RISK CONTACT			LOW RISK CONTACT		
	Community contacts	Inpatient contacts	Health worker contacts	Community contacts	Inpatient contacts	Health worker contacts	Community contacts	Inpatient contacts	Health worker contacts
Exposure (prevention of infection)	Household-like contact (e.g. overnight stay in the same room, intimate partner, close physical contact) with direct contact with skin lesions, dressings or contaminated items (e.g. towels, clothing, bedding).	Direct exposure to infected wound.	Direct unprotected exposure to skin lesions or wound droplets. E.g. splash to face from wound without appropriate PPE (mask +/- eye protection).	Close contact in shared indoor space ≥ 20 hours cumulative, with potential, but no known direct or indirect exposure (with wound uncovered, contaminated items). E.g. childcare, residential accommodation.	Indirect prolonged exposure ≥ 20 hours cumulative when wound uncovered.	Close contact without appropriate PPE (gloves and hand hygiene) but no direct exposure to wound OR Uncertain exposure requiring further risk assessment.	Casual or indirect contact (e.g. same school or workplace without close exposure).	Stayed in same ward/hospital without close contact.	A contact with unlikely/no exposure to skin lesions (e.g. appropriate PPE, distant contact only).
Education	Provide factsheet and detailed public health follow-up.	Individualised public health advice in consultation with IPC.		Provide factsheet and general PH follow-up.		General public health advice in consultation with IPC.	Provide factsheet and general public health information available.		
Test	• Monitor for symptoms for 10 days after last exposure • Minimise contact with at-risk people (e.g. infants, older people, and those who are immunocompromised), especially during the exclusion period. • Swab* throat. If unable to swab all contacts, prioritise contacts with symptoms. • Swab* skin lesions if present.			• Monitor for symptoms for 10 days after last exposure. • Swab* throat if unable to swab all contacts, prioritise contacts with symptoms. • Swab* skin lesions if present.			Nil		
Vaccinate	• If <12 months since last diphtheria-containing vaccine: give booster. • If incompletely vaccinated, complete the primary/catch-up course **(offered and strongly recommended).**			• If incompletely vaccinated complete the primary/catch-up course, **(offered and strongly recommended).** • Give diphtheria booster dose for at-risk patients if >12 months since last diphtheria-containing vaccine.			Nil	If incompletely vaccinated, complete the primary/catch-up course through their usual healthcare provider. **All low-risk contacts should receive a diphtheria booster dose every 5 years.**	Healthcare staff are recommended to have a diphtheria booster dose every 5 years.
Chemoprophylaxis	Chemoprophylaxis recommended for all high-risk contacts. **Azithromycin 500mg daily PO (child 10mg/kg up to 500mg) for 5 days.** Further clinical assessment if upper respiratory tract infection symptoms develop.			Not routinely recommended for medium risk contacts. Further clinical assessment if clinically suspected diphtheria.			Not recommended for low-risk contacts. Further clinical assessment if clinically suspected diphtheria.		
Exclusion	Avoid contact with at risk** populations until: • Completed 03 days of appropriate antibiotics OR • Negative clearance swab AND • Asymptomatic	Apply standard + droplet contact precautions. Managed in consultation with infection prevention and control. Consider cohorting or single room if required.	Continue working with**: • Surgical mask at all times • Strict hand hygiene • Symptom monitoring • Commenced on antibiotics **Exclude only if symptoms develop.**	No exclusion unless any high risk features present. If ANY of the following, escalate to high-risk exclusion: • Symptomatic and clinically suspecting diphtheria • Directed by Communicable Disease Control Branch / clinical team.			Nil		

Note: Contacts at any risk level who are symptomatic should be directed to seek assessment and treatment.

* Swabs, throat and wound, should be accompanied by clear documentation of collection site, relevant clinical details and epidemiological information on the request form.
** At risk populations include, but are not limited to, infants aged all months, individuals who are acutely unwell, older adults, and those who are immunocompromised.
*** Where there is uncertainty, discuss with infection prevention and control for risk assessment.
PPE = personal protective equipment. IPC = infection prevention and control.

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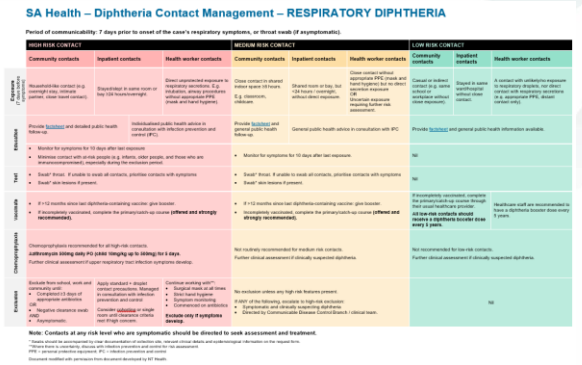

SA Health – Diphtheria Contact Management – RESPIRATORY DIPHTHERIA

Period of communicability: 7 days prior to onset of the case's respiratory symptoms, or throat swab (if asymptomatic).

	HIGH RISK CONTACT			MEDIUM RISK CONTACT			LOW RISK CONTACT		
	Community contacts	Inpatient contacts	Health worker contacts	Community contacts	Inpatient contacts	Health worker contacts	Community contacts	Inpatient contacts	Health worker contacts
Exposure (prevention of infection)	Household-like contact (e.g. overnight stay, intimate partner, close travel contact).	Stayed/slept in same room or bay ≥24 hours/overnight.	Direct unprotected exposure to respiratory secretions. E.g. intubation, airway procedure without appropriate PPE (mask and hand hygiene).	Close contact in shared indoor space ≥8 hours. E.g. classroom, childcare.	Shared room or bay, but <24 hours / overnight, without direct exposure.	Close contact without appropriate PPE (mask and hand hygiene) but no direct exposure to wound OR Uncertain exposure requiring further risk assessment.	Casual or indirect contact (e.g. same school or workplace without close exposure).	Stayed in same ward/hospital without close contact.	A contact with unlikely/no exposure to respiratory droplets, nor direct contact with respiratory secretions (e.g. appropriate PPE, distant contact only).
Education	Provide factsheet and detailed public health follow-up.	Individualised public health advice in consultation with infection prevention and control (IPC).		Provide factsheet and general public health follow-up.	General public health advice in consultation with IPC.		Provide factsheet and general public health information available.		
Test	• Monitor for symptoms for 10 days after last exposure • Minimise contact with at-risk people (e.g. infants, older people, and those who are immunocompromised), especially during the exclusion period. • Swab* throat. If unable to swab all contacts, prioritise contacts with symptoms • Swab* skin lesions if present.			• Monitor for symptoms for 10 days after last exposure. • Swab* throat. If unable to swab all contacts, prioritise contacts with symptoms • Swab* skin lesions if present.			Nil		
Vaccinate	• If <12 months since last diphtheria-containing vaccine: give booster. • If incompletely vaccinated, complete the primary/catch-up course **(offered and strongly recommended).**			• If <12 months since last diphtheria-containing vaccine: give booster. • Incompletely vaccinated, complete the primary/catch-up course **(offered and strongly recommended).**			Nil	If incompletely vaccinated, complete the primary/catch-up course through their usual healthcare provider. **All low-risk contacts should receive a diphtheria booster dose every 5 years.**	Healthcare staff are recommended to have a diphtheria booster dose every 5 years.
Chemoprophylaxis	Chemoprophylaxis recommended for all high-risk contacts. **Azithromycin 500mg daily PO (child 10mg/kg up to 500mg) for 5 days.** Further clinical assessment if upper respiratory tract infection symptoms develop.			Not routinely recommended for medium risk contacts. Further clinical assessment if clinically suspected diphtheria.			Not recommended for low-risk contacts. Further clinical assessment if clinically suspected diphtheria.		
Exclusion	Exclude from school, work and community until: • Completed 03 days of appropriate antibiotics OR • Negative clearance swab AND • Asymptomatic	Apply standard + droplet contact precautions. Managed in consultation with infection prevention and control. Consider cohorting or single room until clearance criteria met (high contact).	Continue working with**: • Surgical mask at all times • Strict hand hygiene • Symptom monitoring • Commenced on antibiotics **Exclude only if symptoms develop.**	No exclusion unless any high risk features present. If ANY of the following, escalate to high-risk exclusion: • Symptomatic and clinically suspecting diphtheria • Directed by Communicable Disease Control Branch / clinical team.			Nil		

Note: Contacts at any risk level who are symptomatic should be directed to seek assessment and treatment.

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** At risk populations include, but are not limited to, infants aged all months, individuals who are acutely unwell, older adults, and those who are immunocompromised.
*** Where there is uncertainty, discuss with infection prevention and control for risk assessment.
PPE = personal protective equipment. IPC = infection prevention and control.

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Immunisation Program Recommendations

Priority 1: APY Lands

Priority 2: Beyond APY Lands

- Oak Valley
- Yalata
- Ceduna (and surrounds)
- Oodnadatta
- Coober Pedy

Remote visitors from these areas travelling to Adelaide, Port Augusta, Port Pirie & Whyalla

Immunisation Program Recommendations

Eligibility

- National Immunisation Program (NIP) schedule points & catch-up
- High & medium risk contacts if >12 months since last dose
- Following groups if >5 years since last dose:
    - All Aboriginal people aged 10+ years
    - Low risk contacts
    - Healthcare & Frontline workers

Healthcare & Frontline Workers

Defined as:

Those who work in the program priority areas and others who have routine, regular, direct patient care with remote visitors from these priority areas.

Including:

- Emergency and essential service workers (police, paramedics, first responders)
- Education staff
- Corrections staff
- Community service workers with direct community contact
- Staff who have regular contact with contaminated surfaces, linen & wound dressings
- Laboratory staff handling specimens

Immunisation Providers

Priority 1: APY Lands

- Nganampa Health Council to service the APY Lands
- Immunisation Clinics for Healthcare & Frontline Workers:
  - Thursday 28 May - Pukatja Clinic 4-6pm
  - Saturday 30 May - Amata Clinic 10am-12pm.

Priority 2: Beyond APY Lands

- Diphtheria vaccine available through routine providers:
  - ACCHOs – in Priority Areas and Metro Adelaide
  - GPs – in Priority Areas
  - Regional pharmacies & select Metro Pharmacies (as per SA Health website)
  - Priority Care Centres (Marion, Para Hills, Hindmarsh, Elizabeth & Mount Barker)
  - Healthcare & Frontline services - LHN

Diphtheria Outbreak Response Immunisation Schedule

South Australian Diphtheria Outbreak Immunisation Schedule

Category	Cohort/Risk level	Recommendation	Vaccines
National Immunisation Program (NIP) Commonwealth funded	6 weeks up to less than 10 years (Infant and Childhood Schedule)	DTPa at 6 weeks, 4 months, 6 months, 18 months, 4 years *Catch up until under 10 years*	Infanrix® hexa or Vaxelis® Infanrix® or Tripacel® Infanrix® IPV or Quadracel®
	Adolescents (School Immunisation Program)	Single dTpa dose (routinely at 12 years) *Catch up until under 20 years*	Boostrix® or Adacel®
	Pregnancy	Single dTpa dose from 20 weeks gestation every pregnancy[1]	Boostrix® or Adacel®
Outbreak program SA funded	All Aboriginal people aged 10 years and above	Single dTpa dose if fully vaccinated and more than 5 years since last dose *Give primary course if indicated*[2]	Boostrix® or Adacel®
Contacts[3] SA funded	High & Medium Risk contacts[3]	Additional DTPa or dTpa dose if more than 12 months since last dose *Give primary course if indicated*[2]	Infanrix® or Tripacel® (child) Boostrix® or Adacel® (adult)
	Low risk contacts[3]	Additional dTpa dose if more than 5 years since last dose *Give primary course if indicated*[2]	Boostrix® or Adacel®
Healthcare & frontline workers[4] SA funded	Healthcare & frontline workers who work in program priority areas as published on SA Health website[4]	Additional dTpa dose if more than 5 years since last dose *Give primary course if indicated*[2]	Boostrix® or Adacel®

Vaccines to be ordered through the Vaccine Distribution Centre (VDC) using the appropriate category (NIP or state funded)

[1] Can be given earlier in pregnancy if high/medium risk contact.

[2] Give 3 doses of dTpa (age-appropriate formulation) with a minimum interval of 4 weeks between doses if no history of a receipt of a primary course. Note: Australian Immunisation Register (AIR) verification of the primary course is not required.

[3] Contacts identified as per the appropriate SA Health - Diphtheria Contact Management Table.

[4] Healthcare workers who have direct patient care, emergency and essential service workers (police, paramedics, first responders), education and corrections staff, community service workers with direct community contact, cleaners/staff who have regular contact with contaminated surfaces, linen and wound dressings, laboratory staff handling specimens.

For more information, visit sahealth.sa.gov.au/immunisationprovider

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Infection prevention and control (IPC):

- For all clinical situations, a minimum of **standard precautions** (*all patients at all times*) is recommended as per usual practices – including **hand hygiene**
- Where applicable, based on the clinical situation and risk assessment, t**ransmission-based precautions** (TBP) may also be required for patients known or suspected to be infected with highly transmissible/significant pathogens
  - TBP are tailored to the route of transmission (airborne, droplet, contact etc)
  - TBP can include one or a combination of contact, droplet or airborne precautions

- Staff and worker health and safety
  - Recommended that only staff who have evidence of up to date diphtheria vaccinations should provide care to patients with **confirmed** diphtheria and ideally also for **suspected or probable** cases
  - Refer to local procedures & worker health & safety advice

Healthcare settings: IPC advice includes:

- Advice for patient management
  - Vaccinated staff to provide care
  - Standard & TBP (contact +/- droplet) other precautions as per risk assessment.
  - Risk assess need for staff to use fit tested/checked particulate filter respirator (PFR) for aerosol generating procedures (AGPs)
  - Patient isolation (including single room with bathroom as available)
  - Patient 1 metre distancing, only cohort as per IPC/medical advice
  - Hand hygiene (soap and water / alcohol based hand gel / wipes)
  - Cover wounds – keep dressing dry and intact, hand hygiene
  - Environmental cleaning/disinfection and dedicated equipment / "clean between"
  - Follow local procedures for laundry & waste management

Healthcare settings: IPC and PPE

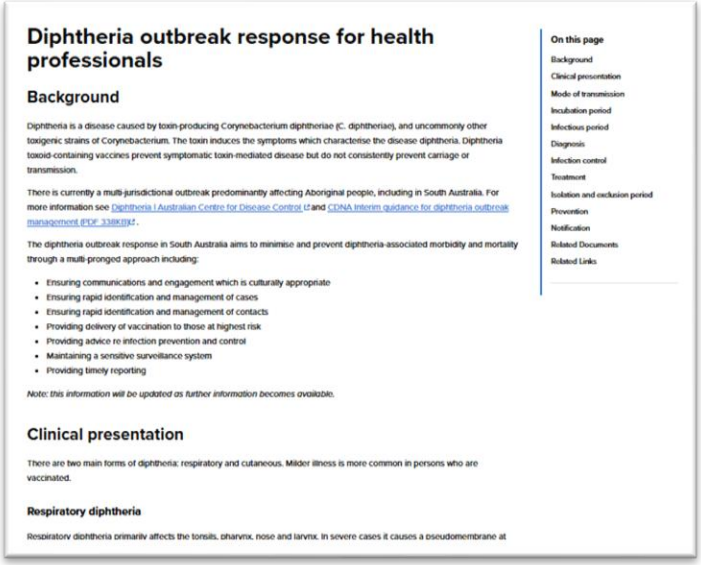
- PPE as per recommended precautions / risk assessment
- For **suspected or confirmed respiratory diphtheria**, as minimum use standard, contact and droplet precautions
  - PPE includes gown, gloves, eye protection & surgical mask
  - Fit tested/checked particulate filtration device (PFR) e.g. P2 / N95 mask for aerosol generating procedures e.g. intubation
- For **suspected or confirmed cutaneous diphtheria where respiratory diphtheria has been excluded**
  - Standard and TBP - contact precautions
  - Recommended PPE includes at a minimum gown, gloves and where there is risk of blood or body fluid exposure to eyes, nose or mouth also wear a mask & eye protection, such as when irrigating wounds

Community settings: IPC

- General advice for patient/consumers
  - Follow medical advice re: treatment, vaccination and ongoing care
  - Follow isolation and exclusion periods
  - Avoid sharing personal items
  - Hand hygiene (alcohol based hand gel or soap and water)
  - Source control (wearing a mask as tolerated and medical advice)
  - Cough etiquette (coughing into elbow or tissue)
  - Wound care (avoid touching and keep dressings clean/intact)
  - Environmental cleaning, laundering, disposing of waste

SA Health website

- www.sahealth.sa.gov.au/diphtheria
- www.sahealth.sa.gov.au/DIP
- www.sahealth.sa.gov/healthalerts



Diphtheria outbreak response for health professionals

Background

Diphtheria is a disease caused by toxin-producing Corynebacterium diphtheriae (C. diphtheriae), and uncommonly other toxigenic strains of Corynebacterium. The toxin induces the symptoms which characterise the disease diphtheria. Diphtheria toxoid-containing vaccines prevent symptomatic toxin-mediated disease but do not consistently prevent carriage or transmission.

There is currently a multi-jurisdictional outbreak predominantly affecting Aboriginal people, including in South Australia. For more information see Diphtheria | Australian Centre for Disease Control and CDNA Interim guidance for diphtheria outbreak management (PDF 338KB).

The diphtheria outbreak response in South Australia aims to minimise and prevent diphtheria-associated morbidity and mortality through a multi-pronged approach including:

- Ensuring communications and engagement which is culturally appropriate
- Ensuring rapid identification and management of cases
- Ensuring rapid identification and management of contacts
- Providing delivery of vaccination to those at highest risk
- Providing advice re infection prevention and control
- Maintaining a sensitive surveillance system
- Providing timely reporting

Note: this information will be updated as further information becomes available.

Clinical presentation

There are two main forms of diphtheria: respiratory and cutaneous. Milder illness is more common in persons who are vaccinated.

Respiratory diphtheria

Respiratory diphtheria primarily affects the tonsils, pharynx, nose and larynx. In severe cases it causes a pseudomembrane at

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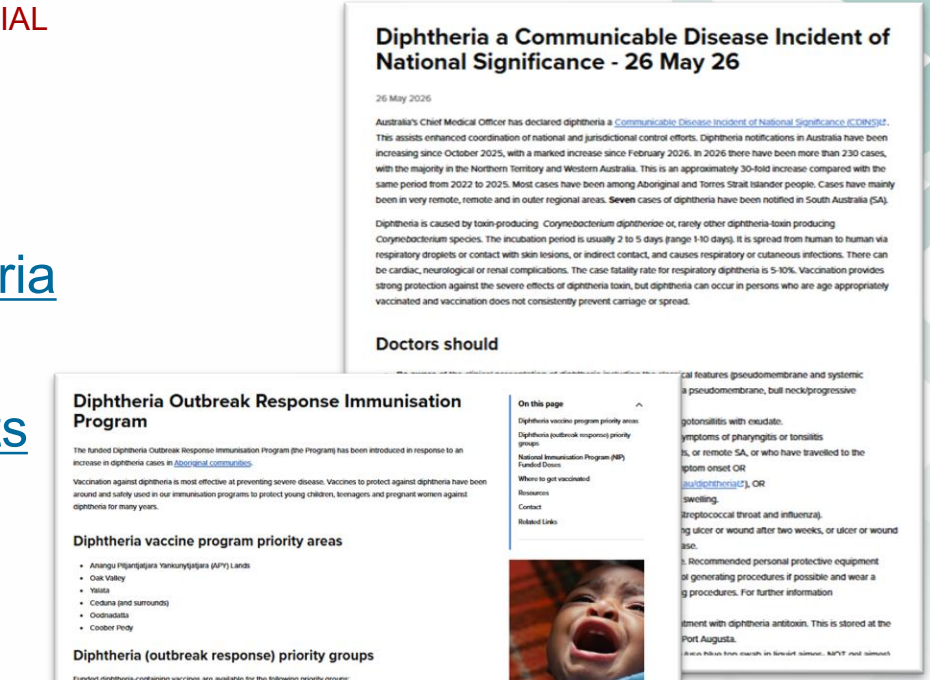


Diphtheria a Communicable Disease Incident of National Significance - 26 May 26

26 May 2026

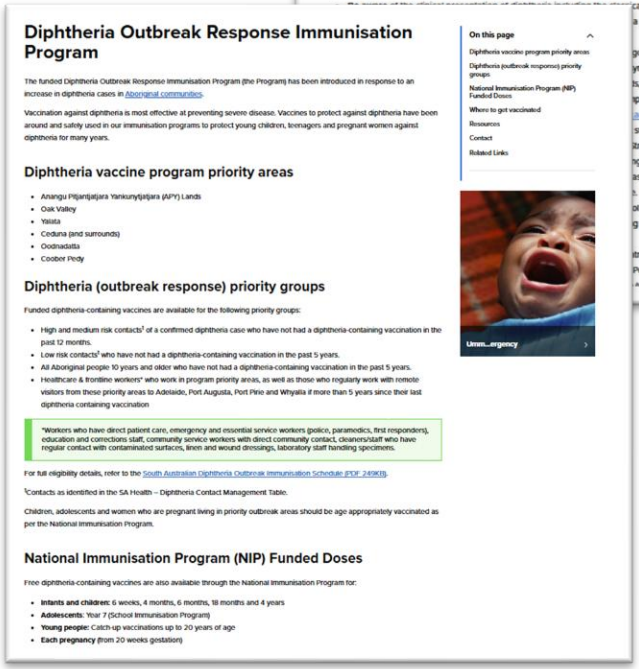
Australia's Chief Medical Officer has declared diphtheria a Communicable Disease Incident of National Significance (CDINSI). This assists enhanced coordination of national and jurisdictional control efforts. Diphtheria notifications in Australia have been increasing since October 2025, with a marked increase since February 2026. In 2026 there have been more than 230 cases, with the majority in the Northern Territory and Western Australia. This is an approximately 30-fold increase compared with the same period from 2022 to 2025. Most cases have been among Aboriginal and Torres Strait Islander people. Cases have mainly been in very remote, remote and in outer regional areas. **Seven** cases of diphtheria have been notified in South Australia (SA).

Diphtheria is caused by toxin-producing *Corynebacterium diphtheriae* or, rarely other diphtheria-toxin producing *Corynebacterium* species. The incubation period is usually 2 to 5 days (range 1-10 days). It is spread from human to human via respiratory droplets or contact with skin lesions, or indirect contact, and causes respiratory or cutaneous infections. There can be cardiac, neurological or renal complications. The case fatality rate for respiratory diphtheria is 5-10%. Vaccination provides strong protection against the severe effects of diphtheria toxin, but diphtheria can occur in persons who are age appropriately vaccinated and vaccination does not consistently prevent carriage or spread.

Doctors should

cal features (pseudomembrane and systemic
a pseudomembrane, bull neck/progressive
gotonsillitis with exudate.
ymptoms of pharyngitis or tonsilitis
is, or remote SA, or who have travelled to the
iptom onset OR
au/diphtheria(C)), OR
swelling.
streptococcal throat and influenza).
g ulcer or wound after two weeks, or ulcer or wound
ase.
. Recommended personal protective equipment
ol generating procedures if possible and wear a
g procedures. For further information

itment with diphtheria antitoxin. This is stored at the
Port Augusta.



Diphtheria Outbreak Response Immunisation Program

The funded Diphtheria Outbreak Response Immunisation Program (the Program) has been introduced in response to an increase in diphtheria cases in Aboriginal communities.

Vaccination against diphtheria is most effective at preventing severe disease. Vaccines to protect against diphtheria have been around and safely used in our immunisation programs to protect young children, teenagers and pregnant women against diphtheria for many years.

Diphtheria vaccine program priority areas

- Anangu Pitjantjatjara Yankunytjatjara (APY) Lands
- Oak Valley
- Yalata
- Ceduna (and surrounds)
- Oodnadatta
- Coober Pedy

Diphtheria (outbreak response) priority groups

Funded diphtheria-containing vaccines are available for the following priority groups:

- High and medium risk contacts[1] of a confirmed diphtheria case who have not had a diphtheria-containing vaccination in the past 12 months.
- Low risk contacts[1] who have not had a diphtheria-containing vaccination in the past 5 years.
- All Aboriginal people 10 years and older who have not had a diphtheria-containing vaccination in the past 5 years.
- Healthcare & frontline workers* who work in program priority areas, as well as those who regularly work with remote visitors from these priority areas to Adelaide, Port Augusta, Port Pirie and Whyalla if more than 5 years since their last diphtheria containing vaccination

*Workers who have direct patient care, emergency and essential service workers (police, paramedics, first responders), education and corrections staff, community service workers with direct community contact, cleaners/staff who have regular contact with contaminated surfaces, linen and wound dressings, laboratory staff handling specimens.

For full eligibility details, refer to the South Australian Diphtheria Outbreak Immunisation Schedule (PDF 249KB).

[1]Contacts as identified in the SA Health – Diphtheria Contact Management Table.

Children, adolescents and women who are pregnant living in priority outbreak areas should be age appropriately vaccinated as per the National Immunisation Program.

National Immunisation Program (NIP) Funded Doses

Free diphtheria-containing vaccines are also available through the National Immunisation Program for:

- **Infants and children:** 6 weeks, 4 months, 6 months, 18 months and 4 years
- **Adolescents:** Year 7 (School Immunisation Program)
- **Young people:** Catch-up vaccinations up to 20 years of age
- **Each pregnancy** (from 20 weeks gestation)

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Resources

- Diphtheria outbreak response for health professionals | SA Health
- Diphtheria Outbreak Response Immunisation Program | SA Health
- Diphtheria - including symptoms, treatment and prevention | SA Health
- Diphtheria case in APY lands | SA Health
- Diphtheria - Australian CDC
- Diphtheria in Australia – Epidemiological updates | Australian Centre for Disease Control
- CDNA Interim guidance for diphtheria outbreak management
- The Australian Immunisation Handbook – Diphtheria
- Clinical management of diphtheria for primary care in the Northern Territory: Interim guideline
- Healthcare: infection prevention and control (IPC) | SA Health

Acknowledgements

- Aboriginal Community Controlled Health Services
- Aboriginal Health Council of South Australia
- Public Health Division

Questions?

Refer to SA Health webpages for further information

Government of South Australia

SA Health