

STEP 1 — NOTIFY CDCB IMMEDIATELY ON SUSPICION OR IF CASE IS CONFIRMED

Notify CDCB on 1300 232 272 (24/7) before laboratory confirmation. Diphtheria is an urgent notification — the public health response starts immediately, for cutaneous as well as respiratory disease. Keep treating the patient (Chart 3) while working with CDCB to start the public health response.

Vulnerable people and settings: infants aged 6 months and under, the elderly, and people who are immunosuppressed. In the household this means avoidance; at work it means exclusion from the workplace (childcare, healthcare, aged care). Consider cohorting or a single room in shared residential settings. **Educate every contact, both tiers:** give information in the person's preferred language — interpreters, Aboriginal Health Workers or Health Practitioners, or resources in language. Tell them to seek assessment early, report any suspected secondary case urgently, and keep vaccination up to date.

IF THE CLINIC IS OVERWHELMED — AGREE PRIORITIES WITH CDCB

- laboratory capacity may be directed to case detection rather than clearance testing, and testing of contacts for carriage to be limited.
- Contact tracing can be narrowed to high-risk exposures, or the focus shifted to vaccination. Decisions to prioritise response actions should be made in collaboration with CDCB
- Any contact who develops symptoms is managed as a suspected case (Charts 2 and 3). [SA] CDCB 1300 232 272, 24 hours / 7 days.**

STEP 2 — DETERMINE INFECTIOUS PERIOD

Respiratory: from the earliest of 7 days before symptom onset, or 7 days before a positive throat swab if asymptomatic — until two negative throat swabs taken at least 24 h after finishing antibiotics and at least 24 h apart, or until antibiotics are completed if swabbing is not done.

Cutaneous: from the date of onset of the skin infection, or the date the swab was taken if onset is unknown — until at least 72 h of antibiotics OR a negative throat swab, AND the wound can be covered or is scabbed over.

STEP 3 — FIND OUT WHO THE PERSON HAS BEEN IN CONTACT WITH DURING THE INFECTIOUS PERIOD?

- Date of symptom onset and what the symptoms were — this sets the infectious period and therefore who counts as a contact.**
- Who lives in the house, who has stayed over, and where the person has spent time — including other households and other communities.
- Determine individuals who have been in contact and the level of contact (eg household, intimate partner, social, work, education, childcare) with case during infectious period. Keep a record of all cases including contact details
- Consider: Who they might have infected (downstream contact tracing) AND Where they might have got their infection (upstream) - more important where new cases in community or region

STEP 4 — DETERMINE RISK LEVEL BASED ON CONTACT MATRICES

Using the contact matrices (charts 4b and 4c) for either respiratory or cutaneous diphtheria to determine the risk category for each contact to determine **High** or **Low** level of risk and the corresponding actions for each

STEP 5 — LOCATE AND INFORM CONTACTS

- Sensitively inform contacts they may have been exposed to diphtheria,
- Provide information (see here for example of contact information sheet)
- Ascertain the most appropriate location for treatment.

Diphtheria - Community Information for Contacts

Questions and Answers for Community Members

STEP 6 — FACILITATE MANAGEMENT OF CONTACTS

- Facilitate management depending on level of risk (e.g. testing, antibiotic prophylaxis's, +/- vaccination, or information only).
- Advise contacts of all risk levels to monitor for symptoms.
- Any individuals who are found to be symptomatic during contact tracing should be treated as a suspected diphtheria case

Risk	Monitor	Swab	Antibiotics	Vaccinate	Restrict	Educate
HIGH	Yes	Yes	Yes	Yes	Yes	Yes
LOW	Yes	If symptomatic*	No	Yes	No	Yes

Refer for environmental health assessment.

- Crowded housing, poor sanitation and inadequate washing facilities drive transmission. Where an environmental health program is available, refer the household.
- Ask about functioning washing facilities, laundry and bedding — towels, clothing and bedding transmit cutaneous disease.

Treat skin sores in the household and community.

- Cutaneous diphtheria commonly co-occurs with Group A Streptococcus and S. aureus. Early recognition and treatment of skin sores reduces diphtheria carriage and transmission.
- See the National Healthy Skin Guideline. Use every encounter to check and catch up diphtheria-containing vaccination.

WORKING IN A CULTURALLY SAFE WAY

- Use trusted local staff wherever possible.
- Minimise repeated interviews by different agencies — agree who asks what before visiting.
- Coordinate visits to households rather than arriving separately.
- Provide interpreters where required.
- Recognise local family and kinship structures when working out who is a contact.
- Ensure messaging is locally developed, not imported.
- Minimise police or government-led approaches where these reduce engagement.
- Where the clinic is an ACCHO it is a core partner in the response, not a referral point — say early what capacity you have.

Two risk tiers — high and low. The tier decides who gets antibiotics.

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			LOW RISK CONTACT		
	Household-like contacts	Early childhood education and care settings, schools and social gatherings	Health care workers	Shared residential settings (e.g. prisons, hospital wards (patients) and boarding schools)	Early childhood education and care settings, schools and social gatherings	Health worker contacts
Exposure (from date of skin infection)	Spent most of a day (8 hours), overnight or multiple days during the infectious period in the same house (or dormitory type room) and had direct interaction with a case, including intimate partners. Those who had close physical contact or had direct contact with skin lesions or exudate, dressings or contaminated items (e.g. towels, clothing, bedding) of a case.	Direct exposure to case's uncovered wound.	Direct contact with the wound of a case in a situation where droplets may be generated and was not wearing appropriate PPE (e.g. wound irrigation generating droplets, or other activities identified as high-risk by CDCB/IPC) IPC tips for Clinics - Diphtheria Flowchart	Any exposure other than direct contact with a case's uncovered wound. (including sharing open recreational spaces)	Any exposure other than direct contact with a case's uncovered wound. (including sharing open recreational spaces)	Direct exposure to skin lesions or wound of a case where droplet generation did not occur. A healthcare worker maintaining appropriate PPE does not constitute a contact
Test	Provide factsheet and detailed public health follow-up. Monitor for symptoms for 7 days after last exposure.			Provide factsheet and general public health information available. Monitor for symptoms for 7 days after last exposure		
Vaccinat	For health worker contacts seek individualised public health advice in consultation with infection prevention and control (IPC) where available. Throat and wound swabs (where applicable). If unable to swab all contacts, prioritise contacts with symptoms. Symptomatic high-risk contacts should be managed as a suspected case – Management of Diphtheria in Clinical Settings			Nil Symptomatic low-risk contacts should have throat and wound (if applicable) swabs.		
Chemoprophylaxis	If >12 months since last diphtheria-containing vaccine: give booster If incompletely vaccinated, complete primary/catch-up course Chemoprophylaxis recommended for all high-risk contacts.			If >5 years since last diphtheria-containing vaccine: give booster If incompletely vaccinated, complete primary/catch-up course Not recommended for low-risk contacts. Further clinical assessment if clinically suspected diphtheria.		
Exclusion	Avoid contact with people who are vulnerable to severe disease** until 72 hours of appropriate course of antibiotics have been completed OR until negative test results from throat and any wound swabs are obtained, whichever is shorter. Inpatient settings: managed in consultation with IPC. Consider cohorting or single room if required in shared residential settings.			Nil Symptomatic low-risk contacts should avoid contact with people vulnerable to severe disease** until negative test results from throat and any wound swabs are obtained; use of masks and covering of wounds should be utilised while results are pending.		

Contact management should include a clinical risk assessment.

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

**Swabs should be accompanied by clear documentation of collection site, relevant clinical details and epidemiological information on the request form.

***Vulnerable individuals and settings include infants aged 6 months and under, the elderly, and immunosuppressed individuals. In the household this requires avoidance and in work situations this requires exclusion from the workplace. Settings include childcare, healthcare and aged care.
PPE = personal protective equipment; IPC = infection prevention and control

***Where there is uncertainty, discuss with infection prevention and control for risk assessment.

Document modified with permission from NT Health. Further information on contact management can be found in [Diphtheria – CDNA National Guidelines for Public Health Units](#).

Two risk tiers — high and low. The tier decides who gets antibiotics.

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			LOW RISK CONTACT									
Household-like contacts	Early childhood education and care settings, schools and social gatherings	Health worker contacts	Shared residential settings (e.g. prisons, hospital wards (patients) and boarding schools)	Early childhood education and care settings, schools and social gatherings	Health care workers							
Exposure (7 days before symptoms)	Spent most of a day (8 hours), overnight or multiple days during the infectious period in the same house (or dormitory type room) and had direct interaction with a case. Including intimate partners and travel companions.	Direct interaction with the case for two full childcare or school days (full day being 6-8 hours) or ≥20 hours cumulative within a 7-day window in the same group as the case during their infectious period.	Direct unprotected exposure to respiratory secretions or droplets from a case without appropriate PPE (e.g. mouth-to-mouth resuscitation, intubation/airway procedures, swabbing/examining). IPC tips for Clinics - Diphtheria Flowchart	Stayed in same residential setting (including sharing open recreational spaces) but did not have direct interaction with a case.	No exposure to respiratory droplets through aerosol generating procedures, nor direct contact with respiratory secretions of a case (e.g. standard contact only). A healthcare worker maintaining appropriate PPE does not constitute a contact							
	Provide factsheet and detailed public health follow-up. Monitor for symptoms for 7 days after last exposure For health worker contacts seek individualised public health advice in consultation with infection prevention and control (IPC) where available.			Provide factsheet and general public health information available. Monitor for symptoms for 7 days after last exposure								
Test	Throat and wound swabs* (where applicable). If unable to swab all contacts, prioritise those with symptoms. Symptomatic high-risk contacts should be managed as a suspected case – Management of Diphtheria in Clinical Settings			Nil Symptomatic low-risk contacts should have throat and wound (if applicable) swabs.								
Vaccinate	If >12 months since last diphtheria-containing vaccine: give booster If incompletely vaccinated, complete primary/catch-up course			If greater than 5 years since last diphtheria-containing vaccine: give booster. If incompletely vaccinated, complete primary/catch-up course	Healthcare staff are recommended to have a diphtheria booster dose every 5 years.							
Chemoprophylaxis	Chemoprophylaxis recommended for all high-risk contacts. <table><tr><th>Adults</th><th>Children (up to 18 years)</th></tr><tr><td>Azithromycin 500mg daily PO for 5 days</td><td>Azithromycin 10mg/kg up to 500mg daily PO for 5 days</td></tr><tr><td></td><td>Azithromycin 30mg/kg (max 2g) single dose</td></tr></table>			Adults	Children (up to 18 years)	Azithromycin 500mg daily PO for 5 days	Azithromycin 10mg/kg up to 500mg daily PO for 5 days		Azithromycin 30mg/kg (max 2g) single dose	Not recommended for low-risk contacts. Further clinical assessment if clinically suspected diphtheria.		
Adults	Children (up to 18 years)											
Azithromycin 500mg daily PO for 5 days	Azithromycin 10mg/kg up to 500mg daily PO for 5 days											
	Azithromycin 30mg/kg (max 2g) single dose											
Exclusion	For additional options Refer to Therapeutic Guidelines (eTG) - Diphtheria - Therapeutic Guidelines Further clinical assessment if upper respiratory tract infection symptoms develop. Avoid contact with people who are vulnerable to severe disease** until 72 hours of appropriate antibiotics completed OR until negative test results from throat and any wound swabs are obtained, whichever is shorter. Inpatient settings apply standard and droplet contact precautions. Managed in consultation with infection prevention and control. Consider cohorting or single room if required in shared residential settings.			Nil Symptomatic low-risk contacts should avoid contact with people vulnerable to severe disease** until negative test results from throat and any wound swabs are obtained. Use of masks and covering of wounds should be utilised while results are pending.								

Contact management should include a clinical risk assessment. Note: Contacts at any risk level who are symptomatic should be directed to seek assessment and treatment.

* Swabs should be accompanied by clear documentation of collection site, relevant clinical details and epidemiological information on the request form.

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