



ALERT FOR KIMBERLEY, PILBARA AND GOLDFIELDS CLINICIANS

Outbreak of diphtheria in the Kimberley

KEY POINTS

- Seven cases of toxigenic diphtheria (five **cutaneous**, two **respiratory**) have been notified in Aboriginal people in the Kimberley since December 2025, with shared genomic and/or epidemiological links.
- Respiratory diphtheria is extremely rare in WA; these are the first cases to be notified in over 50 years.
- Clinicians should be vigilant for patients presenting with clinically suspicious skin sores, infected wounds, or upper respiratory illness in or from the Kimberley, and potentially the Pilbara or Goldfields regions.
- Urgently **notify suspected** or **confirmed** diphtheria cases to your local [Public Health Unit](#) by phone (or call 1800 434 122 if after hours); do not wait for laboratory confirmation before notifying.

Background

- Cutaneous and respiratory diphtheria are vaccine-preventable diseases caused by toxigenic strains of *Corynebacterium diphtheriae* (and occasionally *C. ulcerans*).
- The bacteria produce an exotoxin that causes damage to the mucous membranes of the respiratory tract or skin and may lead to complications such as myocarditis and neuropathy.
- Diphtheria is rare in Australia due to high vaccination rates and improved living conditions, but increasing cutaneous disease among Aboriginal people has been reported in Queensland and the Northern Territory.

Signs and symptoms

- **Cutaneous diphtheria** usually presents on exposed limbs as secondary infection of skin lesions or wounds, or as primary punched-out ulcers with well demarcated edges and a grey necrotic slough.
- Cutaneous disease is rarely associated with systemic toxicity but plays an important role in transmission through contact with wounds or contaminated fomites and can cause respiratory disease in contacts.
- **Respiratory diphtheria** typically presents with initial fever and sore throat, with patches of discoloured pharyngeal exudate that may thicken to form an obstructive and life-threatening pseudomembrane.

Testing and treatment

- Collect swabs from skin/wound lesions (if present) **AND** another combined swab of nasopharynx and throat for bacterial MC&S **before starting antibiotics**; specify **culture for diphtheria** on the pathology form.
- Macrolides (e.g. azithromycin, erythromycin) are [preferred](#) for empiric treatment of suspected **cutaneous diphtheria** due to increasing penicillin resistance, with subsequent therapy guided by susceptibility testing results; duration should be discussed with an infectious diseases physician and/or clinical microbiologist.
- Treatment for suspected **respiratory diphtheria** must be **urgently** discussed with an infectious diseases physician and/or clinical microbiologist; early antibiotics and [antitoxin](#) can prevent complications and death.

Infection prevention and control

- Manage suspected or confirmed **cutaneous diphtheria** by covering wounds with an occlusive waterproof dressing and contact precautions until wounds improve **and** completion of 72 hrs of appropriate antibiotics; use droplet precautions until nasopharyngeal/throat swabs are negative **or** after 72 hrs of antibiotics.
- Manage suspected or confirmed **respiratory diphtheria** with contact and droplet precautions until two negative nasopharyngeal/throat swabs at least 24 hrs apart and more than 24 hrs after antibiotics complete.
- Contact tracing is required for all confirmed cases, with contact management (e.g. testing, antibiotic prophylaxis and vaccination) to be coordinated by [Public Health](#).

Vaccination

- Multiple diphtheria-containing vaccines and booster doses are needed to produce and sustain immunity.
- Ensure children, adolescents and adults are up-to-date with appropriate DTPa or dTpa [vaccination](#).

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See [Diphtheria – AHCWA](#) for Aboriginal-focused flyers; see [Infectious Diseases Health Alerts](#) or subscribe [here](#)