Government of **Western Australia**
Department of **Health**
Communicable Disease Control Directorate

ALERT FOR CLINICIANS 07/09/26

Outbreak of diphtheria in WA: Third severe respiratory case reported

KEY POINTS

- 234 diphtheria cases have been notified in the WA outbreak, mostly among Aboriginal people, including:
  - 147 cutaneous (skin) infections and 87 respiratory (throat) infections
  - cases in the Kimberley (175), Pilbara (50), Goldfields (5), Midwest (3) and Perth (1).
- The third case of **severe respiratory diphtheria** was recently notified in metropolitan Perth.
- **Vaccination** protects against severe toxin-mediated disease; clinicians are urged to:
  - **ensure** children, adolescents and adults are up to date with scheduled diphtheria-containing vaccines
  - **promote** vaccination to all Aboriginal people in WA, and to all people in the Kimberley, Pilbara, Goldfields or Midwest, who have not received a diphtheria-containing vaccine in the **last 5 years**.
- Maintain a low threshold to **test for diphtheria** in patients with suspicious skin lesions/wounds and/or pharyngitis/tonsillitis, particularly if epidemiological risk factors (e.g. contact with a case) or clinical features raise greater suspicion (e.g. pharyngeal/tonsillar exudate).
- The Diphtheria CDNA National Guidelines for Public Health Units has now been published online.
- **Notify** suspected or confirmed cases to your local Public Health Unit or call **1800 434 122** if after hours.

SIGNS AND SYMPTOMS

- Diphtheria in the current outbreak is caused by toxigenic *Corynebacterium diphtheriae*.
- Many outbreak cases have lacked characteristic diphtheria features and may resemble routine skin or respiratory infections; maintain clinical suspicion where epidemiological risk factors are present:
  - **cutaneous diphtheria:** often presents as non-healing wounds, skin lesions or ulcers on exposed limbs, including secondary infections of existing wounds or skin lesions
  - **respiratory diphtheria:** typically presents with fever and sore throat, ranging from mild pharyngitis to severe disease with discoloured pharyngeal exudate that may form an obstructive and life-threatening pseudomembrane and/or clinical signs of systemic toxicity; carriers may remain asymptomatic.

TESTING

- Collect throat swabs and/or skin lesion/wound swabs (plus throat swabs for confirmed cutaneous cases):
  - semi-solid (Amies) transport medium swab with or without charcoal for **diphtheria culture AND**
  - paired dry throat and/or skin lesion swab for **direct PCR toxin testing**
  - label and specify collection sites on both swabs; mark **culture and PCR for diphtheria** on request form
  - ensure standard, contact and droplet precautions are used when collecting all swabs.
- Throat swabs should be collected from the posterior pharynx and both tonsils, targeting any visible membrane, exudate or lesion, while minimising contamination from other oral surfaces.

CASE TREATMENT

- Refer to WA diphtheria outbreak guidance, WA diphtheria outbreak guidance for primary and acute care and Therapeutic Guidelines for detailed treatment recommendations.

If there are no contraindications

Suspected or confirmed **cutaneous** or **mild respiratory diphtheria**	***give:*** azithromycin 500mg (10mg/kg up to 500mg in children) orally once daily for 7 days
Barriers to adherence with oral therapy	***consider:*** a single oral dose of 2g (30mg/kg up to 2g in children) azithromycin
Suspected **severe respiratory diphtheria**	***start:*** azithromycin 500 mg (10mg/kg up to 500mg in children) intravenously daily **and** benzylpenicillin 1.2g (50mg/kg up to 1.2g in children) intravenously 6 hourly ***urgently discuss:*** diphtheria antitoxin (DAT) with infectious diseases and public health[1]

1. See p20-22 of Diphtheria CDNA National Guidelines for Public Health Units for DAT dosing recommendations.
2. Azithromycin is now listed as an unrestricted PBS benefit; up to 8x 500mg tablets can be prescribed under a single PBS co-payment.

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