



**Important Queensland  
Health  
PUBLIC HEALTH  
COMMUNIQUÉ**



**DIPHTHERIA**

**Communiqué No# 1**

**Date 04/05/2011**

**Time 1500 hrs**

Queensland Health is alerting general practitioners to the first case of respiratory diphtheria acquired in Australia since 1993. A 22 year old woman has died of confirmed diphtheria on 30 April 2011. She was known to be unvaccinated and had no history of overseas travel.

Contact with a returned overseas traveller is a potential source of infection. Close contacts of both the case and the returned traveller have been followed up by Public Health Unit staff. Follow up includes collection of nose and throat swabs, antibiotic prophylaxis and booster vaccination.

Although diphtheria is now extremely rare in Australia due to high vaccination coverage it remains endemic in many parts of the world where vaccination rates are low. Fully vaccinated people who travel through these areas may still acquire nose and throat carriage of *Corynebacterium diphtheriae*. Unvaccinated people in Australia are therefore still at risk of acquiring this serious infection.

This recent case of respiratory diphtheria is a reminder of the importance of maintaining high vaccination rates. Diphtheria was the most common infectious cause of death in Australia in the pre-vaccine era. Routine diphtheria vaccination is recommended for children at 2, 4 and 6 months of age and 4 years of age with a booster for Year 10 students through the School Based Vaccination Program. Vaccination is also recommended for adults aged 50 years and over who have not received a booster dose of diphtheria containing vaccine in the past 10 years.

Travellers to high risk countries (particularly southeast Asia, the Newly Independent States of the former Soviet Union, Baltic countries or eastern European countries) should receive a booster dose of diphtheria containing vaccine if they have not received one in the past 10 years.

While the likelihood of further cases is low, clinicians are reminded that diphtheria is notifiable to Queensland Health on clinical suspicion under the *Public Health Act 2005*. If you suspect diphtheria you should immediately notify your local Public Health Unit.

Respiratory diphtheria is most often an upper respiratory tract illness. Onset is often gradual, with symptoms of fever, sore throat and weakness. Dysphagia, headache and altered voice occur in fewer than half of patients. Neck oedema and difficulty breathing occur in <10% and are associated with an increased risk of death. Primary infection most often involves the tonsils and pharynx, but may also involve the larynx, nose, trachea and bronchi. Isolated spots of grey or white exudate appear which extend and coalesce over 24 hours to form a confluent, sharply demarcated pseudomembrane. It progressively thickens, becomes tightly adherent to the underlying tissue, and darkens in colour. Systemic manifestations due to diphtheria toxin include polyneuropathy and cardiac problems such as myocarditis, dysrhythmias and dilated cardiomyopathy.

The case fatality rate of respiratory diphtheria is 5 to 10%, even with treatment.

Transmission usually requires close prolonged contact with an infected person. Cases may remain infectious for several weeks.

Diphtheria may also present in a cutaneous form, which is usually non-toxicogenic.

**Authorised by Dr C Selvey, Senior Director, Communicable Diseases Branch, Queensland Health**