

**Check List for Assessing a Patient with Suspected Diphtheria**

	<b>Symptom or event</b>	<b>Yes /No</b>
<b>Suspect case</b>	Pharyngitis, naso-pharyngitis, tonsillitis, laryngitis, tracheitis (or any combination of these), absent or low-grade fever	
	Grayish adherent pseudo-membrane present	
	Membrane bleeds, if manipulated or dislodged	
<b>Probable case</b>	Suspect case above + 1 or more of the following	
	- Stridor	
	- Bull-neck (cervical edema)	
	- Toxic circulatory collapse	
	- Acute renal insufficiency	
	- Sub-mucosal or sub-cutaneous petechiae	
	- Myocarditis	
	- Death	
	Recently returned (<2 weeks) from travel to area with endemic diphtheria?	
	Recent contact (<2 weeks) with confirmed diphtheria case or carrier?	
	Recent contact (<2 weeks) with visitor from area with endemic diphtheria?	
	Recent contact with dairy or farm animals? Domestic pets?	
	Immunization status: Up-to-date - any DTaP/DT/Tdap/Td shot within past 10 years?	
<b>Laboratory Confirmed case</b>	Positive culture of <i>C. diphtheriae</i> (or <i>C. ulcerans</i> ) AND	
	- Positive Elek Test	
	OR	
	- PCR for <i>tox</i> gene (Positive for subunit A and B)	
	OR	

## What other conditions may be considered in the differential diagnosis of respiratory diphtheria?

Respiratory diphtheria is an uncommon disease in the US. The symptoms of respiratory diphtheria are due to diphtheria toxin. *Corynebacterium* species which produce diphtheria toxin are *C. diphtheriae* (biotypes *mitis*, *gravis*, *intermedius*, or *belfanti*), *C. ulcerans*, *C. pseudotuberculosis*. Symptoms of respiratory diphtheria may also be associated with non-toxigenic strains of *C. diphtheriae*.

- Other biological disease agents which may also cause a membranous pharyngitis include:
  1. Group A  $\beta$ -hemolytic *Streptococcus*
  2. *Staphylococcus aureus*
  3. *Arcanobacter hemolyticum*
  4. *Candida albicans*
  5. *Borellia vincenti* (Vincent's angina)
  6. *H. influenzae* (acute epiglottitis)
  7. Viruses – EBV (Infectious mononucleosis), adenovirus, *Herpes simplex*
  8. Other agents - *Toxoplasma*
  
- Use of some anti-neoplastic agents may also result in formation of a pharyngeal membrane e.g methotrexate.
  
- Long term use of corticosteroids (e.g. prednesolone) can cause oral candidiasis.

This document can be found on the CDC website at:

[http://www.cdc.gov/vaccines/vpd-vac/diphtheria/dat/downloads/dip\\_cklist\\_diag.pdf](http://www.cdc.gov/vaccines/vpd-vac/diphtheria/dat/downloads/dip_cklist_diag.pdf)