

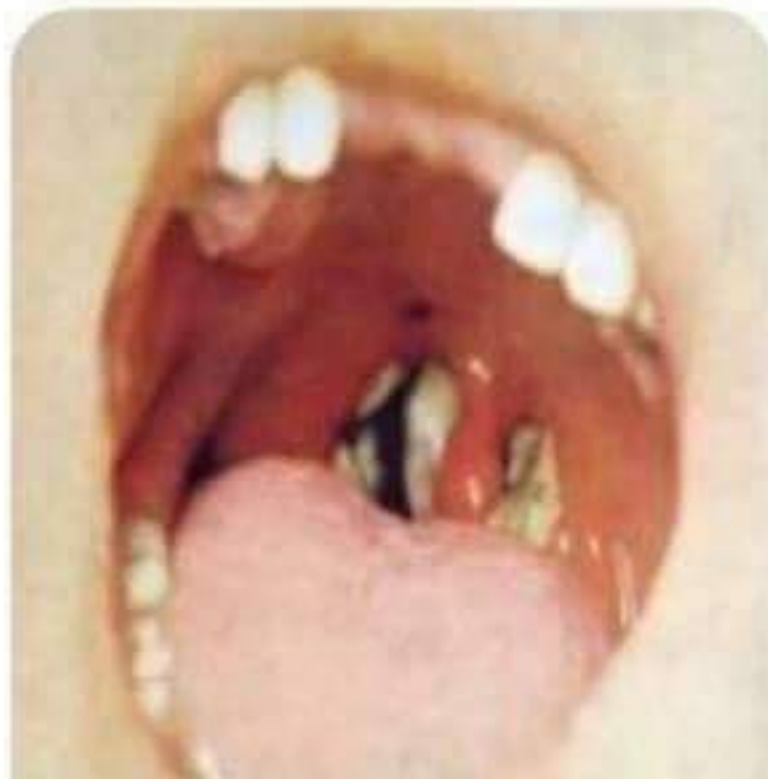
# What Is Diphtheria

Nurse Info



# What is Diphtheria

An infection of local tissue of Upper respiratory tract with production of toxin which causes systemic effects on Heart and Peripheral tissues,



## Definition

- Diphtheria is an acute, toxin-mediated disease caused by toxigenic *Corynebacterium diphtheria*.
- It's a very contagious and potentially life-threatening bacterial disease.
- It's a localized infectious disease, which usually attacks the throat and nose mucous membrane





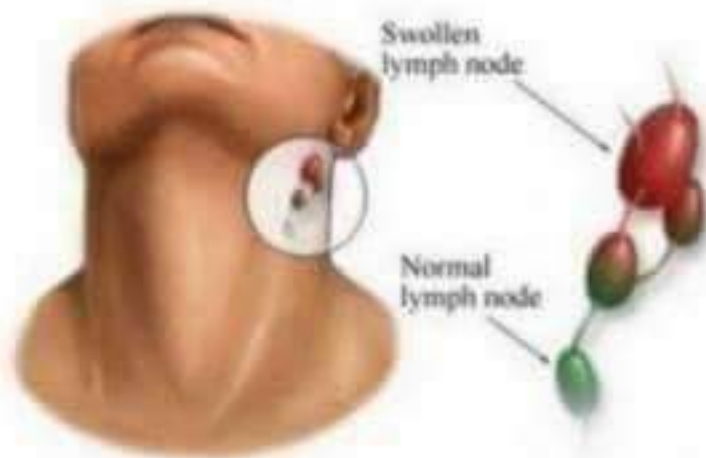
# Diphtheria

- Greek *diphtheria* (leather hide)
- Caused by Aerobic Gram +ve rods
- *Corynebacterium diphtheria*
- Exotoxin production only if infected by virus phage infected carrying toxin gene

# Signs and symptoms

Signs and symptoms usually begin two to five days after a person becomes infected.

- A sore throat and hoarseness
- Painful swallowing
- Swollen glands (enlarged lymph nodes) in your neck





A sheet of thick, gray matter covers the back of the throat, making breathing hard.

Symptoms include sore throat, fever, swollen lymph nodes and weakness.

Treatments include antibiotics and an antitoxin that neutralises the diphtheria toxin. A vaccine is available.

### **How it spreads**

By airborne respiratory droplets (coughs or sneezes).

By saliva (kissing or shared drinks).

### **Symptoms**

#### **Requires a medical diagnosis**

Symptoms include sore throat, fever, swollen lymph nodes and weakness.





**People may experience:**

**Whole body:** fatigue, fever, or malaise

**Respiratory:** noisy breathing or shortness of breath

**Speech:** hoarseness or impaired voice

**Throat:** difficulty swallowing or soreness


**Also common:** coughing, runny nose, swelling, or swollen lymph nodes



## **Schick Test ( Out dated )**

- Schick test: It is an intradermal test, the test is carried out by injecting intradermally into the skin of forearm 0.2 ml of diphtheria toxin, while into the opposite arm is injected as a control, the same amount of toxin which has been inactivated by heat.





# Treating Contacts

All contacts  
are advised to  
receive

500 mg  
Erythromycin  
4 times a day.





# Treatment

- Antibiotic not useful in Acute infections,
- Antitoxin a must.
- Anti toxin obtained from horse serum
- Mild 20,000 to 40,000
- Moderate 40,000 to 60,000
- Severe 80,000 to 1,00,000
- Commonly used antibiotics,
- Penicillin parentally,
- Oral Erythromycin



## Prevention

**Vaccination**: Immunisation with diphtheria toxoid, combined with tetanus and pertussis toxoid (DTP vaccine), should be given to all children at two, three and four months of age. Booster doses are given between the ages of 3 and 5 .

The child is given a further booster vaccine before leaving school and is then considered to be protected for a further 10 years (16 – 18 years).



## Passive Immunization

- Given in Acute infections
- Give Subcutaneously
- 500 – 1000 Units of Antitoxin
- Given as Horse Serum
- Combined in Acute Infections ( Both Active Immunization with Toxoid and Antitoxin.