# **CAUSE**

Corynebacterium diphtheriae bacteria in airway

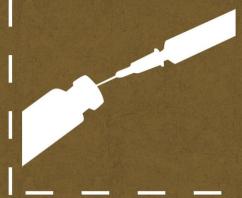


#### **SYMPTOMS**

nasal discharge
sore throat
weakness
fever
headache
bluish skin
swollen neck
"barking" cough
painful swallowing
difficulty breathing

# **PREVENTION**

DTaP vaccine injections plus
TdaP adult booster



### **COMPLICATIONS**

airway blockage



pneumonia



heart damage



nerve damage



paralysis



death



# **EPIDEMIOLOGY**

spread via direct contact or through the air

bacteria produce diphtheria toxin which prevents normal cell function

outbreaks are rare but still occur among unvaccinated populations

6-7

avg. number of people an infected person will infect while contagious  $(R_0)$ 

5-20%

rate of **fatality** depending on age (highest rates at

< age 5 and

> age 40)

50%

rate of **fatality** prior to vaccines and modern medicine