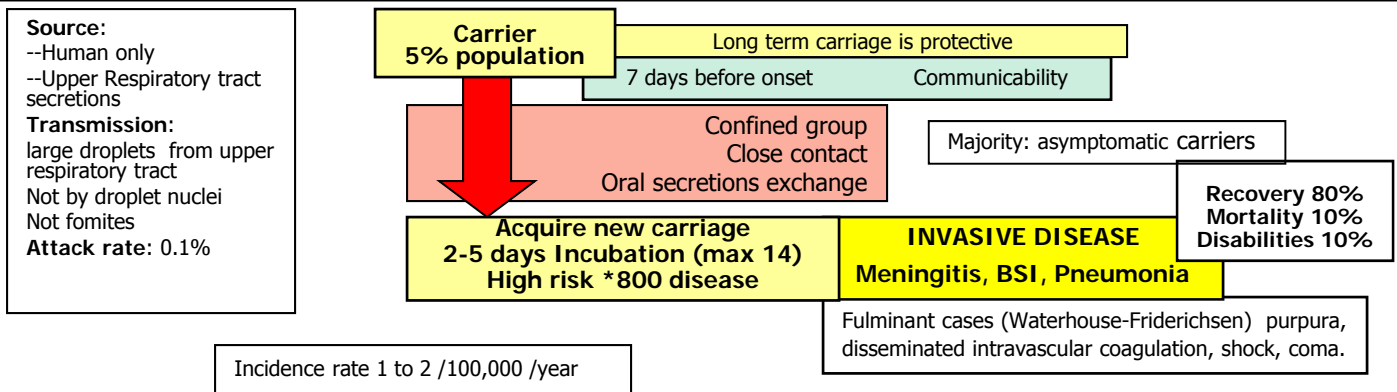


MENINGOCOCCAL INVASIVE DISEASE

EPIDEMIOLOGY & TRANSMISSION



DIAGNOSIS / TREATMENT

Clinical Dx
 Meningitis, Sepsis, Pneumonia
 Petechial or Purpuric rash.

SeroGroups
 A, B, C, W125, Y


Laboratory Dx
 Gram stain CSF: Gram negative diplococcus
 Culture of Blood /CSF: Neisseria meningitidis (Meningococcus)
 Meningococci in upper respiratory tract site is not diagnostic (5% carriers)
 Bacterial antigen detection in CSF. False-negative common
 Positive antigen in serum and urine unreliable
 PCR in serum or CSF (expe)
 Follow up with Serogroup & PFGE

Send culture to State Lab

Treatment of Meningococcal Invasive Disease
 Ceftriaxone, in children 25 mg/kg every 12 hours up to 1 g.
 Adult dose, 1 g IV every 12 hours
 Penicillin G, 50,000 U/kg every 4 hours IV,
 up to 4 million U q 4 hours
 Penicillin /cephalosporin allergic, chloramphenicol,
 25 mg/kg every 6 hours IV up to 1 g 6 hours
 Supportive Care
 Common complications of meningococcal disease are vascular collapse and shock, primarily caused by the effects of meningococcal lipooligosaccharide, which is a potent toxin.

PREVENTION / CHEMOPROPHYLAXIS

Droplet Precaution



- Household contacts and persons sharing the same living quarters, ++ young children
- Daycare center or child care contacts, frequent playmates of young children
- HCW who resuscitated, intubated, or suctioned the patient before antibiotics were begun
- Close social contacts who were exposed to oral secretions in week prior to onset, such as by kissing, sharing eating utensils or toothbrushes
- NO casual contacts:** classroom (other than child care center), elementary or secondary school class mates, school bus, office co-worker, HCW with casual contact (for example, entering the patient room, taking vital signs)

Infected people not considered contagious after 24 hours of preventive Tx
 After discharge from hospital, no risk to classmates, return to school OK
 Chemoprophylaxis >14 days after index illness onset not useful
 Oropharyngeal or nasopharyngeal cultures not helpful

Chemoprophylaxis

- eliminate nasopharyngeal carriage of close contacts
- reduce their risk of developing invasive disease
- does NOT prevent contacts from subsequently acquiring the infection
- does NOT treat infection in those incubating disease.

Drug	Age group	Dosage	Duration
Rifampin	Children <1mo	5mg/kg q12hr	2 days
Rifampin	Children ≥1 mo	10mg/kg q12hr	2 days
Rifampin	Adults	600mg q12hrs	2 days
Cipro	Adults	500mg	Stat
Ceftriaxone	Children <15 yr	125mg	Stat IM
Ceftriaxone	Adults	250mg	Stat IM

An **outbreak** is defined by the occurrence of 3 or more confirmed or probable cases of identical serogroup during a period of ≤ 3 months, with a primary attack rate ≥10 /100,000 population.

MASS IMMUNIZATION