Bordetella pertussis and Bordetella parapertussis

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Disclosures

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*Bordetella pertussis & Bordetella parapertussis*

- Aerobic, small nonmotile, Gram-negative coccobacilli
Symptoms
- Incubation: 5-10 days
- Three stages:
  - Catarrhal (1-2 weeks)
  - Paroxysmal (2-4 weeks)
  - Convalescent (3-4 weeks)

Transmission
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Seasonality of *Bordetella pertussis*

![Graph showing seasonality of *Bordetella pertussis*](image)

Pathogenesis – Virulence Factors

- Endotoxin
- Pertussis toxin
- Filamentous hemagglutinin (FHA)
- Adenylate cyclase
- Pertactin
- Tracheal cytotoxin
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Epidemiology - United States

Reported NNDSS pertussis cases: 1922-2016

Diagnosis

- Nasopharyngeal aspirate/swab
  - Nucleic acid amplification test preferred (highest sensitivity)
- Serology
Can you please ask the artist to draw a picture of a NP swab in the nasopharynx?- see https://www.youtube.com/watch?v=__dSqj2tZTg when the swab is all the way in and they are showing anatomy too. Thanks.

Robin Patel, 1/2/2015
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Treatment

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References

