



Pathophysiology

- Viral lower respiratory tract infection
- Obstruction of small airways due to inflammation and mucus production
- **Etiology:** Respiratory syncytial virus (RSV), human metapneumovirus, influenza, rhinovirus, adenovirus, and parainfluenza

Presentation – Symptoms peak at day 3-5 of illness, then improve



Wheezing
Cough



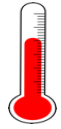
Respiratory distress
Apnea



Rhinorrhea
Nasal congestion



Dehydration



Fever

Bronchiolitis	versus	Asthma
First episode wheeze (but can recur) Typically <1 year (can be up to 2 years) No bronchospasm = No response to salbutamol		Recurrent wheeze Typically >1 year Bronchospasm = Response to salbutamol

Investigations – None required. Clinical diagnosis based on signs and symptoms!



➤ **Chest X-ray**
If suspecting alternate diagnosis



➤ **Blood Gas**
If concerned about respiratory failure



➤ **Respiratory Virus Swab**
For hospital cohorting or suspected influenza (not routinely recommended)



➤ **Other Blood Work or Cultures**
For severely ill or febrile infants <3 months old

Management



Indications for Admission: Requirement of supplemental oxygen, dehydration, apnea, risk factors for severe disease, severe respiratory distress

Recommended:



Oxygen
Maintain saturation >90%



Hydration
Encourage oral feeds.
Consider NG tube or IV fluids

Severe: Consider high-flow oxygen, non-invasive ventilation, and intubation

Equivocal Evidence:



Nebulized epinephrine



Nebulized hypertonic saline



Nasal suctioning

NOT Recommended:



Salbutamol



Glucocorticoids



Antibiotics



Antivirals



Chest physiotherapy



Aerosolized saline