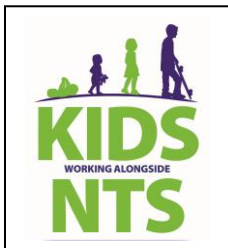

KIDS Clinical Guideline: Bronchiolitis

Background:

- acute infective inflammatory illness of the small airways
- characterised by coryza, cough, wheeze, respiratory distress, poor feeding, mild pyrexia (usually < 39°C), hyperinflation, fine crepitations and apnoea in neonates
- RSV accounts for 75% cases; other agents include influenza, parainfluenza, adenovirus, rhinovirus and human metapneumovirus
- factors increasing the risk of more severe disease include prematurity, congenital heart disease, chronic lung disease, immunodeficiency

Differential diagnosis

- bacterial pneumonia
- aspiration
- tracheomalacia
- virus-induced wheeze or asthma
- pertussis (may co-exist in up to 10%)
- inhaled foreign body
- congenital heart disease

Investigations:

- NPA for immunofluorescence if out of season
- NPA for PCR if likely to require PICU admission
- CXR if severe or diagnosis uncertain or murmur present
- FBC, U/E's & blood cultures (if features of sepsis)

Initial treatment:

- ensure patent airway - suction nose & mouth
- aim for $SpO_2 \geq 92\%$ (humidified O_2)
- correct dehydration
- monitor for apnoeas (particularly if < 6/52 age)
- if moderate or severe respiratory distress,
  - stop feeds & site nasogastric tube
  - commence iv fluids (80% maintenance)
  - consider sedation if agitated (chloral hydrate 30-50 mg/kg NG/PR)
- antibiotic only indicated if bacterial infection suspected

Indications for respiratory support:

- Apnoeas
- Respiratory distress
- hypercapnia with acidosis
- altered conscious level
- clinical exhaustion

Respiratory support:

- Start high-flow nasal cannula O_2 (1-2 L/kg)
- Change to CPAP (6-10 cmH_2O)if ongoing respiratory distress
- call for anaesthetic help
- call KIDS for advice (0 300 200 1100)
- if intubation is indicated, do not wait for retrieval service

Management following intubation:

see **KIDS pre transfer checklist**