



(PLACE PATIENT LABEL HERE)

SURNAME: \_\_\_\_\_ NHI: \_\_\_\_\_

FIRST NAMES: \_\_\_\_\_

Date of Birth: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ SEX: \_\_\_\_\_

## WHEEZE > 1 YEAR OF AGE

Indicate findings below by:  Positive / given OR  Negative / not given *All boxes must be populated*

### Inclusion Criteria

Date:	Time:	Name:	Sign:	Designation:
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**Upper Airway Obstruction → STOP - NOT SUITABLE FOR THIS CARE BUNDLE**

↳ ED Senior Medical or Paediatric Registrar review without delay

**Wheeze present and older than 1 year of age → CONTINUE**

↳ Initiate Best Care Bundle "Wheeze over 1 year" on Whiteboard

### Initial Nursing assessment - Aim to complete by 30 minutes

History, examination and vital signs recorded on the Nursing Assessment Sheet.

**Wheeze Severity Score recorded and appropriate pathway started.** (see page 2)

↳ **Initial Pathway started:**  Mild  Moderate  Severe

Initial SS:

**Red Flags → Senior Medical or Paediatric Registrar review without delay**

**SS = 6 or "Severe" → Move to Resus and inform Paediatric Team**

Poor response to Salbutamol prior to arrival in ED  Possible FB inhalation  Stridor

Previous PICU admit  Cardiac disease  Other Respiratory disease (CF, Bronchiectasis)

Allergies associated with anaphylaxis in past  Urticarial rash

**Pathway discontinued:** Time: Sign:

Completed normally  Individualised management  Alternative diagnosis

### Admission Guidelines - When to refer for Paediatric review

*If history of poor compliance with treatment after discharge in the past or suspicion that compliance is likely to be poor after discharge, discuss with Paediatric Team.*

- |  |   |
|--|---|
| <input type="checkbox"/> Moderate symptoms persist<br><input type="checkbox"/> Oxygen requirement<br><input type="checkbox"/> Significant co-morbidities | <input type="checkbox"/> Any other significant concerns or high risk of deterioration<br>• If late at night and transport issues, consider admitting overnight rather than discharging at this time |
|--|---|

### Sample Signatures

Name	Signature	Initials	Name	Signature	Initials



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**Asthma Severity Score Tool (SS)** Add wheeze score and work of breathing score

Wheeze			Work of breathing		
	None	0		None	0
	Expiratory	1		Mild	1
	Inspiratory and Expiratory	2		Moderate	2
	Heard without stethoscope	3		Severe	3
	Silent chest	3		Respiratory fatigue	3

**Mild Pathway (Severity Score 1 - 2)**

*At each review: Record vital signs and then select management option.*

START	Score:	<input type="checkbox"/> Give Salbutamol 6 puffs	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>Start here</b> if moved from Moderate Pathway         </div>
	Time:		
	Sign:		
at 20 min	Score:	<input type="checkbox"/> Score 3 or above → move to Moderate Pathway	
	Time:	<input type="checkbox"/> Score 2 → Give Salbutamol 6 puffs	
	Sign:	<input type="checkbox"/> Score 0 or 1 → Observe with no treatment	
at 40 min	Score:	<input type="checkbox"/> Score 3 or above → move to Moderate Pathway <i>Seek medical review if started on moderate pathway and deteriorated</i>	
	Time:	<input type="checkbox"/> Score 2 → Give Salbutamol 6 puffs	
	Sign:	<input type="checkbox"/> Score 0 or 1 → Observe with no treatment	
at 60 min	Score:	<input type="checkbox"/> Score 3 or above → move to Moderate Pathway <i>Seek medical review if started on moderate pathway and deteriorated</i>	
	Time:	<input type="checkbox"/> Score 2 → Observe with no treatment	
	Sign:	<input type="checkbox"/> Score 0 or 1 → Observe with no treatment ↳ Discharge if only initial treatment was given - Consult Dr or PCNS	
at 2 hrs	Score:	<input type="checkbox"/> If score 3 or above move to Moderate Pathway <i>Seek medical review if started on moderate pathway and deteriorated</i>	
	Time:	<input type="checkbox"/> Score 2 → Consult Medical Staff for further management	
	Sign:	<input type="checkbox"/> Score 0 or 1 → Observe with no treatment ↳ Discharge if no treatment given in the last hour - Consult Dr or PCNS	



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### Moderate Pathway (Severity Score 3 - 5) → review every 20 minutes

At each review: Record vital signs and then select management option.

START	Score:	<input type="checkbox"/> Administer oxygen if required as per standing order
	Time:	<input type="checkbox"/> Prednisolone if known Asthmatic (If < 5 years old, consult Dr first)
	Sign:	<input type="checkbox"/> Give Salbutamol 6 puffs <input type="checkbox"/> Tick if nebulised
at 20 min	Score:	<input type="checkbox"/> <b>Score 6 → Move to Resus and start Severe Pathway</b>
	Time:	<input type="checkbox"/> Score 1 to 2 → Move to mild pathway <input type="checkbox"/> Remove O <sub>2</sub> if Sats > 94% in air
	Sign:	<input type="checkbox"/> Score 3 to 5 → Give Salbutamol 6 puffs <input type="checkbox"/> Tick if nebulised
at 40 min	Score:	<input type="checkbox"/> <b>Score 6 → Move to Resus and start Severe Pathway</b>
	Time:	<input type="checkbox"/> Score 1 to 2 → Move to mild pathway <input type="checkbox"/> Remove O <sub>2</sub> if Sats > 94% in air
	Sign:	<input type="checkbox"/> Score 3 to 5 → Give Salbutamol 6 puffs <input type="checkbox"/> Tick if nebulised
at 60 min	Score:	<input type="checkbox"/> <b>Score 6 → Move to Resus and start Severe Pathway</b>
	Time:	<input type="checkbox"/> Score 1 to 2 → Observe only <input type="checkbox"/> Remove O <sub>2</sub> if Sats > 94% in air
	Sign:	<input type="checkbox"/> Score 3 to 5 → Give Salbutamol 6 puffs <input type="checkbox"/> Tick if nebulised ↳ Consider Prednisolone if not given yet (If < 5 years old, consult Dr first) ↳ Consider Ipratropium bromide if not given yet
at 90 min	Score:	<input type="checkbox"/> <b>Score 6 → Move to Resus and start Severe Pathway</b>
	Time:	<input type="checkbox"/> Score 1 to 2 → Give Salbutamol <input type="checkbox"/> Remove O <sub>2</sub> if Sats > 94% in air
	Sign:	<input type="checkbox"/> Score 3 to 5 → Give Salbutamol 6 puffs <input type="checkbox"/> Tick if nebulised
at 2 hours	Score:	<input type="checkbox"/> <b>Score 6 → Move to Resus and start Severe Pathway</b>
	Time:	<input type="checkbox"/> Score 1 to 2 → Observe only <input type="checkbox"/> Remove O <sub>2</sub> if Sats > 94% in air ↳ <b>Consult Medical Staff for further management</b>
	Sign:	<input type="checkbox"/> Score 3 to 5 → Give Salbutamol 6 puffs <input type="checkbox"/> Tick if nebulised ↳ Consider Prednisolone if not given yet (If < 5 years old, consult Dr first) ↳ <b>Consult Medical Staff for further management</b>



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Severe Pathway (SS = 6) → move to Resus and call for help

High flow oxygen, attach monitoring equipment

Inform Paediatric Team

Initial treatment:

↳ SALBUTAMOL 5 mg + IPRATROPIUM BROMIDE 250 mcg nebulised

Discuss with PICU if poor response to treatment

If poor respiratory effort or decreased conscious level consider intubation and ventilation at any stage

Formulary

Table with 2 columns: Medication and Dosage/Instructions. Includes Salbutamol MDI and Spacer, Salbutamol Nebulised, Ipratropium bromide MDI and Spacer, Ipratropium bromide Nebulised, Prednisolone, and Dexamethasone.

Disposition

Disposition checkboxes: PICU referral for admission arranged, Paediatric referral, Discharge (Discharge guidelines met), and Follow up options (HC4K, Other Specify).

Discharge Guidelines

Discharge patient if the following criteria have been met.

- Patient reviewed by Senior Dr. or Paediatric Team if not ED patient.
• Maintaining saturations of >94% in room air.
• Ongoing treatment explained and appropriate medications prescribed.
• Spacer Technique has been assessed and is satisfactory.
• Parent / Caregiver feel confident in being able to manage at home and know who to contact if required.
• No transport or other issues which might interfere with coming back to ED for review if required.
• Discharge letter and other relevant documentation (handouts) given to Parent / Caregiver.

If previously diagnosed with asthma.

- If the patient does not have a GP, then a list of GP's in the area can be provided.
• Referral to Asthma Auckland for further education if deemed necessary.
• Refer back to GP regarding ongoing Asthma management and for an Asthma Action Plan.