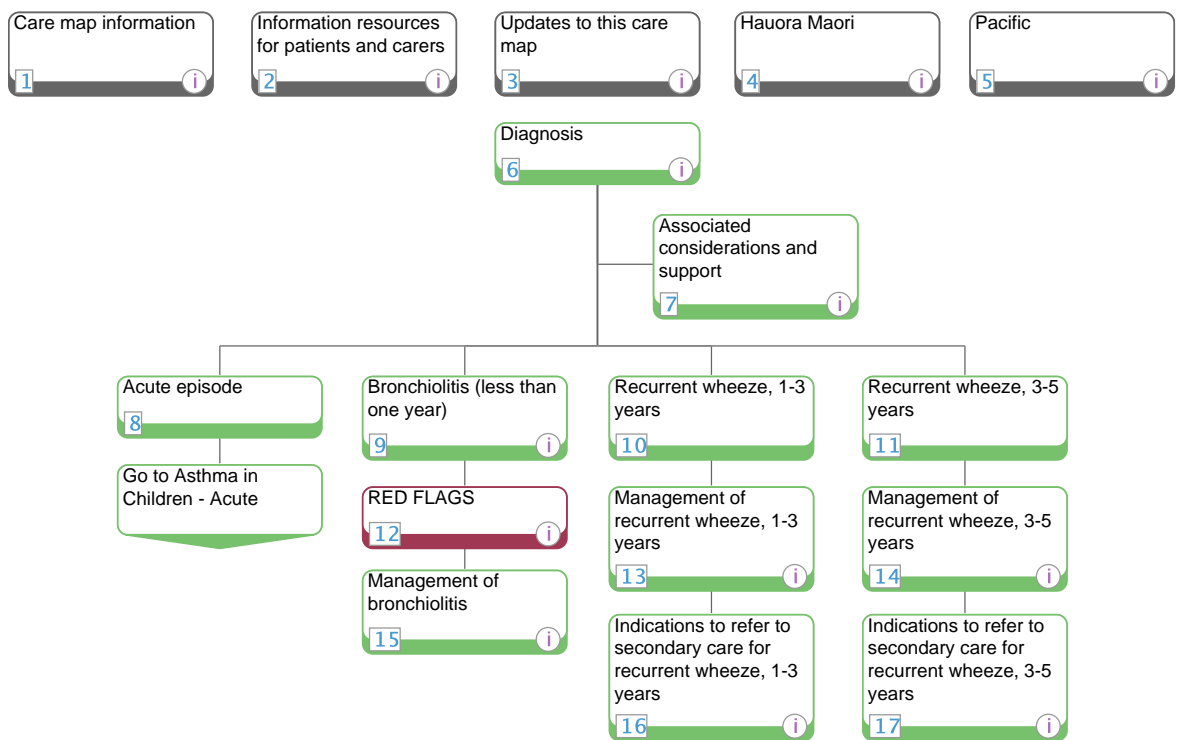


Wheeze in Preschool Children

Paediatrics > Thoracic medicine > Asthma in Children

- i Information
- R Referral
- N National info
- L Local info
- Note
- Primary care
- Secondary care
- Red flag
- Information



Wheeze in Preschool Children

Paediatrics > Thoracic medicine > Asthma in Children

1 Care map information

Quick info:

This pathway is intended for use with children under five years of age exhibiting respiratory wheeze.

This Pathway should be used only for patients in which it will influence the patient management. It is to be used as a guide and doesn't replace clinical judgement. This pathway is not an educational tool for medical diagnosis.

2 Information resources for patients and carers

Quick info:

Resources:

See [Asthma Foundation](#) for additional resources and the [National Respiratory Strategy](#)

[Inhaler Technique](#)

Language translation assistance:

[HBDHB Interpreting Service](#) - phone 06 878 8109 ext 5805 or email interpreting@hawkesbaydhb.govt.nz to make an appointment (charges may apply).

These websites may help with simple words and phrases:

- [Babelfish](#)
- [Google translate](#)

[Language Line](#) - professional interpreters are available, free of charge, for telephone-based sessions (44 languages are supported):

- phone 0800 656 656
- Monday - Friday 9am - 6pm
- Saturday 9am - 2pm

Bookings are not usually necessary. For longer consultations (for example, a nurse consultation for a newly diagnosed patient) it is best to make a booking at least 24 hours in advance by calling the above number or emailing language.line@dia.govt.nz and providing your contact details and a summary of the service you require (time and date of the meeting, language, approximate length of the appointment, gender of interpreter (if relevant)).

3 Updates to this care map

Quick info:

Date of publication: January 2016

Date of review and republication: January 2017

This care map has been developed in line with consideration to evidenced based guidelines.

For further information on contributors and references please see the Pathway's Provenance Certificate.

4 Hauora Maori

Quick info:

Maori are a diverse people and whilst there is no single Maori identity, it is vital practitioners offer culturally appropriate care when working with Maori whanau. It is important for practitioners to have a baseline understanding of the issues surrounding Maori health. This knowledge can be actualised by (not in any order of priority):

- clinicians acknowledging [Te Whare Tapa Wha](#) (Maori model of health) when working with Maori whanau
- asking Maori clients if they would like their whanau or significant others to be involved in assessment and treatment
- asking Maori clients about any particular cultural beliefs they or their whanau have that might impact on assessment and treatment of the particular health issues
- consider the importance of introductions and mihimihi ('whanaungatanga') - a process that enables the exchange of information to support interaction and meaningful connections. This means taking a little time to ask where this person is from or where

Wheeze in Preschool Children

Paediatrics > Thoracic medicine > Asthma in Children

they have significant connections to. This information is reciprocated; i.e. the health professional also shares where they are from

- knowledge of the [Hawke's Bay health sector's strategies and initiatives](#) for improving Maori health and wellbeing
- having a historical overview of legislation that has impacted on Maori well-being

Training is available through the Hawke's Bay DHB to assist you to better understand Maori culture and to better engage with Maori patients. Contact the coordinator (education@hbdhb.govt.nz) to request details of the next courses.

For more information on the regional and national Maori Health Strategies go to:

- **Mai** Maori Health Strategy 2014-2019- [Full file](#) or [Summary diagram](#)
- **He Korowai Oranga**: Maori Health Strategy - sets the [Government's overarching framework](#) to achieving the best health outcomes for Maori.

Hawke's Bay District Health Board contracts Maori Providers to deliver breast and cervical screening, and mobile nursing teams. A referral to one of these providers may assist Maori patients to feel more comfortable about receiving these services.

Central Hawke's Bay:

- [Central Health](#)

Hastings:

- [Te Taiwhenua o Heretaunga](#)
- [Kahungunu Health Services](#) (Choices)

Napier:

- [Te Kupenga Hauora](#)

Wairoa:

- [Kahungunu Executive](#)

5 Pacific

Quick info:

Pacific people value their culture, language, families, education and their health and wellbeing. Many Pacific families have a religious affiliation to a local church group.

The Pacific people are a diverse and dynamic population:

- more than 22 nations represented in New Zealand
- each with their own unique culture, language, history, and health status
- share many similarities which we have shared with you here in order to help you work with Pacific patients more effectively
- for many families language, cost and access to care are barriers

Pacific ethnic groups in Hawke's Bay include Samoa, Cook Islands, Fiji, Tonga, Niue, Tokelau, Kiribati and Tuvalu. Samoan and Cook Island groups are the largest and make up two thirds of the total Pacific population. There is a growing trend of inter-ethnic relationships and New Zealand born Pacific populations.

Acknowledge [The FonoFale Model](#) (Pacific model of health) when working with Pacific peoples and families.

General guidelines when working with Pacific peoples and families (information developed by Central PHO, Manawatu):

- [Cultural protocols and greetings](#)
- [Building relationships](#) with your Pacific patients
- [Involving family support and religion](#) during assessments and in the hospital
- [Home visits](#)

Hawke's Bay-based resources:

- [HBDHB interpreting service](#) 06 8788 109 ext 5805 (no charge for hospital patients; charges apply for community-based translations)
- Tim Hutchins- Pacific Navigation Services LTD 027 9719199
- Services to assist Pacific peoples to access healthcare ([SIA](#))
- [Improving the Health of Pacific People in Hawke's Bay](#) – Pacific Health Action Plan

Ministry of Health resources:

- [Ala Mo'ui](#) - Pathways to Pacific Health and Wellbeing 2014-2018
- [Primary care for Pacific people](#): a Pacific and health systems approach

Wheeze in Preschool Children

Paediatrics > Thoracic medicine > Asthma in Children

- Health education resources in [Pacific languages](#) (links to a webpage where you can download resources)

6 Diagnosis

Quick info:

Features:

Wheeze should ideally be heard by the clinician, and distinguished from upper airway noises. Associated respiratory symptoms may include shortness of breath, increased work of breathing, and cough. With recurrent cough in the absence of wheeze consider alternate diagnoses. Persistent wheeze that does not vary over time should prompt consideration of inhaled foreign body or anatomical airway narrowing.

7 Associated considerations and support

Quick info:

• Smoking

- parents/caregivers should be offered appropriate support to stop smoking
 - [Quitline](#)
 - TTOH
 - Te Kupenga
 - school nurses
 - see [Smoking Cessation ABCD pathway](#)

• Flu vaccination:

- should be offered

• Rhinitis/Hayfever:

- needs to be well controlled
- see [Rhinosinusitis - Suspected pathway](#)

• Housing (subject to approval):

- [Healthy Homes \(PHO\)](#)
- [Curtain Bank](#)
- [Child Healthy Housing \(DHB\) criteria](#)
- [Child Healthy Housing \(DHB\) referral form](#)

• WINZ:

- [link to disability allowance information](#)

- Public Health Nurse/School Based Nurses
- [Breathe Hawke's Bay](#)

9 Bronchiolitis (less than one year)

Quick info:

Features:

- acute onset
- expiratory wheeze
- fine crackles
- cough
- URTI

Indicators of severity:

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Wheeze in Preschool Children

Paediatrics > Thoracic medicine > Asthma in Children

- reduced oral intake
- respiratory rate
- heart rate
- increased work of breathing
- oxygen sats

12 RED FLAGS

Quick info:

Indication for referral:

- unable to feed
- irritable or drowsy
- apnoea
- respiratory rate > 60
- heart rate > 160
- oxygen sats < 92%
- capillary refill > 2 seconds
- respiratory effort / fatigue

Consider:

- high risk infants:
 - premature infants
 - less than two months of age
 - underlying cardiac or respiratory conditions
- duration of illness < 72 hours
- social concerns

13 Management of recurrent wheeze, 1-3 years

Quick info:

History:

- frequent or severe episodic wheeze requiring intervention
- presence of interval symptoms
- [triggers](#)
- family history
- previous treatment

Examination:

- interval examination may be normal.
- confirm presence of wheeze (current / historic)
- atopic features - signs of eczema / hayfever
- consider alternative diagnosis for cough in the absence of wheeze
- chest x-ray is not generally indicated in preschool wheeze, but may be considered when the diagnosis is uncertain

Management:

- provide written action plan e.g. [The Asthma Foundation](#) or [healthalliance](#)
- [salbutamol via spacer](#) as reliever therapy

Wheeze in Preschool Children

Paediatrics > Thoracic medicine > Asthma in Children

• evidence against oral corticosteroids under age 3

- consider preventer for frequent or severe episodic wheeze or persistent interval symptoms
 - starting dose fluticasone 50mcg bd or beclomethosone 100 mcg bd
 - montelukast 4 mg od ([link to special authority form](#)) - for children over 2 years

Review control

Indicators of poor control:

- using inhaled β_2 agonists three times a week or more
- symptomatic three times a week or more
- waking one night a week or more with asthma symptoms

Review effectiveness by monitoring decrease of symptoms after 6-8 weeks:

- if poor control, increase inhaled corticosteroids
- consider ICS/LABA combination inhaler OR addition of montelukast if poor control on fluticasone 100 mcg bd

Continue regular review at least six-monthly:

- consider reduction of medication to lowest effective dose
- review symptoms, medication adherence, inhaler technique and spacer care
- discuss trigger avoidance, environmental modification, smoking cessation

14 Management of recurrent wheeze, 3-5 years

Quick info:

History:

- frequent or severe episodic wheeze requiring intervention
- presence of interval symptoms
- [triggers](#)
- family history
- previous treatment

Examination:

- interval examination may be normal.
- confirm presence of wheeze (current / historic)
- atopic features - signs of eczema / hayfever
- consider alternative diagnosis for cough in the absence of wheeze
- chest x-ray is not generally indicated in preschool wheeze, but may be considered when the diagnosis is uncertain

Management:

- provide written action plan e.g. [The Asthma Foundation](#) or [healthalliance](#)
- [salbutamol via spacer](#) as reliever therapy
- consider preventer for frequent or severe episodic wheeze or persistent interval symptoms:
 - starting dose fluticasone 50mcg bd or beclomethasone 100 mcg bd
 - montelukast 4 mg od ([link to special authority form](#))

Review control

Indicators of poor control:

- using inhaled β_2 agonists three times a week or more
- symptomatic three times a week or more

Wheeze in Preschool Children

Paediatrics > Thoracic medicine > Asthma in Children

- waking one night a week or more with asthma symptoms

Review effectiveness by monitoring decrease of symptoms after 6-8 weeks:

- if poor control, increase inhaled corticosteroids
- consider ICS/LABA combination inhaler OR addition of montelukast if poor control on fluticizone 100 mcg bd

Continue regular review at least six-monthly:

- consider reduction of medication to lowest effective dose
- review symptoms, medication adherence, inhaler technique and spacer care
- discuss trigger avoidance, environmental modification, smoking cessation

See also: [Inhaler Technique](#)

15 Management of bronchiolitis

Quick info:

Management:

- reassurance
- supportive care
- consider follow-up
- give KidsHealth [Bronchiolitis handout](#) and refer parents to [KidsHealth](#) for more info

Evidence does NOT support:

- oral or inhaled corticosteroids
- antibiotics
- bronchodilators. Consider trial in infants over 9 months if history of atopy or family history of asthma. Discontinue if ineffective

Atypical features:

Consider alternate diagnoses if:

- fever > 38.5
- unilateral chest signs
- absence of wheeze

16 Indications to refer to secondary care for recurrent wheeze, 1-3 years

Quick info:

Indications to refer:

- uncertain diagnosis
- ongoing symptoms despite high dose preventer therapy:
 - fluticasone 100mcg bd
 - beclomethasone 200mcg bd
- recurrent severe episodes
- clinician concern

17 Indications to refer to secondary care for recurrent wheeze, 3-5 years

Quick info:

Indications to refer:

- uncertain diagnosis

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Wheeze in Preschool Children

Paediatrics > Thoracic medicine > Asthma in Children

- ongoing symptoms despite therapeutic dose combination ICS/LABA therapy
- recurrent severe episodes
- clinician concern

Asthma Provenance Certificate

Overview

This document describes the provenance of Hawke's Bay District Health Board's **Asthma** Pathway. It was developed August-September 2015 and first published in January 2016. A review of the Pathway is due in January 2017.

The Collaborative Clinical Pathways programme is one initiative stemming from the *Transform and Sustain* agenda. The main aims of CCP are to:

- Identify opportunities to improve how health and disability care is planned and delivered within the district to improve patient access to a wider range of health services that are both closer to home and reduce avoidable hospital admissions.
- Provide health professionals throughout the Hawke's Bay district with best practice, evidence-based clinical pathways that are available at the point of care.

Outcomes we expect to achieve include faster access to definitive care, improved health equity and outcomes, better value from publically-funded resources, and better patient experience through clear expectations, improved access and greater health literacy. These outcomes are clearly aligned to the NZ healthcare *Triple Aim* and *Better, Sooner, More Convenient* policy directions.

Editorial methodology

This Pathway was based on high-quality information and known Best Practice guidelines from New Zealand and around the world including Map of Medicine editorial methodology. It was developed by individuals with front-line clinical experience (see Contributors section of this document) and has undergone consultation to gain feedback and input from the wider clinical community.

Map of Medicine Pathways are constantly updated in response to new evidence. Continuous evidence searching means that Pathways can be updated rapidly in response to any change in the information landscape. Indexed and grey literature is monitored for new evidence, and feedback is collected from users year-round. The information is triaged so that important changes to the information landscape are incorporated into the Pathways through the quarterly publication cycle.

An update to this Pathway is scheduled for 12 months after first publication. However, feedback is welcomed at any time, with important updates added at the earliest opportunity within the Map of Medicine publishing schedule (the third Friday of each month).

References

This Pathway has been developed according to the Map of Medicine editorial methodology. Its content is based on high-quality guidelines and practice-based knowledge provided by contributors with front-line clinical experience. Feedback on this Pathway was received from stakeholders during a consultation process.

1	<i>Global Initiative for Asthma (GINA): 2015</i>
2	National Institute for Health and Care Excellence. <i>Asthma Management: 2015</i>
3	Hawke's Bay District Health Board. <i>Guidelines for Acute Paediatric Asthma: 2013</i>

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Disclaimers

Clinical Pathways Steering Group, Hawke's Bay DHB and Health Hawke's Bay – Te Oranga Hawke's Bay

It is not the function of the Clinical Pathways Steering Group, Hawke's Bay DHB and Health Hawke's Bay – Te Oranga Hawke's Bay to substitute for the role of the clinician, but to support the clinician in enabling access to know-how and knowledge. Users of the Map of Medicine are therefore urged to use their own professional judgement to ensure that the patient receives the best possible care. Whilst reasonable efforts have been made to ensure the accuracy of the information on this online clinical knowledge resource, we cannot guarantee its correctness and completeness. The information on the Map of Medicine is subject to change and we cannot guarantee that it is up-to-date.