



# Control Asthma Now

Community Pediatric Asthma Service

## Physician News and Views

Volume 10, Winter 2013

### Asthma Improvement Project – Less Waiting for Specialty Referral & New Referral Form

The Community Pediatric Asthma Service provides asthma education and spirometry with Certified Respiratory Educators (CRE) in community physician offices and community clinics around the Calgary Zone. The Asthma Speciality Clinic at Alberta Children's Hospital and South Calgary Health Centre provides pulmonary function testing, education, nursing, allergy testing for environmental triggers, psychosocial services and specialist support.

Last fall, we began to collaborate on a pediatric asthma improvement initiative. Waiting time for a asthma speciality clinic appointment became our focus. The elimination of the waiting list at Alberta Children's Hospital effectively means patients receive a scheduled appointment, not a spot on the waiting list.

In April, patients triaged as routine on the Asthma Speciality Clinic waiting list were transferred to the Community Pediatric Asthma Service for spirometry and education. Since July, routine asthma referrals to Asthma Speciality Clinic are now re-directed to the community service. Any patient requiring the support of the Asthma Speciality Clinic can be expedited back.

We have introduced a new referral form that we hope will help everyone better understand all the pediatric asthma referral options in the Calgary Zone. A copy of the new Alberta Health Services referral form is inserted in this newsletter and is available on our website (go to "Pediatric Asthma Forms" at the bottom of the "All About Us" tab).

### Noseworthy News - Don't Forget the Nose!

The nose is part of our single airway therapy for asthma, but is commonly forgotten in the diagnosis and treatment of asthma. If the nose is involved, successful asthma treatment and management will include nasal therapy.

When the environment triggers seasonal/allergic rhinitis, daily oral antihistamines and nasal steroids are recommended.



Dramatic changes in barometric pressure like those we experience in Calgary during a Chinook cause inflammatory changes in the nose and lungs and may mean some of your patients will be on nasal therapy all year!

See our nasal steroid instruction sheet insert or view/print it online at [www.ucalgary.ca/icancontrolasthma](http://www.ucalgary.ca/icancontrolasthma) → Video Central → Device Demos → Nasal Steroid Spray

### Together We Are Making a Difference!

In spite of a 13% increase in the pediatric population in the Calgary Zone over the last six years, the 2011-2012 Child Health Utilization Report now identifies asthma as the #9 reason children came to Emergency and the #7 reason they were admitted at Alberta Children's Hospital – that's a significant improvement over the #3 reason for an emergency visit or admission in 2005!



**NEW**

# Canadian Asthma Consensus Guidelines

**2 0 1 2 U P D A T E**

Mary Noseworthy, MDCM, FRCPC, Director, Asthma Specialty Clinic,  
Alberta Children's Hospital and Medical Co-Leader, Community  
Pediatric Asthma Service (Calgary Zone), Alberta Health Services

**The Canadian Thoracic Society 2012 guideline  
update critically evaluated 4 main topics:**

<b>1. Asthma control</b>	the role of non-invasive measures of airway inflammation
<b>2. Adjunct controller therapy</b>	which medication to add, at what ICS dose
<b>3. ICS/LABA combination therapy in a single inhaler</b>	used as a reliever, or as both a reliever and a controller
<b>4. Asthma Action Plans</b>	how to adjust controller therapy in the "yellow zone"

**Abbreviated terms (from the 'Slim Jim') with examples include:**

<b>ICS</b>	<b>Inhaled Corticosteroids</b> <ul style="list-style-type: none"> <li>• Alvesco</li> <li>• Asmanex</li> <li>• Flovent</li> <li>• Pulmicort</li> <li>• Qvar</li> </ul>
<b>SABA</b>	<b>Short-Acting Beta Agonist</b> <ul style="list-style-type: none"> <li>• Airomir</li> <li>• Bricanyl</li> <li>• Ventolin</li> <li>• Generic salbutamol</li> </ul>
<b>FABA</b>	<b>Fast-Acting Beta Agonist</b> <b>Note:</b> All SABA's are fast-acting, therefore, they are also FABA's <ul style="list-style-type: none"> <li>• All SABA's listed above</li> <li>• Formoterol sold as Oxeze and Foradil</li> <li>• Formoterol sold in two combinations with an ICS - Symbicort and Zenhale.</li> </ul>
<b>LABA</b>	<b>Long-Acting Beta Agonist</b> <b>Note:</b> Not all LABA's are fast-acting <ul style="list-style-type: none"> <li>• Foradil</li> <li>• Oxeze</li> <li>• Serevent. <b>Note:</b> Not fast-acting, therefore, NOT for use as a rescue medication</li> </ul>
<b>LTRA</b>	<b>Leukotriene Receptor Antagonist</b> <ul style="list-style-type: none"> <li>• Generic montelukast</li> <li>• Singulair</li> <li>• Accolate</li> </ul>

**ICS/LABA**
**Inhaled Corticosteroid/Long-Acting Beta Agonist aka  
"Combination Therapy"**

- Advair (fluticasone/salmeterol)
- Symbicort (budesonide/formoterol)
- Zenhale (mometasone/formoterol)

**Our thoughts on the most important messages that might impact your practice follow.**

## 1. Asthma Control

- Inhaled corticosteroids (ICS) remain the first-line controller therapy for all ages
- Controller therapy should take into account both current control and future risk for severe exacerbations
- Spirometry is the gold standard in testing for children and adults. In adults, specialists are also now measuring exhaled nitric oxide as a measure of airway inflammation to guide adjustments to therapy.

## 2. Adjunct Controller Therapy

- It is not recommended to use single inhaler therapy (Symbicort) as a reliever and a controller as a self-management strategy in lieu of ensuring adherence to low-dose ICS with a fast-acting reliever in children 12+ years
- In children <12 years, there is not sufficient evidence to recommend the use of combination therapy (ie. Advair, Symbicort or Zenhale) over moderate dose ICS or ICS and montelukast (Singulair) as maintenance therapy

## 3. ICS/LABA Combination Therapy in a Single Inhaler

- In individuals with mild intermittent asthma on no maintenance controller therapy or mild asthma on ICS monotherapy, use of a short-acting beta agonist is recommended instead of either a LABA (Oxeze) or an ICS/LABA combination inhaler (Advair, Symbicort or Zenhale) as a reliever
- As per Health Canada:
  - » Advair (fluticasone/salmeterol) is not indicated for PRN use
  - » Zenhale (mometasone/formoterol) is not indicated for PRN use
  - » Symbicort is the only combination therapy indicated for PRN use in conjunction with BID maintenance dosing
- For patients 12+ years, Symbicort (budesonide/formoterol) may be used:
  - » **As a reliever** - in patients with uncontrolled asthma despite adherence to a medium dose of combination therapy (Symbicort)... ►

**NEW**

# Canadian Asthma Consensus Guidelines

**2 0 1 2 U P D A T E**

## Examples – Stepping Up a Medium Dose:

- **Advair** 250µg BID with PRN salbutamol could become Symbicort 200-400µg BID and PRN as maintenance therapy
- **Zenhale** 200µg BID with PRN salbutamol could become Symbicort 200-400µg BID and PRN as maintenance therapy
- **Symbicort** 200µg BID with PRN Bricanyl could become Symbicort 200-400µg BID and PRN as maintenance therapy

» **As a reliever and a controller** - in exacerbation prone patients with uncontrolled asthma despite high dose maintenance ICS or ICS/LABA therapy treatment may be increased as follows with close MD follow-up...

## Examples - Stepping Up a High Dose:

- **Flovent** 500µg BID with PRN salbutamol could become Symbicort 400µg BID and PRN as maintenance therapy
- **Qvar** 400µg BID with PRN salbutamol could become Symbicort 400µg BID and PRN as maintenance therapy
- **Alvesco** 800µg OD with PRN salbutamol could become Symbicort 400µg BID and PRN as maintenance therapy
- **Advair** 500µg BID with PRN salbutamol could become Symbicort 400µg BID and PRN as maintenance therapy ►

- **Symbicort** 400µg BID with PRN Bricanyl could become Symbicort 400µg BID and PRN as maintenance therapy.

**Note: The maximum dose of Symbicort is 1600µg/day for 7-14 days for anyone 12+ years.**



*If your pediatric patient is on 500µg of any inhaled steroid and not controlled, reconsider diagnosis, treat allergic rhinitis and consider step-up therapies.*

Dr. Mark Anselmo, Division Chief,  
Respiratory Section, Alberta Children's Hospital

## 4. Asthma Action Plans

- Current Canadian Guidelines do not support intermittent treatment with ICS for symptoms associated with colds. Daily treatment with ICS is recommended
- Regular controller therapy with ICS is recommended for all ages. Add oral steroids for exacerbations when needed
- There is still insufficient evidence in children <12 years to support a recommendation regarding levels of step-up ICS therapy with worsening symptoms

*The Community Pediatric Asthma Service does not promote or endorse any asthma medication or product. All drugs named here are for example only.*

## CONGRATULATIONS!

# Alberta Medical Association Honours Shirley van de Wetering

The Alberta Medical Association (AMA) honoured five Albertans for their exemplary efforts in advancing the province's health care system at their September 2012 AGM and Representative Forum in Edmonton.

The AMA Medal of Honor is presented to non-physicians to recognize their contributions to the advancement of research, education, health care organization and health education, as well as their efforts to raise the standards of health care in Alberta.

Shirley van de Wetering received the AMA Medal of Honor for her efforts to improve access to care for children and families living with asthma. Shirley launched this work in 2001 as the Project Manager for



the Child Asthma Network (iCAN Project) that has evolved into the Community Pediatric Asthma Service as you know it today. The combined efforts of Shirley, the educator team and your efforts as primary care providers have contributed to a significant reduction in emergency visits and admissions for children with asthma in the Calgary Zone. Shirley is also responsible for the launch and ongoing development of the pediatric asthma "iCAN" website ("I CAN Control my Asthma Now") which is recognized locally, nationally and internationally.

## New Nasal Flu-Mist Vaccine

Asthma is the #1 reason for school and work related absences in North America associated with colds and flu. For this reason, we support the flu vaccine for patients and families living with asthma. Nasal spray vaccine appears to give the best protection against influenza in the 2 – 17 year old age group with mild to moderate asthma. Children with severe asthma should continue to receive the intramuscular injection of the vaccine.

## Welcome Glenda MacLean!

We welcome Dr. Glenda MacLean as our new Department of Family Medicine/ Primary Care Network Medical Co-Leader. Glenda practices family medicine in southwest Calgary and is a member of the West Central Primary Care Network.

## New Asthma Medication & Device – Asmanex Twisthaler

Merck has just added a new once daily inhaled corticosteroid (ICS) Asmanex (mometasone) for use in children 12+ years. Mometasone is a well known

and effective nasal corticosteroid (Nasonex). Their combination product, Zenhale (mometasone and formoterol), was introduced to Canada in 2011. Asmanex is most comparable to Alvesco, QVAR, Flovent and Pulmicort. This once-a-day ICS is available in 200 mcg (pink) and 400 mcg (purple). The new device is actuated by twisting the cap, has a counter and will not open when it is empty. The lock when empty feature is a valuable and unique first in Canada. If your patients

report any difficulty accessing Asmanex at their pharmacy, contact your Merck rep or have them call Merck Customer Service at 1-800-567-2594.



## Inserts

For your reference, inserts in this newsletter include:

- Canadian Respiratory Guidelines 2012 Update ('Slim Jim')
- Asthma Medication Record (dosing options for every asthma medication)
- New Pediatric Asthma Referral form and info sheet
- Asmanex and Nasal Steroid Spray instructions sheets for patients
- Copies of our most recent patient newsletter for your office

## Contact Us @

### Community Pediatric Asthma Service

Alberta Health Services  
#2270, 31 Sunpark Plaza SE  
Calgary, AB T2X 3W5  
Phone: (403) 943-9139  
Fax: (403) 943-9474  
Email: [ican@ucalgary.ca](mailto:ican@ucalgary.ca)  
[www.ucalgary.ca/icancontrolasthma](http://www.ucalgary.ca/icancontrolasthma)



## Save a Tree!



You can receive our annual Physician News & Views by email.

All previous issues of our newsletters are archived on our website.

Let us know if we can send you a digital version.  
Call: (403) 943-9139 or  
email: [ican@ucalgary.ca](mailto:ican@ucalgary.ca).

## World Congress of Asthma

### Quebec, August 2012

Members of the Asthma Specialty Clinic at Alberta Children's Hospital and the Community Pediatric Asthma Service shared our pediatric asthma successes with the world with six oral presentations at the World Congress of Asthma in Quebec City in August 2012!



[www.ucalgary.ca/icancontrolasthma](http://www.ucalgary.ca/icancontrolasthma)



Alberta Children's Hospital



October 31, 2012

Dear Physicians,

Subject: New Pediatric Asthma Referral Form, Calgary Zone

We are officially introducing a new pediatric asthma referral form that we hope will help everyone better understand pediatric asthma referral options provided by Alberta Health Services in the Calgary Zone.

The **Community Pediatric Asthma Service** (the "Community Service") provides asthma education and spirometry (interpreted by a pediatric respirologist) with Certified Respiratory Educators (CRE) in community physician offices and community clinics around the Calgary Zone. **Please note our new fax number.**

The **Asthma Specialty Clinic** (the "Clinic") at Alberta Children's Hospital and South Calgary Health Centre provides pulmonary function testing interpreted by a pediatric respirologist, nursing support, asthma education, allergy testing for environmental triggers, psychosocial services and specialist consult. **Please note our new fax number.**

The **Pulmonary Function Testing Lab** at Alberta Children's Hospital (the "Lab") provides pulmonary function testing for children 6+ years and pre-school testing 4 – 6 years (if developmentally appropriate), interpreted by a pediatric respirologist, but with no consultation. Methacholine challenge and exercise testing referrals must come from a respiratory speciality clinic.

Routine referrals received by the Clinic will be directed to the Community Service to facilitate timely assessment and care.

All pediatric asthma patients will receive an appointment date with the Clinic or the Community Service and this date will be communicated back to you.

You will be advised if any patient seen in the Community Service requires the additional support of the Clinic and these patients will be referred to the Clinic, on your behalf, by the Community Service educators for an urgent assessment.

We hope this new form simplifies pediatric asthma referrals to Alberta Health Services in the Calgary Zone. If you have questions or feedback about the form, please let us know.

Cordially,



Dr. Mary Noseworthy,  
Medical Leader, Asthma Speciality Clinic &  
Medical Co-Leader, Community Pediatric Asthma Service

## Pediatric Asthma Referral Form

<b>Date:</b> yyyy/mm/dd	<b>Patient Information:</b> ( patient label preferred )
<b>Referring Physician:</b> (office stamp preferred) <b>Name:</b> <b>Address:</b> <b>Phone:</b> <b>Fax:</b> <b>PracID (required):</b>	<b>Last Name:</b> <b>First Name:</b>  <b>DOB:</b> yyyy/mm/dd <b>Gender:</b> <b>PHN:</b> <b>Address:</b>  <b>City:</b> <b>Province:</b> <b>Postal Code:</b>
<b>Parents/Guardian Names:</b>	
<b>DAYTIME Phone Numbers:</b>	
<b>Interpreter required:</b> NO YES (circle one). If YES, what language/dialect is spoken:	

**Comments/Concerns/History:**

**Asthma Diagnosis Confirmed?** NO YES NOT SURE (circle one)

**Medications:**

**Please refer to ONE of the following services** (further information on Page 2):

<b>REFER TO:</b> <input type="checkbox"/> <b>Community Pediatric Asthma Service</b> for 60 minute asthma education <b><u>Fax: (403) 776-3806 (NEW)</u></b> Phone: (403) 943-9139  <ul style="list-style-type: none"> <li>Poor control of asthma/spirometry</li> <li>Recent hospital admission</li> <li>Multiple ED visits (3+)</li> <li>Review of medications, including compliance and technique</li> <li>Written Asthma Management Plan</li> <li>First or second episode of wheeze</li> <li>Asthma symptoms. Need confirmation of diagnosis</li> <li>Trigger identification and avoidance strategies</li> <li>Family needs more information about asthma</li> <li>Mild to moderate asthma</li> </ul>	<b>REFER TO:</b> <input type="checkbox"/> <b>Asthma Specialty Clinic, ACH</b> for specialist support <b><u>Fax: (403) 776-3807 (NEW)</u></b> Phone: (403) 955-7328  <ul style="list-style-type: none"> <li>Any ICU admission for asthma</li> <li>Co-morbidities</li> <li>Non-responsive to asthma treatment (explain in comments)</li> <li>6 – 18 months of age  <b>(&lt;6 months refer to Pulmonary Clinic)</b></li> <li>Psycho/social concerns impacting asthma control</li> <li>Moderate to severe asthma</li> </ul>	<b>REFER TO:</b> <input type="checkbox"/> <b>Pulmonary Function Testing Lab, ACH</b> for testing to support asthma diagnosis <b><u>Fax: (403) 955-2512</u></b> Phone: (403) 955-7875  <ul style="list-style-type: none"> <li>Standard testing includes spirometry lung volumes pre/post bronchodilator for 6+ years</li> <li>Pre-school testing 4 – 6 years (if developmentally appropriate)</li> <li>Support asthma diagnosis</li> <li>Suspect asthma, but no previous spirometry</li> </ul>
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## **Pediatric Asthma Information Sheet - Referral Options in the Calgary Zone:**

### **COMMUNITY PEDIATRIC ASTHMA SERVICE**

Fax: (403) 776-3806 (NEW) Phone: (403) 943-9139

Certified Respiratory Educators (CRE) provide spirometry interpreted by a pediatric respirologist, asthma education that includes device assessment, trigger identification and avoidance strategies, written Asthma Action Plan and referral to Asthma Speciality Clinic, if required.

### **COMMUNITY PEDIATRICIANS**

Telephone advice line (403) 955-1098 for primary care physicians between 8:00am – 5:00pm, 7 days/week. There are also a number of community pediatricians with an interest in asthma who accept acute asthma referrals in a timely fashion. This list is available at <http://www.ucalgary.ca/icancontrolasthma/aboutus>

### **ASTHMA SPECIALTY CLINIC, Alberta Children's Hospital (ACH)**

Fax: (403) 776-3807 (NEW) Phone: (403) 955-7328

Specialist assessment, pulmonary function testing interpreted by a pediatric respirologist, educator assessments - device, trigger identification/ environment assessment, Asthma Action Plan. May also include allergy testing for asthma environmental triggers, psycho/social factors impacting asthma control or challenges related to living with a chronic condition and nurse telephone advice/support.

### **URGENT REFERRALS**

Alberta Children's Hospital (ACH) Switchboard: **(403) 955-7211**

Call ACH switchboard at 403-955-7211 and ask to page the **"pediatric respiratory physician on-call."**

### **PULMONARY FUNCTION LAB, Alberta Children's Hospital (ACH)**

Fax: (403) 955-2512 Phone: (403) 955-7875

Pulmonary function testing 6+ years and pre-school testing 4 – 6 years (if developmentally appropriate), interpreted by a pediatric respirologist, but with no consultation. Methacholine challenge and exercise testing referrals must come from a respiratory speciality clinic.

### **CALGARY COPD & ASTHMA PROGRAM (CCAP)**

Fax: (403) 283-3406 Phone: (403) 944-8742

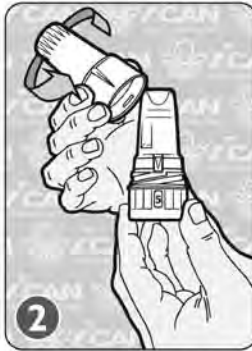
Patients 16 years+ for spirometry with asthma/COPD education, tobacco reduction, chronic cough. Referral form available online at <http://www.ucalgary.ca/asthma>

# DRY POWDER INHALER

## TWISTHALER (6+ YEARS)



1  
CLOSED



2  
TWIST CAP OFF



3  
BREATHE OUT



4  
DEEP BREATH IN & HOLD



5  
TWIST CAP ON TO CLOSE



6  
RINSE & SPIT

### IMPORTANT INFORMATION

- Note:** Place mouthpiece between your teeth and close your lips (like sucking a straw).
- Empty?:** The window has numbers that count down the dose everytime you open the cap. When it is empty, it locks and you will not be able to twist off the cap. Throw it away.
- Expired?:** The expiry date is on the cap.
- Reminders:** Twist cap on until you hear a click.  
Do not breathe into the device.  
Keep the Twisthaler dry.
- Cleaning:** Wipe mouthpiece with a dry tissue or cloth.

This material is designed for information purposes only. It should not be used in place of medical advice, instruction and/or treatment. If you have specific questions, please consult your doctor or appropriate healthcare professional.

Developed by the Community Pediatric Asthma Service, Calgary and area.

**For more information on asthma medications and device demos, visit our website at:**  
**[www.ucalgary.ca/icancontrolasthma](http://www.ucalgary.ca/icancontrolasthma)**



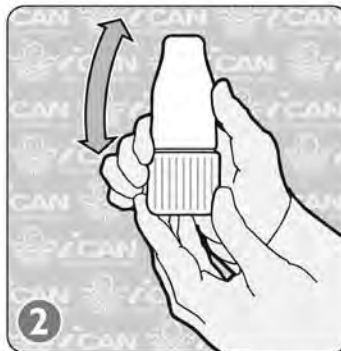


# NASAL STEROID

## SPRAY



**1** BLOW YOUR NOSE



**2** SHAKE & REMOVE CAP



**3** PRESS DOWN AS YOU  
BREATHE IN, DON'T SNIFF



**REPEAT**  
**STEP 3**  
**In Other Nostril**

**4** REMINDER



**5** REPLACE CAP

## IMPORTANT INFORMATION

**Expired?:** Check the expiry date on the label.

**Reminders:** Step 3:

- Place the tip of the nasal spray in your nostril.
- Aim the tip toward your ear on the same side.
- Block the other nostril with your finger.
- Don't sniff or blow your nose for a few minutes after you spray so the medication has a chance to be absorbed. Hold a tissue under your nose.

This medicine works best if taken daily for at least several weeks. Use as prescribed.

Store at room temperature, away from direct light.

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Developed by the Community Pediatric Asthma Service and the COPD & Asthma Network of Alberta.

**For more information on asthma medications and device demos, visit:**

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