New Beginnings for Asthma

In this issue, we look into strategies to prepare us for the new year. Medication maintenance is one of the most important ways to prevent severe asthma symptoms. Due to the numerous types of inhalers in the market now, it is critical to understand the differences between each one. With the increasing rates of asthma, there is also been an increase in emergency department visits related to asthma. Research shows that some of these visits could have been potentially preventable as well. Learning how to control asthma symptoms and treating them appropriately can increase your quality of life and decrease the costs of medical expenses.

Cold Weather As An Asthma Trigger

Cold air can cause wheezing, cough, or shortness of breath. With the cold season, when people spend more time indoors they are more exposed to indoor air pollutants such as dust, fumes from cooking, or pests. If you are spending time outdoors wear a scarf and breathe through your nose to warm the air. Make sure to keep you rescue inhaler on hand and use your maintenance medications as directed by your doctor. If you haven't already done so, get your influenza vaccine or flu shot to protect yourself from getting the cold or flu. The cold weather can worsen your asthma symptoms, but being prepared ahead of time can also make it easier to manage.

New Year, New Medications

As we bring in 2019, it is important to prepare for another year of controlled asthma symptoms.

- Plan for Annual Check-up & Appointments
- Develop an Asthma Action Plan with your Doctor
- Check Expiration Dates of Medications
- Get Additional Refills for Medications
- Ask about Using a Spacer

Maintaining your asthma symptoms and going to regular doctors visits will decrease the rates of emergency department visits. As an adult or parent it is critical to meet with a physician to reevaluate your health and ensure that your asthma is being controlled as it should be. Expiration dates can be found on the boxes or actual inhaler. For metered doses you can tell how many doses are left before it runs out. You may have to see the doctor for additional refills, but if you already had one, you may just have to call for more refills. For both older adults and children, you can also inquire about getting a prescription for a spacer that makes it easier to use inhalers as well.

Inside This Issue:

01 Winter Issue/New Year, New Medications
02 Differentiating Between Types of Inhalers
03 Asthma Medications
04 Increased Uptake of ED Visits for Asthma
05 Medication Drop Off Locations

Join Our Next Meeting:

Tuesday February 12th
@ 55 Technology Drive
10:00-11:30AM
See Page 4 for more info
Differentiating Between Types of Inhalers

Knowing which and how to use an inhaler properly can lead to better asthma control.

Contact your healthcare provider for any questions or concerns regarding your medication. It is critical to adhere to your prescribed medications as directed.

Creating an Asthma Action Plan and reviewing inhaler techniques are just some of the ways to self-manage your asthma.

Short-Acting Beta Agonists: "Rescue"

Intended Use: Quick/immediate relief of asthma symptoms (Short Term)
Usual Dosage: Inhale 1-2 Puffs every 4-6 Hours as needed

Inhaled Corticosteroids: "Maintenance"

Intended Use: Control & Management of asthma symptoms (Long Term)
Usual Dosage: Inhale 1-2 puffs daily*
*May vary for adults and children, check with your doctor

Asthma Medications

Relievers / Rescue / Bronchodilators

Short-acting Beta, Agonists

ProAir albuterol sulfate 90mcg Teva
ProAir RespClick albuterol sulfate dry powder 90mcg Teva
Proventil albuterol sulfate 10mg Merck
Ventolin albuterol sulfate 4mg GlaxoSmithKline
Xopenex inhaled albuterol tartrate 4mg Cipla

Nebulized Albuterol albuterol sulfate 2.5mg/mL, generic
Xopenex Inhalation Solution inhaled albuterol HCl 0.3mg/mL Sunovion
Xopenex Inhalation Solution inhaled albuterol HCl 0.6mg/mL Sunovion
Xopenex Inhalation Solution inhaled albuterol HCl 1.2mg/mL Sunovion

Ipratropium Bromide

Atrovent ipratropium bromide 0.06mg/mL Boehringer Ingelheim
Combivent Respimat ipratropium bromide 20mcg, albuterol sulfate 160mcg Boehringer Ingelheim

*Ipratropium bromide is not a recommended rescue inhaler outside of use in the emergency room or urgent care but may, on occasion, be prescribed to supplement short-acting Beta agonists.

Source: http://www.health.state.mn.us/divs/healthimprovement/programs-initiatives/in-communities/asthmameds.html
Controllers

Inhaled Corticosteroids (ICS): Metered-Dose Inhalers (MDI)

- **Aerospan** budesonide 80mcg Modu-Pharmaceuticals
- **Alvesco** formoterol 160mcg Serevent
- **Asmanex** fluticasone propionate 100mg/25mcg Merck
- **Flonase** fluticasone propionate 100mcg GlaxoSmithKline
- **Flonase** fluticasone propionate 200mcg MannKind

Inhaled Corticosteroids (ICS): Dry Powder Inhalers

- **QVAR** budesonide 80mcg Teva
- **ArmonAir RespiClick** fluticasone propionate 113mcg Teva
- **Pulmicort Flexhaler** budesonide 180mcg AstraZeneca

Combination Therapies

- **Advair** fluticasone propionate/salmeterol 45mcg/225mcg GlaxoSmithKline
- **Advair Diskus** fluticasone propionate/salmeterol 100mcg/50mcg GlaxoSmithKline
- **Dulera** mometasone furoate/formoterol fumarate 80mcg/3.75mcg GlaxoSmithKline
- **Symbicort** budesonide/formoterol fumarate 80mcg/4.0mcg AstraZeneca

Inhaled Corticosteroids (ICS): Nebulized

- **Pulmicort Respules** budesonide 0.2mg/2ml, AstraZeneca
- **Pulmicort Respules** budesonide 0.5mg/2ml, AstraZeneca

Anticholinergic Controller

- **Spiriva Respimat** tiotropium bromide 1.25mcg Boehringer Ingelheim

Long-acting Beta₂ Agonists (LABA)

- **Serevent Discus** salmeterol/sulfate 50mcg/15mcg Teva

Increased Uptake of Emergency Department Visits for Asthma

Between 2010 and 2014, Lawrence and Lowell were the only two cities that had statistically significantly higher rates of emergency department (ED) visits related to asthma compared to the statewide rate. Except for Methuen who did not differ significantly, other cities or towns in the Greater Lowell area experienced much lower rates. The statewide age-adjusted rate for males and females combined was 70.86 per 10,000 people.

In 2014, 104.14 out of every 10,000 residents in Lowell visited the emergency department for asthma after adjusting for age. This is equivalent to 1.04% of the city’s population. In the same year, Lawrence had an adjusted rate of 163.72 per 10,000 people or 1.63%.

Between 2001 and 2010, rates of ED visits by children had increased by 13.3% (Nath & Hsia, 2015). Factors contributing to these "potentially preventable" visits were lack of a primary care provider or lack of a medical home (Johnson, Chambers & Dexheimer, 2016). Another reason may be lack of insurance or working during office hours, but personnel of the ED view the increased rates due to lack of knowledge about what is considered as a "true emergency."

Reasons why an adult may delay care for asthma are due to cost and insurance issue. A 2001 study in California found that women and Latinos with severe asthma were more likely to visit the ED. On the other hand, Asian, African American, and uninsured adults with less severe asthma were more likely to visit the ED (Meng, et al., 2006).

Steps an individual can take to decrease the rate of ED visits include:
- regular consultation/annual check-ups
- adherence to medication
- control exposures of environmental triggers

Sources:
Local Medication Drop-Off Locations

CVS Pharmacy:
Lowell
1815 Middlesex St
336 Bridge St
Haverhill
425 Lowell St

Walgreens:
Lowell
54 Plain St

Contact your local health department or police department to find out if your town has a medication drop-off day.

Police Departments:

<table>
<thead>
<tr>
<th>Town</th>
<th>Address</th>
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<tbody>
<tr>
<td>Billerica</td>
<td>Lawrence</td>
</tr>
<tr>
<td>6 Good St</td>
<td>90 Lowell St</td>
</tr>
<tr>
<td>Chelmsford</td>
<td>Lowell</td>
</tr>
<tr>
<td>2 Olde North Rd</td>
<td>50 Arcand Dr</td>
</tr>
<tr>
<td>Dracut</td>
<td>Methuen</td>
</tr>
<tr>
<td>110 Loon Hill Rd</td>
<td>90 Hampshire St</td>
</tr>
<tr>
<td>Tewksbury</td>
<td>Tyngsborough</td>
</tr>
<tr>
<td>918 Main St</td>
<td>20 Westford Rd</td>
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Asthma Coalition of Greater Lowell Meeting Schedule for 2019

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>Tuesday, February 12th</td>
<td>10:00AM - 11:30AM</td>
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<tr>
<td>Tuesday, April 9th</td>
<td>10:00AM - 11:30AM</td>
</tr>
<tr>
<td>Tuesday, June 4th</td>
<td>10:00AM - 11:30AM</td>
</tr>
<tr>
<td>Tuesday, August 13th</td>
<td>10:00AM - 11:30AM</td>
</tr>
<tr>
<td>Tuesday, October 15th</td>
<td>10:00AM - 11:30AM</td>
</tr>
<tr>
<td>Tuesday, December 10th</td>
<td>10:00AM - 11:30AM</td>
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</tbody>
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Venue:
55 Technology Drive, Lowell, MA 01851
Circle Health (GLHA) Office Location (2nd Floor) Newton Conference Room

Please note the time and room change for the 2019 year.

@ACGreaterLowell

Contact us:
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Visit our site: https://www.greaterlowellhealthalliance.org/health-priorities/other-health-priorities/respiratory-diseases-2/