Spotlight on Lung Disease: **Cystic Fibrosis**

*Cystic Fibrosis* (CF) is the most common fatal genetic disease in Canada. Approximately 1 in 25 Canadians carries the gene responsible for CF. It is estimated that 1 of every 3600 children born has CF and currently about 4000 Canadians attend specialized CF clinics. Newborns in Saskatchewan are screened for several conditions including cystic fibrosis. Most children are diagnosed by the age of two. A milder form of the disease can go undetected until later in life.

The cystic fibrosis gene causes the body to produce abnormally thick, sticky mucus. This mucus builds up primarily in the lungs and pancreas. It can also affect the liver, nose and sinuses, reproductive organs and sweat glands.

**Symptoms:**
- Delayed growth
- Salty tasting skin
- Abdominal pain
- Nausea, loss of appetite
- Weight loss
- Pancreatitis
- Coughing, increased phlegm
- Fatigue
- Recurrent pneumonia
- Clubbing

**Treatment:**
- Antibiotics for lung and sinus infections
- Nebulized medications including antibiotics and DNase to thin mucus
- Pancreatic enzymes
- Vitamins
- Diet high in protein and calories
- Postural drainage and percussion to clear mucus from the lungs
- Oxygen
- Lung transplant

**Prognosis:** There has been a remarkable improvement in life expectancy over the past 30 years. Better treatments, early detection, and lung transplantation have all factored into this good news story.
Moustaches + Home Oxygen = Dangerous Combination

A Mayo Clinic study published in June 2014 has found a strong link between facial hair and home oxygen therapy related burns. Thankfully, fires from oxygen therapy are rare. The researchers did find that 8 out of 9 men who were treated for burns had facial hair. In an experiment with mannequins, oxygen at 2 lpm and exposure to sparks, only the mannequins with mustaches went up in flames. To reduce the risk, people can shave facial hair, should use water-based hair gels instead of alcohol or oil and, of course, avoid sparks and flames.

Beyond the facts: Lung Cancer

Lung cancer statistics are stark:

- Lung cancer remains the leading cause of cancer death for both men and women.
- 25,500 Canadians will be diagnosed with lung cancer each year.
- 20,200 Canadians will die from lung cancer. This is 27% of all cancer deaths.
- 13,300 men will be diagnosed with lung cancer and 10,700 will die from it.
- 12,200 women will be diagnosed with lung cancer and 9,500 will die from it.
- On average, 70 Canadians will be diagnosed with lung cancer every day.
- On average, 55 Canadians will die from lung cancer every day.

Behind those numbers are real Canadians facing the challenges, and the fears of a very serious diagnosis.

Dr. Terry-Nan Tannenbaum, a public health specialist from Montreal is generously sharing her own personal story in a series of blogs. Read more....

Home Oxygen Benefits: First Nations

The SAIL home oxygen program provides benefits to Saskatchewan residents covered through the provincial health program. Our First Nations citizens have similar benefits through the federal Non-Insured Health Benefits (NIHB) program.

There are some differences between the programs including:

- Nurse practitioners cannot prescribe home oxygen through the NIHB program.
- ABG results are required for initial oxygen set up, as well as the three month and one year assessments.

Any questions or concerns about NHIB benefits should be directed to:
Non-Insured Health Benefits
Health Canada
South Broad Plaza
2045 Broad Street, 1st Floor
Regina, SK S4P 3T7
Toll free: 1-866-885-3933

Did You Know?

- It is estimated that the number of people suffering from asthma will grow by more than 100 million worldwide by 2025.
- Asthma is the leading cause of absenteeism from school and the third leading cause of work loss.
- Asthma is the leading cause of hospital admission for children.
- There are 100,000 people in Saskatchewan living with asthma.
Asthma is common, but serious

This beautiful little boy, Emerson, died of an asthma attack. His parents, Micheal and Sheri Olain are generously sharing their story in the hope that no other family suffers the same heartache.

Here is their story in Micheal’s words:

My wife Sheri and I tragically lost our wonderful son, Emerson, in December 2013 from an asthma attack. Emerson would have turned three in January. By sharing Emerson’s story we are hoping that some good can come out of our terrible loss and that it never happens to any other child.

Emerson is our second child. He was a normal, happy boy who kept us very busy. He was always up for anything, loved everything and wanted to be exactly like his brother, Clive. Like my wife Sheri says, “It’s a good thing he was so cute, because he sure was busy.”

Emerson had the usual colds and flu that two year olds get, but was never officially diagnosed with asthma. He did use inhalers when his colds affected his chest. He had never been to the emergency department until the night he passed away.

Asthma can be life-threatening and Sheri and I urge you to become fully informed about this chronic lung disease. We feel that had we been better educated about asthma that Emerson might still be here today. Never in a million years would we have thought he would die from it and we urge other parents to take it very seriously. Education, avoiding asthma triggers, and proper use of asthma medication are currently our best tools for managing asthma while researchers search diligently for a cure.

Here are the warning signs of an asthma emergency:

• Struggling for breath
• Very rapid breathing
• Blue rescue inhaler doesn’t help or needing it more than every 4 hours
• Sucking in skin above breastbone and between ribs
• Really tired, lethargic (because of the work of breathing)
• It’s hard to speak - you can’t finish a sentence
• Nostrils flaring out
• Pale, grey, sweating
• Blue lips or nail beds

If you or someone you love has an asthma emergency, go to the nearest emergency department right away or call 911. They should also take their fast acting (rescue) inhaler as necessary on their way to the hospital.

For more information on current guidelines for the treatment of asthma go to:
http://www.respiratoryguidelines.ca/guideline/asthma

An excellent review of the management of acute asthma in adults in a case study form can be found at:
http://www.cmaj.ca/content/182/2/E55.full.pdf

The Canadian Pediatric Society issued a position paper on the management of a paediatric patient with acute asthma exacerbation. This paper can be downloaded from: http://www.cps.ca/documents/position/management-acute-asthma-exacerbation
**Inhaler Technique**

Inhaled medication is the mainstay for treatment of both asthma and COPD, yet only just over half of the patients assessed in a study in 2013 had good inhaler technique. Medications aren’t effective when people don’t take them properly. To address this issue, The Lung Association has created inhaler videos that can be watched through YouTube.

The Lung Association also develops patient education brochures on a variety of topics. These can be easily ordered through our web site. As always, if anyone has questions about lung disease or lung health, our helpline is staffed by certified respiratory educators.

**Designed for Addiction**

A new report from the Campaign for Tobacco Free Kids has shone a light on some of the ways the tobacco industry has modified cigarettes to make them more addictive than the cigarettes our parents smoked 50 years ago.

**Methods to increase addictiveness:**
- Increasing nicotine levels
- Adding ammonia or ammonia compounds, which increase the speed at which nicotine is delivered to the brain.
- Adding sugars, which increase the addictive effects of nicotine and make it easier to inhale tobacco smoke.

**Additives to attract new tobacco users:**
- Levulinic acid reduces the harshness of nicotine and makes the smoke feel smoother and less irritating.
- Flavorings, such as chocolate and liquorice, boost the sweetness of tobacco, mask the harshness of the smoke and make tobacco products more appealing to young people.
- Bronchodilators expand the lungs’ airways, making it easier for tobacco smoke to pass into the lungs.
- Menthol cools and numbs the throat to reduce throat irritation and makes the smoke feel smoother.

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**Home Oxygen Suppliers**