

# SAIL Home Oxygen Program

## Tester's Newsletter

Spring 2015

Published by The Lung Association of Saskatchewan



Next Home Oxygen Tester's Workshops via Telehealth

**Thursday, February 26 at 13:00**

**Wednesday, April 15 at 13:30 (note time change)**

Please sign up with your local Telehealth coordinator  
48 hours before broadcast time

### Wheezing Infants



A [recent study from Finland](#) has shed some light on why infants develop wheezing for the first time. They studied infants from 3-23 months old who were wheezy for the first time. All (100%) of the patients tested positive for viruses. [Rhinovirus](#) and [respiratory syncytial virus \(RSV\)](#) were the most common infections.

Unfortunately, children who have a severe infection may go on to develop asthma by the time they are school aged. A family history of asthma, a history of [atopy](#), and parental smoking are all also factors in the development of asthma. An asthma diagnosis cannot be confirmed until a child is old enough to perform spirometry testing, usually by the age of 6.

### Electronic Cigarettes and Oxygen

On November 24, 2014 Health Canada issued an [alert](#) regarding the use of electronic cigarettes in the presence of an oxygen source. This is after a person, while using oxygen, was injured in a fire caused by the electronic cigarette. Electronic cigarettes include heating elements and a power source that may be charged from a USB port or a separate battery charger. These sources of heat may ignite the electronic cigarette if they are close to oxygen.

Health Canada is warning consumers of potential risks of using electronic cigarettes while undergoing oxygen therapy. They also warn that electronic cigarette batteries should not be charged near an oxygen source due to the risk of fire. Additionally, consumers are warned that other kinds of electrical devices may have the potential to cause a fire when used near an oxygen source.



## Nocturnal Oximetry



Each month an average of 35 nocturnal oximetry tests are done through the Lung Association. These tests are arranged in our major centres by the Respiratory Therapy Departments. Some of these tests are a screening tool for sleep apnea. Some are tests to determine if people with COPD desaturate at night and will qualify for funding through the SAIL program.

A [study from New Zealand](#) looked at nocturnal desaturation in people with COPD. The researchers found that the prevalence of significant nocturnal desaturation in the whole COPD population studied was less than 5%. There was, however, a small subset of patients with daytime resting saturations of less than 95% who did also have significant nocturnal desaturation. In fact, 49% of those patients spent more than 30% of the night with saturations less than 90%. Interestingly, the researchers also found that nocturnal desaturation was not associated with poorer sleep quality. In fact, poor sleep quality is common to all people with COPD.

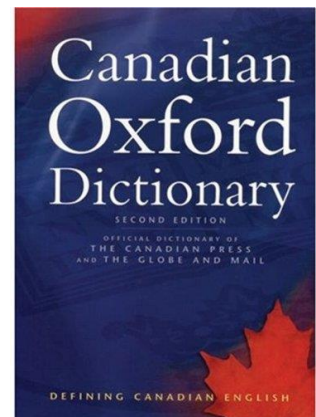
Although SAIL nocturnal funding criteria is set at a desaturation of  $\leq 87\%$  for 30% of the test time, this study may help us to narrow the patient population that we test at night to those with resting saturations of  $< 95\%$ . The message for home oxygen testers: if your COPD patient has borderline low saturations at rest during the day, they may also have significant nocturnal desaturation which may be worthwhile testing.

*Reference: Lewis CA, et al, Isolated nocturnal desaturation in COPD: prevalence and impact on quality of life and sleep, Thorax 2009 64: 133-138. Accessed January 8, 2015.*

## Oxford Dictionaries Word of the Year 2014: Vape

Vape? What does that mean? It means to inhale and exhale the vapour produced by an electronic cigarette. E-cigarettes have exploded into a \$2 billion industry without regulation standards. Are e-cigarettes that contain nicotine (which is not legal in Canada) a smoking cessation tool? Researchers are not sure. Are youth being targeted and will the use of e-cigarettes lead to tobacco smoking? Again, they are not sure. Here's a statement taken from the Clinical Cancer Research Journal: "we support careful consideration of (electronic cigarettes with nicotine) as potentially harmful and potentially beneficial products." Stay tuned...there will be much more written about e-cigarettes in the future.

*Reference: Herbst RS, Electronic Nicotine Delivery Systems: A Policy Statement from the American Association for Cancer research and the American Society of Clinical Oncology: Clin Cancer Res; 21 (3) February 1, 2015.*



## Infectious Diseases

The outbreak of Ebola has once again brought attention to infectious diseases. According to the [World Health Organization](#), the number one infectious disease killers are lower respiratory infections, commonly known as pneumonia and acute bronchitis. HIV/AIDS are still number two, but account for only about half as many deaths as pneumonia and acute bronchitis.

About 2.8 million people died from [pneumonia](#) and [acute bronchitis](#) in 2010. Sadly, about half of these deaths were children under the age of five. The death toll is greatest in countries that are resource poor. Vaccination, improvement in nutrition, access to clean water, and the reduction of exposure to tobacco smoke and air pollution can all help reduce the number of deaths.

## The Lung Association Website

After months of hard work, the Lung Association has launched a [new web site](#). More colourful, and easy to navigate, the web site still has the same links as before. You will still find the oxygen tester's information under the Health Professionals tab. As always, if you have any trouble with the web site, please [contact Marion](#).

## Sleep Apnea Treatment in the Elderly

Past research has shown the many benefits of treating [sleep apnea](#) with continuous positive airway pressure (CPAP) in middle-aged people with obstructive sleep apnea.

A [British study](#) published in Lancet Respiratory Medicine involving people aged 65 and older has shown that CPAP is an effective treatment in the elderly as well. The researchers are hopeful that CPAP can also be used to treat or prevent cognitive decline (slower or poor thinking) in the elderly.

The symptoms of sleep apnea in the elderly are slightly different and include: frequent trips to the bathroom, poor or slow thinking, and atrial fibrillation.

The elderly with sleep apnea are not as likely to snore, and often do not have a bed partner to help identify sleeping problems.



## Did You Know?

- Humans are the only mammals that can't swallow and breathe at the same time.
- It is impossible to sneeze with your eyes open.
- Three years after a person quits smoking, their chance of having a heart attack is the same as someone who has never smoked before.
- It takes more muscles to frown than it does to smile.
- Lack of sleep can affect your immune system and reduce your ability to fight infections.

## Home Oxygen Suppliers



<http://www.medigas.com/>



<http://prairieoxygen.ca/>



<http://pho2.ca/>



<http://ranacaregroup.com/>



<https://www.vitalaire.com/>