

#### NZNO College of Respiratory Nurses monthly news bulletin Friday 31 July 2020

This bulletin has been compiled by Linda Stopforth, SNIPS, on behalf of the NZNO College of Respiratory Nurses. It is for NZNO College of Respiratory Nurses only and must not be reproduced without their permission. It is provided on the last Friday of each month. This monthly bulletin contains an overview of news items, articles and research papers of interest to the College members, but does not necessarily represent the views of the NZNO College of Respiratory Nurses. All links are current at the time of being compiled and distributed. For feedback please contact your College Administrator: diana.geerling@nzno.org.nz

#### To learn more about the College click here

### NZNO / section news

### **Consultation**

NZNO regularly seeks members input on a range of documents up for consultation. The listing is regularly updated and full information can be found here

## Worksafe proposed changes to the Workplace Exposure Standards (WES) of 18 substances and the Biological Exposure Indices (BEI) of 4 substances

NZNO welcomes your feedback on proposed changes to the Workplace Exposure Standards (WES) of 18 substances and the Biological Exposure Indices (BEI) of 4 substances.

## Proposed Guidelines for the Posthumous Use of Gametes, Reproductive Tissue and Stored Embryos

NZNO warmly invites your feedback on draft guidelines for the use of gametes and reproductive tissue from deceased people and already stored embryos from the now deceased. These guidelines are proposed to replace Guidelines for the Storage, Use, and Disposal of Sperm from a Deceased Man (released in 2000).

### **New Zealand**

#### Otago researchers find link between rape and breathing problems

Rape and sexual trauma may have long-lasting consequences for physical health as well as mental health, University of Otago researchers have found. <u>Read more</u>

#### Push to distribute respiratory resources into rural communities

This week, Asthma and Respiratory Foundation NZ (ARFNZ) are distributing more than 26,000 free resources to rural and isolated communities or those deemed to have increased rates of respiratory disease. <u>Read more</u>

## **Air pollution**

#### Wood burners a worry for those with respiratory disease - ARFNZ

Asthma and Respiratory Foundation NZ (ARFNZ) urges the public to consider the implications of older or incorrectly used wood burners on community respiratory health this winter. <u>Read more</u>

#### More evidence of causal link between air pollution and early death

Strengthening U.S. air quality standards for fine particulate pollution to be in compliance with current World Health Association (WHO) guidelines could save more than 140,000 lives over the course of a decade, according to a new study. <u>Read more</u>

### Asthma

Health researchers secure HRC funding for asthma among Pacific children - Dr Foliaki A Massey-led study has been awarded \$971,541 by the Health Research Council of New Zealand (HRC) to explore the barriers to self-management of asthma in Pacific children. Read more

Childhood asthma rates falling with fewer unnecessary antibiotic prescriptions, study finds

Infants given antibiotics face nearly double the risk of asthma by age 5, study says Read more

#### Occupational Asthma Triggers and the Risk for New, Exacerbated Asthma

Occupations that involve high vs low asthma trigger exposures were found to more than double an individual's risk of developing asthma, according to study results published in Occupational and Environmental Medicine. <u>Read more</u>

The article below is not available full text but may be sourced via a DHB or academic library, or via the NZNO library service

#### Predictive value of blood eosinophils and exhaled nitric oxide in adults with mild asthma: a prespecified subgroup analysis of an open-label, parallel-group, randomised controlled trial

The Lancet : Respiratory medicine VOLUME 8, ISSUE 7, P671-680, JULY 01, 2020

DOI:<u>https://doi.org/10.1016/S2213-2600(20)30053-9</u>

Whether blood eosinophil counts and exhaled nitric oxide (FeNO) are associated with important outcomes in mild asthma is unclear. In this prespecified subgroup analysis of a previously published open-label clinical trial, we aimed to assess associations between blood eosinophil counts and FeNO with outcomes and response to asthma treatment.

### COPD

## 'A balancing act'. Living with severe chronic obstructive pulmonary disease in Southern New Zealand: a qualitative study.

Tumilty Emma, Doolan-Noble Fiona, Latu Anna Tiatia Fa'atoese, McAuley Kathryn, Dummer Jack, Baxter Jo, Hannah Debbie, Donlevy Simon, Stokes Tim (2020) *Journal of Primary Health Care* **12**, 166-172.

**INTRODUCTION:** Chronic obstructive pulmonary disease (COPD) is a common chronic condition managed in primary care.

**AIM:** To understand how patients with severe COPD living in the Southern Health Region (Otago and Southland) experience and cope with the condition. <u>Read more</u>

The article below is not available full text but may be sourced via a DHB or academic library, or via the NZNO library service

## Covid-19

GPs welcome new Covid-19 testing guidelines: 'You can't be complacent'

The criteria for Covid-19 testing has changed again and doctors are being urged to swab high-risk patients who are more likely to get critically ill from Covid-19. <u>Read more</u>

Coronavirus: Mobile data free for key Covid-19 information

Mobile data used for looking at key health information, including essential Covid-19 information, will no longer be charged for, Health Minister Chris Hipkins says. Read more

## COVID-19 acute respiratory distress syndrome (ARDS): clinical features and differences from typical pre-COVID-19 ARDS

Peter G Gibson, Ling Qin and Ser Hon Puah

Med J Aust 2020; 213 (2): 54-56.e1. || doi: 10.5694/mja2.50674

COVID-19 ARDS is a predictable serious complication of COVID-19 that requires early recognition and comprehensive management

"This disease is still too strange to us, and there are too many doubts", says Dr Ling Qin (LQ), after reviewing more than 400 patients with coronavirus disease 2019 (COVID-19) pneumonia in Wuhan Union Hospital, China. COVID-19 is a novel disease. We are familiar with acute respiratory distress syndrome (ARDS); however, when it occurs as part of COVID-19, it has different features and there remain unanswered questions. <u>Read more</u>

#### CT of coronavirus disease (COVID-19) versus CT of influenza virus pneumonia

A new article investigating the differences in CT findings between coronavirus disease (COVID-19) pneumonia and influenza virus pneumonia found that most lesions from COVID-19 were located in the peripheral zone and close to the pleura, whereas influenza virus was more prone to show mucoid impaction and pleural effusion. The more important role of CT during the present pandemic is in finding lesions and evaluating the effects of treatment. Read more

## **Cystic fibrosis**

#### Cystic fibrosis: Why so many respiratory complications?

Cystic fibrosis causes severe respiratory and digestive disorders. Despite considerable therapeutic advances, this disease still reduces life expectancy, in particular due to life-threatening respiratory infections. Scientists have now discovered the reason for this large number of lung infections: a protein, Vav3. <u>Read more</u>

#### Nebuliser hygiene in cystic fibrosis: evidence-based recommendations

Jane Bell, Lauren Alexander, Jane Carson, Amanda Crossan, John McCaughan, Hazel Mills , Damian O'Neill, John E. Moore, B. Cherie Millar

Breathe Jun 2020, 16 (2) 190328; DOI: 10.1183/20734735.0328-2019 Nebulised therapies are extensively used in the daily therapeutic management of cystic fibrosis both for mucociliary clearance and for the management of chronic infections. Extensive developments have been made in relation to nebulised drug delivery mechanisms and drug formulations, and guidelines have been prepared that have addressed the appropriate use of such therapies. However, due to these developments, a plethora of nebuliser devices and drug chambers exist, and frequently, the limited guidance provided in relation to nebuliser hygiene is to follow manufacturers' instructions. Such instructions are inconsistent and at times confusing, translating to an increase in the burden associated with nebuliser maintenance. An evidence-based universal guideline relating to nebuliser care and hygiene is urgently required that is applicable to both at-home use and inpatient use. This article reviews the scientific literature in order to propose an evidence-based approach to nebuliser hygiene to ensure optimum drug delivery, and infection prevention and control. **Read more** 

#### Influenza

#### Single-Dose Flu Drug Can Reduce Spread Within Households, Study Finds

A single dose of the flu drug baloxavir marboxil can reduce the spread of the illness within households, new research concludes. <u>Read more</u>

#### Flu in early life determines our susceptibility to future infections

Early infections of influenza A can help predict how the virus will affect people across different ages in the future and could impact the effectiveness of flu vaccines, says a new study. <u>Read more</u>

#### Obesity and metabolic syndrome are risk factors for severe influenza, COVID-19

Metabolic syndrome increases the risk of severe disease from viral infection, according to a new review. <u>Read more</u>

#### Lung cancer

## Exclusive: 'It's negligent: Plea for more specialist nurses for patients with Australia's deadliest cancer, lung cancer

A call from a lung cancer nurse is something nobody ever wants to receive. But the alternative means facing Australia's deadliest cancer without dedicated support. Sadly, for thousands of Australian's, that's the reality. <u>Read more</u>

### Lung function and physiology

#### Study identifies unique cells that may drive lung fibrosis

This is one of the first comprehensive looks at lung cells using a technology called single-cell RNA sequencing. Instead of examining a mash-up of many cells from a tissue sample, single-cell sequencing allowed researchers in this study to closely examine the individual cells that make up the lungs; to identify their function, and ultimately understand the molecular changes that may be driving the disease. <u>Read more</u>

#### **Mesothelioma**

## Erionite in Auckland bedrock and malignant mesothelioma: an emerging public and occupational health hazard? | OPEN ACCESS

Martin S Brook, Philippa M Black, Jennifer Salmond, Kim N Dirks, Terri-Ann Berry, Gregor Steinhorn

NZ Medical Journal Vol 133 No 1518: 17 July 2020

Asbestos-induced malignant mesothelioma (MM) is of worldwide concern but particularly in New Zealand. The highest mesothelioma incidence is in the construction and building trades. <u>Read more</u>

#### Sleep apnoea

#### New Android application helps identify signs of sleep apnea at home

Sleep apnea is a very common sleep disorder characterized by breathing pauses and periodic snoring. According to some studies, as much as ten percent of the population suffer from it, but up to nine out of ten cases remain undiagnosed because symptoms are sometimes mild and there are a lack of resources in diagnostics. <u>Read more</u>

## Smoking (inc vaping and electronic cigarettes)

#### Smokers support smokefree goals - Otago Uni

Most people who smoke or have recently quit smoking support New Zealand's goal of becoming a smokefree nation by 2025, researchers at the University of Otago, Wellington have found. They also support many of the specific measures that smokefree practitioners and researchers believe are needed to achieve the goal. <u>Read more</u>

#### Quitline plus surgery are big motivators for giving up smoking

Smokers who have thoracic surgery are much more likely to stop using tobacco if they also complete a quitline intervention, a new UC Davis Health study shows. <u>Read more</u>

## **Smoking related illness**

#### Short-Term Secondhand Smoke Exposure Effects in Asthma vs COPD

In individuals with asthma and chronic obstructive pulmonary disease (COPD), acute, shortterm secondhand smoke (SHS) exposure has been shown to modify spirometric indices and is a known hazard. However, the results of an intervention trial (ClinicalTrials.gov Identifier: <u>NCT03074734</u>) suggest that this effect may only be significant in asthma and not COPD. Results of the analysis were published in the Journal of Asthma. <u>Read more</u>

### **General items of interest**

## Respiratory Research Review Issue 174

In this issue we focus on COPD. It is the third leading cause of death worldwide, with more than 3 million deaths per year. Read more

## Respiratory Research Review

#### Issue 175

'Tackling two pandemics: a plea on World Tuberculosis Day'. Maybe we can learn to treat COVID-19 by reflecting on lessons learned from treating TB. <u>Read more</u>

#### Tobacco and electronic cigarette use 2015/16: New Zealand Health Survey

The Tobacco and Electronic Cigarette Use Data Explorer provides survey results on the following topics: smoking prevalence, types of tobacco products smoked, reasons for smoking roll-your-own cigarettes, initiation and uptake of smoking, smoking cessation behaviour, electronic cigarette use, smoking in pregnancy and exposure to second-hand smoke. <u>Read more</u>

#### Primary care improvement case study: Childhood respiratory warrant of fitness: Unichem Russell Street, Hastings

As part of a Whakakotahi improvement project, Unichem Russell Street, Hastings developed a quality improvement project to improve asthma management in a group of Māori and Pacific children.

This is the first in a new series of case studies on primary care projects, intended to help guide other providers wanting to start projects of their own. <u>Read more</u>

#### Pulmonary alveolar proteinosis in children

Andrew Bush, Rishi Pabary

Breathe 2020 16: 200001; DOI: 10.1183/20734735.0001-2020

Pulmonary alveolar proteinosis (PAP) is an umbrella term for a wide spectrum of conditions that have a very characteristic appearance on computed tomography. There is outlining of the secondary pulmonary lobules on the background of ground-glass shadowing and pathologically, filling of the alveolar spaces with normal or abnormal surfactant. PAP is rare and the common causes in children are very different from those seen in adults; autoimmune

PAP is rare and macrophage blockade not described in children. There are many genetic causes of PAP, the best known of which are mutations in the genes encoding surfactant protein (SP)-B, SP-C, thyroid transcription factor 1, ATP-binding cassette protein 3, and the granulocyte–macrophage colony-stimulating factor (GM-CSF) receptor  $\alpha$ - and  $\beta$ - chains. PAP may also be a manifestation of rheumatological and metabolic disease, congenital immunodeficiency, and haematological malignancy. Precise diagnosis of the underlying cause is essential in planning treatment, as well as for genetic counselling. The evidence base for treatment is poor. Some forms of PAP respond well to whole-lung lavage, and autoimmune PAP, which is much commoner in adults, responds to inhaled or subcutaneous GM-CSF. Emerging therapies based on studies in murine models of PAP include stem-cell transplantation for GM-CSF receptor mutations. Read more

# Registered nurses' views on telephone nursing for patients with respiratory tract infections in primary healthcare – a qualitative interview study.

Kaminsky, E., Aurin, I.E., Hedin, K. et al.

BMC Nurs 19, 65 (2020). https://doi.org/10.1186/s12912-020-00459-1 Telephone nursing in primary healthcare has been suggested as a solution to the increased demand for easy access to healthcare, increased number of patients with complex problems, and lack of general practitioners. Registered nurses' assessments may also be of great importance for antibiotic prescriptions according to guidelines. The aim of this study was to describe registered nurses' views of telephone nursing work with callers contacting primary healthcare centres regarding respiratory tract infections. <u>Read more</u>

# Do we need tailored training and development plans for European Union respiratory nurses?

Silvia Arranz Alonso, ... et al

Breathe 2020 16: 200010; DOI: 10.1183/20734735.0010-2020

Nurses are critical players in healthcare and should be the next profession to standardise levels of education, preparing them for an active partnership with other healthcare professionals prepared to tackle the chronic disease problem in Europe. <u>Read more</u>

## Where to find SNIPS





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