

October, 2020

Respiratory Stream and COVID-19 Status Update

Thank you for participating in the Hazelwood Health Study Respiratory Stream testing in 2017-2018. We had planned to contact you about testing your respiratory (lung) health for a second time in 2020, however, those plans have been delayed while COVID-19 restrictions remain in place.

We understand this is a very challenging time as the community faces the many impacts of the coronavirus pandemic. Like the rest of the community, the Hazelwood Health Study has modified its work practices. With minimal disruption to study progress, the majority of staff have been able to work from home and have been well resourced by their respective Universities. By prioritising the analysis of already-collected data, over new data collection, the researchers continue to work hard to address the core health questions set by the local community following the 2014 mine fire.

Thanks to the hard work of all Victorians, the number of new cases of coronavirus, especially in regional areas like the Latrobe Valley, is coming down. Hopefully restrictions will soon be sufficiently relaxed for us to plan the next round of respiratory health testing. At this point, we don't know if the testing will commence later this year or next year. We would like to wish you well during this difficult time and to extend our thanks and appreciation for your past participation and ongoing support. The Hazelwood Health Study team will be in touch when it is possible to recommence testing.

Do you have any questions, have you moved or changed your contact details?

Contact the Hazelwood Health Study team at contact@hazelwoodhealthstudy.org.au or call 1800 985 899

Respiratory health key findings

The Hazelwood Health Study has released a number of findings about the Hazelwood mine fire and respiratory health. Here are some key findings:

Increased reporting of respiratory symptoms

In 2016-2017 over 3000 adults from Morwell who were exposed to the mine fire smoke, and almost 1000 adults from Sale with little or no exposure, reported their respiratory symptoms as part of the Adult Survey. Using air pollution modelling conducted by CSIRO, we estimated each participant's level of exposure to the smoke. 2 ½ years after the fire, we found that participants with low, medium or high exposure were between 15% to 110% more likely to report respiratory symptoms (wheeze, night-time and resting shortness of breath, chronic cough and phlegm, chest tightness and nasal symptoms) relative to participants with no exposure. Cough, in particular, appeared to increase in line with increasing smoke exposure.

Poorer lung health

About a year after the Adult Survey, approximately 520 participants from Morwell and Sale underwent a number of tests of their lung health as part of the Hazelwood Health Study Respiratory Stream. This included a test of stretchiness of their lungs using the forced oscillation technique (FOT). We found that as the level of mine fire smoke exposure increased, lung stretchiness decreased. That is, three and a half years after the mine fire, people who had been exposed to the highest levels of smoke had the poorest lung health.

Increased obstruction of lung airflow in non-smokers

Chronic Obstructive Pulmonary Disease (COPD) is characterised by persistent obstruction of lung airflow that interferes with normal breathing. We measured COPD in Respiratory Stream participants using spirometry to measure how much air they inhale and exhale, and how fast they exhale. Participants also answered questions about cough, chest tightness and medication use. We found that higher levels of smoke exposure from the 2014 mine fire were associated with increased chest tightness and chronic cough 3 ½ years later. Amongst non-smokers, there was strong evidence of increasing levels of mine fire smoke exposure being associated with increased levels of COPD. In smokers, this relationship was not seen, but we did see that increased mine fire smoke exposure was associated with increased evidence of chronic cough.

Poorer asthma control

About 230 of the Respiratory Stream participants had asthma. When Morwell adults with asthma who were exposed to the mine fire smoke were compared to Sale adults with asthma who were not exposed, we found no differences in asthma-related symptoms or severity, lung function or airway inflammation when measured 3 ½ years later. However, there was some evidence that adults with asthma from Morwell had poorer asthma control. This finding was taken up by the Latrobe Health Assembly (see over the page).



This research was funded by the Department of Health and Human Services. More detailed reports and research summaries describing these findings can be found at www.hazelwoodhealthstudy.org.au/study-findings

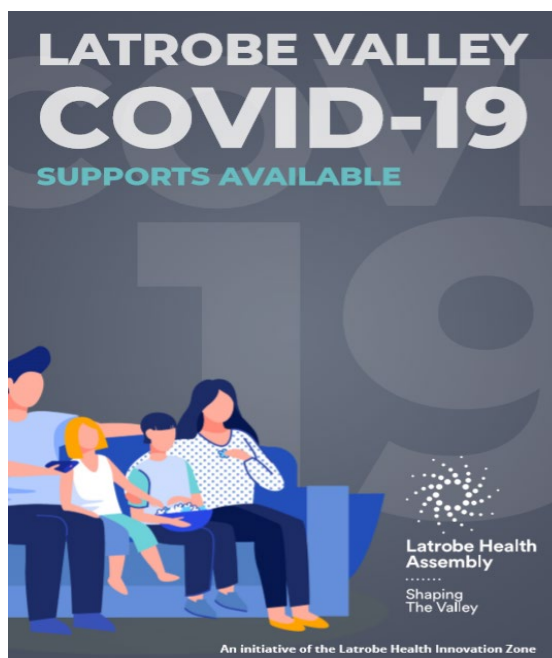
Local Learnings

Latrobe Health Assembly – Following on from the asthma findings referred to over the page, The Latrobe Health Assembly launched the #Scarfie campaign in June 2018. The awareness campaign to promote the importance of having an up to date asthma management plan. For more information go to www.healthassembly.org.au



Gippsland Air Quality and Health Forum – this public online event was organised by Healthy Futures together with Lung Foundation Australia and Asthma Australia. Health experts, including Hazelwood researcher Fay Johnston, came together to provide an overview of air quality in Gippsland, including pollution sources, health impacts and potential relationships with COVID-19. For more information visit www.healthyfutures.net.au/gippsland

Community information



Latrobe Health Assembly COVID-19 Supports Directory

The Latrobe Health Assembly has launched a comprehensive online COVID-19 Supports Directory featuring a growing list of support services operating within the Latrobe Health Innovation Zone to support the community during and following the COVID-19 pandemic. For more information go to www.healthassembly.org.au

Stay Safe & Stop the Spread by:

washing your hands regularly, wearing a face covering when you leave home, coughing and sneezing into your elbow, keeping at least 1.5 metres from others, staying home if you feel unwell. If you have symptoms of coronavirus (COVID-19) [get tested](#) then stay home.



Check your asthma control

Although at present there is no cure, with good management, people with asthma can lead normal, active lives. For good asthma management, it is important that you:

- understand what triggers your asthma (this can be different for everyone).
- try to avoid or reduce your exposure to these triggers.
- see your doctor for regular check-ups and work together to manage your asthma.
- follow your personal written asthma action plan, developed with your doctor.
- use your medications as instructed by your doctor, even when you feel well.
- make sure you are using your inhaler (puffer) correctly.

If you have allergies or COPD as well as asthma, it is important to treat the symptoms of both conditions, as treating one can help you manage the other.

Is your asthma under control?

Asthma control tests are a set of health questions used to help measure asthma control in children and adults. There are a number of asthma control tests available online, including the Asthma Score, available via www.asthma.org.au.

Good asthma control means having all of the following:

- no night-time asthma symptoms.
- no asthma symptoms on waking.
- no need for reliever medication.
- no restriction of day-to-day activities.
- no days off school or work due to asthma.
- no asthma attacks or flare-ups.

For more information visit www.nationalasthma.org.au or www.asthma.org.au or see your doctor for an asthma review.