



Hazelwood Mine Fire Health Study

Scientific Reference Group Meeting 1/2022

Tuesday 27 September 2022

4.00pm AEST

Via Zoom

MEETING NOTES

Membership:

Professor Ross Coppel (Chair), Deputy Dean (Innovation and Strategy), FMNHS, Monash University
Professor Michael Abramson, Principal Investigator, Monash University
Professor Michael Ackland, Monash University
Professor John Attia, University of Newcastle
Dr Jillian Blackman, Senior Project Manager
Mr Danny Brazzale, Austin Hospital
Dr Matthew Carroll, Co-Principal Investigator (Gippsland)
Dr Beth Edmondson
Professor Anna Hansell, University of Leicester
Dr Melita Keywood, CSIRO Oceans & Atmosphere
Associate Professor Rebecca Kippen, School of Rural Health, Monash University
Dr Tyler Lane, Senior Research Fellow, Hazelwood Health Study
Professor Sherene Loi, Peter MacCallum Cancer Centre & University of Melbourne
Professor Alexander McFarlane, University of Adelaide
Professor Rory Wolfe, School of Public Health & Preventive Medicine, Monash University
Professor Graeme Zosky, University of Tasmania

1. Welcome

RC requested that Acknowledgement of Country to be added to meeting agenda.

2. In attendance

Prof Ross Coppel (Chair), Prof Michael Abramson, Prof Michael Ackland, Dr Jillian Blackman, Dr Matthew Carroll, Dr Beth Edmondson, A/Prof Rebecca Kippen, Dr Tyler Lane, Prof Sherene Loi, Prof Alexander McFarlane, Prof Rory Wolfe, Prof Graeme Zosky

3. Apologies

Prof John Attia, Prof Anna Hansell, Dr Melita Keywood.

4. Membership

The SRG welcomed new member Professor Sherene Loi, a medical oncologist from the Peter MacCallum Cancer Centre who specializes in breast cancer treatment.

Dr Tyler Lane joined the SRG as an ex-officio member. TL took up an appointment as a Senior Research Fellow with the HHS in early 2022.

5. Conflict of Interest

No conflicts of interest were declared.

6. Minutes of previous meeting (Att. 1)

MA confirmed that the minutes were an accurate record of the last meeting. The minutes were accepted.

It was proposed that a list of actions arising be included in the meeting notes/agenda.

7. Study Update, Findings and Plans (Att. 2)

- *Current Stream Status (pp 2-3) (Jill Blackman/Tyler Lane)*

JB reported that **Early Life Follow-up (ELF)** clinical testing round 2 was completed in 2021. The ELF team will clean and analyse the Round 2 data in 2022 as well as prepare for the final clinical testing round in 2023.

The **Psychological Impacts** team completed the Psychological Impacts/ELF Stream survey of ELF families, and the third follow-up for the Adult Psychological Impacts survey is about to commence.

JB reported that the **Hazelinks Stream** team has been working on deidentified linkage data and is preparing for identified data linkages that will be completed in 2023.

The **Community Wellbeing Stream** is developing a Wellbeing Barometer which measures community wellbeing and will shortly commence stakeholder consultation.

Adult Survey Stream is conducting a Long-term Respiratory Survey which also includes a question on COVID-19 infection. TL reported that the EPA has provided data on air quality during the Black Summer fires. The data provided by the EPA included data from Morwell and nearby areas and would assist researchers adjust for any confounding effects from PM_{2.5} exposure during the Black Summer. TL reported that the analysis of the EPA data did not show a big difference.

- *Cancer 5 years after the mine fire (p 4) (Michael Abramson)*

The SRG discussed potential impacts of the COVID-19 lockdowns in 2020 on the study findings. It was noted that it is quite likely that people put off seeking care and this will be a confounding factor. RW reported that he is currently modelling cancer diagnoses.

MA reported that the Hazelinks/Cancer Stream has completed an initial analysis of the cancer data. The analysis of the data for the first 5 years after the mine fire has not shown an association between PM_{2.5} exposure and cancer diagnoses. There was increased risk of malignancies, particularly male reproductive cancers. MA noted that mesothelioma is also more common in the Latrobe Valley than Sale, most likely due to the higher exposure to asbestos in industries including the State Electricity Commission (SEC). A separate report on

prior incidence of cancer was completed at the start of the HHS, looking at cancers incidence in the period up to 2013. It was agreed that 5 years is not long enough to show an effect.

It was noted that there was increased breast cancer incidence. The data that the Study has received was not sufficiently granular to identify the mutation status and sub-types. SL highlighted a paper on cancer mortality risks from long term exposure to ambient fine particles:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5505442/>

This large study found that in females the risks of breast cancer was higher than lung cancer. The cancer data linkage will be repeated in 2023.

The attached Powerpoint presentation highlights the recent Study findings on Emergency Department presentations (p 5), the Impact of the mine fire on mental health (pp 6-8), Infant exposure to mine fire smoke, and health service use and lung health (pp 9-11).



Att. 2 HHS
presentation to the SF

SRG members emphasized the need to keep the cohort engaged ahead of the third clinical testing round.

The SRG discussed the difficulties encountered with recruitment in 2021 with lockdowns and floods. Danny Brazalle observed that it has been difficult to get patients to attend clinics even when there is a clinical need. SRG members raised the issue of whether there has been movement out of the community that might affect recruitment? It was noted that in the early years after the mine fire 90% of exposed people were still in the region.

Rebecca Kippen observed that the 2021 Census contains data on whether people have moved in the last 5 years. Study researchers could request specific tables for the Latrobe Valley.

8. Other Business

- Plans for Years 11-20 (p 12) (Matthew Carroll)

Study researchers are starting to think about plans for Years 11-20 and initiating discussions with the Department of Health regarding a potential continuation of the Study. It was noted that there is a concern that the Study would not be able to pick up cancer outcomes with the data that are available up to Year 10.

The MyFood Swaps collaboration with the Latrobe Health Assembly is an example of what can be built onto the Study. Another option is to look at funding opportunities to extend the Study through externally-funded projects.

It was emphasized that the Department has invested in the research infrastructure established for the Study and this could be used to examine further research questions, for example

health service utilisation, climate impacts on the population, and the Latrobe Valley as a community in transition.

It was suggested that a proposal for funding beyond Year 10 should consider the policy environment at the Department of Health. In the coming year discussions will be held with the Latrobe Health Assembly and the Gippsland Regional Public Health Unit. The HHS Project Management Group is due to meet with the Department of Health in November 2022.

Actions:

- JB invited SRG members to provide suggestions regarding the continuation of the HHS in Years 11-20.
- JB will circulate the Proposal for Years 11-20 to SRG members.
- MA requested that future meetings to be recorded.

9. Date of Next Meeting

- The next meeting will be held in mid-2023.

Scientific Reference Group

Preamble

The Scientific Reference Group (SRG) comprises scientific experts in the various scientific disciplines contributing to the study who will provide input into the study directions. These include, but are not limited to: internal medicine, toxicology, psychiatry, sociodemography, biostatistics etc.

Meetings and Membership

Meeting once a year, by Zoom conferencing or face-to-face, the SRG is chaired by Professor Ross Coppel. Meetings will be minuted and, following approval, meeting minutes will be posted on the study website.

Terms of Reference

The specific roles of the SRG are to:

1. Assist the academic leads and stream leaders develop their research plans
 2. Monitor the progress of the study's research activities
 3. Provide the academic leads and stream leaders with ongoing advice
 4. Review protocols and adherence
 5. Function as a data monitoring and safety board in the event of adverse responses or complaints
 6. Consider proposals for new research activities or streams
- Identify potential new collaborations and recruits