



# AHRA

AUSTRALIAN HEALTH  
RESEARCH ALLIANCE

## Thunderstorm Asthma: Solving the Puzzle

### What is the problem?

In 2016, Melbourne suffered an asthma epidemic that led to the activation of disaster codes. Emergency services were overwhelmed and 10 people died, mostly in Melbourne's Western suburbs. Currently there is no reason to believe this will not occur again. To be prepared we need to understand what puts certain people at risk, develop treatments and build an early warning system.

### About this research translation project

This project has several aims: (a) to determine who is most at risk, (b) to monitor those at risk and track how air quality impacts them, and (c) to extend our ability to provide pollen warnings across additional states in Australia.

a) A Victoria wide telephone survey has already been completed which confirmed that people with pre-existing asthma have increased risk, as do those born overseas. This work has been used to advise guidelines issued by the Victorian DHHS to provide treatment recommendations for clinicians and patients at risk.

b) The TAISAR study: (Thunderstorm Asthma in Severe Allergic Rhinitis) – A group of 6 hospitals across Victoria have been recruiting patients into a study that collects medical data on affected patients and is establishing a biobank for future research. This study will utilise a smartphone app that will collect environmental data so we can connect this to asthma attacks in the patient group for the first time.

c) Australia needs a national pollen counting capability. This project will extend the existing pollen counting systems in Victoria, NSW, QLD and Tasmania into all other states – in particular SA and WA will have publically available pollen data for the first time this coming pollen season.

### What will be the impact?

This study will enable Government and health professionals to provide evidence-based, targeted advice to people with grass pollen allergy on the risks of thunderstorm asthma and to invest in evidence-based treatment and warning systems to avert a repeat of this disaster.



Melbourne Academic  
Centre for Health

**For more information on this project, contact:**  
**Professor Jo Douglass**  
**(The University of Melbourne)**  
**E: [jo.douglass@mh.org.au](mailto:jo.douglass@mh.org.au)**  
**P: (03) 9342 7191**

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