

Epidemic Thunderstorm Asthma

Preparedness guidance for GP Respiratory Clinics - October 2022

OFFICIAL

Who is the intended audience of this document?

This document should be read by all clinicians and administration staff who work in GP Respiratory Clinics (GPRCs) in preparation for a potential epidemic thunderstorm asthma (ETSA) event during the grass pollen season (1 October – 31 December).

What is the purpose of this document?

This document is to support clinic preparedness for an ETSA event.

Although ETSA events are uncommon, they place significant demand on health care services due to the near-simultaneous onset of asthma exacerbations. In 2016, Victoria experienced the world's largest ETSA event. In the 30 hours from the onset the storm, greater Melbourne saw almost 3,500 excess Emergency Department presentations and tragically 10 deaths. It was estimated that Melbourne-based general practices saw on average a seven-fold increase in asthma-related encounters, representing approximately 10,000 patients over three days. The rapid demand for urgent care was challenging.

During an ETSA event and the days following, GPRCs may also see a sudden surge of patients presenting with asthma of varying degrees of severity. Optimal outcomes may require innovative adjustments to provide rapid assessment and treatment of many in parallel.

How to prepare your clinic for the ETSA season

GPRCs should develop clear plans individualised to their clinic's operational capacity that cover seasonal preparedness, and actions to be taken on high-risk days or if an ETSA event occurs. Please consider the following to guide your preparedness:

Reacquaint yourself and staff to ETSA

Information, resources and updates on ETSA for health professionals (and the community) are available from:

- [Department of Health website](https://www.health.vic.gov.au/environmental-health/epidemic-thunderstorm-asthma) <https://www.health.vic.gov.au/environmental-health/epidemic-thunderstorm-asthma>
- [Better Health Channel](https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/thunderstorm-asthma) <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/thunderstorm-asthma>

Prepare clinical protocols and clinical supplies

- Have suitable protocols available, which are known to your staff, to manage a possible surge of patients presenting or calling your clinic for urgent asthma care.
- Re-familiarise staff with acute asthma management including status asthmaticus and respiratory arrest (e.g. using [HealthPathways](https://www.health.vic.gov.au/preventive-health/primary-health-networks-and-health-pathways) <https://www.health.vic.gov.au/preventive-health/primary-health-networks-and-health-pathways>, and national and Victorian guidance for [adults](#)

<<https://www.astmahandbook.org.au/acute-asthma/clinical>> and [children](#) <https://www.rch.org.au/clinicalguide/guideline_index/Asthma_acute/>).

- Have a well-rehearsed protocol for the management of a deteriorating patient.
- Have an appropriate method to record care provided during a surge.
- Consider your clinic's infection prevention and control processes if a surge of patients occurs. During ETSA events, GPRCs should use discretion around cohorting suspected and confirmed COVID-19 patients as well as those with asthma in order to save lives.
- Ensure adequate stock or rapid access to spacers, relievers (salbutamol and ipratropium), oral corticosteroids, oxygen, and other consumables.
- Consider a small patient take home pack that contains required medication with instructions and a spacer (if available), a list of nearby after-hours pharmacies they can fill scripts if required, online sites for asthma education ([Asthma Australia](#) <<https://asthma.org.au/>>, [Better Health Channel](#) <<https://www.betterhealth.vic.gov.au/conditionsandtreatments/asthma>>), Asthma Australia phone support line (1800 278 462), when and how to have their asthma reviewed, asthma first aid instructions (see below), and an interim asthma action plan if time permits. The significance of an asthma diagnosis and need for ongoing follow-up should be stressed to patients.

Prepare at-risk patients for an ETSA event

As part of the respiratory assessment process, if a person has a history of asthma, suspected asthma, or springtime allergic rhinitis:

- Advise them about the risk of thunderstorm asthma. Direct them to the [Better Health Channel ETSA factsheet](#) <<https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/thunderstorm-asthma>> and the ETSA risk forecast (see below), which assist the community and health services to know which days are high risk and to plan accordingly.
- Assess [asthma control](#) <<https://asthma.org.au/about-asthma/understanding-asthma/asthma-control-test/>>, use of inhaled corticosteroids and puffer technique.
- If required, update their asthma action plan, and refer them back to their usual GP for review and management of their asthma and/or hay fever.
- Remind people with asthma to carry their reliever and those with springtime allergic rhinitis to have appropriate access to a rapid-acting bronchodilator reliever during grass pollen season.
- Advise them to avoid being outdoors just before and during thunderstorms, especially the wind gusts that precede them, during grass pollen season. They should go inside, close doors and windows, and turn off air-conditionings systems that bring in outdoor air (e.g., evaporative systems).
- Remind patients and especially those who care for people with asthma or springtime allergic rhinitis to learn [asthma first aid](#) <<https://asthma.org.au/treatment-diagnosis/asthma-first-aid/>>.
- Ask those with springtime allergic rhinitis if they have any asthma symptoms as they could have undiagnosed asthma.

Prepare the workforce

- Educate staff about the upcoming grass pollen season and potential for an ETSA event. Let them know how they can protect themselves and their families.
- Prepare for a possible large influx of patients during an event and on subsequent days. Consider possible means of extending service times and capacity, and increase preparedness on high risk forecast days.
- Have a clear escalation process to notify your senior leadership team if there is a sudden increase in asthma presentations. You can alert the Department of Health on 1300 790 733 (24 hours, seven days a week) if you notice a sudden increase in asthma presentations suggestive of an ETSA event.

Prepare the clinic facilities

- Have information available in your clinic for staff and patients, such as posters about thunderstorm asthma and asthma first aid. A range of [posters and brochures can be found online](https://www.health.vic.gov.au/environmental-health/epidemic-thunderstorm-asthma-campaign-toolkit) <<https://www.health.vic.gov.au/environmental-health/epidemic-thunderstorm-asthma-campaign-toolkit>>, along with a range of [resources in community languages](https://www.health.vic.gov.au/environmental-health/thunderstorm-asthma-multicultural-resources) <<https://www.health.vic.gov.au/environmental-health/thunderstorm-asthma-multicultural-resources>>.
- Plan how you will manage a large volume of patients and their accompanying family and carers.

Monitor the ETSA risk forecast

- Develop a suitable process to monitor the ETSA risk forecast during grass pollen season (see below). Set up an emergency ‘watch zone’ for your clinic on [Vic Emergency](https://emergency.vic.gov.au/respond/) <<https://emergency.vic.gov.au/respond/>> to receive alerts of high-risk forecast days and if an ETSA event emerges in your area
- Have a prepared and practiced response to a high or moderate ETSA risk forecast.
- Continue to monitor PHN communications and consider subscribing to the [Department of Health’s ETSA risk forecast email to receive daily forecasts](https://www.health.vic.gov.au/subscribe) <<https://www.health.vic.gov.au/subscribe>>.

The ETSA risk forecast

The ETSA risk forecast operates during the grass pollen season (from 1 October to 31 December) and combines the forecast of a certain uncommon type of thunderstorm and the forecast of grass pollen levels.

The risk forecast covers three days (today, tomorrow and the day after) and is updated twice daily (12:30pm and 3pm) during the grass pollen season. It uses a colour-coded risk scale specific for each district (Figure 1):

- A high-risk (red) ETSA forecast is generated when both high grass pollen levels and a severe thunderstorm with strong winds are predicted in a particular weather district.
- A moderate-risk (orange) ETSA forecast is generated when there is either moderate grass pollen levels and a severe thunderstorm with strong winds, or when high grass pollen and a moderate thunderstorm are predicted in a particular weather district.
- A low-risk (green) forecast indicates that the elements necessary for an ETSA event are not expected to occur and an event is unlikely.

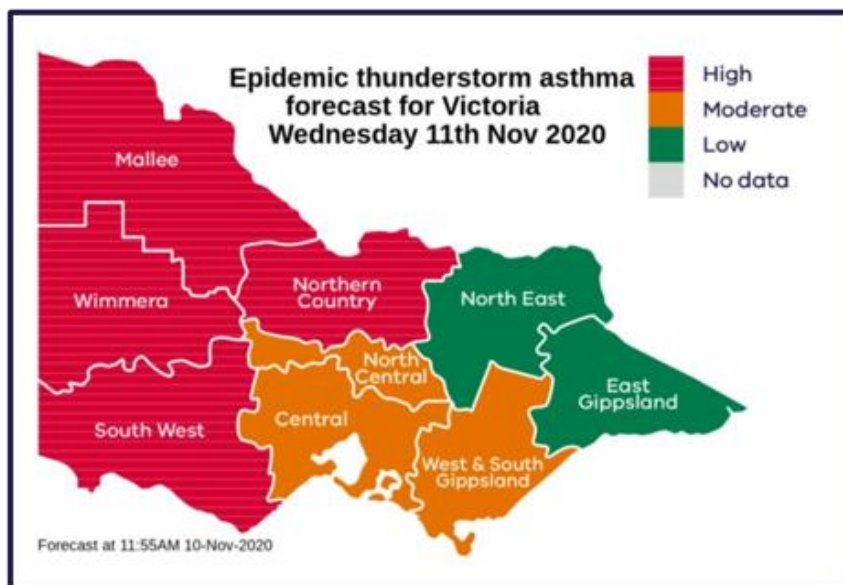


Figure 1: Epidemic thunderstorm asthma risk forecast example

The ETSA risk forecast is available on the [Department of Health](https://www.health.vic.gov.au/environmental-health/epidemic-thunderstorm-asthma-risk-forecast), <https://www.health.vic.gov.au/environmental-health/epidemic-thunderstorm-asthma-risk-forecast> > [Vic Emergency](https://emergency.vic.gov.au/prepare/#thunderstorm-asthma-forecast) <<https://emergency.vic.gov.au/prepare/#thunderstorm-asthma-forecast>> and [Melbourne Pollen](https://www.melbournepollen.com.au/) <<https://www.melbournepollen.com.au/>> websites.

You can subscribe to automatically receive the epidemic thunderstorm asthma risk forecast through the [Department of Health website](https://www.health.vic.gov.au/subscribe) <<https://www.health.vic.gov.au/subscribe>> and if requested you can also receive the heat health alerts (alerts you to days of excessive heat that places people at risk).

Vic Emergency website provides the ETSA forecasts under the *Prepare and Get Ready* tab and warnings will be presented under the *Incident and Warnings* tab. You can set up a watch zone for your area through the menu on top right-hand corner of web page.

Further information

Asthma management and first aid

[Managing acute asthma in adults](https://www.astmahandbook.org.au/acute-asthma/clinical) <https://www.astmahandbook.org.au/acute-asthma/clinical>

[Managing acute asthma in children](https://www.rch.org.au/clinicalguide/guideline_index/Asthma_acute/) <https://www.rch.org.au/clinicalguide/guideline_index/Asthma_acute/>

[HealthPathways Clinical Guidelines](https://www.health.vic.gov.au/preventive-health/primary-health-networks-and-health-pathways) <https://www.health.vic.gov.au/preventive-health/primary-health-networks-and-health-pathways>

[Inhaler technique video \(adults\)](https://www.nationalasthma.org.au/how-to-videos) <https://www.nationalasthma.org.au/how-to-videos>

[Inhaler technique video \(children\)](https://www.rch.org.au/kidsinfo/fact_sheets/asthma-videos/) <https://www.rch.org.au/kidsinfo/fact_sheets/asthma-videos/>

[Asthma Australia – Asthma First Aid](https://asthma.org.au/treatment-diagnosis/asthma-first-aid/) <https://asthma.org.au/treatment-diagnosis/asthma-first-aid/>

[National Asthma Council – Asthma First Aid](https://www.nationalasthma.org.au/asthma-first-aid) <https://www.nationalasthma.org.au/asthma-first-aid>

[Asthma Patient Factsheet](https://www.bettersafecare.vic.gov.au/resources/tools/asthma) <https://www.bettersafecare.vic.gov.au/resources/tools/asthma>

Epidemic thunderstorm asthma

[Department of Health ETSA information](https://www.health.vic.gov.au/environmental-health/epidemic-thunderstorm-asthma) <https://www.health.vic.gov.au/environmental-health/epidemic-thunderstorm-asthma>

[Better Health Channel ETSA information](https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/thunderstorm-asthma)

<https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/thunderstorm-asthma>

[Vic emergency – ETSA risk forecast](https://emergency.vic.gov.au/prepare/#thunderstorm-asthma-forecast) <https://emergency.vic.gov.au/prepare/#thunderstorm-asthma-forecast>

[Melbourne Pollen count and forecast](https://www.melbournepollen.com.au) <https://www.melbournepollen.com.au>

Managing emergencies in General Practice

Royal Australian College of General Practitioners – [Managing emergencies in general practice](https://www.racgp.org.au/running-a-practice/practice-management/managing-emergencies-and-pandemics/managing-emergencies-in-general-practice)
<https://www.racgp.org.au/running-a-practice/practice-management/managing-emergencies-and-pandemics/managing-emergencies-in-general-practice>

To receive this document in another format, phone **1300 761 874**, using the National Relay Service 13 36 77 if required, or email [the Environmental Health Policy and Risk Management Unit](mailto:environmental.healthunit@health.vic.gov.au) <environmental.healthunit@health.vic.gov.au>.

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Available at [Epidemic thunderstorm asthma – resources for professionals](https://www.health.vic.gov.au/environmental-health/resources-for-health-professionals)

<https://www.health.vic.gov.au/environmental-health/resources-for-health-professionals>