

The November 2016 Victorian epidemic thunderstorm asthma event: Health impacts

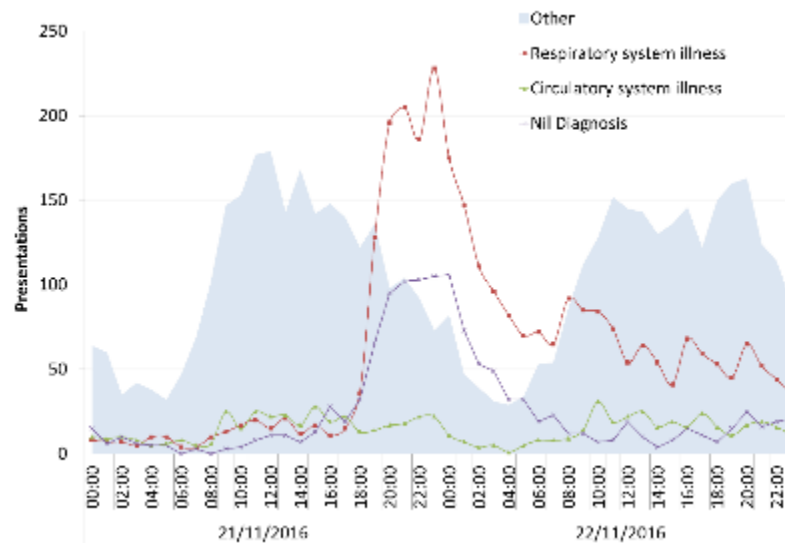
Emergency Management Conference, 12 July 2017
Dr Clare Looker, DHHS



**The November 2016 Victorian
epidemic thunderstorm
asthma event: an assessment
of the health impacts**

The Chief Health Officer's Report, 27 April 2017

Presentations to public hospital ED, 21 - 22 Nov 2016 (Metro & Barwon hospitals)



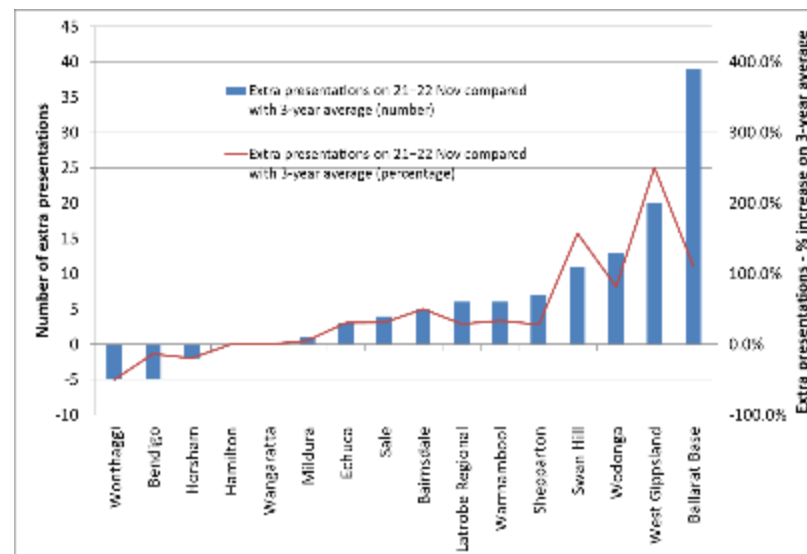
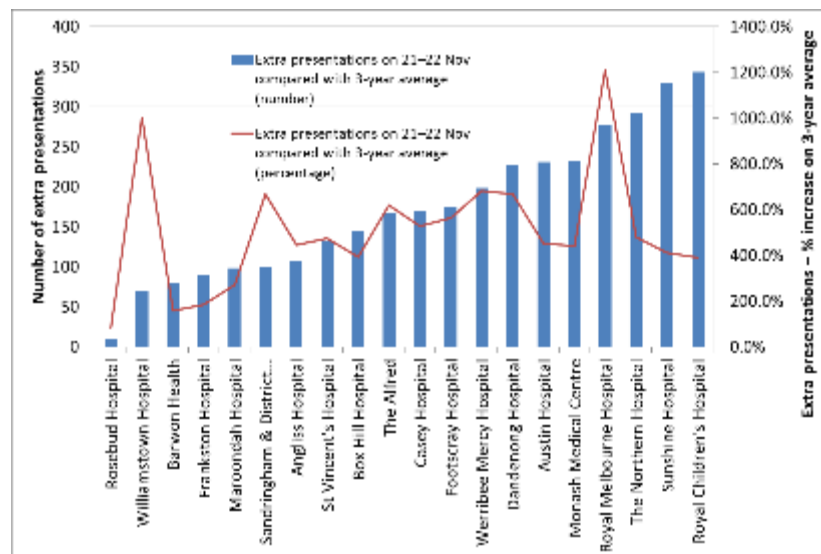
- **Sudden increase in respiratory presentations**
- **Remains elevated at 30 hrs**
- **Sudden increase in Nil Diagnosis**
- **Report from ED's and timing suggests 'Nil Diagnosis' were in fact treated asthmatics**
- **We will count Respiratory and Nil Diagnosis as asthmatic presentations**

Victorian public hospital emergency department presentations, 21-22 November 2016

Table 1: Victorian public hospital emergency department presentations, 21-22 November 2016

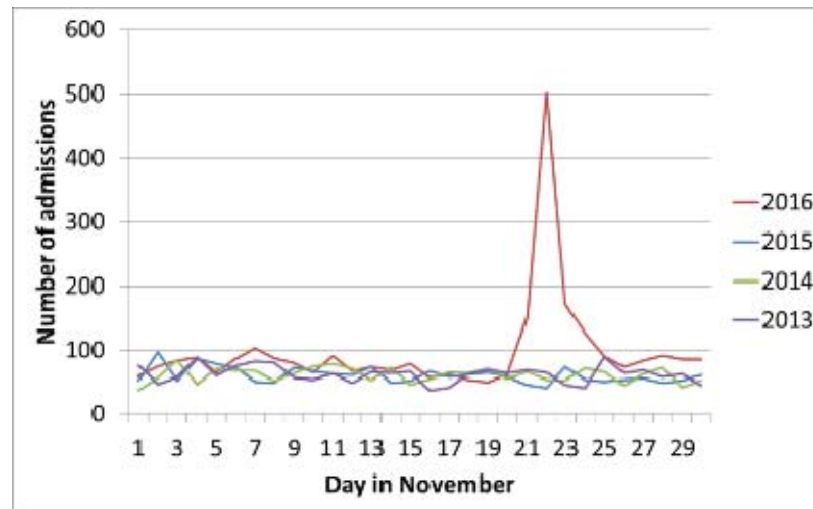
	Number of presentations	3 year average	Excess cases (% increase on 3 year average)
Total presentations (including respiratory and 'nil diagnosis')			
Melbourne & Geelong	9909	6266	3643 (58%)
Other hospitals	2814	2590	224 (9%)
	12723	8856	3867 (44%)
Respiratory presentations			
Melbourne & Geelong	2973	453	2520 (556%)
Other hospitals	239	151	88 (58%)
	3212	604	2608 (432%)
'Nil Diagnosis' presentations			
Melbourne & Geelong	1253	313	940 (300%)
Other hospitals	175	125	50 (40%)
	1428	438	990 (226%)
All other presentations (excluding respiratory and 'nil diagnosis')			
Melbourne & Geelong	5683	5500	183 (3%)
Other hospitals	2400	2314	86 (4%)
	8083	7814	269 (3%)

Additional presentations by hospital



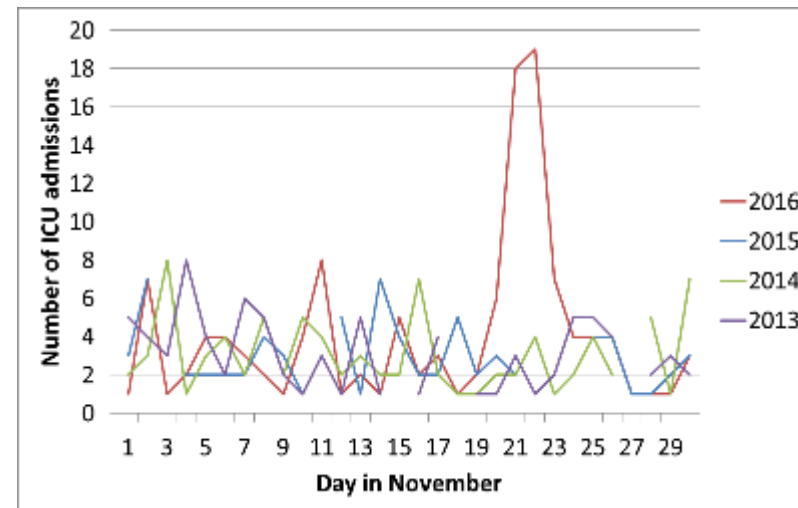
Victorian hospital asthma-related admissions, November 2016

- 30 hr from 6pm 21 November:
548 excess admissions (1034% increase)
- Prior to 21 November, asthma admissions already 14.8% greater than expected for month
- Admissions remained high for rest of the month



Total asthma related ICU admissions for November 2013-2016 (all Victorian hospitals)

- For 21-22 November 2016:
34 excess ICU admissions
(1,133% increase)
- 30 hrs after 6pm 21 November:
30 excess ICU admissions
(3000% increase).



Asthma-related deaths

- Coronial investigation underway
- Nine deaths reported in media as associated with thunderstorm asthma event
- Analysis of Victorian Births, Deaths and Marriages Registry and Coroner's Court data indicates 9 deaths are recorded with asthma as primary cause of death between 21 and 30 November 2016

References

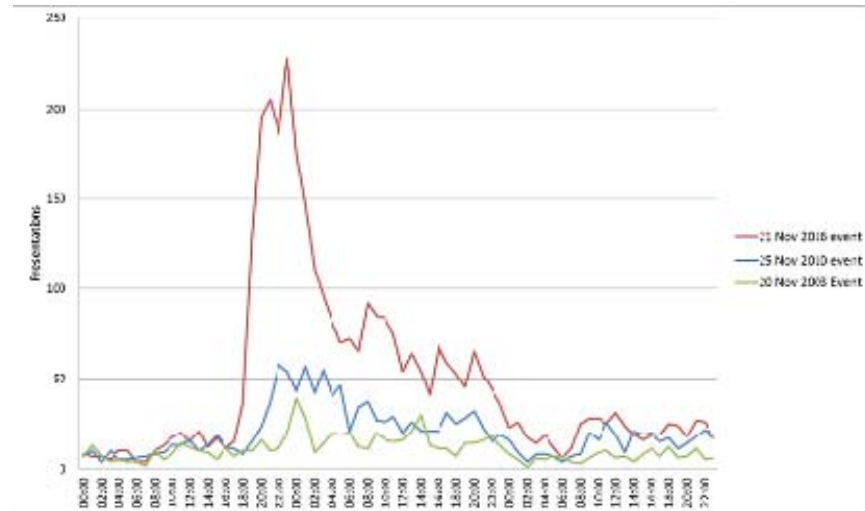
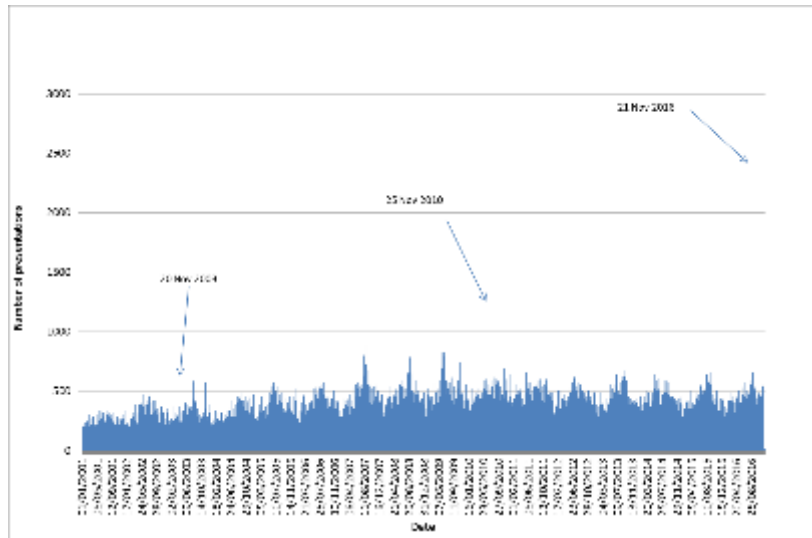
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<https://www2.health.vic.gov.au/emergencies/thunderstorm-asthma-event/response>

Inspector General of Emergency Management (IGEM): Final Report

<https://www2.health.vic.gov.au/emergencies/thunderstorm-asthma-event/review>

Respiratory and nil diagnosis presentations to Victorian public hospital EDs on days epidemic thunderstorm asthma



Victorian total presentations at all public hospital EDs 30 hours from 6.00pm 21 Nov.

If we look at the 30 hrs after 6pm, 21
November

- 9,155 total presentations to Victorian public hospital EDs, a 3,496 (62%) increase above 3 year average of 5,637
- There was 3,866 Resp. and Nil Diagnosis presentations to Melbourne & Geelong, a 3,365 (672%) increase above 3 yearly average of 510

