**Epidemiology and Infection**

**Supplementary Material**

**Meteorological factors and respiratory syncytial virus seasonality in subtropical Australia.**

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**Literature review**

A literature review was conducted to determine other subtropical locations that have explored respiratory syncytial virus seasonality (with Cfa Köppen Classification). We searched Pubmed up to and including July 31st 2017. We used search terms ‘respiratory syncytial virus’ AND ‘seasonality,’ OR ‘respiratory syncytial virus’ AND ‘epidemic’ this yielded 692 titles, of these we identified 8 studies in sub tropical locations according to the Cfa Köppen Classification by searching titles and abstracts. The reference list of articles identified were also searched and relevant articles retrieved, this resulted in a further 5 relevant studies, for a total of 13 studies included in the review.

**Supplementary Table**. Seasonality of respiratory syncytial virus in subtropical locations studied based on the Köppen Classification of Cfa [[1](#_ENREF_1)].

|  |  |  |
| --- | --- | --- |
| **Site** | **Latitude** | **RSV activity** |
| Baguio City, Philippines [[2](#_ENREF_2)]Hong Kong [[3](#_ENREF_3), [4](#_ENREF_4)]Sao Paulo, Brazil [[5](#_ENREF_5)]Taiwan [[6](#_ENREF_6)]Pretoria, South Africa [[7](#_ENREF_7)]Delhi, India [[8](#_ENREF_8)]Houston, Texas [[8](#_ENREF_8)]Porto Alegre, Brazil [[9](#_ENREF_9)]Jacksonville, Florida [[10](#_ENREF_10)]Hangzhou, China [[11](#_ENREF_11)]Suzhou, China [[12](#_ENREF_12)]Buenos Aires, Argentina [[13](#_ENREF_13)]Montevideo, Uruguay [[14](#_ENREF_14)] | 16.4° N 22.4° N23.6° S25.0° N25.7° S28.4° N29.6° N30.0° S30.3° N30.3° N31.3° N34.6° S34.9 ° S | Peak in autumn Peak in spring – summer Peak autumn to winterContinuous with peaks in spring and autumnPeak in autumnAlmost continuous, peaklate autumn - winterMid-autumn to winterPeak in winter Continuous, peak late autumn to winterPeak in winter to spring Peak in winter Peak in winter Peak in spring |

0

5

10

15

20

RSV cases

 2008

 2010

 2012

 2014

 2016

Date

**Supplementary Figure.** Respiratory syncytial virus positive swabs (Jul 2007 – Jun 2016).

The three-month moving average of the number of RSV test positives showing the year-on-year trend of RSV results is shown in the Supplementary Figure. This demonstrates the general consistency of peak RSV activity, although occasional year-to-year variation with the number of positive swabs may occur, as seen in 2014.

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