

# AUSTRALIAN SENTINEL PRACTICES RESEARCH NETWORK, 1 JANUARY TO 31 MARCH 2016

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## Introduction

The Australian Sentinel Practices Research Network (ASPREN) is a national surveillance system that is funded by the Australian Government Department of Health, owned and operated by the Royal Australian College of General Practitioners and directed through the Discipline of General Practice at the University of Adelaide.

The network consists of general practitioners and nurse practitioners Australia-wide, who report syndromic presentations on a number of defined medical conditions each week. ASPREN was established in 1991 to provide a rapid monitoring scheme for infectious diseases that can inform public health officials of the epidemiology of pandemic threats in the early stages of a pandemic, as well as play a role in the evaluation of public health campaigns and research of conditions commonly seen in general practice. Reporters currently submit data via automated data extraction from patient records, web-based data collection or paper form.

In 2010, virological surveillance was established allowing ASPREN practitioners to collect nasal swab samples for laboratory viral testing of a proportion of influenza-like illness (ILI) patients for a range of respiratory viruses including influenza A and influenza B. In 2016, ASPREN practitioners are instructed to swab 20% of all patients presenting with an ILI.

The list of conditions reported is reviewed annually by the ASPREN management committee. In 2016, 4 conditions are being monitored. They are ILI, gastroenteritis and varicella infections (chickenpox and shingles). Definitions of these conditions are described in surveillance systems reported in *CDI*, published in *Commun Dis Intell* 2016;40(1):11.

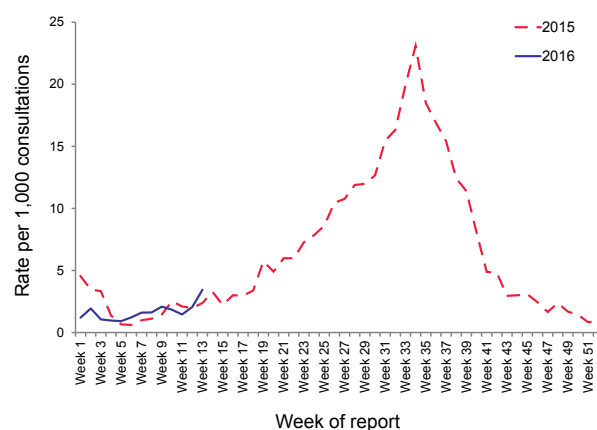
## Results

Sentinel practices contributing to ASPREN were located in all 8 states and territories in Australia. A total of 240 general practitioners regularly contributed data to ASPREN in the 1st quarter of 2016. Each week an average of 222 general practitioners provided information to ASPREN at an average

of 15,970 (range 12,767 to 17,970) consultations per week and an average of 110 (range 82 to 134) notifications per week (all conditions).

ILI rates reported from 1 January to 31 March 2016 averaged 1.7 cases per 1,000 consultations (range 0.9 to 3.5 cases per 1,000 consultations). This was lower than the rates in the same reporting period in 2015, which averaged 2.0 cases per 1,000 consultations (range 0.6 to 4.5 cases per 1,000 consultations, Figure 1). ILI rates peaked in week 13 at a rate of 3.5 ILI cases per 1,000 consultations.

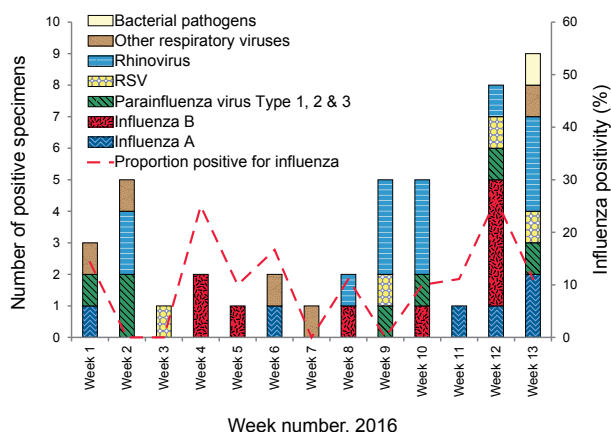
**Figure 1: Consultation rates for influenza-like illness, ASPREN, 2015 and 1 January to 31 March 2016, by week of report**



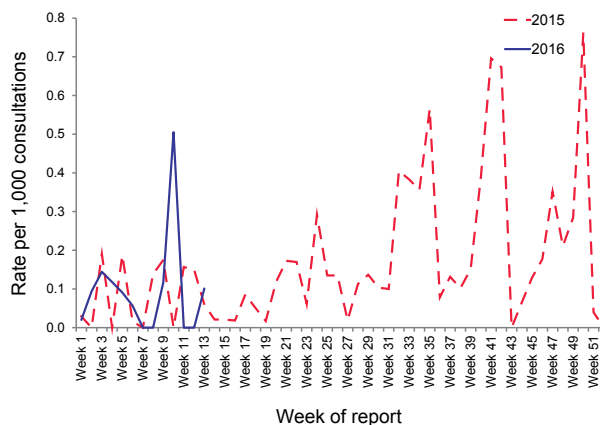
The ASPREN ILI swab testing program continued in 2016 with 127 tests being undertaken from 1 January to 31 March. The most commonly reported virus during this reporting period was rhinovirus (10.2% of all swabs performed, Figure 2), with the second most common virus being influenza B (7.1% of all swabs performed).

From the beginning of 2016 to the end of week 13, 15 cases of influenza were detected with 9 of these typed as influenza B (7.1% of all swabs performed) and the remaining 6 being influenza A (4.7% of all swabs performed) (Figure 2).

**Figure 2: Influenza-like illness swab testing results, ASPREN, 1 January to 31 March 2016, by week of report**

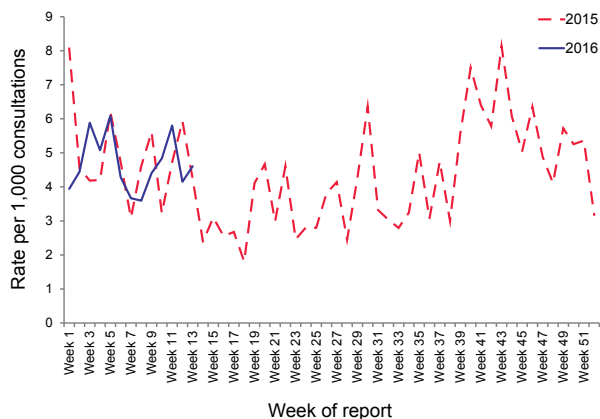


**Figure 4: Consultation rates for chickenpox, ASPREN, 2015 and 1 January to 31 March 2016, by week of report**



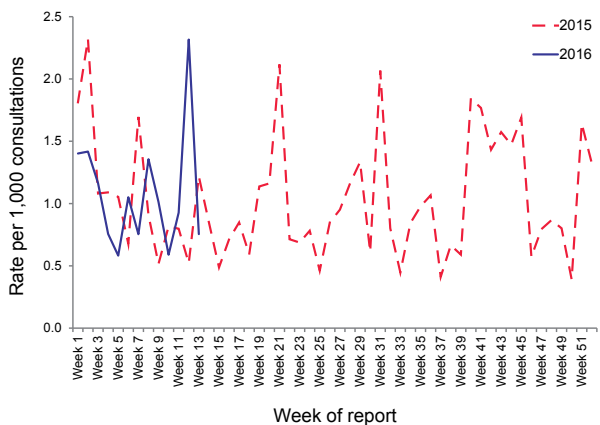
During this reporting period, consultation rates for gastroenteritis averaged 4.7 cases per 1,000 consultations (range 3.9 to 6.1 cases per 1,000, Figure 3). This was similar to the rates in the same reporting period in 2015 where the average was 4.9 cases per 1,000 consultations (range 3.1 to 8.1 cases per 1,000).

**Figure 3: Consultation rates for gastroenteritis, ASPREN, 2015 and 1 January to 31 March 2016, by week of report**



In the 1st quarter of 2016, reported rates for shingles averaged 1.1 cases per 1,000 consultations (range 0.6 to 2.3 cases per 1,000 consultations, Figure 5). This was similar to the rates in the same reporting period in 2015 where the average shingles rate was 1.1 cases per 1,000 consultations (range 0.5 to

**Figure 5: Consultation rates for shingles, ASPREN, 2015 and 1 January to 31 March 2016, by week of report**



Varicella infections were reported at a higher rate for the 1st quarter of 2016 compared with the same period in 2015. From 1 January to 31 March 2016, recorded rates for chickenpox averaged 0.1 cases per 1,000 consultations (range 0.0 to 0.5 cases per 1,000 consultations, Figure 4).

2.3 cases per 1,000 consultations).