Quarterly report

The Australian Sentinel Practices Research Network, 1 January to 31 March 2017

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Introduction

The Australian Sentinel Practices Research Network (ASPREN) is a national influenza and infectious diseases surveillance system that is funded by the Australian Government Department of Health. ASPREN was established by the Royal Australian College of General Practitioners in 1991 and is currently 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 forms.

The list of conditions reported for syndromic surveillance is reviewed annually by the ASPREN management committee. In 2017, 4 conditions were being monitored. They were influenza-like illness (ILI), gastroenteritis and two 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.

In 2010, virological surveillance was established allowing ASPREN practitioners to collect nasal swab samples for laboratory viral testing a systematic sample of ILI patients for a range of respiratory viruses including influenza A and influenza B.

Results

Sentinel practices contributing to ASPREN were located in all 8 states and territories in Australia. A total of 203 general practitioners regularly contributed data to ASPREN in the 1st quarter of 2017. Each week an average of 173 general practitioners provided information to ASPREN with an average of 13,912 (range 11,597 to 14,935) consultations per week and an average of 97 (range 75 to 123) notifications per week (all conditions).

ILI rates reported from 1 January to 31 March 2017 averaged 2.5 cases per 1,000 consultations

(range 1.2 to 4.5 cases per 1,000 consultations). This was higher than the rates in the same reporting period in 2016, which averaged 1.8 cases per 1,000 consultations (range 0.8 to 3.5 cases per 1,000 consultations, Figure 1).

The ASPREN ILI swab testing program continued in 2017 with 106 tests being undertaken from 1 January to 31 March. The most commonly reported virus during this reporting period was rhinovirus (26% of all swabs performed), with the second most common virus being influenza A (19% of all swabs performed, Figure 2). This was higher than seen in the same reporting period in 2016 where rhinovirus and influenza accounted for 10% and 7% of all swabs performed, respectively.

From the beginning of 2017 to the end of week 13, there were 25 cases of influenza detected, with 20 of these typed as influenza A (19% of all swabs performed) and the remaining 5 being influenza B (5% of all swabs performed) (Figure 2).

During this reporting period, consultation rates for gastroenteritis averaged 3.8 cases per 1,000 consultations (range 2.4 to 5.6 cases per 1,000, Figure 3). This was lower than the rates in the same reporting period in 2016 where the average was 4.6 cases per 1,000 consultations (range 3.5 to 6.0 cases per 1,000).

Varicella infections were reported at a similar rate for the 1st quarter of 2017 compared with the same period in 2016. From 1 January to 31 March 2017, recorded rates for chickenpox averaged 0.1 cases per 1,000 consultations (range 0.0 to 0.8 cases per 1,000 consultations, Figure 4).

In the 1st quarter of 2017, reported rates for shingles averaged 1 case per 1,000 consultations (range 0.3 to 1.8 cases per 1,000 consultations, Figure 5). This was similar to the rates in the same reporting period in 2016 where the average shingles rate was 1.1 cases per 1,000 consultations (range 0.6 to 2.3 cases per 1,000 consultations).

Submit an Article

You are invited to submit your next communicable disease related article to the Communicable Diseases Intelligence (CDI) for consideration.

More information regarding CDI can be found at: <u>http://health.gov.au/cdi</u>.

Further enquiries should be direct to: <u>cdi.editor@health.gov.au</u>.

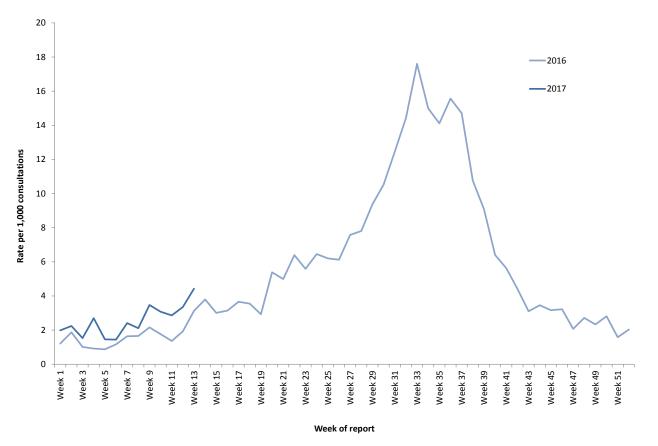
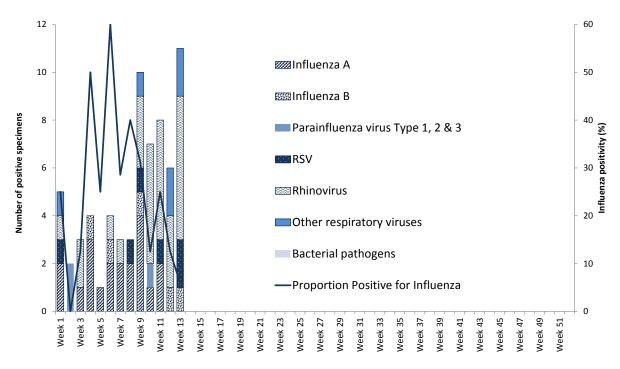


Figure 1: Consultation rates for influenza-like illness, ASPREN, 2016 and 1 January to 31 March 2017, by week of report

Figure 2: Influenza-like illness swab testing results, ASPREN, 1 January to 31 March 2017, by week of report



Week number, 2016

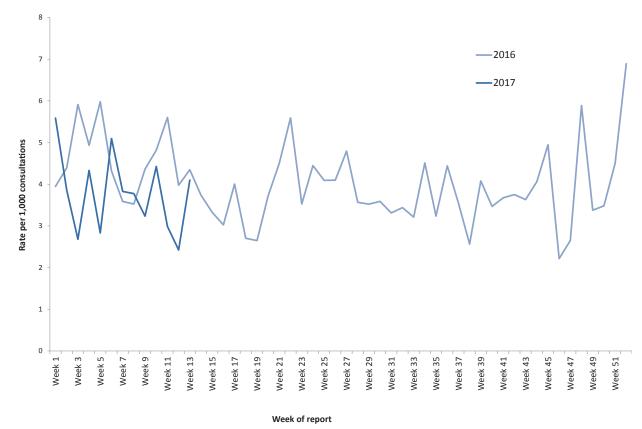
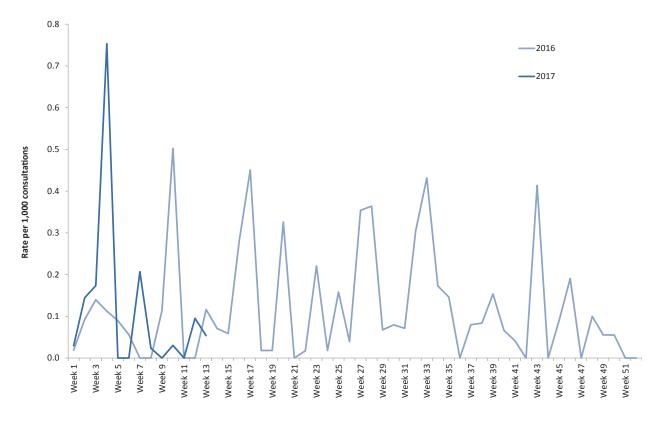


Figure 3: Consultation rates for gastroenteritis, ASPREN, 2016 and 1 January to 31 March 2017, by week of report

Figure 4: Consultation rates for chickenpox, ASPREN, 2016 and 1 January to 31 March 2017, by week of report



Week of report

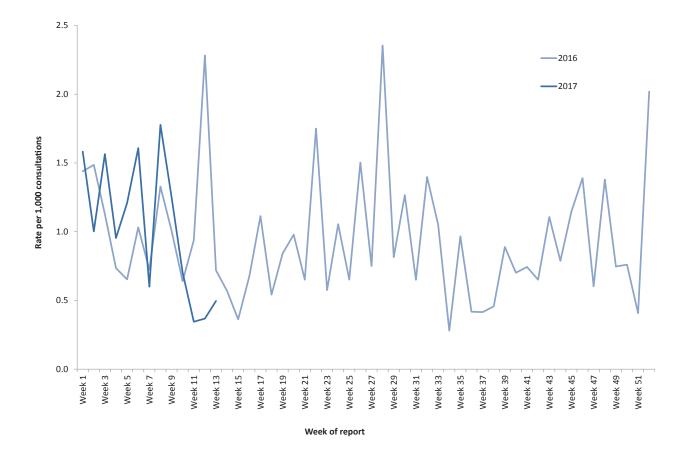


Figure 5: Consultation rates for shingles, ASPREN, 2016 and 1 January to 31 March 2017, by week of report