

AUSTRALIAN SENTINEL PRACTICES RESEARCH NETWORK, 1 JULY TO 30 SEPTEMBER 2015

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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 who report 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 alert public health officials of epidemics in their early stages as well as play a role in the evaluation of public health campaigns and research of conditions commonly seen in general practice. Electronic, web-based data collection was established in 2006.

Since 2010, ASPREN GPs have been collecting nasal swab samples for laboratory testing, allowing for viral testing of 20% of influenza-like illness (ILI) patients for a range of respiratory viruses including influenza A, influenza B and A(H1N1)pdm09.

The list of conditions reported is reviewed annually by the ASPREN management committee. In 2015, 4 conditions are being monitored. They include 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* 2015;39(1):E180.

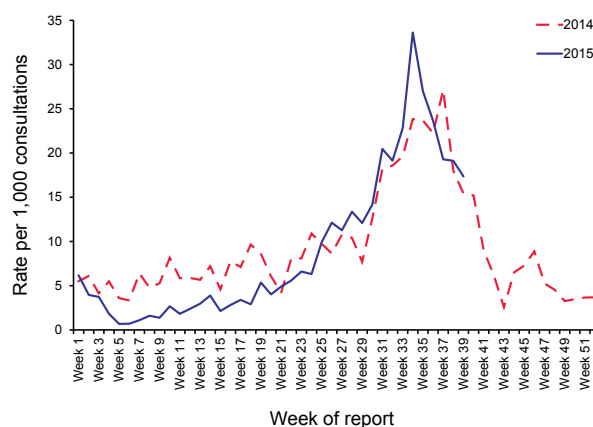
Results

Sentinel practices contributing to ASPREN were located in all 8 states and territories in Australia. A total of 260 general practitioners regularly contributed data to ASPREN in the 3rd quarter of 2015. Each week an average of 230 general practitioners provided information to ASPREN at an average of 18,322 (range 16,122–19,971) consultations per week and an average of 361 (range 260–538) notifications per week.

ILI rates reported from 1 July to 30 September 2015 averaged 19.5 cases per 1,000 consultations (range 11.3–33.6 cases per 1,000 consultations). This was

higher than in the same reporting period in 2014, which averaged 17.56 cases per 1,000 consultations (range 7.7–27.2 cases per 1,000 consultations, Figure 1). ILI rates peaked in week 34 at a rate of 33.6 ILI cases per 1,000 consultations.

Figure 1: Weighted consultation rates for influenza-like illness, ASPREN, 2014 and 1 January to 30 September 2015, by year and week of report

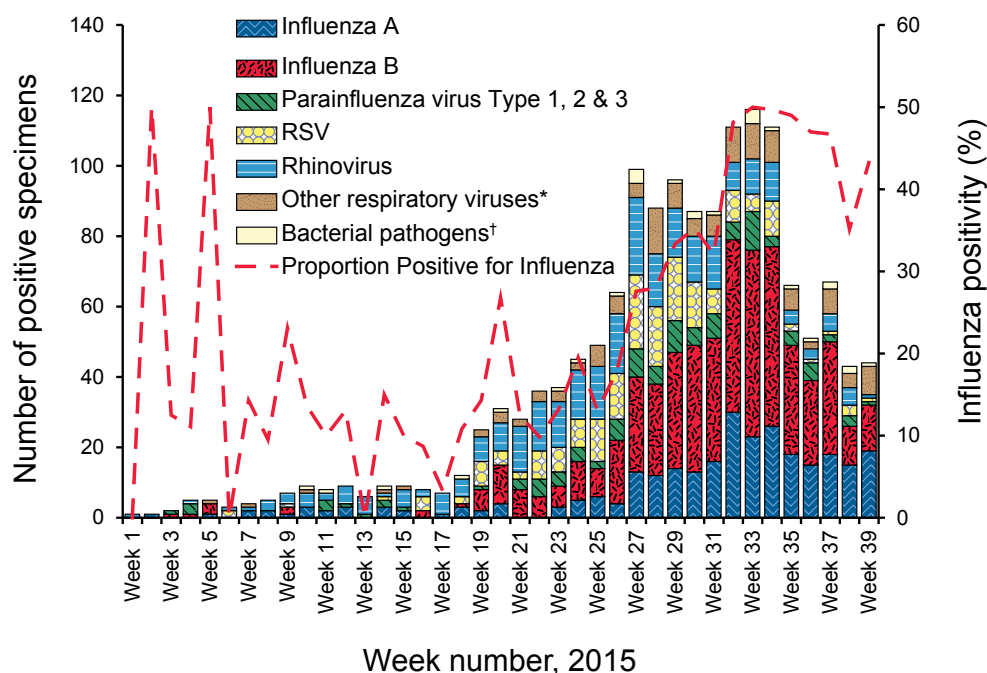


* Results are weighted to account for population size differences between jurisdictions, using population estimates from the 2011 Australian Census.

The ASPREN ILI swab testing program continued in 2015 with 1,629 tests being undertaken from 1 July to 30 September. The most commonly reported virus during this reporting period was influenza B (25.8% of all swabs performed, Figure 2), with the second most common virus being influenza A (14.2% of all swabs performed).

From the beginning of 2015 to the end of week 39 there were 785 cases of influenza detected with 505 of these typed as influenza B (19.8% of all swabs performed) and the remaining 280 being influenza A (11%) (Figure 2). Influenza positivity for 2015 was higher at 30.8% compared with 27% for the same period last year, with lower influenza A positivity and higher influenza B positivity being seen in 2015 compared with 2014 (23.4% and 3.6% of all swabs performed in 2014, respectively).

Figure 2: Swab testing results, ASPREN, 1 January to 30 September 2015, proportion positivity by virus, by week of report



* Includes human metapneumovirus and adenovirus.

† Includes *Bordetella pertussis* and *Mycoplasma pneumoniae*.

During this reporting period, consultation rates for gastroenteritis averaged 4.03 cases per 1,000 consultations (range 2.5–6.4 cases per 1,000, Figure 3). This was similar to the rates in the same reporting period in 2014 where the average was 4.02 cases per 1,000 consultations (range 2.2–8.3 cases per 1,000).

Varicella infections were reported at a similar rate for the 3rd quarter of 2015 compared with the same period in 2014. From 1 July to 30 September 2015, recorded rates for chickenpox averaged 0.21 cases per 1,000 consultations (range 0.08–0.59 cases per 1,000 consultations, Figure 4).

Figure 3: Consultation rates for gastroenteritis, ASPREN, 2014 and 1 January to 30 September 2015, by year and week of report

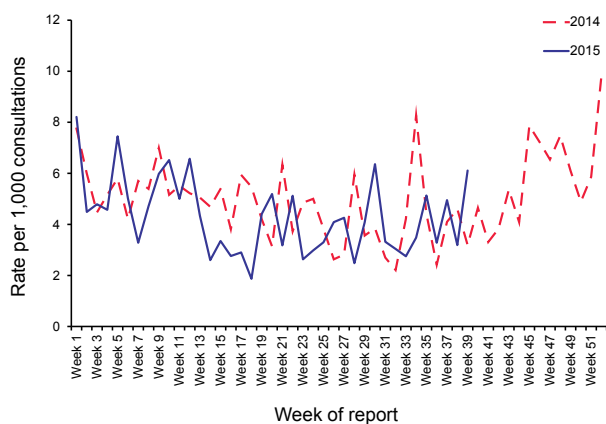
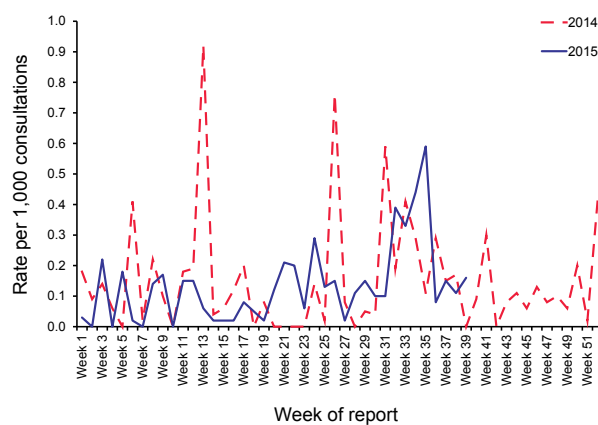


Figure 4: Consultation rates for chickenpox, ASPREN, 2014 and 1 January to 30 September 2015, by year and week of report



In the 3rd quarter of 2015, reported rates for shingles averaged 0.94 cases per 1,000 consultations (range 0.45–2.06 cases per 1,000 consultations, Figure 5), this was similar to the rates in the same reporting period in 2014 where the average shingles rate was 0.92 cases per 1,000 consultations (range 0.60–1.81 cases per 1,000 consultations).

Figure 5: Consultation rates for shingles, ASPREN, 2014 and 1 January to 30 September 2015, by year and week of report

