Australian Sentinel Practices Research Network, 1 October to 31 December 2012
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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.

In June 2010, ASPREN’s laboratory influenza-like illness (ILI) testing was implemented, allowing for viral testing of 25% of ILI patients for a range of respiratory viruses including influenza A, influenza B and influenza A(H1N1)pdm09.

The list of conditions is reviewed annually by the ASPREN management committee. In 2013, 4 conditions were monitored. They included 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 2013;37(1):E62.

Results

Sentinel practices contributing to ASPREN were located in all 8 states and territories in Australia. A total of 244 general practitioners contributed data to ASPREN in the 4th quarter of 2012. Each week an average of 199 general practitioners provided information to ASPREN at an average of 16,388 (range 13,438–19,063) consultations per week and an average of 163 (range 143–205) notifications per week.

ILI rates reported from 1 October to 31 December 2012 averaged 4 cases per 1,000 consultations (range 3–6 cases per 1,000 consultations). This was lower than the same reporting period in 2011, which averaged 8 cases per 1,000 consultations (range 6–13 cases per 1,000 consultations) (Figure 1).

ILI swab testing has continued during 2012. From the beginning of 2012 to the end of week 52, 1,277 cases of influenza have been detected, the majority of these being influenza A (untyped) (26% of all swabs performed), influenza B (11% of all swabs performed) and the remainder A(H1N1)pdm09 (0.5% of all swabs performed) (Figure 2).

During this reporting period, consultation rates for gastroenteritis averaged 5 cases per 1,000 consultations (range 3–6 cases per 1,000 consultations, Figure 3). This was lower than the same reporting period in 2011 where the average was 6 cases per 1,000 consultations (range 3–12 cases per 1,000 consultations).
Figure 2: Influenza-like illness swab testing results, ASPREN, 1 January to 31 December 2012, by week of report

Week number, 2012

- Influenza A untyped / other
- Respiratory syncytial virus
- Parainfluenza virus type 1
- Parainfluenza virus type 2
- Parainfluenza virus type 3
- Adenovirus
- Rhinovirus
- Metapneumovirus
- Enterovirus
- Pertussis
- Influenza B
- Influenza A H1N1 (2009)
- Parainfluenza virus type 2
- Mycoplasma pneumoniae
- Proportion positive for influenza

Number of positive specimens

Influenza positivity (%)
Varicella infections were reported at a lower rate for the 4th quarter of 2012 compared with the same period in 2011. From 1 October to 31 December 2012, recorded rates for chickenpox averaged 0.3 cases per 1,000 consultations (range 0.1–0.6 cases per 1,000 consultations, Figure 4).

In the 4th quarter of 2012, reported rates for shingles averaged 0.9 cases per 1,000 consultations (range 0.7–1.1 cases per 1,000 consultations, Figure 5), unchanged from the same reporting period in 2011 where the average shingles rate was 0.9 case per 1,000 consultations (range 0.2–1.8 cases per 1,000 consultations).