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 25% of ILI patients for a range of respiratory viruses including influenza A, influenza B and A(H1N1)pdm09.

The list of conditions is reviewed annually by the ASPREN management committee. In 2013, 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

ILI rates reported from 1 October to 31 December 2013 averaged 5 cases per 1,000 consultations (range 1–11 cases per 1,000 consultations) This was higher compared with rates in the same reporting period in 2012, which averaged 4 cases per 1,000 consultations (range 2–6 cases per 1,000 consultations, Figure 1).

Varicella infections were reported at a lower rate for the 4th quarter of 2013 compared with the same period in 2012. From 1 October to 31 December 2013, recorded rates for chickenpox averaged 0.22 cases per 1,000 consultations (range 0.05–0.48 cases per 1,000 consultations, Figure 4).

From the beginning of 2013 to the end of week 52, 446 cases of influenza were detected, with 291 of these typed as influenza A (12.1% of all swabs performed) and the remaining 155 being influenza B (6.5% of all swabs performed) (Figure 2).

During this reporting period, consultation rates for gastroenteritis averaged 6 cases per 1,000 consultations (range 4–9 cases per 1,000 consultations, Figure 3). This was higher compared with rates in the same reporting period in 2012 where the average was 5 cases per 1,000 consultations (range 3–6 cases per 1,000).

From the beginning of 2013 to the end of week 52, 446 cases of influenza were detected, with 291 of these typed as influenza A (12.1% of all swabs performed) and the remaining 155 being influenza B (6.5% of all swabs performed) (Figure 2).

Varicella infections were reported at a lower rate for the 4th quarter of 2013 compared with the same period in 2012. From 1 October to 31 December 2013, recorded rates for chickenpox averaged 0.22 cases per 1,000 consultations (range 0.05–0.48 cases per 1,000 consultations, Figure 4).

In the 4th quarter of 2013, reported rates for shingles averaged 1.02 cases per 1,000 consultations (range 0.53–1.57 cases per 1,000 consultations, Figure 5), higher compared with the same reporting period in 2012 where the average shingles rate was 0.87 case per 1,000 consultations (range 0.68–1.08 cases per 1,000 consultations).
Figure 2: Influenza-like illness swab testing results, ASPREN, 2012 and 1 January to 31 December 2013, by week of report
Figure 3: Consultation rates for gastroenteritis, ASPREN, 2012 and 1 January to 31 December 2013, by week of report

Figure 4: Consultation rates for chickenpox, ASPREN, 2012 and 1 January to 31 December 2013, by week of report

Figure 5: Consultation rates for shingles, ASPREN, 2012 and 1 January to 31 December 2013, by week of report