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. An electronic, web-based data collection was established in 2006.

Since 2010, ASPREN general practitioners have been collecting nasal swab samples for laboratory testing, allowing for viral testing of 25% of influenza like illness (ILI) patients for a range of respiratory viruses including influenza A, influenza B and H1N1(2009).

The list of conditions reported is reviewed annually by the ASPREN management committee. In 2012, 4 conditions were being 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 236 general practitioners contributed data to ASPREN in the 3rd quarter of 2012. Each week an average of 194 general practitioners provided information to ASPREN at an average of 20,235 (range 15,070–23,235) consultations per week and an average of 429 (range 241–571) notifications per week.

ILI rates reported from 1 July to 30 September 2012 averaged 17 cases per 1,000 consultations (range 7–26 cases per 1,000 consultations), which was lower compared with rates in the same reporting period in 2011, which averaged 19 cases per 1,000 consultations (range 11–24 cases per 1,000 consultations, Figure 1). This can be attributed to the 2012 season beginning and peaking earlier than the 2011 season with the peak in 2012 occurring at week 29 compared with week 33 in 2011.

ILI swab testing continued during 2012. The most commonly reported virus during this reporting period was influenza A (untyped) (28% of all swabs performed, Figure 2), with the second most common virus being influenza B (12% of all swabs performed).

From the beginning of 2012 to the end of week 39, 1,251 cases of influenza were detected, the majority of these being influenza A (untyped) (28% of all swabs performed), influenza B (12% of all swabs performed) and the remainder H1N1(2009) (0.5% of all swabs performed). As influenza A H3N2 was...
Figure 2: Influenza-like illness swab testing results, ASPREN, 1 January to 30 September 2012, by week of report
the predominantly circulating strain in Australia in 2012, it is assumed that the vast majority of the influenza A (untyped) are of the H3N2 subtype.

During this reporting period, consultation rates for gastroenteritis averaged 4 cases per 1,000 consultations (range 3–5 cases per 1,000 consultations, Figure 3). This was lower compared with rates in the same reporting period in 2011 where the average was 5 cases per 1,000 consultations (range 4–7 cases per 1,000 consultations).

Varicella infections were reported at a lower rate for the 3rd quarter of 2012 compared with the same period in 2011. From 1 July to 30 September 2012, recorded rates for chickenpox averaged 0.22 cases per 1,000 consultations (range 0–0.56 cases per 1,000 consultations, Figure 4).

In the 3rd quarter of 2012, reported rates for shingles averaged 0.64 cases per 1,000 consultations (range 0.29–0.86 cases per 1,000 consultations, Figure 5), slightly lower compared with the same reporting period in 2011 where the average shingles rate was 0.78 case per 1,000 consultations (range 0.49–1.29 cases per 1,000 consultations).