VIROLOGY

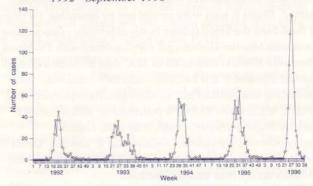
RESPIRATORY VIRUSES

Influenza

The 1996 influenza outbreak was the largest experienced in New Zealand since the Influenza Surveillance Programme began operating in its current form (1990). It was especially noteworthy for its rapid onset and subsequent decline in most regions of the country, and the high number of bronchiolitis cases associated with the infection, especially in young children. Peak weekly isolation numbers exceeded previous annual peaks by 2.3 times (Figure 2). Both GP consultation rates for influenza like illness and numbers of laboratory diagnosed influenza cases rapidly declined after peaking in late June -early July and only two laboratory confirmed cases were identified in September. The outbreak was caused predominantly by a type A H3N2 virus similar to A/Wuhan/ 359/95, the strain found in outbreaks in Asia and USA at the end of the Northern Hemisphere winter of 1995/96. Of 701 influenza viruses isolated, only five were type B and eight

type A H1N1. The circulating A/Wuhan/359/95- like viruses showed about 75% antigenic homology with the H3N2 component (A/Johannesburg/33/94) of the influenza vaccine for 1996. This match would have conferred to vaccinees, good protection against infection or reduced the severity of complications.

Figure 2. Weekly Laboratory Confirmed Influenza 1992 - September 1996



Respiratory Syncytial Virus

The 1996 RSV outbreak, which affected most regions of the country, peaked nationally at the end of July. The peak was three to four weeks earlier than three of the previous four years, (1993 was the same) and exceeded the previous four year's peaks by 30-72% (Figure 3). The number of reported cases declined rapidly during September with only four reported in the last week.

Figure 3. RSV Laboratory-confirmed cases by week 1992 - September 1996

