

VIROLOGY ANNUAL REPORT 2006

(http://www.surv.esr.cri.nz/virology/virology_annual_report.php)

Table 1 Summary of viral and mycoplasma pneumoniae infections in 2006

Year 2006	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
*Influenza A	0	0	0	0	2	18	101	143	53	4	1	0	322
*Influenza A H3N2	0	1	4	2	17	59	153	118	28	2	0	0	384
*Influenza A H1N1	0	0	0	0	0	1	13	14	20	8	0	0	56
*Influenza B	1	0	1	0	0	1	1	0	1	1	0	0	6
Parainfluenza 1	0	0	0	1	6	16	16	5	2	0	0	0	46
Parainfluenza 2	0	0	0	1	0	0	0	0	0	0	5	0	6
Parainfluenza 3	1	0	0	1	0	0	0	3	21	24	18	1	69
Respiratory Syncytial Virus (RSV)	2	1	4	4	11	77	172	276	111	22	4	2	686
Rhinovirus	4	1	6	4	1	2	2	2	7	3	2	0	34
Measles	0	0	0	0	0	0	0	0	0	0	1	0	1
Mumps	0	0	0	1	1	0	0	0	0	3	3	0	8
Rubella	0	0	0	0	0	1	0	0	0	0	0	2	3
Varicella Zoster Virus (VZV)	69	42	72	57	41	55	51	62	70	52	49	58	678
Rotavirus	18	11	16	7	4	20	67	72	123	87	44	20	489
Mycoplasma Pneumoniae	37	41	35	23	22	26	24	28	46	14	14	9	319
Adenovirus	15	20	12	24	16	24	14	19	33	29	27	41	274
Adenovirus Type 1	3	0	0	0	0	2	0	2	1	1	1	0	10
Adenovirus Type 2	1	0	0	6	0	4	0	5	6	4	3	3	32
Adenovirus Type 3	7	3	3	0	0	2	0	3	2	2	5	5	32
Adenovirus Type 4	7	3	3	0	4	4	2	8	8	4	7	5	55
Adenovirus Type 5	1	1	0	0	0	0	1	0	2	1	4	0	10
Adenovirus Type 6	0	0	0	0	0	0	0	0	0	0	1	0	1
Adenovirus Type 7	0	0	0	0	0	0	0	0	2	1	1	1	5
Adenovirus Type 8	2	1	1	1	1	0	11	2	1	3	1	5	29
Adenovirus Type 11	0	0	1	1	0	0	0	0	0	1	1	0	4
Adenovirus Type 15	0	1	0	2	1	1	0	0	0	0	0	1	6
Adenovirus Type 16	0	0	0	1	0	0	0	0	0	0	0	0	1
Adenovirus Type 19	0	0	0	5	3	1	0	1	0	3	2	1	16
Adenovirus Type 22	0	0	0	0	1	0	0	0	0	0	0	0	1
Adenovirus Type 29	1	2	1	0	0	0	0	0	0	0	0	0	4
Adenovirus Type 37	0	1	0	0	3	0	0	0	1	0	0	0	5
Adenovirus Type 41	0	0	0	0	0	2	0	2	0	0	0	0	4
Adenovirus Untypable	0	0	2	0	4	0	0	0	1	0	0	0	7
Enterovirus	18	11	6	11	6	16	6	10	24	33	15	7	163
Enterovirus Coxsackievirus Group B type 1	1	0	0	0	0	0	0	0	0	0	0	0	1
Enterovirus Coxsackievirus Group B type 2	1	1	0	1	0	0	0	0	0	0	0	0	3
Enterovirus Coxsackievirus Group B type 3	1	0	0	0	0	0	1	0	0	0	0	0	2
Enterovirus Coxsackievirus Group B type 5	2	0	1	0	1	0	0	1	0	1	1	0	7
Enterovirus Coxsackievirus Group A type 4	0	0	1	0	0	0	0	0	0	0	0	0	1
Enterovirus Coxsackievirus Group A type 6	0	0	0	1	1	0	0	0	1	0	0	0	3
Enterovirus Coxsackievirus Group A type 9	0	0	0	0	0	0	2	0	0	0	4	3	9
Enterovirus Coxsackievirus Group A type 10	0	0	1	1	1	0	0	0	0	0	0	0	3
Enterovirus Coxsackievirus Group A type 12	0	0	1	0	0	0	0	0	0	0	0	0	1
Enterovirus Coxsackievirus Group A type 16	0	0	0	0	0	0	0	1	0	0	0	0	1
Enterovirus Coxsackievirus Group A type 21	0	0	0	0	0	0	1	0	0	0	0	0	1
Enterovirus Coxsackievirus Group A type 24	0	0	0	0	1	0	3	0	1	0	0	0	5
Enterovirus Echovirus type 2	0	0	0	0	0	0	0	0	1	0	0	0	1
Enterovirus Echovirus type 3	0	0	0	0	0	1	0	1	1	0	0	2	5
Enterovirus Echovirus type 6	0	0	0	1	0	0	0	0	0	3	2	1	7
Enterovirus Echovirus type 7	0	0	0	0	0	2	0	0	0	0	0	0	2
Enterovirus Echovirus type 9	0	0	0	0	0	1	0	0	0	0	0	0	1
Enterovirus Echovirus type 18	0	0	0	1	0	0	0	2	0	0	3	0	6
Enterovirus Echovirus type 21	0	0	0	0	0	0	0	0	0	1	0	0	1
Enterovirus Echovirus type 22	0	0	0	1	0	0	0	0	0	0	0	0	1
Enterovirus Echovirus type 25	0	0	1	0	0	0	0	0	0	0	0	0	1
Enterovirus Echovirus type 27	0	0	1	0	0	0	0	0	0	0	0	0	1
Enterovirus Enterovirus type 71	0	0	1	0	0	0	0	0	0	0	0	0	1
Enterovirus Untypable	0	1	0	0	0	1	0	0	0	0	0	0	2

*Note: Viruses designated with an asterisk were reported based on the specimen taken date, whereas other viruses were based on the lab reporting date.

Table 1 on the previous page summarises viral and mycoplasma pneumoniae infections reported in New Zealand in 2006. The information is based on weekly data collated from the virology laboratories of Auckland Healthcare, Healthcare Waikato, Canterbury Health, Capital Coast Health, Middlemore Hospital and ESR.

RESPIRATORY VIRUSES

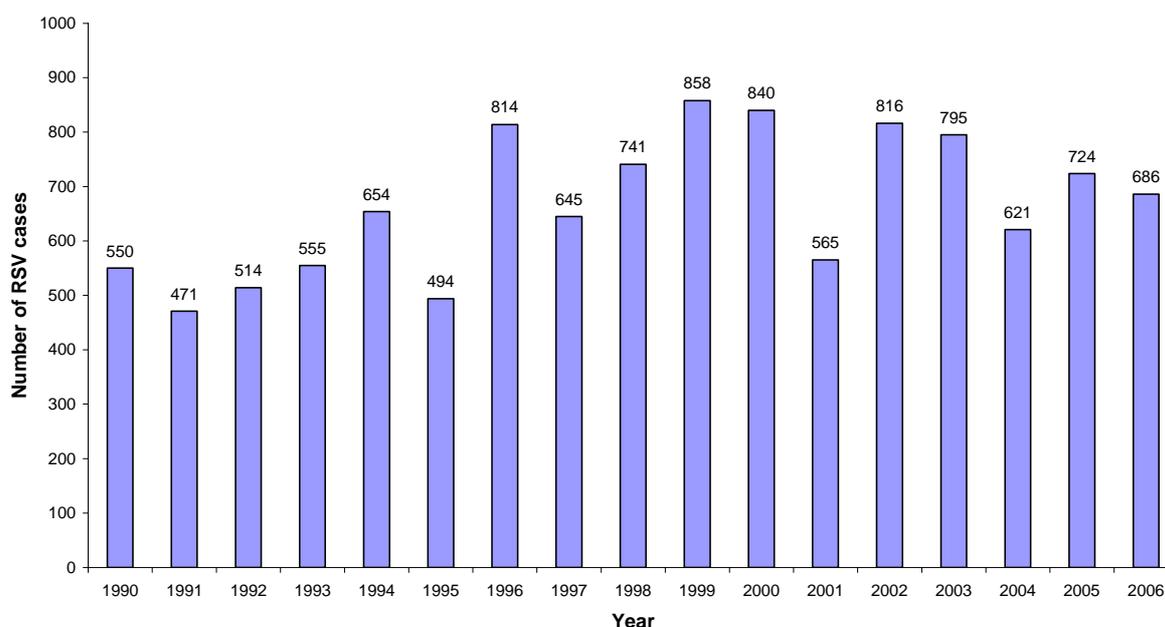
Influenza

The influenza annual report in 2006 is available at the website:
http://www.surv.esr.cri.nz/virology/influenza_annual_report.php

Respiratory Syncytial Virus (RSV)

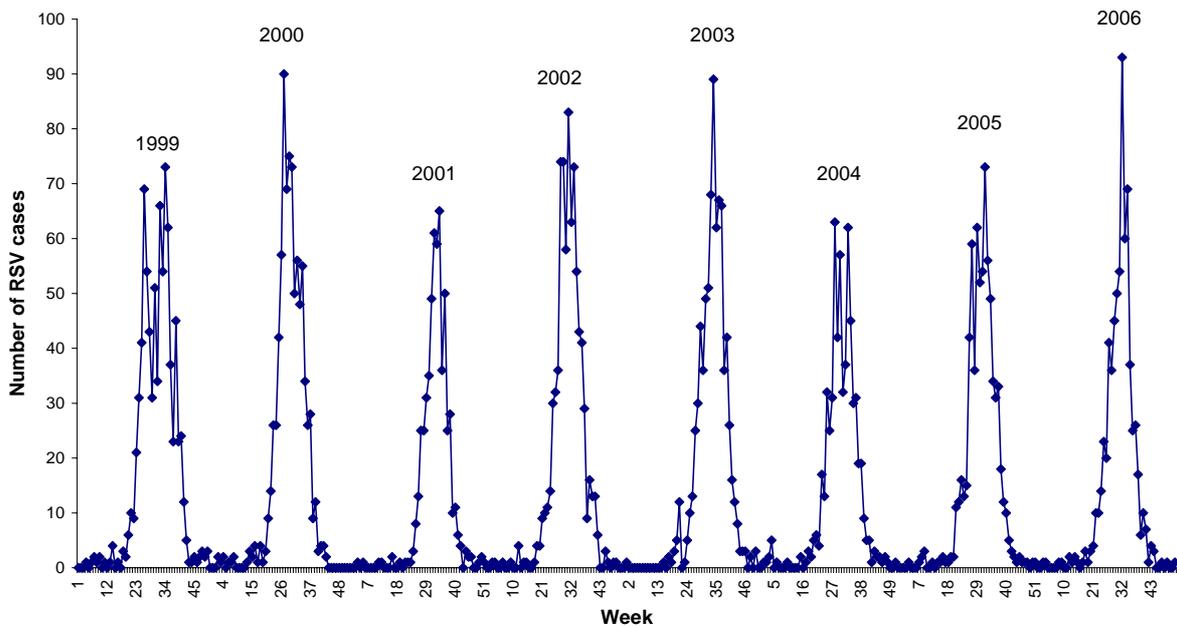
Based on laboratory-confirmed RSV cases reported to ESR, the RSV activity in 2006 was lower than in 2005 (Figure 1). During January to December 2006, a total of 686 RSV infections were reported compared with 724 reported during the same period in 2005. Over the previous 15 years, the highest RSV activity occurred in 1999 with 858 cases reported.

Fig 1 Annual laboratory-confirmed RSV cases, 1990-2006



In 2006, the RSV activity started to increase in June and peaked in Week 32 (at the beginning of August), the same week as the peak in 2005 (Figure 2). The RSV activity remained high until Week 40 (late September). Since then, the number of RSV cases declined to a baseline level.

Fig 2 RSV laboratory-confirmed cases by week, 1999-2006



ENTEROVIRUSES AND ADENOVIRUSES

The New Zealand enterovirus and adenovirus laboratory network comprises four laboratories: one public health virology laboratory (ESR, Wellington) and three hospital virology laboratories in Auckland, Waikato and Christchurch. These four virology laboratories cover 100% of the population and all geographical areas of the country. The enterovirus and adenovirus surveillance is a year-round routine diagnostic surveillance for hospital in-patients and out-patients. Hospital laboratories report all enterovirus and adenovirus isolations and/or typing results weekly to ESR and this data is then available nationally. Untyped or untypable enteroviruses and adenoviruses are referred to ESR for identification.

Enteroviruses

There were a total of 163 enteroviruses reported in 2006, compared with 247 in 2005. A total of 66 (40.5%) enterovirus isolates were referred for serotyping. Among serotyped enteroviruses, coxsackie A9 was the most predominant serotype with 9 isolations (13.4%), compared with no isolations in 2005. There were 7 isolations of echovirus type 6 (10.6%) and 7 of coxsackie B5 (10.6%), compared with one of echovirus type 6 and 9 of coxsackie B5 in 2005 respectively.

Adenoviruses

There were a total of 274 adenoviruses reported in 2006, compared with 338 in 2005. Of these, 222 (81%) adenoviruses were referred for serotyping using adenovirus antisera 1-31, 37 and 41. The predominant serotypes in 2006 were adenovirus type 4 (55, 24.8%), type 2 (32, 14.4%) and type 3 (32, 14.4%).

MEALSSES, MUMPS AND RUBELLA(MMR)

The MMR annual report in 2006 is available in the report "Annual Surveillance Summary 2006" at http://www.surv.esr.cri.nz/surveillance/annual_surveillance.php?we_objectID=1300