

VIROLOGY ANNUAL REPORT 2007  
([http://www.surv.esr.cri.nz/virology/virology\\_annual\\_report.php](http://www.surv.esr.cri.nz/virology/virology_annual_report.php))

Table 1 Summary of viral and mycoplasma pneumoniae infections in 2007

Year 2007	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
*Influenza A	0	1	0	0	6	16	16	44	13	2	0	0	98
*Influenza A H3N2	0	0	0	0	8	60	73	50	10	0	0	0	201
*Influenza A H1N1	0	0	1	0	3	10	38	165	59	5	1	0	282
*Influenza B	1	1	1	1	1	4	35	55	50	13	0	1	163
Parainfluenza 1	0	0	0	0	0	0	0	0	0	1	0	0	1
Parainfluenza 2	0	1	0	3	3	3	0	4	0	0	0	0	14
Parainfluenza 3	0	1	1	1	1	0	3	7	41	15	20	9	99
Respiratory Syncytial Virus (RSV)	1	0	3	2	6	30	106	246	190	58	16	1	659
Rhinovirus	0	0	0	5	1	0	2	2	1	3	1	6	21
Measles	1	2	0	0	0	0	0	0	0	0	0	0	3
Mumps	0	1	2	0	0	1	2	1	2	7	0	1	17
Rubella	0	0	0	1	0	0	0	1	0	0	2	1	5
Varicella Zoster Virus (VZV)	67	56	71	42	49	48	65	53	52	66	67	60	696
Rotavirus	29	20	38	13	34	17	12	24	97	104	95	47	530
Mycoplasma Pneumoniae	8	9	4	9	13	10	10	9	20	19	12	8	131
Adenovirus	37	25	63	55	42	70	58	47	81	70	66	40	654
Adenovirus Type 1	0	0	1	1	0	0	4	1	9	10	10	7	43
Adenovirus Type 2	1	0	3	0	1	3	1	4	4	4	1	3	25
Adenovirus Type 3	12	3	6	6	9	11	8	6	6	24	23	32	146
Adenovirus Type 4	1	0	1	2	1	1	2	2	2	2	1	1	16
Adenovirus Type 5	0	0	1	0	0	0	1	1	3	1	0	1	8
Adenovirus Type 6	0	0	0	0	0	0	0	0	0	1	0	0	1
Adenovirus Type 7	1	0	1	0	1	0	0	1	8	2	0	2	16
Adenovirus Type 8	4	16	55	29	41	22	22	22	27	10	12	4	264
Adenovirus Type 14	0	0	0	1	0	0	0	0	0	0	0	0	1
Adenovirus Type 19	0	0	0	1	0	0	0	0	3	0	0	0	4
Adenovirus Type 15/29	0	1	1	1	0	0	0	0	1	0	0	1	5
Adenovirus Type 21	1	0	0	0	0	0	0	0	0	0	0	0	1
Adenovirus Type 37	0	0	1	4	3	3	7	3	9	4	2	1	37
Adenovirus Untypable	3	0	0	0	3	2	3	3	1	1	0	2	18
Enterovirus	10	13	8	12	10	17	8	7	13	8	12	30	148
Enterovirus Coxsackievirus Group B type 4	0	0	0	0	1	1	0	0	0	0	1	0	3
Enterovirus Coxsackievirus Group B type 5	1	0	0	0	0	0	0	0	0	0	0	0	1
Enterovirus Coxsackievirus Group A type 9	1	1	1	0	0	0	0	0	0	0	0	0	3
Enterovirus Coxsackievirus Group A type 16	1	0	0	0	0	0	0	0	0	0	0	1	2
Enterovirus Coxsackievirus Group A type 24	0	0	0	0	0	0	0	0	0	0	0	1	1
Enterovirus Echovirus type 3	0	0	0	0	0	0	0	0	0	0	0	1	1
Enterovirus Echovirus type 6	0	0	3	0	1	0	0	0	0	1	0	6	11
Enterovirus Echovirus type 7	0	0	0	0	0	0	0	0	0	0	0	3	3
Enterovirus Echovirus type 11	0	0	0	0	0	0	0	0	0	6	0	2	8
Enterovirus Echovirus type 18	2	2	0	0	0	0	0	0	0	0	0	0	4
Enterovirus Echovirus type 27	0	0	0	0	0	0	0	0	0	0	0	2	2
Enterovirus Echovirus type 30	0	0	0	2	1	3	0	3	0	1	0	0	10
Enterovirus Enterovirus type 71	0	0	3	0	5	5	0	0	0	0	0	2	15
Enterovirus Untypable	0	0	0	0	0	0	0	0	1	1	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 summarises viral and mycoplasma pneumoniae infections reported in New Zealand in 2007. 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

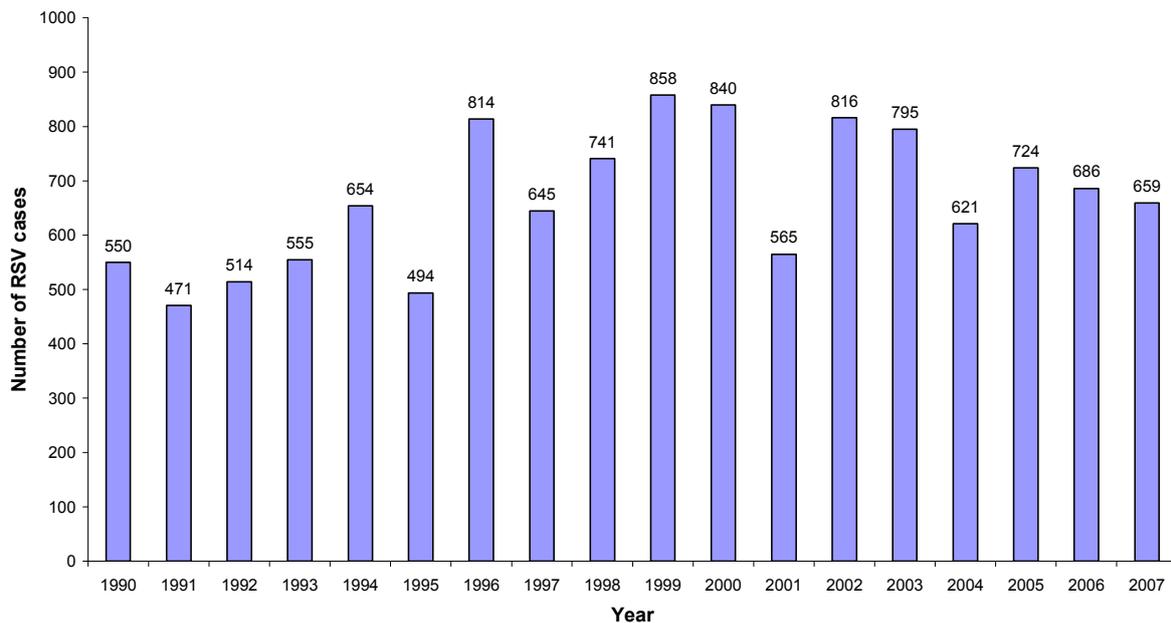
### *Influenza*

The influenza annual report in 2007 is available at the website:  
[http://www.surv.esr.cri.nz/virology/influenza\\_annual\\_report.php](http://www.surv.esr.cri.nz/virology/influenza_annual_report.php)

### *Respiratory Syncytial Virus (RSV)*

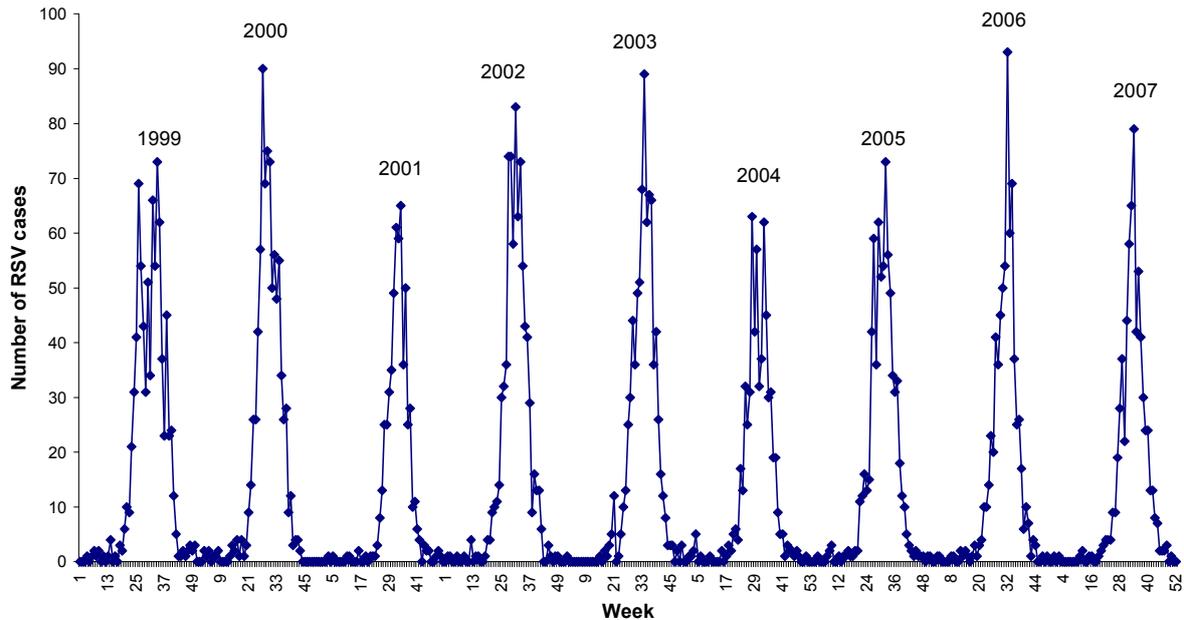
Based on laboratory-confirmed RSV cases reported to ESR, the RSV activity in 2007 was slightly lower than that of 2006 (Figure 1). During January to December 2007, a total of 659 RSV infections were reported compared with 686 cases reported during the same period in 2006. Over the previous 18 years, the highest RSV activity occurred in 1999 with 858 cases reported.

**Fig 1 Annual laboratory-confirmed RSV cases, 1990-2007**



In 2007, the RSV activity started to increase in July and peaked in Week 34 (middle of August), 2 weeks later than the peak in 2006 (Figure 2). The RSV activity remained high until Week 37 (early September). Since then, the number of RSV cases declined to a baseline level.

**Fig 2 RSV laboratory-confirmed cases by week, 1999-2007**



## 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 148 enteroviruses reported in 2007, compared with 163 in 2006. A total of 66 (43 %) enterovirus isolates were referred for serotyping. Among serotyped enteroviruses, enterovirus type 71 was the most predominant serotype with 15 isolations (23%), compared with one isolation in 2006. There were 11 isolations of echovirus type 6 (16.7%) and 10 of echovirus type 30 (15.2%), compared with 7 of echovirus type 6 and none of echovirus type 30 in 2006 respectively.

### *Adenoviruses*

There were a total of 654 adenoviruses reported in 2007, compared with 274 in 2006. This is a significant increase. Of these, 585 (89%) adenoviruses were referred for serotyping using adenovirus antisera 1-31, 37 and 41. The predominant serotypes in 2007 were adenovirus type 8 (264, 45.1%), type 3 (146, 25%) and type 1 (43, 7.4%).

## MEASLES, MUMPS AND RUBELLA(MMR)

The MMR annual report in 2007 is available in the report “Annual Surveillance Summary 2007” at [http://www.surv.esr.cri.nz/surveillance/annual\\_surveillance.php?we\\_objectID=1300](http://www.surv.esr.cri.nz/surveillance/annual_surveillance.php?we_objectID=1300)