

Air-/Droplet-
Borne
Diseases

Vector-Borne/
Zoonotic
Diseases

Food-/Water-
Borne
Diseases

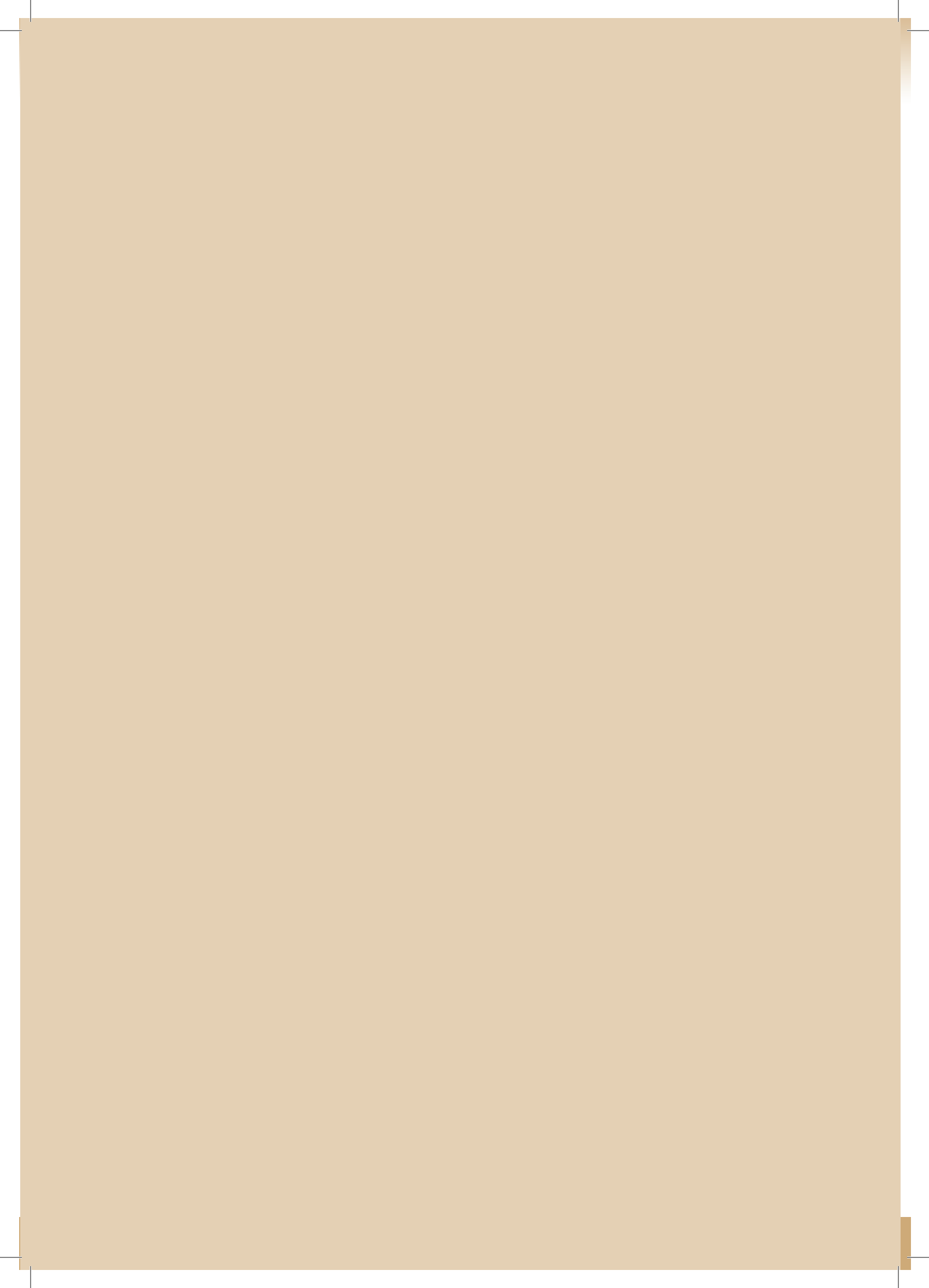
Blood-Borne
Diseases

Environment-
Related
Diseases

HIV/AIDS, STIs,
Tuberculosis
& Leprosy

Childhood
Immunisation

- Hand, Foot and Mouth Disease
- Influenza
- Measles
- Meningococcal Infection
- Mumps
- Pertusis
- Rubella
- Viral Conjunctivitis



I AIR-/DROPLET-BORNE DISEASES

HAND, FOOT AND MOUTH DISEASE (HFMD)

Hand, foot and mouth disease (HFMD) is a common childhood viral disease characterised by brief prodromal fever, followed by pharyngitis, mouth ulcers and rash on the hands and feet. Children may have reduced appetite due to painful oral ulcers erupting on the tongue, gums or inside of the cheeks. A non-pruritic vesicular rash or red spots typically appears on the hands and feet, most commonly on the palms and soles. The common causative agents for HFMD are the *coxsackieviruses type A (CA)*, *echovirus (EC)* and *enterovirus 71 (EV71)*. HFMD can be transmitted from person to person through the faecal-oral or respiratory route.

A total of 20,003 cases of HFMD were reported in 2007, an increase of 30.9% from 15,282 cases reported in

2006 (Figure 1.1). The incidence rate was highest in the 0 – 4 year-old age group, with a male to female ratio of 1.3:1 (Table 1.1). Among the three major ethnic groups, Malays had the highest incidence followed by Chinese and Indians (Table 1.2). No HFMD deaths were reported in 2007.

Viral isolation of *enterovirus 71* was carried out on selected HFMD cases at the KK Women’s and Children’s Hospital (KKH) and from children affected during community outbreaks in pre-school centres. Of the isolates that were tested positive, the majority was *coxsackieviruses type A (CA)* (83.2%), followed by EV 71 (7.9%). The predominant Coxsackievirus serotype identified was CA16 (72.6%), followed by CA6 (11.9%).

Figure 1.1
E-weekly distribution of reported hand, foot and mouth cases, 2006 – 2007

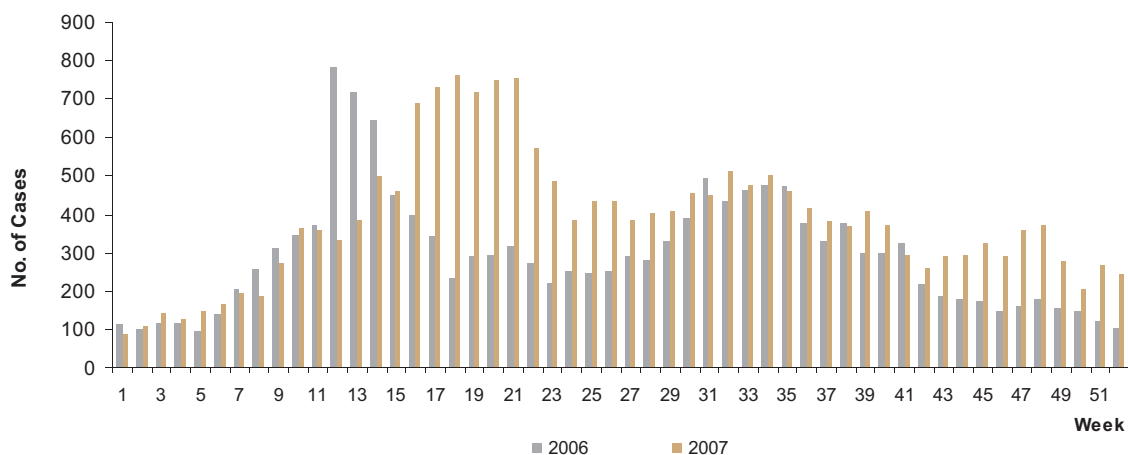


Table 1.1
Age-gender distribution and age-specific incidence rates of reported hand, foot and mouth cases, 2007

Age (Yrs)	Male	Female	Total (%)	Incidence rate per 100,000 population*
0-4	7,053	5,388	12,441 (62.2)	5,972.6
5-14	3,475	2,703	6,178 (30.9)	1,195.7
15-24	227	191	418 (2.1)	58.2
25-34	265	313	578 (2.9)	60.6
35-44	194	154	348 (1.7)	43.0
45-54	21	11	32 (0.16)	4.9
>55	5	3	8 (0.04)	1.1
Total	11,240	8,763	20,003(100.0)	435.9

*Rates are based on 2007 estimated mid-year population.
 (Source: Singapore Department of Statistics)

Table 1.2
Ethnic-gender distribution and ethnic-specific incidence rates of reported hand, foot and mouth cases, 2007

	Male	Female	Total (%)	Incidence rate per 100,000 population*
Singapore Resident				
Chinese	7,884	6,179	14,063 (70.3)	523.4
Malay	1,797	1,381	3,178 (15.9)	647.8
Indian	436	327	763 (3.8)	243.5
Others	400	346	746 (3.7)	810.0
Foreigner	723	530	1253 (6.3)	124.6
Total	11,240	8,763	20,003(100.0)	435.9

*Rates are based on 2007 estimated mid-year population.
 (Source: Singapore Department of Statistics)

Institutional Outbreak of HFMD

There were 1723 reported outbreaks of HFMD in year 2007, each involving two or more cases. Table 1.3 gives a breakdown of HFMD outbreaks at various educational

institutions by attack rate. Two case studies are discussed below.

Table 1.3
Outbreaks of hand, foot and mouth disease in childcare centres/ kindergartens/ schools, 2007

Attack rate (%)	Childcare Centres	Kindergartens	Primary Schools	Enrichment Centres	Other Institutions*
< 10	466	457	434	13	56
10 - 20	169	7	-	16	1
21 - 30	62	1	-	6	-
31 - 40	20	2	-	4	-
41 - 50	8	-	-	1	-
>50	-	-	-	-	-
Total	725	467	434	40	57

*four from a combined childcare/ kindergarten institutions, 35 from international schools and private schools, 10 from special schools and eight from secondary schools

Case Study 1: Childcare centre at Sengkang East Way

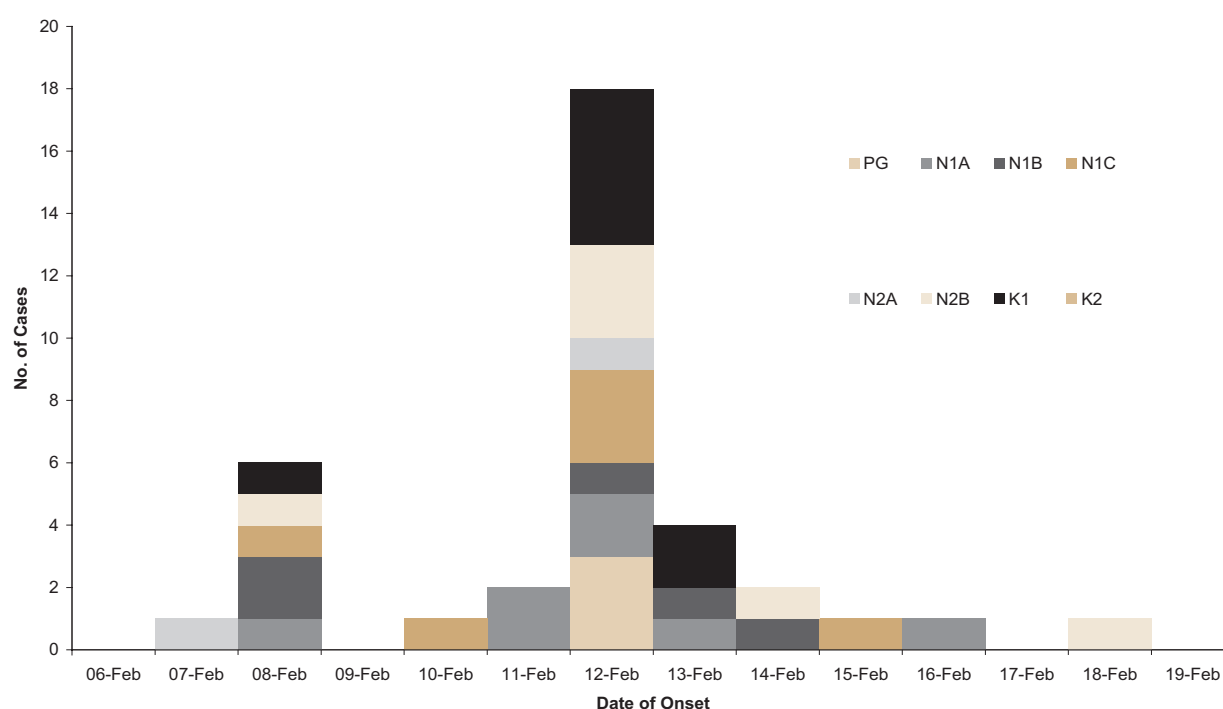
An outbreak of HFMD involving 37 children aged between 2 and 6 years was reported from 7 February to 18 February 2007 in a childcare centre at Sengkang East Way. At the time of the outbreak, the centre had 24 full-time staff and 157 children in 8 classes in Playgroup, Nursery 1, Nursery 2, Kindergarten 1 and Kindergarten 2.

The index case, a four-year-old from the Nursery2A class presented with symptoms on 7 February 2007. The infection spread rapidly amongst other children in the nursery and kindergarten classes. The last reported case was on 18 February 2007 (Figure 1.2). The class-specific attack rates ranged from 0 – 38.9% with an overall attack rate of 23.9% (Table 1.4).

Table 1.4
Attack rates of hand, foot and mouth disease in a childcare centre at Sengkang East Way, February 2007

Class Category	No. Enrolled			No. Affected and Attack Rates					
	Male	Female	Total	Male	%	Female	%	Total	%
PG	6	3	9	2	33.3	1	33.3	3	33.3
N1A	9	9	18	3	33.3	4	44.4	7	38.9
N1B	6	11	17	3	50.0	2	18.2	5	29.4
N1C	5	11	16	3	60.0	3	27.3	6	37.5
N2A	9	11	20	1	11.1	1	9.1	2	10.0
N2B	11	10	21	3	27.3	3	30.0	6	28.6
K1	16	9	25	6	37.5	2	22.2	8	32.0
K2	21	8	29	0	0.0	0	0.0	0	0.0
Total	83	72	155	21	25.3	16	22.2	37	23.9

Figure 1.2
Time distribution of 37 cases of hand, foot and mouth disease in a child care centre at Sengkang East Way, 7-18 February 2007



Case Study 2: Childcare centre at Toh Yi Drive

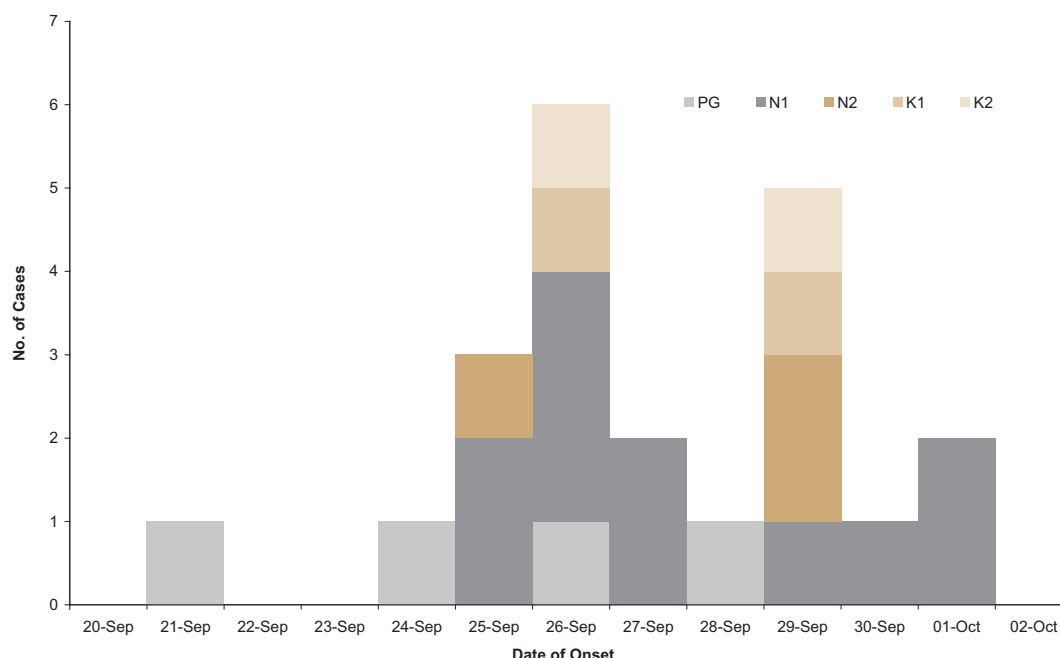
The outbreak in a childcare centre at Toh Yi Drive involving 22 children aged from 1 to 8 years was reported from 21 September to 1 October 2007. At the time of the outbreak, the centre had 6 full-time staff and 50 children in 6 classes, Playgroup, Nursery 1, Nursery 2, Kindergarten 1, Kindergarten 2 and BASC.

The outbreak started with a child attending playgroup class who developed symptoms on 21 September 2007. The infection spread rapidly amongst children in the classes. The last reported case was on 1 October 2007 (Figure 1.3). The class-specific attack rate ranged from 0 – 78.6% with an overall attack rate of 44.0% (Table 1.5).

Table 1.5
Attack rates of 22 cases of hand, foot and mouth disease in a child care centre at Toh Yi Drive, 21 September - 1 October 2007

Class Category	No. Enrolled			No. Affected and Attack Rates					
	Male	Female	Total	Male	%	Female	%	Total	%
PG	5	2	7	3	60.0	1	50.0	4	57.1
N1	7	7	14	5	71.4	6	85.7	11	78.6
N2	6	0	6	3	50.0	0	0.0	3	50.0
K1	8	3	11	1	12.5	1	33.3	2	18.2
K2	4	5	9	0	0.0	2	40.0	2	22.2
BASC	2	1	3	0	0.0	0	0.0	0	0.0
Total	32	18	50	12	37.5	10	55.6	22	44.0

Figure 1.3
Time distribution of 22 cases of hand, foot and mouth disease in a child care centre at Toh Yi Drive, 21 September - 1 October 2007



INFLUENZA

Influenza is an acute viral disease of the respiratory tract characterised by fever and one or more symptoms of sore throat, cough, coryza, headache and myalgia. It is spread from person to person mainly through infec-

tious respiratory secretions released during coughing and sneezing.

The causative agent is the influenza virus and three types of influenza virus (influenza A, B and C) are recog-

nised. The Influenza type A viruses include three subtypes (H1N1, H2N2 and H3N2) that infect humans and have been associated with pandemics and widespread epidemics. Influenza type B is occasionally associated with regional epidemics, and influenza type C is usually associated with sporadic cases and minor localised outbreaks. Diagnosis is based on the clinical recognition of influenza-like illness with or without laboratory confirmation and strain characterisation.

In the temperate and cold climates, influenza reaches peak incidence in winter. As the Northern and Southern Hemisphere have winter at different times of the year, there are two flu seasons each year: December-March in the Northern Hemisphere; June-September in the Southern Hemisphere¹.

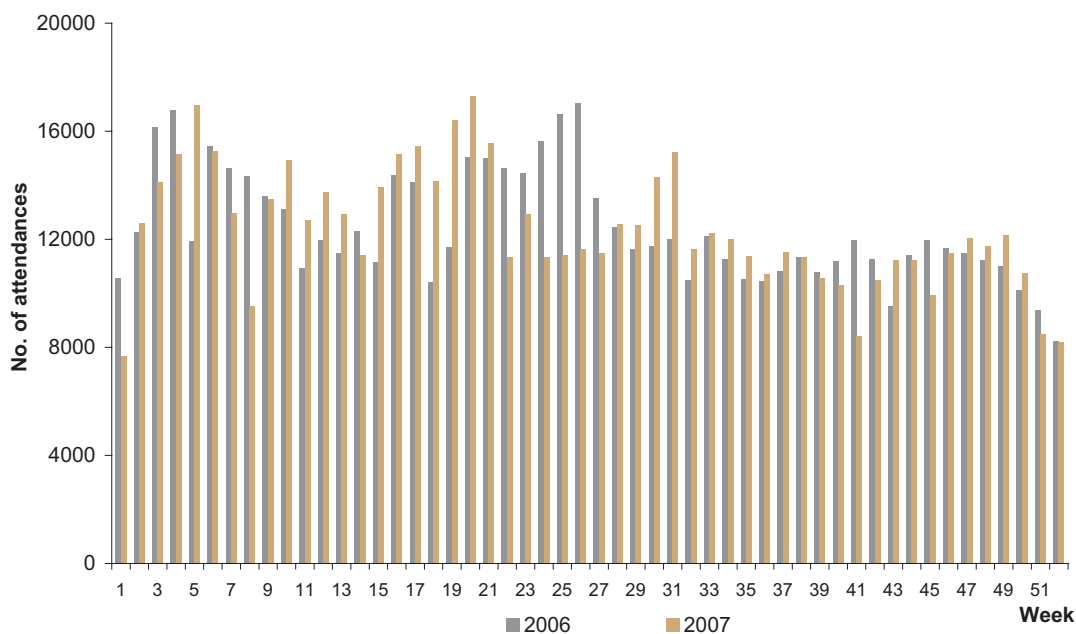
In tropical and subtropical areas, influenza epidemics can occur either twice a year or even throughout the year.

In Singapore, influenza viruses circulate year round, with a bimodal increase in incidence observed in April–July and November–January.

During 2007, the weekly attendance for acute respiratory infections (ARI) at the polyclinics and hospital emergency departments (ED) was monitored as a proxy indicator for influenza activity (Note: ARI represents a mixture of respiratory illnesses and the proportion of influenza cases presenting with ARI varies with the level of influenza activity. The weekly number of admissions due to ARI at restructured hospitals was also monitored.

There were a total of 644,304 attendances at polyclinics for ARI in 2007, a decrease of 0.2% over the 645,454 seen in 2006. No clear seasonal pattern for ARI was observed although higher weekly ARI incidences were observed in E-week 5 and E-week 20. (Figure 1.4)

Figure 1.4
E-weekly distribution of acute respiratory infection attendance at polyclinics, 2006 – 2007

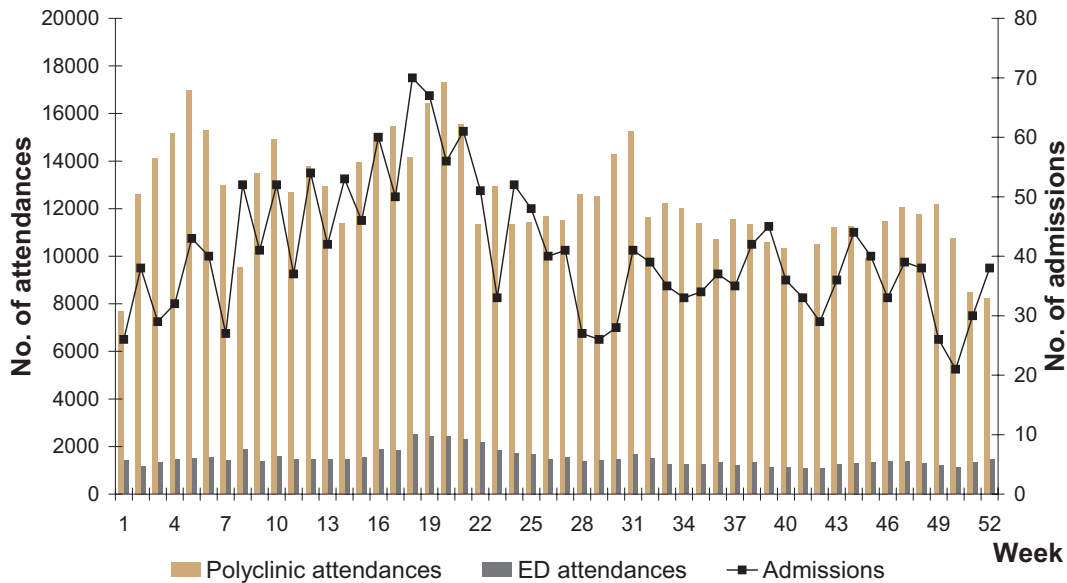


Annual total of 78,341 ARI cases were seen at the emergency departments (ED) in 2007 and it has increased by 29.3% compared to 2006. The average weekly ARI

attendance at ED was 1,507 and higher attendances were observed in E-weeks 5, 19 and 26 (Figure 1.5).

¹ *Epidemiological Bulletin*, Vol. 22 No. 3, September 2001

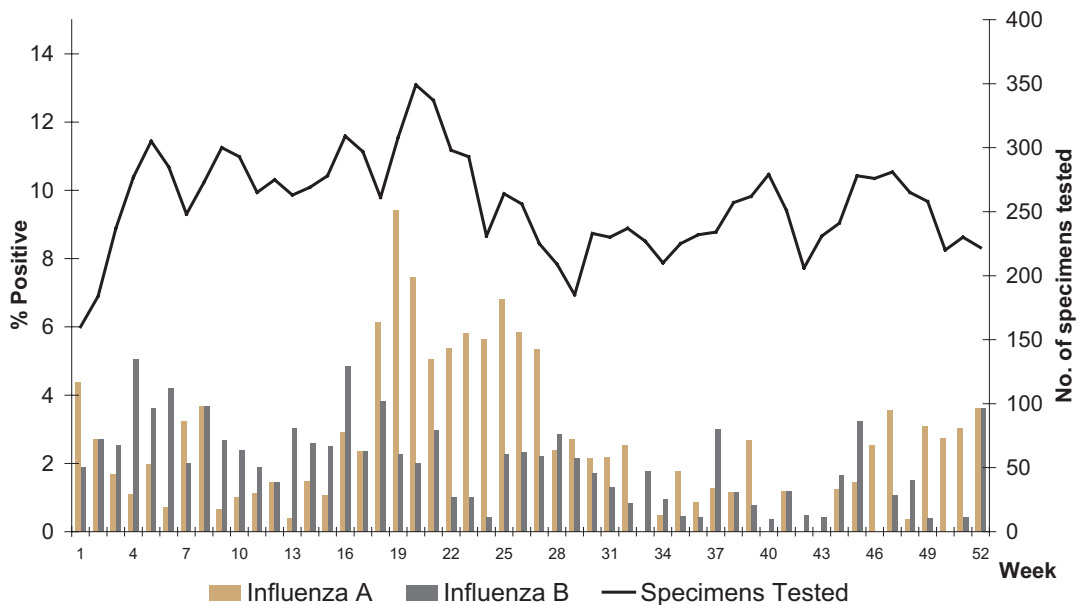
Figure 1.5
Weekly polyclinic attendance, emergency department (ED) attendances and admissions for ARI, 2007



Virological surveillance of influenza viruses was carried out on throat and nasopharyngeal specimens obtained from polyclinics, hospitals and private clinic throughout the year. The isolation and typing of influenza viruses was carried out at the National Influenza Centre (NIC) in the Department of Pathology, Singapore General Hospital and National Public Health Laboratory, Ministry

of Health. Moderate influenza activity was observed in E-week 1 - 15 with a range of 2.9% - 7.3% of respiratory specimens testing positive for influenza viruses. A rapid surge in influenza activity was detected in E-week 18 which continued until E-week 27. Influenza activity peaked in E-week 19 with 11.7% of specimens testing positive for influenza viruses (Figure 1.6).

Figure 1.6
Virological surveillance of influenza A & B, 2007



Influenza A continued to dominate over influenza B, with influenza A H1N1 subtype making way for influenza A H3N2 subtype. Of 93 influenza A isolates, 73.1% belonged to H3N2 subtype. Influenza B was responsible for

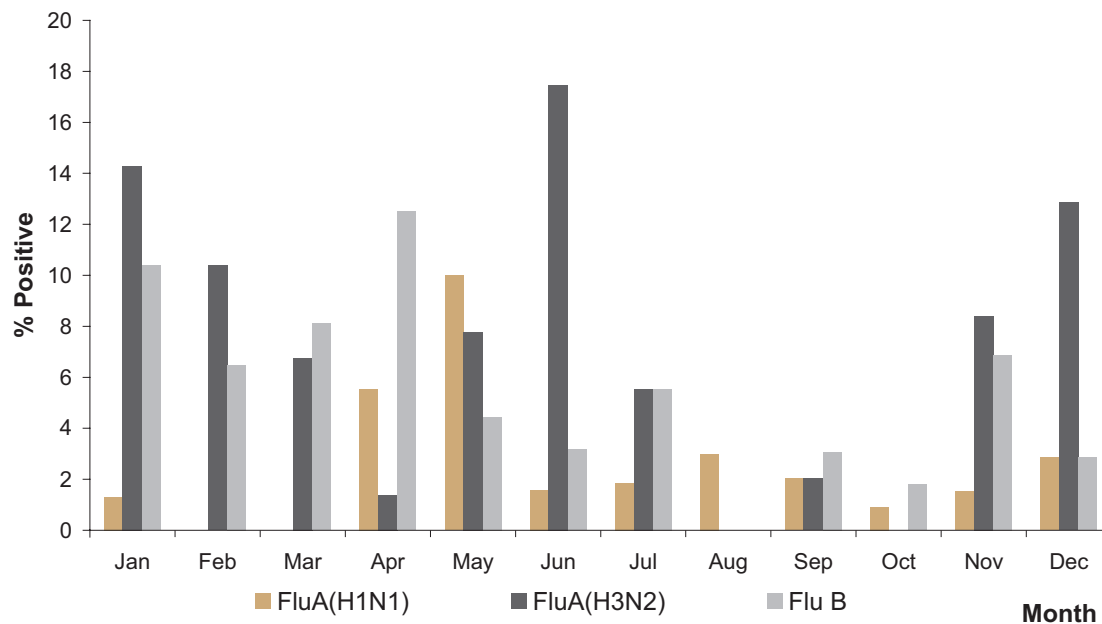
a significant 36.3% of influenza cases. While influenza A accounted for the bigger peak from May to July, influenza B was mainly active from January through March. A/Wisconsin/67/2005 (H3N2)-like strains remained in circula-

tion, in the presence of some A/Brisbane/10/07 (H3N2)-like strains. The H1N1 viruses that were detected were A/Solomon Islands/3/06-like that first appeared from July 2006. B/Ohio/1/05, which made its appearance towards the end of 2005 and had remained active throughout 2006, co-circulated with B/Florida/07/2004-like strains

until the later part of the year when the former was not detected. B/Shanghai/361/2002-like strains and B/Malaysia/2506/04 strains were occasionally isolated.

No H5N1 virus was detected from suspected avian influenza cases.

Figure 1.7
Influenza virus isolates, 2007



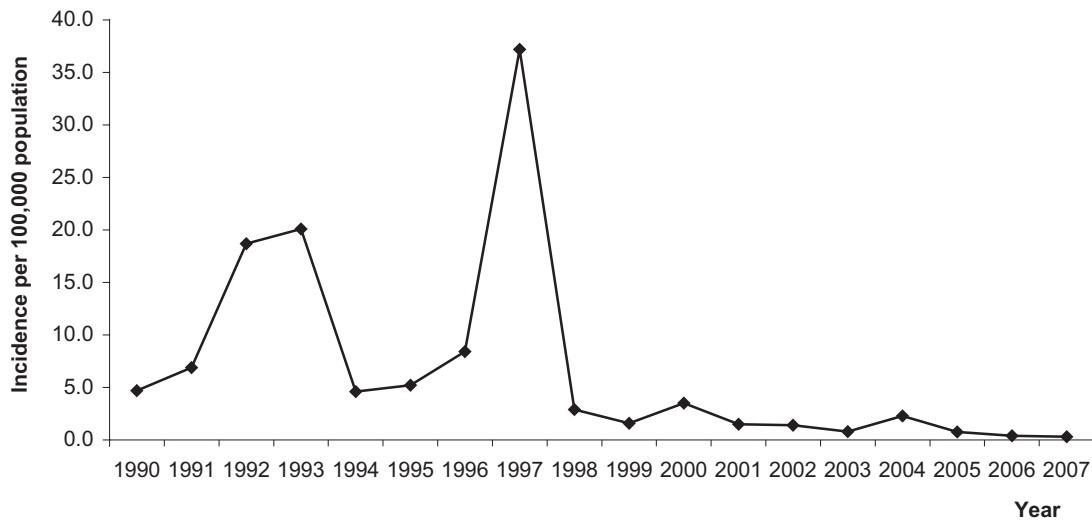
MEASLES

Measles is an acute, highly communicable viral disease caused by the measles virus, a member of the genus *Morbillivirus* of the family *Paramyxoviridae*. The mode of transmission is airborne by droplet spread, direct contact with nasal or throat secretions of an infected person.

In Singapore, the number of reported measles cases has rapidly declined with the introduction of compul-

sory measles vaccination in August 1985. In 1992 and 1997, there was an increase in the number of reported cases (Figure 1.8). All age groups were affected and as a result, the “catch-up” immunisation initiative was implemented in July – November 1997 and the two-dose MMR vaccination regime was implemented in January 1998. The incidence of measles has remained at a low level since then.

Figure 1.8
Incidence of reported measles cases, 1990 – 2007



A total of 15 laboratory confirmed cases of measles were reported in 2007 compared to 28 in 2006 (Figure 1.9). Four cases were foreigners seeking medical treatment in Singapore and were not included in the analysis. The highest incidence rate was observed in children under

the age of 4 years old. Among the three major ethnic groups, Chinese had the highest incidence rate followed by Malays and Indians (Tables 1.6 and 1.7). Only 2 cases had one dose of MMR vaccination prior to onset of illness (Source: National Immunisation Registry).

Figure 1.9
E-weekly distribution of reported lab confirmed measles cases, 2006 – 2007

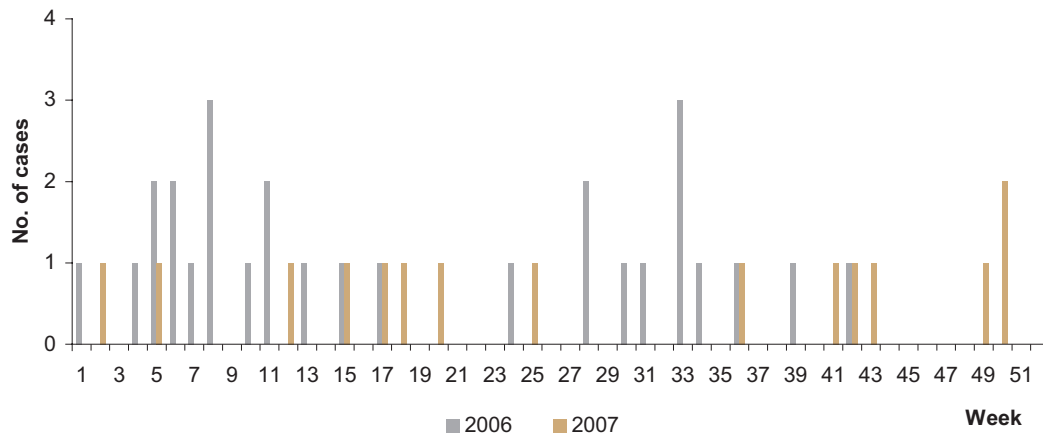


Table 1.6
Age-gender distribution and age-specific incidence of reported measles cases, 2007

Age (Yrs)	Male	Female	Total (%)	Incidence rate per 100,000 population*
0 - 6mths	0	0	0 (0.0)	0.0
7 - 11mths	1	0	1 (9.1)	6.3
1 - 4	4	0	4 (36.4)	2.4
5 - 9	2	0	2 (18.2)	0.8
10 - 14	0	1	1 (9.1)	0.4
15 - 24	1	0	1 (9.1)	0.1
25 - 34	0	0	0 (0.0)	0.0
35 - 44	1	1	2 (18.2)	0.2
45 - 54	0	0	0 (0.0)	0.0
55+	0	0	0 (0.0)	0.0
Total	9	2	11 (100.0)	0.2

[^]Excluding four foreigners seeking medical treatment in Singapore

*Rates are based on 2007 estimated mid-year population.

(Source: Singapore Department of Statistics)

Table 1.7
Ethnic-gender distribution and ethnic-specific incidence rate of reported measles cases, 2007

	Male	Female	Total (%)	Incidence rate per 100,000 population*
Singapore Resident				
Chinese	3	0	3 (27.3)	0.1
Malay	2	0	2 (18.2)	0.4
Indian	1	0	1 (9.1)	0.3
Others	1	2	3 (27.3)	3.3
Foreigner	2	0	2 (18.2)	0.2
Total	9	2	11 (100.0)	0.2

[^]Excluding four foreigners seeking medical treatment in Singapore

*Rates are based on 2007 estimated mid-year population.

(Source: Singapore Department of Statistics)

MENINGOCOCCAL INFECTION

Meningococcal meningitis is an acute bacterial disease, characterised by sudden onset of fever, intense headache, nausea and often vomiting and stiff neck. Frequently there is a petechial rash with pink macules or very rarely, vesicles. The causative agent is *Neisseria meningitidis* with serotype groups, namely, A, B, C, Y, W-135, X and Z. The mode of transmission is via direct

contact, including respiratory droplets from nose and throat of infected persons.

In 2007, there were five reported cases of meningococcal infection compared to 10 cases in 2006 (Table 1.8). All the cases were laboratory confirmed with positive blood culture, three were *neisseria meningitidis* group B, one group A and one was untyped (Table 1.9).

Table 1.8
Age-gender distribution and age-specific incidence rates of reported meningococcal infection cases, 2007

Age (Yrs)	Male	Female	Total (%)	Incidence rate per 100,000 population*
0 - 4	0	0	0	0.0
5 - 14	0	0	0	0.0
15 - 24	0	0	0	0.0
25 - 34	0	0	0	0.0
35 - 44	0	0	0	0.0
45 - 54	3	0	3 (60.0)	0.5
55+	1	1	2 (40.0)	0.4
Total	4	1	5 (100.0)	0.1

*Rates are based on 2007 estimated mid-year population.
(Source: Singapore Department of Statistics)

Table 1.9
Epidemiological data of five reported meningococcal infection cases, 2007

Case particulars				
Gender	Age (Yrs)	Ethnic group	Causative agent	Status
M	45	Chinese	<i>Neisseria meningitidis</i> Grp A	Recovered
M	52	Chinese	<i>Neisseria meningitidis</i> untyped	Recovered
F	55	Chinese	<i>Neisseria meningitidis</i> Grp B	Recovered
M	66	Chinese	<i>Neisseria meningitidis</i> Grp B	Recovered
F	71	Malay	<i>Neisseria meningitidis</i> Grp B	Recovered

MUMPS

Mumps or infectious parotitis is an acute viral disease characterised by fever, swelling and tenderness of one or more salivary glands. The mumps virus, a member of the genus Paramyxovirus, is antigenically related to the parainfluenza viruses. The mode of transmission is airborne spread via infected droplet or by direct contact with the saliva of an infected person.

The incidence of mumps in Singapore increased five-fold between 1998 and 1999, from 1,183 cases (30.2

per 100,000 population) to 6,384 cases (161.6 per 100,000 population). Children below age 15 were the most affected age-group. This increase was due to the low protective efficacy of vaccines containing the Rubini strain, which had been used between the years 1993 – 1995. Following this resurgence, a more efficacious vaccine replaced the Rubini strain-containing vaccine. Since then, the annual incidence of mumps has declined rapidly to 780 cases (17.0 per 100,000 population) in 2007 (Figure 1.10).

Figure 1.10
Incidence of reported mumps cases, 1990 – 2007

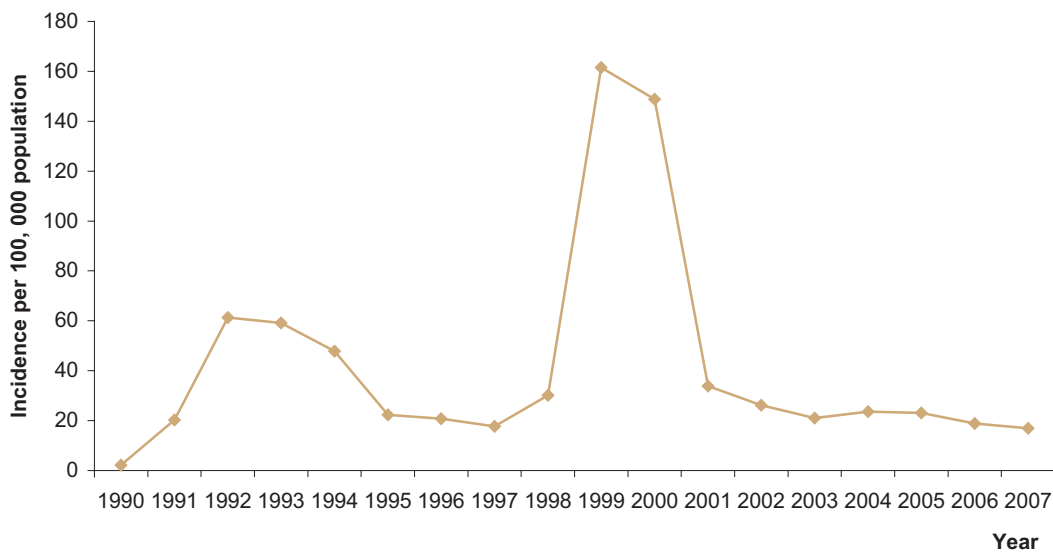
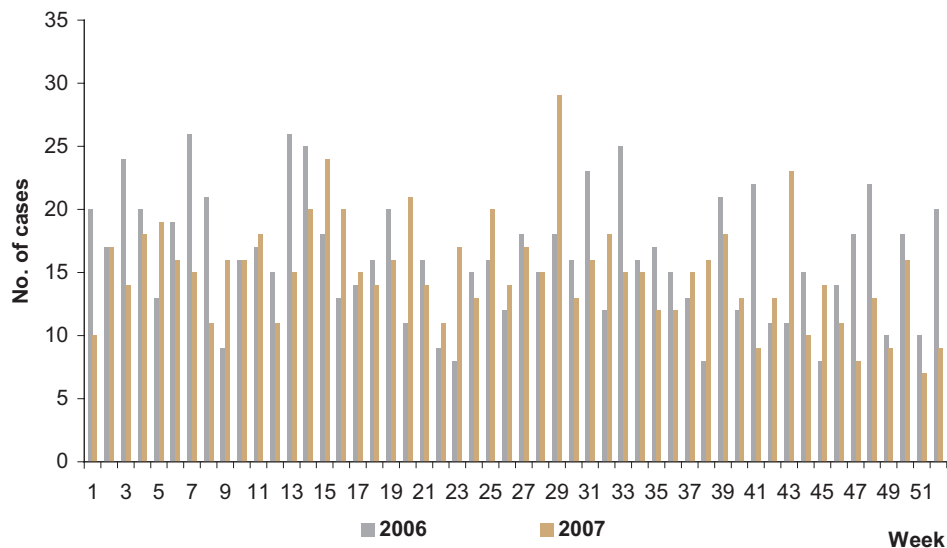


Figure 1.11
E-weekly distribution of reported mumps cases, 2006 – 2007



A total of 780 cases were reported in 2007, a decrease of 7.6% from the 844 cases reported in 2006 (Figure 1.11). The highest incidence rate was observed in the 5 – 9 years age group (Table 1.10). Among the three ma-

ior ethnic groups, Malay had the highest incidence rate followed by Chinese and Indian. Foreigners comprised 18.2% of cases (Table 1.11).

Table 1.10
Age-gender distribution and age-specific incidence of reported mumps cases, 2007

Age (Yrs)	Male	Female	Total (%)	Incidence rate per 100,000 population*
0 - 6mths	0	0	0 (0.0)	0.0
7 - 11mths	1	0	1 (0.1)	6.3
1 - 4	71	42	113 (14.5)	66.5
5 - 9	141	59	200 (25.6)	81.8
10 - 14	46	31	77 (9.9)	28.3
15 - 24	33	41	74 (9.5)	10.3
25 - 34	62	76	138 (17.7)	14.5
35 - 44	65	35	100 (12.8)	12.4
45 - 54	24	26	50 (0.0)	7.7
55+	13	14	27 (3.5)	3.7
Total	456	324	780 (100.0)	17.0

*Rates are based on 2007 estimated mid-year population.
(Source: Singapore Department of Statistics)

Table 1.11
Ethnic-gender distribution and ethnic-specific incidence of reported mumps cases, 2007

	Male	Female	Total (%)	Incidence rate per 100,000 population*
Singapore Resident				
Chinese	258	184	442 (56.7)	16.4
Malay	79	60	139 (17.8)	28.3
Indian	22	15	37 (4.7)	11.8
Others	12	8	20 (2.6)	21.7
Foreigner				
	85	57	142 (18.2)	14.1
Total	456	324	780 (100.0)	17.0

*Rates are based on 2007 estimated mid-year population.
(Source: Singapore Department of Statistics)

PERTUSSIS

Pertussis is an acute bacterial infection of the respiratory tract caused by *Bordetella pertussis*. The mode of transmission is airborne by droplet spread, direct contact with nasal or throat secretions of an infected person.

A total of 38 laboratory confirmed cases of pertussis were reported in 2007 compared to three in 2006 (Figure 1.12). Two cases were foreigners seeking medical treat-

ment in Singapore and were not included in the analysis. The highest incidence rate was observed in children under 6 months of age. Among the three major ethnic groups, Malays had the highest incidence rate followed by Chinese and Indians (Tables 1.12 and 1.13). Only nine cases had at least one dose of DTP a vaccination prior to onset of illness (Source: National Immunisation Registry).

Figure 1.12
E-weekly distribution of reported lab confirmed pertussis cases, 2006 – 2007

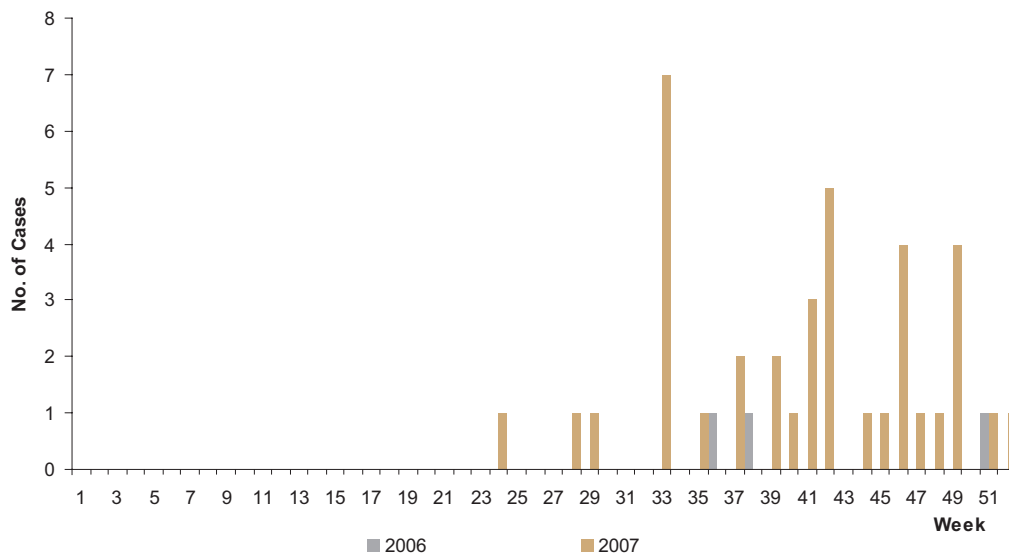


Table 1.12
Age-gender distribution and age-specific incidence of reported pertussis cases[^], 2007

Age (Yrs)	Male	Female	Total (%)	Incidence rate per 100,000 population*
< 6 mths	18	14	32 (88.9)	153.5
6 mths – < 1yr	2	1	3 (8.3)	14.4
1 – 4	0	0	0 (0.0)	0.0
5 – 9	1	0	1 (2.8)	0.4
10 – 14	0	0	0 (0.0)	0.0
15 – 24	0	0	0 (0.0)	0.0
25 – 34	0	0	0 (0.0)	0.0
35 – 44	0	0	0 (0.0)	0.0
45 – 54	0	0	0 (0.0)	0.0
55+	0	0	0 (0.0)	0.0
Total	21	15	36 (100.0)	0.8

[^]Excluding two foreigners seeking medical treatment in Singapore
 *Rates are based on 2007 estimated mid-year population.
 (Source: Singapore Department of Statistics)

Table 1.13

Ethnic-gender distribution and ethnic-specific incidence rate of reported pertussis cases[^], 2007

	Male	Female	Total (%)	Incidence rate per 100,000 population*
Singapore Resident				
Chinese	7	7	14 (38.9)	0.5
Malay	11	5	16 (44.4)	3.3
Indian	3	2	5 (13.9)	1.6
Others	0	1	1 (2.8)	1.1
Foreigner	0	0	0 (0.0)	0.0
Total	21	15	36 (100.0)	0.8

[^]Excluding two foreigners seeking medical treatment in Singapore

*Rates are based on 2007 estimated mid-year population.

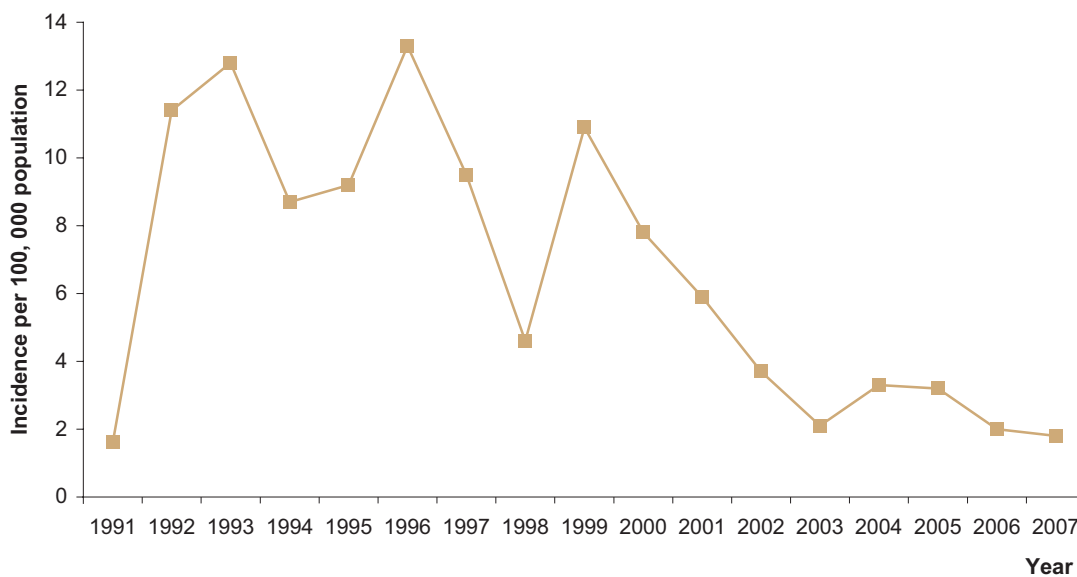
(Source: Singapore Department of Statistics)

RUBELLA

Rubella is a mild febrile viral disease with a diffuse punctate and maculopapular rash sometimes resembling that of measles or scarlet fever. It is also commonly known as German measles. The causative agent is the rubella virus (*Rubivirus*) from the *Togaviridae* family and it is spread through droplets or by close contact with the nasopharyngeal secretions of an infected person.

Rubella incidence fluctuated during 1991 – 1999. This was followed by a steady decline from 1999 (10.9 per 100,000 population) to 2007 (1.8 per 100,000 population) (Figure 1.13).

Figure 1.13
Incidence of reported rubella cases, 1991 – 2007



A total of 83 cases of rubella were reported in 2007, a decrease of 7.8% from the 90 cases reported in 2006 (Figure 1.14). The highest incidence rate was observed in the 0 – 4 years age group (11.0 per 100, 000) (Table 1.14). Of the 43 female cases, 55.8% (2.1 per 100,000 female populations) were in the reproductive age group of 15 – 44 years. Among the three major ethnic groups,

Chinese had the highest incidence rate, followed by Malay and Indian. Foreigners comprised 34.9% of cases (Table 1.15).

There were no reported cases of congenital rubella but there was one termination of pregnancy as a result of acquired maternal rubella infection.

Figure 1.14
E-weekly distribution of reported rubella cases, 2006 – 2007

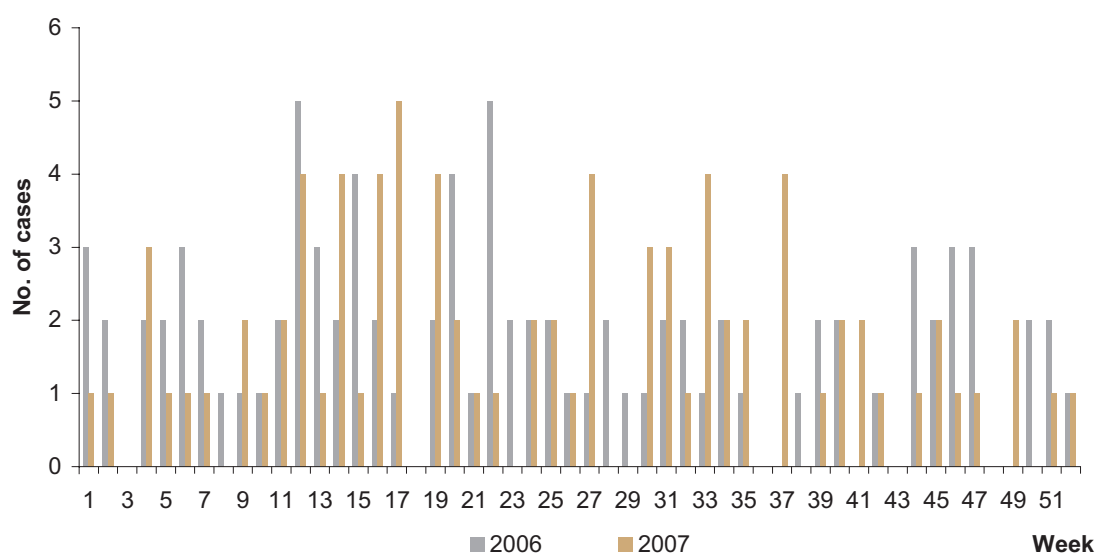


Table 1.14
Age-gender distribution and age-specific incidence of reported rubella cases, 2007

Age (Yrs)	Male	Female	Total (%)	Incidence rate per 100,000 population*
0 - 6mths	2	1	3 (3.6)	13.4
7 - 11mths	3	4	7 (8.4)	43.9
1 - 4	5	8	13 (15.7)	7.7
5 - 9	0	0	0 (0.0)	0.0
10 - 14	2	1	3 (3.6)	1.1
15 - 24	10	8	18 (21.7)	2.5
25 - 34	9	12	21 (25.3)	2.2
35 - 44	3	4	7 (8.4)	0.9
45 - 54	6	4	10 (12.0)	1.5
55+	0	1	1 (1.2)	0.1
Total	40	43	83 (100.0)	1.8

*Rates are based on 2007 estimated mid-year population.
(Source: Singapore Department of Statistics)

Table 1.15
Ethnic-gender distribution and ethnic-specific incidence of reported rubella cases, 2007

	Male	Female	Total (%)	Incidence rate per 100,000 population*
Singapore Residents				
Chinese	24	16	40 (48.2)	1.5
Malay	1	10	11 (13.3)	2.2
Indian	0	1	1 (1.2)	0.3
Others	0	2	2 (2.4)	2.2
Foreigner	15	14	29 (34.9)	2.9
Total	40	43	83 (100.0)	1.8

*Rates are based on 2007 estimated mid-year population.
 (Source: Singapore Department of Statistics)

VIRAL CONJUNCTIVITIS

Viral conjunctivitis is a clinical syndrome characterised by inflammation of the conjunctiva of the eyes beginning with lacrimation, irritation and hyperemia of the palpebral and bulbar conjunctivae. The common causative agents are the adenoviruses and the enteroviruses.

In 2007, the restructured polyclinics reported 38,344 attendances for conjunctivitis, an increase of 17% from the 32,807 attendances reported in 2006 (Figure 1.15). No outbreak of conjunctivitis was reported in 2007.

Figure 1.15
E-weekly distribution of reported conjunctivitis cases, 2006 – 2007

