

Statistics
of
Communicable Diseases and
Surveillance Report
Republic of China
2008

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Foreword

I am pleased to present to you the 2008 Statistics of Communicable Diseases and Surveillance Report by Taiwan Centers for Disease Control (Taiwan CDC).

Constructing a highly sensitive, prompt, effective and international disease surveillance system that provides the earliest warning possible has always been among Taiwan CDC's top priorities. It is because an efficient early warning system provides a good basis for disease prevention. On the other hand, communicable disease statistics is the most fundamental tool for disease surveillance, public health policy-making and implementation.

Since the 1970's, the Department of Health (DOH) began establishing specific communicable disease surveillance systems. In 1993, a more integrated system, the "Communicable Disease Case Reporting and Management System", was constructed; the system was used to transmit and register cases of communicable diseases along with the cases' biospecimen information. In July 1997, information technology was incorporated into disease surveillance. Case reporting systems were then included into the Health Information Network (HIN). In July 2001, the case reporting systems became web-based to facilitate electronic transmission of surveillance data, thus improving the timeliness and completeness of case reporting and investigation. In 1993, Taiwan CDC began publishing the "Annual Report of Communicable Disease Statistics in the Taiwan-Fukien Area". In 1995, Taiwan CDC published the "Annual Report of Communicable Disease Surveillance".

In 1996, the two aforementioned publications were combined to produce the “Statistics of Communicable Diseases and Surveillance Report”.

Every year, the more important acute infectious diseases in Taiwan include influenza, dengue fever and enterovirus infection. To accomplish the goal of effective surveillance and early detection, Taiwan CDC has established several specific surveillance systems to more comprehensively track epidemic trends in order to prevent and control the spread of infectious disease promptly. In addition, Taiwan CDC has also set up the “Real-time Outbreak and Disease Surveillance System”, which utilizes a network of more than 150 medical institutions in Taiwan to transfer the diagnosis data of patients who visited the emergency department automatically and timely to Taiwan CDC. As a result, any abnormal situation concerning any disease or syndrome can be analyzed as early as possible. In terms of control and prevention of important chronic diseases such as tuberculosis, human immunodeficiency virus infection and acquired immune deficiency syndrome, Taiwan CDC has continued to track and manage those cases. Over the years, the number of new cases has been decreasing, which is attributed to the co-operation of all health personnel.

I hope this annual report can enhance public awareness and understanding of communicable disease surveillance system. To further improve the publication, any comments and suggestions from readers and experts in all fields would be greatly appreciated.



Steve Hsu-Sung Kuo
Director-General
Centers for Disease Control, Taiwan

Statistics of Communicable Diseases and Surveillance Report

Republic of China

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Acknowledgement

Explanatory Notes

1. Taiwan in this Report includes Taiwan Island, Penghu, Kinmen and Matsu.
2. The Report includes the notifiable diseases* and other relevant communicable diseases. Sources of information “Report of cases of communicable and emerging infectious disease, include suspected cases”** are filled or submitted on-line by medical personnel and reported to local health agencies.
3. Definitions of terms used in the Report:
 - (1) Notifiable diseases: Communicable diseases listed in Article 3, Communicable Disease Control Act and those in AIDS Prevention and Control Act.
 - (2) Reported cases: Cases of communicable disease or suspected cases detected by physicians while diagnosing and treating patients, and statistic of reported cases using the “Report of cases of communicable and emerging infectious disease, include suspected cases” form.
 - (3) Confirmed cases: Reported cases that are diagnosed or found positive by CDC laboratory testing or other verified institutions; “Pertussis” confirmation should fit with the clinical symptoms and determined epidemiologically associated with positive cases thus identified; Gonorrhea, Syphilis, HIV Infection and AIDS (Acquired immune deficiency syndrome) cases should be confirmed by laboratory testing; moreover, AIDS should comply with the definition of disease; Acute Flaccid Paralysis* cases should be verified by the Task Group on the Investigation of Acute Flaccid Paralysis of the CDC in Department of Health.
 - (4) SMYF Program (a.k.a the third phase of the Poliomyelitis, Neonatal Tetanus, Congenital Rubella Syndrome and Measles Eradication Program): The Executive Yuan approved the implementation of the first phase of the program in 1990. The program was implemented from 1991 through 1996. The second phase of the program was approved in 1996 and implemented from 1997 through 2001. The third phase of the program was approved in 2001 and has been implemented since 2002 to 2006. The fourth phase of the program was approved in 2006 and has been implemented since 2007 to 2011. The goal of the program is to eradicate Measles by 2010 and keep

Neonatal Tetanus, Congenital Rubella Syndrome and Poliomyelitis under effective control.

(5) Unspecified hepatitis: Cases that are non-A / non-B hepatitis and that can neither be classified as hepatitis C, D or E.

4. Analysis standards:

(1) By locality: The actual residential locality of the confirmed case.

(2) By age group: The actual age of the confirmed case.

(3) By month: The actual disease onset month of the confirmed case. The number of Syphilis, Gonorrhoea, HIV Infection and AIDS were estimated from the day of diagnostic. The number of TB was estimated by the day of notified.

(4) By year: The actual disease onset year of the confirmed case. The number of Syphilis, Gonorrhoea, HIV infection and AIDS were estimated from the day of diagnostic. The number of TB was estimated by the day of notified.

(5) By week: Please refer to Appendix 4 for further details. Date is calculated according to the following regulations set by the Office of Statistics of the Department of Health:

I. January 1 will be the first day of the first week in a year. While, December 31 will be the last day of the last week. There are 53 weeks in a year.

II. A week is Sunday through Saturday.

III. There are about four to five weeks in a month.

IV. If the first and the last weeks of a year do not amount to seven days, they will still be counted as a week.

V. The last week of a month should amount to five days. If not, the days are counted as part of the next month.

(6) In the 1999 annual statistics report, the tuberculosis statistics included only confirmed cases of open (active) and non-open (non-active) pulmonary tuberculosis, but not cases of pulmonary tuberculosis complicated with non-pulmonary tuberculosis. In compliance with the amendment made to the Communicable Diseases Control Act in 1999 and the intensified control of open pulmonary tuberculosis, CDC began to include and tabulate open pulmonary tuberculosis (including open pulmonary tuberculosis and open pulmonary tuberculosis with pulmonary and non-pulmonary complications) and other tuberculosis (all tuberculosis cases except the aforementioned open pulmonary

tuberculosis) in the tuberculosis statistics. For international comparison, Tuberculosis has been categorized as smear positive and others in 2006.

(7) Starting from 2002, only Taiwanese HIV infection and AIDS cases are analyzed.

(8) From 2000 to 2005, Mumps and Varicella had been reported with secondary data; and had been reported with detailed information since January 1, 2006.

(9) Mid-Year Population: The mid-year population comes from the “2008 Demographic Fact Book, Republic of China” by the Ministry of the Interior and which is used to calculate the incidence rate of diseases.

(10) Beginning in 2002, the historical information will not be amended. Any correction made to such information will be listed in the appendix 1. The analysis baseline in 2008 was based on the data before 2009/5/1.

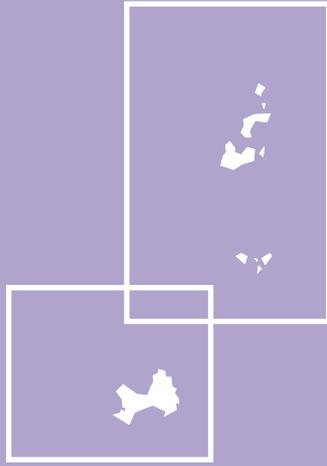
(11) The statistics of MDR TB (Multi-drug resistant tuberculosis) , Chikungunya Fever, Neonatal Tetanus, Herpesvirus B Infection, Leptospirosis, Melioidosis, Botulism, Invasive Pneumococcal Disease, Q Fever, Endemic Typhus Fever, Lyme Disease, Tularemia, Cat-Scratch Disease, Toxoplasmosis and Creutzfeldt-Jakob Disease were conducted with the proclamation of “Categories of Communicable Diseases and Prophylaxis of Category IV and V” proclaimed on October 9, 2007, and were validated since October 15, 2007.

(12) The following revision was promulgated under Sue-So-Ji No. 0970001187 on October 24, 2008. Leprosy was renamed Hansen's disease and HIV infection was included in the list of Category III Notifiable Infectious Diseases. The revision came into effect beginning November 1, 2008.

5. Symbols: “-” for no reported cases; “...” for not under surveillance.

* Specified by laws and regulations: “Communicable Disease Control Act” and “AIDS Prevention and Control Act”. Please see Appendix 2 for classification of communicable diseases.

** Please see Appendix 3 for the form of “Report of cases of communicable and emerging infectious disease, include suspected cases”.



I

Summary Tables and Graphs for Confirmed Cases

— **Republic of China (Taiwan), 2008**

©Abbreviations and Symbols Used in Table

- No reported cases.
- ... Not under surveillance.

Table 1 Confirmed cases number of notifiable diseases — by locality, 2008

Unit: Person

Area / Locality	Midyear population	Category I					
		Smallpox	Plague	SARS	Rabies	Anthrax	H5N1 Influenza
Total	22,997,696	-	-	-	-	-	-
Taipei Area							
Taipei City	2,626,096	-	-	-	-	-	-
Taipei County	3,815,872	-	-	-	-	-	-
Keelung City	389,688	-	-	-	-	-	-
Yilan County	460,650	-	-	-	-	-	-
Kinmen County	83,058	-	-	-	-	-	-
Lienchiang County	9,851	-	-	-	-	-	-
Northern Area							
Taoyuan County	1,946,827	-	-	-	-	-	-
Hsinchu City	402,203	-	-	-	-	-	-
Hsinchu County	499,547	-	-	-	-	-	-
Miaoli County	560,280	-	-	-	-	-	-
Central Area							
Taichung City	1,061,013	-	-	-	-	-	-
Taichung County	1,554,420	-	-	-	-	-	-
Changhua County	1,313,645	-	-	-	-	-	-
Nantou County	532,735	-	-	-	-	-	-
Southern Area							
Yunlin County	724,673	-	-	-	-	-	-
Chiayi City	273,434	-	-	-	-	-	-
Chiayi County	550,038	-	-	-	-	-	-
Tainan City	766,555	-	-	-	-	-	-
Tainan County	1,104,978	-	-	-	-	-	-
Kao-Ping Area							
Kaohsiung City	1,523,099	-	-	-	-	-	-
Kaohsiung County	1,243,862	-	-	-	-	-	-
Pingtung County	887,201	-	-	-	-	-	-
Penghu County	92,849	-	-	-	-	-	-
Eastern Area							
Hualien County	342,368	-	-	-	-	-	-
Taitung County	232,754	-	-	-	-	-	-
Others		-	-	-	-	-	-

Table 1 (Continued) Confirmed cases number of notifiable diseases—by locality, 2008
 Unit: Person

Area / Locality	Category II							
	Diphtheria	Typhoid ¹ Fever	Dengue ¹ Fever	Dengue ¹ Hemorrhagic Fever / Dengue Shock Syndrome	Meningococcal Meningitis	Paratyphoid ¹ Fever	Poliomyelitis	Acute ² Flaccid Paralysis
Total	-	33	714	5	19	11	-	74
Taipei Area								
Taipei City	-	6	66	1	4	2	-	3
Taipei County	-	5	61	-	5	3	-	9
Keelung City	-	1	5	-	-	-	-	-
Yilan County	-	-	1	-	-	-	-	-
Kinmen County	-	-	-	-	-	-	-	-
Lienchiang County	-	-	-	-	-	-	-	-
Northern Area								
Taoyuan County	-	7	31	-	3	1	-	7
Hsinchu City	-	2	2	-	-	-	-	-
Hsinchu County	-	3	9	-	2	2	-	3
Miaoli County	-	1	4	-	-	-	-	2
Central Area								
Taichung City	-	2	4	-	-	-	-	3
Taichung County	-	-	18	-	-	-	-	4
Changhua County	-	1	7	-	2	-	-	3
Nantou County	-	1	3	-	-	-	-	-
Southern Area								
Yunlin County	-	1	4	-	-	-	-	2
Chiayi City	-	-	2	-	-	-	-	-
Chiayi County	-	-	-	-	-	-	-	-
Tainan City	-	1	29	1	-	1	-	-
Tainan County	-	1	13	-	-	-	-	2
Kao-Ping Area								
Kaohsiung City	-	1	341	2	-	-	-	19
Kaohsiung County	-	-	102	1	-	1	-	11
Pingtung County	-	-	10	-	2	1	-	5
Penghu County	-	-	-	-	-	-	-	-
Eastern Area								
Hualien County	-	-	2	-	1	-	-	1
Taitung County	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-

Note:

¹The case amount of these diseases contained imported ones, including 20 Typhoid Fever, 226 Dengue Fever, 1 Dengue Hemorrhagic Fever/Dengue Shock Syndrome and 8 Paratyphoid Fever cases confirmed.

²Acute Flaccid Paralysis cases above 15 years old had been excluded since 2005.

Table 1 (Continued) Confirmed cases number of notifiable diseases—by locality, 2008
Unit: Person

Area / Locality	Midyear population	Category II						
		Shigellosis ¹	Amoebiasis ¹	Malaria ¹		Measles ¹	Acute ¹ Hepatitis A	Enterohaemorrhagic <i>E. coli</i> Infection
				Indigenous	Imported			
Total	22,997,696	90	227	-	18	16	236	-
Taipei Area								
Taipei City	2,626,096	13	27	-	1	1	44	-
Taipei County	3,815,872	23	31	-	2	1	56	-
Keelung City	389,688	-	-	-	1	2	8	-
Yilan County	460,650	-	5	-	-	-	6	-
Kinmen County	83,058	-	-	-	1	-	2	-
Lienchiang County	9,851	-	-	-	-	-	-	-
Northern Area								
Taoyuan County	1,946,827	21	13	-	-	2	27	-
Hsinchu City	402,203	1	5	-	-	-	1	-
Hsinchu County	499,547	1	4	-	1	-	7	-
Miaoli County	560,280	10	1	-	2	-	3	-
Central Area								
Taichung City	1,061,013	4	14	-	-	-	9	-
Taichung County	1,554,420	5	10	-	1	-	13	-
Changhua County	1,313,645	1	2	-	1	-	8	-
Nantou County	532,735	3	2	-	-	-	2	-
Southern Area								
Yunlin County	724,673	1	2	-	1	-	2	-
Chiayi City	273,434	-	2	-	-	-	5	-
Chiayi County	550,038	-	1	-	-	2	1	-
Tainan City	766,555	1	5	-	-	-	11	-
Tainan County	1,104,978	2	9	-	2	-	5	-
Kao-Ping Area								
Kaohsiung City	1,523,099	1	10	-	1	6	11	-
Kaohsiung County	1,243,862	1	9	-	1	2	7	-
Pingtung County	887,201	-	5	-	1	-	3	-
Penghu County	92,849	-	1	-	-	-	1	-
Eastern Area								
Hualien County	342,368	1	65	-	2	-	3	-
Taitung County	232,754	1	4	-	-	-	1	-
Others		-	-	-	-	-	-	-

Note:

¹The case amount of these diseases contained imported ones, including 44 Shigellosis, 83 Amoebiasis, 18 Malaria, 7 Measles and 35 Acute Hepatitis A cases confirmed.

Table 1 (Continued) Confirmed cases number of notifiable diseases—by locality, 2008
 Unit: Person

Area / Locality	Category II							
	Hantavirus Syndrome		Cholera	Rubella ¹	MDR-TB ^{3,9}	Chikungunya ^{1,9} Fever	West Nile Fever	Epidemic Typhus Fever
	Hemorrhagic Fever with Renal Syndrome	Hantavirus Pulmonary Syndrome						
Total	1	-	1	33	159	9	-	-
Taipei Area								
Taipei City	-	-	-	3	12	4	-	-
Taipei County	-	-	-	8	31	1	-	-
Keelung City	-	-	-	-	2	-	-	-
Yilan County	-	-	-	-	2	-	-	-
Kinmen County	-	-	-	-	-	-	-	-
Lienchiang County	-	-	-	-	-	-	-	-
Northern Area								
Taoyuan County	-	-	-	6	14	3	-	-
Hsinchu City	-	-	-	-	1	-	-	-
Hsinchu County	-	-	-	1	5	-	-	-
Miaoli County	-	-	-	-	3	1	-	-
Central Area								
Taichung City	-	-	-	-	5	-	-	-
Taichung County	-	-	-	1	11	-	-	-
Changhua County	-	-	-	10	13	-	-	-
Nantou County	-	-	-	-	6	-	-	-
Southern Area								
Yunlin County	-	-	-	-	7	-	-	-
Chiayi City	-	-	-	-	1	-	-	-
Chiayi County	-	-	-	-	5	-	-	-
Tainan City	-	-	-	-	2	-	-	-
Tainan County	-	-	-	1	8	-	-	-
Kao-Ping Area								
Kaohsiung City	1	-	-	1	5	-	-	-
Kaohsiung County	-	-	1	-	9	-	-	-
Pingtung County	-	-	-	1	8	-	-	-
Penghu County	-	-	-	-	-	-	-	-
Eastern Area								
Hualien County	-	-	-	-	6	-	-	-
Taitung County	-	-	-	1	3	-	-	-
Others	-	-	-	-	-	-	-	-

Note:

¹The case amount of these diseases contained imported ones, including 8 Rubella and 9 Chikungunya Fever cases confirmed.

³The caseload of MDR-TB was estimated by the date of notification.

⁹The statistics of MDR-TB and Chikungunya Fever were conducted with the proclamation validated since October 15th, 2007.

Table 1 (Continued) Confirmed cases number of notifiable diseases—by locality, 2008
Unit: Person

Area / Locality	Midyear population	Category III							
		Pertussis ¹	Tetanus ⁵	Japanese Encephalitis	Tuberculosis ³		Congenital ¹ Rubella Syndrome	Acute ¹ Hepatitis B	Acute ¹ Hepatitis C
					Smear-positive	Others			
Total	22,997,696	41	18	17	5,559	8,706	1	231	124
Taipei Area									
Taipei City	2,626,096	8	-	-	445	733	-	36	14
Taipei County	3,815,872	20	-	-	831	1,316	1	54	21
Keelung City	389,688	-	-	1	122	146	-	7	4
Yilan County	460,650	-	-	-	125	235	-	5	3
Kinmen County	83,058	-	-	-	11	14	-	-	1
Lienchiang County	9,851	-	-	-	-	2	-	-	-
Northern Area									
Taoyuan County	1,946,827	6	3	1	395	627	-	30	9
Hsinchu City	402,203	-	-	-	45	89	-	7	1
Hsinchu County	499,547	-	-	-	69	127	-	9	1
Miaoli County	560,280	-	1	-	82	172	-	3	6
Central Area									
Taichung City	1,061,013	-	-	-	186	405	-	6	8
Taichung County	1,554,420	-	2	-	251	585	-	7	9
Changhua County	1,313,645	3	1	2	413	551	-	6	4
Nantou County	532,735	-	-	2	144	239	-	2	3
Southern Area									
Yunlin County	724,673	-	3	2	246	335	-	3	8
Chiayi City	273,434	-	-	-	54	91	-	-	1
Chiayi County	550,038	-	1	1	147	214	-	7	5
Tainan City	766,555	-	-	-	179	292	-	6	1
Tainan County	1,104,978	-	2	2	297	470	-	4	2
Kao-Ping Area									
Kaohsiung City	1,523,099	-	-	2	429	580	-	19	11
Kaohsiung County	1,243,862	2	1	1	431	630	-	12	6
Pingtung County	887,201	-	3	1	369	515	-	4	4
Penghu County	92,849	-	-	-	9	24	-	-	-
Eastern Area									
Hualien County	342,368	-	1	1	177	183	-	3	2
Taitung County	232,754	2	-	1	102	131	-	1	-
Others		-	-	-	-	-	-	-	-

Note:

¹The case amount of these diseases contained imported ones, including 1 Pertussis, 1 Congenital Rubella Syndrome, 15 Acute Hepatitis B and 2 Acute Hepatitis C cases confirmed.³The caseload of TB was estimated by the date of notification.⁵Calculation for Tetanus based on reported cases only.

Table 1 (Continued) Confirmed cases number of notifiable diseases—by locality, 2008
 Unit: Person

Area / Locality	Category III								
	Acute Hepatitis			Mumps ⁵	Legionellosis ¹	Invasive Haemophilus Influenzae Type b Infection	Syphilis ⁶	Gonorrhea ⁶	Neonatal Tetanus ⁹
	D	E ¹	Un-specified						
Total	4	14	22	1,145	69	12	6,526	1,621	-
Taipei Area									
Taipei City	-	3	2	212	14	-	862	333	-
Taipei County	-	6	2	212	14	2	1,346	516	-
Keelung City	-	1	2	23	1	1	125	49	-
Yilan County	-	-	-	28	1	-	181	7	-
Kinmen County	-	-	-	3	-	-	8	-	-
Lienchiang County	-	-	-	1	-	-	2	-	-
Northern Area									
Taoyuan County	-	-	-	89	3	1	627	205	-
Hsinchu City	-	1	-	18	1	-	115	31	-
Hsinchu County	-	-	-	34	2	-	116	46	-
Miaoli County	-	-	-	31	-	-	90	25	-
Central Area									
Taichung City	-	1	1	46	2	-	449	40	-
Taichung County	-	-	1	58	2	1	346	58	-
Changhua County	-	-	-	41	2	-	244	20	-
Nantou County	-	-	-	36	4	-	81	14	-
Southern Area									
Yunlin County	1	-	1	26	1	2	161	32	-
Chiayi City	-	1	-	3	-	-	60	11	-
Chiayi County	-	-	-	14	2	-	119	28	-
Tainan City	1	-	3	12	1	2	109	24	-
Tainan County	2	1	3	15	5	1	181	35	-
Kao-Ping Area									
Kaohsiung City	-	-	5	78	5	-	423	44	-
Kaohsiung County	-	-	1	67	3	-	419	47	-
Pingtung County	-	-	1	44	2	-	263	31	-
Penghu County	-	-	-	6	1	-	11	-	-
Eastern Area									
Hualien County	-	-	-	25	3	-	116	24	-
Taitung County	-	-	-	23	-	2	71	1	-
Others	-	-	-	-	-	-	1	-	-

Note:

¹The case amount of these diseases contained imported ones, including 4 Acute Hepatitis E and 3 Legionellosis cases confirmed.

⁵Calculation for Mumps based on reported cases only.

⁶The caseload of Syphilis, Gonorrhea and Hansen's Disease were estimated by the date of diagnosis.

⁹The statistic of Neonatal Tetanus was conducted with the proclamation validated since October 15th, 2007.

Table 1 (Continued) Confirmed cases number of notifiable diseases—by locality, 2008
Unit: Person

Area / Locality	Midyear population	Category III				Category IV		
		Enteroviruses Infection with Severe Complications	HIV Infection ⁷	AIDS ⁷	Hansen's ⁶ Disease	Herpesvirus ⁹ B Infection	Leptospirosis ⁹	Melioidosis ^{1,9}
Total	22,997,696	373	1,752	849	8	-	47	45
Taipei Area								
Taipei City	2,626,096	5	280	149	-	-	4	-
Taipei County	3,815,872	19	377	149	-	-	12	3
Keelung City	389,688	1	67	11	-	-	-	-
Yilan County	460,650	1	19	7	-	-	1	-
Kinmen County	83,058	-	-	-	-	-	-	-
Lienchiang County	9,851	-	-	-	-	-	-	-
Northern Area								
Taoyuan County	1,946,827	18	140	82	2	-	5	-
Hsinchu City	402,203	2	40	17	1	-	-	-
Hsinchu County	499,547	8	28	17	1	-	-	1
Miaoli County	560,280	8	16	5	1	-	-	-
Central Area								
Taichung City	1,061,013	21	109	66	-	-	-	2
Taichung County	1,554,420	23	86	59	-	-	2	1
Changhua County	1,313,645	50	57	28	-	-	1	-
Nantou County	532,735	8	26	15	-	-	4	-
Southern Area								
Yunlin County	724,673	19	53	21	-	-	2	-
Chiayi City	273,434	2	7	3	-	-	-	-
Chiayi County	550,038	13	23	9	-	-	-	-
Tainan City	766,555	27	32	14	-	-	2	1
Tainan County	1,104,978	51	43	28	1	-	-	4
Kao-Ping Area								
Kaohsiung City	1,523,099	22	141	73	2	-	3	16
Kaohsiung County	1,243,862	39	134	44	-	-	2	14
Pingtung County	887,201	24	52	36	-	-	7	3
Penghu County	92,849	5	2	-	-	-	-	-
Eastern Area								
Hualien County	342,368	4	10	9	-	-	-	-
Taitung County	232,754	3	10	7	-	-	2	-
Others		-	-	-	-	-	-	-

Note:

¹Five confirmed cases of Melioidosis were imported.⁶The caseload of Syphilis, Gonorrhea and Hansen's Disease were estimated by the date of diagnosis.⁷The caseload of HIV Infection and AIDS were estimated by the date of diagnosis, and did not include the cases of foreign nationality.⁹The statistics of Herpesvirus B infection, Leptospirosis and Melioidosis were conducted with the proclamation validated since October 15th, 2007.

Table 1 (Continued) Confirmed cases number of notifiable diseases—by locality, 2008
 Unit: Person

Area / Locality	Category IV								
	Botulism ⁹	Invasive ⁹ Pneumococcal Disease	Q Fever ^{1,9}	Endemic ^{1,9} Typhus Fever	Lyme ^{1,9} Disease	Tularemia ⁹	Scrub ¹ Typhus	Varicella ⁵	Cat- ⁹ Scratch Disease
Total	11	805	91	31	2	-	492	11,877	28
Taipei Area									
Taipei City	-	61	-	2	1	-	26	2,298	4
Taipei County	-	117	-	2	-	-	24	2,696	5
Keelung City	-	20	-	-	-	-	4	191	-
Yilan County	-	22	-	-	-	-	11	316	-
Kinmen County	-	-	-	1	-	-	66	23	-
Lienchiang County	-	-	-	-	-	-	17	21	-
Northern Area									
Taoyuan County	-	57	2	1	-	-	13	1,078	2
Hsinchu City	3	16	-	-	-	-	4	340	2
Hsinchu County	-	16	-	-	-	-	5	294	1
Miaoli County	1	16	3	1	-	-	16	421	-
Central Area									
Taichung City	3	36	1	-	-	-	6	411	1
Taichung County	-	59	1	4	-	-	9	505	1
Changhua County	-	50	7	1	-	-	9	475	3
Nantou County	-	22	4	-	-	-	28	187	1
Southern Area									
Yunlin County	-	23	1	3	-	-	3	189	1
Chiayi City	-	11	1	-	-	-	1	54	-
Chiayi County	-	18	1	-	-	-	4	121	1
Tainan City	-	34	5	-	-	-	9	165	-
Tainan County	-	35	15	1	-	-	10	221	2
Kao-Ping Area									
Kaohsiung City	-	46	7	5	1	-	13	711	1
Kaohsiung County	4	55	24	4	-	-	25	466	1
Pingtung County	-	49	17	6	-	-	17	273	-
Penghu County	-	-	2	-	-	-	94	59	-
Eastern Area									
Hualien County	-	27	-	-	-	-	44	232	-
Taitung County	-	15	-	-	-	-	34	129	2
Others	-	-	-	-	-	-	-	1	-

Note:

¹The case amount of these diseases contained imported ones, including 1 Q Fever, 3 Endemic Typhus Fever, 2 Lyme Disease and 3 Scrub Typhus cases confirmed.

⁵Calculation for Varicella based on reported cases only.

⁹The statistics of Botulism, Invasive Pneumococcal Disease, Q Fever, Endemic Typhus Fever, Lyme Disease, Tularemia and Cat-Scratch Disease were conducted with the proclamation validated since October 15th, 2007.

Table 1 (Continued) Confirmed cases number of notifiable diseases—by locality, 2008
Unit: Person

Area / Locality	Midyear population	Category IV			Category V				
		Toxoplasmosis ⁹	Severe Complicated Influenza Case	Creutzfeldt- ^{6,9} Jakob Disease	Rift Valley Fever	Marburg Haemorrhagic Fever	Yellow Fever	Ebola Haemorrhagic Fever	Lassa Fever
Total	22,997,696	3	22	-	-	-	-	-	-
Taipei Area									
Taipei City	2,626,096	2	2	-	-	-	-	-	-
Taipei County	3,815,872	-	5	-	-	-	-	-	-
Keelung City	389,688	-	-	-	-	-	-	-	-
Yilan County	460,650	1	-	-	-	-	-	-	-
Kinmen County	83,058	-	-	-	-	-	-	-	-
Lienchiang County	9,851	-	-	-	-	-	-	-	-
Northern Area									
Taoyuan County	1,946,827	-	2	-	-	-	-	-	-
Hsinchu City	402,203	-	-	-	-	-	-	-	-
Hsinchu County	499,547	-	-	-	-	-	-	-	-
Miaoli County	560,280	-	2	-	-	-	-	-	-
Central Area									
Taichung City	1,061,013	-	-	-	-	-	-	-	-
Taichung County	1,554,420	-	1	-	-	-	-	-	-
Changhua County	1,313,645	-	1	-	-	-	-	-	-
Nantou County	532,735	-	-	-	-	-	-	-	-
Southern Area									
Yunlin County	724,673	-	-	-	-	-	-	-	-
Chiayi City	273,434	-	-	-	-	-	-	-	-
Chiayi County	550,038	-	-	-	-	-	-	-	-
Tainan City	766,555	-	1	-	-	-	-	-	-
Tainan County	1,104,978	-	1	-	-	-	-	-	-
Kao-Ping Area									
Kaohsiung City	1,523,099	-	3	-	-	-	-	-	-
Kaohsiung County	1,243,862	-	-	-	-	-	-	-	-
Pingtung County	887,201	-	4	-	-	-	-	-	-
Penghu County	92,849	-	-	-	-	-	-	-	-
Eastern Area									
Hualien County	342,368	-	-	-	-	-	-	-	-
Taitung County	232,754	-	-	-	-	-	-	-	-
Others									
		-	-	-	-	-	-	-	-

Note:

⁶The caseload of Creutzfeldt-Jakob Disease was estimated by the date of diagnosis.⁹The statistics of Toxoplasmosis and Creutzfeldt-Jakob Disease were conducted with the proclamation validated since October 15th, 2007.

Table 2 Confirmed cases number and incidence⁸ rate of notifiable diseases
 —by age group, 2008

Unit: Person

Disease	< 1 yr		1-4 yrs		5-14 yrs		15-24 yrs		25-39 yrs	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Category I										
Smallpox	-	-	-	-	-	-	-	-	-	-
Plague	-	-	-	-	-	-	-	-	-	-
SARS	-	-	-	-	-	-	-	-	-	-
Rabies	-	-	-	-	-	-	-	-	-	-
Anthrax	-	-	-	-	-	-	-	-	-	-
H5N1 Influenza	-	-	-	-	-	-	-	-	-	-
Category II										
Diphtheria	-	-	-	-	-	-	-	-	-	-
Typhoid Fever ¹	-	-	1	0.12	-	-	9	0.28	19	0.33
Dengue Fever ¹	-	-	10	1.18	57	1.95	65	1.99	182	3.18
Dengue Hemorrhagic Fever ¹ / Dengue Shock Syndrome	-	-	-	-	-	-	1	0.03	1	0.02
Meningococcal Meningitis	2	1.05	3	0.35	5	0.17	1	0.03	-	-
Paratyphoid Fever ¹	-	-	-	-	2	0.07	1	0.03	3	0.05
Poliomyelitis	-	-	-	-	-	-	-	-	-	-
Acute Flaccid Paralysis ²	7	3.69	33	3.88	34	1.16	-	-	-	-
Shigellosis ¹	-	-	8	0.94	16	0.55	13	0.40	35	0.61
Amoebiasis ¹	-	-	-	-	2	0.07	28	0.86	86	1.50
Malaria¹										
Indigenous	-	-	-	-	-	-	-	-	-	-
Imported	-	-	-	-	-	-	1	0.03	8	0.14
Measles ¹	5	2.63	4	0.47	-	-	1	0.03	5	0.09
Acute Hepatitis A ¹	-	-	1	0.12	10	0.34	44	1.34	100	1.74
Enterohaemorrhagic <i>E. coli</i> Infection	-	-	-	-	-	-	-	-	-	-
Hantavirus Syndrome										
Hemorrhagic Fever with Renal Syndrome	-	-	-	-	-	-	-	-	1	0.02
Hantavirus Pulmonary Syndrome	-	-	-	-	-	-	-	-	-	-
Cholera	-	-	-	-	-	-	-	-	-	-

Note:

¹The case amount of these diseases contained imported ones, including 20 Typhoid Fever, 226 Dengue Fever, 1 Dengue Hemorrhagic Fever/Dengue Shock Syndrome, 8 Paratyphoid Fever, 44 Shigellosis, 83 Amoebiasis, 18 Malaria, 7 Measles and 35 Acute Hepatitis A cases confirmed.

²Acute Flaccid Paralysis cases above 15 years old had been excluded since 2005.

⁸Incidence rate indicates the number of new confirmed cases per 100,000 population.

Table 2 (Continued) Confirmed cases number and incidence⁸ rate of notifiable diseases
—by age group, 2008

Unit: Person

Disease	40-64 yrs		≥ 65 yrs		Age not stated		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Category I								
Smallpox	-	-	-	-	-	-	-	-
Plague	-	-	-	-	-	-	-	-
SARS	-	-	-	-	-	-	-	-
Rabies	-	-	-	-	-	-	-	-
Anthrax	-	-	-	-	-	-	-	-
H5N1 Influenza	-	-	-	-	-	-	-	-
Category II								
Diphtheria	-	-	-	-	-	-	-	-
Typhoid Fever ¹	3	0.04	1	0.04	-	-	33	0.14
Dengue Fever ¹	319	4.17	81	3.41	-	-	714	3.10
Dengue Hemorrhagic Fever ¹ / Dengue Shock Syndrome	2	0.03	1	0.04	-	-	5	0.02
Meningococcal Meningitis	3	0.04	5	0.21	-	-	19	0.08
Paratyphoid Fever ¹	5	0.07	-	-	-	-	11	0.05
Poliomyelitis	-	-	-	-	-	-	-	-
Acute Flaccid Paralysis ²	-	-	-	-	-	-	74	0.32
Shigellosis ¹	11	0.14	7	0.30	-	-	90	0.39
Amoebiasis ¹	96	1.25	15	0.63	-	-	227	0.99
Malaria¹								
Indigenous	-	-	-	-	-	-	-	-
Imported	8	0.10	1	0.04	-	-	18	0.08
Measles ¹	1	0.01	-	-	-	-	16	0.07
Acute Hepatitis A ¹	58	0.76	23	0.97	-	-	236	1.03
Enterohaemorrhagic <i>E. coli</i> Infection	-	-	-	-	-	-	-	-
Hantavirus Syndrome								
Hemorrhagic Fever with Renal Syndrome	-	-	-	-	-	-	1	0.00
Hantavirus Pulmonary Syndrome	-	-	-	-	-	-	-	-
Cholera	-	-	1	0.04	-	-	1	0.00

Note:

¹The case amount of these diseases contained imported ones, including 20 Typhoid Fever, 226 Dengue Fever, 1 Dengue Hemorrhagic Fever/Dengue Shock Syndrome, 8 Paratyphoid Fever, 44 Shigellosis, 83 Amoebiasis, 18 Malaria, 7 Measles and 35 Acute Hepatitis A cases confirmed.

²Acute Flaccid Paralysis cases above 15 years old had been excluded since 2005.

⁸Incidence rate indicates the number of new confirmed cases per 100,000 population.

Table 2 (Continued) Confirmed cases number and incidence⁸ rate of notifiable diseases
 — by age group, 2008

Unit: Person

Disease	< 1 yr		1-4 yrs		5-14 yrs		15-24 yrs		25-39 yrs	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Rubella ¹	-	-	-	-	1	0.03	26	0.79	4	0.07
MDR-TB ^{3,9}	-	-	-	-	1	0.03	10	0.31	30	0.52
Chikungunya Fever ^{1,9}	-	-	-	-	-	-	-	-	4	0.07
West Nile Fever	-	-	-	-	-	-	-	-	-	-
Epidemic Typhus Fever	-	-	-	-	-	-	-	-	-	-
Category III										
Pertussi ¹	13	6.85	3	0.35	18	0.61	3	0.09	2	0.03
Tetanus ⁵	-	-	1	0.12	1	0.03	-	-	-	-
Japanese Encephalitis	-	-	-	-	1	0.03	2	0.06	5	0.09
Tuberculosis ³										
Smear-positive	2	1.05	1	0.12	21	0.72	251	7.67	613	10.69
Others	1	0.53	16	1.88	71	2.42	502	15.34	1,002	17.48
Congenital Rubella Syndrome ¹	1	0.53	-	-	-	-	-	-	-	-
Acute Hepatitis										
B ¹	2	1.05	-	-	1	0.03	25	0.76	114	1.99
C ¹	-	-	-	-	1	0.03	10	0.31	41	0.72
D	-	-	-	-	-	-	-	-	1	0.02
E ¹	-	-	-	-	-	-	1	0.03	7	0.12
Unspecified	-	-	1	0.12	2	0.07	1	0.03	8	0.14
Mumps ⁵	4	2.11	208	24.48	601	20.52	67	2.05	120	2.09
Legionellosis ¹	-	-	-	-	1	0.03	-	-	4	0.07
Invasive Haemophilus Influenzae Type b Infection	4	2.11	5	0.59	2	0.07	-	-	-	-
Syphilis ⁶	40	21.08	-	-	2	0.07	587	17.94	1,831	31.94
Gonorrhea ⁶	2	1.05	-	-	10	0.34	479	14.64	848	14.79
Neonatal Tetanus ⁹	-	-	-	-	-	-	-	-	-	-
Enteroviruses Infection with Severe Complications	65	34.25	271	31.90	37	1.26	-	-	-	-
HIV Infection ⁷	-	-	2	0.24	-	-	378	11.55	954	29.16
AIDS ⁷	-	-	-	-	-	-	97	2.96	465	14.21

Note:

¹The case amount of these diseases contained imported ones, including 8 Rubella, 9 Chikungunya Fever, 1 Pertussis, 1 Congenital Rubella Syndrome, 15 Acute Hepatitis B, 2 Acute Hepatitis C, 4 Acute Hepatitis E and 3 Legionellosis cases confirmed.

³The caseload of MDR-TB and TB were estimated by the date of notification.

⁵Calculation for Tetanus and Mumps based on reported cases only.

⁶The caseload of Syphilis and Gonorrhea were estimated by the date of diagnosis.

⁷The caseload of HIV Infection and AIDS were estimated by the date of diagnosis, and did not include the cases of foreign nationality.

⁸Incidence rate indicates the number of new confirmed cases per 100,000 population.

⁹The statistic of MDR-TB, Chikungunya Fever and Neonatal Tetanus were conducted with the proclamation validated since October 15th, 2007.

Table 2 (Continued) Confirmed cases number and incidence⁸ rate of notifiable diseases
— by age group, 2008

Unit: Person

Disease	40-64 yrs		≥ 65 yrs		Age not stated		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Rubella ¹	2	0.03	-	-	-	-	33	0.14
MDR-TB ^{3,9}	70	0.91	48	2.02	-	-	159	0.69
Chikungunya Fever ^{1,9}	5	0.07	-	-	-	-	9	0.04
West Nile Fever	-	-	-	-	-	-	-	-
Epidemic Typhus Fever	-	-	-	-	-	-	-	-
Category III								
Pertussis ¹	2	0.03	-	-	-	-	41	0.18
Tetanus ⁵	4	0.05	12	0.51	-	-	18	0.08
Japanese Encephalitis	9	0.12	-	-	-	-	17	0.07
Tuberculosis ³								
Smear-positive	1,856	24.25	2,815	118.64	-	-	5,559	24.17
Others	2,478	32.38	4,636	195.39	-	-	8,706	37.86
Congenital Rubella Syndrome ¹	-	-	-	-	-	-	1	0.00
Acute Hepatitis								
B ¹	79	1.03	10	0.42	-	-	231	1.00
C ¹	54	0.71	18	0.76	-	-	124	0.54
D	3	0.04	-	-	-	-	4	0.02
E ¹	4	0.05	2	0.08	-	-	14	0.06
Unspecified	9	0.12	1	0.04	-	-	22	0.10
Mumps ⁵	107	1.40	38	1.60	-	-	1,145	4.98
Legionellosis ¹	28	0.37	36	1.52	-	-	69	0.30
Invasive Haemophilus Influenzae Type b Infection	1	0.01	-	-	-	-	12	0.05
Syphilis ⁶	2,668	34.86	1,398	58.92	-	-	6,526	28.38
Gonorrhoea ⁶	257	3.36	25	1.05	-	-	1,621	7.05
Neonatal Tetanus ⁹	-	-	-	-	-	-	-	-
Enteroviruses Infection with Severe Complications	-	-	-	-	-	-	373	1.62
HIV Infection ⁷	395	5.16	23	0.97	-	-	1,752	7.62
AIDS ⁷	265	3.46	22	0.93	-	-	849	3.69

Note:

¹The case amount of these diseases contained imported ones, including 8 Rubella, 9 Chikungunya Fever, 1 Pertussis, 1 Congenital Rubella Syndrome, 15 Acute Hepatitis B, 2 Acute Hepatitis C, 4 Acute Hepatitis E and 3 Legionellosis cases confirmed.

³The caseload of MDR-TB and TB were estimated by the date of notification.

⁵Calculation for Tetanus and Mumps based on reported cases only.

⁶The caseload of Syphilis and Gonorrhoea were estimated by the date of diagnosis.

⁷The caseload of HIV Infection and AIDS were estimated by the date of diagnosis, and did not include the cases of foreign nationality.

⁸Incidence rate indicates the number of new confirmed cases per 100,000 population

⁹The statistic of MDR-TB, Chikungunya Fever and Neonatal Tetanus were conducted with the proclamation validated since October 15th, 2007.

Table 2 (Continued) Confirmed cases number and incidence⁸ rate of notifiable diseases
 — by age group, 2008

Unit: Person

Disease	< 1 yr		1-4 yrs		5-14 yrs		15-24 yrs		25-39 yrs	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Hansen's Disease ^{4,6}	-	-	-	-	-	-	2	0.06	1	0.02
Category IV										
Herpesvirus B Infection ⁹	-	-	-	-	-	-	-	-	-	-
Leptospirosis ⁹	-	-	-	-	-	-	3	0.09	14	0.24
Melioidosis ^{1,9}	-	-	-	-	1	0.03	-	-	4	0.07
Botulism ⁹	-	-	-	-	-	-	-	-	4	0.07
Invasive Pneumococcal Disease ⁹	19	10.01	151	17.77	35	1.20	10	0.31	57	0.99
Q Fever ^{1,9}	-	-	-	-	-	-	5	0.15	22	0.38
Endemic Typhus Fever ^{1,9}	-	-	-	-	-	-	3	0.09	7	0.12
Lyme Disease ^{1,9}	-	-	-	-	-	-	-	-	-	-
Tularemia ⁹	-	-	-	-	-	-	-	-	-	-
Scrub Typhus ¹	1	0.53	8	0.94	22	0.75	80	2.44	97	1.69
Varicella ⁵	430	226.56	859	101.11	7,142	243.88	1,093	33.40	2,029	35.40
Cat-Scratch Disease ⁹	-	-	-	-	11	0.38	6	0.18	6	0.10
Toxoplasmosis ⁹	-	-	-	-	-	-	1	0.03	2	0.03
Severe Complicated Influenza Case	-	-	1	0.12	4	0.14	2	0.06	4	0.07
Creutzfeldt-Jakob Disease ^{6,9}	-	-	-	-	-	-	-	-	-	-
Category V										
Rift Valley Fever	-	-	-	-	-	-	-	-	-	-
Marburg Haemorrhagic Fever	-	-	-	-	-	-	-	-	-	-
Yellow Fever	-	-	-	-	-	-	-	-	-	-
Ebola Haemorrhagic Fever	-	-	-	-	-	-	-	-	-	-
Lassa Fever	-	-	-	-	-	-	-	-	-	-

Note:

¹The case amount of these diseases contained imported ones, including 5 Melioidosis, 1 Q Fever, 3 Endemic Typhus Fever, 2 Lyme Disease and 3 Scrub Typhus cases confirmed.

⁴The confirmed cases of Hansen's Disease included 4 Taiwanese, 2 Indonesian and 2 philippine.

⁵Calculation for Varicella based on reported cases only.

⁶The caseload of Hansen's Disease and Creutzfeldt-Jakob Disease were estimated by the date of diagnosis.

⁸Incidence rate indicates the number of new confirmed cases per 100,000 population

⁹The statistics of Herpesvirus B Infection, Leptospirosis, Melioidosis, Botulism, Invasive Pneumococcal Disease, Q Fever, Endemic Typhus Fever, Lyme Disease, Tularemia, Cat-Scratch Disease, Toxoplasmosis and Creutzfeldt-Jakob Disease were conducted with the proclamation validated since October 15th, 2007.

Table 2 (Continued) Confirmed cases number and incidence⁸ rate of notifiable diseases
— by age group, 2008

Unit: Person

Disease	40-64 yrs		≥ 65 yrs		Age not stated		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Hansen's Disease ^{4,6}	3	0.04	2	0.08	-	-	8	0.03
Category IV								
Herpesvirus B Infection ⁹	-	-	-	-	-	-	-	-
Leptospirosis ⁹	24	0.31	6	0.25	-	-	47	0.20
Melioidosis ^{1,9}	25	0.33	15	0.63	-	-	45	0.20
Botulism ⁹	6	0.08	1	0.04	-	-	11	0.05
Invasive Pneumococcal Disease ⁹	216	2.82	317	13.36	-	-	805	3.50
Q Fever ^{1,9}	54	0.71	10	0.42	-	-	91	0.40
Endemic Typhus Fever ^{1,9}	19	0.25	2	0.08	-	-	31	0.13
Lyme Disease ^{1,9}	2	0.03	-	-	-	-	2	0.01
Tularemia ⁹	-	-	-	-	-	-	-	-
Scrub Typhus ¹	211	2.76	73	3.08	-	-	492	2.14
Varicella ⁵	281	3.67	43	1.81	-	-	11,877	51.64
Cat-Scratch Disease ⁹	5	0.07	-	-	-	-	28	0.12
Toxoplasmosis ⁹	-	-	-	-	-	-	3	0.01
Severe Complicated Influenza Case	5	0.07	6	0.25	-	-	22	0.10
Creutzfeldt-Jakob Disease ^{6,9}	-	-	-	-	-	-	-	-
Category V								
Rift Valley Fever	-	-	-	-	-	-	-	-
Marburg Haemorrhagic Fever	-	-	-	-	-	-	-	-
Yellow Fever	-	-	-	-	-	-	-	-
Ebola Haemorrhagic Fever	-	-	-	-	-	-	-	-
Lassa Fever	-	-	-	-	-	-	-	-

Note:

¹The case amount of these diseases contained imported ones, including 5 Melioidosis, 1 Q Fever, 3 Endemic Typhus Fever, 2 Lyme Disease and 3 Scrub Typhus cases confirmed.

⁴The confirmed cases of Hansen's Disease included 4 Taiwanese, 2 Indonesian and 2 philippine.

⁵Calculation for Varicella based on reported cases only.

⁶The caseload of Hansen's Disease and Creutzfeldt-Jakob Disease were estimated by the date of diagnosis.

⁸Incidence rate indicates the number of new confirmed cases per 100,000 population

⁹The statistics of Herpesvirus B Infection, Leptospirosis, Melioidosis, Botulism, Invasive Pneumococcal Disease, Q Fever, Endemic Typhus Fever, Lyme Disease, Tularemia, Cat-Scratch Disease, Toxoplasmosis and Creutzfeldt-Jakob Disease were conducted with the proclamation validated since October 15th, 2007.

Table 3 Confirmed cases number of notifiable diseases— by month, 2008

Unit: Person

Disease	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Category I													
Smallpox	-	-	-	-	-	-	-	-	-	-	-	-	-
Plague	-	-	-	-	-	-	-	-	-	-	-	-	-
SARS	-	-	-	-	-	-	-	-	-	-	-	-	-
Rabies	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthrax	-	-	-	-	-	-	-	-	-	-	-	-	-
H5N1 Influenza	-	-	-	-	-	-	-	-	-	-	-	-	-
Category II													
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-	-
Typhoid Fever ¹	2	1	1	5	9	3	2	2	5	-	1	2	33
Dengue Fever ¹	27	8	12	13	8	25	79	131	70	159	147	35	714
Dengue Hemorrhagic Fever ¹ / Dengue Shock Syndrome	-	-	-	-	-	-	1	-	-	2	1	1	5
Meningococcal Meningitis	3	3	4	-	-	2	-	5	1	-	1	-	19
Paratyphoid Fever ¹	1	-	-	-	3	3	2	-	1	-	1	-	11
Poliomyelitis	-	-	-	-	-	-	-	-	-	-	-	-	-
Acute Flaccid Paralysis ²	6	6	7	8	9	10	5	5	5	6	3	4	74
Shigellosis ¹	3	8	12	19	10	7	1	8	10	5	4	3	90
Amoebiasis ¹	20	31	52	17	13	16	13	7	11	18	11	18	227
Malaria¹													
Indigenous	-	-	-	-	-	-	-	-	-	-	-	-	-
Imported	2	3	-	1	1	1	3	-	4	-	1	2	18
Measles ¹	1	-	2	2	-	1	-	2	-	-	4	4	16
Acute Hepatitis A ¹	24	23	44	26	18	12	15	13	21	17	10	13	236
Enterohaemorrhagic <i>E. coli</i> Infection	-	-	-	-	-	-	-	-	-	-	-	-	-
Hantavirus Syndrome													
Hemorrhagic Fever with Renal Syndrome	-	-	1	-	-	-	-	-	-	-	-	-	1
Hantavirus Pulmonary Syndrome	-	-	-	-	-	-	-	-	-	-	-	-	-
Cholera	-	-	-	-	1	-	-	-	-	-	-	-	1

Note:

¹The case amount of these diseases contained imported ones, including 20 Typhoid Fever, 226 Dengue Fever, 1 Dengue Hemorrhagic Fever/Dengue Shock Syndrome, 8 Paratyphoid Fever, 44 Shigellosis, 83 Amoebiasis, 18 Malaria, 7 Measles and 35 Acute Hepatitis A cases confirmed.

²Acute Flaccid Paralysis cases above 15 years old had been excluded since 2005.

Table 3 (Continued) Confirmed cases number of notifiable diseases — by month, 2008
Unit: Person

Disease	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Category II													
Rubella ¹	1	1	7	12	2	4	2	2	1	-	1	-	33
MDR-TB ^{3,9}	15	9	20	14	19	7	8	13	12	3	9	30	159
Chikungunya Fever ^{1,9}	-	1	-	1	-	-	1	-	-	2	1	3	9
West Nile Fever	-	-	-	-	-	-	-	-	-	-	-	-	-
Epidemic Typhus Fever	-	-	-	-	-	-	-	-	-	-	-	-	-
Category III													
Pertussis ¹	-	1	4	1	3	8	12	6	4	1	1	-	41
Tetanus ⁵	2	3	-	2	1	-	5	-	2	1	1	1	18
Japanese Encephalitis	-	-	-	-	1	9	6	-	-	-	1	-	17
Tuberculosis ³	1,156	952	1,162	1,306	1,357	1,191	1,239	1,187	1,202	1,291	1,068	1,154	14,265
Smear-positive	463	335	461	523	529	478	493	464	476	484	416	437	5,559
Others	693	617	701	783	828	713	746	723	726	807	652	717	8,706
Congenital Rubella Syndrome ¹	1	-	-	-	-	-	-	-	-	-	-	-	1
Acute Hepatitis													
B ¹	17	11	17	21	23	25	15	15	24	27	16	20	231
C ¹	7	7	15	14	9	14	12	9	6	16	9	6	124
D	-	1	-	-	-	1	1	-	1	-	-	-	4
E ¹	-	2	-	1	3	1	4	1	1	1	-	-	14
Unspecified	1	1	2	5	-	-	3	1	2	2	3	2	22
Mumps ⁵	88	65	78	109	118	125	107	90	113	98	85	69	1,145
Legionellosis ¹	2	6	2	8	4	7	7	4	5	9	6	9	69
Invasive Haemophilus Influenzae Type b Infection	1	-	1	1	2	-	-	1	1	1	-	4	12
Syphilis ⁶	453	355	539	548	548	566	566	570	568	708	528	577	6,526
Gonorrhoea ⁶	143	107	123	113	124	132	119	148	151	151	137	173	1,621
Neonatal Tetanus ⁹	-	-	-	-	-	-	-	-	-	-	-	-	-
Enteroviruses Infection with Severe Complications	13	6	14	40	100	137	31	13	6	4	2	7	373
HIV Infection ⁷	130	114	158	171	156	135	151	143	149	168	132	145	1,752
AIDS ⁷	77	56	74	69	84	48	64	71	78	81	70	77	849

Note:

¹The case amount of these diseases contained imported ones, including 8 Rubella, 9 Chikungunya Fever, 1 Pertussis, 1 Congenital Rubella Syndrome, 15 Acute Hepatitis B, 2 Acute Hepatitis C, 4 Acute Hepatitis E and 3 Legionellosis cases confirmed.

³The caseload of MDR-TB and TB were estimated by the date of notification.

⁵Calculation for Tetanus and Mumps based on reported cases only.

⁶The caseload of Syphilis and Gonorrhoea were estimated by the date of diagnosis.

⁷The caseload of HIV Infection and AIDS were estimated by the date of diagnosis, and did not include the cases of foreign nationality.

⁹The statistic of MDR-TB, Chikungunya Fever and Neonatal Tetanus were conducted with the proclamation validated since October 15th, 2007."

Table 3 (Continued) Confirmed cases number of notifiable diseases — by month, 2008
Unit: Person

Disease	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Hansen's Disease ^{4,6}	1	-	2	2	-	-	1	1	-	1	-	-	8
Category IV													
Herpesvirus B Infection ⁹	-	-	-	-	-	-	-	-	-	-	-	-	-
Leptospirosis ⁹	3	1	2	2	3	5	2	8	10	4	3	4	47
Melioidosis ^{1,9}	1	3	3	3	-	2	11	8	3	3	5	3	45
Botulism ⁹	-	4	1	6	-	-	-	-	-	-	-	-	11
Invasive Pneumococcal Disease ⁹	82	77	125	65	59	47	30	37	50	52	52	129	805
Q Fever ^{1,9}	7	5	18	16	10	13	7	3	3	3	3	3	91
Endemic Typhus Fever ^{1,9}	1	1	1	2	5	3	9	1	2	3	2	1	31
Lyme Disease ^{1,9}	-	-	-	-	-	-	2	-	-	-	-	-	2
Tularemia ⁹	-	-	-	-	-	-	-	-	-	-	-	-	-
Scrub Typhus ¹	47	15	11	15	24	61	100	47	38	39	48	47	492
Varicella ⁵	1,172	1,079	1,124	1,266	1,419	1,259	862	689	665	653	695	994	11,877
Cat-Scratch Disease ⁹	-	-	-	-	1	3	8	4	6	-	6	-	28
Toxoplasmosis ⁹	-	-	-	-	-	1	-	-	-	-	2	-	3
Severe Complicated Influenza Case	6	3	4	-	-	-	-	-	-	2	-	7	22
Creutzfeldt-Jakob Disease ^{6,9}	-	-	-	-	-	-	-	-	-	-	-	-	-
Category V													
Rift Valley Fever	-	-	-	-	-	-	-	-	-	-	-	-	-
Marburg Haemorrhagic Fever	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellow Fever	-	-	-	-	-	-	-	-	-	-	-	-	-
Ebola Haemorrhagic Fever	-	-	-	-	-	-	-	-	-	-	-	-	-
Lassa Fever	-	-	-	-	-	-	-	-	-	-	-	-	-

Note:

¹The case amount of these diseases contained imported ones, including 5 Melioidosis, 1 Q Fever, 3 Endemic Typhus Fever, 2 Lyme Disease and 3 Scrub Typhus cases confirmed.

⁴The confirmed cases of Hansen's Disease included 4 Taiwanese, 2 Indonesian and 2 philippine.

⁵Calculation for Varicella based on reported cases only.

⁶The caseload of Hansen's Disease and Creutzfeldt-Jakob Disease were estimated by the date of diagnosis.

⁹The statistics of Herpesvirus B Infection, Leptospirosis, Melioidosis, Botulism, Invasive Pneumococcal Disease, Q Fever, Endemic Typhus Fever, Lyme Disease, Tularemia, Cat-Scratch Disease, Toxoplasmosis and Creutzfeldt-Jakob Disease were conducted with the proclamation validated since October 15th, 2007.

Table 4 Confirmed cases and incidence⁸ rate of notifiable diseases — by sex, 2008
Unit: Person

Disease	Female		Male		Sex not stated		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Category I								
Smallpox	-	-	-	-	-	-	-	-
Plague	-	-	-	-	-	-	-	-
SARS	-	-	-	-	-	-	-	-
Rabies	-	-	-	-	-	-	-	-
Anthrax	-	-	-	-	-	-	-	-
H5N1 Influenza	-	-	-	-	-	-	-	-
Category II								
Diphtheria	-	-	-	-	-	-	-	-
Typhoid Fever ¹	23	0.20	10	0.09	-	-	33	0.14
Dengue Fever ¹	328	2.88	386	3.32	-	-	714	3.10
Dengue Hemorrhagic Fever ¹ / Dengue Shock Syndrome	2	0.02	3	0.03	-	-	5	0.02
Meningococcal Meningitis	13	0.11	6	0.05	-	-	19	0.08
Paratyphoid Fever ¹	6	0.05	5	0.04	-	-	11	0.05
Poliomyelitis	-	-	-	-	-	-	-	-
Acute Flaccid Paralysis ²	24	0.21	50	0.43	-	-	74	0.32
Shigellosis ¹	45	0.40	45	0.39	-	-	90	0.39
Amoebiasis ¹	84	0.74	143	1.23	-	-	227	0.99
Malaria¹								
Indigenous	-	-	-	-	-	-	-	-
Imported	2	0.02	16	0.14	-	-	18	0.08
Measles ¹	9	0.08	7	0.06	-	-	16	0.07
Acute Hepatitis A ¹	97	0.85	139	1.20	-	-	236	1.03
Enterohaemorrhagic <i>E. Coli</i> Infection	-	-	-	-	-	-	-	-
Hantavirus Syndrome								
Hemorrhagic Fever with Renal Syndrome	-	-	1	0.01	-	-	1	0.00
Hantavirus Pulmonary Syndrome	-	-	-	-	-	-	-	-
Cholera	1	0.01	-	-	-	-	1	0.00

Note:

¹The case amount of these diseases contained imported ones, including 20 Typhoid Fever, 226 Dengue Fever, 1 Dengue Hemorrhagic Fever/Dengue Shock Syndrome, 8 Paratyphoid Fever, 44 Shigellosis, 83 Amoebiasis, 18 Malaria, 7 Measles and 35 Acute Hepatitis A cases confirmed.

²Acute Flaccid Paralysis cases above 15 years old had been excluded since 2005.

⁸Incidence rate indicates the number of new confirmed cases per 100,000 population.

Table 4 (Continued) Confirmed cases and incidence⁸ rate of notifiable diseases
— by sex, 2008

Unit: Person

Disease	Female		Male		Sex not stated		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Category II								
Rubella ¹	14	0.12	19	0.16	-	-	33	0.14
MDR-TB ^{3,9}	51	0.45	108	0.93	-	-	159	0.69
Chikungunya Fever ^{1,9}	-	-	9	0.08	-	-	9	0.04
West Nile Fever	-	-	-	-	-	-	-	-
Epidemic Typhus Fever	-	-	-	-	-	-	-	-
Category III								
Pertussis ¹	19	0.17	22	0.19	-	-	41	0.18
Tetanus ⁵	12	0.11	6	0.05	-	-	18	0.08
Japanese Encephalitis	5	0.04	12	0.10	-	-	17	0.07
Tuberculosis³								
Smear-positive	1,502	13.20	4,057	34.92	-	-	5,559	24.17
Others	2,928	25.73	5,778	49.74	-	-	8,706	37.86
Congenital Rubella Syndrome ¹	1	0.01	-	-	-	-	1	0.00
Acute Hepatitis								
B ¹	92	0.81	139	1.20	-	-	231	1.00
C ¹	37	0.33	87	0.75	-	-	124	0.54
D	-	-	4	0.03	-	-	4	0.02
E ¹	5	0.04	9	0.08	-	-	14	0.06
Unspecified	11	0.10	11	0.09	-	-	22	0.10
Mumps ⁵	416	3.66	729	6.27	-	-	1,145	4.98
Legionellosis ¹	14	0.12	55	0.47	-	-	69	0.30
Invasive Haemophilus Influenzae Type b Infection	6	0.05	6	0.05	-	-	12	0.05
Syphilis ⁶	1,895	16.65	4,631	39.86	-	-	6,526	28.38
Gonorrhea ⁶	129	1.13	1,492	12.84	-	-	1,621	7.05
Neonatal Tetanus ⁹	-	-	-	-	-	-	-	-
Enteroviruses Infection with Severe Complications	144	1.27	229	1.97	-	-	373	1.62
HIV Infection ⁷	99	0.87	1,653	14.23	-	-	1,752	7.62
AIDS ⁷	54	0.47	795	6.84	-	-	849	3.69

Note:

¹The case amount of these diseases contained imported ones, including 8 Rubella, 9 Chikungunya Fever, 1 Pertussis, 1 Congenital Rubella Syndrome, 15 Acute Hepatitis B, 2 Acute Hepatitis C, 4 Acute Hepatitis E and 3 Legionellosis cases confirmed.

³The caseload of MDR-TB and TB were estimated by the date of notification.

⁵Calculation for Tetanus and Mumps based on reported cases only.

⁶The caseload of Syphilis and Gonorrhea were estimated by the date of diagnosis.

⁷The caseload of HIV Infection and AIDS were estimated by the date of diagnosis, and did not include the cases of foreign nationality.

⁸Incidence rate indicates the number of new confirmed cases per 100,000 population.

⁹The statistic of MDR-TB, Chikungunya Fever and Neonatal Tetanus were conducted with the proclamation validated since October 15th, 2007.

Table 4 (Continued) Confirmed cases and incidence⁸ rate of notifiable diseases
— by sex, 2008

Unit: Person

Disease	Female		Male		Sex not stated		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Hansen's Disease ^{4,6}	7	0.06	1	0.01	-	-	8	0.03
Category IV								
Herpesvirus B Infection ⁹	-	-	-	-	-	-	-	-
Leptospirosis ⁹	6	0.05	41	0.35	-	-	47	0.20
Melioidosis ^{1,9}	6	0.05	39	0.34	-	-	45	0.20
Botulism ⁹	8	0.07	3	0.03	-	-	11	0.05
Invasive Pneumococcal Disease ⁹	257	2.26	548	4.72	-	-	805	3.50
Q Fever ^{1,9}	14	0.12	77	0.66	-	-	91	0.40
Endemic Typhus Fever ^{1,9}	11	0.10	20	0.17	-	-	31	0.13
Lyme Disease ^{1,9}	2	0.02	-	-	-	-	2	0.01
Tularemia ⁹	-	-	-	-	-	-	-	-
Scrub Typhus ¹	167	1.47	325	2.80	-	-	492	2.14
Varicella ⁵	5,484	48.19	6,393	55.03	-	-	11,877	51.64
Cat-Scratch Disease ⁹	11	0.10	17	0.15	-	-	28	0.12
Toxoplasmosis ⁹	2	0.02	1	0.01	-	-	3	0.01
Severe Complicated Influenza Case	11	0.10	11	0.09	-	-	22	0.10
Creutzfeldt-Jakob Disease ^{6,9}	-	-	-	-	-	-	-	-
Category V								
Rift Valley Fever	-	-	-	-	-	-	-	-
Marburg Haemorrhagic Fever	-	-	-	-	-	-	-	-
Yellow Fever	-	-	-	-	-	-	-	-
Ebola Haemorrhagic Fever	-	-	-	-	-	-	-	-
Lassa Fever	-	-	-	-	-	-	-	-

Note:

¹The case amount of these diseases contained imported ones, including 5 Melioidosis, 1 Q Fever, 3 Endemic Typhus Fever, 2 Lyme Disease and 3 Scrub Typhus cases confirmed.

⁴The confirmed cases of Hansen's Disease included 4 Taiwanese, 2 Indonesian and 2 philippine.

⁵Calculation for Varicella based on reported cases only.

⁶The caseload of Hansen's Disease and Creutzfeldt-Jakob Disease were estimated by the date of diagnosis.

⁸Incidence rate indicates the number of new confirmed cases per 100,000 population.

⁹The statistics of Herpesvirus B Infection, Leptospirosis, Melioidosis, Botulism, Invasive Pneumococcal Disease, Q Fever, Endemic Typhus Fever, Lyme Disease, Tularemia, Cat-Scratch Disease, Toxoplasmosis and Creutzfeldt-Jakob Disease were conducted with the proclamation validated since October 15th, 2007.

Table 5 Confirmed cases number of notifiable diseases — by year, 1999-2008

Unit: Person

Disease	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Category I										
Smallpox	...	...	...	...	...	...	...	-	-	-
Plague	-	-	-	-	-	-	-	-	-	-
SARS	...	...	...	...	347	-	-	-	-	-
Rabies	-	-	-	1	-	-	-	-	-	-
Anthrax	-	-	-	-	-	-	-	-	-	-
H5N1 Influenza	...	...	...	...	...	...	-	-	-	-
Category II										
Diphtheria	-	-	-	-	-	-	-	-	-	-
Typhoid Fever ¹	49	43	59	54	40	38	35	43	34	33
Dengue Fever ¹	65	140	270	5,388	145	427	306	1,074	2,179	714
Dengue Hemorrhagic Fever ¹ / Dengue Shock Syndrome	4	1	11	242	2	7	5	19	12	5
Meningococcal Meningitis	13	16	43	46	26	24	20	13	20	19
Paratyphoid Fever ¹	11	3	11	18	15	19	13	10	6	11
Poliomyelitis	-	-	-	-	-	-	-	-	-	-
Acute Flaccid Paralysis ²	59	63	101	84	65	56	61	66	51	74
Shigellosis ¹	210	321	1,327	436	246	156	174	139	246	90
Amoebiasis ¹	55	322	303	289	121	96	120	125	145	227
Malaria¹										
Indigenous	-	-	-	-	-	-	-	-	-	-
Imported	32	42	29	28	34	18	26	26	13	18
Measles ¹	-*	5*	9*	24	6	-	7	4	10	16
Acute Hepatitis A ¹	103	68	257	212	160	204	257	189	203	236
Enterohaemorrhagic <i>E. Coli</i> Infection	-	-	1	-	-	-	-	-	-	-
Hantavirus Syndrome										
Hemorrhagic Fever with Renal Syndrome	...	...	1*	-	-	3	-	3	1	1
Hantavirus Pulmonary Syndrome	...	...	3*	-	-	-	-	-	-	-
Cholera	5	8	-	2	1	1	2	1	-	1

Note:

¹The case amount of these diseases contained imported ones, including 20 Typhoid Fever, 226 Dengue Fever, 1 Dengue Hemorrhagic Fever/Dengue Shock Syndrome, 8 Paratyphoid Fever, 44 Shigellosis, 83 Amoebiasis, 18 Malaria, 7 Measles and 35 Acute Hepatitis A cases confirmed.

²Acute Flaccid Paralysis cases above 15 years old had been excluded since 2005.

*The collative case numbers see the appendix 1.

Table 5 (Continued) Confirmed cases number of notifiable diseases
— by year, 1999-2008

Unit: Person

Disease	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rubella ¹	2	29	17	4	2	4	7	6	54	33
MDR-TB ^{3,9}	...	...	...	...	...	...	...	...	19	159
Chikungunya Fever ^{1,9}	...	...	...	...	...	...	...	...	2	9
West Nile Fever	...	...	...	...	...	...	...	-	-	-
Epidemic Typhus Fever	-	-	-	-	-	-	-	-	-	-
Category III										
Pertussis ¹	19	47	6	18	26	21	38	14	41	41
Tetanus ⁵	20	24	19	15	13	16	16	14	10	18
Japanese Encephalitis	24	13	33	19	25	32	35	29	37	17
Tuberculosis ³										
Smear-positive	3,312	4,276	4,512	5,928	5,203	5,784	5,748	5,542	5,734	5,559
Others	10,184	9,634	9,974	10,830	9,839	11,000	10,724	9,836	8,746	8,706
Congenital Rubella Syndrome ¹	-	-	3	-	-	-	-	-	1	1
Acute Hepatitis										
B ¹	377	226	355	417	326*	378	321	245	202	231
C ¹	4	4	152	156	167	195	172	154	153	124
D	-	-	4	9	11	12	4	5	1	4
E ¹	1	-	1	12	10*	18	21	11	12	14
Unspecified	-	-	-	-	-	-	10	9	10	22
Mumps ⁵	261	375	444	664*	676	1,081	1,158	971	1,208	1,145
Legionellosis ¹	22	63	40	72	109	106	38	56	56	69
Invasive Haemophilus Influenzae Type b Infection	31	45	49	41	22	20	12	16	16	12
Syphilis ⁶	3,038	3,875	4,256	4,182	3,947	5,209	5,305	5,808	5,798	6,526
Gonorrhoea ⁶	163	361	443	838	1,626	1,978	1,515	1,437	1,442	1,621
Neonatal Tetanus ⁹	...	...	...	...	...	...	...	...	-	-
Enteroviruses Infection with Severe Complications	35	291	393	162	70	50	142	11	12	373
HIV Infection ⁷	507*	570*	689	773*	857*	1,521*	3,403	2,938	1,935	1,752
AIDS ⁷	180*	181*	165*	177*	225*	257*	506	579	1,061	849

Note:

¹The case amount of these diseases contained imported ones, including 8 Rubella, 9 Chikungunya Fever, 1 Pertussis, 1 Congenital Rubella Syndrome, 15 Acute Hepatitis B, 2 Acute Hepatitis C, 4 Acute Hepatitis E and 3 Legionellosis cases confirmed.

³The caseload of MDR-TB and TB were estimated by the date of notification.

⁵Calculation for Tetanus and Mumps based on reported cases only.

⁶The caseload of Syphilis and Gonorrhoea were estimated by the date of diagnosis.

⁷The caseload of HIV Infection and AIDS were estimated by the date of diagnosis, and did not include the cases of foreign nationality.

⁹The statistic of MDR-TB, Chikungunya Fever and Neonatal Tetanus were conducted with the proclamation validated since October 15th, 2007.

*The collative case numbers see the appendix 1.

Table 5 (Continued) Confirmed cases number of notifiable diseases
— by year, 1999-2008

Unit: Person

Disease	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Hansen's Disease ^{4,6}	3	4	2	7*	2*	5*	9	11	12	8
Category IV										
Herpesvirus B Infection ⁹	...	...	...	...	...	...	...	...	-	-
Leptospirosis ⁹	...	...	...	...	...	...	...	...	10	47
Melioidosis ^{1,9}	...	...	...	...	...	...	...	...	4	45
Botulism ⁹	...	...	...	...	...	...	...	...	4	11
Invasive Pneumococcal Disease ⁹	...	...	...	...	...	...	...	...	169	805
Q Fever ^{1,9}	...	...	...	...	...	...	...	...	17	91
Endemic Typhus Fever ^{1,9}	...	...	...	...	...	...	...	...	6	31
Lyme Disease ^{1,9}	...	...	...	...	...	...	...	...	1	2
Tularemia ⁹	...	...	...	...	...	...	...	...	-	-
Scrub Typhus ¹	302	270	235	237	271	368	462	384	510	492
Varicella ⁵	1,263	5,863	5,316	13,070*	12,270*	13,219	13,600	10,563	11,110	11,877
Cat-Scratch Disease ⁹	...	...	...	...	...	...	...	...	1	28
Toxoplasmosis ⁹	...	...	...	...	...	...	...	...	2	3
Severe Complicated Influenza Case	2	4	7	5	16	19	33	25	26	22
Creutzfeldt-Jakob Disease ^{6,9}	...	...	...	...	...	...	...	...	-	-
Category V										
Rift Valley Fever	...	...	...	...	...	...	...	-	-	-
Marburg Haemorrhagic Fever	...	...	...	...	...	...	...	-	-	-
Yellow Fever	-	-	-	-	-	-	-	-	-	-
Ebola Haemorrhagic Fever	-	-	-	-	-	-	-	-	-	-
Lassa Fever	...	...	...	...	...	...	...	-	-	-

Note:

¹The case amount of these diseases contained imported ones, including 5 Melioidosis, 1 Q Fever, 3 Endemic Typhus Fever, 2 Lyme Disease and 3 Scrub Typhus cases confirmed.

⁴The confirmed cases of Hansen's Disease included 4 Taiwanese, 2 Indonesian and 2 philippine.

⁵Calculation for Varicella based on reported cases only.

⁶The caseload of Hansen's Disease and Creutzfeldt-Jakob Disease were estimated by the date of diagnosis.

⁹The statistics of Herpesvirus B Infection, Leptospirosis, Melioidosis, Botulism, Invasive Pneumococcal Disease, Q Fever, Endemic Typhus Fever, Lyme Disease, Tularemia, Cat-Scratch Disease, Toxoplasmosis and Creutzfeldt-Jakob Disease were conducted with the proclamation validated since October 15th, 2007.

*The collative case numbers see the appendix 1.

Table 6 Analysis of time intervals between diagnosis and reporting for notifiable diseases
—by locality, 2008

Unit:Day

Locality	2007			2008							
	Case no.	Average	Median	Case no.	Average	Median	<=24 hours		>24 hours		
							Case no.	%	Case no.	%	
Total	5,237	0.2	0	4,527	0.2	0	4,513	99.7	14	0.3	
Taipei City	408	0.2	0	755	0.3	0	753	99.7	2	0.3	
Kaohsiung City	639	0.3	0	988	0.3	0	987	99.9	1	0.1	
Taipei County	114	0.2	0	355	0.3	0	354	99.7	1	0.3	
Yilan County	44	0.1	0	42	0.2	0	41	97.6	1	2.4	
Taoyuan County	246	0.0	0	462	0.1	0	455	98.5	7	1.5	
Hsinchu County	11	0.3	0	13	0.1	0	13	100.0	-	-	
Miaoli County	18	0.3	0	44	0.2	0	44	100.0	-	-	
Taichung County	80	0.5	0	126	0.3	0	126	100.0	-	-	
Changhua County	56	0.1	0	118	0.3	0	118	100.0	-	-	
Nantou County	134	0.1	0	26	0.0	0	26	100.0	-	-	
Yunlin County	16	0.2	0	31	0.0	0	31	100.0	-	-	
Chiayi County	15	0.1	0	20	0.1	0	20	100.0	-	-	
Tainan County	785	0.1	0	103	0.2	0	102	99.0	1	1.0	
Kaohsiung County	240	0.2	0	339	0.3	0	339	100.0	-	-	
Pingtung County	81	0.2	0	178	0.3	0	178	100.0	-	-	
Taitung County	28	0.3	0	33	0.1	0	33	100.0	-	-	
Hualien County	55	0.1	0	190	0.1	0	189	99.5	1	0.5	
Penghu County	3	0.0	0	7	0.3	0	7	100.0	-	-	
Keelung City	26	0.2	0	25	0.1	0	25	100.0	-	-	
Hsinchu City	30	0.2	0	39	0.2	0	39	100.0	-	-	
Taichung City	165	0.1	0	252	0.2	0	252	100.0	-	-	
Chiayi City	49	1.1	0	48	0.0	0	48	100.0	-	-	
Tainan City	1,988	0.2	0	323	0.2	0	323	100.0	-	-	
Kinmen County	6	0.2	0	10	0.3	0	10	100.0	-	-	
Lienchiang County	-	-	-	-	-	-	-	-	-	-	

Note:

1. Listed infectious diseases should be reported within 24 hours, which was not included HIV and AIDS.
2. Analysis of time interval "between diagnosis and report received" has been separated into "between diagnosis and reporting" and "between reporting and report received" since 2003.

Table 7 Analysis of time intervals between reporting and reports received for notifiable diseases — by locality, 2008

Unit:Day

Locality	2007			2008							
	Case no.	Average	Median	Case no.	Average	Median	<=24 hours		>24 hours		
							Case no.	%	Case no.	%	
Total	5,237	0.0	0	4,527	0.0	0	4,527	100.0	-	-	
Taipei City	408	0.0	0	755	0.0	0	755	100.0	-	-	
Kaohsiung City	639	0.0	0	988	0.0	0	988	100.0	-	-	
Taipei County	114	0.0	0	355	0.0	0	355	100.0	-	-	
Yilan County	44	0.0	0	42	0.0	0	42	100.0	-	-	
Taoyuan County	246	0.0	0	462	0.0	0	462	100.0	-	-	
Hsinchu County	11	0.0	0	13	0.0	0	13	100.0	-	-	
Miaoli County	18	0.0	0	44	0.0	0	44	100.0	-	-	
Taichung County	80	0.0	0	126	0.0	0	126	100.0	-	-	
Changhua County	56	0.0	0	118	0.0	0	118	100.0	-	-	
Nantou County	134	0.0	0	26	0.0	0	26	100.0	-	-	
Yunlin County	16	0.0	0	31	0.0	0	31	100.0	-	-	
Chiayi County	15	0.0	0	20	0.0	0	20	100.0	-	-	
Tainan County	785	0.0	0	103	0.0	0	103	100.0	-	-	
Kaohsiung County	240	0.0	0	339	0.0	0	339	100.0	-	-	
Pingtung County	81	0.0	0	178	0.0	0	178	100.0	-	-	
Taitung County	28	0.0	0	33	0.1	0	33	100.0	-	-	
Hualien County	55	0.1	0	190	0.1	0	190	100.0	-	-	
Penghu County	3	0.0	0	7	0.0	0	7	100.0	-	-	
Keelung City	26	0.0	0	25	0.1	0	25	100.0	-	-	
Hsinchu City	30	0.0	0	39	0.0	0	39	100.0	-	-	
Taichung City	165	0.0	0	252	0.0	0	252	100.0	-	-	
Chiayi City	49	0.0	0	48	0.0	0	48	100.0	-	-	
Tainan City	1,988	0.0	0	323	0.0	0	323	100.0	-	-	
Kinmen County	6	0.0	0	10	0.1	0	10	100.0	-	-	
Lienchiang County	-	-	-	-	-	-	-	-	-	-	

Note:

1. Listed infectious diseases should be reported within 24 hours, which was not included HIV and AIDS.
2. Analysis of time interval "between diagnosis and report received" has been separated into "between diagnosis and reporting" and "between reporting and report received" since 2003.

Table 8 Analysis of time intervals between reports received from local health bureau to Taiwan CDC for notifiable diseases — by locality, 2008

Unit:Day

Locality	2007			2008							
	Case no.	Average	Median	Case no.	Average	Median	<=24 hours		>24 hours		
							Case no.	%	Case no.	%	
Total	5,237	0.0	0	4,527	0.0	0	4,525	100.0	2	0.0	
Taipei City	408	0.0	0	755	0.0	0	755	100.0	-	-	
Kaohsiung City	639	0.0	0	988	0.0	0	988	100.0	-	-	
Taipei County	114	0.0	0	355	0.0	0	355	100.0	-	-	
Yilan County	44	0.0	0	42	0.0	0	42	100.0	-	-	
Taoyuan County	246	0.0	0	462	0.0	0	462	100.0	-	-	
Hsinchu County	11	0.0	0	13	0.0	0	13	100.0	-	-	
Miaoli County	18	0.0	0	44	0.0	0	44	100.0	-	-	
Taichung County	80	0.0	0	126	0.0	0	126	100.0	-	-	
Changhua County	56	0.0	0	118	0.0	0	118	100.0	-	-	
Nantou County	134	0.0	0	26	0.0	0	26	100.0	-	-	
Yunlin County	16	0.0	0	31	0.0	0	31	100.0	-	-	
Chiayi County	15	0.0	0	20	0.0	0	20	100.0	-	-	
Tainan County	785	0.1	0	103	0.0	0	103	100.0	-	-	
Kaohsiung County	240	0.0	0	339	0.0	0	338	99.7	1	0.3	
Pingtung County	81	0.0	0	178	0.0	0	178	100.0	-	-	
Taitung County	28	0.0	0	33	0.0	0	33	100.0	-	-	
Hualien County	55	0.2	0	190	0.0	0	189	99.5	1	0.5	
Penghu County	3	0.0	0	7	0.0	0	7	100.0	-	-	
Keelung City	26	0.0	0	25	0.0	0	25	100.0	-	-	
Hsinchu City	30	0.0	0	39	0.0	0	39	100.0	-	-	
Taichung City	165	0.0	0	252	0.0	0	252	100.0	-	-	
Chiayi City	49	0.0	0	48	0.0	0	48	100.0	-	-	
Tainan City	1,988	0.0	0	323	0.0	0	323	100.0	-	-	
Kinmen County	6	0.0	0	10	0.1	0	10	100.0	-	-	
Lienchiang County	-	-	-	-	-	-	-	-	-	-	

Note: Listed infectious diseases should be reported within 24 hours, which was not included HIV and AIDS.

Table 9 Cases of Acute Flaccid Paralysis, Neonatal Tetanus, Congenital Rubella Syndrome, and Measles Eradication Program—by Locality, 2008

Unit: Person

Locality	Total					Acute flaccid paralysis					Neonatal tetanus				
	(1)	(2)	(3)	(3-1)	(4)	(1)	(2)	(3)	(3-1)	(4)	(1)	(2)	(3)	(3-1)	(4)
Total	496	235	215	91.5	119	445	76	68	89.5	73	2	-	-	-	-
Taipei City	1	47	46	97.9	15	-	6	6	100.0	6	-	-	-	-	-
Kaohsiung City	36	37	23	62.2	27	23	24	16	66.7	24	-	-	-	-	-
Taipei County	5	34	34	100.0	9	-	-	-	-	-	2	-	-	-	-
Yilan County	-	3	3	100.0	-	-	1	1	100.0	-	-	-	-	-	-
Taoyuan County	-	34	34	100.0	25	-	17	17	100.0	17	-	-	-	-	-
Hsinchu County	1	1	1	100.0	1	-	-	-	-	-	-	-	-	-	-
Miaoli County	-	3	3	100.0	-	-	-	-	-	-	-	-	-	-	-
Taichung County	9	5	5	100.0	2	4	1	1	100.0	1	-	-	-	-	-
Changhua County	16	18	18	100.0	14	4	4	4	100.0	4	-	-	-	-	-
Nantou County	1	1	1	100.0	-	1	-	-	-	-	-	-	-	-	-
Yunlin County	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chiayi County	5	4	4	100.0	2	1	-	-	-	-	-	-	-	-	-
Tainan County	1	1	1	100.0	-	-	-	-	-	-	-	-	-	-	-
Kaohsiung County	11	9	9	100.0	5	7	5	5	100.0	5	-	-	-	-	-
Pingtung County	9	9	5	55.6	5	5	4	4	100.0	4	-	-	-	-	-
Taitung County	400	1	1	100.0	1	400	-	-	-	-	-	-	-	-	-
Hualien County	-	2	2	100.0	-	-	-	-	-	-	-	-	-	-	-
Penghu County	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Keelung City	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hsinchu City	-	3	2	66.7	-	-	-	-	-	-	-	-	-	-	-
Taichung City	-	14	14	100.0	9	-	9	9	100.0	9	-	-	-	-	-
Chiayi City	-	3	3	100.0	-	-	1	1	100.0	-	-	-	-	-	-
Tainan City	1	6	6	100.0	4	-	4	4	100.0	3	-	-	-	-	-
Kinmen County	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lienchiang County	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: 1. (1) Cases from active surveillance
 (2) Cases from passive surveillance
 (3) Investigated cases
 (3-1) Percentage of cases investigated
 (4) Confirmed Cases (AFP cases were confirmed by neurologists, others by lab and clinical symptoms.)
 2. Analysis unit: reporting jurisdictions.
 3. Acute flaccid paralysis cases under 15 years old were excluded since 2005.

Table 9 (Continued) Cases of Acute Flaccid Paralysis, Neonatal Tetanus, Congenital Rubella Syndrome, and Measles Eradication Program—by Locality, 2008

Unit: Person

Locality	Congenital rubella syndrome					Measles					Rubella				
	(1)	(2)	(3)	(3-1)	(4)	(1)	(2)	(3)	(3-1)	(4)	(1)	(2)	(3)	(3-1)	(4)
Total	2	2	2	100.0	1	18	66	59	89.4	12	29	91	86	94.5	33
Taipei City	1	-	-	-	-	-	23	23	100.0	4	-	18	17	94.4	5
Kaohsiung City	-	-	-	-	-	6	6	2	33.3	2	7	7	5	71.4	1
Taipei County	1	-	-	-	-	1	16	16	100.0	3	1	18	18	100.0	6
Yilan County	-	-	-	-	-	-	-	-	-	-	-	2	2	100.0	-
Taoyuan County	-	1	1	100.0	1	-	2	2	100.0	1	-	14	14	100.0	6
Hsinchu County	-	-	-	-	-	-	-	-	-	-	1	1	1	100.0	1
Miaoli County	-	-	-	-	-	-	-	-	-	-	-	3	3	100.0	-
Taichung County	-	-	-	-	-	4	3	3	100.0	-	1	1	1	100.0	1
Changhua County	-	-	-	-	-	2	4	4	100.0	-	10	10	10	100.0	10
Nantou County	-	-	-	-	-	-	1	1	100.0	-	-	-	-	-	-
Yunlin County	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chiayi County	-	-	-	-	-	3	3	3	100.0	2	1	1	1	100.0	-
Tainan County	-	-	-	-	-	-	-	-	-	-	1	1	1	100.0	-
Kaohsiung County	-	-	-	-	-	-	-	-	-	-	4	4	4	100.0	-
Pingtung County	-	-	-	-	-	2	3	1	33.3	-	2	2	-	-	1
Taitung County	-	-	-	-	-	-	-	-	-	-	-	1	1	100.0	1
Hualien County	-	-	-	-	-	-	2	2	100.0	-	-	-	-	-	-
Penghu County	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Keelung City	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hsinchu City	-	-	-	-	-	-	1	-	-	-	-	2	2	100.0	-
Taichung City	-	1	1	100.0	-	-	1	1	100.0	-	-	3	3	100.0	-
Chiayi City	-	-	-	-	-	-	1	1	100.0	-	-	1	1	100.0	-
Tainan City	-	-	-	-	-	-	-	-	-	-	1	2	2	100.0	1
Kinmen County	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lienchiang County	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: 1. (1) Cases from active surveillance
 (2) Cases from passive surveillance
 (3) Investigated cases
 (3-1) Percentage of cases investigated
 (4) Confirmed Cases (AFP cases were confirmed by neurologists, others by lab and clinical symptoms.)
 2. Analysis unit: reporting jurisdictions.

Table 10 Vaccination coverage in percent with individual vaccines
 — by birth cohorts & locality

Unit : %

Vaccines	BCG			DTP					
Birth cohort	2007			2007			2006		
Dose	single dose			3rd dose			4th dose		
Locality	Target population	Vaccinated population	Vaccination coverage	Target population	Vaccinated population	Vaccination coverage	Target population	Vaccinated population	Vaccination coverage
Total	204636	200846	98.15	204636	196747	96.14	205420	191229	93.09
Taipei City	22633	22289	98.48	22633	21957	97.01	21957	20814	94.79
Kaohsiung City	12096	11910	98.46	12096	11681	96.57	12187	11284	92.59
Taipei County	32826	31968	97.39	32826	30874	94.05	33331	30226	90.68
Yilan County	3721	3706	99.6	3721	3663	98.44	3872	3736	96.49
Taoyuan County	20005	19586	97.91	20005	19187	95.91	20002	18544	92.71
Hsinchu County	6244	6143	98.38	6244	5975	95.69	6055	5640	93.15
Miaoli County	5179	5092	98.32	5179	4999	96.52	5115	4780	93.45
Taichung County	15213	15049	98.92	15213	14791	97.23	15043	14158	94.12
Changhua County	12189	11936	97.92	12189	11858	97.28	12480	11733	94.01
Nantou County	4478	4405	98.37	4478	4266	95.27	4546	4171	91.75
Yunlin County	6294	6260	99.46	6294	6180	98.19	6514	6260	96.1
Chiayi County	4640	4610	99.35	4640	4549	98.04	4779	4590	96.05
Tainan County	8785	8632	98.26	8785	8550	97.32	8779	8398	95.66
Kaohsiung County	10607	10276	96.88	10607	10087	95.1	10777	9766	90.62
Pingtung County	6946	6847	98.57	6946	6715	96.67	7304	6782	92.85
Taitung County	1989	1899	95.48	1989	1867	93.87	2034	1803	88.64
Hualien County	2754	2735	99.31	2754	2603	94.52	2857	2651	92.79
Penghu County	763	762	99.87	763	747	97.9	836	801	95.81
Keelung City	2896	2879	99.41	2896	2806	96.89	2941	2761	93.88
Hsinchu City	4953	4854	98	4953	4668	94.25	4878	4422	90.65
Taichung City	9760	9601	98.37	9760	9446	96.78	9559	9019	94.35
Chiayi City	2153	2086	96.89	2153	2047	95.08	2249	2117	94.13
Tainan City	6457	6342	98.22	6457	6229	96.47	6406	5924	92.48
Kinmen County	943	867	91.94	943	891	94.49	829	763	92.04
Lienchiang County	112	112	100	112	111	99.11	90	86	95.56

Note: Inoculation period: 2006/01/01 to 2008/12/31.

Table 10 (Continued) Vaccination coverage in percent with individual vaccines
—by birth cohorts & locality

Unit : %

Vaccines	OPV						Hepatitis B					
	2007			2006			2007			2007		
Birth cohort	2007			2006			2007			2007		
Dose	3rd dose			4th dose			2nd dose			3rd dose		
Locality	Target population	Vaccinated population	Vaccination coverage	Target population	Vaccinated population	Vaccination coverage	Target population	Vaccinated population	Vaccination coverage	Target population	Vaccinated population	Vaccination coverage
Total	204636	196385	95.97	205420	190574	92.77	204636	200714	98.08	204636	197493	96.51
Taipei City	22633	21930	96.89	21957	20741	94.46	22633	22285	98.46	22633	21978	97.11
Kaohsiung City	12096	11667	96.45	12187	11235	92.19	12096	11889	98.29	12096	11753	97.16
Taipei County	32826	30772	93.74	33331	30077	90.24	32826	31864	97.07	32826	31140	94.86
Yilan County	3721	3663	98.44	3872	3735	96.46	3721	3707	99.62	3721	3669	98.6
Taoyuan County	20005	19118	95.57	20002	18447	92.23	20005	19626	98.11	20005	19228	96.12
Hsinchu County	6244	5973	95.66	6055	5618	92.78	6244	6085	97.45	6244	5990	95.93
Miaoli County	5179	4986	96.27	5115	4760	93.06	5179	5098	98.44	5179	5013	96.79
Taichung County	15213	14791	97.23	15043	14155	94.1	15213	15019	98.72	15213	14825	97.45
Changhua County	12189	11857	97.28	12480	11730	93.99	12189	12015	98.57	12189	11870	97.38
Nantou County	4478	4260	95.13	4546	4149	91.27	4478	4377	97.74	4478	4296	95.94
Yunlin County	6294	6170	98.03	6514	6247	95.9	6294	6256	99.4	6294	6182	98.22
Chiayi County	4640	4548	98.02	4779	4590	96.05	4640	4587	98.86	4640	4552	98.1
Tainan County	8785	8531	97.11	8779	8368	95.32	8785	8614	98.05	8785	8565	97.5
Kaohsiung County	10607	10065	94.89	10777	9743	90.41	10607	10362	97.69	10607	10112	95.33
Pingtung County	6946	6695	96.39	7304	6750	92.42	6946	6820	98.19	6946	6728	96.86
Taitung County	1989	1849	92.96	2034	1782	87.61	1989	1928	96.93	1989	1879	94.47
Hualien County	2754	2608	94.7	2857	2654	92.89	2754	2693	97.79	2754	2638	95.79
Penghu County	763	747	97.9	836	797	95.33	763	757	99.21	763	749	98.17
Keelung City	2896	2804	96.82	2941	2756	93.71	2896	2885	99.62	2896	2822	97.44
Hsinchu City	4953	4660	94.08	4878	4370	89.59	4953	4819	97.29	4953	4706	95.01
Taichung City	9760	9423	96.55	9559	9011	94.27	9760	9592	98.28	9760	9472	97.05
Chiayi City	2153	2046	95.03	2249	2108	93.73	2153	2073	96.28	2153	2045	94.98
Tainan City	6457	6208	96.14	6406	5888	91.91	6457	6348	98.31	6457	6256	96.89
Kinmen County	943	903	95.76	829	779	93.97	943	903	95.76	943	914	96.92
Lienchiang County	112	111	99.11	90	84	93.33	112	112	100	112	111	99.11

Note: Inoculation period: 2006/01/01 to 2008/12/31.

Table 10 (Continued) Vaccination coverage in percent with individual vaccines
 —by birth cohorts & locality

Unit : %

Vaccines	Varicella			MMR			JE					
	July, 2006 - June, 2007			2006			2006			2005		
Dose	single dose			single dose			2nd dose			3rd dose		
Locality	Target population	Vaccinated population	Vaccination coverage	Target population	Vaccinated population	Vaccination coverage	Target population	Vaccinated population	Vaccination coverage	Target population	Vaccinated population	Vaccination coverage
Total	202951	191179	94.2	205420	198943	96.85	205741	195281	94.92	206890	189891	91.78
Taipei City	21980	20572	93.59	21957	21243	96.75	22124	20839	94.19	21994	19568	88.97
Kaohsiung City	12072	11422	94.62	12187	11761	96.5	12165	11449	94.11	12602	11445	90.82
Taipei County	32714	30182	92.26	33331	31817	95.46	33110	31138	94.04	32416	28676	88.46
Yilan County	3758	3662	97.45	3872	3812	98.45	3889	3763	96.76	3961	3756	94.82
Taoyuan County	19674	18455	93.8	20002	19384	96.91	19949	18919	94.84	20364	19021	93.41
Hsinchu County	6088	5716	93.89	6055	5859	96.76	6048	5771	95.42	5893	5507	93.45
Miaoli County	5182	4855	93.69	5115	4987	97.5	5147	4931	95.8	5159	4912	95.21
Taichung County	14937	14315	95.84	15043	14683	97.61	15024	14407	95.89	15132	14213	93.93
Changhua County	12273	11720	95.49	12480	12192	97.69	12524	12041	96.14	12651	11850	93.67
Nantou County	4568	4258	93.21	4546	4400	96.79	4554	4344	95.39	4729	4381	92.64
Yunlin County	6362	6109	96.02	6514	6408	98.37	6568	6403	97.49	6858	6510	94.93
Chiayi County	4635	4467	96.38	4779	4713	98.62	4840	4660	96.28	5172	4894	94.62
Tainan County	8796	8494	96.57	8779	8641	98.43	8815	8513	96.57	9244	8763	94.8
Kaohsiung County	10432	9697	92.95	10777	10326	95.82	10813	10155	93.91	10817	9780	90.41
Pingtung County	7123	6706	94.15	7304	7094	97.12	7310	6986	95.57	7414	6854	92.45
Taitung County	2035	1870	91.89	2034	1901	93.46	2100	1779	84.71	2060	1678	81.46
Hualien County	2703	2518	93.16	2857	2765	96.78	2880	2741	95.17	2772	2587	93.33
Penghu County	790	761	96.33	836	823	98.44	844	817	96.8	835	793	94.97
Keelung City	2914	2770	95.06	2941	2853	97.01	2959	2838	95.91	2921	2762	94.56
Hsinchu City	4797	4414	92.02	4878	4655	95.43	4879	4637	95.04	4571	4247	92.91
Taichung City	9512	9116	95.84	9559	9365	97.97	9520	9031	94.86	9892	8961	90.59
Chiayi City	2228	2110	94.7	2249	2206	98.09	2241	2150	95.94	2176	2078	95.5
Tainan City	6374	6023	94.49	6406	6161	96.18	6527	6095	93.38	6371	5830	91.51
Kinmen County	912	877	96.16	829	805	97.1	818	783	95.72	783	726	92.72
Lienchiang County	92	90	97.83	90	89	98.89	93	91	97.85	103	99	96.12

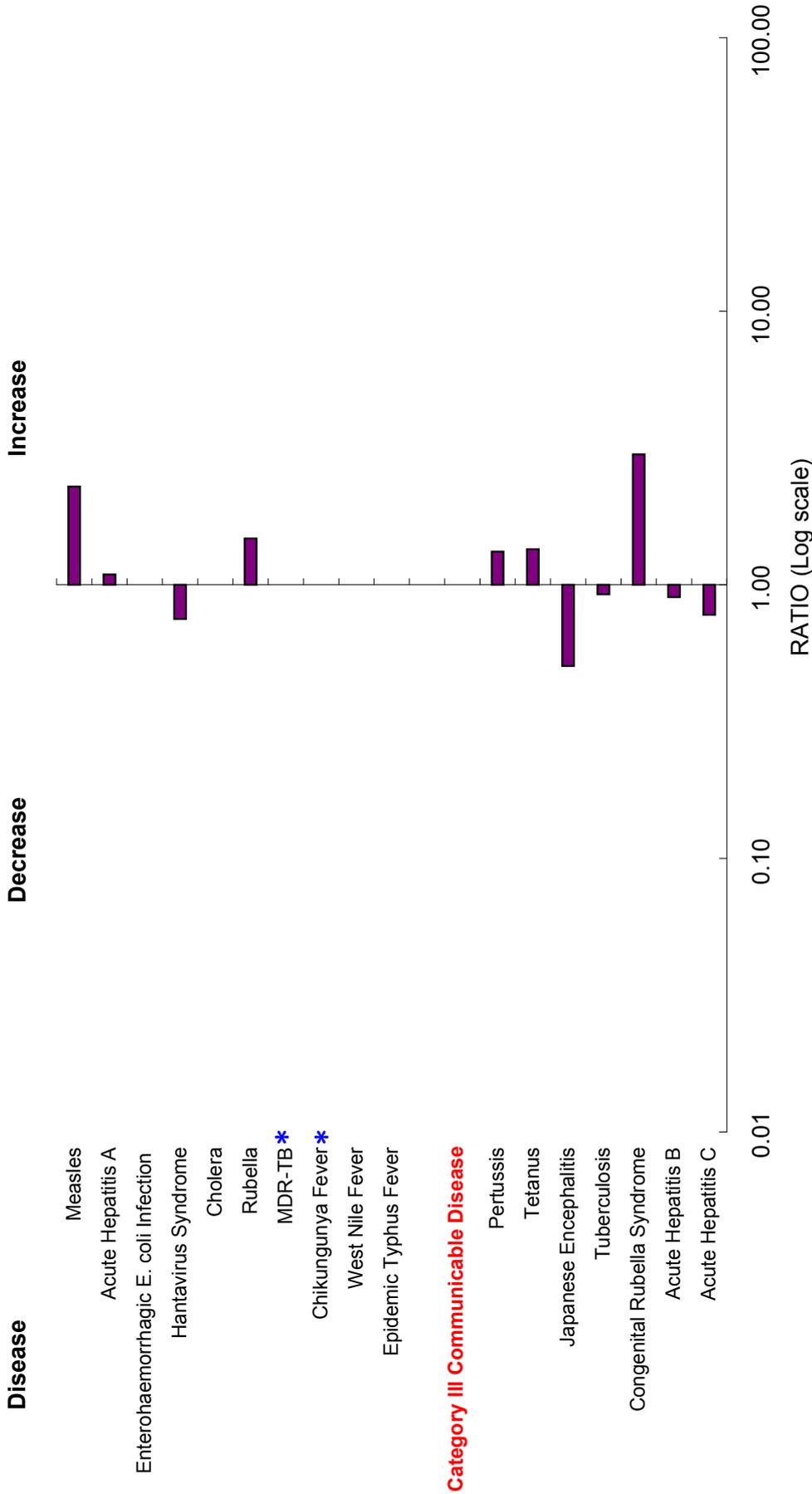
Note: Inoculation period: 2006/01/01 to 2008/12/31. (JE vaccination time from 2006/3/1 to 2007/9/30).

Table 10 (Continued) Vaccination coverage in percent with individual vaccines
—by birth cohorts & locality

Unit : %

Vaccines	JE			MMR			Td			OPV		
Birth cohort	First grade of primary school (September, 2007 attend school)			First grade of primary school (September, 2007 attend school)			First grade of primary school (September, 2007 attend school)			First grade of primary school (September, 2007 attend school)		
Locality	Target population	Vaccinated population	Vaccination coverage	Target population	Vaccinated population	Vaccination coverage	Target population	Vaccinated population	Vaccination coverage	Target population	Vaccinated population	Vaccination coverage
Total	285733	283130	99.09	274511	270505	98.54	271987	267369	98.3	272055	267531	98.34
Taipei City	29936	29567	98.77	29167	28365	97.25	26202	25323	96.65	26198	25337	96.71
Kaohsiung City	24365	24168	99.19	16945	16580	97.85	17295	16935	97.92	17293	16931	97.91
Taipei County	45397	44889	98.88	45559	44180	96.97	45168	44101	97.64	45173	44138	97.71
Yilan County	5465	5277	96.56	5303	5291	99.77	5299	5286	99.75	5299	5288	99.79
Taoyuan County	27745	27613	99.52	27669	27523	99.47	27690	27590	99.64	27690	27614	99.73
Hsinchu County	7160	7108	99.27	3443	3413	99.13	3928	3924	99.9	3924	3922	99.95
Miaoli County	8004	7960	99.45	7936	7936	100	7790	7740	99.36	7790	7740	99.36
Taichung County	20207	20175	99.84	19691	19600	99.54	19693	19666	99.86	19693	19666	99.86
Changhua County	16093	16058	99.78	16188	16086	99.37	16182	16071	99.31	16182	16073	99.33
Nantou County	6403	6366	99.42	5976	5914	98.96	6205	6159	99.26	6205	6149	99.1
Yunlin County	8493	8462	99.63	8495	8472	99.73	8488	8452	99.58	8489	8451	99.55
Chiayi County	6021	5992	99.52	6062	6055	99.88	6051	5993	99.04	6053	6000	99.12
Tainan County	12045	12036	99.93	11905	11896	99.92	11884	11864	99.83	11917	11897	99.83
Kaohsiung County	13957	13853	99.25	14035	13884	98.92	13993	13815	98.73	13991	13831	98.86
Pingtung County	9271	9200	99.23	9935	9861	99.26	9922	9167	92.39	9935	9180	92.4
Taitung County	2192	2191	99.95	2881	2880	99.97	2601	2600	99.96	2621	2620	99.96
Hualien County	3777	3770	99.81	3723	3709	99.62	3725	3713	99.68	3725	3713	99.68
Penghu County	981	981	100	990	986	99.6	990	986	99.6	990	986	99.6
Keelung City	4350	4279	98.37	4410	4349	98.62	4395	4334	98.61	4395	4333	98.59
Hsinchu City	5908	5706	96.58	5303	5220	98.43	5921	5892	99.51	5921	5914	99.88
Taichung City	14614	14272	97.66	15128	14647	96.82	14826	14356	96.83	14827	14342	96.73
Chiayi City	3593	3593	100	3792	3754	99	3782	3768	99.63	3788	3774	99.63
Tainan City	8970	8827	98.41	8805	8649	98.23	8875	8551	96.35	8874	8550	96.35
Kinmen County	711	711	100	1095	1092	99.73	1007	1007	100	1007	1007	100
Lienchiang County	75	75	100	75	75	100	75	75	100	75	75	100

Note: Elementary school children were vaccinated during 2007/9/1 to 2008/6/30 (JE vaccination time during 2008/3/1 to 2008/9/30).



Note : 1. Analysis unit: confirmed cases and its onset date.
 2. Ratio = 2008 cases / means of 2005-2007.
 3. The default value is 100 when denominator is zero and numerator is not zero. The default value is 0.01 when denominator is not zero and numerator is zero.
 4. For tetanus, varicella and mumps : based on reported cases .
 5. For syphilis and gonorrhoea: based on the diagnosis date.
 6. The numbers of HIV infection and AIDS were estimated by the date of diagnosis, and foreign nationality was excluded.
 7. * The statistics of MDR-TB and Chikungunya Fever were validated since October 15, 2007, hence there were no comparative analysis results with historical data.

Figure 1. (Continued) Comparison of 2008 total confirmed cases of notifiable diseases with historical data

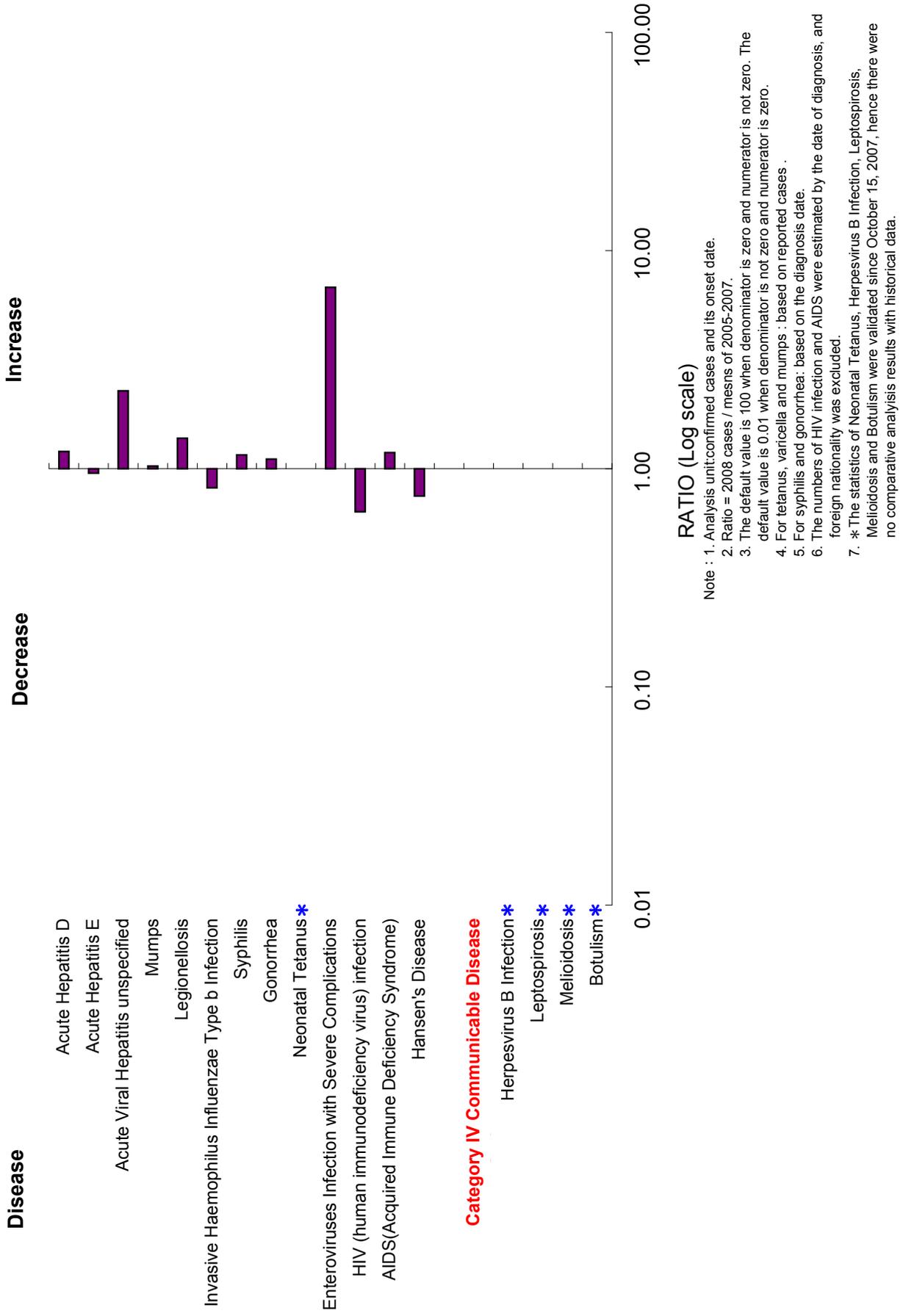


Figure 1. (Continued) Comparison of 2008 total confirmed cases of notifiable diseases with historical data

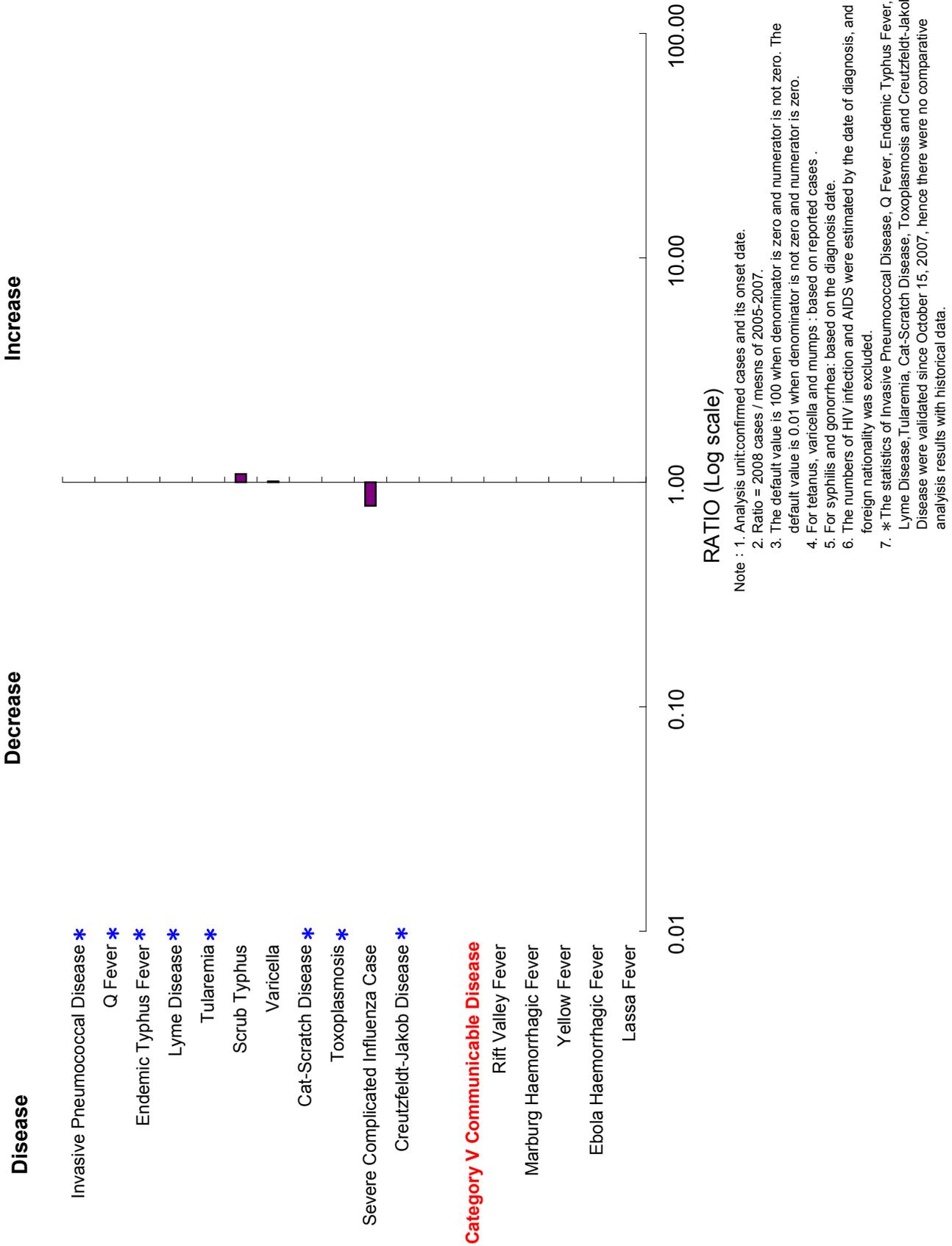
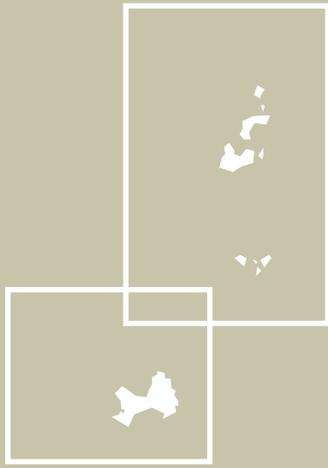


Figure 1. (Continued) Comparison of 2008 total confirmed cases of notifiable diseases with historical data



II

Specific Surveillance Systems

— **Republic of China (Taiwan), 2008**

©Abbreviations and Symbols Used in Table

- No reported cases.
- ... Not under surveillance.

Nosocomial Infections Surveillance System

I. Introduction

The "nosocomial infection" is limited to describing infections that acquired in hospitals, while the "healthcare-associated infection" (HAI) generally refers to infections that patients acquire while receiving treatment for medical or surgical conditions. HAIs may occur in all settings of care, including hospitals, long-term care facilities, homecare facilities, or outpatient departments. In order to respond to continuous evolving in the contents of medical services and the expansion of surveillance range, "healthcare-associated infection" instead of "nosocomial infection" was commonly used internationally as well as in the definition of infection surveillance in the acute care settings that published by the US CDC in 2008. To monitor the occurrence of HAIs effectively, to evaluate the epidemiologic trend of HAIs in Taiwan, and to set up internationally comparable surveillance indicators, therefore all the information could be made use of collectively to serve as important references for policy making, Taiwan CDC had revised and launched the Taiwan Nosocomial Infections Surveillance System (TNIS) in 2007. Moreover, strengthening in functions and the utility of the surveillance system is continuously going on. TNIS system not only helps to gather demographic data of HAI cases and patient-specific cultures and antimicrobial susceptibility results from reporting hospitals, but also provides a format report function, so that reporting hospitals can analyze their data locally as a reference in developing quality improvement initiatives.

II. Purpose of surveillance system

1. Establish the epidemiological database of HAI in Taiwan
2. Discovery of HAI trends
3. Facilitation of inter- and intra-hospital comparisons that can be used for quality improvement activities
4. Assistance for hospitals in developing the appropriate surveillance mechanism that permits timely recognition of infection control problems.

III. Reporting methods and data analysis feedback

TNIS adopts voluntary reporting, and each hospital may provide their data either through web-based entry or convey their data electronically through interchange platform. The web-based report mechanism mainly serves for the hospitals which lack HAI surveillance system of their own. Hospital staff enters the HAI data on the TNIS website directly. The other mechanism,

conveying surveillance data electronically through interchange platform, serves for the hospitals which had built their own HAI surveillance system. However, to enable interoperability between hospital information systems (HIS) and TNIS system, infection control practitioner has to work on vocabularies mapping from local to standard codes and hospital information technology staff has to bridge the connection between the two systems and make the electronic data pack in a standard format according to the working instruction issued by Taiwan CDC. Through this mechanism, surveillance data could be routinely transferred from hospital information systems to the TNIS system automatically. This can save the hospital staff a lot of time because they would not need to repeatedly enter the data to both of hospital surveillance system and TNIS system. At present, more than 300 hospitals are reporting during 2008, and more than 70 hospitals are working on bridging the connection between HIS and TNIS system to convey their data through interchange platform. Hospitals may use TNIS system to manage HAI cases and generate individual hospital reports. Also, Taiwan CDC periodically feedback hospitals with analysis report as a reference for inter- and intra-hospital comparisons, hope to facilitate hospitals to improve their quality in controlling HAIs and to safeguard the wellbeing of healthcare workers and the general public.

IV. Healthcare-associated infection surveillance data analysis content

1. TNIS hospitals in the intensive care units (ICUs) of medical centers and regional hospitals contributing data used in this report in 2008.
2. Distribution of HAI rates by type of location in the ICUs of medical centers and regional hospitals in 2008.
3. Distribution of device-associated infection rates in the ICUs of medical centers and regional hospitals in 2008.
4. Distribution of major sites of HAI in ICU patients from medical centers and regional hospitals in 2008.
5. Common pathogens of HAI for patients in the ICUs of medical centers in 2008.
6. Common pathogens of HAI for patients in the ICUs of regional hospitals in 2008.
7. Antimicrobial resistance proportions of selected pathogens of HAI in the ICUs of medical centers and regional hospitals in 2008.

V. Surveillance method and main results

In order to evaluate the general view of rates of HAIs and device-associated infections in Taiwan, the data source of rate distributions of HAIs and of device-associated infections in ICUs of medical centers and regional hospitals in 2008 were adopted by paper-based reports provided by all medical centers and regional hospitals, regardless it was in and not in TNIS system. Otherwise, all the analytical results in this report besides the aforesaid statement were derived from TNIS

database (Table 11). This report should be considered provisional. When more information is available in TNIS system, Taiwan CDC will provide the updated analysis report of comparison and trend of years on its website as a reference for the general public.

The distributions of HAI rate ((number of HAIs/number of patient-days)×1000‰) in ICUs of medical centers and regional hospitals are shown in Table 12. There were 819,556 patient-days with 9,936 person-times of HAI events occurred in the ICUs of 21 medical centers, the rate of infections was 12.1‰. However, in the ICUs of the 78 regional hospitals, there were 897,959 patient-days with 8,542 person-times of HAI events occurred, the rate of infections was 9.5‰. The HAI rates of ICUs were higher in medical centers than those in regional hospitals by corresponding types of location. The infection rate was highest in surgical ICU among all types of ICUs for medical centers and regional hospitals; the rate was 14.6‰ and 11.8‰, respectively. The distributions of device-associated infection rate in ICUs ((number of device-associated infections/number of device-days)×1000‰) are shown in Figure 2. The rates of catheter-associated urinary tract infections (CAUTI) was 6.0‰ in medical centers and 4.5‰ in regional hospitals, and the central line-associated bloodstream infections (CLABSI) were 4.8‰ and 3.6‰ respectively, the rate of CAUTI and the rate of CLABSI in ICUs of medical centers are higher than those in regional hospitals; the rate of infection of ventilator-associated pneumonia in regional hospitals is higher than that in medical centers, which are 2.9‰ and 2.1‰ respectively.

There were 14 medical centers and 51 regional hospitals participated in reporting HAI cases to TNIS system in 2008. The distribution of site-specific HAIs in ICUs is shown in Table 13, with the urinary tract infections topped the list in both medical centers and regional hospitals (39.3% and 38.5% respectively), followed by bloodstream infections (31.7%), and respiratory tract infections (15.3%) in medical centers; while followed by respiratory tract infections (25.2%), and bloodstream infections (24.0%) in regional hospitals. The common pathogens for HAIs in ICUs are shown in Table 14 and Table 15, the top three pathogens in the ICUs of medical centers and regional hospitals were the same, but the order in medical centers is *Candida* species, *Acinetobacter baumannii* and *Pseudomonas aeruginosa*; whereas the order in regional hospitals is *A. baumannii*, *Candida* species and *P. aeruginosa*. The proportions of antimicrobial resistance among selected pathogens identified from patients in the ICUs with HAIs are shown in Figure 3. In the ICUs of medical centers, the proportion of *S. aureus* isolates those were resistant to methicillin (MRSA) is 80.7%, the proportion of *A. baumannii* isolates those were resistant to carbapenem (CRAB) is 56.3%, the proportion of *P. aeruginosa* isolates those were resistant to carbapenem (CRPA) is 16.4%, the proportion of *enterococci* isolates those were resistant to vancomycin (VRE) is 13.0%, and the proportion of *Klebsiella pneumoniae* isolates those were resistant to carbapenem (CRKP) is 6.2%. Meanwhile, the antimicrobial resistance proportions of selected pathogens isolated from patients acquired HAIs in the ICUs of regional hospitals were 79.1%, 62.1%, 15.6%, 16.6% and 3.3% for MRSA, CRAB, CRPA, VRE and CRKP, respectively.

VI. Data analysis of healthcare-associated infections in medical centers and regional hospitals in 2008

Table 11. TNIS hospitals in the ICUs of medical centers and regional hospitals contributing data used in this report, 2008

Hospital level	1 st Quarter		2 nd Quarter		3 rd Quarter		4 th Quarter	
	No. of hospitals	No. of HAIs						
Medical center	14	1,448	14	1,396	14	1,445	12	1,452
Regional hospital	51	1,425	50	1,421	49	1,304	49	1,225

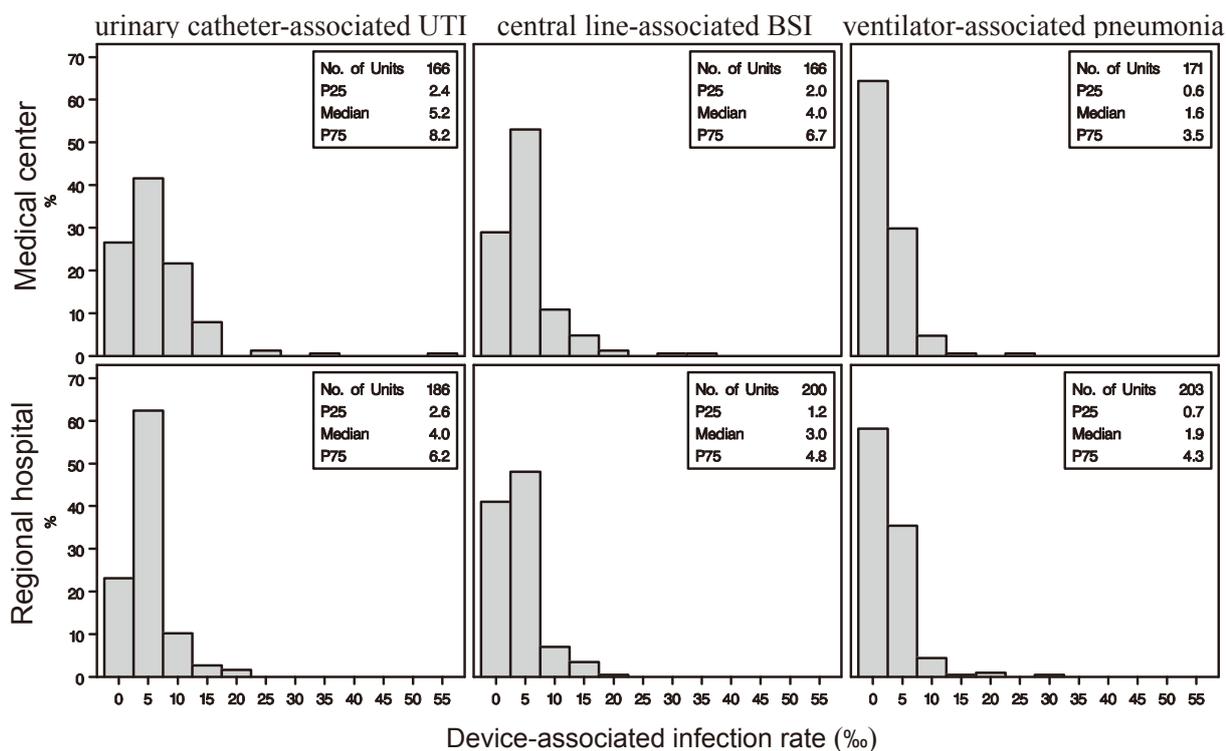
Note: Data updated to 2009/05/01

Table 12. Distribution of healthcare-associated infection rates by type of location in the ICUs of medical centers and regional hospitals, 2008

Hospital level	Type of locations	No. of units	No. of HAIs	Patient -days	Pooled mean*	Percentile		
						25%	50%	75%
Medical center	Medical ICU	50	3,279	232,393	14.1	10.1	13.2	16.7
	Surgical ICU	71	3,904	267,813	14.6	10.5	13.1	17.5
	Cardiology ICU	16	823	74,134	11.1	8.9	10.2	12.7
	Pediatric ICU	41	838	166,460	5.0	2.4	4.9	8.0
	Medical/surgical	19	1,092	78,756	13.9	9.6	12.2	17.5
	Total	197	9,936	819,556	12.1	8.0	11.6	15.3
Regional hospital	Medical ICU	56	2,349	247,723	9.5	5.5	8.5	13.2
	Surgical ICU	43	1,982	167,826	11.8	7.5	10.2	16.4
	Cardiology ICU	13	285	34,732	8.2	5.5	8.1	9.9
	Pediatric ICU	53	129	55,994	2.3	0.0	1.1	3.9
	Medical/surgical	89	3,797	391,684	9.7	6.8	9.1	11.7
	Total	254	8,542	897,959	9.5	5.0	7.8	11.7

Note:

1. Data sources were adopted by paper-based reports provided by medical centers and regional hospitals, regardless it was in not in TNIS system ;
2. healthcare-associated infection rate= (number of HAIs/number of patient-days) ×1000‰



Note:

1. device-associated infection rate= (number of HAIs/number of device-days) ×1000‰;
2. each analysis of ICU data excluded rates for units that did not report at least 50 device-days or reported more device-days than patient-days;
3. UTI, urinary tract infection; BSI, bloodstream infection

Figure 2. Distribution of device-associated infection rates in the ICUs of medical centers and regional hospitals, 2008

Table13. Distribution of major sites of healthcare-associated infection in the ICU patients from medical centers and regional hospitals, 2008

Infection site	Medical center		Regional hospital	
	No.	%	No.	%
Urinary tract	2,258	39.3	2,067	38.5
Bloodstream	1,822	31.7	1,292	24.0
Respiratory tract	878	15.3	1,354	25.2
Surgical site	290	5.1	216	4.0
Other	493	8.6	446	8.3
Total	5,741	100.0	5,375	100.0

Note: proportion of specific infection site= (number of specific infection site /number of overall infection)×100%

Table 14. Common pathogens of healthcare-associated infections in the ICUs of medical centers, 2008

Pathogens	Infection sites											
	Total		Urinary tract		Bloodstream		Respiratory tract		Surgical site		Others	
	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.
<i>Candida</i> species	1		1		3		8		8		6	
<i>C. albicans</i>		639		462		121		17		13		26
Other <i>Candida</i> spp. or NOS		267		185		73		2		4		3
<i>Acinetobacter baumannii</i>	2	648	6	146	2	240	2	169	3	41	4	52
<i>Pseudomonas aeruginosa</i>	3	639	4	215	7	126	1	189	1	50	3	59
<i>Escherichia coli</i>	4	630	2	448	8	90	7	32	6	32	7	28
<i>Staphylococcus aureus</i>	5	546	10	28	1	253	3	116	2	42	1	107
<i>Klebsiella pneumoniae</i>	6	483	5	157	5	179	4	88	4	37	10	22
Yeast-like	7	367	3	279	11	43	11	11	11	7	9	27
<i>Enterobacter</i> species	8		7		6		6		5		8	
<i>E. cloacae</i>		283		74		122		35		30		22
Other <i>Enterobacter</i> spp. or NOS		62		20		20		10		7		5
Coagulase negative staphylococci	9	283	15	8	4	185	44	1	7	23	2	66
<i>Stenotrophomonas maltophilia</i>	10	170	13	12	9	66	5	70	9	11	12	11
Other	-	1,480	-	457	-	541	-	161	-	155	-	166
Total	-	6,497	-	2,491	-	2,059	-	901	-	452	-	594

Note:

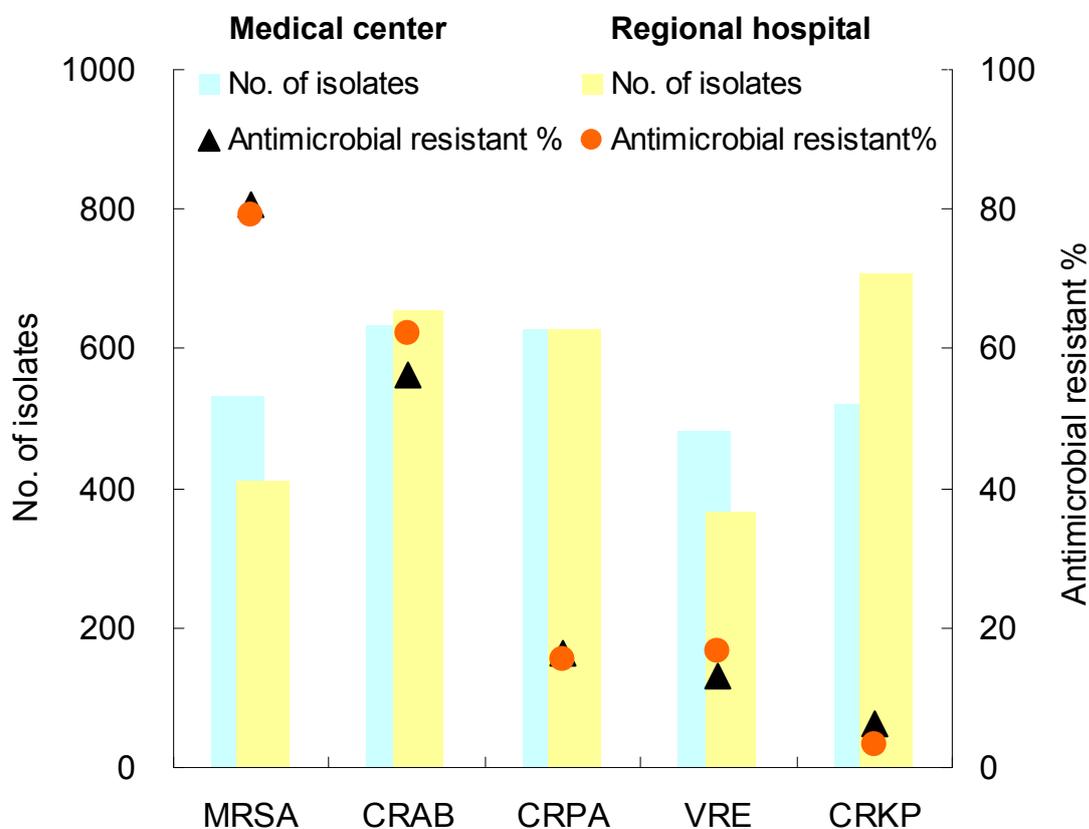
1. isolates of the same species of bacteria, regardless of antimicrobial susceptibility pattern, are counted only once per patient per infection. That is, no duplicate isolates are included;
2. NOS: not otherwise specified

Table 15. Common pathogens of healthcare-associated infections in the ICUs of regional hospitals, 2008

Pathogens	Total		Infection sites									
			Urinary tract		Bloodstream		Respiratory tract		Surgical site		Others	
	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.	Rank	No.
<i>Acinetobacter baumannii</i>	1	743	5	143	2	154	1	346	5	24	1	76
<i>Candida</i> species	2		1		5		9		4		6	
<i>C. albicans</i>		542		361		89		39		20		33
Other <i>Candida</i> spp. or NOS		191		120		56		5		6		4
<i>Pseudomonas aeruginosa</i>	3	715	4	213	8	67	2	336	2	38	3	61
<i>Escherichia coli</i>	4	667	2	453	7	81	6	70	1	39	7	24
<i>Klebsiella pneumoniae</i>	5	637	3	242	4	145	3	189	6	22	5	39
<i>Staphylococcus aureus</i>	6	495	9	38	1	204	4	155	3	30	2	68
<i>Enterobacter</i> species	7		8		6		8		7		8	
<i>E. cloacae</i>		200		66		70		36		16		12
Other <i>Enterobacter</i> spp. or NOS		63		27		14		14		2		6
Coagulase negative staphylococci	8	236	11	21	3	147	15	11	9	11	4	46
Yeast-like	9	214	6	128	9	48	13	18	15	3	9	17
<i>Proteus</i> species	10		7		13		11		8		11	
<i>P. mirabilis</i>		143		93		14		15		10		11
Other <i>Proteus</i> spp. or NOS		13		6		0		4		3		0
Other	-	1,256	-	388	-	341	-	333	-	95	-	99
Total	-	6,115	-	2,299	-	1,430	-	1,571	-	319	-	496

Note:

1. isolates of the same species of bacteria, regardless of antimicrobial susceptibility pattern, are counted only once per patient per infection. That is, no duplicate isolates are included;
2. NOS: not otherwise specified



Note:

1. Intermediate and resistant results of antibiotic susceptibility tests were categorized as antimicrobial resistant
2. MRSA: methicillin resistant *Staphylococcus aureus*. CRAB: carbapenem (imipenem or meropenem) resistant *Acinetobacter baumannii*. CRPA: carbapenem (imipenem or meropenem) resistant *Pseudomonas aeruginosa*. VRE: vancomycin resistant enterococci (*Enterococcus faecalis*, *Enterococcus faecium...etc.*) . CRKP: carbapenem (imipenem, meropenem, or ertapenem) resistant *Klebsiella pneumoniae*

Figure 3. Antimicrobial resistances of selected pathogens of healthcare-associated infections in the ICUs of medical centers and regional hospitals, 2008

Sentinel Surveillance System

I. Introduction

In order to retrieve the underreport and low timeliness of "notifiable diseases" and "reportable infectious diseases", the former National Quarantine Service set up the sentinel surveillance system in 1989, and it went into operation in 1990. In the early stage, the sentinel physicians were selected by health bureaus of counties and cities which recommended the representative practitioners having a large amount of outpatients in the districts, and the working personnel of surveillance centers of various districts of the Quarantine Service Center interviewed the physicians and selected proper physicians after knew their willingness to cooperate. The number of sentinel physicians in 2008 was kept between 700 and 800, and they were distributed in about 87% of urban townships of Taiwan.

II. Purpose of surveillance system

1. Detect infectious diseases that may break out in communities as early as possible.
2. Evaluate the harm extent of the reported diseases to the people's health.
3. Evaluate the effect of preventive plans for infectious diseases.
4. Set up basic data of indigenous epidemiology of Taiwan.
5. Set up the prevalence trend and prevalence forecasting of diseases.

III. Reported diseases in the past years

1990	Varicella, mumps, measles, rubella.
1991 1992	Varicella, mumps, bacterial gastroenteritis.
1993 1994	Varicella, mumps, bacterial gastroenteritis, pertussis.
1995	Varicella, mumps, measles, rubella, acute flaccid paralysis, diarrhea.
1996 1997 1998	Varicella, mumps, measles, rubella, acute flaccid paralysis, diarrhea, acute respiratory infection.
1999	Varicella, diarrhea, acute respiratory infection, influenza-like illness, hand-foot-mouth disease or herpangina.
2000 2001	Varicella, invasive gastroenteritis, noninvasive gastroenteritis, influenza-like illness, hand-foot-mouth disease or herpangina.
2002	Varicella, diarrhea (initiating since the 27 th week, up to the 26 th week: invasive gastroenteritis, noninvasive gastroenteritis), influenza-like illness, hand-foot-mouth disease or herpangina, fever.
2003 2004	Varicella, diarrhea, influenza-like illness, hand-foot-mouth disease or herpangina, fever.
2005 2006	Varicella, diarrhea, influenza-like illness, hand-foot-mouth disease or herpangina.
2007 2008	Diarrhea, influenza-like illness, hand-foot-mouth disease or herpangina.

IV. Reporting methods and data analysis

The sentinel physicians report the case load of diseases monitored by them to different substations of the Centers for Disease Control through the internet or telephone or fax directly once a week, and the substations' personnel put the data in the sentinel physician information management system.

The Centers for Disease Control collects and analyzes the data of the sentinel physician information management system weekly, and makes a statistical chart and displays it in the website, and publishes the "Sentinel Surveillance Weekly Report" and sends it to sentinel physicians for their reference.

V. Selective analysis of reportable diseases

1. Influenza-like illness (ILI)

⊙ Definition of case:

Following three conditions should be satisfied simultaneously:

- (1) Sudden onset, with symptoms of fever (ear temperature $\geq 38^{\circ}\text{C}$) and respiratory tract;
- (2) With muscular soreness or headache or extreme tiredness;
- (3) Simple rhinorrhea, tonsillitis and bronchitis should be excluded.

⊙ Analysis of epidemic situations: In 2008, the weekly consultation rate for influenza-like illness (ILI) reported by sentinel physicians ranged from 2.4% to 4.0%. The overall epidemic trend was milder compared to those of previous years.

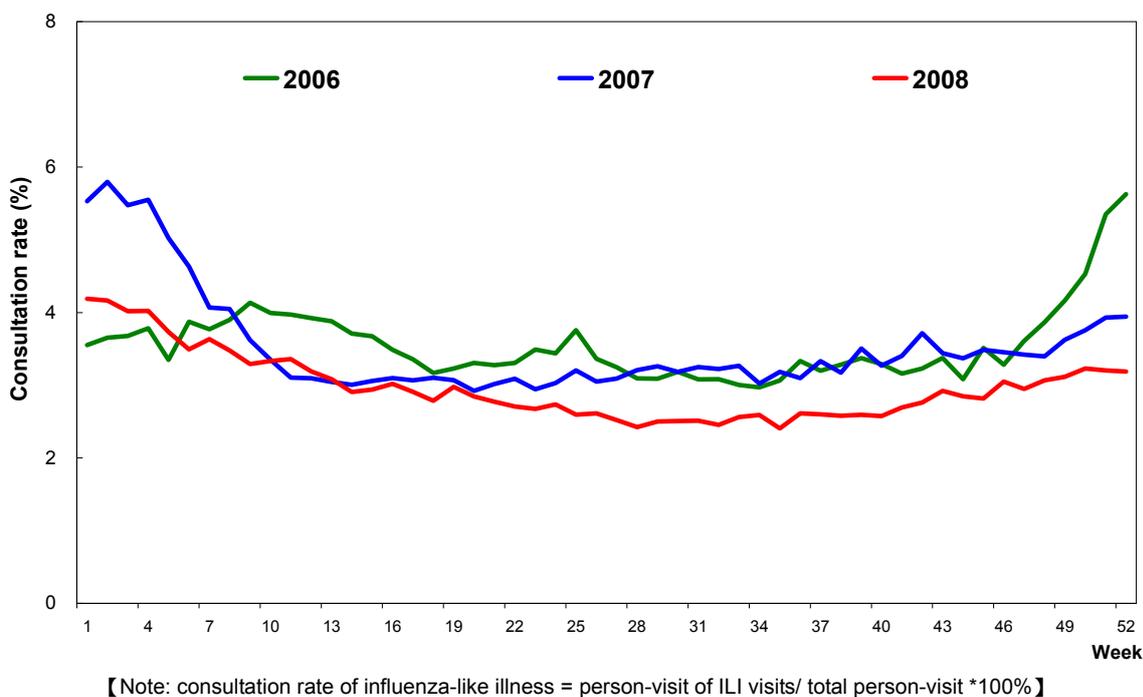
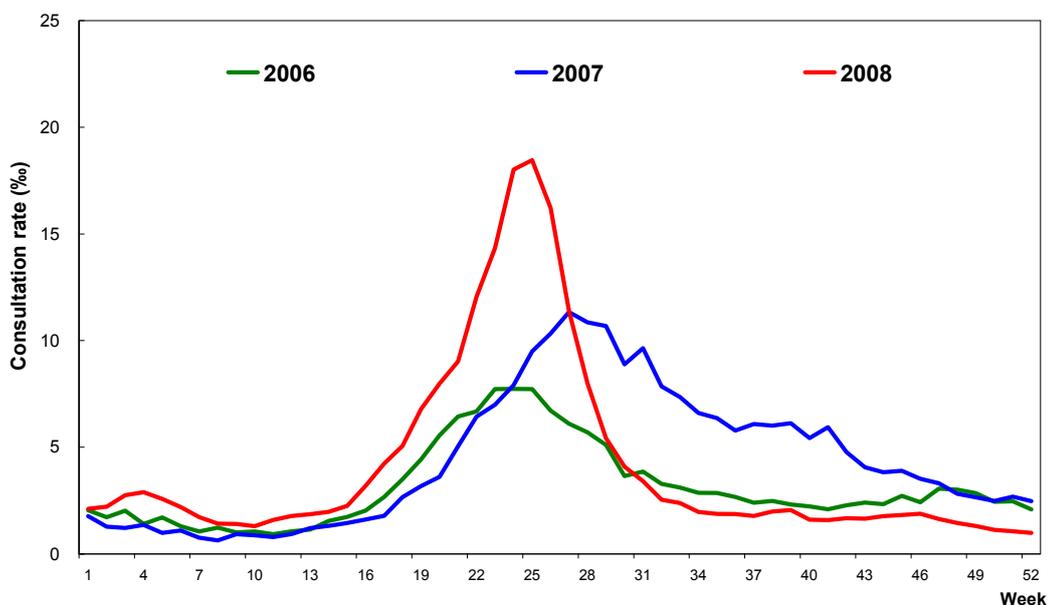


Figure 4 Trends of influenza-like illnesses reported by sentinel physicians weekly, 2006-2008

2. Enterovirus infections

- (1) Most of enterovirus infections are without symptoms or only with mild symptoms which are similar to common cold, sometimes some special clinical manifestations will be resulted in, including hand-foot-mouth disease, herpangina, aseptic meningitis, viral encephalitis, myocarditis, polio-like syndrome and acute hemorrhagic conjunctivitis. The hand-foot-mouth disease and herpangina are brought into the diseases under the surveillance of sentinel physicians in order to monitor the enterovirus infection situation in Taiwan systematically.
- (2) Definition of hand-foot-mouth disease case: small blisters or rashes appear on mouth, palms, soles and/or knees and buttocks.
- (3) Definition of herpangina case: have a fever and small blisters or ulcers appear at pharyngeal portion.
- (4) Analysis of epidemic situations: In Taiwan, enterovirus infections are generally most prevalent between the months of April and October, with two peaks occurring in May- June and September-October. In 2008, the weekly consultation rate of enterovirus infections reported by the sentinel physicians ranged from 1.0‰ to 18.5‰, with a peak season occurring in mid-June. However, the second peak in October did not show up this year. Herpangina was the main symptom presented. The overall epidemic peak occurred between the 15th and 30th weeks, and it was more severe than those in previous years. Since the 30th week, the overall epidemic trend was milder comparatively to previous ones.

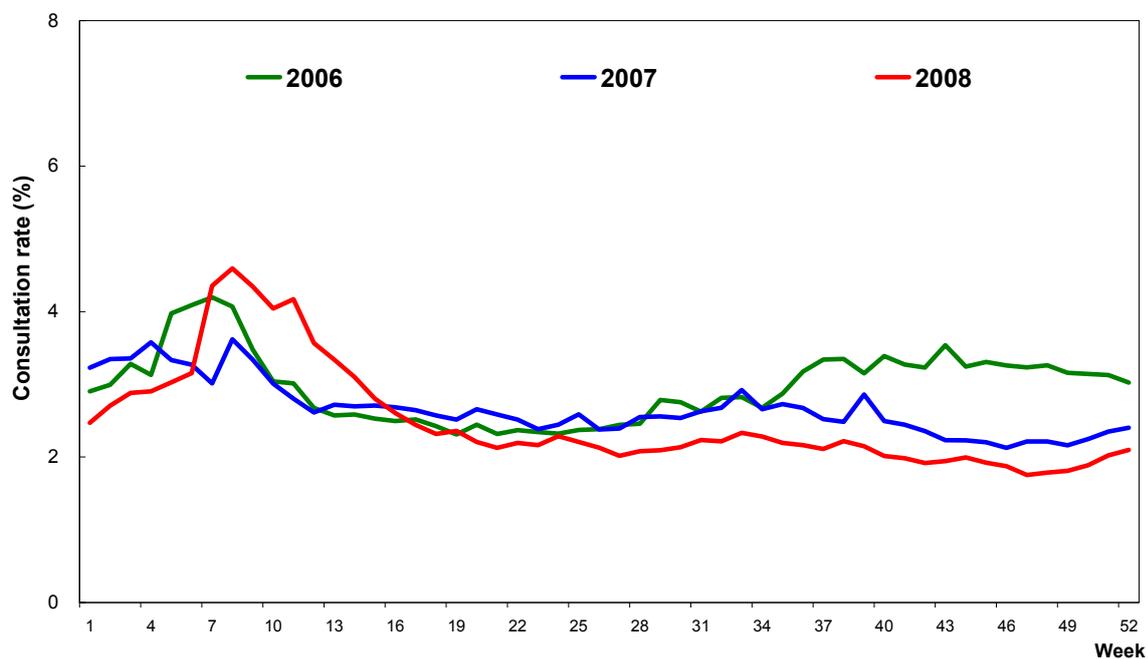


【Note: Consultation rate of enterovirus infections = person-visit of enterovirus infections / total person-visit *1000‰.】

Figure 5 Trends of Enterovirus Infections reported by sentinel physicians weekly, 2006-2008

3. Diarrhea

- ⊙ Definition of case: more than three times of diarrhea per day, with more than one of followings:
 1. vomiting, 2. fever, 3. mucous stool or hematochezia, 4. watery diarrhea.
- ⊙ Analysis of epidemic situations: In 2008, the weekly consultation rate for diarrhea reported by sentinel physicians ranged from 1.8% to 4.6%. The overall epidemic peak occurred in spring, and it was similar to those in previous years.



【Note: Consultation rate of diarrhea = person-visit of diarrhea / total person-visit *100%.】

Figure 6 Trends of diarrhea reported by sentinel physicians weekly, 2006-2008

School-based Surveillance System

I. Introduction

The school-based surveillance system mainly monitors common communicable diseases in school children, a primary school is a dense group with weak resistance, once a communicable disease invaded, it will be very likely to initiate an outbreak, the Centers for Disease Control has carried out the school-based surveillance since February, 2001 in order to control the occurrence of communicable diseases, and the number of reporting primary schools has been increased from 20 to about 611, a long-term trend of communicable diseases that are likely to be acquired by school children has been set up, so as to detect the pathogens and prevent the prevalence of communicable diseases as early as possible.

II. Purpose of surveillance system

The occurrence trend of communicable diseases in schools can be known by setting up the school-based surveillance system, so as to predict the possibility of outbreak, monitor the prevalence of communicable diseases early, and adopt proper prophylactic measures timely to avoid communicable diseases spreading through the schools, and with the schools' health education, to reach the goal of prevention of communicable diseases and secure the school children's health. The school-based surveillance system is a simple, flexible, specific and sensitive system. Meanwhile, it can reflect the situations of communicable disease surveillance timely and effectively, and gather school children's communicable disease data systematically for analyzing and interpreting the epidemic situations as the reference for evaluation and execution of prophylactic measures. Therefore, the occurrence of communicable diseases in schools shall be monitored continuously to avoid these diseases being spread to families or communities that may result in wider prevalence.

The database of the school-based surveillance system monitors communicable diseases based on a diversified communicable disease surveillance system to perfect the overall diseases reporting.

III. Diseases under surveillance

Influenza-like illness, hand-foot-mouth disease or herpangina, diarrhea, fever, conjunctivitis and other special communicable diseases are reportable in this system.

IV. Reporting method and data analysis feedback

The principle of the reporting method is voluntary participation, the school nurses of public primary schools report the case data to this system directly through the internet every week, when the reports are completed by every Tuesday, the persons in charge of various substations of the Centers for Disease Control supervise and complete the upload ratio of schools of different districts, and find out whether there are other communicable disease situations. The data are collected and analyzed weekly, and made into a statistical chart that is displayed in the website, and they are fed back to the reporting schools, relevant health units and education units through the "Sentinel Surveillance Weekly Report" published weekly.

V. Selective analysis of reportable diseases

1. Influenza-like illness

◎ Definition of case:

Acute respiratory infection and with the following criteria simultaneously:

- (1) Sudden onset, with fever (ear temperature $\geq 38^{\circ}\text{C}$) and respiratory infection.
- (2) With muscular soreness or headache or extreme tiredness.

◎ Analysis of epidemic situation:

- (1) According to the data of the school-based surveillance system of the Centers for Disease Control, the morbidity of influenza-like illness was between 0.26% and 0.62% in 2008; the overall epidemic situation was similar to that in 2007.
- (2) As compared with the data of the sentinel surveillance system, these two systems have similar trends.

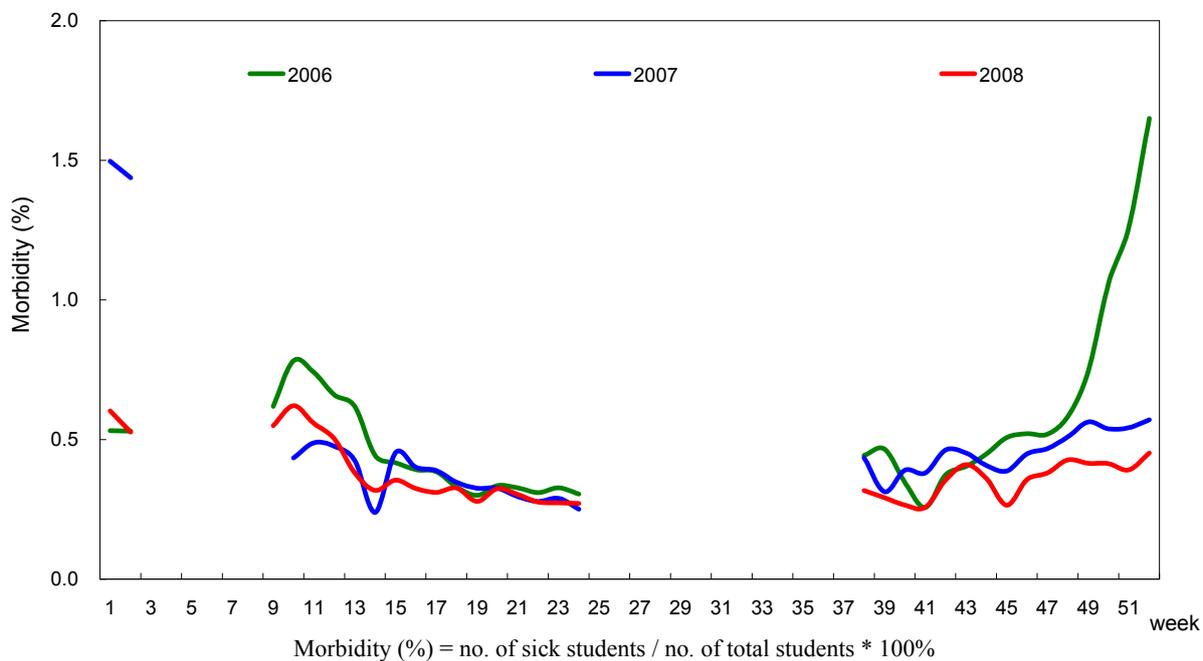


Figure 7 ILI morbidity reported by the School-based Surveillance System, 2006-2008

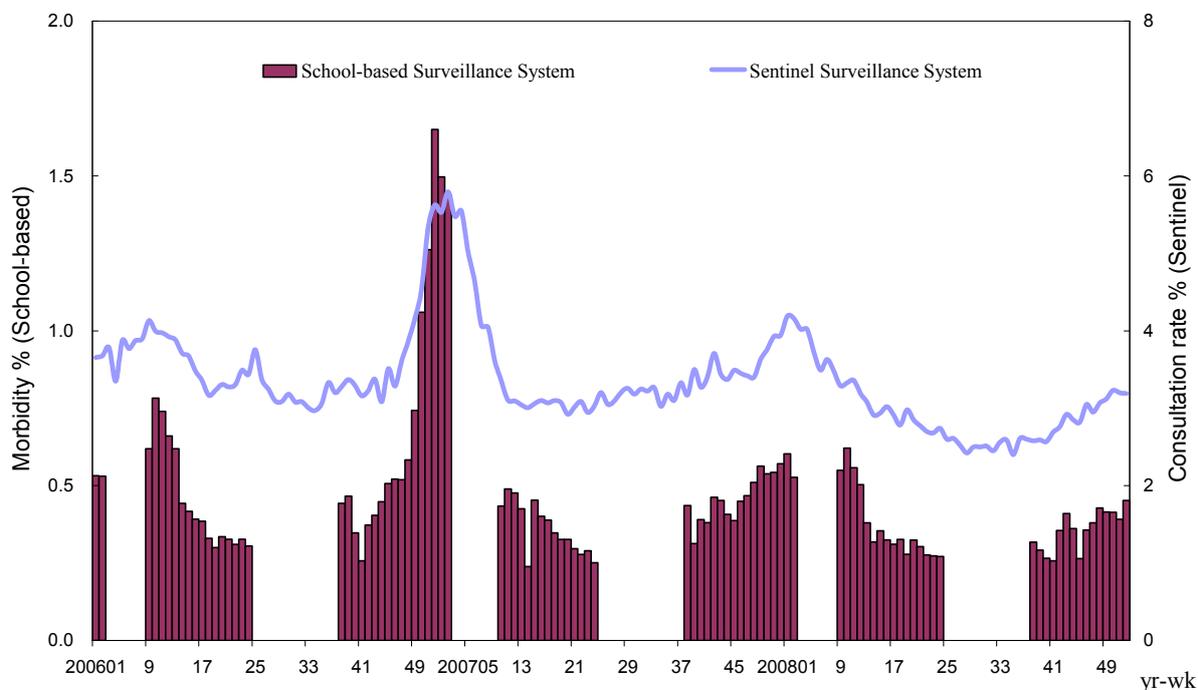


Figure 8 Comparison of ILI morbidity between School-based Surveillance System and Sentinel Surveillance System

2. Hand-foot-mouth disease or herpangina

◎ Definition of case:

- (1) Definition of hand-foot-mouth disease case: small blisters or rashes appear on mouth, palms, soles and/or knees and buttocks.
- (2) Definition of herpangina case: have a fever and small blisters or ulcers appear at pharyngeal portion.

◎ Analysis of epidemic situation:

- (1) According to the data of the school-based surveillance system of the Centers for Disease Control, the morbidity of hand-foot-mouth disease or herpangina was 0.007% to 0.166% in 2008; the epidemic situation showed an obvious uptrend from the fifth week to the end of the semester (24th week), and the overall epidemic situation was heavier than that in 2006 and 2007.
- (2) As compared with the data of the sentinel surveillance system, these two systems have similar trends.

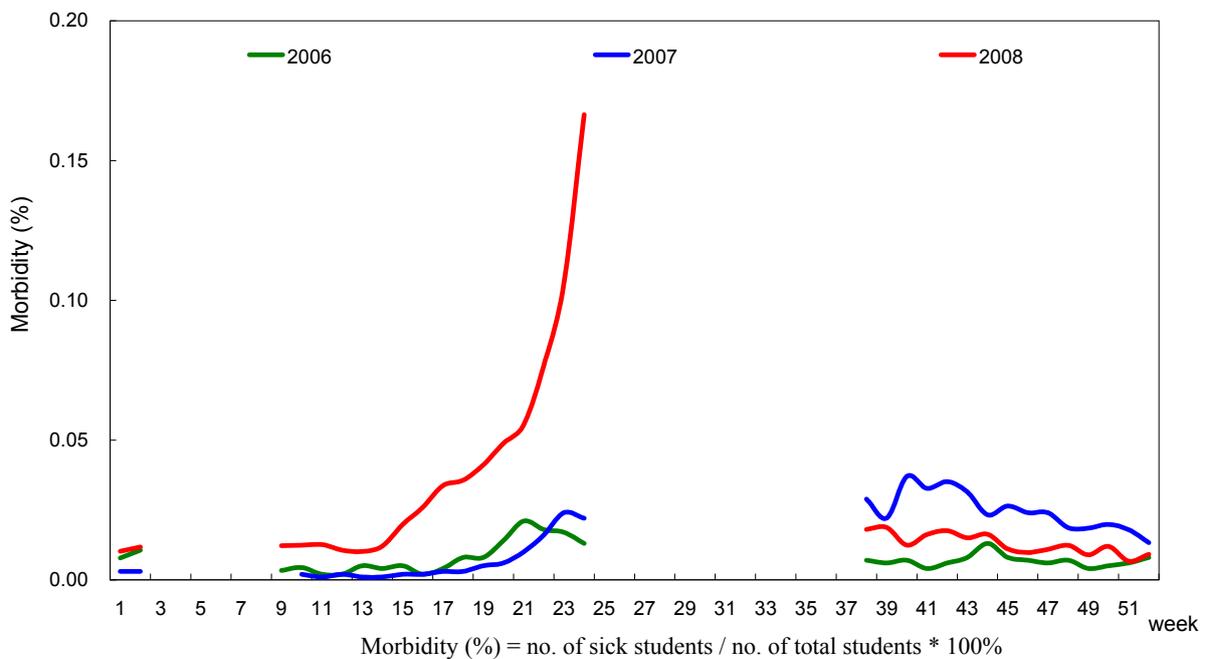


Figure 9 Enterovirus morbidity reported by the School-based Surveillance System, 2006-2008

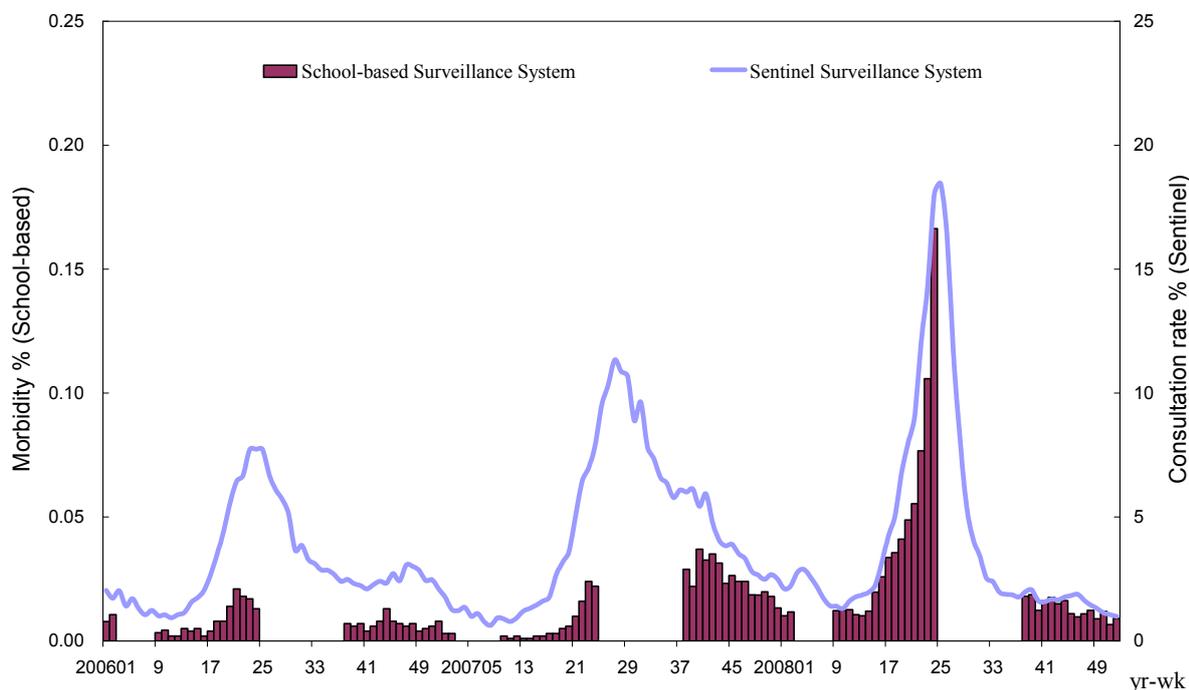


Figure 10 Comparison of Enterovirus morbidity between the School-based Surveillance System and Sentinel Surveillance System

3. Diarrhea

◎ Definition of case:

More than three times of diarrhea per day, and with more than one of following symptoms:

- (1) Vomiting.
- (2) Fever.
- (3) Mucous stool or hematochezia.
- (4) Watery diarrhea.

◎ Analysis of epidemic situation:

- (1) According to the data of the school-based surveillance system of the Centers for Disease Control, the morbidity rate of diarrhea in 2008 was 0.02% to 0.16%; except the period from the 9th week to the 13th week showed a high trend, the overall epidemic situation was similar to that in 2006 and 2007.
- (2) As compared with the data of the sentinel surveillance system, these two systems have similar trends.

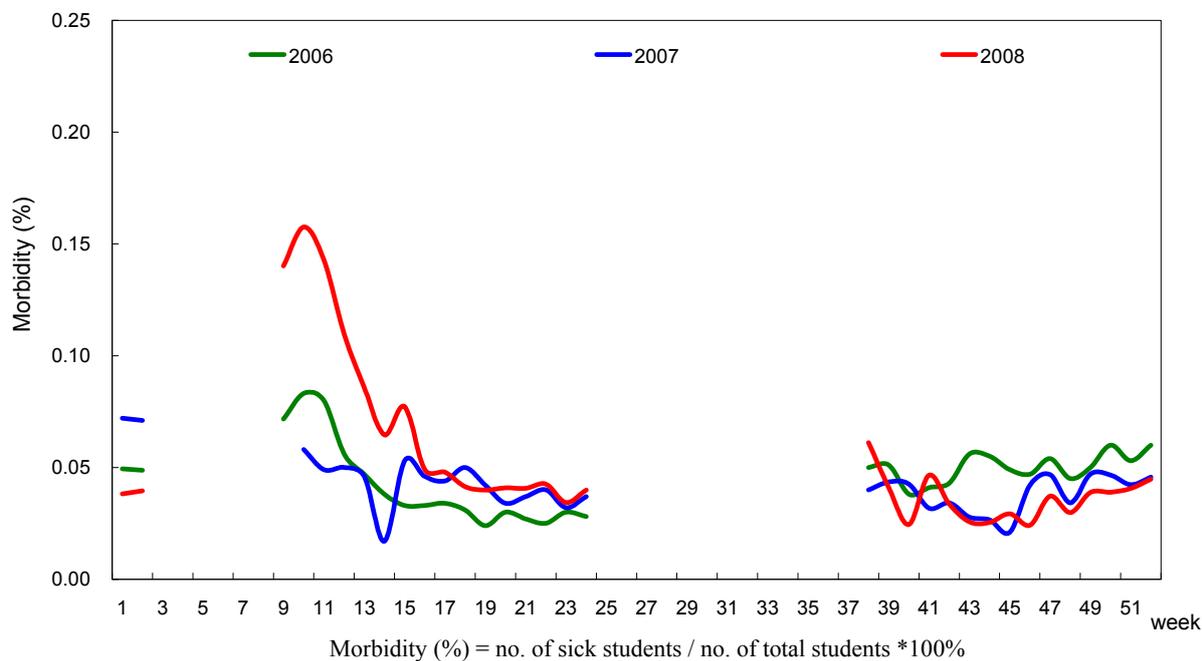


Figure 11 Diarrhea morbidity reported by the School-based Surveillance System, 2006-2008

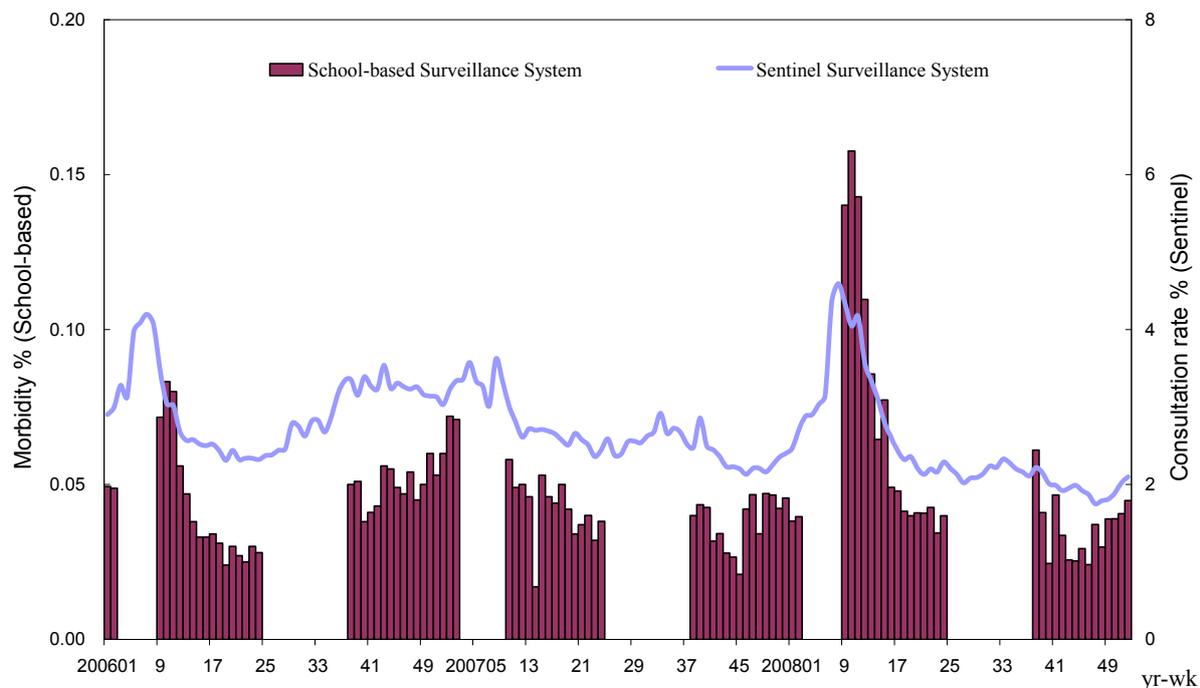


Figure 12 Comparison of Diarrhea morbidity between the School-based Surveillance System and Sentinel Surveillance System

4. Fever

⊙ Definition of case:

Fever (ear temperature $\geq 38^{\circ}\text{C}$) and without the aforesaid diseases or symptoms of influenza-like illness, hand-foot-mouth disease or herpangina and diarrhea.

⊙ Analysis of epidemic situation:

According to the data of the school-based surveillance system of the Centers for Disease Control, the morbidity of fever was between 0.20% and 0.42% in 2008; the overall epidemic situation was a little higher than that in 2007.

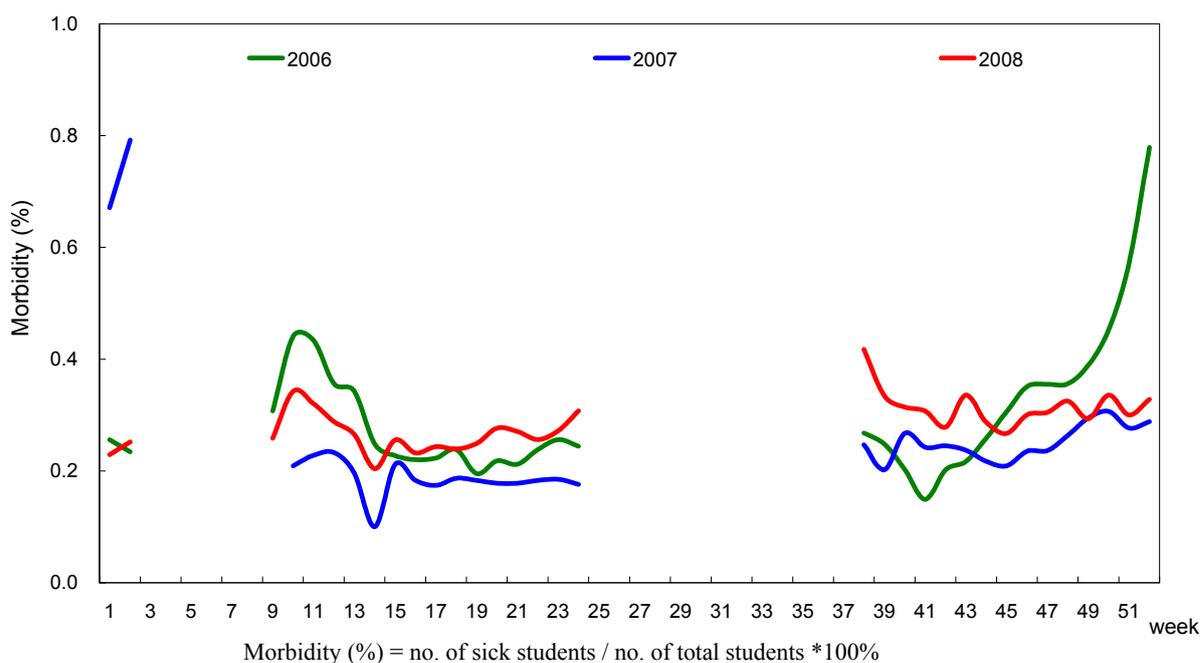


Figure 13 Fever morbidity reported by the School-based Surveillance System, 2006-2008

5. Acute hemorrhagic conjunctivitis (AHC)

⊙ Definition of case:

eyes prick, burning heat sensation, photophobia, mawkishness, foreign body sensation, scieropia; conjunctivas present bright red, sometimes there will be subconjunctival hemorrhage; eyes produce a lot of viscous secretion; sometimes preauricular lymph nodes enlarge, tenderness.

⊙ Analysis of epidemic situation:

According to the data of the school-based surveillance system of the Centers for Disease Control, the morbidity of AHC in 2008 was between 0.007‰ and 0.276‰; the overall epidemic situation was relatively high between the 43th week and the 47th week.

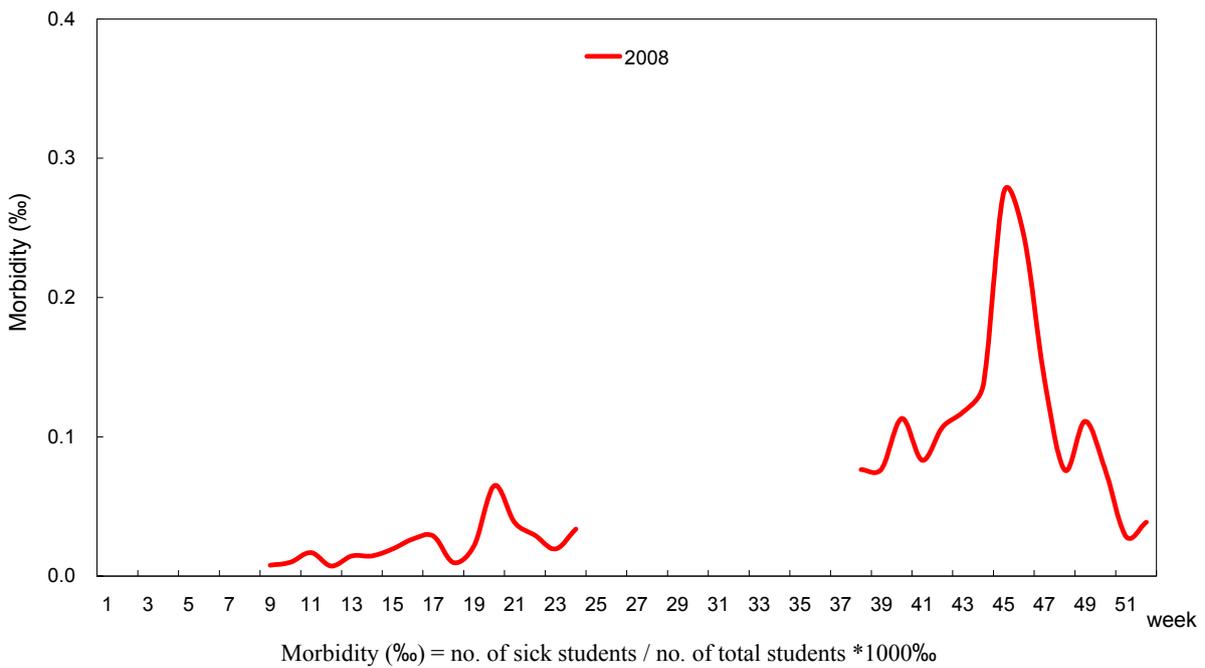


Figure 14 AHC morbidity reported by the School-based Surveillance System, 2008

Laboratory Surveillance System

I. Origin

The outbreak of enterovirus epidemic situation in Taiwan in 1998 exposed the deficiency in the quality and quantity of virus laboratories in Taiwan. Therefore, the Department of Health has founded contracted laboratories for viral infections in the whole Taiwan successively since March of 1999, besides providing subsidies for the laboratories, and it put more efforts into the improvement of ability in virus inspection and the cultivation of talents. At present, the contracted laboratories are playing an important role in the prevention of viral infections in all districts of Taiwan, moreover, the initiative surveillance system of enterovirus and influenza laboratory formed by the contracted laboratories and their peripheral examination sites provides good laboratory diagnosis services timely, besides carrying out central and local inspection grading systems, improving the detection rate of diseases and the timeliness, taking strict precautions against the diffusion of infectious diseases, and accelerating the control on epidemic situations, it enables us to know the activities of important viruses in different areas of Taiwan in different seasons, that can be used as important references for early warning of infectious diseases and epidemic prevention policies, even a precious native genetic and biomaterial databases of viruses have been set up for Taiwan.

II. Distribution and responsibility districts of contracted laboratories

There were 13 contracted laboratories for viral infections in Taiwan in 2008, the distribution and responsibility districts are as follows: the North District contains National Taiwan University Hospital (covering Taipei City, Kinmen County, and Lienchiang County), Chang Gung Memorial Hospital Linkou Branch (covering Taoyuan County, Hsinchu County and Hsinchu City), Taipei Veterans General Hospital (covering Keelung City and Yilan County), Tri-Service General Hospital (covering Taipei County and specimens from military hospitals); the Central District contains China Medical University Hospital (covering Miaoli County and Taichung City), Taichung Veterans General Hospital (covering Taichung County and Nantou County--non-sentinel physician specimen) , National Sun Yat-sen University Hospital (covering Nantou County --sentinel physician specimen) and Changhua Christian Hospital (covering Changhua County and Yunlin County); the South District contains National Cheng Gung University Hospital (covering Tainan County, Tainan City, Chiayi County and Chiayi City), Kaohsiung Medical University Hospital (covering Pingtung County and Penghu County), Kaohsiung Veterans General Hospital (covering Kaohsiung City) and Chang Gung Memorial Hospital Kaohsiung Branch (covering Kaohsiung County); and the East District contains Buddhist Tzu Chi General Hospital (covering Hualien County and Taitung County).

III. Specimen source and testing flow

The specimens are mainly from the outpatients, hospitalized patients and emergency patients of the medical centers where the contracted laboratories are located in, as well as from about 240 sentinel specimen collecting sites in Taiwan. The testing objects are suspected influenza or enterovirus infection patients, the former patients shall satisfy the definition of influenza-like illness case (fever above 38°C, cough, sore throat or myalgia, excluding slight rhinitis, tonsillitis and bronchitis), the latter patients shall be hand-foot-mouth disease or herpangina patients, and the specimens of individual cases shall be collected within three days after the onset, each specimen collecting site shall collect 2 specimens weekly and send them to the contracted laboratory of its district for test.

Another important task of the contracted laboratories is to test the specimens of enterovirus and severe influenza cases, the specimens are collected by the reporting hospitals and transported by the health office to the contracted laboratories for relevant tests, and the results can be used as the reference for clinical diagnoses of individual cases.

1. Collection of specimens:

The total number of specimens collected was 22,312 from January to the end of December in 2008, about 1,859 specimens were collected monthly, the numbers of specimens collected from the North, Central, South and East Districts were 8,271, 5,078, 7,430 and 1,533, the North District provided the most specimens, followed by the South District, the Central District, and the East District provided the least.

2. General situation of prevalence of enterovirus:

3,807 strains of enterovirus were isolated between January and the end of December in 2008, after typing by monoclonal antibody staining, most of them were Coxsackie virus A 1,776 strains (46.7%), followed by 984 strains of Enterovirus Type 71 (25.8%), 601 strains of Coxsackie virus B (15.8%), 84 strains of echovirus (2.2%), 26 poliomyelitis vaccine strains (0.7%), and 336 strains of NPEV (8.8%).

1220 strains of Coxsackie virus A2 (68.7%) are in the majority of 1,776 strains of Coxsackie virus A, followed by 144 strains of Coxsackie virus A16 (8.1%); the majority of 601 strains of Coxsackie virus B are 389 strains of Coxsackie virus B4 (64.7%); the majority of 84 strains of Echovirus are 51 strains of Echovirus Type 30 (60.7%), followed by 14 strains of Echovirus Type 4 (16.7%). (see Figure 15 for curve diagram of distribution of weekly positive rate of enterovirus of virus contracted laboratories). After typing of NPEV by gene sequencing, the majority is Coxsackie virus A2, followed by Coxsackie virus B4, Coxsackie virus A4, Echovirus Type 3, Enterovirus Type 71, Rhinovirus Type 2, Echovirus Type 25, Coxsackie virus B3, Coxsackie virus A5 and so on.

To sum up, the first five isolated types of enterovirus in 2008 are Coxsackie virus A2, Enterovirus Type 71, Coxsackie virus B4, Coxsackie virus B1 and Coxsackie virus A16, the major

gene subtype of Enterovirus Type 71 therein is B5. (see Figure 16 for distribution of enterovirus types under sentinel specimen collecting surveillance).

3. General situation of prevalence of influenza virus:

1,177 strains of influenza virus were isolated between January and the end of December in 2008, among which, 755 strains (64.1%) of influenza A virus were isolated, 422 strains (35.9%) of influenza B virus were isolated, Type A was the major epidemic strain during the first seven weeks and after the 41th week in 2008, and Type B was the major epidemic strain between the 8th week and the 40th week. (see Figure 17 for distribution curve of influenza virus under sentinel specimen collecting surveillance).

It is found after typing of virus isolated strains in the Centers for Disease Control by gene sequencing, A/Brisbane/10/2007 is the main of influenza A virus (subtype H3N2), accounting for about 51.0% of Type A, secondly influenza A virus (subtype H1N1) A/Brisbane/59/2007 accounts for 48.4% and A/Solomon_Islands/3e/2006 accounts for 0.6%; B/Florida/4/2006(B/Yam) is the main of Type B which accounts for 99.4%, B/Malaysia/2506/2004(B/Vic) accounts for 0.3% and B/Shanghai/361/2002(B/Vic) accounts for 0.3%.

To sum up, the influenza virus isolation types in 2008 are ranked as INFB, INFAH3 and INFAH1. (see Figure 18 for distribution of influenza virus types under sentinel specimen collecting surveillance).

4. General situation of other respiratory tract viruses:

Respiratory tract viruses other than the influenza virus mainly isolated 1,321 cases of Adenovirus, 877 cases of Herpes simplex virus (HSV), 345 cases of Parainfluenza virus, 174 cases of Cytomegalovirus (CMV) and 81 cases of Respiratory syncytial virus (RSV). (See Figure 19 for curve diagram of distribution of positive rate of respiratory tract viruses under sentinel specimen collecting surveillance).

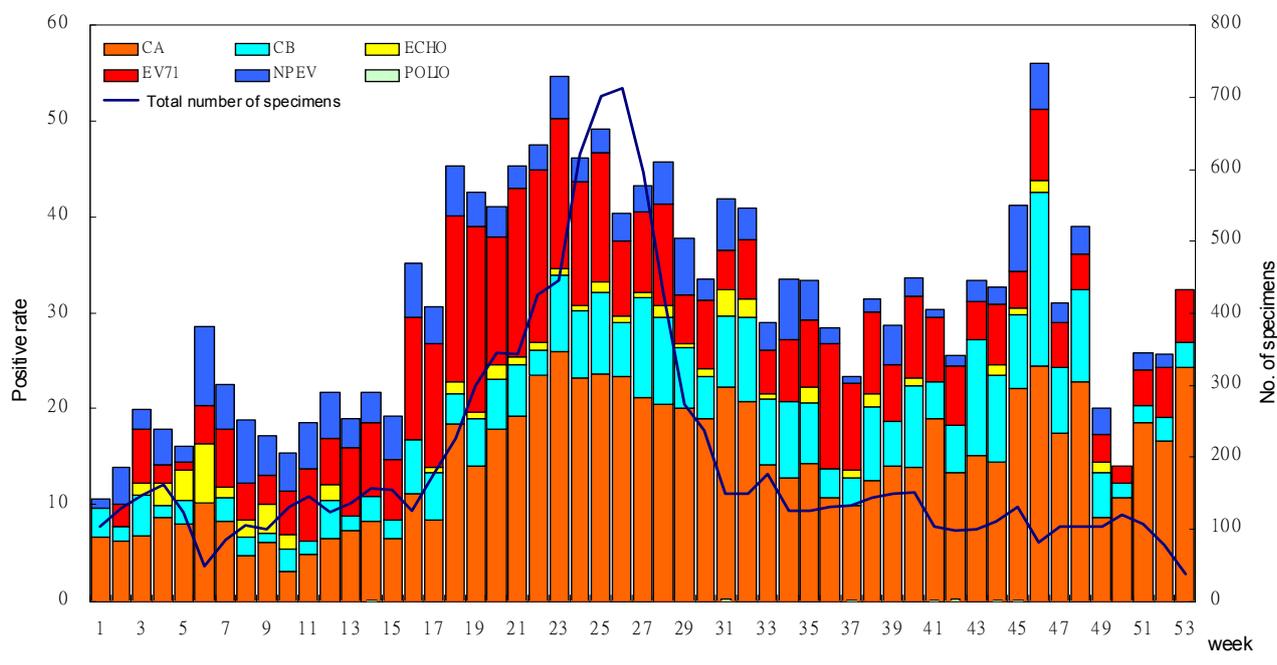


Figure 15 Enterovirus positive isolation rates in specimens collected by the sentinel physicians, 2008

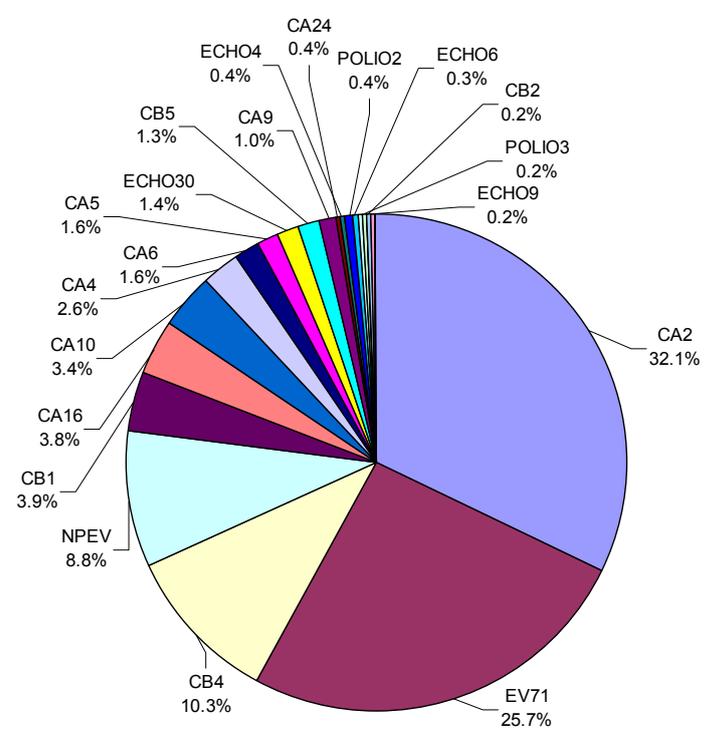


Figure 16 Strain ratios of enterovirus isolates from specimens collected by the sentinel physicians, 2008

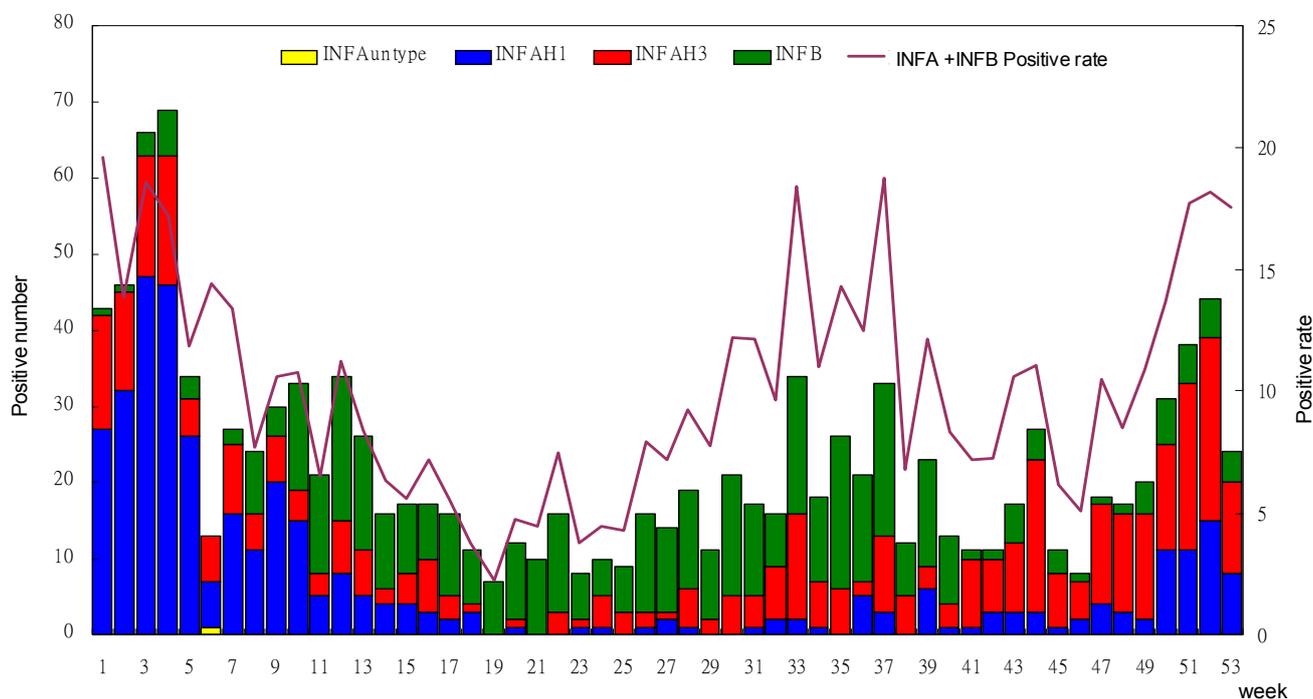


Figure 17 Isolation situations of influenza viruses from specimens collected by the sentinel physicians, 2008

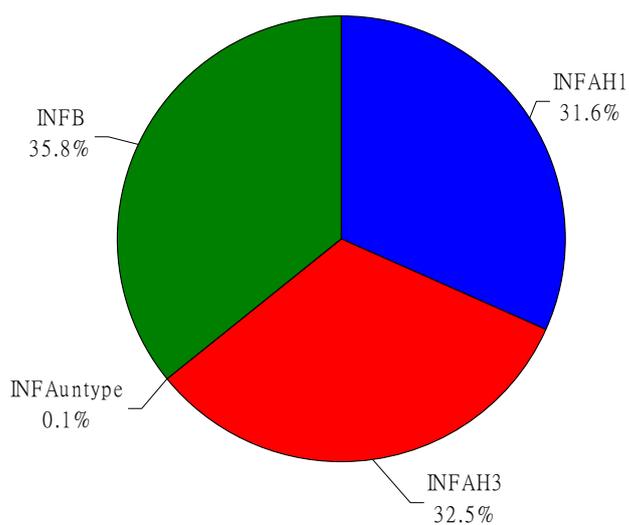


Figure 18 Strain proportional ratios of influenza virus positive specimens collected by the sentinel physicians, 2008

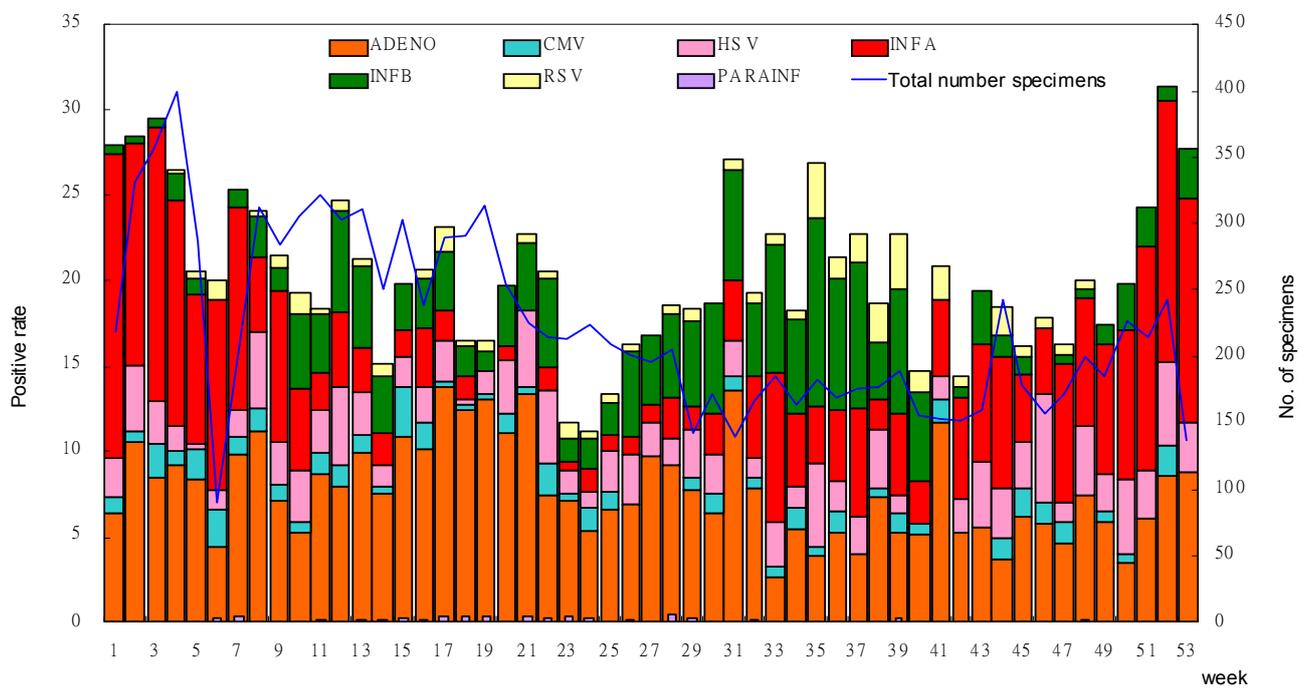


Figure 19 Positive isolation rates for respiratory tract viruses from specimens collected by the sentinel physicians, 2008

Quarantine Service

I. Health examination of foreign labors

In order to avoid local diseases of labor exporting countries being imported into Taiwan and influencing the people's health, each legally imported worker shall enclose and submit a qualification of health examination issued by an approved foreign hospital before applying for an entry visa, and shall go to the designated hospital for the health examination of employed foreigners in Taiwan to take a health examination within three days after his arrival in Taiwan. In addition, foreign labors shall take health examination within 30 days before and after the 6th, 18th and 30th month of employment in Taiwan, so that their health conditions can be monitored. At present, the designated items of health examination of foreign labors include: chest X-ray screening for tuberculosis, HIV antibody test, serological test for syphilis, hepatitis B surface antigen examination, stool examination for intestinal parasites, pregnancy detection, general physical examination and leprosy check-up. The pregnancy detection should be carried out only in the labor exporting countries, the other health examinations are exempted from the pregnancy detection. The health examinations in the 6th, 18th and 30th month of employment in Taiwan are exempted from hepatitis B surface antigen examination.

Foreign labors who are found with intestinal parasite disease after examination (excluding *Entamoeba histolytica*) should have a treatment and recheck period of 45 days; those who have a positive result of syphilis serological test should complete the treatment within 30 days; any worker who has been rejected in any of the designated items of health examination or has acquired any of the four communicable diseases designated by the Central Competent Health Authority should be repatriated within the time limit according to law, so as to maintain domestic epidemic prevention safety.

There were 506,483 person-times of health examination of foreign labors in Taiwan in 2008, 32,264 person-times were failed, resulting in the failure rate of 6.4%. Among which, the highest rate was from intestinal parasite disease, 31,503 person-times failed, resulting in the failure rate of 6.2%; Moreover, 652 person-times were failed in chest X-ray tested for tuberculosis, resulting in the failure rate of 0.1%. On top of that, 40 people were tested positive for HIV antibody examination. (Table 16).

II. Health declaration of inbound passengers

In order to prevent for communicable diseases from entering Taiwan by ships and aircraft to endanger our people's safety, the Centers for Disease Control carries out necessary quarantine measures for the inbound passengers according to the "Communicable Disease Control Act" and the "Regulations Governing Quarantine at Ports", and tracks the passengers having symptoms to protect the people's health. The health declaration of inbound passengers has implemented "Symptom Declaration Form" since July 1, 2002 for inbound passengers having symptoms to fill out, however, in order to respond to the international epidemic situation of severe acute respiratory syndrome, this form has been replaced by "SARS and Other Communicable Disease Survey Form " since March 30, 2003, it is required that all passengers to enter Taiwan should fill out this form, and the " SARS and Other Communicable Disease Survey Form " was changed to the "Communicable Disease Survey Form" in January of 2004, however, considering the benefit and resources, it has been changed since December 1, 2004 that only passengers showing symptoms are required to fill out the "Communicable Disease Survey Form" voluntarily.

From January to December in 2008, the total number of inbound passengers were 12,204,843, and 16,487 passengers having symptoms filled out the "Communicable Disease Survey Form", and then local health authorities kept monitoring them. 112 cases of dengue fever, 27 cases of shigellosis and 9 cases of chikungunya fever were detected through the "Communicable Disease Survey Form" filled out by inbound personnel and temperature screening measures in 2008.(Table 17).

Table 16 Physical examinations status of foreign labors, 2008

Unit: person, %

Country	Physical Examinations	Failed	X-ray	HIV	Syphilis	Hepatitis B	Parasites	Hansen's disease	Mental condition	Others
Thailand	At Enrty	24,820 90 0.36%	6 0.02%	2 0.01%	1 0.00%	10 0.04%	71 0.29%	- -	- -	- -
	Periodic	86,526 3,944 4.56%	166 0.19%	6 0.01%	4 0.00%	- -	3,768 4.35%	- -	- -	- -
Indonesia	At Enrty	52,208 117 0.22%	9 0.02%	7 0.01%	6 0.01%	11 0.02%	84 0.16%	- -	- -	- -
	Periodic	130,196 14,971 11.50%	173 0.13%	13 0.01%	13 0.01%	- -	14,772 11.35%	- -	- -	- -
Philippines	At Enrty	29,453 100 0.34%	12 0.04%	4 0.01%	2 0.01%	3 0.01%	79 0.27%	- -	- -	- -
	Periodic	87,190 7,113 8.16%	194 0.22%	3 0.00%	5 0.01%	- -	6,911 7.93%	- -	- -	- -
Malaysia	At Enrty	2 - -	- -	- -	- -	- -	- -	- -	- -	- -
	Periodic	2 1 50.00%	- -	- -	- -	- -	1 50.00%	- -	- -	- -
Vietnam	At Enrty	26,895 99 0.37%	12 0.04%	- -	2 0.01%	12 0.04%	73 0.27%	- -	- -	- -
	Periodic	69,186 5,829 8.43%	80 0.12%	5 0.01%	- -	- -	5,744 8.30%	- -	- -	- -
Mongolia	At Enrty	0 - -	- -	- -	- -	- -	- -	- -	- -	- -
	Periodic	5 - -	- -	- -	- -	- -	- -	- -	- -	- -
Others	At Enrty	0 - -	- -	- -	- -	- -	- -	- -	- -	- -
	Periodic	0 - -	- -	- -	- -	- -	- -	- -	- -	- -
Total	At Enrty	133,378 406 0.30%	39 0.03%	13 0.01%	11 0.01%	36 0.03%	307 0.23%	- -	- -	- -
	Periodic	373,105 31,858 8.54%	613 0.16%	27 0.01%	22 0.01%	- -	31,196 8.36%	- -	- -	- -
Total		506,483 32,264 6.37%	652 0.13%	40 0.01%	33 0.01%	36 0.01%	31,503 6.22%	- -	- -	- -

Note:

The data of At Enrty physical examination provided by the Council of Labor Affairs while the parasites failed persons indicated those who were failed after treatment. The data of Periodic physical examination provided by health bureaus of local governments while the parasites failed persons include who failed at the first test or re-tests after treatments.

Table 17 Statistic of CDC "Communicable Diseases Survey Form " in 2008

Month	Inbound passenger No.	Cases with symptom		Pathogen detected		Note (Traveling country)
		Case No.	Case percentage (%)	Notifiable disease (case No.)	Others (case No.)	
Jan.	977,327	1,954	0.20	Dengue fever (3), Shigellosis (1)	Salmonella (2)	Indonesia, Philippines (Dengue fever) / India (Shigellosis) / Singapore (Salmonella)
Feb.	997,283	2,003	0.20	Dengue fever (6), Shigellosis (1), Chikungunya fever (1)	None	Indonesia, Malaysia, Vietnam, Philippines, Singapore (Dengue fever) / Indonesia (Shigellosis) / Indonesia (Chikungunya fever)
Mar.	1,026,140	1,561	0.15	Dengue fever (4), Shigellosis (6)	Salmonella (2)	Indonesia, New Zealand (Dengue fever) / Indonesia, Cambodia, Vietnam, Singapore (Shigellosis) / China, Thailand (Salmonella)
Apr.	1,030,970	1,360	0.13	Dengue fever (6), Shigellosis (1), Chikungunya fever (1)	Salmonella (2), Vibrio parahaemolyticus (2)	Indonesia, Malaysia, Vietnam (Dengue fever) / Cambodia (Shigellosis) / Thailand (Vibrio parahaemolyticus) / Thailand (Salmonella) / Indonesia (Chikungunya fever)
May	1,029,611	1,207	0.12	Dengue fever (4), Shigellosis (3)	Salmonella (3)	Indonesia, Philippines, Singapore (Dengue fever) / Cambodia, Vietnam, Sao Tome And Principe (Shigellosis) / Vietnam, China, Singapore (Salmonella)
Jun.	1,023,911	1,091	0.11	Dengue fever (4), Shigellosis (6)	Salmonella (2), Vibrio parahaemolyticus (3)	Vietnam, Indonesia, Singapore, Honduras (Dengue fever) / China, Indonesia, Egypt, Malaysia, Singapore (Shigellosis) / Hong Kong (Vibrio parahaemolyticus) / Japan, Malaysia (Salmonella)
Jul.	1,139,497	1,540	0.14	Dengue fever (14), Chikungunya fever (1)	Salmonella (2), Vibrio parahaemolyticus (4)	Indonesia, India, Vietnam, Thailand, Laos (Dengue fever) / Malaysia (Vibrio parahaemolyticus) / Hong Kong, Vietnam (Vibrio parahaemolyticus) / Indonesia (Chikungunya fever)
Aug.	1,091,910	1,501	0.14	Dengue fever (18), Shigellosis (4)	Salmonella (1), Vibrio parahaemolyticus (3)	Indonesia, Cambodia, Thailand, Malaysia, Philippines, Vietnam, Myanmar (Dengue fever) / Indonesia, India, Hong Kong, Thailand (Shigellosis) / Hong Kong (Salmonella) / Philippines, China (Vibrio parahaemolyticus)
Sep.	984,841	1,370	0.14	Dengue fever (13), Shigellosis (1)	Salmonella (3), Vibrio parahaemolyticus (2)	Vietnam, Indonesia, Philippines, Malaysia, Bangladesh, Cambodia, Thailand (Dengue fever) / China (Shigellosis) / Japan, Thailand, Malaysia (Salmonella) / China (Vibrio parahaemolyticus)
Oct.	1,031,607	1,206	0.12	Dengue fever (17), Shigellosis (3), Chikungunya fever (2)	Salmonella (3)	Vietnam, Malaysia, Indonesia, U.S (Dengue fever) / China, Vietnam (Shigellosis) / Cambodia, Malaysia (Salmonella) / Malaysia (Chikungunya fever)
Nov.	945,621	825	0.09	Dengue fever (13), Shigellosis (1), Chikungunya fever (1)	Salmonella (1), Vibrio parahaemolyticus (2)	Indonesia, Thailand, Malaysia, Vietnam, Myanmar (Dengue fever) / China (Shigellosis) / Vietnam (Salmonella) / Philippines, Vietnam (Vibrio parahaemolyticus) / Indonesia (Chikungunya fever)
Dec.	926,125	869	0.09	Dengue fever (10), Chikungunya fever (3)	Vibrio parahaemolyticus (1)	Vietnam, Philippines, Indonesia, Singapore (Dengue fever) / Thailand, Malaysia (Chikungunya fever) / Philippines (Vibrio parahaemolyticus)
Total	12,204,843	16,487	0.14	Dengue fever (112), Shigellosis (27), Chikungunya fever (9)	Salmonella (21), Vibrio parahaemolyticus (17)	

Mosquito Surveillance

As located in tropical zone and subtropical zone with a hot and wet climate, Taiwan is very suitable for breeding of mosquitoes. The critical mosquitoes in Taiwan are *Aedes aegypti* and *Aedes albopictus* spreading dengue fever and *Anopheles minimus* spreading malaria.

I. Dengue fever mosquitoes

The dengue fever mosquito surveillance has been set up since the outbreak of dengue fever in the south in 1977. Next the data of mosquitoes surveyed in 2008 will be further analyzed. The health bureaus of all counties and cities surveyed 33,963 village-times, including 19,992 village-times of Level 0, 8,595 village-times of Level I, 3,388 village-times of Level II, 1,432 village-times of Level III, 421 village-times of Level IV, 79 village-times of Level V, 43 village-times of Level VI, 9 village-times of Level VII, and 4 village-times of Level VIII (Table 18). The number of villages above Level II has a trend of increasing month by month, it is most obvious between June and October, and there will be a decline after October (Figure 20).

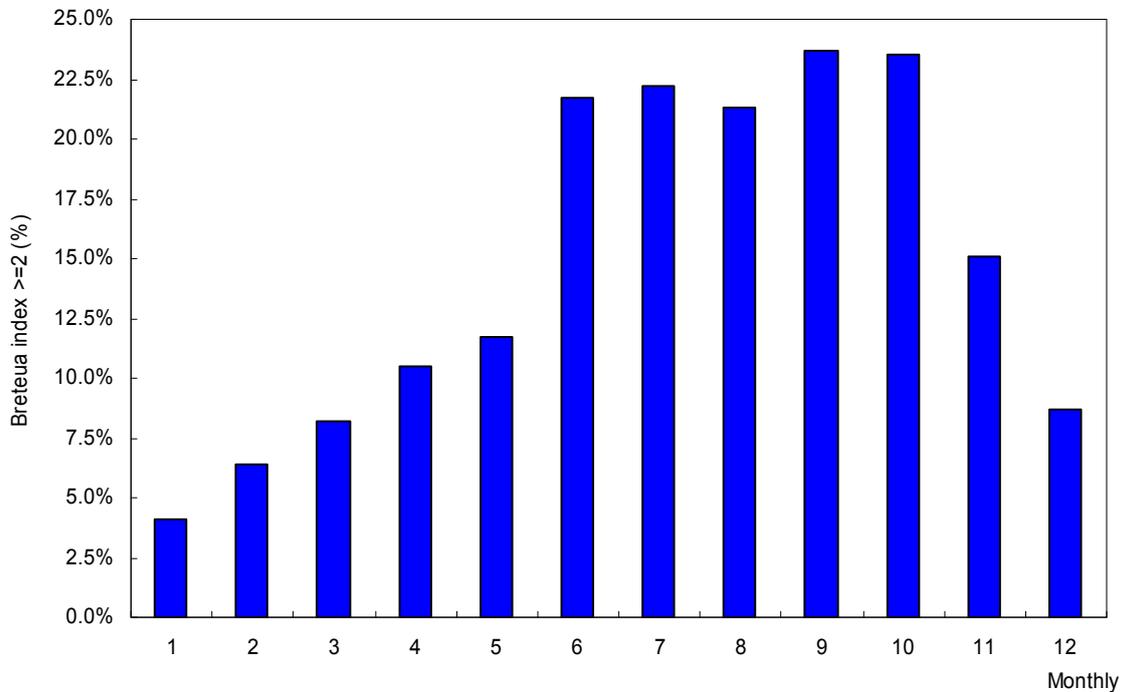


Figure 20 The percentage of villages with Dengue fever vector, 2008

Table 18 Distribution of Breteua index, 2008

Locality	Villages (No. of times)	Breteua Index								
		0	1	2	3	4	5	6	7	8
Taipei City	1488	867	504	91	26	-	-	-	-	-
Kaohsiung City	1110	332	357	164	177	59	16	5	-	-
Taipei County	1937	1647	239	39	9	3	-	-	-	-
Yilan County	1188	1159	27	2	-	-	-	-	-	-
Taoyuan County	2278	2190	67	12	7	2	-	-	-	-
Hsinchu County	732	606	114	8	3	1	-	-	-	-
Miaoli County	565	149	317	86	12	1	-	-	-	-
Taichung County	797	260	472	58	4	1	1	-	-	1
Changhua County	1046	563	425	52	5	1	-	-	-	-
Nantou County	841	660	163	13	5	-	-	-	-	-
Yunlin County	915	662	244	3	6	-	-	-	-	-
Chiayi County	905	864	40	1	-	-	-	-	-	-
Tainan County	5170	1390	1939	1366	387	73	9	2	3	1
Kaohsiung County	866	141	345	267	51	53	7	1	1	-
Pingtung County	69	18	42	9	-	-	-	-	-	-
Taitung County	3445	1468	831	450	467	163	39	24	3	-
Hualien County	1443	1047	85	10	1	-	-	-	-	-
Penghu County	813	751	53	6	3	-	-	-	-	-
Keelung City	379	318	49	10	1	1	-	-	-	-
Hsinchu City	521	396	90	33	2	-	-	-	-	-
Taichung City	362	183	165	13	1	-	-	-	-	-
Chiayi City	1808	1583	195	27	2	1	-	-	-	-
Tainan City	5483	2647	1822	667	263	62	7	11	2	2
Kinmen County	40	30	10	-	-	-	-	-	-	-
Lienchiang County	62	61	-	1	-	-	-	-	-	-
Total	33963	19992	8595	3388	1432	421	79	43	9	4

II. Malaria mosquitoes

Mosquito light traps were hanged in houses in townships having breeding of *Anopheles minimus* in 2008 to survey adult mosquitoes, 59 cities and townships and 295 villages were surveyed, including Shitan Township, Tai-an Township and Nanzhuang Township of Miaoli County; Yuchi Township of Nantou County; Zhongpu Township, Fanlu Township, Zhuqi Township, Meishan Township, Dapu Township, Liujiao Township, Puzi City, Yizhu Township, Xingang Township of Chiayi County; Taitung City, Dawu Township, Beinan Township, Taimali Township, Haiduan Township, Chishang Township, Chenggong Township, Changbin Township, Luye Township, Donghe Township, Jinfeng Township, Ludao Township, Daren Township, and Guanshan Township of Taitung County; Mudan Township, Hengchun Township, Checheng Township, Shizi Township, and Manchou Township of Pingtung County; Cuo Cheng Township, Nanhua Township, Longchi Township, Hsinhua Township, and Guanmiao Township of Tainan County; Fuli Township, Shioulin Township, Chi-an Township, Fenglin Township, Chosi Township, Hsincheng Township, Fengbin Township, Wanrong Township, Yuli Township, and Hualien City of Hualien County; Yuanshan Township, Su-ao Township, Jiaoxi Township, Dongshan Township, Sanxing Township, Zhuangwei Township, Nan-ao Township, and Yilan City of Yilan County; Neimen Township, Qishan Township, Sanmin Township, and Namaxia Township of Kaohsiung County. The survey result showed that 14 townships and 26 villages had collected adult *Anopheles minimus* (Table 19 and Figure 21). Tuci Village of Longci Township of Tainan County had the maximum density, the village kept a record that one trap caught 98.5 *Anopheles minimus* on average per night in November.

Table 19 The number of villages with *An. Minimus*

County / Township	<i>An. minimus</i> (No.)	Villages (No.)	Villages with <i>An. minimus</i>
Taitung County	Chenggong	6	2
	Dawu	5	2
	Donghe	1	1
	Changbin	22	2
Tainan County	Longci	523	4
	Sinhua	1	1
Hwalien County	Yuli	1	1
	Fongbin	10	1
	Rueisuei	12	3
	Fenglin	1	1
Pingtung County	Shihzih	4	1
	Checheng	2	2
	Manjhou	14	3
	Mudan	2	2
Total	14	604	26

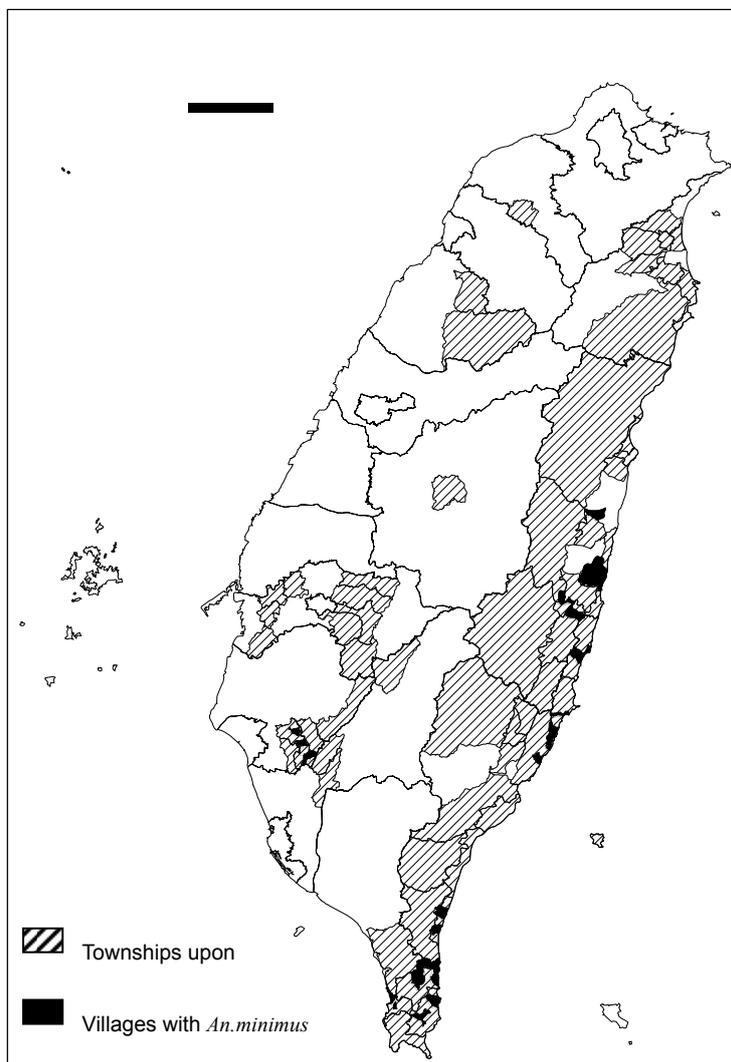


Figure 21 Distribution of *Anopheles minimus*, 2008

Symptom Surveillance System

I. Introduction

The outbreak of SARS in March of 2003 also attacked Taiwan, and caused serious harms to the society and economy. Avian influenza also broke out in Korea, Japan and Vietnam in December of that year, Asian countries and regions other than Taiwan and Pakistan have become avian flu stricken areas presently. The death cases of human infected with H5N1 virus occurred in Vietnam, Thailand and Cambodia, attracted worldwide attention and concerns. The symptom surveillance system is constructed in order to beware of the invasion of viruses, so as to detect H5N1 influenza cases under investigation as early as possible and adopt various prophylactic measures promptly, the surveillance contains following items: H5N1 influenza cases under investigation, influenza-like illness, fever of unknown origin, diarrhea, upper respiratory infection, patients with cough lasting for more than 3 weeks and enterovirus.

II. Purpose of surveillance system

1. To strengthen the surveillance of the airport and the port of travelers, in order to achieve the purpose of communicable diseases battle country outside.
2. Effective control of cluster events, when the cluster event notification, the system will automatically generate a number and will also send mobile phone text messaging to inform prevention associates, start-related prevention work, in addition, the system can also streamline the manpower of surveillance.
3. To enhance the convenience and accessibility of surveillance system, in order to achieve the purpose of early detection and prevention.

III. Reporting method and data analysis

Medical institutions (report H5N1 influenza cases under investigation and diarrhea only) or health offices report through the internet directly, and put the data in the communicable disease case reporting system—symptom reporting system. Health offices, substations of the Centers for Disease Control and coherent units can download field data such as the reports, submission of specimens and test results inside the system through BO (Business Objects) for analysis.

IV. Selective analysis of reportable diseases

©H5N1 person under investigation:

1. Cases under investigation: one of following conditions shall be satisfied:

(1) Following clinical conditions and epidemiology correlated conditions are required concurrently.

*Clinical conditions (who has one of following conditions):

- Satisfy the definition of influenza-like illness case reporting
- Chest X-ray shows pneumonia.

*Epidemiology correlated conditions: who has any of following exposure histories within 7 days before the onset:

- Who had contacted animals (or their excreta) or suspected, probable or confirmed case of H5N1 influenza at home.
- Who had been to a foreign area where a confirmed case of H5N1 flu had occurred for less than a month or who had been to a foreign area where an animal H5N1 flu case had occurred for less than a month and had contacted animals or poultry related places.
- Who had been in a laboratory for experiments of influenza virus.

(2) Pneumonia patients with quick exacerbation of unknown origin.

(3) H5 subtype influenza virus patients detected by the central competent authority or its designated local competent authority which has the laboratory ability to test, medical service (affair) institutions, academic or research institutions.

2. Description of data analysis: including sex, age specific, epidemic related description (contact history, travel history), and virus type.

3. Epidemic analysis of test results of specimens collected from persons-under- investigation for H5N1 influenza:

In 2008, a total of 10 cases were reported. The H5N1 results were all negative. Among them, 6 cases were positive for influenza virus including 4 type A (H1) and 2 type A (H3), as the rest being negative for all types. In 2007, a total of 48 cases were reported. The H5N1 results were all negative. Among them, 20 cases came out positive for influenza virus including 2 type A (H1) and 18 type A (H3). The rest were negative for all tests.

Table 20 Statistics of cases of person-under-investigation for H5N1 influenza, 2007-2008

Year	Cluster No.	Case No.	H5	seasonal Influenza	Negative
2007	-	48	-	20 (2AH1/18AH3)	28
2008	-	10	-	6 (4AH1/2AH3)	4
Total	-	58	-	26 (6AH1/20AH3)	32

◎ Influenza-like illness clustering

1. Definition of case: satisfy the definition of influenza-like illness case reporting, and with person, time and place relevance.

Definition of influenza-like illness reporting: following three conditions should be satisfied simultaneously:

- (1) Sudden onset, with symptoms of fever (ear temperature $\geq 38^{\circ}\text{C}$) and respiratory tract;
 - (2) Who has one of the symptoms such as muscular soreness, headache and extreme tiredness;
 - (3) Simple rhinorrhea, tonsillitis and bronchitis should be excluded.
2. Description of data analysis, including population (institution) category, virus type and month category.
 3. Epidemic analysis of influenza-like illness clusters: In 2008, a total of 27 clusters of influenza-like illness were reported. Out of which, 25 were positive for influenza virus including 18 type A, 7 type B with the remainders negative. In 2007, a total of 39 clusters of influenza-like illness were reported. Thirty three of them were positive for influenza virus including 25 type A, 2 type A and B co-infection, and 6 type B with the rest negative. Schools were the institution category with the most clusters of ILI, followed by populous institutions, hospitals, military bases, and others (such as families, companies, etc.) in order of decreasing numbers.

Table 21 Test results for influenza-like illness clustering incidents in 2007-2008

Years	Cluster No.	Type A Influenza	Type A+B Influenza	Type B Influenza	Negative
2007	39	25	2	6	6
2008	27	18	0	7	2
Total	66	43	2	13	8

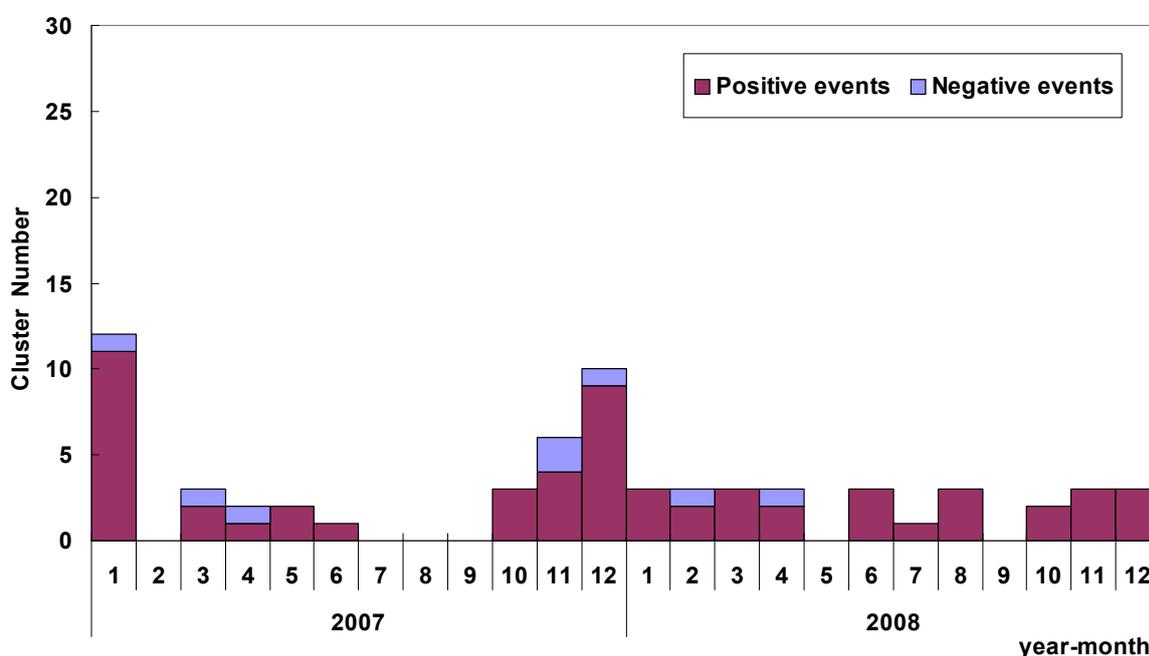


Figure 22 Evolutional trends of influenza-like illness clustering incidents in 2007-2008

Table 22 Distribution of clusters of influenza-like illness cases (by location), 2007-2008

Institution categories	2007	2008	Total
populous institutions	3	6	9
hospitals	4	5	9
schools	26	12	38
military	5	3	8
others	1	1	2
Total	39	27	66

©Diarrhea clustering

1. Definition of case: Exclusion of notifiable diseases and food poisoning, gastro-intestinal symptoms of diarrhea case and with person, time and place relevance.
2. Description of data analysis, including population (institution) category, virus type and month category.
3. Epidemic analysis of diarrhea clusters: In 2008, a total of 49 clusters of diarrhea were reported. Thirty of them turned out to be positive for Norovirus, 8 positive for Rotavirus, while the remainders were negative. In 2007, a total of 66 clusters were reported with 40 positive for Norovirus, while the rest were all negative. Populous institutions were the category with the most clusters of diarrhea, followed by schools, hospitals, others (such as families, companies, etc.) and military bases in order of decreasing numbers.

Table 23 Test results for diarrhea clustering incidents in 2007-2008

Years	Cluster No.	Norovirus	Rotavirus	Negative
2007	66	40	0	26
2008	49	30	8	11
Total	115	70	8	37

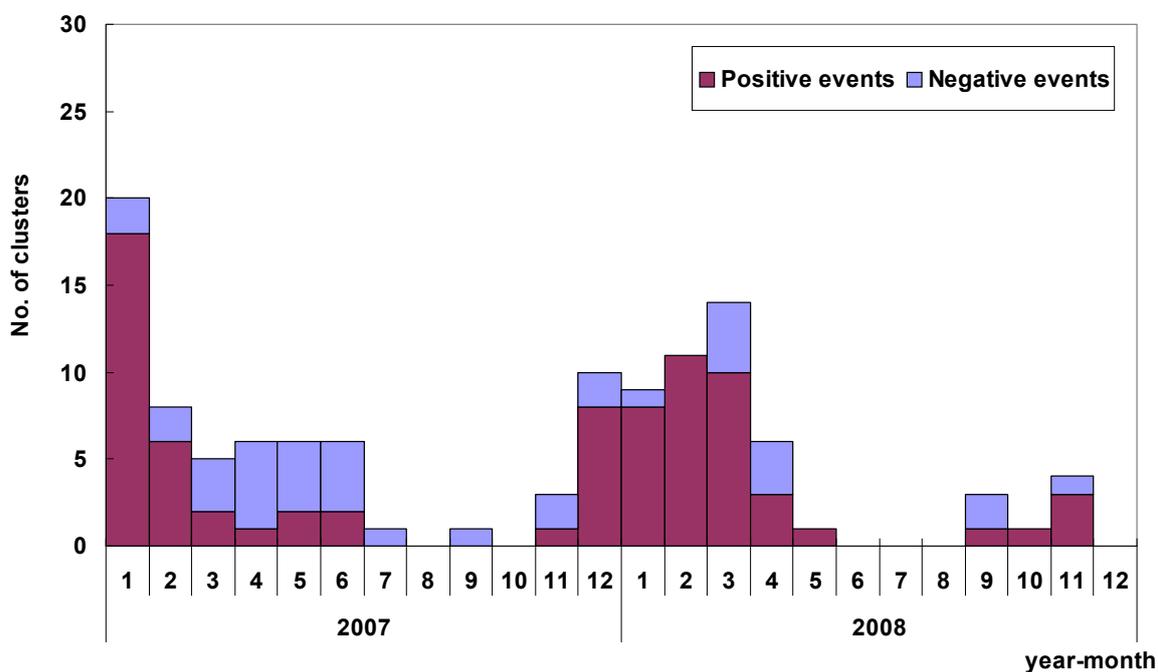


Figure 23 Evolutional trends of diarrhea clusters in 2007-2008

Table 24 Distribution of clusters of diarrhea cases (by location), 2007-2008

Institution categories	2007	2008	Total
populous institutions	20	17	37
hospitals	16	9	25
schools	17	15	32
military	1	1	2
others	12	7	19
Total	66	49	115

◎Upper respiratory tract infection (URI) clustering

1. Definition of case: the individual case has upper respiratory tract symptoms, and with person, time and place relevance.
2. Epidemic analysis of URI clusters: In 2008, a total of 35 clusters of URI were reported. Ten of them were positive for influenza virus type A, one Norovirus, one Legionellosis, one Mycoplasma, and one Coxsackievirus B1, with the remainders all negative. Schools (14 clusters) were the institution category with the most clusters of URI, followed by populous institutions (13 clusters), hospitals (5 clusters), and military bases (3 clusters) in order of decreasing numbers.

◎Clustering of fever of unknown origin

1. Definition of case: the individual case has symptoms of fever of unknown origin, and with person, time and place relevance.
2. Epidemic analysis of fever (with unknown causes) clusters: In 2008, a total of four clusters of fever (with unknown causes) were reported. Only one was positive for influenza virus type B, with all others negative. The outbreaks at institutions were distributed as one in populous institutions, two in school, and one in others (such as families, companies, etc.).

◎Cough lasting for more than three weeks in patients with clustering

Definition of case: the individual case has cough lasting for more than three weeks, and with person, time and place relevance, judged to be suspected cluster and have risk of spread infection.

◎Enterovirus clustering

1. Definition of case: which happens in places such as nurseries in hospitals, neonate wards, baby care centers and homes of puerperal care, the individual case's sufferer and relevant contacted persons are of the suspected clustering events of high risk groups of enterovirus infection with severe complication.
2. Epidemic analysis of enterovirus infection clusters: In 2008, no cluster was reported.

STD Sentinel Surveillance System

I. Introduction

In the sexually transmitted disease (STD) surveillance system of Taiwan, only syphilis and gonorrhea are classified as notifiable diseases that should be reported at present, moreover, most of the STDs patients are not willing to see a doctor, they would buy ready-made medicine for treatment, and the doctors usually provide treatment according to the symptoms without conducting laboratory tests, so the original data of existing prevalence of STDs is insufficient.

In order to complete the epidemiological data of STDs, the Centers for Disease Control developed the "STD Sentinel Physician Surveillance Project" on November 20, 2003, and set up outpost surveillance sites to report symptoms, so as to master the basic data of STD epidemiology of Taiwan.

II. Syndrome reporting items

1. Urethritis/cervicitis syndrome:

- (1) Male's urethritis: any one of urethra/anus secretion, urinary pain, or ureteral orifice itch.
- (2) Female's cervicitis: any one of grume at cervix uteri, purulent or spumescent secretion.

2. Genital ulcer syndrome: one or more of ulcers or blisters at genitals, urethra, vagina, anus or recta of male/female.

3. Inguinal lymph node syndrome: swollen lymph nodes of one side or both sides of inguinal region, but no person infected at lower limb, buttock or genital skin.

4. Genital neoplasm syndrome: one or more of neoplasm at the genitals or anus of male/female.

III. Reporting method and data analysis feedback

The monthly symptom reporting table shall be filled monthly, and shall be faxed to local health authorities before the fifth day of the next month.

IV. Analysis of reported data of 2008

1. Source of reported data: 579 sentinel physicians participated in the STD Sentinel Surveillance System in 2008, among which, the department of obstetrics and gynecology accounted for 31.26%, the department of dermatology accounted for 6.21%, the urological department accounted for 15.37%, the family doctor department accounted for 27.11%, the infection department accounted for 11.57% and other departments accounted for 8.46%.
2. As for the STD Sentinel Surveillance System in 2008, the sex and age distribution of reported four major STDs syndromes of male and female are shown in Table 25 and Table 26.

Table 25 Reported cases of STD Sentinel Surveillance System –by gender , 2008

I Urethritis / cervicitis syndrome	Male	10,156
	Female	90,017
	Total	100,173
II Genital ulcer syndrome	Male	632
	Female	1,721
	Total	2,353
III Inguinal lymph node syndrome	Male	331
	Female	1,849
	Total	2,180
IV Genital neoplasm syndrome	Male	3,083
	Female	2,944
	Total	6,027

Table 26 Reported cases of STD Sentinel Surveillance System -by age, 2008

Age / No. of cases	<1	1-9	10-19	20-29	30-39	40-49	50-59	>=60	Total
I Urethritis / cervicitis syndrome	235	486	3,418	21,463	28,636	21,848	13,959	10,128	100,173
II Genital ulcer syndrome	4	7	73	390	588	645	398	248	2,353
III Inguinal lymph node syndrome	2	59	92	445	641	588	232	121	2,180
IV Genital neoplasm syndrome	3	305	860	1,779	1,346	714	588	432	6,027
Total	244	857	4,443	24,077	31,211	23,795	15,177	10,929	110,733

Real-time Outbreak and Diseases Surveillance System

I. Introduction

The Real-time Outbreak and Disease Surveillance System (RODS) is an automatic syndrome surveillance system constructed by Taiwan CDC and the University of Pittsburgh jointly. At present, more than 150 medical institutions in Taiwan transfer the health diagnosis data of emergency treatment to CDC timely and automatically, so that abnormal situations of various diseases or syndromes can be analyzed as early as possible.

II. Purpose of surveillance system

- (1) Detect infectious diseases that may break out in communities as early as possible.
- (2) Evaluate the harm extent of the reported diseases to the people.
- (3) Set up the prevalence trend and prevalence forecasting of diseases.

III. Reported diseases in the past years

2007 – influenza-like illness, enterovirus, diarrhea.

2008 – influenza-like illness, enterovirus, diarrhea, conjunctivitis.

IV. Reporting method and data analysis

About 150 hospitals in Taiwan provide daily real-time (data transmission frequency depends on HIS program at hospital) data of emergency patients through the internet directly. The main fields of reported data contain: patient's name, ID card number (passport number), date of birth, sex, code of reporting hospital, admission time, chief complaint, ICD9_1, ICD9_2, ICD9_3, ICD9_4, triage and temperature.

The Centers for Disease Control collects and analyzes RODS data weekly and makes statistical charts to display in the website.

V. Selective analysis of reportable diseases

◎Enterovirus

Analysis of epidemic situations:

In Taiwan, enterovirus infections are generally most prevalent between April and October. In 2008, enterovirus had its most severe epidemic in decades, the weekly consultation rate of enterovirus infections reported by the emergency department (ED) ranged from 0.48‰ to 30.43‰, with a peak season occurring in mid-June. The overall epidemic peak occurred between 15th and 30th weeks, and it was more severe than those in previous years. Since the 30th week, the overall epidemic trend was milder comparing to previous ones.

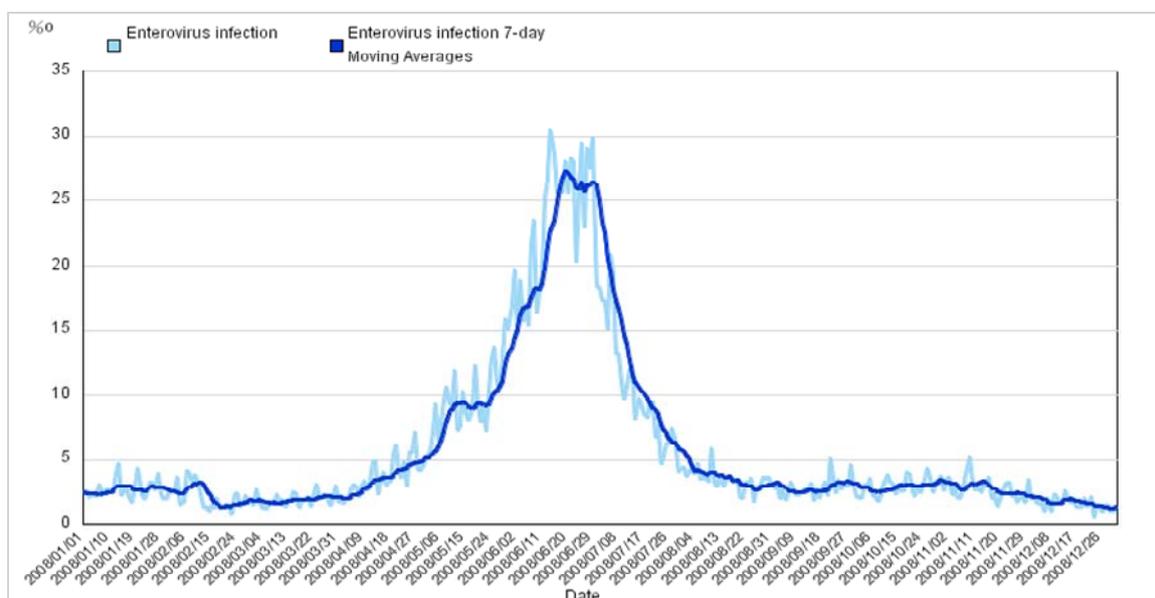


Figure 24 Enterovirus Emergency Department Daily Consultation Rate & 7-day Moving Average

©Influenza-like illness

Analysis of epidemic situations:

In 2008, the weekly consultation rate for influenza-like illness (ILI) reported by emergency department (ED) ranged from 7.73% to 22.39%. The overall epidemic trend was milder comparing to those in previous years. Peak of the epidemic for the 2008 is the 1st week. There were a peak occurred between Jan 27 and Feb 6. That peak occurred because of most ill people went to emergency department during Chinese Lunar New Year. Chinese lunar New Year days usually show clearly peaks since clinics are closed then.

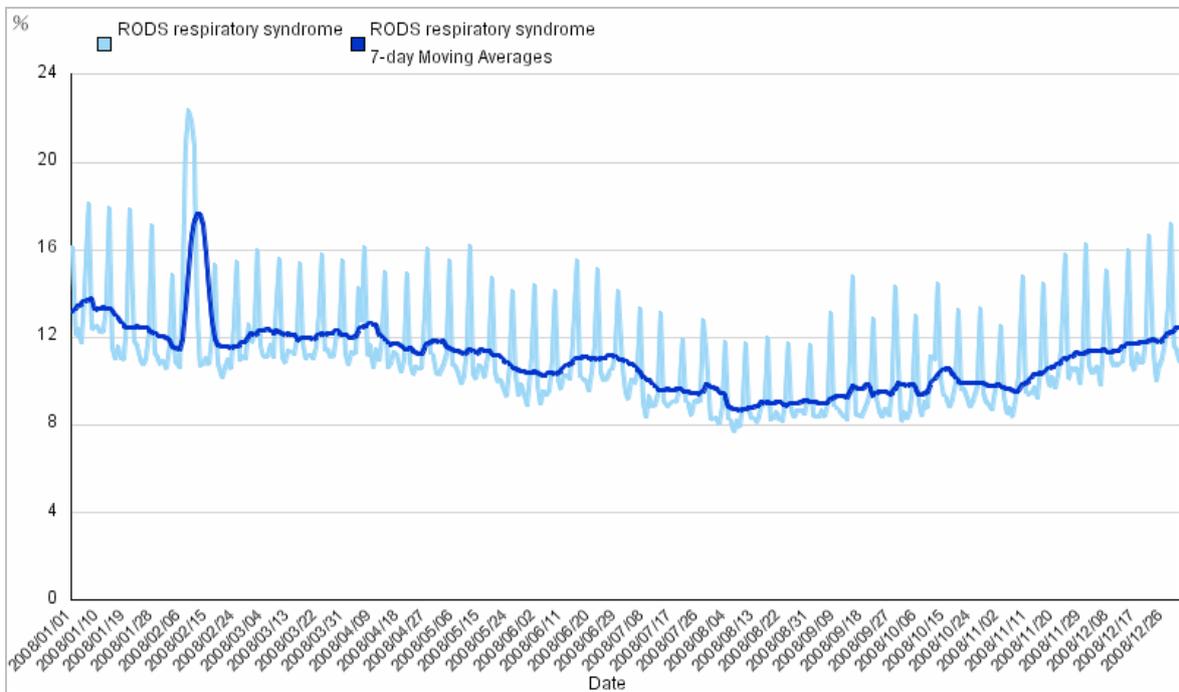


Figure 25 Respiratory Emergency Department Daily Consultation Rate & 7-day Moving Average

©Diarrhea

Analysis of epidemic situations:

In 2008, the weekly consultation rate for diarrhea reported by emergency department ranged from 2.50% to 12.95%. The overall epidemic peak occurred in spring, and it was similar to those in previous years.

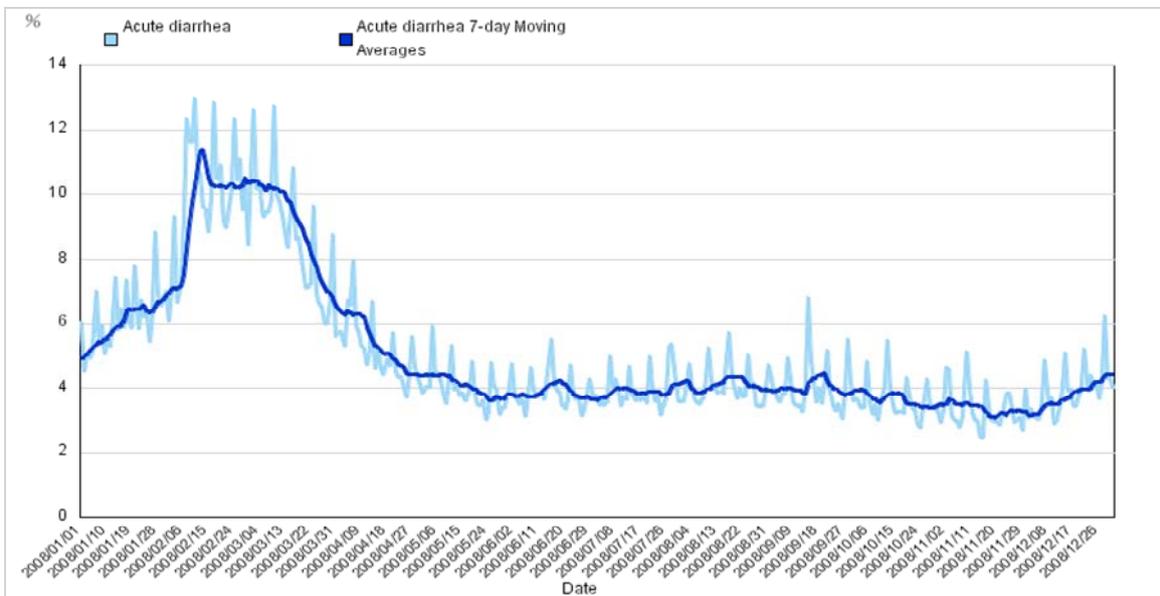


Figure 26 Acute Diarrhea Emergency Department Daily Consultation Rate & 7-day Moving Average

©Acute Hemorrhagic Conjunctivitis

Analysis of epidemic situations:

In 2008, the weekly consultation rate for diarrhea reported by emergency department (ED) ranged from 0.65‰ to 6.86‰, with a peak occurred between Jan 27 and Feb 10. That peak occurred because of most ill people went to emergency department during Chinese Lunar New Year. Chinese Lunar New Year days usually show clearly peaks since clinics are closed then. The overall epidemic trend was milder comparing to those of previous years.

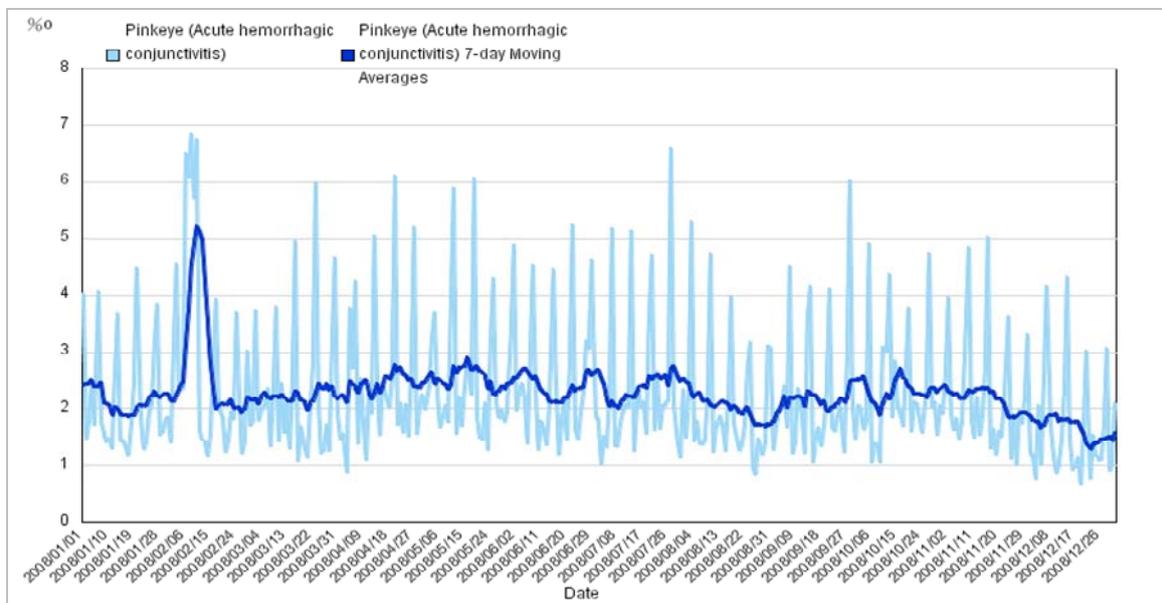
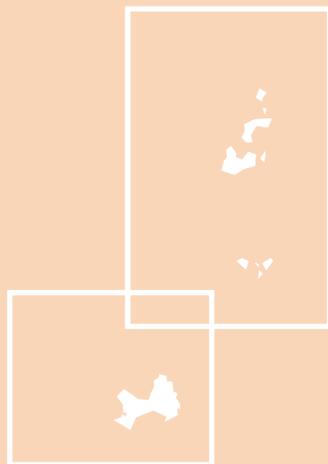


Figure 27 Acute Hemorrhagic Conjunctivitis Emergency Department Daily Consultation Rate & 7-day Moving Average

2008

Statistics of Communicable Diseases
and Surveillance Report



III

Surveillance Reports of Selected Diseases

— **Republic of China (Taiwan), 2008**

©Abbreviations and Symbols Used in Table

- No reported cases.
- ... Not under surveillance.

Measles

Since 1985, measles had broken out in 1985 (2,219 cases), 1988 (1,386 cases), 1989 (1,060 cases) and 1992 (264 cases), and the annual cases in the other years were less than 100. In 2008, 16 confirmed cases (0.07 incidence rate per 100,000 population) were reported, which was increased as compared with 10 confirmed cases (0.04 incidence rate per 100,000 population) in 2007. The data of confirmed cases in 2008 are analyzed as follows:

(1) Gender

7 male cases (43.8%), 9 female cases (56.2%), the male-to-female ratio was 0.8:1.0.

(2) Age

5 cases of under aged 1, 4 cases of aged 1-4 (1 case of aged 1, 2 cases of aged 2, 1 case of aged 4), 2 cases of aged 25-29 and 2 cases of aged 30-34, 1 case of aged 20-24, 1 case of aged 35-39 and 1 case of aged 45-49.

(3) Month

4 cases in November, 4 cases in December, 2 cases in March, 2 cases in April, 2 cases in August, 1 case in January and 1 case in June.

(4) Region

Most of cases occurred in Kaohsiung City (6 cases), followed 2 cases in Keelung City, 2 cases in Taoyuan County, 2 cases in Chiayi County, and 2 cases in Kaohsiung County, 1 case in Taipei City and 1 case in Taipei County, no confirmed cases reported in other counties and cities.

The incidence rate of confirmed cases per 100,000 population in Keelung City was 0.51, which was the highest, followed by Kaohsiung City (0.39) and Chiayi County (0.36).

(5) Imported cases and country of infection

7 imported cases, including 5 cases from China, 1 case from Japan and 1 case from Thailand.

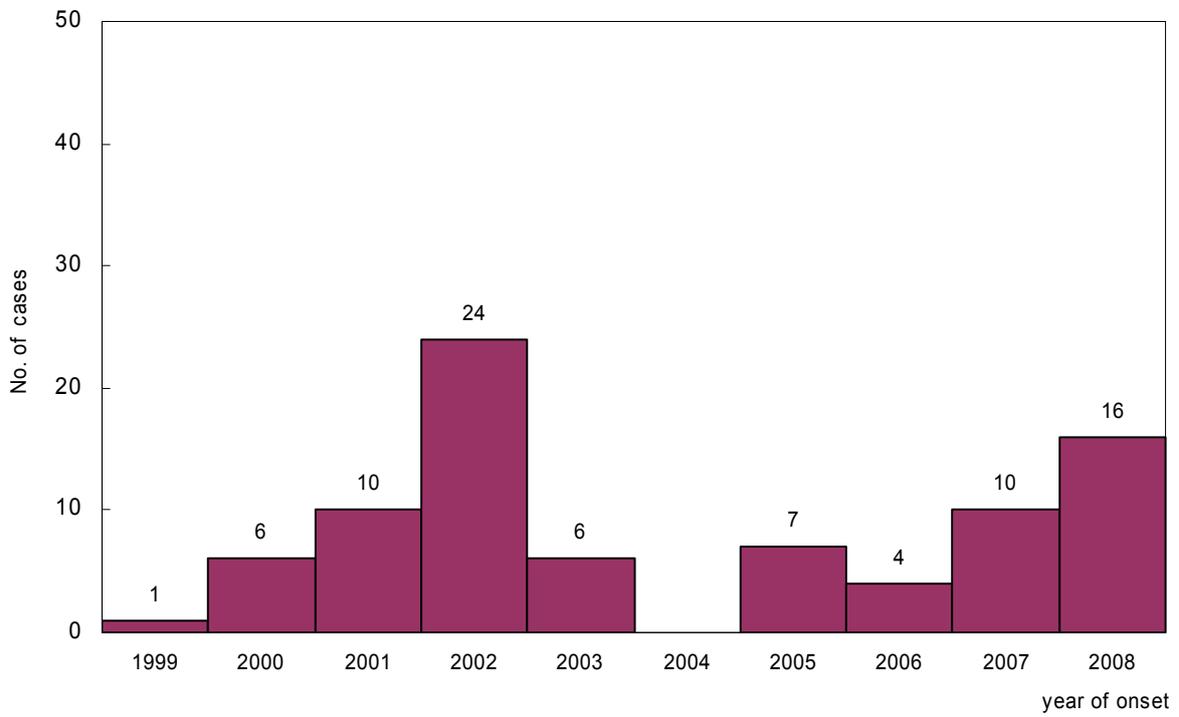


Figure 28 Number of Measles confirmed cases, 1999-2008

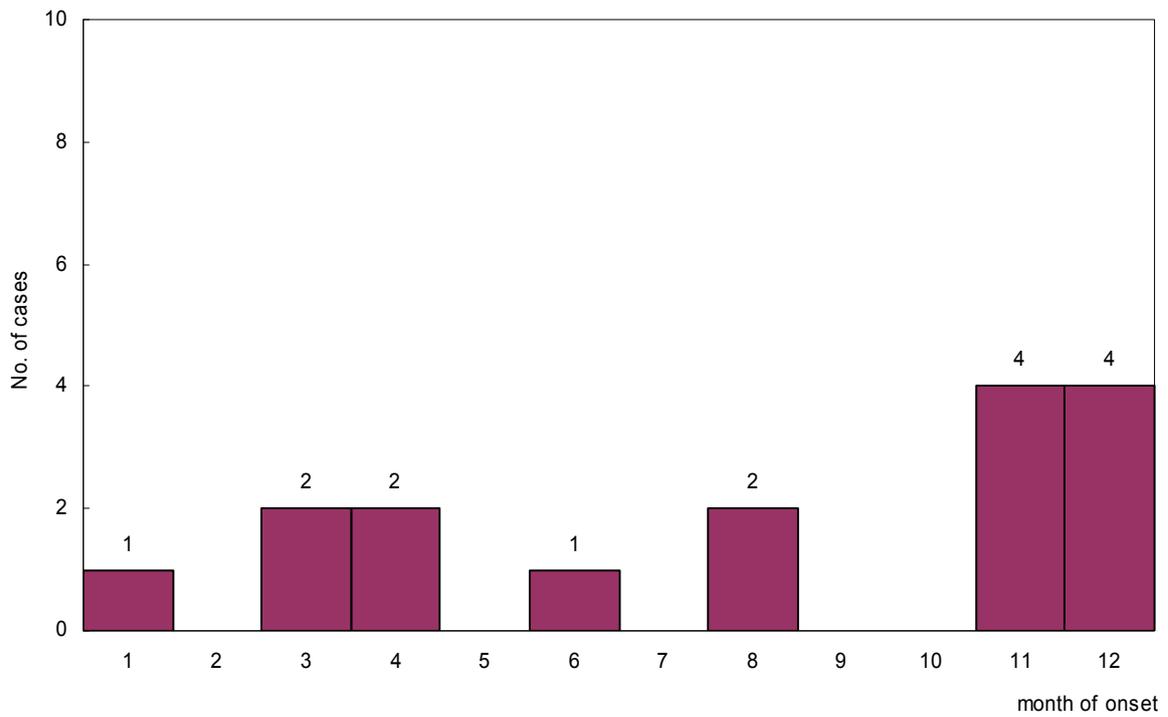


Figure 29 Number of Measles confirmed cases, 2008

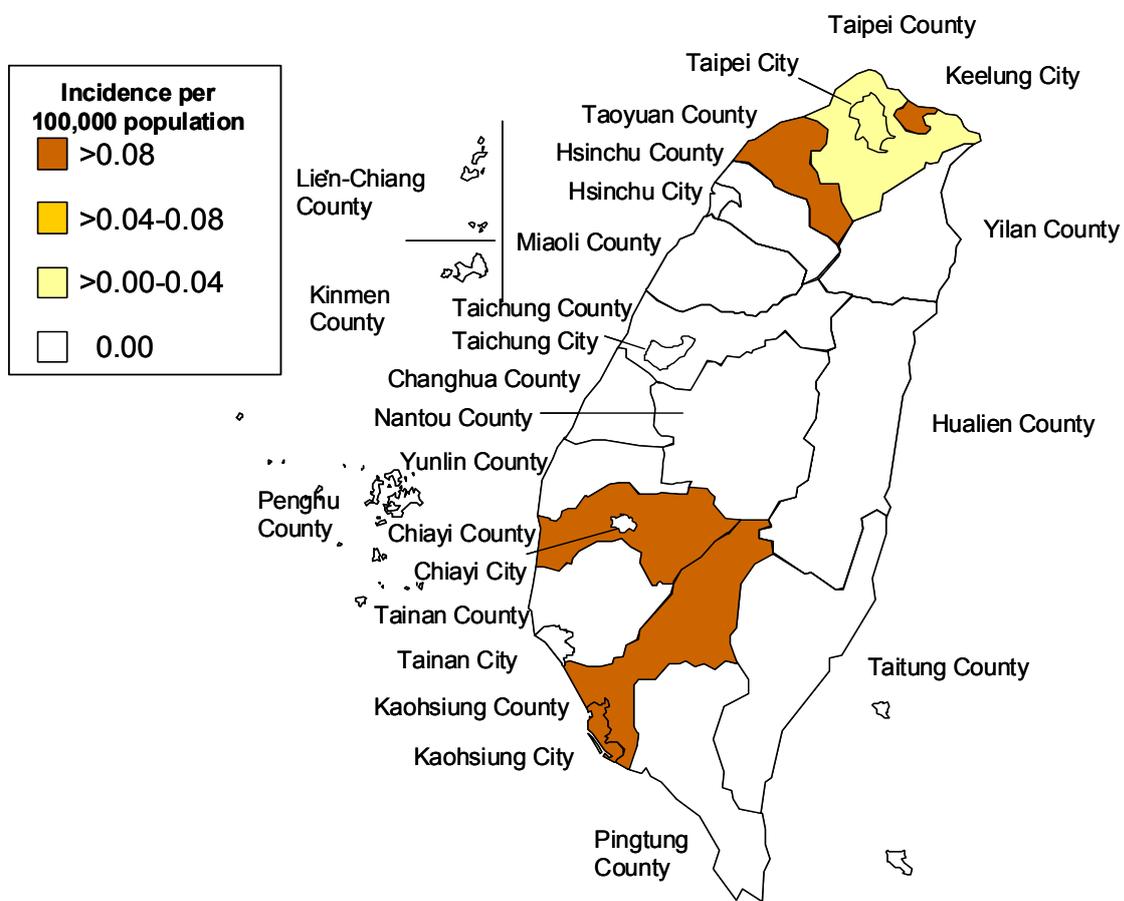


Figure 30 Geographical distribution by incidence of Measles confirmed cases, 2008

Pertussis

In 2008, 41 confirmed cases (0.18 incidence rate per 100,000 population) were reported, the same as that in 2007 (0.18 incidence rate per 100,000 population). The data of confirmed cases in 2008 are analyzed as follows:

(1) Gender

22 male cases (53.7%), 19 female cases (46.3%), the male-to-female ratio was 1.2:1.0.

(2) Age

16 cases of aged 10-14, 13 cases of under aged 1, 3 cases of aged 1-4, 3 cases of aged 15-19, 2 cases of aged 35-39, 2 cases of aged 5-9, 1 case of aged 40-44 and 1 case of aged 45-49.

As for the distribution of age in months of 13 cases of under aged 1, 6 cases were 2 months old, 4 cases were 1 month old, 1 case was 3 months old, 1 case was 4 months old, and 1 case was 5 months old.

(3) Month

12 cases in July, 8 cases in June, 6 cases in August, 4 cases in March, 4 cases in September, 3 cases in May, 1 case in February, April, October and November respectively.

(4) Region

Taipei County (20 cases) ranked the first, followed by Taipei City (8 cases), Taoyuan County (6 cases), Changhua County (3 cases), Kaohsiung County (2 cases) and Taitung County (2 cases), no confirmed cases in other counties and cities.

Taitung County (0.86) had the highest incidence rate of confirmed cases per 100,000 population, followed by Taipei County (0.52) and Taoyuan County (0.31).

(5) Imported cases and country of infection

1 imported case from China.

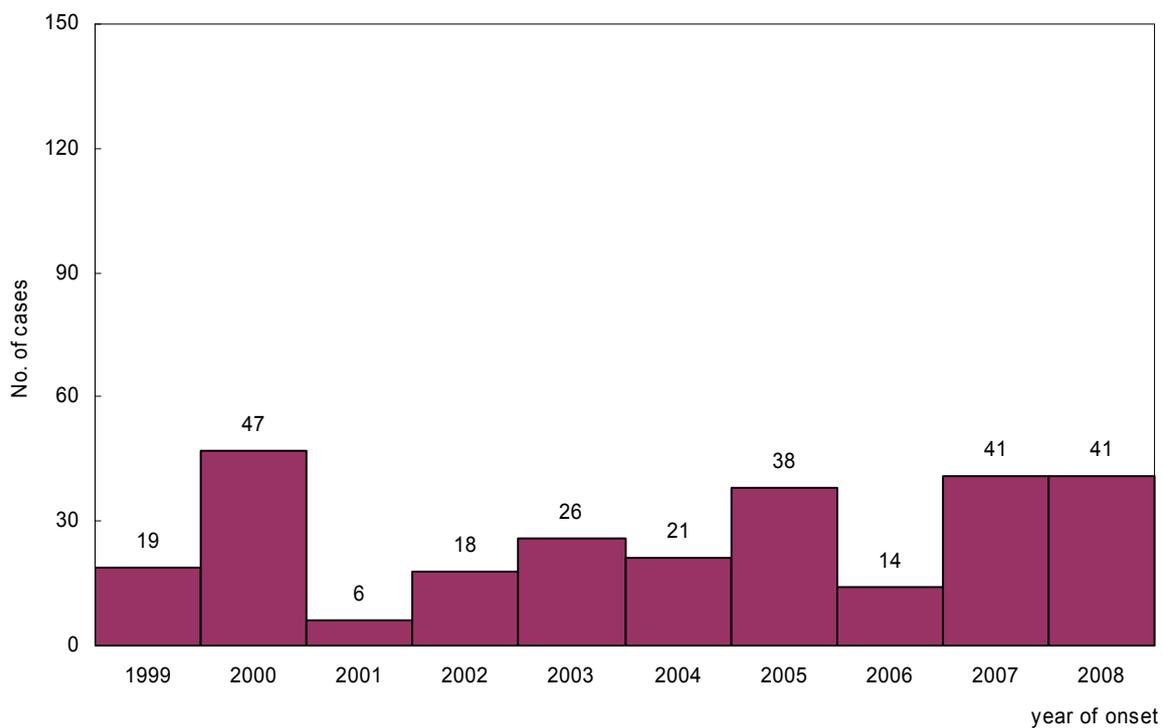


Figure 31 Number of Pertussis confirmed cases, 1999-2008

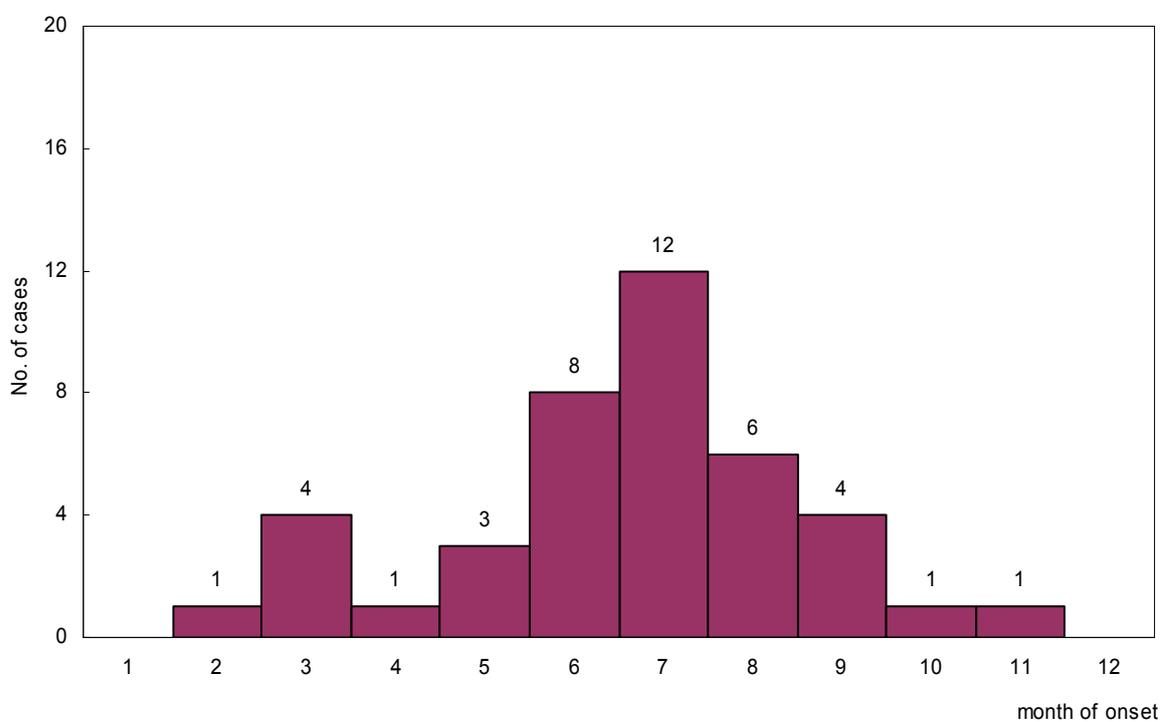


Figure 32 Number of Pertussis confirmed cases, 2008

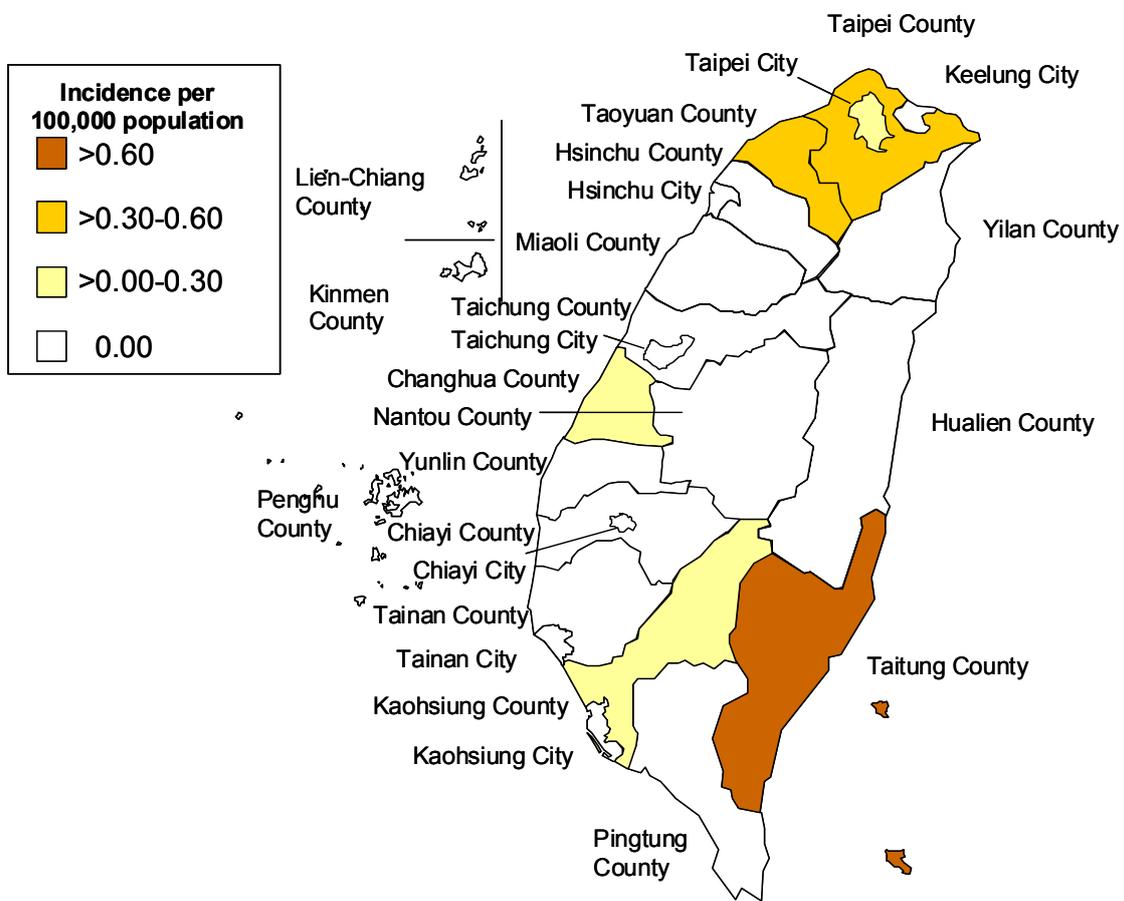


Figure 33 Geographical distribution by incidence of Pertussis confirmed cases, 2008

Meningococcal Meningitis

In 2008, 19 confirmed cases (0.08 incidence rate per 100,000 population) were reported, which was decreased as compared with 20 cases (0.09 incidence rate per 100,000 population) in 2007. The data of confirmed cases in 2008 are analyzed as follows:

(1) Gender

6 male cases (31.6%), 13 female cases (68.4%), the male-to-female ratio was 0.5:1.0.

(2) Age

5 cases of aged 10-14, 5 cases of aged 65 or above, 3 cases of aged 1-4, 2 cases of under aged 1, 1 case of aged 20-24, 40-44, 50-54 and 55-59 respectively.

2 cases of under aged 1 were less than 1 month.

(3) Month

5 cases in August, 4 cases in March, 3 cases in January, 3 cases in February, 2 cases in June, 1 case in September and 1 case in November.

(4) Region

Taipei County (5 cases) ranked the first, followed by Taipei City (4 cases), Taoyuan County (3 cases), 2 cases in Hsinchu County, 2 cases in Changhua County and 2 cases in Pingtung County, 1 case in Hualien County, no confirmed cases in other counties and cities.

Hsinchu County (0.40) had the highest incidence rate of confirmed cases per 100,000 population, followed by Hualien County (0.29) and Pingtung County (0.23).

(5) Imported cases and country of infection

No imported case.

(6) Serogroup

Group B meningococcus ranked the first with 17 cases (89.5%), followed by Group C one case (5.3%) and untyped one case (5.3%).

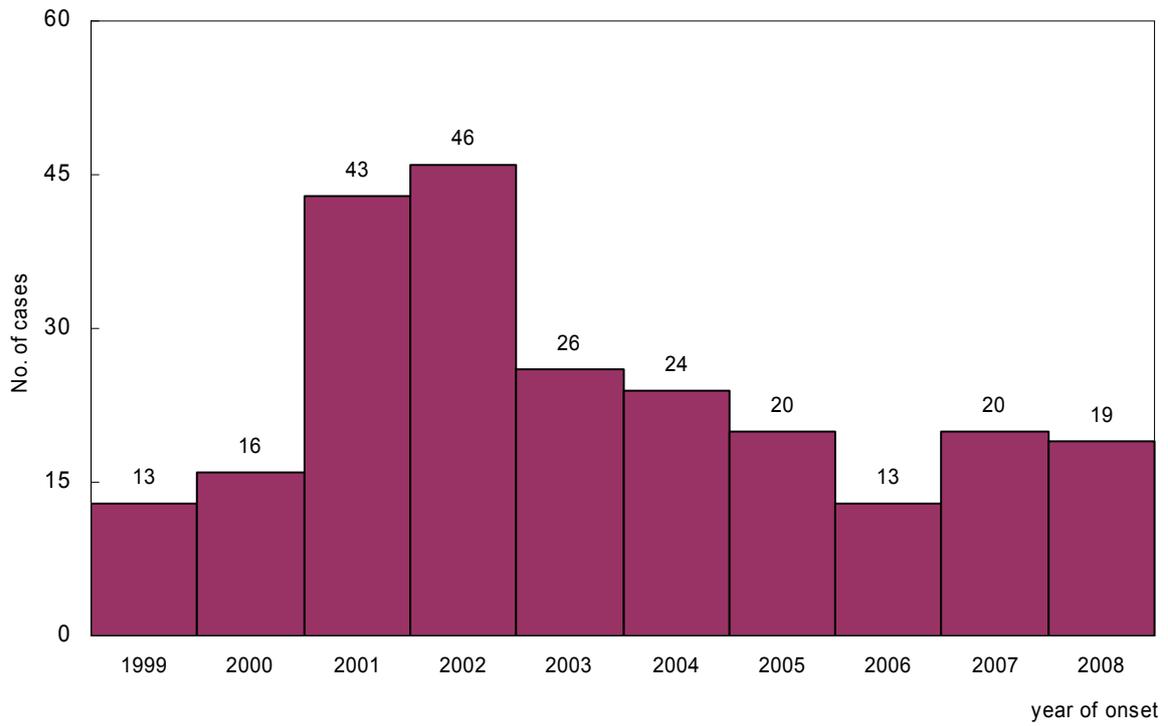


Figure 34 Number of Meningococcal Meningitis confirmed cases, 1999-2008

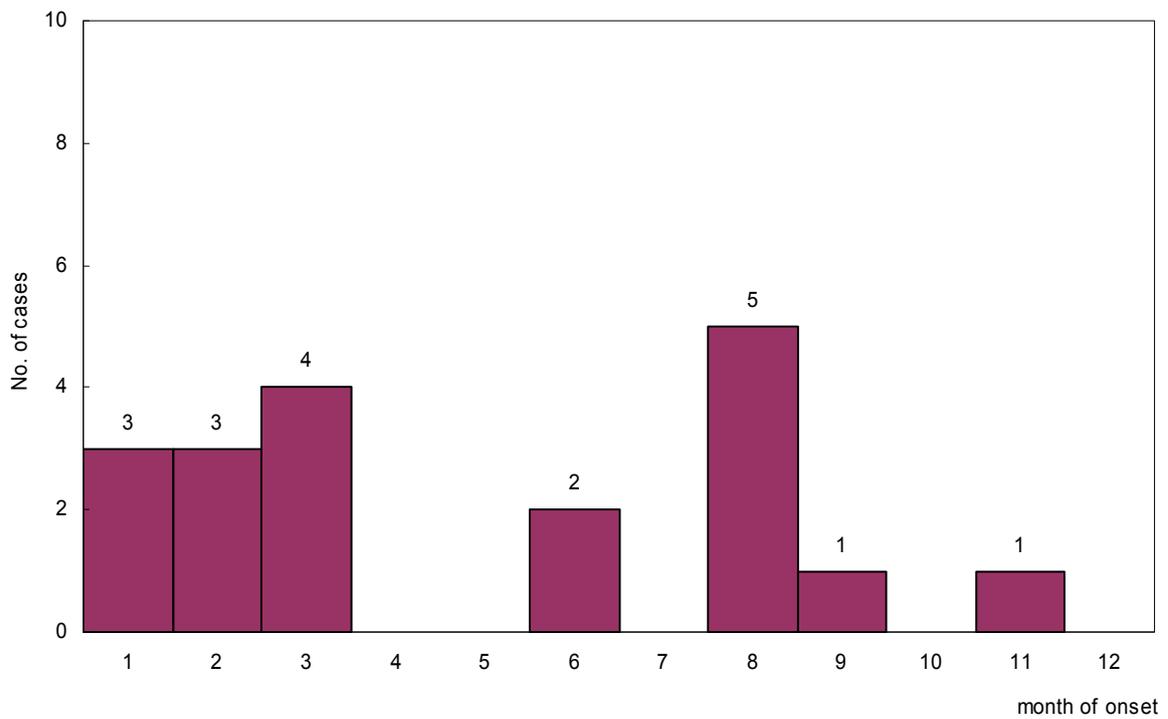


Figure 35 Number of Meningococcal Meningitis confirmed cases, 2008

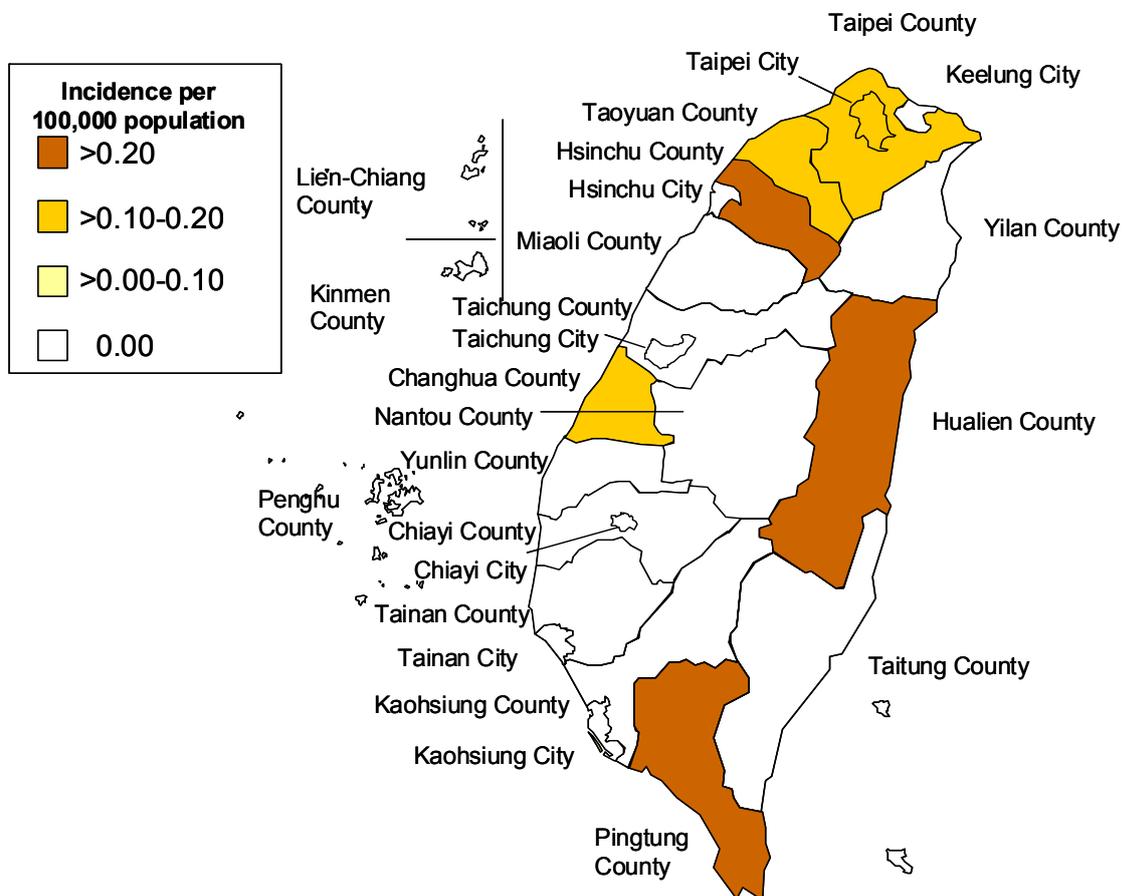


Figure 36 Geographical distribution by incidence of Meningococcal Meningitis confirmed cases, 2008

Japanese Encephalitis

In 2008, 17 confirmed cases (0.07 incidence rate per 100,000 population) were reported, which was decreased as compared with 37 confirmed cases (0.16 incidence rate per 100,000 population) in 2007. The data of confirmed cases in 2008 are analyzed as follows:

(1) Gender

12 male cases (70.6%), 5 female cases (29.4%), the male-to-female ratio was 2.4:1.0.

(2) Age

9 cases of aged 40-64, 5 cases of aged 25-39, 2 cases of aged 15-24, and 1 case of aged 5-14.

(3) Month

The cases mainly occurred in summer seasons, 9 cases in June, 6 cases in July, 1 case in May and 1 case in November.

(4) Region

2 cases in Changhua County, 2 cases in Nantou County, 2 cases in Yunlin County, 2 cases in Tainan County and 2 cases in Kaohsiung City, 1 case in Keelung City, Taoyuan County, Chiayi County, Kaohsiung County, Pingtung County, Hualien County and Taitung County respectively, no confirmed cases in other counties and cities.

Taitung County (0.43) ranked the highest in the incidence rate of confirmed cases per 100,000 population, followed by Nantou County (0.38) and Hualien County (0.29).

(5) Imported cases and country of infection

No imported case.

(6) Clinical symptoms

Among these confirmed cases, 16 cases with fever, 9 cases with unconsciousness or coma, 13 cases with headache, 1 case with neck stiffness, 7 cases with convulsion, 4 cases with nausea or vomiting.

(7) Abode or neighboring environmental condition

Among these confirmed cases, 4 cases lived nearby pig farms, 7 cases lived nearby pigeonries, 9 cases lived nearby irrigated fields, 1 case lived nearby egrets nest, 1 case lived nearby coop, 4 cases nearby pool.

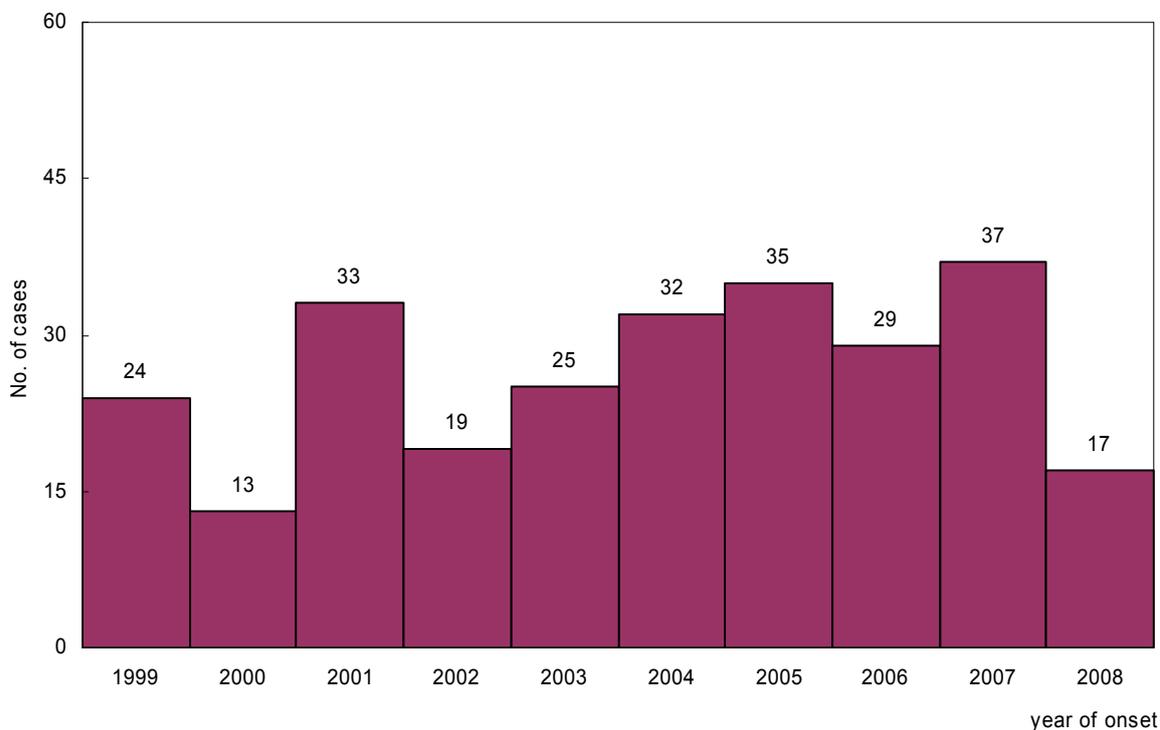


Figure 37 Number of Japanese Encephalitis confirmed cases, 1999-2008

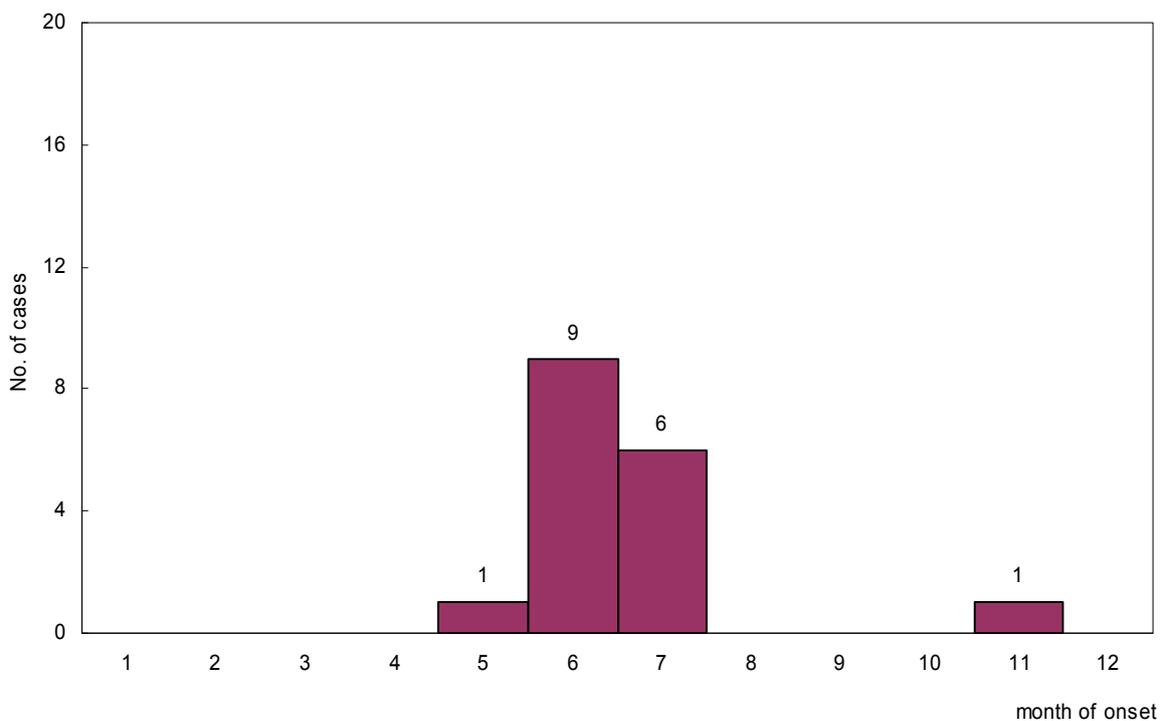


Figure 38 Number of Japanese Encephalitis confirmed cases, 2008

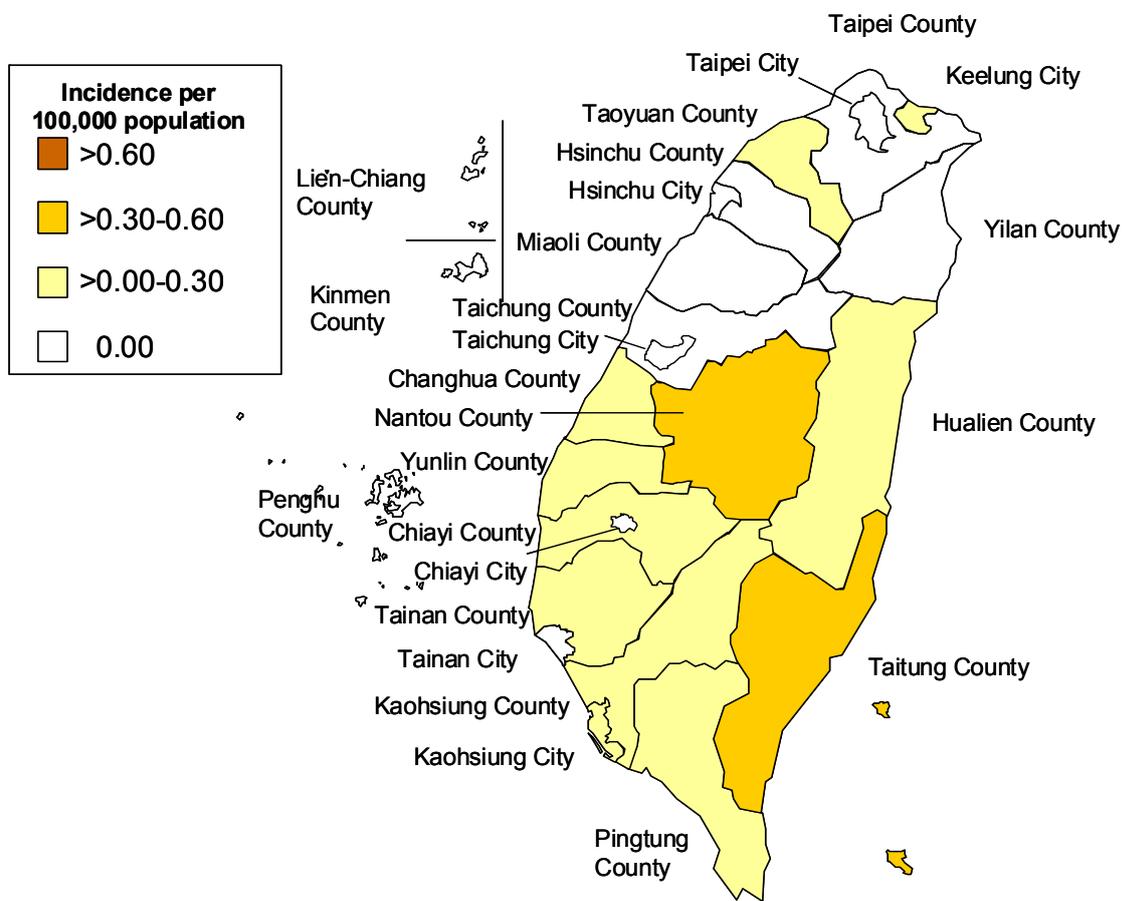


Figure 39 Geographical distribution by incidence of Japanese Encephalitis confirmed cases, 2008

Acute Hepatitis A

In 2008, 236 confirmed cases (1.03 incidence rate per 100,000 population) were reported, which was increased as compared with 203 confirmed cases (0.89 incidence rate per 100,000 population) in 2007. The data of confirmed cases in 2008 are analyzed as follows:

(1) Gender

139 male cases (58.9%), 97 female cases (41.1%), the male-to-female ratio was 1.4:1.0.

(2) Age

100 cases of aged 25-39, 58 cases of aged 40-64, 44 cases of aged 15-24, 23 cases of aged 65 or above, 10 cases of aged 5-14 and 1 case of aged 1-4.

(3) Month

Cases occurred in all months.

(4) Region

Taipei County ranked the first with 56 cases, followed by 44 cases in Taipei City, 27 cases in Taoyuan County, 13 cases in Taichung County, 11 cases in Tainan City and 11 cases in Kaohsiung City, and less than 10 cases in any of other counties and cities. No confirmed cases in Lienchiang County.

Kinmen County (2.4) had the highest incidence rate of confirmed cases per 100,000 population, followed by Keelung City (2.05) and Chiayi City (1.83).

(5) Imported cases and country of infection

35 imported cases, including 12 cases from China, 4 cases from India, 3 cases from Malaysia, 3 cases from Philippines, 3 cases from Cambodia, 2 cases from Indonesia, 2 cases from Korea, 2 cases from Vietnam, and 1 case from Australia, Japan, Thailand and unknown country respectively.

(6) Clinical symptoms

The epidemiological survey data of 236 confirmed cases showed: in cases with symptoms (multiple choice), tiredness accounted for 65.3% (154 person-times), yellowing of the white of the eye or skin accounted for 58.9% (139 person-times), fever accounted for 46.2% (109 person-times), nausea and vomiting accounted for 78.8% (103 person-times of nausea, 83 person-times of vomiting, totaling 186 person-times), stomach discomfort and abdominal pain accounted for 76.7% (99 person-times of stomach discomfort, 82 person-times of abdominal pain, totaling 181 person-times), tawny urine accounted for 58.1% (137 person-times).

(7) Drinking water source and food habit

The epidemiological survey data of 236 confirmed cases showed that the major sources (multiple choices) of residential drinking water are tap water which accounted for 74.6% (176 person-times), packaged water accounted for 17.8% (42 person-times); in addition, spring water accounted for 4.7% (11 person-times), groundwater accounted for 0.84% (2 person-times). As for the food habit, taking food at snack booths (multiple choice) accounted for the largest proportion which was 45.3% (107 person-time), and dinner party in restaurants accounted for 30.1% (71 person-times), taking nutritional lunch or take-away lunch box accounted for 28.8% (68 person-times).

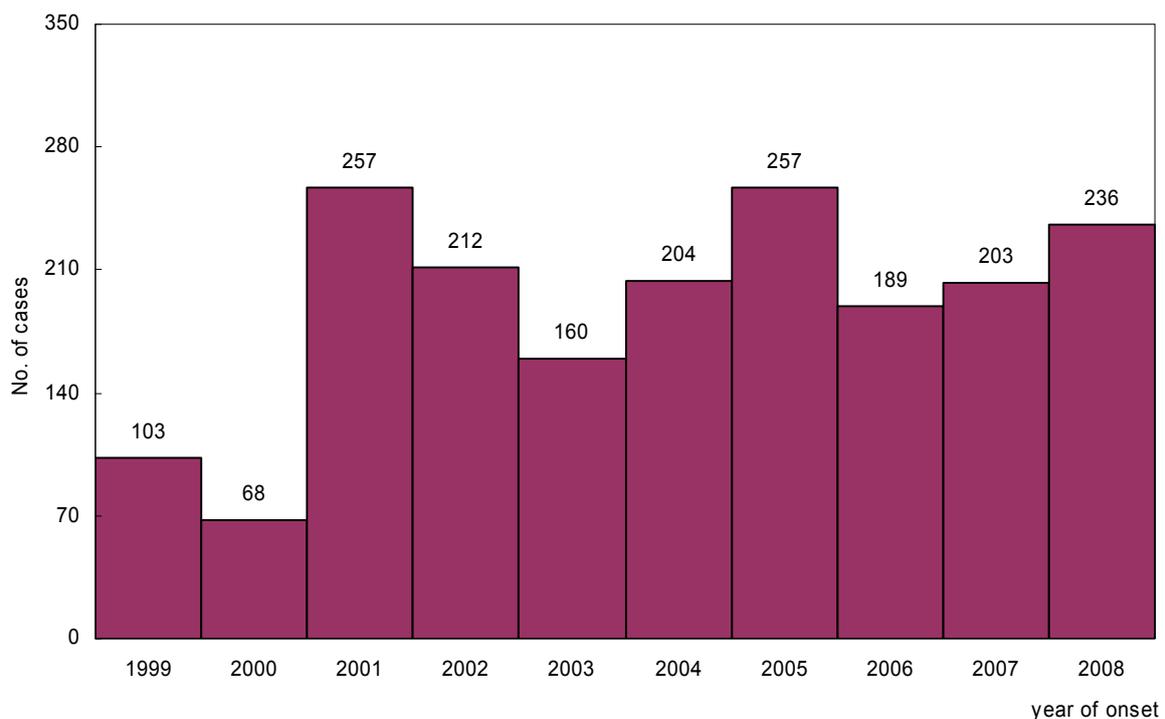


Figure 40 Number of Acute Hepatitis A confirmed cases, 1999-2008

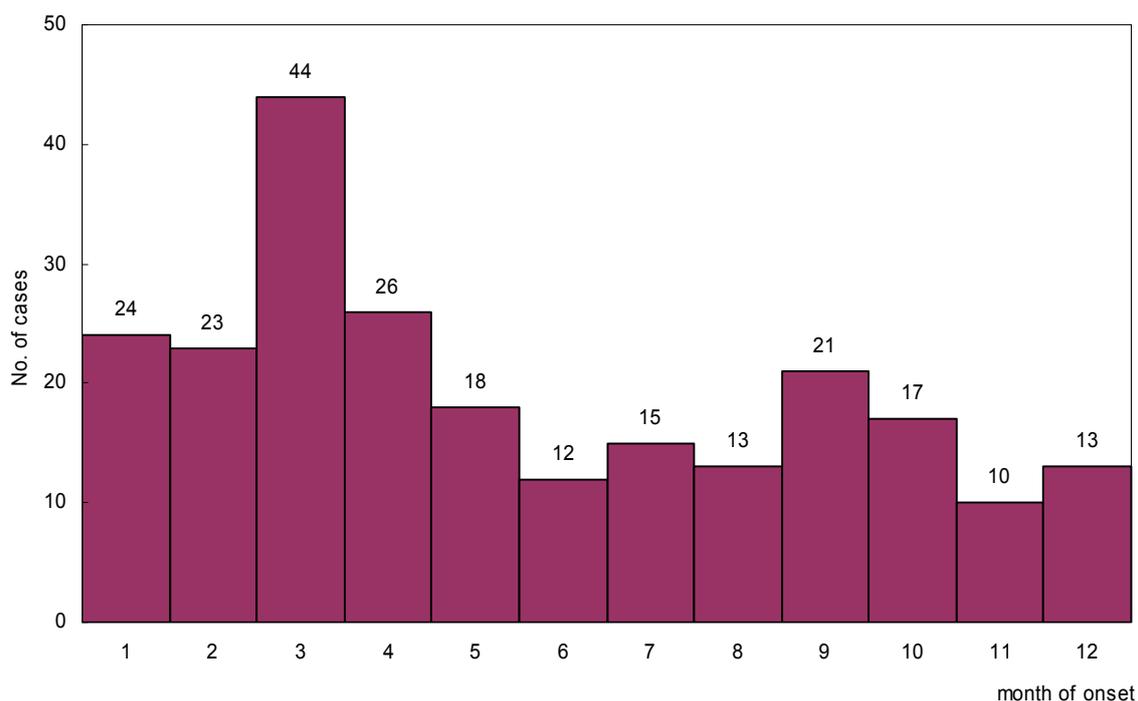


Figure 41 Number of Acute Hepatitis A confirmed cases, 2008

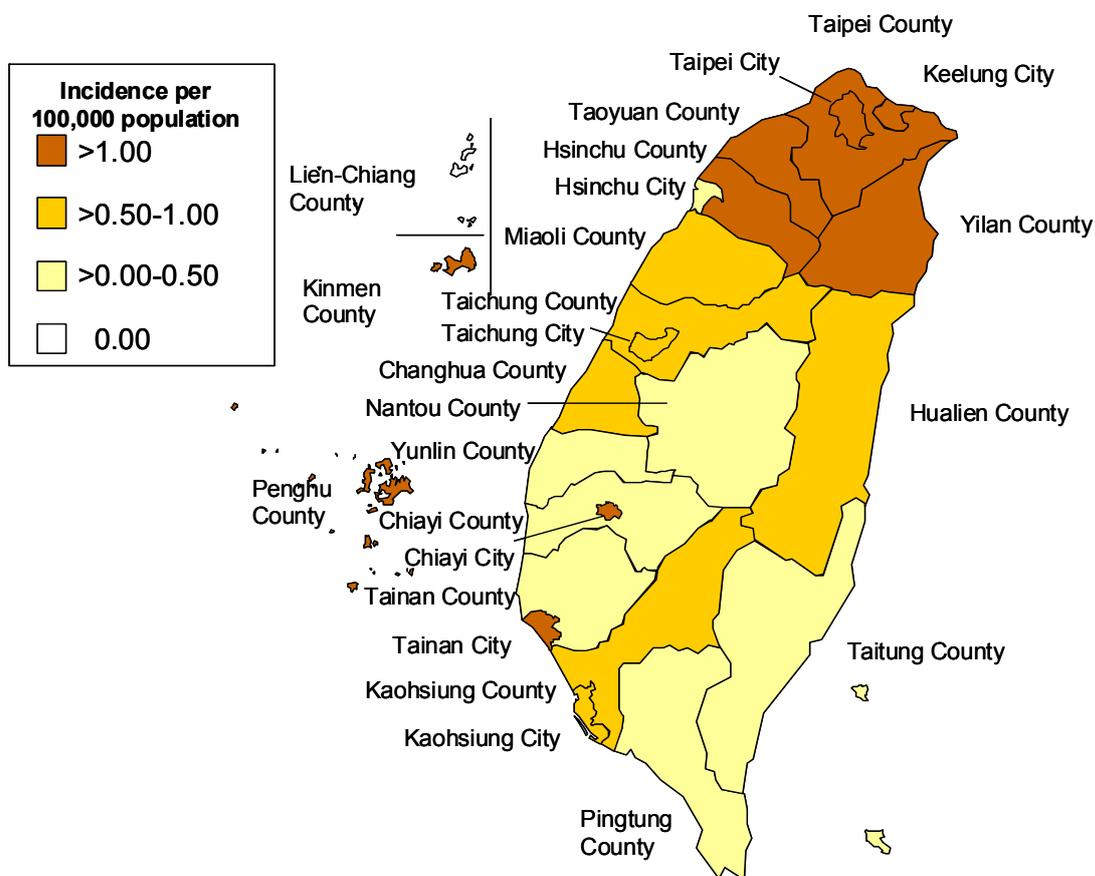


Figure 42 Geographical distribution by incidence of Acute Hepatitis A confirmed cases, 2008

Acute Hepatitis B

In 2008, 231 confirmed cases (1.00 incidence rate per 100,000 population) were reported, which was increased as compared with 202 confirmed cases (0.88 incidence rate per 100,000 population) in 2007. The data of confirmed cases in 2008 are analyzed as follows:

(1) Gender

139 male cases (60.2%), 92 female cases (39.8%), the male-to-female ratio was 1.5:1.0.

(2) Age

114 cases of aged 25-39, 79 cases of aged 40-64, 25 cases of aged 15-24, 10 cases of aged 65 or above, 2 cases of under aged 1 and 1 case of aged 5-14.

(3) Month

Cases occurred in all months.

(4) Region

Taipei County ranked the first with 54 cases, followed by 36 cases in Taipei City, 30 cases in Taoyuan County, 19 cases in Kaohsiung City and 12 cases in Kaohsiung County, and less than 10 cases in any of other counties and cities. No confirmed cases in Chiayi City, Kinmen County, Lienchiang County and Penghu County.

Hsinchu County (1.80) and Keelung City (1.80) had the highest incidence rate of confirmed cases per 100,000 population, followed by Hsinchu City (1.74).

(5) Imported cases and country of infection

15 imported cases, including 5 cases from China, 2 cases from Thailand, 1 case from India, Philippines and Vietnam respectively, and the other 5 cases from known countries.

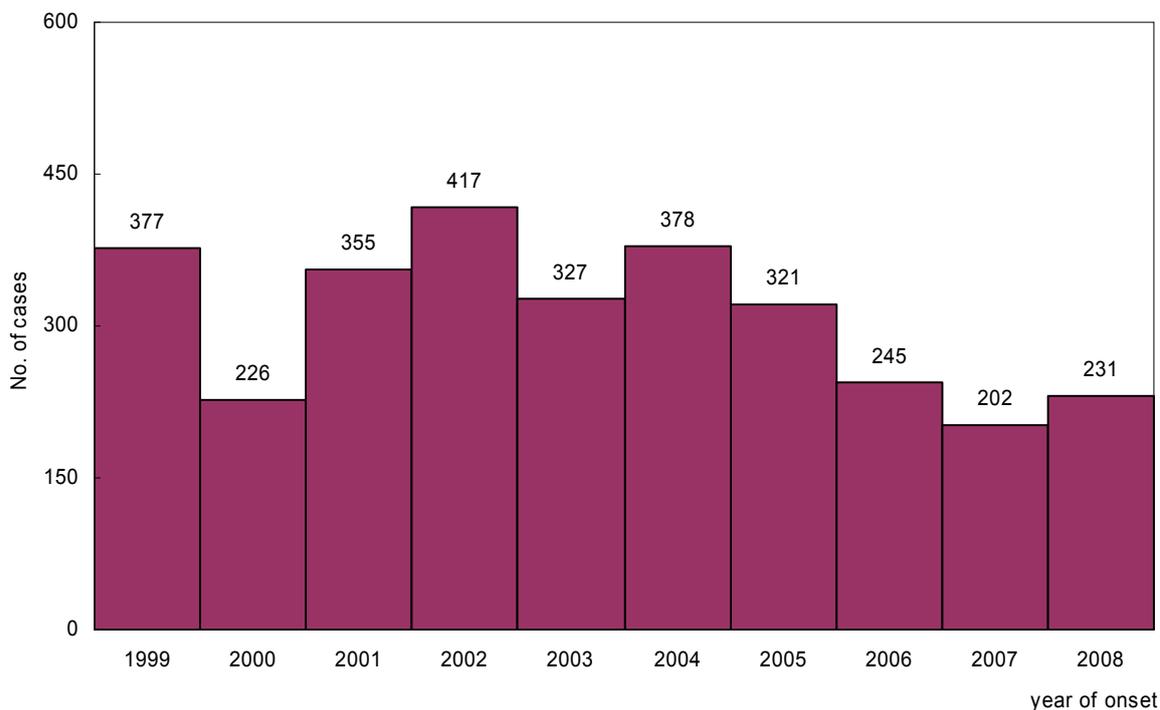


Figure 43 Number of Acute Hepatitis B confirmed cases, 1999-2008

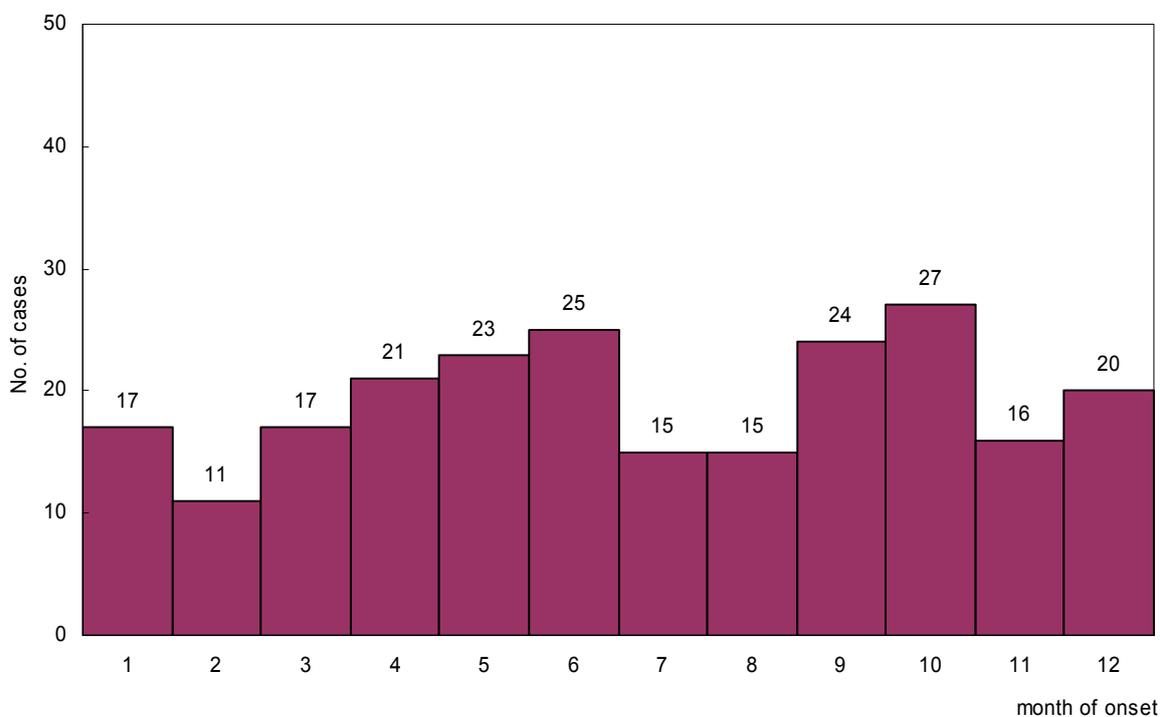


Figure 44 Number of Acute Hepatitis B confirmed cases, 2008

Acute Hepatitis C

In 2008, 124 confirmed cases (0.54 incidence rate per 100,000 population) were reported, which was decreased as compared with 153 confirmed cases (0.67 incidence rate per 100,000 population) in 2007. The data of confirmed cases in 2008 are analyzed as follows:

(1) Gender

87 male cases (70.2%), 37 female cases (29.8%), the male-to-female ratio was 2.4:1.0.

(2) Age

54 cases of aged 40-64, 41 cases of aged 25-39, 18 cases of aged 65 or above, 10 cases of aged 15-24 and 1 case of aged 5-14.

(3) Month

Cases occurred in all months.

(4) Region

Taipei County ranked the first with 21 cases, followed by 14 cases in Taipei City, 11 cases in Kaohsiung City, and less than 10 cases in any of other counties and cities. No confirmed cases in Taitung County, Lienchiang County and Penghu County.

Kinmen County (1.2) had the highest incidence rate of confirmed cases per 100,000 population, followed by Yunlin County (1.1) and Miaoli County (1.07).

(5) Imported cases and country of infection

2 imported cases, including 1 case from China and 1 case from the United States.

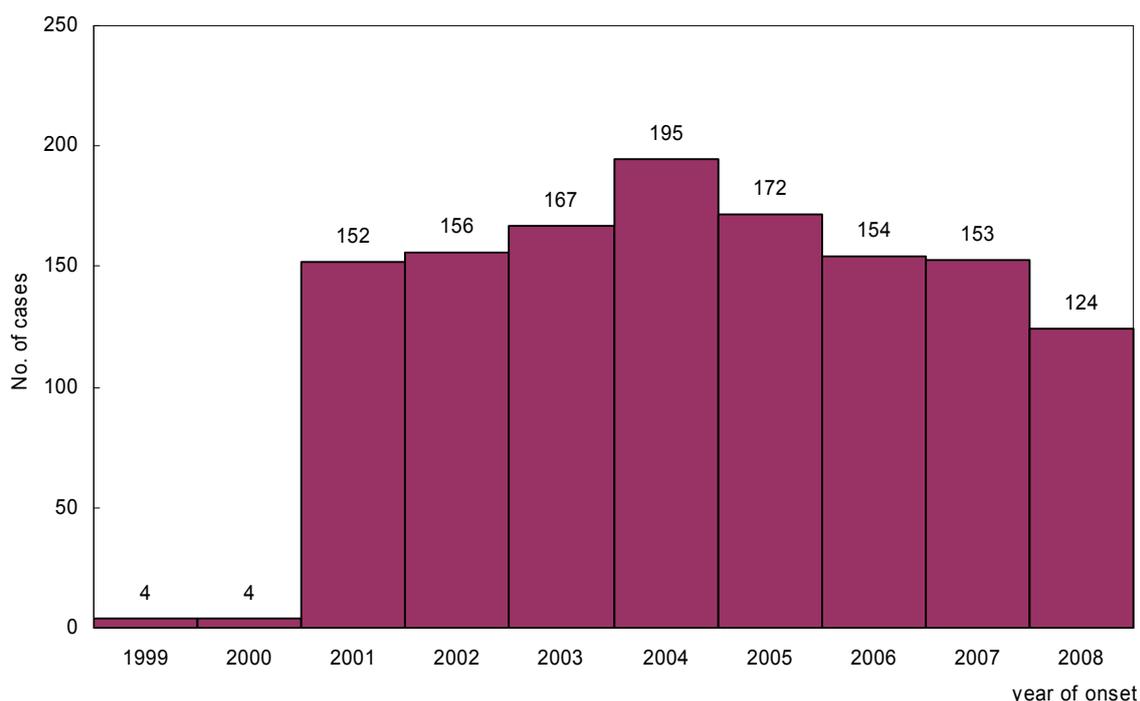


Figure 46 Number of Acute Hepatitis C confirmed cases, 1999-2008

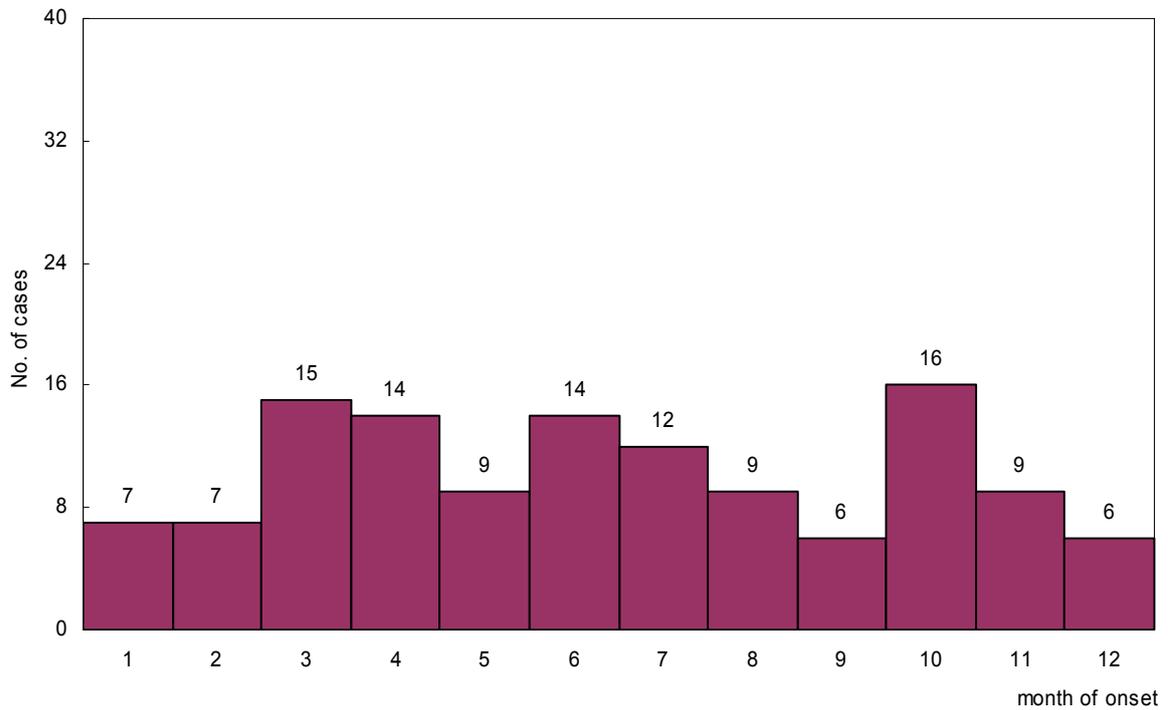


Figure 47 Number of Acute Hepatitis C confirmed cases, 2008

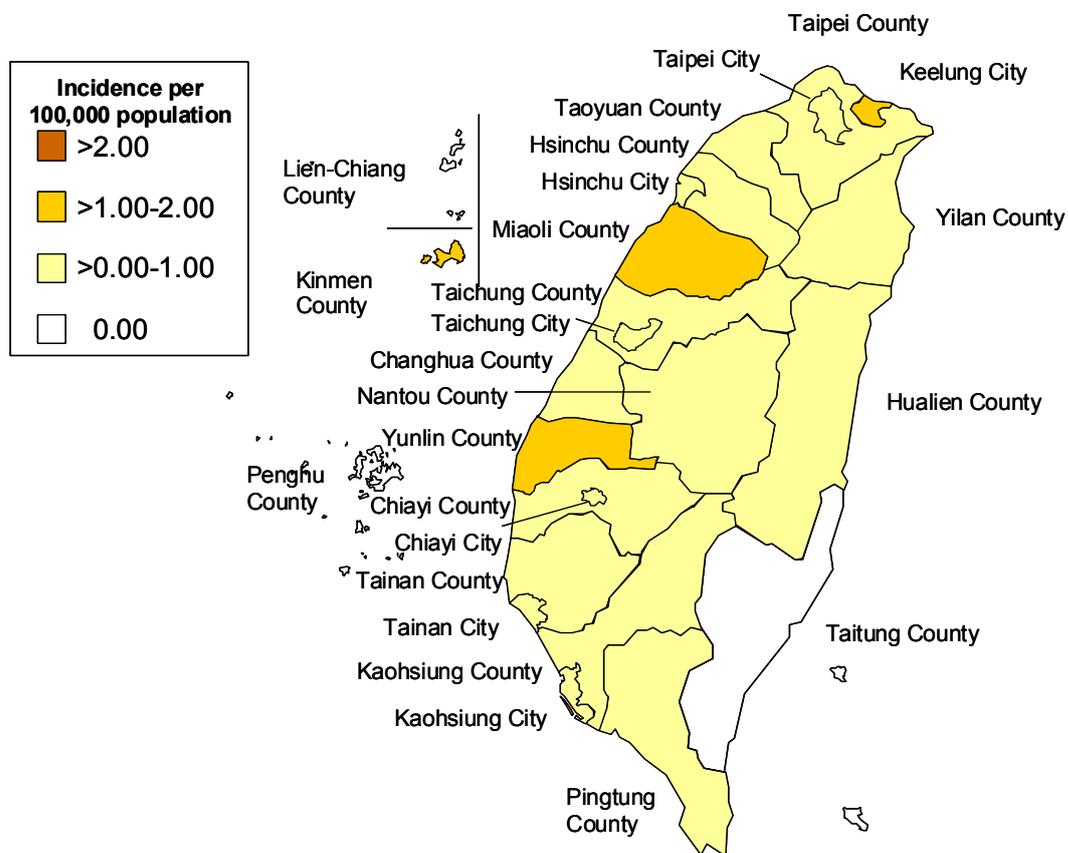


Figure 48 Geographical distribution by incidence of Acute Hepatitis C confirmed cases, 2008

Scrub Typhus

In 2008, 492 confirmed cases (2.14 incidence rate per 100,000 population) were reported, which was decreased as compared with 510 confirmed cases (2.23 incidence rate per 100,000 population) in 2007. The data of confirmed cases in 2008 are analyzed as follows:

(1) Gender

325 male cases (66.1%), 167 female cases (33.9%), the male-to-female ratio was 1.9:1.0.

(2) Age

Most of cases were adults greater than 20 years old. Among them, 211 cases of aged 40-64, followed by 97 cases of aged 25-39, 80 cases of aged 15-24, 73 cases of aged 65 or above, 22 cases of aged 5-14, and 9 cases of under aged 4.

(3) Month

Cases occurred in all months, 100 cases in July and 61 cases in June.

(4) Region

Penghu County ranked the first with 94 cases, followed by 66 cases in Kinmen County, 44 cases in Hualien County, 34 cases in Taitung County, 28 cases in Nantou County, 26 cases in Taipei City, 25 cases in Kaohsiung County, 24 cases in Taipei County, and less than 20 cases in any of other counties and cities.

Lienchiang County (172.57) had the highest incidence rate of confirmed cases per 100,000 population, followed by Penghu County (101.24), Kinmen County (79.46), Taitung County (14.61) and Hualien County (12.85), while other counties and cities were below 10.00.

(5) Imported cases and country of infection

3 imported cases were from India, Philippines and Vietnam respectively.

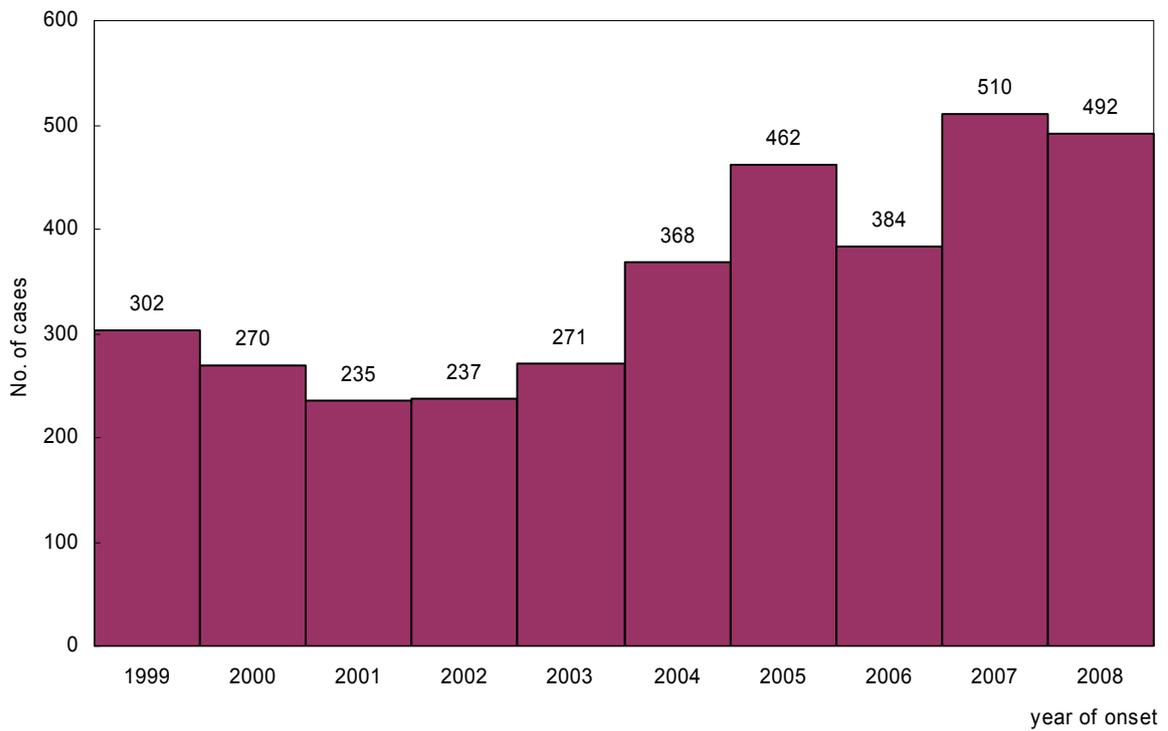


Figure 49 Number of Scrub Typhus confirmed cases, 1999-2008

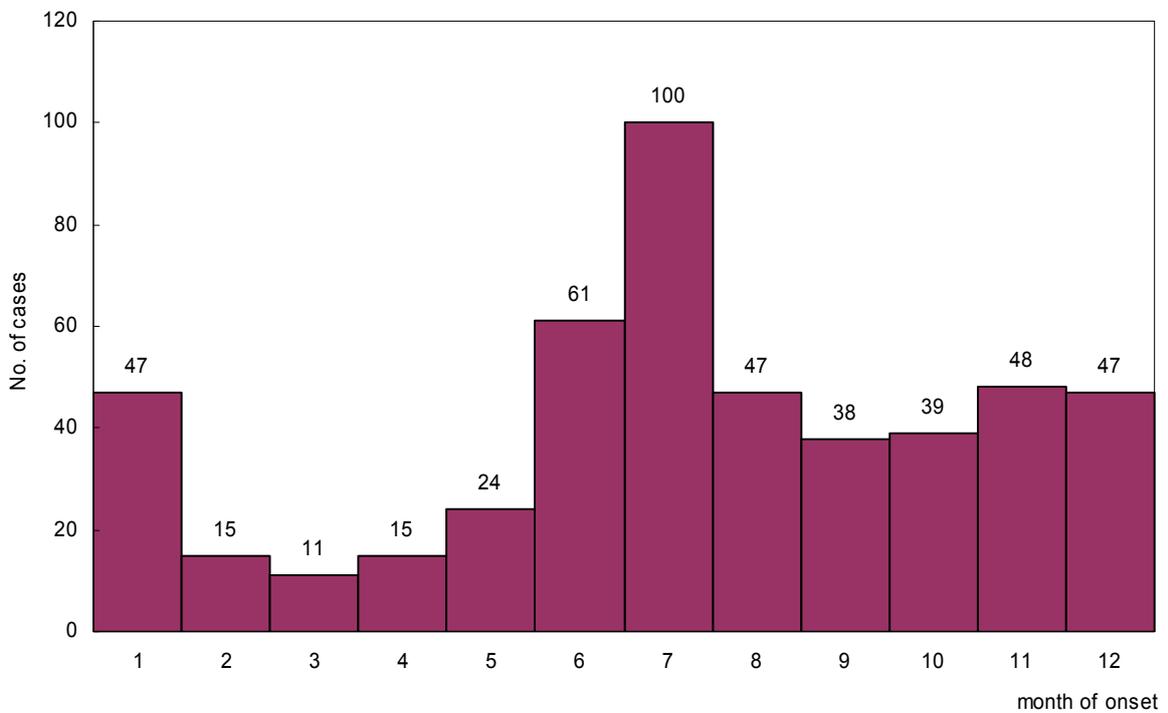


Figure 50 Number of Scrub Typhus confirmed cases, 2008

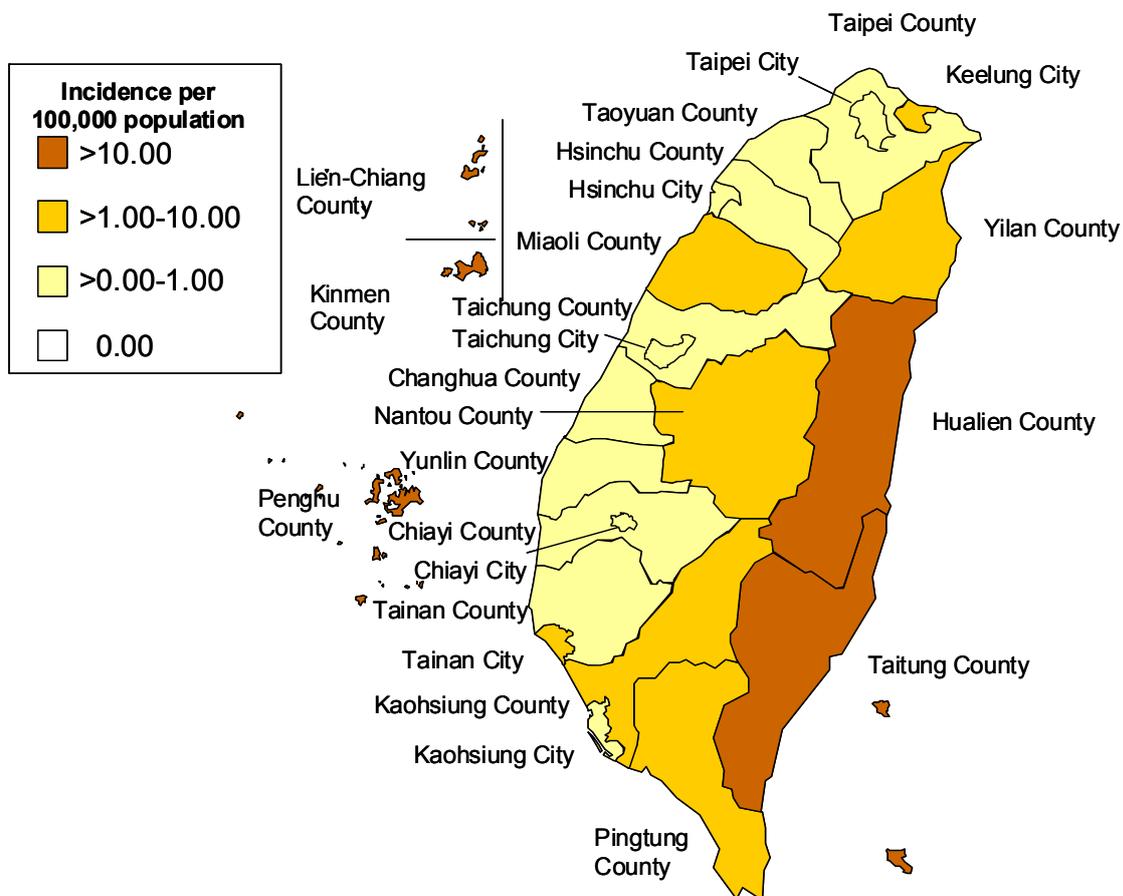


Figure 51 Geographical distribution by incidence of Scrub Typhus confirmed cases, 2008

Legionellosis

In 2008, 69 confirmed cases (0.30 incidence rate per 100,000 population) were reported, which was higher than 56 confirmed cases (0.24 incidence rate per 100,000 population) in 2007. The data of confirmed cases in 2008 are analyzed as follows:

(1) Gender

55 male cases (79.7%), 14 female cases (20.3%), the male-to-female ratio was 3.9:1.0.

(2) Age

The age distribution consisted mostly elders, 36 cases of aged 65 or above, 28 cases of aged 40-64, 4 cases of aged 25-39, and 1 case of aged 5-14.

(3) Month

Cases occurred in all months, 9 cases in October, 9 cases in December, and 8 cases in April.

(4) Region

14 cases in Taipei City and 14 cases in Taipei County, 5 cases in Tainan County, 5 cases in Kaohsiung City, 4 cases in Nantou County, and no more than 3 cases in any of other counties and cities. No confirmed cases in Kinmen County, Lienchiang County, Miaoli County, Chiayi City and Taitung County.

Penghu County (1.08) had the highest incidence rate of confirmed cases per 100,000 population, followed by Hualien County (0.88) and Nantou County (0.75).

(5) Imported cases and country of infection

3 imported cases were from China.

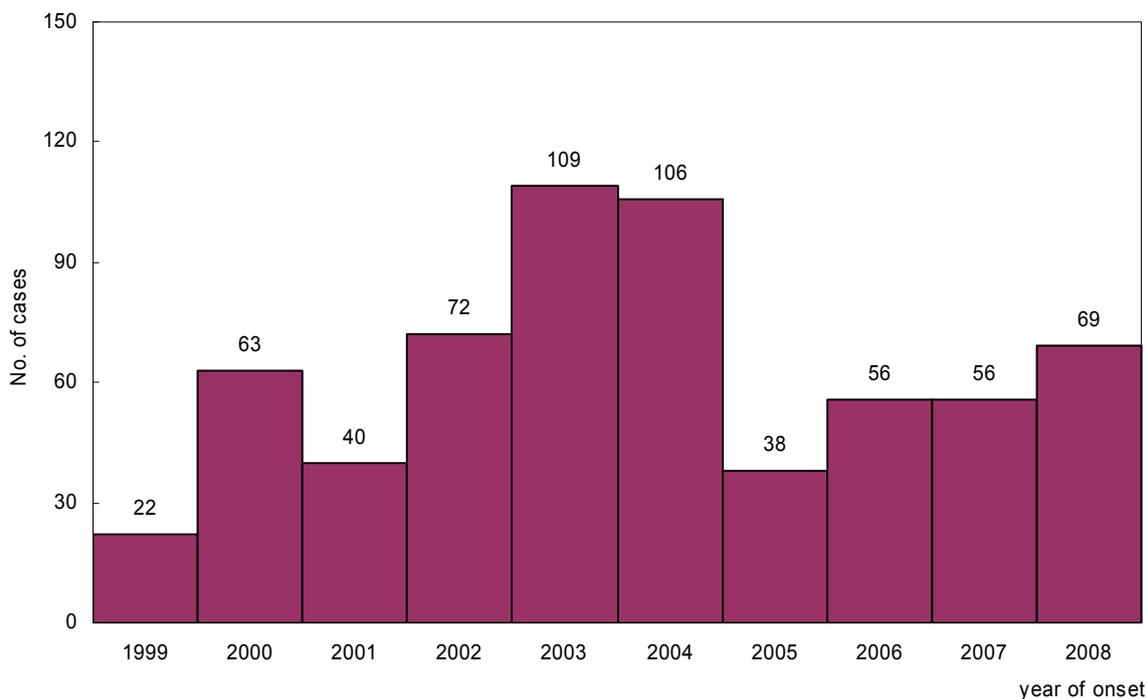


Figure 52 Number of Legionellosis confirmed cases, 1999-2008

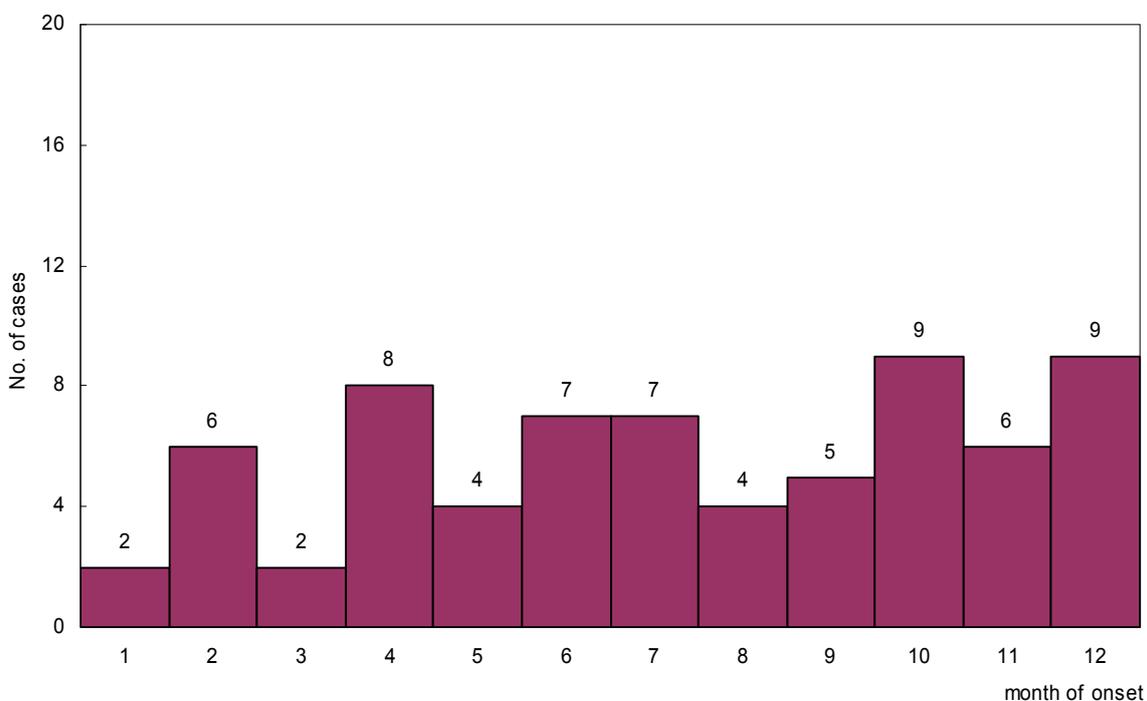


Figure 53 Number of Legionellosis confirmed cases, 2008

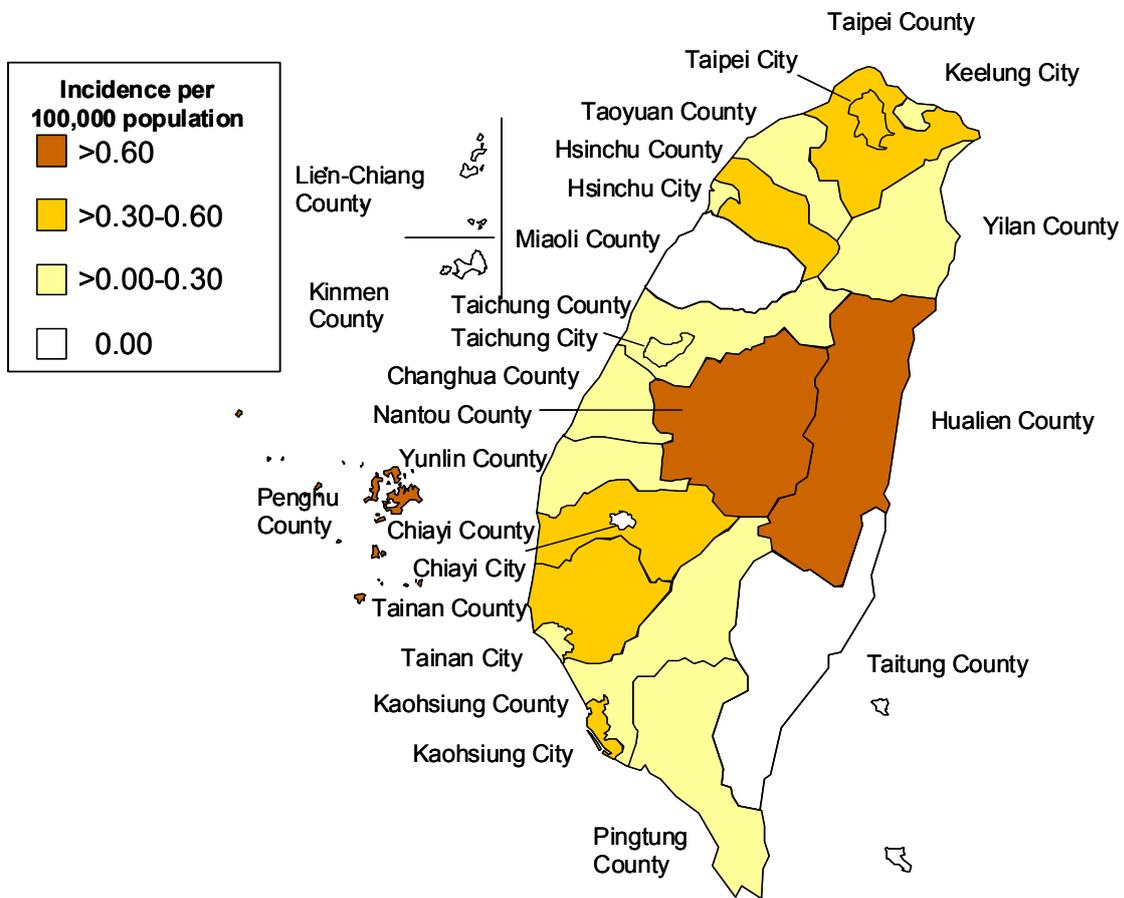


Figure 54 Geographical distribution by incidence of Legionellosis confirmed cases, 2008

Dengue Fever

In 2008, 714 confirmed cases (3.10 incidence rate per 100,000 population) were reported, which was decreased as compared with 2,179 confirmed cases (9.51 incidence rate per 100,000 population) in 2007.

Also, 5 dengue hemorrhagic fever/dengue shock syndrome cases (0.02 incidence rate per 100,000 population) were reported, which was decreased as compared with 12 cases (0.05 incidence rate per 100,000 population) in 2007.

Among the confirmed cases, there were 226 imported cases and 488 indigenous cases. There were 5 confirmed cases of dengue hemorrhagic fever, including 1 imported case (region was Taipei City) and 4 indigenous cases (2 cases in Kaohsiung City, 1 case in Tainan City and 1 case in Kaohsiung County). The data of confirmed cases in 2008 are analyzed as follows:

(1) Gender

226 imported cases, including 123 male cases (54.4%) and 103 female cases (45.6%), the male-to-female ratio was 1.2:1.0.

488 indigenous cases, including 263 male cases (53.9%) and 225 female cases (46.1%), the male-to-female ratio was 1.2:1.0.

(2) Age

226 imported cases, including 6 cases of aged 1-4 (2.7%), 21 cases of aged 5-14 (9.3%), 20 cases of aged 15-24 (8.8%), 79 cases of aged 25-39 (35.0%), 88 cases of aged 40-64 (38.9%), and 12 cases of aged 65 or above (5.3%).

488 indigenous cases, including 4 cases of aged 1-4 (0.8%), 36 cases of aged 5-14 (7.4%), 45 cases of aged 15-24 (9.2%), 103 cases of aged 25-39 (21.1%), 231 cases of aged 40-64 (47.3%), and 69 cases of aged 65 or above (14.1%).

(3) Month

226 imported cases occurred in all months, most of cases occurred in April and between June and December, more than 10 cases occurred in each of these months, especially 40 cases (17.7%) in August, and then 39 cases (17.3%) in July, and 28 cases (12.4%) in October.

488 indigenous cases occurred in months other than February, April and May, most of cases occurred from July to November, especially 131 cases (26.8%) in October and 131 cases in November, and then 91 cases (18.7%) in August, 48 cases (9.8%) in September, 40 cases in July, 21 cases in January, 18 cases in December, 5 cases in June and 3 cases in March.

(4) Region

226 imported cases, including 49 cases in Taipei County, and then 46 cases in Taipei City and 29 cases in Taoyuan County.

488 indigenous cases, including 326 cases in Kaohsiung City, and then 98 cases in Kaohsiung County and 23 cases in Tainan City.

Overall, Kaohsiung City (22.39) had the highest incidence rate of confirmed cases per 100,000 population, followed by Kaohsiung County (8.20) and Tainan City (3.78).

(5) Imported cases and country of infection

226 imported cases, including 73 cases (32.3%) from Vietnam that accounted for the largest proportion, and then 48 case (21.2%) from Indonesia, 30 cases (13.3%) from Thailand, 25 cases (11.1%) from Philippines, 14 cases (6.2%) from Myanmar, 10 cases (4.4%) from Cambodia, 8 cases (3.5%) from Malaysia, 7 cases (3.1%) from Singapore, 4 cases (1.8%) from Tonga, 3 cases (1.3%) from India, 2 cases (0.9%) from unknown areas, 1 case (0.4%) from Bangladesh and 1 case (0.4%) from Honduras.

(6) Virus type

226 imported cases, including 63 cases of dengue virus Type I, 24 cases of Type II, 23 cases of Type III, 10 cases of Type IV, and the rest of 106 cases could not be identified.

488 indigenous cases, including 174 cases of dengue virus Type I, 30 cases of Type II, 0 cases of Type III, 1 case of Type IV, and the rest of 283 cases could not be identified.

(7) Clinical symptoms

Among 714 confirmed cases, 650 cases had clinical symptoms, 63 cases were infected persons without symptoms, 1 case was unknown, among 226 imported cases therein, 14 cases were infected persons without symptoms; and 488 indigenous cases, including 49 infected persons without symptoms.

Figure 27 Virus type infection source of Dengue Fever confirmed case,2008

Virus type/ infection source	DEN-1	DEN-2	DEN-3	DEN-4	Undetermined	Total
Vietnam	30	3	5	-	35	73
Indonesia	8	11	3	10	16	48
Thailand	11	2	2	-	15	30
Philippines	-	3	9	-	13	25
Myanmar	3	-	1	-	10	14
Cambodia	1	1	1	-	7	10
Malaysia	3	3	1	-	1	8
Singapore	3	1	-	-	3	7
Tonga	1	-	-	-	3	4
India	1	-	-	-	2	3
Bangladesh	-	-	1	-	-	1
Honduras	1	-	-	-	-	1
Taiwan	174	30	-	1	283	488
Unknown	1	-	-	-	1	2
Total	237	54	23	11	388	714

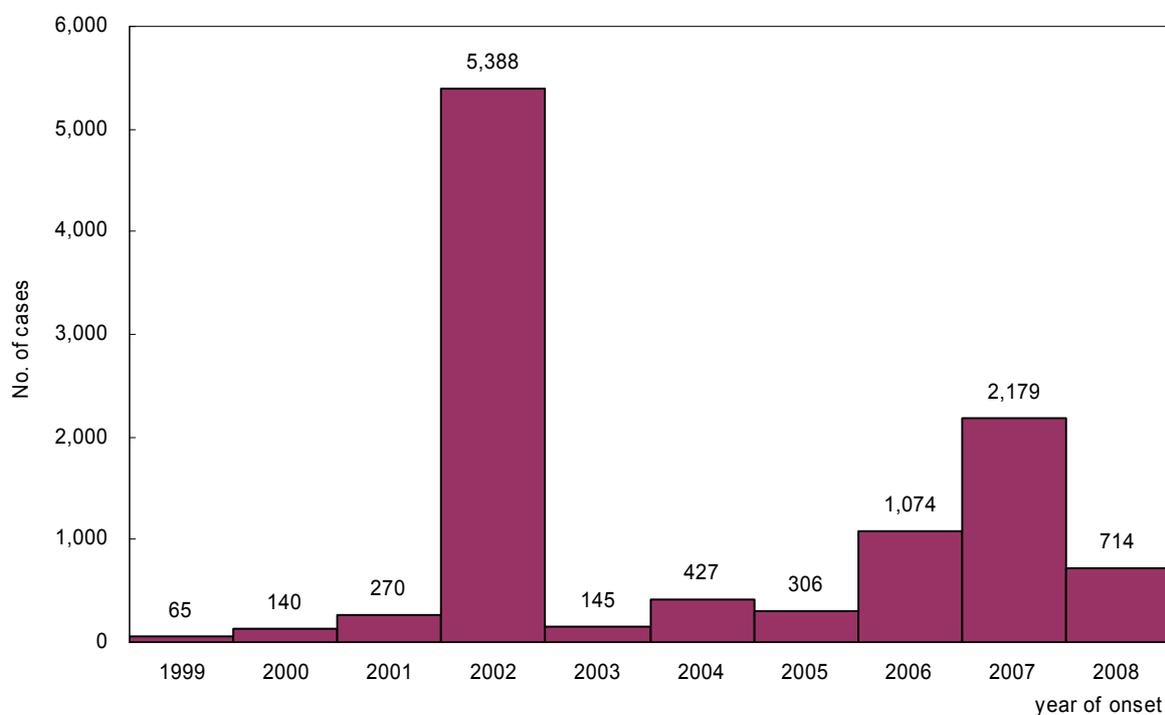


Figure 55 Number of Dengue Fever confirmed cases, 1999-2008

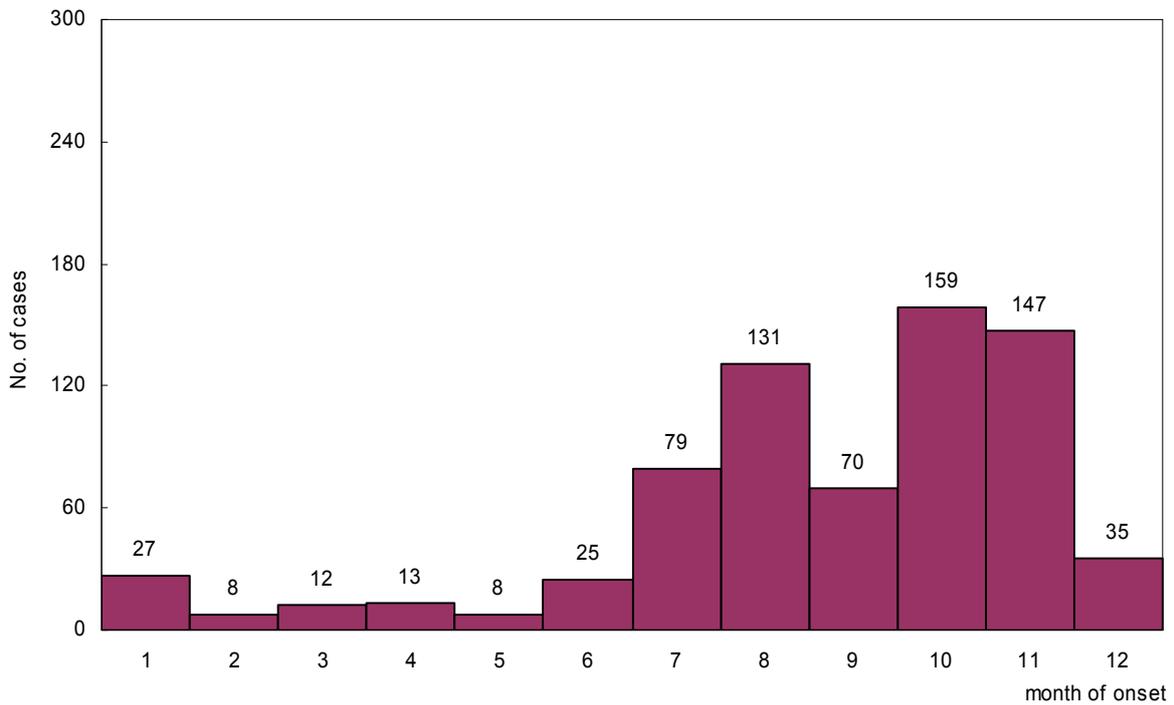


Figure 56 Number of Dengue Fever confirmed cases, 2008

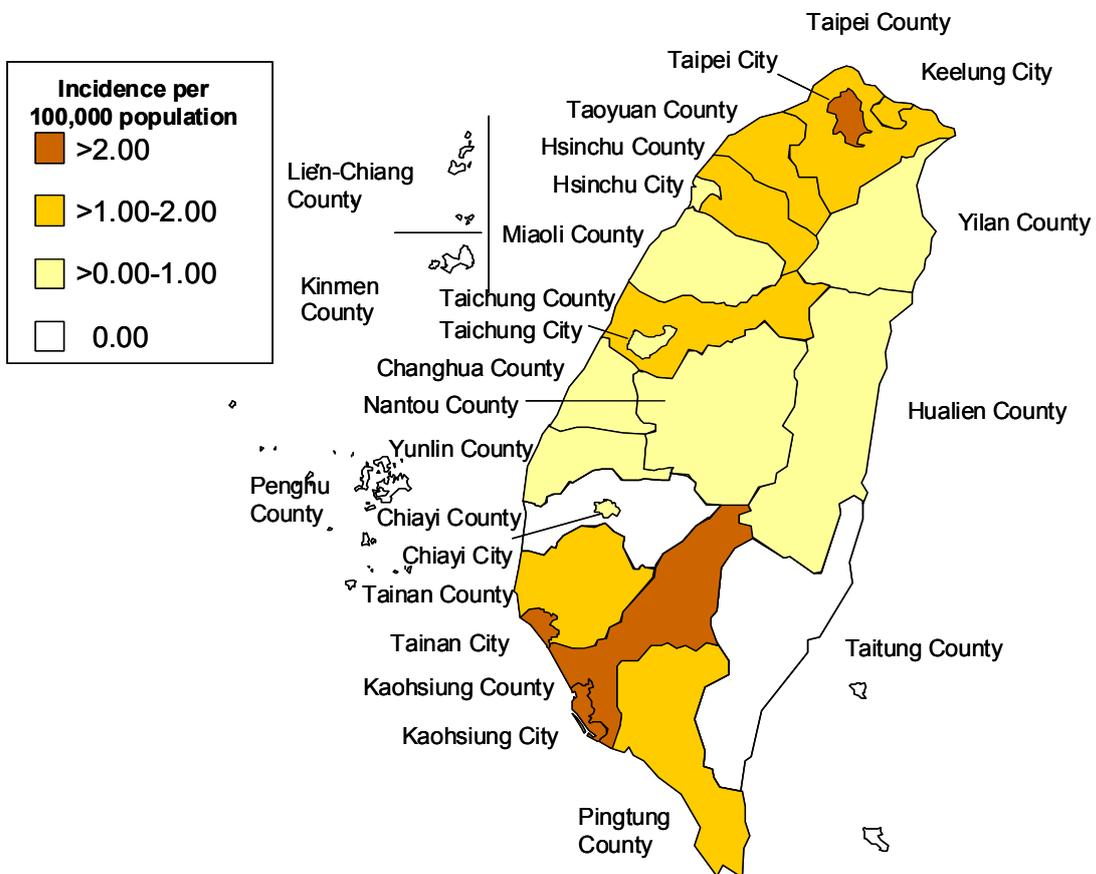


Figure 57 Geographical distribution by incidence of Dengue Fever confirmed cases, 2008

Enterovirus Infection with Severe Complications

In 2008, 373 confirmed cases (1.62 incidence rate per 100,000 population) were reported, which was increased as compared with 12 confirmed cases (0.05 incidence rate per 100,000 population) in 2007. The data of confirmed cases in 2008 are analyzed as follows:

(1) Gender

229 male cases (61.4%), 144 female cases (38.6%), the male-to-female ratio was 1.6:1.0.

(2) Age

Cases were mostly below aged 14, cases of aged 1-4 accounted for the largest proportion, including 106 cases of aged 1 (28.4%), 100 cases of aged 2 (26.8%), 65 cases of under aged 1 (17.4%), 39 cases of aged 3 (10.5%), 33 cases of aged 5-9 (8.8%), 26 cases of aged 4 (7.0%) and 4 cases of aged 10-14 (1.1%).

(3) Month

Cases occurred in all months, more than 30 cases occurred in each month from April to July, especially 137 cases in June (36.7%), 100 cases in May (26.8%), 40 cases in April (10.7%), 31 cases in July, 14 cases in March, 13 cases in January, 13 cases in August, 7 cases in December, 6 cases in February, 6 cases in September, 4 cases in October and 2 case in November.

(4) Region

Counties and cities other than Kinmen County and Lienchiang County had confirmed cases. Tainan County ranked the first with 51 cases, and then 50 cases in Changhua County, 39 cases in Kaohsiung County, 27 cases in Tainan City, 24 cases in Pingtung County, 23 cases in Taichung County, 22 cases in Kaohsiung City, 21 cases in Taichung City, and less than 20 cases in any of other counties and cities.

Penghu County (5.39) had the highest incidence rate of confirmed cases per 100,000 population, followed by Tainan County (4.62) and Changhua County (3.81).

(5) Imported cases and country of infection

No imported case.

(6) Pathogenic identification

After examination via serum neutralization tests, enzyme-linked immunosorbent assays (ELISA) of IgM, and virus culture, EV71 were mainly isolated viruses with 346 cases registered. Among them, 336 were EV71 only, and the other ten had isolated with EV71 and other type enterovirus simultaneously, including unclassified CA (1), CA2 (1), CB2 (1), CB4 (2), OPV3 (1), and

untyped (4).

Followed EV71 were Coxsackie virus A with 16 cases including CA2 (14) and CA4 (2); Coxsackie virus B with four cases including CB4 (3) and CB5 (1); Echovirus 6 with one case; and three cases untyped.

Table 28 Number of Enterovirus Infection with Severe Complications confirmed cases by age, 2005-2008

	2005		2006		2007		2008	
	No. of cases (	% )	No. of cases (	% )	No. of cases (	% )	No. of cases (	% )
>=0, <7m	40 (	28.2)	1 (	9.1)	1 (	8.3)	26 (	7.0)
>=7m, <1yr	12 (	8.5)	4 (	36.3 )	- (	- )	39 (	10.5)
>=1, <4 yrs	75 (	52.8)	3 (	27.3)	8 (	66.7)	245 (	65.7)
>=4, <7 yrs	12 (	8.5)	1 (	9.1)	2 (	16.7)	52 (	13.9)
>=7, <16 yrs	3 (	2.1)	2 (	18.2)	1 (	8.3)	11 (	2.9)
>=16 yrs	- (-)	- (-)	- (-)	- (-)
Unknown	- (-)	- (-)	- (-)	- (-)
Total	142 (	100.0)	11 (	100.0)	12 (	100.0)	373 (	100.0)

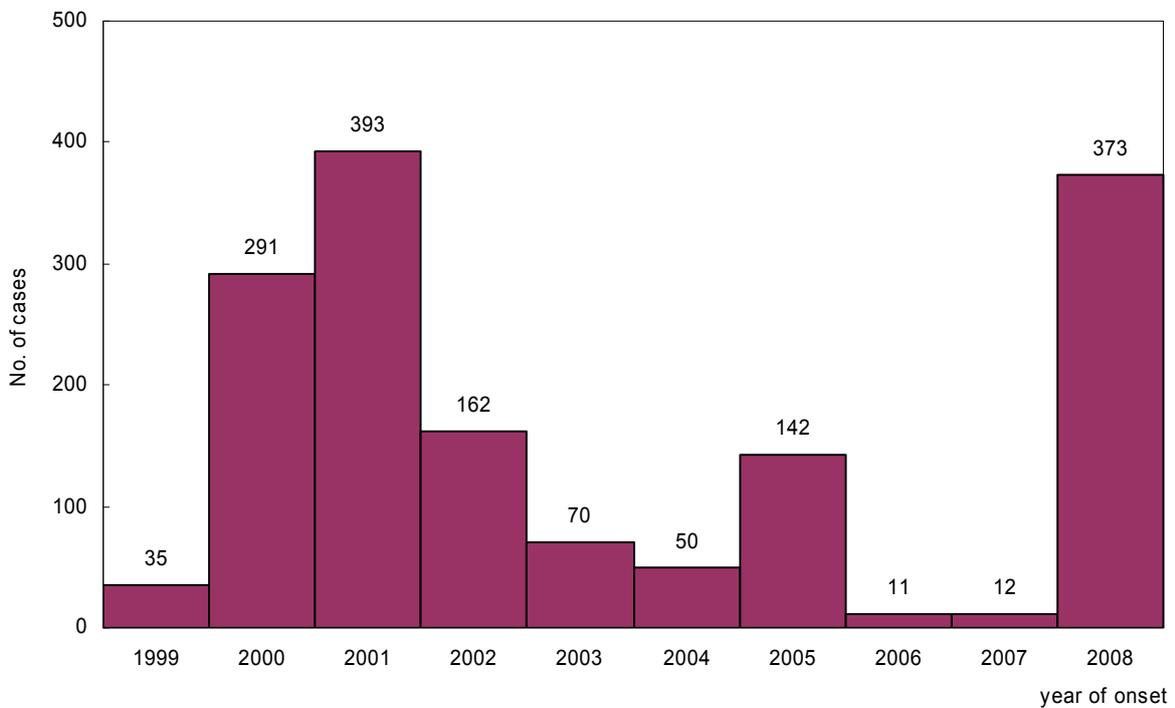


Figure 58 Number of Enterovirus Infection with Severe Complications confirmed cases, 1999-2008

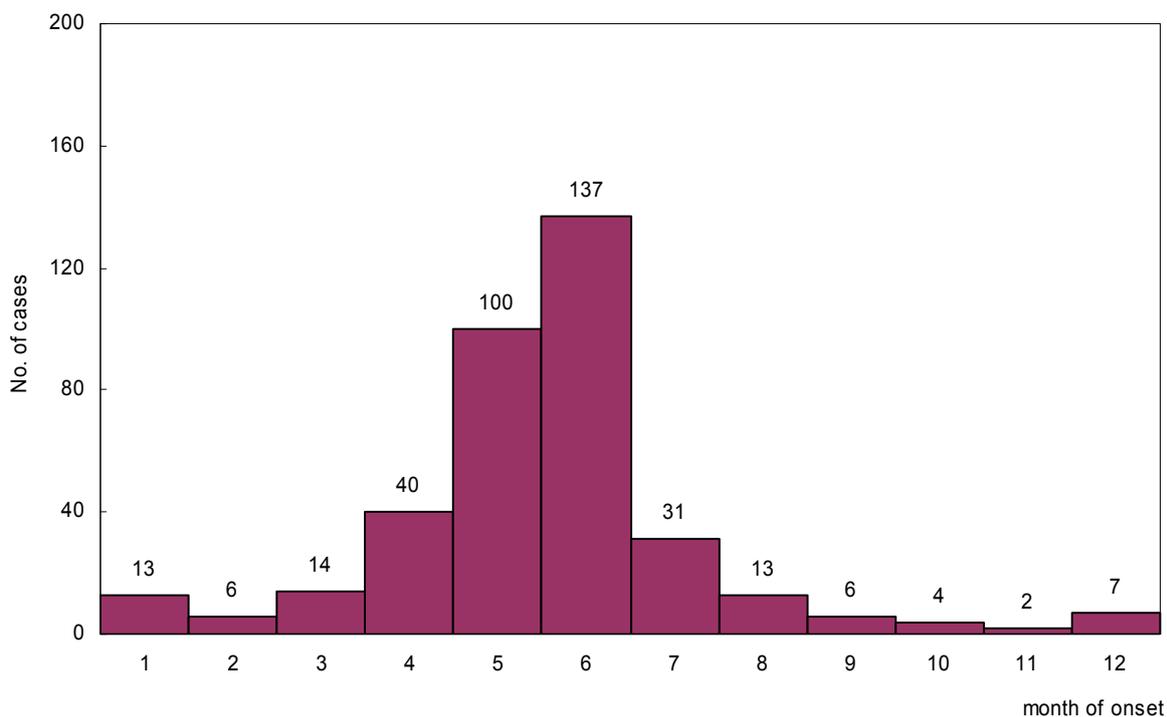


Figure 59 Number of Enterovirus Infection with Severe Complications confirmed cases,

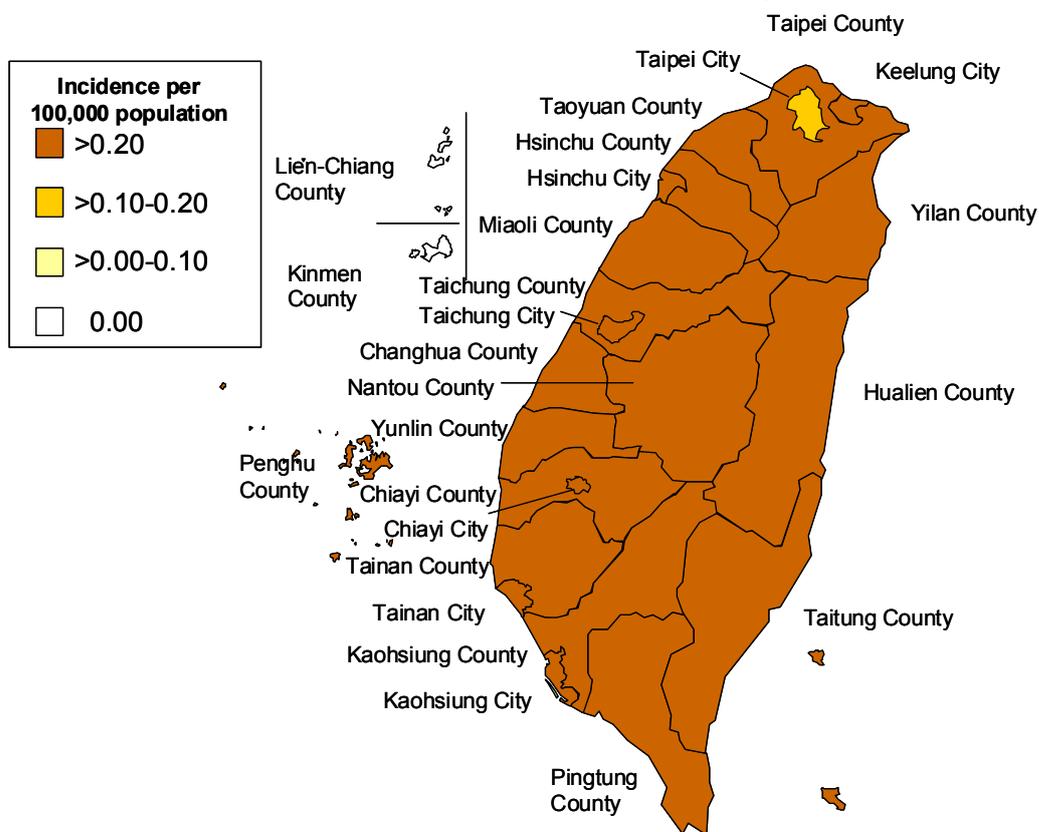


Figure 60 Geographical distribution by incidence of Enterovirus Infection with Severe Complications confirmed cases, 2008

Malaria

In 2008, 18 confirmed cases (0.08 incidence rate per 100,000 population) were reported, and all of them were imported cases, that was increased as compared with 13 confirmed cases (0.06 incidence rate per 100,000 population) in 2007. The data of confirmed cases in 2008 are analyzed as follows:

(1) Gender

16 male cases (88.9%), 2 female cases (11.1%), the male-to-female ratio was 8.0:1.0.

(2) Age

8 cases of aged 25-39, 8 cases of aged 40-64, and then 1 case of aged 15-24, 1 case of aged 65 or above.

(3) Month

Months other than March, August and October had cases, 4 cases in September, and then 3 cases in February, 3 cases in July, 2 cases in January, 2 cases in December, 1 case in April, May, June and November respectively.

(4) Region

2 cases in Taipei County, 2 cases in Miaoli County, 2 cases in Tainan County, 2 cases in Hualien County, and then 1 case in Keelung City, Taipei City, Hsinchu County, Taichung County, Changhua County, Yunlin County, Kaohsiung City, Kaohsiung County, Pingtung County and Kinmen County respectively.

Kinmen County (1.20) had the highest incidence rate of confirmed cases per 100,000 population, followed by Hualien County (0.58) and Miaoli County (0.36).

(5) Imported cases and country of infection

Among the 18 imported cases, 12 cases were from the Asia-Pacific region (66.7%), including 4 cases from Papua New Guinea, 2 cases from Indonesia, 2 cases from India, 2 cases from Thailand, 1 case from Malaysia and 1 case from Cambodia; 6 cases were from Africa (33.3%), including 3 cases from Mozambique, 2 cases from Malawi, and 1 case from Equatorial Guinea.

(6) Types of protozoan infected

10 cases of *Plasmodium vivax*, 4 cases of *Plasmodium falciparum*, 3 cases of mixed infection and 1 case of *Plasmodium ovale*.

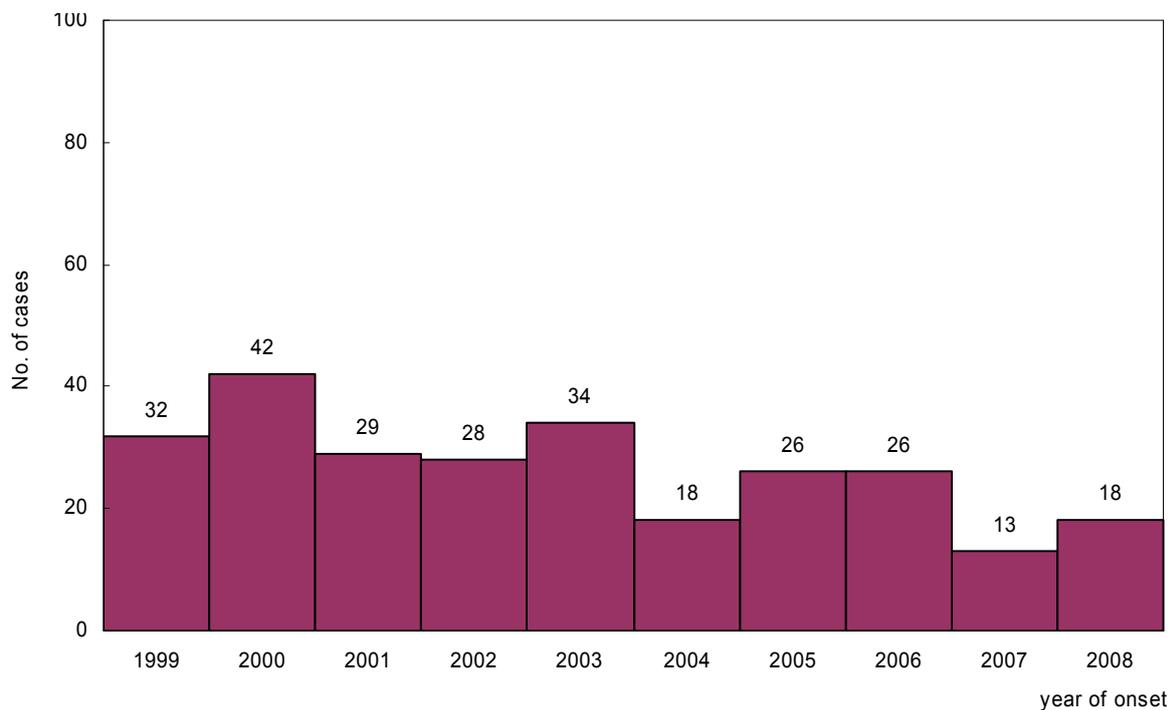


Figure 61 Number of imported Malaria confirmed cases, 1999-2008

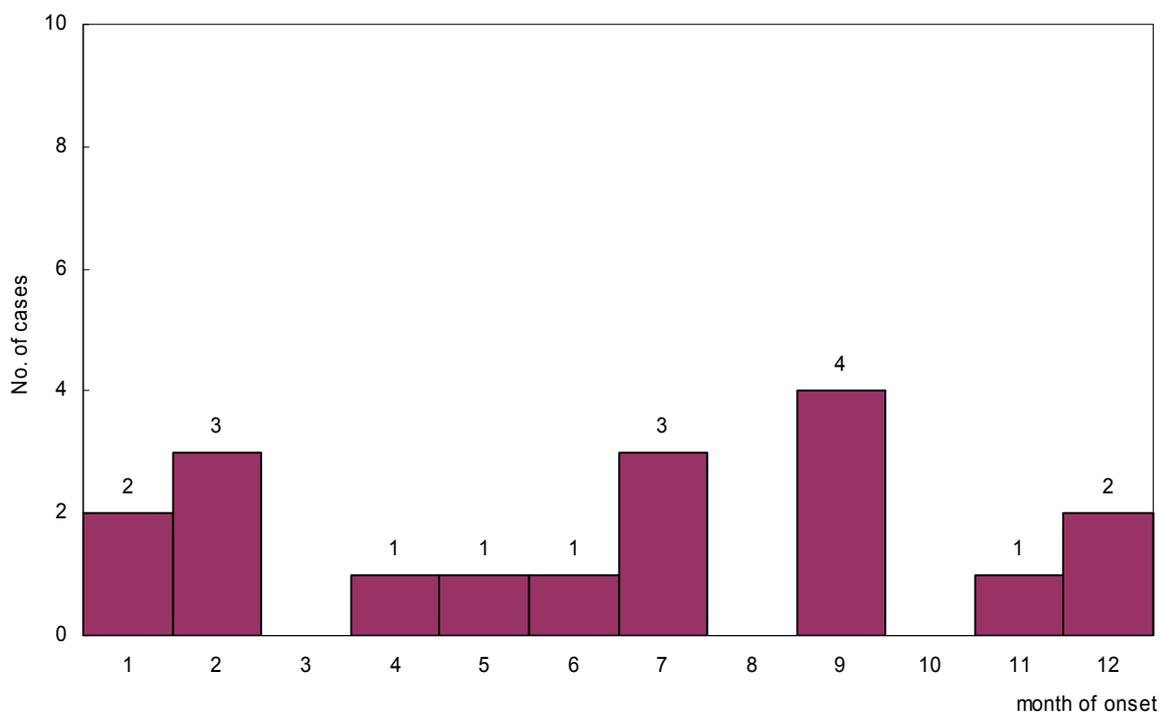


Figure 62 Number of imported Malaria confirmed cases, 2008

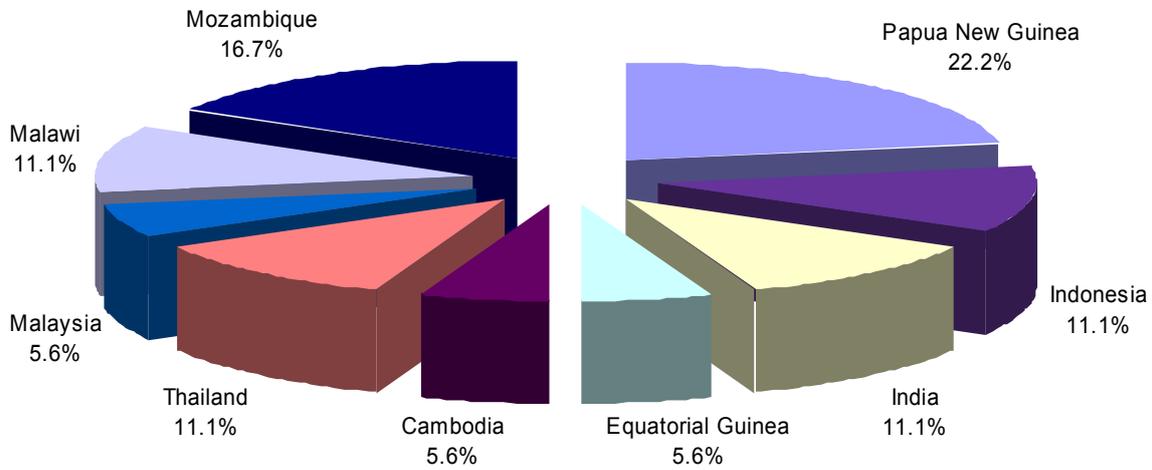


Figure 63 Infections source of imported Malaria confirmed cases, 2008

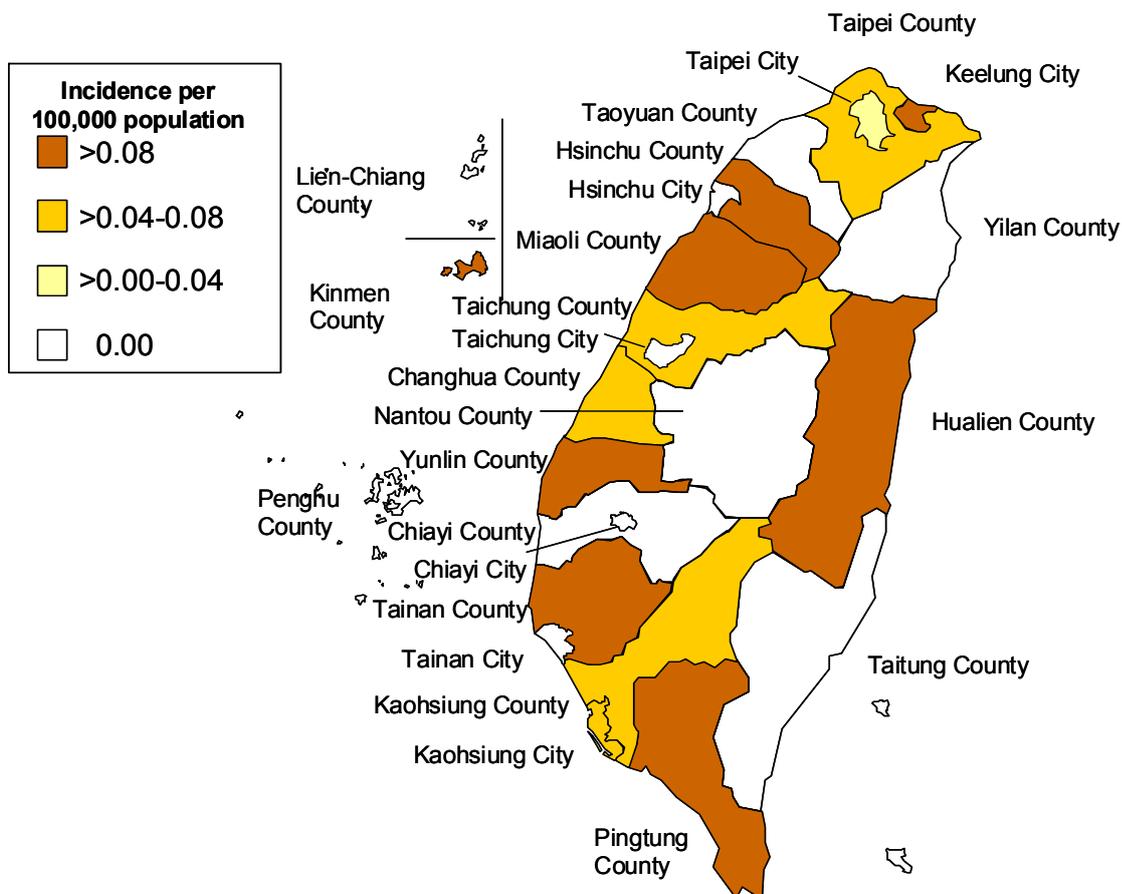


Figure 64 Geographical distribution by incidence of imported Malaria confirmed cases, 2008

Shigellosis

In 2008, 90 confirmed cases (0.39 incidence rate per 100,000 population) were reported, including 44 imported cases, that was decreased as compared with 45 imported cases among 246 confirmed cases (1.07 incidence rate per 100,000 population) in 2007. The data of confirmed cases in 2008 are analyzed as follows:

(1) Gender

44 imported cases, including 20 male cases (45.5%) and 24 female cases (54.5%), the male-to-female ratio was 0.8:1.0.

46 indigenous cases, including 25 male cases (54.3%) and 21 female cases (45.7%), the male-to-female ratio was 1.2:1.0.

(2) Age

Among 44 imported cases, including 2 cases of aged 1-4 (4.5%), 4 cases of aged 5-14 (9.1%), 8 cases of aged 15-24 (18.2%), 23 cases of aged 25-39 (52.3%), 5 cases of aged 40-64 (11.4%), and 2 cases of aged 65 or above (4.5%).

Among 46 indigenous cases, including 6 cases of aged 1-4 (13.0%), 12 cases of aged 5-14 (26.1%), 5 cases of aged 15-24 (10.9%), 12 cases of aged 25-39 (26.1%), 6 cases of aged 40-64 (13.0%), and 5 cases of aged 65 or above (10.9%).

(3) Month

44 imported cases occurred in months other than July, including 7 cases in March, 7 cases in May, 7 cases in June, and then 6 cases in August, 5 cases in October, 4 cases in February, 2 cases in January, 2 cases in April, 2 cases in November, 1 case in September and 1 case in December.

46 indigenous cases occurred in months other than June and October, including 17 cases in April, and then 9 cases in September, 5 cases in March, 4 cases in February, 3 cases in May, 2 cases in August, 2 cases in November, 2 cases in December, 1 case in January and 1 case in July.

(4) Region

14 of 44 imported cases occurred in Taipei County, and then 11 cases in Taipei City, 7 cases in Taoyuan County, 3 cases in Taichung County, 1 case in Hsinchu City, Hsinchu County, Taichung City, Yunlin County, Tainan City, Tainan County, Kaohsiung City, Kaohsiung County and Taitung County respectively, no confirmed imported cases in other counties and cities.

14 of 46 indigenous cases occurred in Taoyuan County, and then 10 cases in Miaoli County, 9 cases in Taipei County, 3 cases in Taichung City, 3 cases in Nantou County, 2 cases in Taipei City, 2 cases in Taichung County, 1 case in Changhua County, Tainan County and Hualien County respectively, no confirmed indigenous cases in other counties and cities.

Miaoli County (1.78) had the highest incidence rate of confirmed cases per 100,000 population, followed by Taoyuan County (1.08) and Taipei County (0.60).

(5) Imported cases and country of infection

Among 44 imported cases, 1 case (2.3%) was unknown of its infectious country, 39 cases (88.6%) of the rest of 43 cases were from Asia, including 12 cases from Indonesia, 8 cases from Cambodia, 7 cases from China, 4 cases from Vietnam, 3 cases from India, 2 cases from Singapore, 2 cases from Thailand, and 1 case from Malaysia; and 4 cases (9.1%) were from Africa, including 2 cases from Egypt, 1 case from Tunisia and 1 case from Sao Tome and Principe.

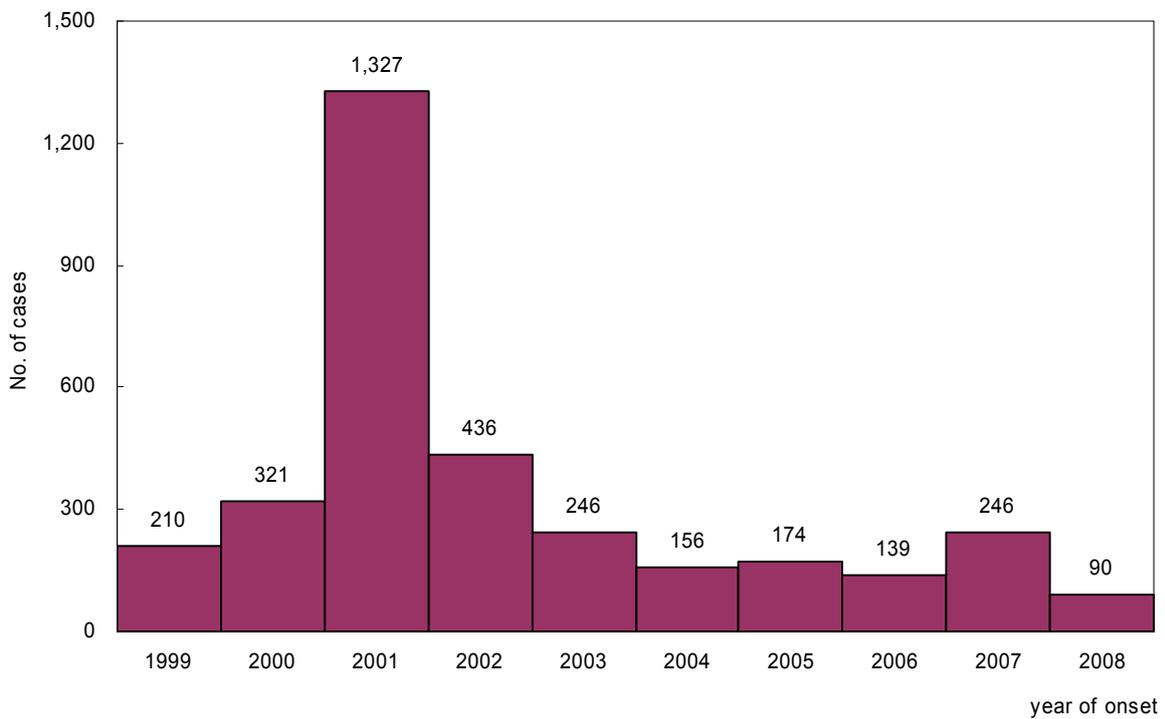


Figure 65 Number of Sigeliosis confirmed cases, 1999-2008

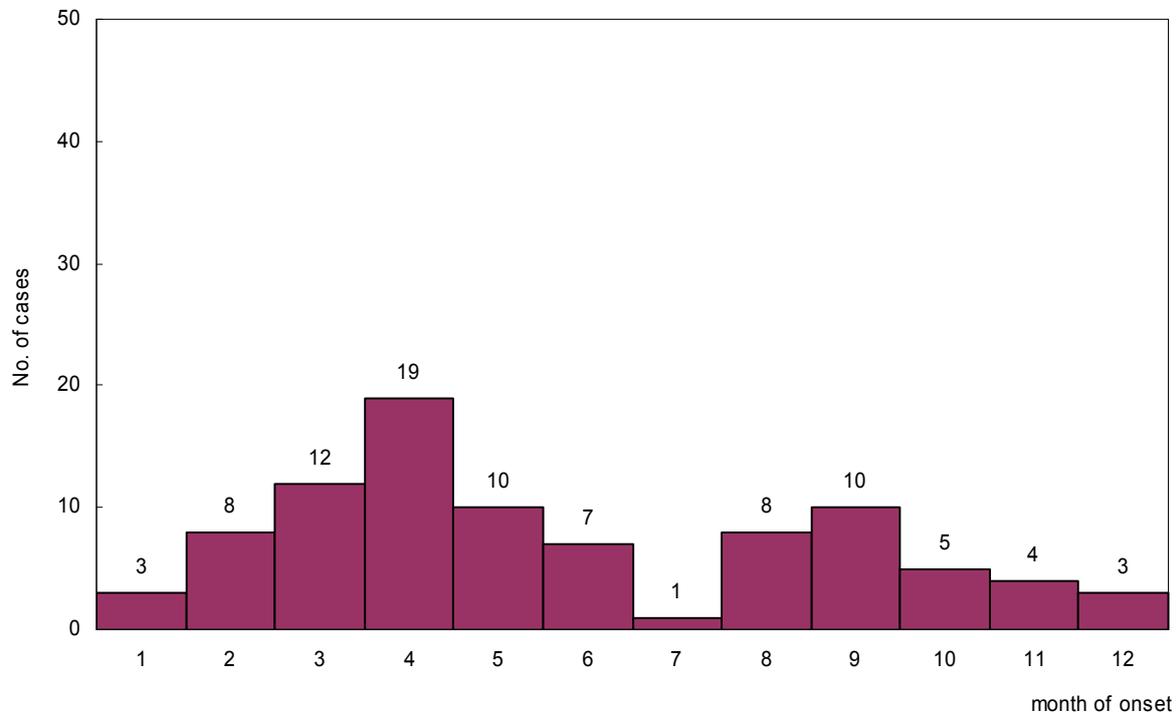


Figure 66 Number of Sigellosis confirmed cases, 2008

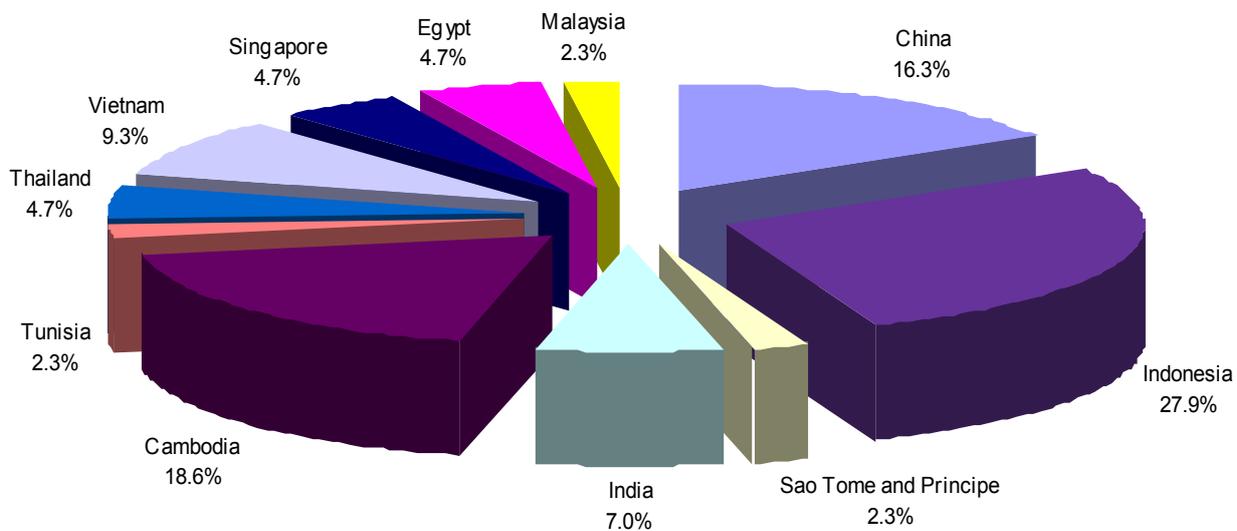


Figure 67 Infections source of Shigellosis confirmed cases, 2008

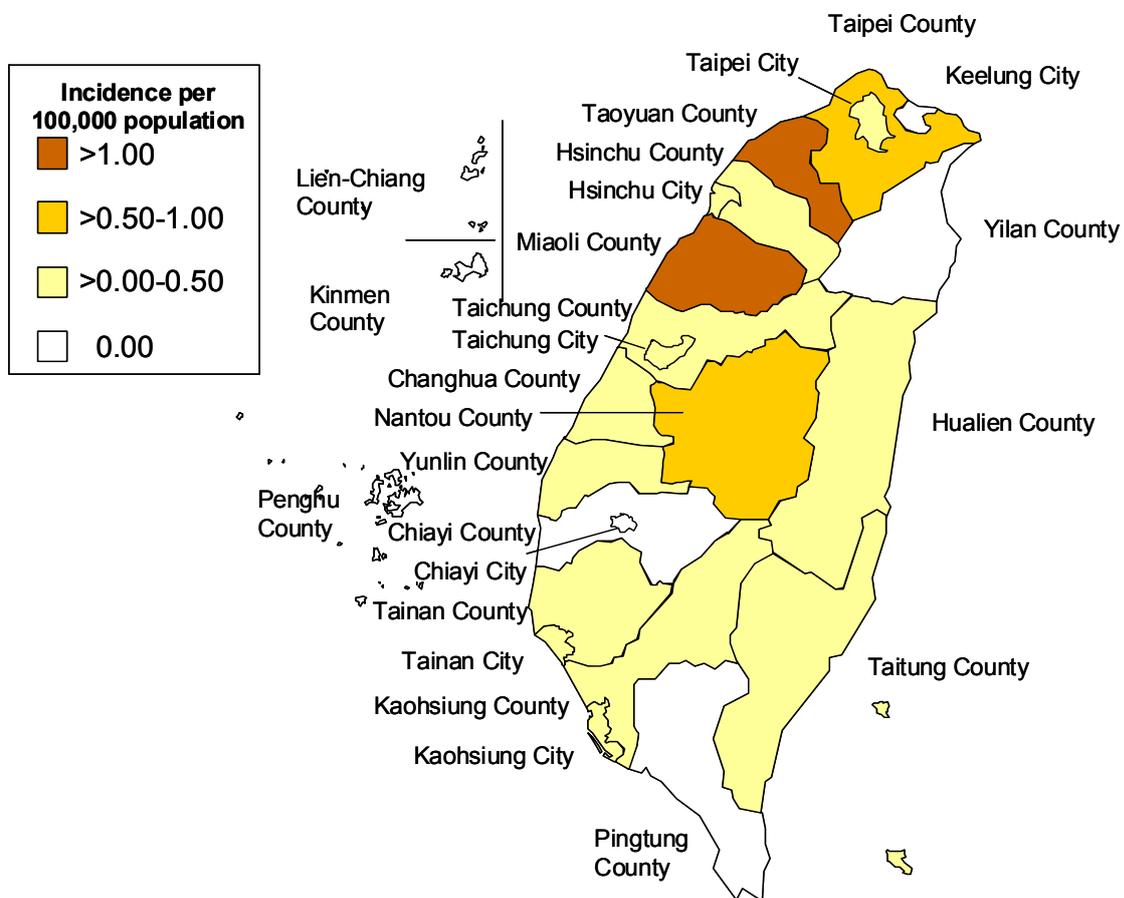


Figure 68 Geographical distribution by incidence of Shigellosis confirmed cases, 2008

Severe Complicated Influenza Case

In 2008, 22 confirmed cases (0.10 incidence rate per 100,000 population) were reported, which was slightly decreased as compared with 26 confirmed cases (0.11 incidence rate per 100,000 population) in 2007. The data of confirmed cases in 2008 are analyzed as follows:

(1) Gender

11 male cases (50.0%), 11 female cases (50.0%), the male-to-female ratio was 1.0:1.0.

(2) Age

6 cases of aged 65 or above (27.3%), and then 5 cases of aged 40-64 (22.7%), 4 cases of aged 5-14 (18.2%), 4 cases of aged 25-39 (18.2%), 2 cases of aged 15-24 (9.1%) and 1 case of aged 1-4 (4.5%).

(3) Month

7 cases in December (31.8%), and then 6 cases in January, 4 cases in March, 3 cases in February and 2 cases in October.

(4) Region

5 cases in Taipei County, and then 4 cases in Pingtung County, 3 cases in Kaohsiung City, 2 cases in Taipei City, 2 cases in Taoyuan County, and 2 cases in Miaoli County, 1 case in Taichung County, Changhua County, Tainan City and Tainan County respectively, no confirmed cases in other counties and cities.

Pingtung County (0.45) had the highest incidence rate of confirmed cases per 100,000 population, followed by Miaoli County (0.36) and Kaohsiung City (0.20).

(5) Imported cases and country of infection

No imported case.

(6) Virus type

9 cases of Influenza A (40.9%), 8 cases of Influenza B (36.4%), and 5 cases were undetermined (22.7%).

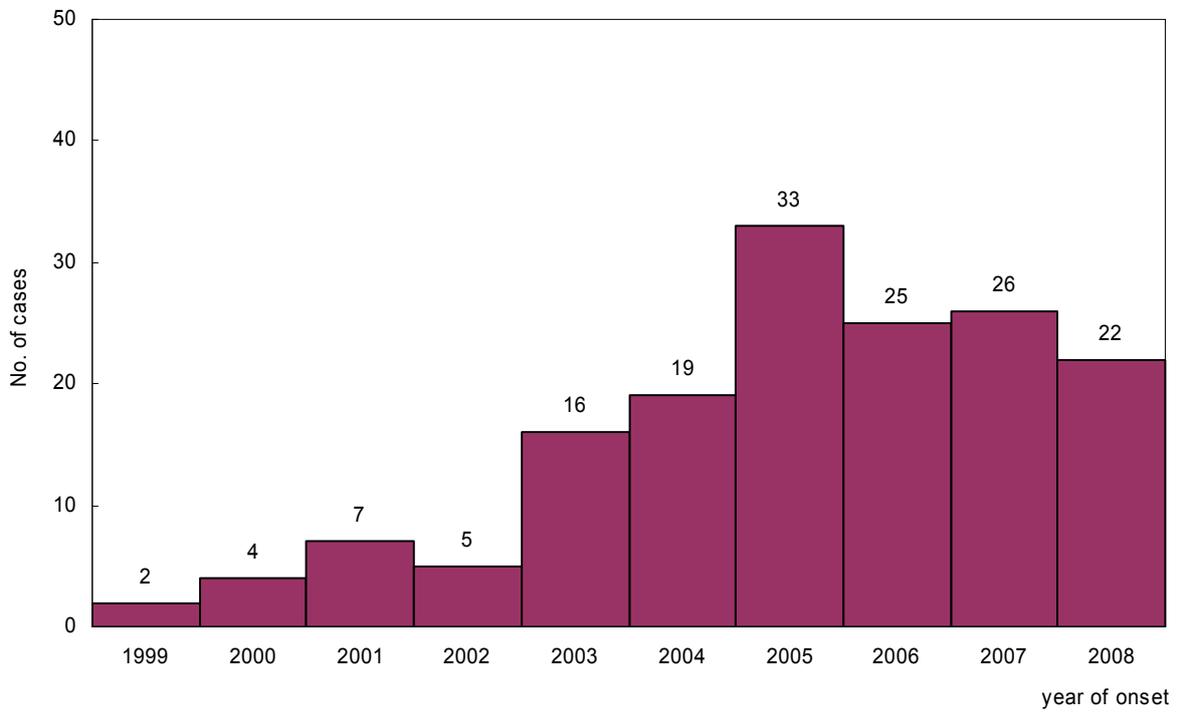


Figure 69 Number of Severe Complicated Influenza Confirmed Cases, 1999-2008

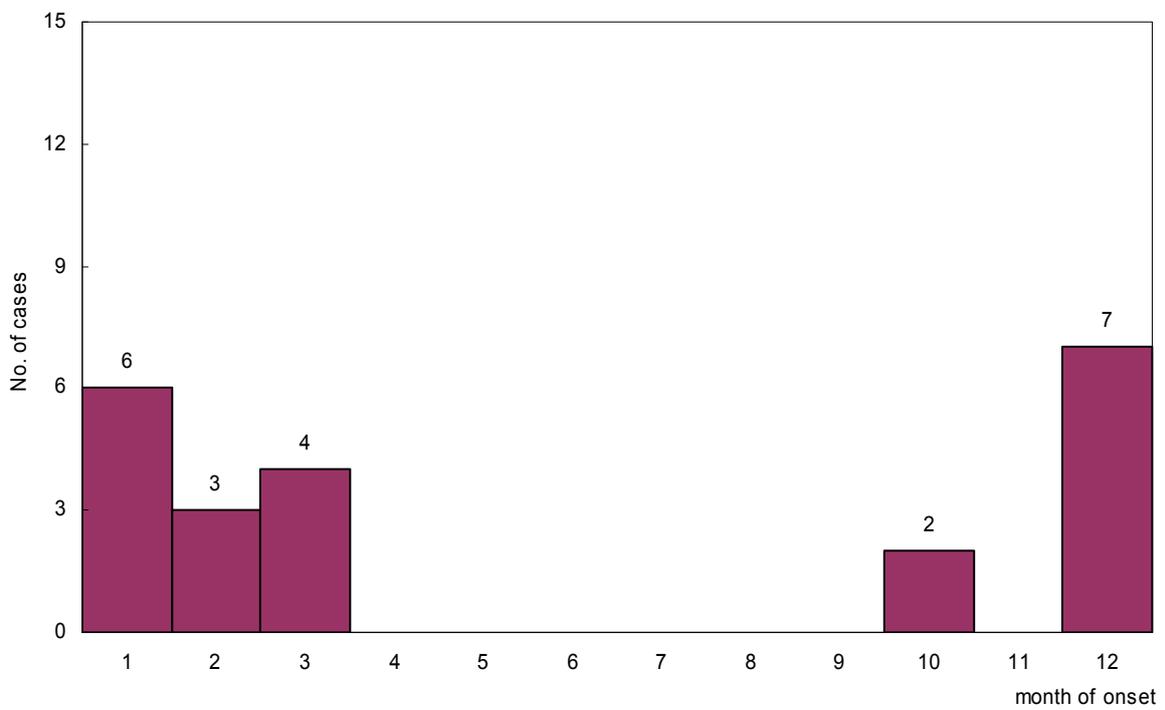


Figure 70 Number of Severe Complicated Influenza Confirmed Cases, 2008

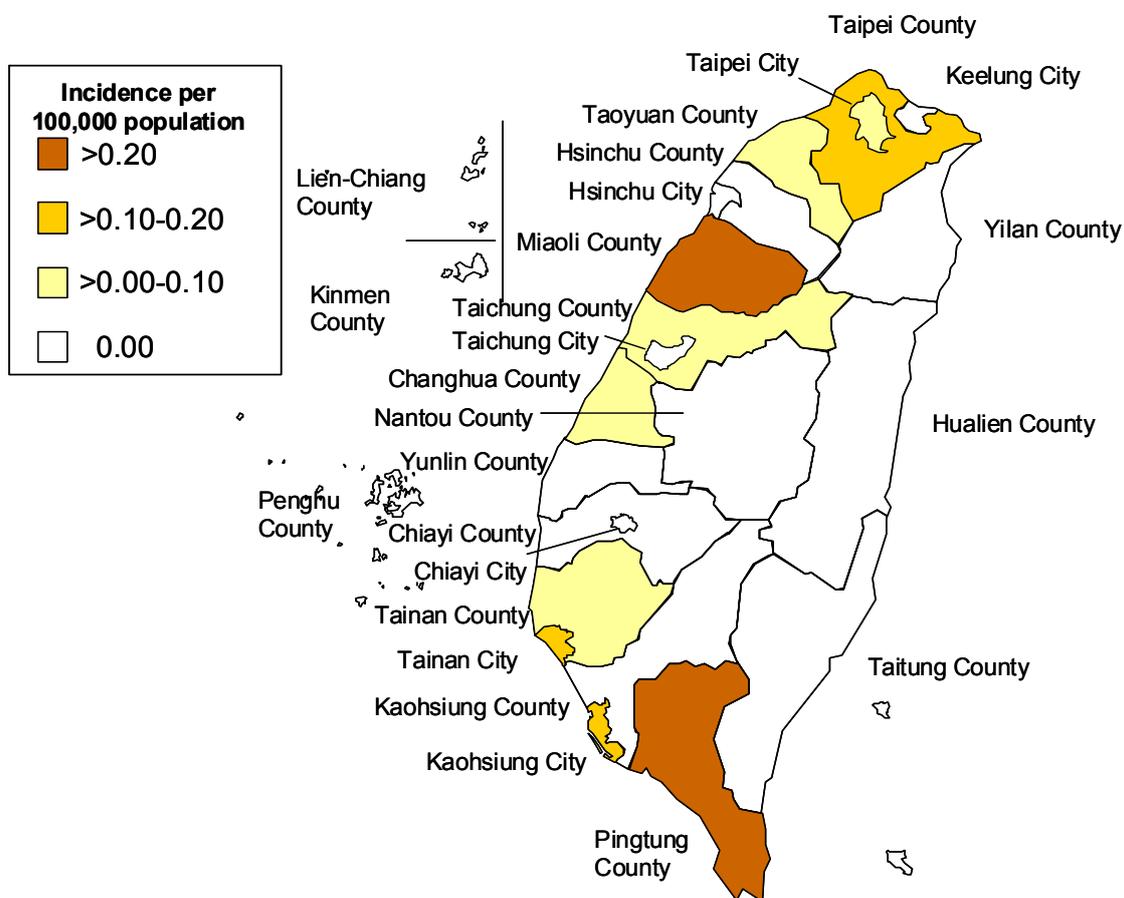


Figure 71 Geographical distributions by incidence of Severe Complicated Influenza Confirmed Case, 2008

Syphilis

In 2008, 6,526 confirmed cases (28.38 incidence rate per 100,000 population) were reported, which was increased as compared with 5,798 confirmed cases (25.30 incidence rate per 100,000 population) in 2007. The data of confirmed cases in 2008 are analyzed as follows:

(1) Gender

4,631 male cases (71.0%), 1,895 female cases (29.0%), the male-to-female ratio was 2.4:1.0.

(2) Age

3,277 cases of aged 25-49 (50.2%), and then 1,514 cases of aged 50-69 (23.2%), 1,106 cases of aged 70 or above (17.0%), 589 cases of aged 4-24 (9.0%); and 40 cases of under aged 1 (0.6%).

(3) Month (based on diagnosis date)

No specific months or seasons, cases occurred in all months.

(4) Region

1,346 cases in Taipei County (20.6%), and then 862 cases in Taipei City (13.2%), 627 cases in Taoyuan County (9.6%), 449 cases in Taichung City (6.9%), 423 cases in Kaohsiung City (6.5%) and 419 cases in Kaohsiung County (6.4%).

Taichung City (42.32) had the highest incidence rate of confirmed cases per 100,000 population, followed by Yilan County (39.29), Taipei County (35.27), Hualien County (33.88), Kaohsiung County (33.69), Taipei City (32.82), Taoyuan County (32.21), Keelung City (32.08), and Taitung County (30.50), while other counties and cities were below 30.00.

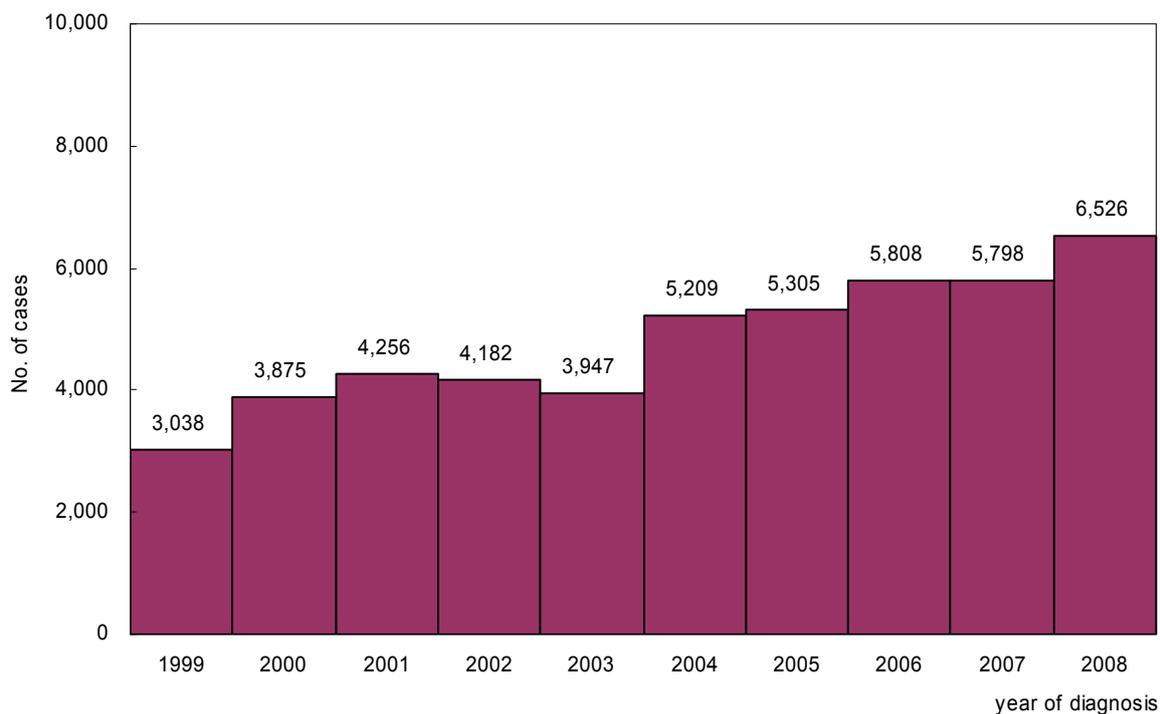


Figure 72 Number of Syphilis confirmed cases, 1999-2008

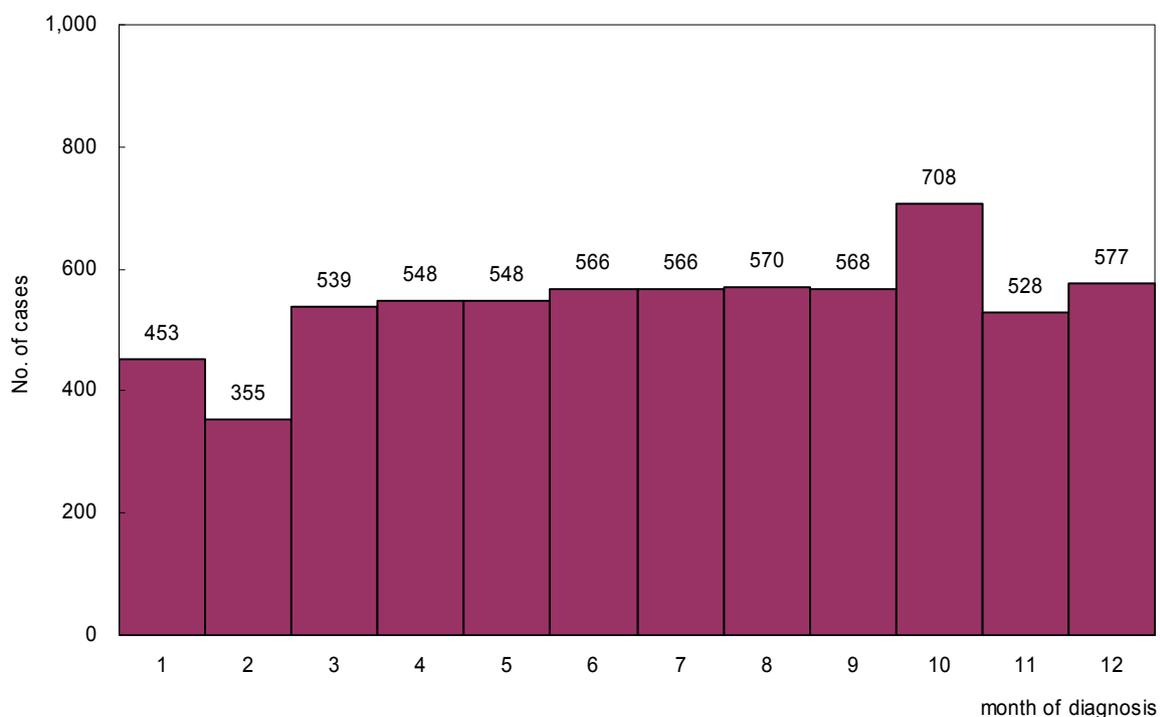


Figure 73 Number of Syphilis confirmed cases, 2008

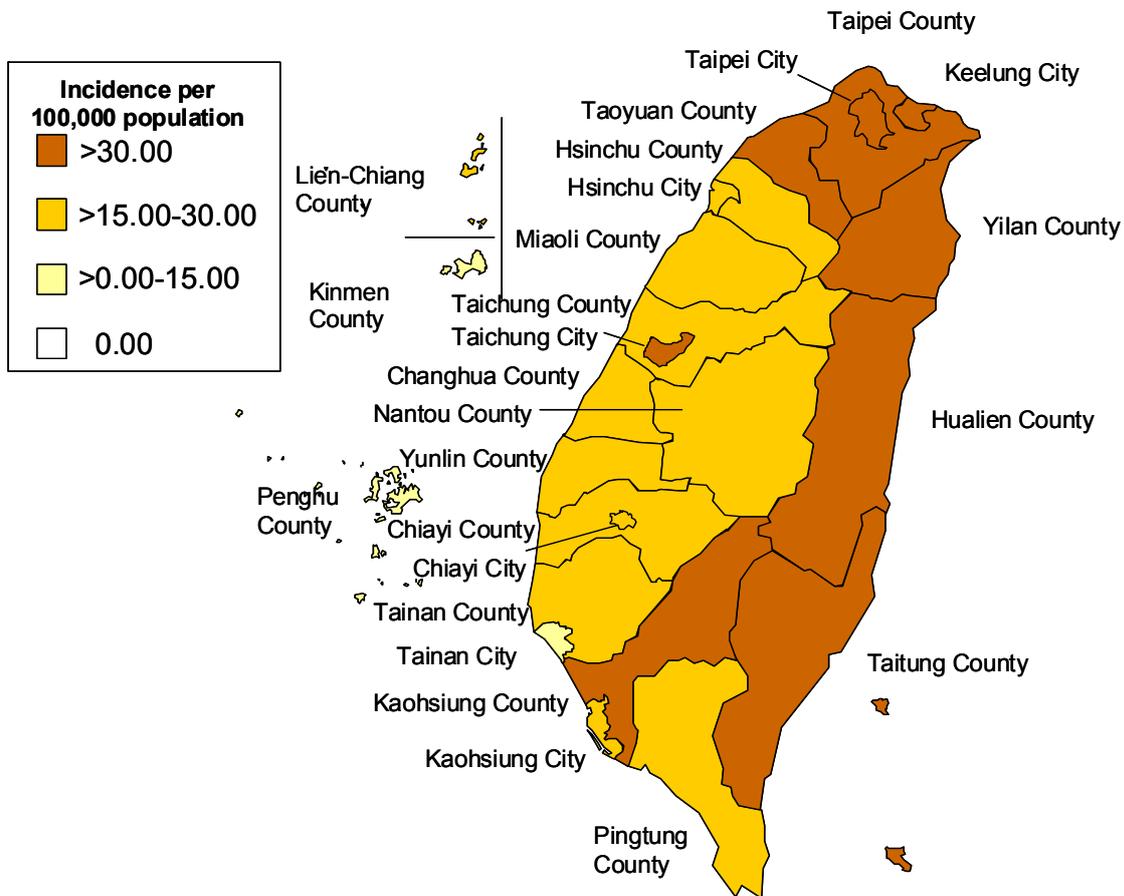


Figure 74 Geographical distribution by incidence of Syphilis confirmed cases, 2008

Gonorrhoea

In 2008, 1,621 confirmed gonorrhoea cases (7.05 incidence rate per 100,000 population) were reported, which was increased as compared with 1,442 confirmed cases (6.30 incidence rate per 100,000 population) in 2007. The data of confirmed cases in 2008 are analyzed as follows:

(1) Gender

1,492 male cases (92.0%), 129 female cases (8.0%), the male-to-female ratio was 11.6:1.0.

(2) Age

1,327 cases of aged 15-39 (81.9%), and then 236 cases of aged 40-59 (14.6%), 46 cases of aged above 60 (2.8%), and less than 10 cases of other aged (0.7%).

(3) Month (based on diagnosis date)

No specific months or seasons, cases occurred in all months.

(4) Region

516 cases in Taipei County (31.8%), and then 333 cases in Taipei City (20.5%), 205 cases in Taoyuan County (12.6%), 58 cases in Taichung County (3.6%), and 49 cases in Keelung City (3.0%), no confirmed cases in Penghu County, Kinmen County and Lienchiang County.

Taipei County (13.52) had the highest incidence rate of confirmed cases per 100,000 population, followed by Taipei City (12.68), Keelung City (12.57), and Taoyuan County (10.53), while other counties and cities were below 10.00.

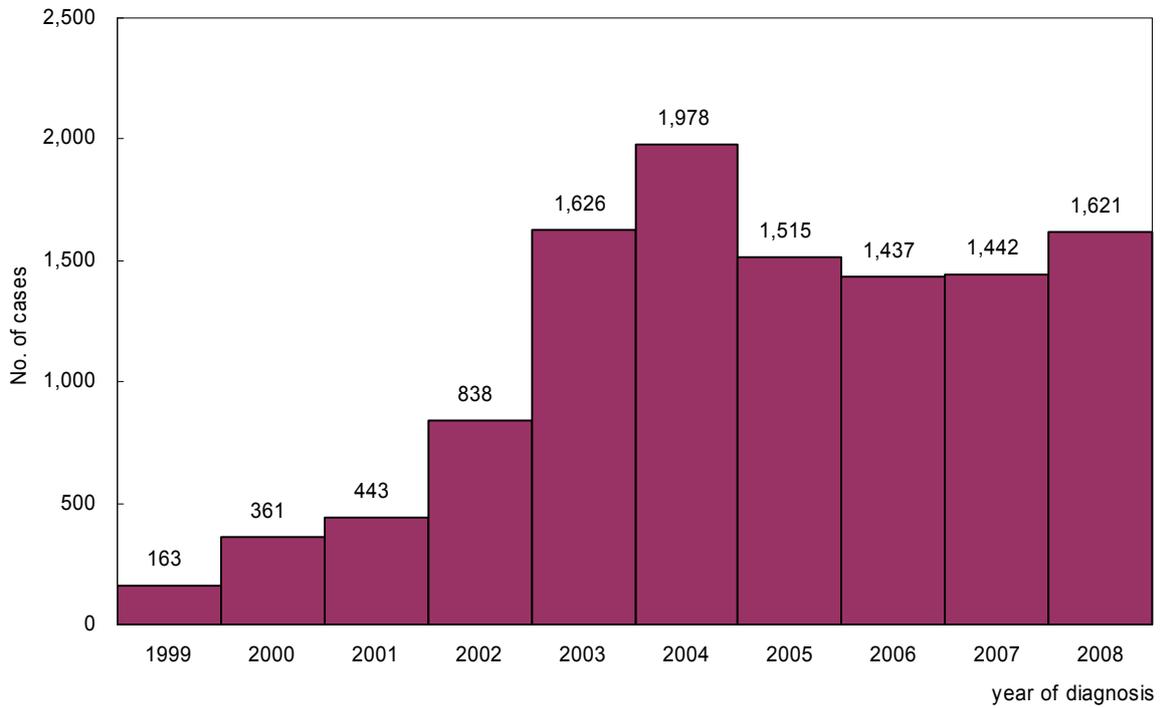


Figure 75 Number of Gonorrhea confirmed cases, 1999-2008

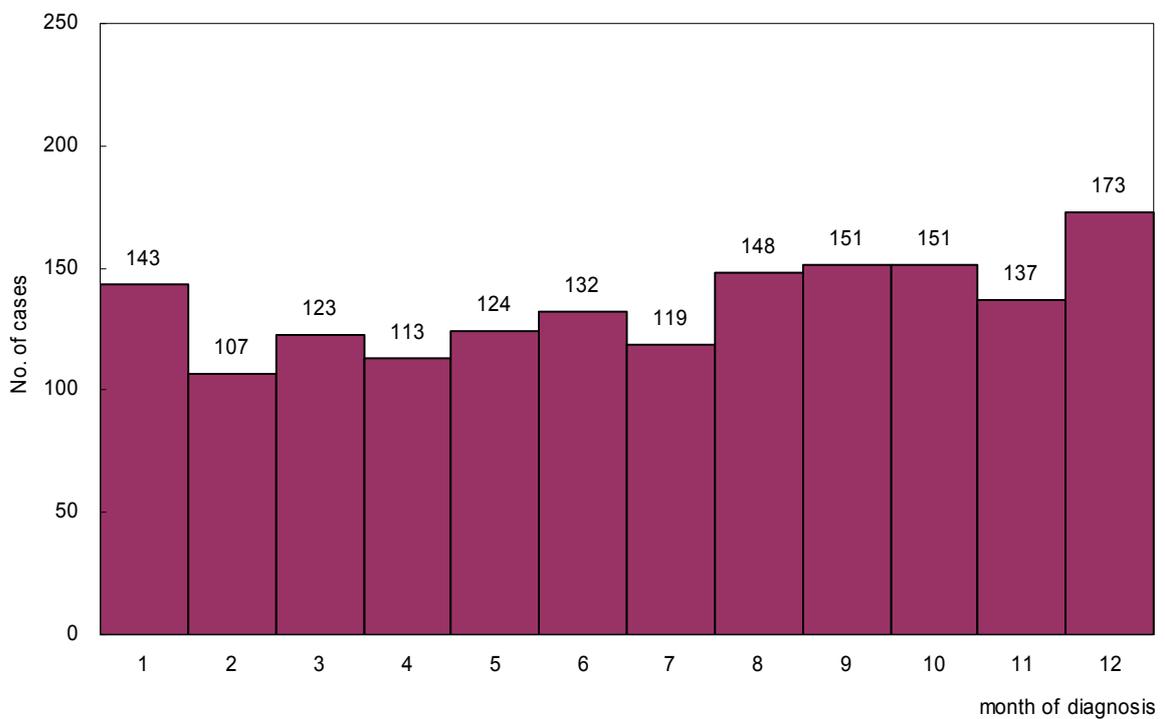


Figure 76 Number of Gonorrhea confirmed cases, 2008

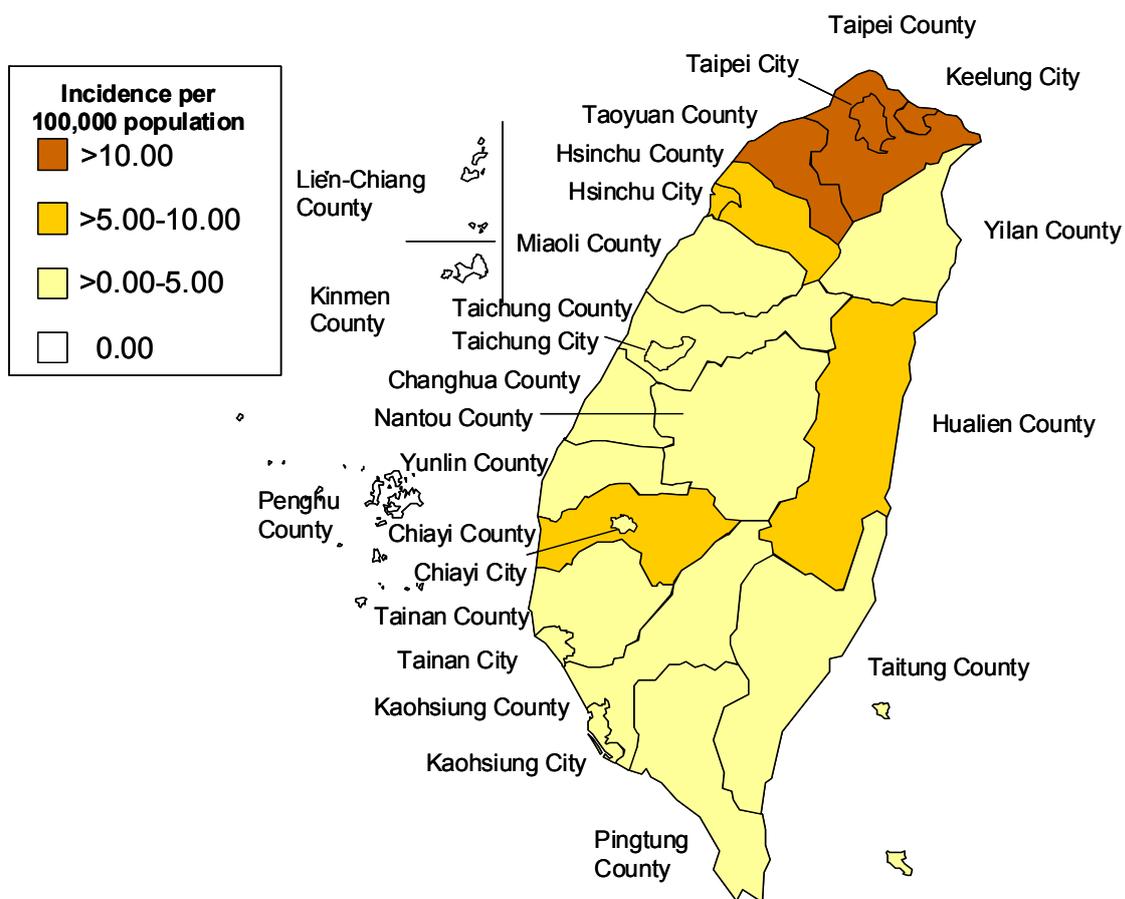


Figure 77 Geographical distribution by incidence of Gonorrhea confirmed cases, 2008

HIV Infection & AIDS

From 1984 to the end of December 2008, there were 17,428 accumulative HIV infection cases (16,748 native cases and 680 foreign cases) and 5,255 (5,183 native cases and 72 foreign cases) accumulative AIDS cases were reported.

In 2008, 1,791 HIV infection cases (1,752 native cases and 39 foreign cases) and 856 AIDS cases (849 native cases and 7 foreign cases) were diagnosed and reported. The data of native cases in 2008 are analyzed as follows (HIV infected cases contain AIDS cases):

(1) Gender

HIV: 1,653 male cases (94.3%), 99 female cases (5.7%), the male-to-female ratio was 16.6:1.0.

AIDS: 795 male cases (93.6%), 54 female cases (6.4%), the male-to-female ratio was 14.7: 1.0.

(2) Age

HIV: 696 cases of aged 25-34 (39.7%), and then 432 cases of aged 35-44 (24.7%), and 378 cases of aged 15-24 (21.6%).

AIDS: 308 cases of aged 25-34 (36.3%), and then 261 cases of aged 35-44 (30.7%), and 123 cases of aged 45-54 (14.5%).

(3) Month (based on diagnosis date)

Cases occurred in all months, no specific months or seasons.

(4) Risk factors

HIV (total): 854 homosexuals (48.7%), 377 drug users (21.5%), 333 heterosexuals (19.0%), 145 bisexuals (8.3%), 2 cases of vertical transmission (0.1%), 1 hemophiliac (0.1%), and 40 cases of unknown risk factors (2.3%).

HIV (male): 854 homosexuals (51.7%), and then 329 drug users (19.9%), 289 heterosexuals (17.5%), 145 bisexuals (8.8%), 1 case of vertical transmission (0.1%), and 35 cases of unknown risk factors (2.1%).

HIV (female): 48 drug users (48.5%), and then 44 heterosexuals (44.4%), 1 case of vertical transmission (1.0%), 1 hemophiliac (1.0%) and 5 cases of unknown risk factors (5.1%).

AIDS (total): 404 homosexuals (47.6%), and then 221 heterosexuals (26.0%), 150 drug users (17.7%), 63 bisexuals (7.4%), 1 hemophiliac (0.1%), and 10 cases of unknown risk factors (1.2%).

AIDS (male): 404 homosexuals (50.8%), and then 190 heterosexuals (23.9%), 127 drug users (16.0%), 63 bisexuals (7.9%), 1 hemophiliac (0.1%), and 10 cases of unknown risk factors (1.3%).

AIDS (female) : 31 heterosexuals (57.4%), and then 23 drug users (42.6%).

See Tables 29 and 30 for risk factors.

(5) Occupations

HIV: 773 cases of others (44.1%), and then 432 cases of unemployment (24.7%), 154 cases of other service industry (8.8%), 128 students (7.3%), 78 servicemen (4.5%), and 27 cases of unknown occupation (1.5%), as shown in Table 31.

AIDS: 273 cases of others (32.2%), and then 192 cases of unemployment (22.6%), 111 cases of other service industry (13.1%), 56 students (6.6%), 21 servicemen (2.5%), and 67 cases of unknown occupation (7.9%), as shown in Table 31.

(6) Region

HIV: 377 cases in Taipei County (21.5%), and then 280 cases in Taipei City (16.0%), 141 cases in Kaohsiung City (8.0%), 140 cases in Taoyuan County (8.0%), and 134 cases in Kaohsiung County (7.6%).

Keelung City (17.22) had the highest incidence rate of HIV infection per 100,000 population, followed by Kaohsiung County (10.78) and Taipei City (10.68).

AIDS: 149 cases in Taipei County (17.6%), and then 82 cases in Taoyuan County (9.7%), 73 cases in Kaohsiung City (8.6%), 66 cases in Taichung City (7.8%), 59 cases in Taichung County (6.9%); no AIDS cases reported in Lienchiang County.

Taichung City (6.19) had the highest incidence rate of AIDS per 100,000 population, followed by Taipei City (5.68) and Hsinchu City (4.19).

Table 29 Risk factor of HIV infection confirmed cases (excluding foreigner), 2008

Risk factor	Male	%	female	%	Total	%
Homosexuals	854	51.70%	0	0.00%	854	48.70%
Injecting drug users	329	19.90%	48	48.50%	377	21.50%
Heterosexuals	289	17.50%	44	44.40%	333	19.00%
Bisexuals	145	8.80%	0	0.00%	145	8.30%
Vertical transmission	1	0.10%	1	1.00%	2	0.10%
Hemophiliacs	0	0.00%	1	1.00%	1	0.10%
Unknown	35	2.10%	5	5.10%	40	2.30%
Total	1653	100.00%	99	100.00%	1752	100.00%

Table 30 Risk factor of AIDS confirmed cases (excluding foreigner), 2008

Risk factor	Male	%	female	%	Total	%
Homosexuals	404	50.80%	0	0.00%	404	47.60%
Heterosexuals	190	23.90%	31	57.40%	221	26.00%
Injecting drug users	127	16.00%	23	42.60%	150	17.70%
Bisexuals	63	7.90%	0	0.00%	63	7.40%
Hemophiliacs	1	0.10%	0	0.00%	1	0.10%
Vertical transmission	0	0.00%	0	0.00%	0	0.00%
Unknown	10	1.30%	0	0.00%	10	1.20%
Total	795	100.00%	54	100.00%	849	100.00%

Table 31 Occupational distribution of HIV /AIDS confirmed cases (excluding foreigner), 2008

Occupation	HIV	AIDS	Occupation	HIV	AIDS
Others	773	273	House Keeping	11	3
Unemployment	432	192	Culture, Sporting, & Recreational services	9	4
Services	154	111	Accommodation & Food services	8	7
Student	128	56	Wholesale & Retail trade	7	6
Servicemen	78	21	Transport, Container & Communication	7	2
Unknown	27	67	Public administration (includes government agency)	6	8
Education	20	14	Medical personnel	3	1
Manufacturing	20	12	Electricity, Gas & Water	2	2
Construction	18	4	Doctor	2	2
Professional, Scientific & Technical Services	16	8	Mining & Quarrying	2	22
Agriculture, Forestry, Fishing & Animal Husbandry	14	9	Health care & Social welfare Services	1	1
Financial intermediation (includes insurance)	13	23	Nurse	1	1

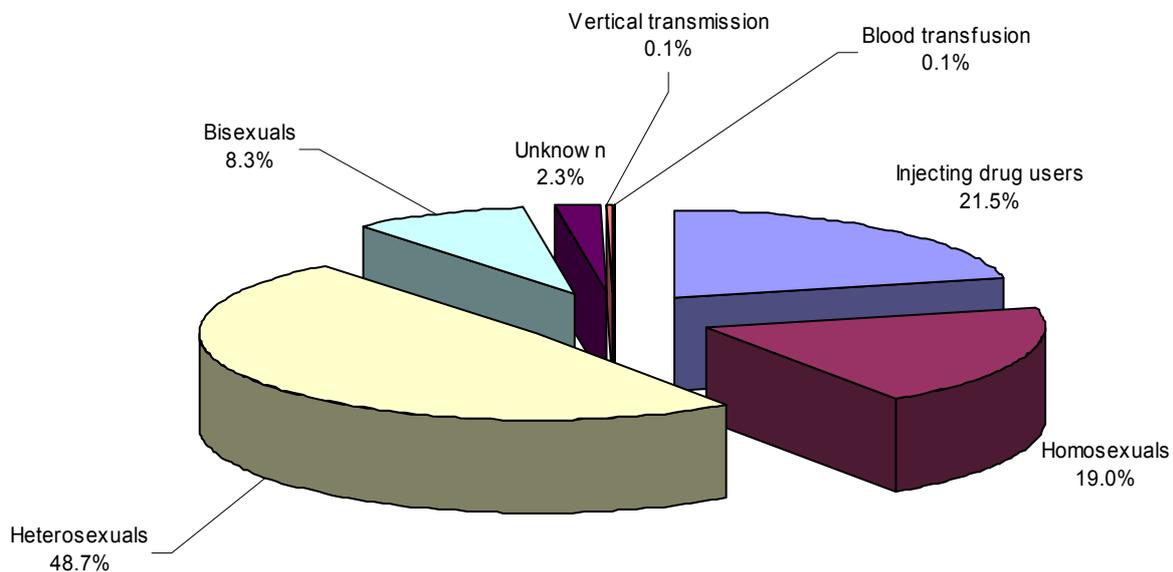


Figure 78 Risk factor of HIV infection confirmed cases (foreigner excluded), 2008

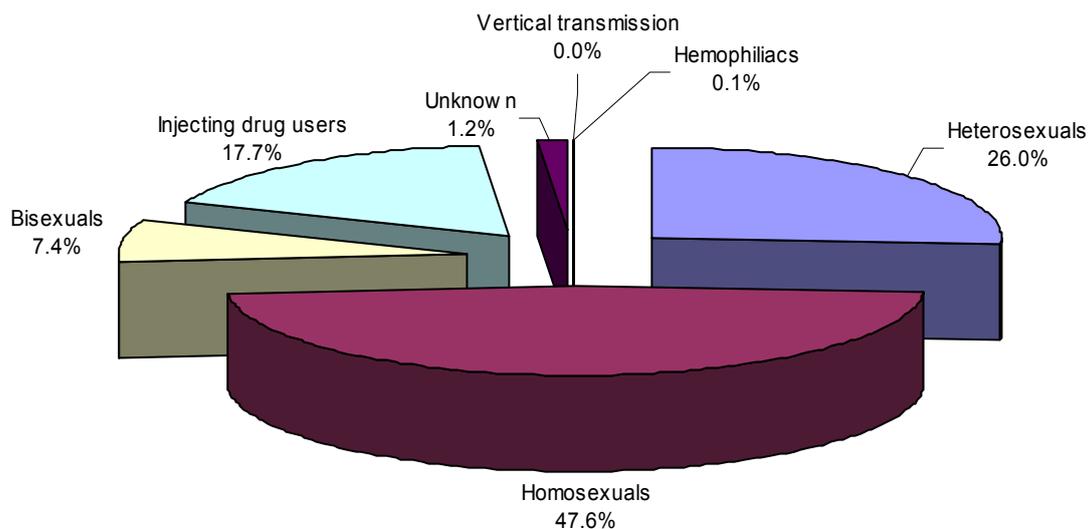


Figure 79 Risk factor of AIDS confirmed cases (foreigner excluded), 2008

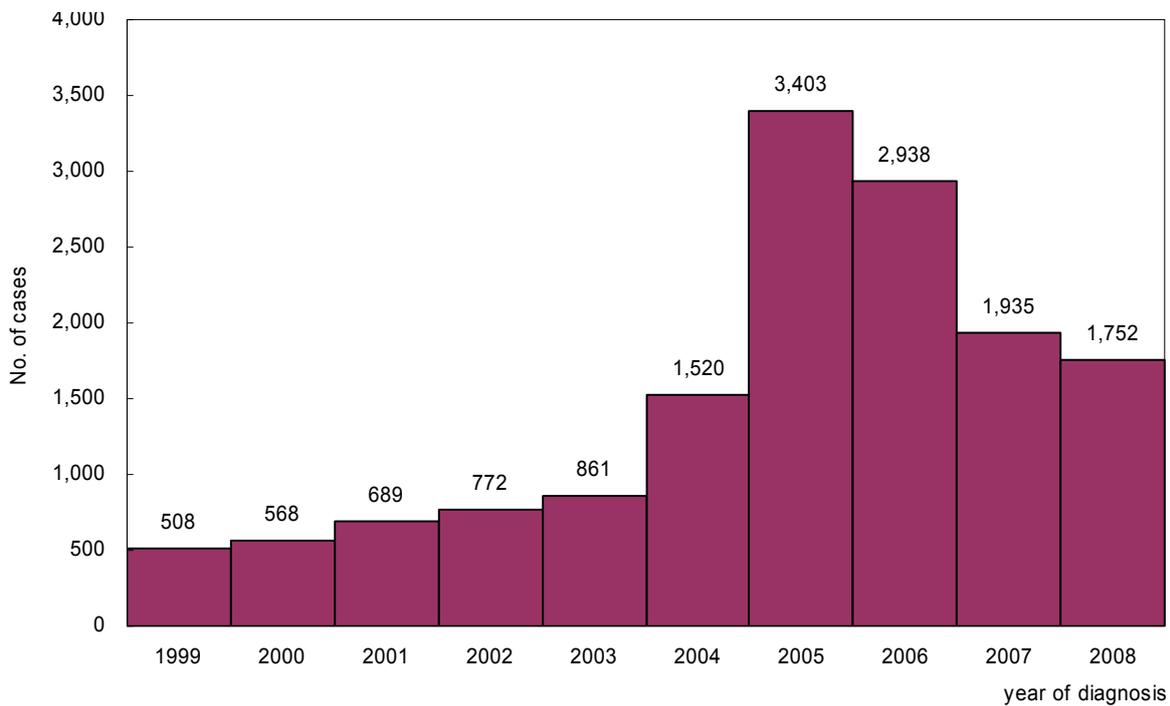


Figure 80 Number of HIV infection confirmed cases (excluding foreigner), 1999-2008

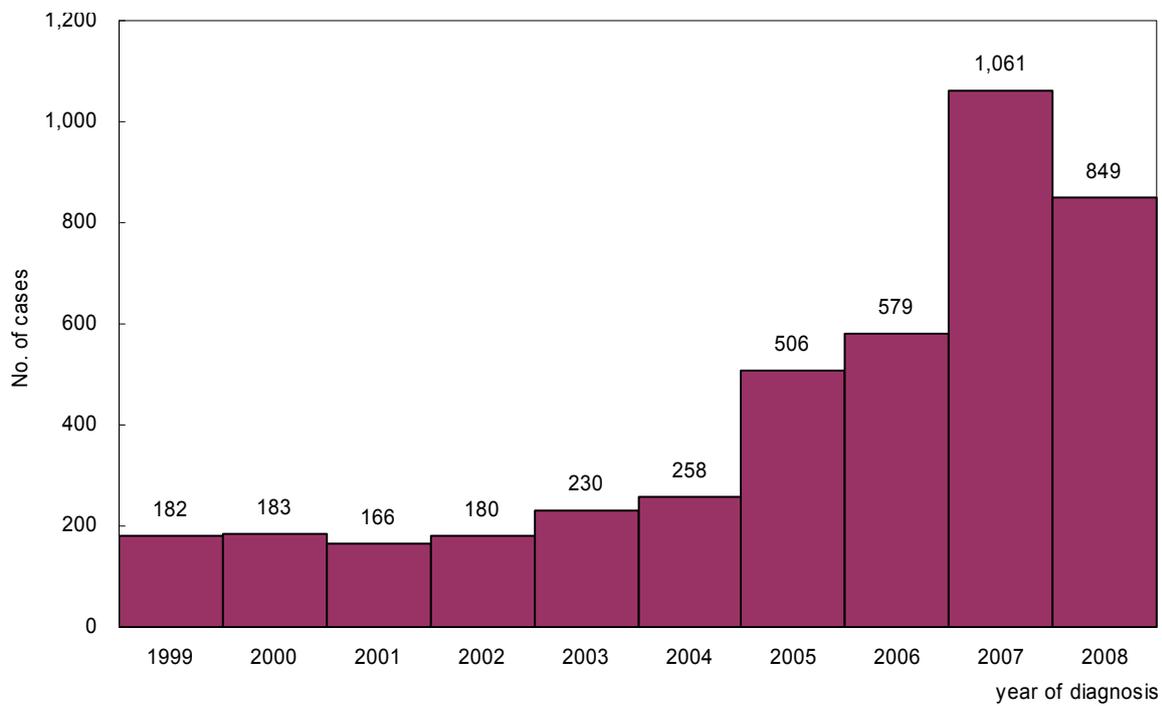


Figure 81 Number of AIDS confirmed cases (excluding foreigner), 1999-2008

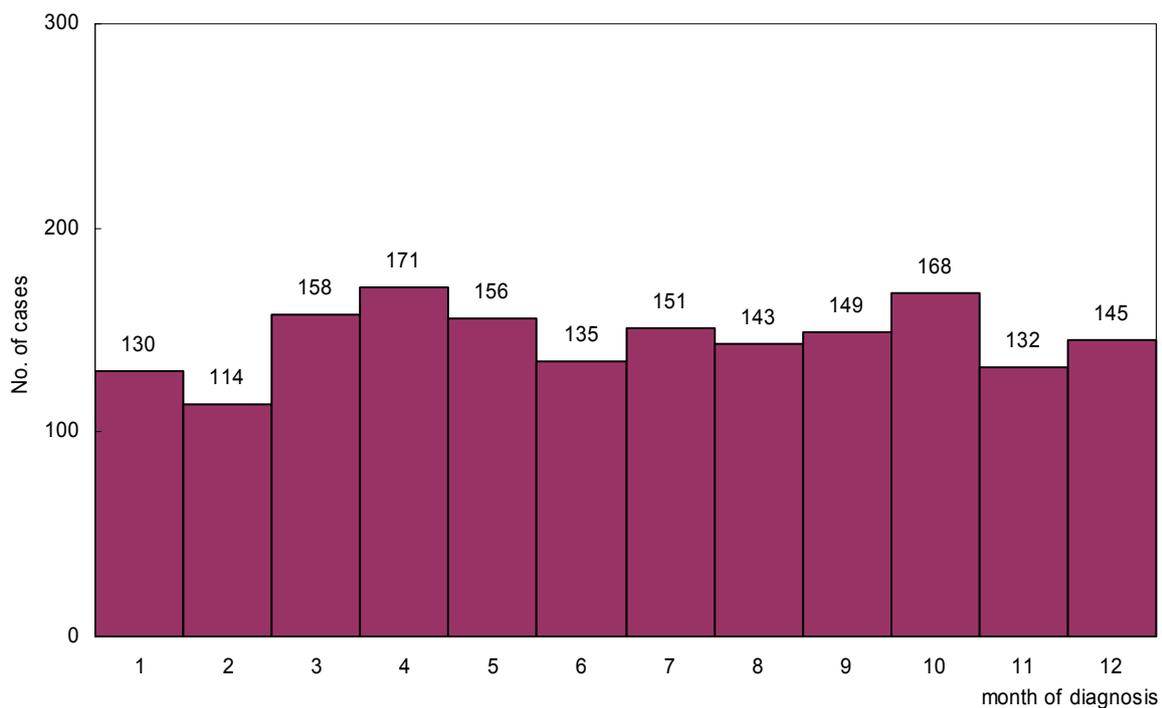


Figure 82 Number of HIV infection confirmed cases (excluding foreigner), 2008

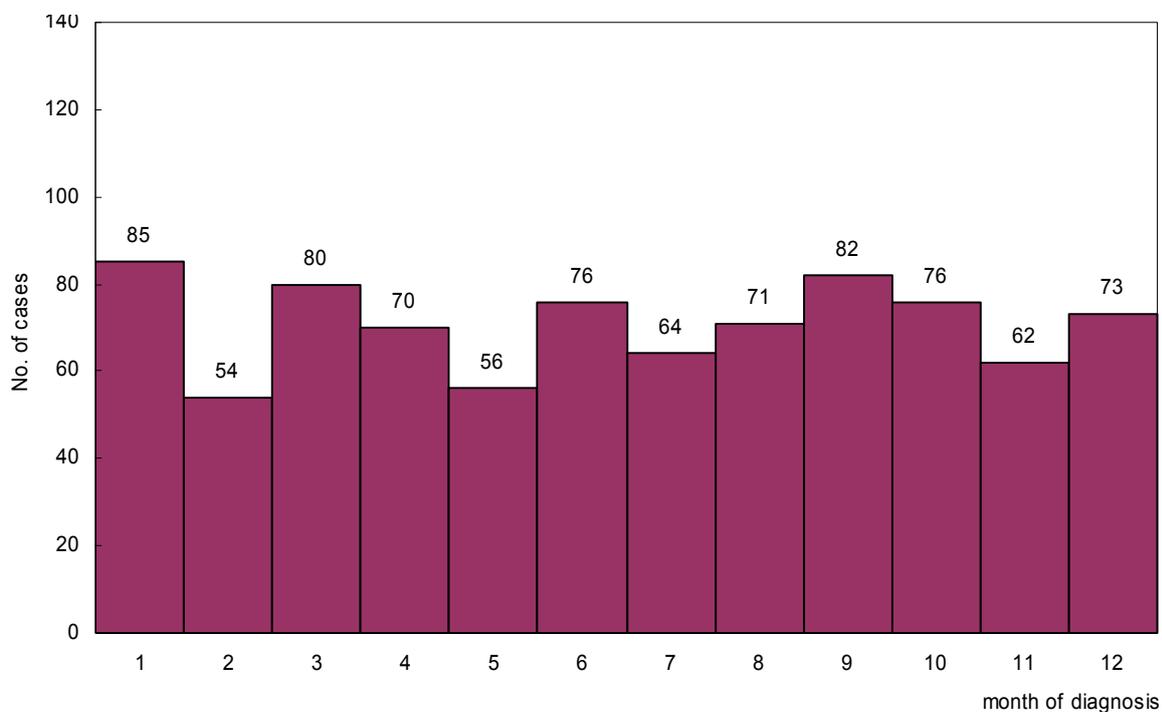


Figure 83 Number of AIDS confirmed cases (excluding foreigner), 2008

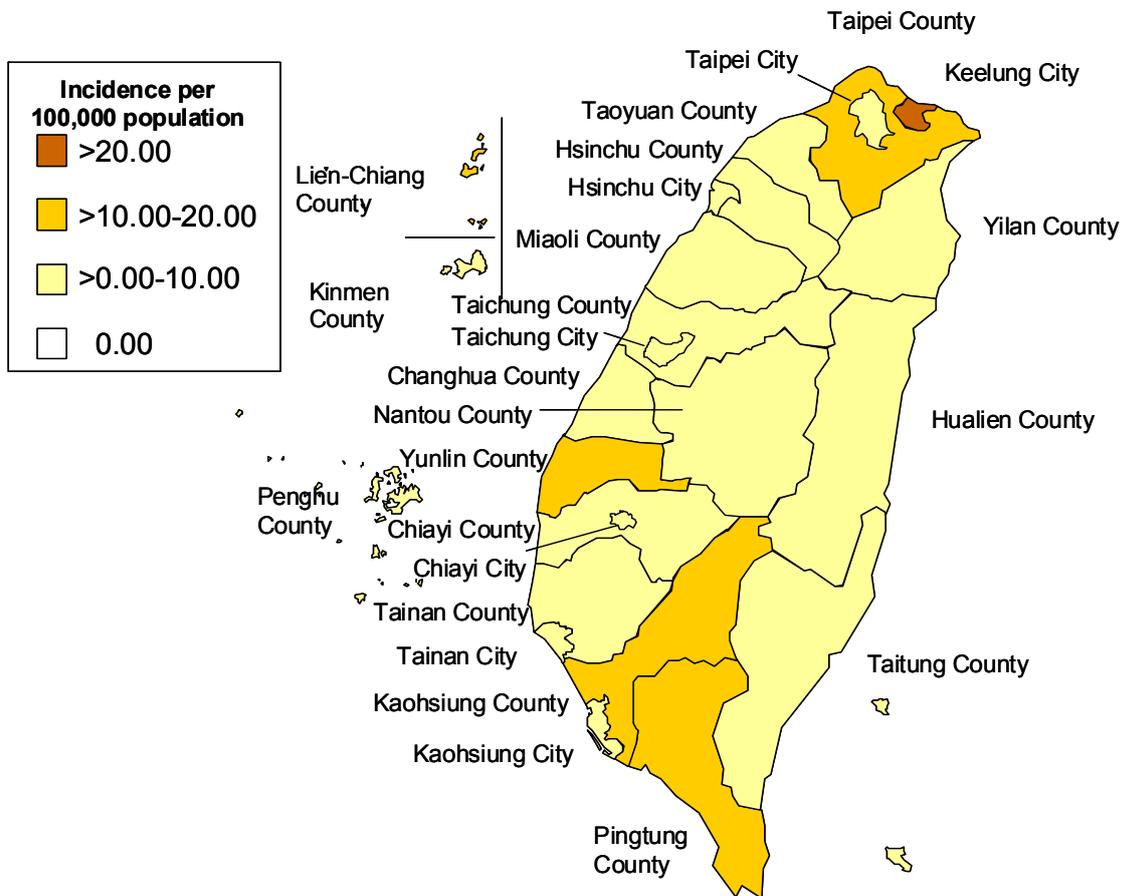


Figure 84 Geographical distribution by incidence of HIV infection confirmed cases (foreigner excluded), 2008

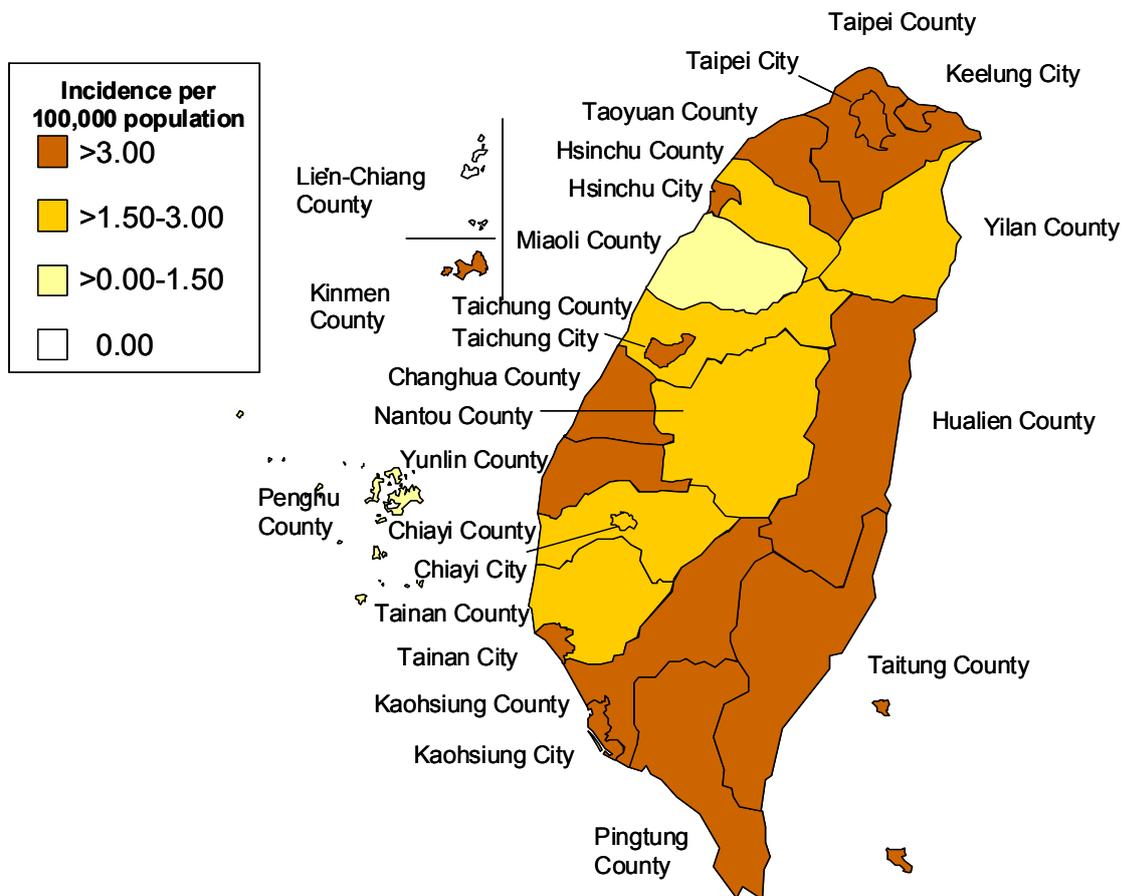


Figure 85 Geographical distribution by incidence of AIDS confirmed cases (foreigner excluded), 2008

Tuberculosis

In 2008, 14,265 cases (62 cases per 100,000 population) were confirmed, 14,480 cases (63 cases per 100,000 population) were confirmed in 2007, both the incidence number and the incidence rate in 2008 were lower than that in 2007, the incidence number decreased by 1.5%, and the incidence rate decreased by 1.6%. The data of confirmed cases are described as follows:

(1) Gender

9,835 male cases (68.9%), 4,430 female cases (31.1%), the number of male tuberculosis patients was about 2.2 times of female; the incidence rate of male tuberculosis was 84.7 persons per 100,000 population, and that of female was 38.9 persons, the incidence rate of male tuberculosis was about 2.2 times of female.

(2) Age

The number of cases and the incidence rate per 100,000 population increased obviously with the age. 112 cases of aged 0-14, 753 cases of aged 15-24, 1,043 cases of aged 25-34, 1,279 cases of aged 35-44, 1,782 cases of aged 45-54, 1,845 cases of aged 55-64, 7,451 cases of aged above 65, the cases of aged above 65 accounted for 52.2% of total cases.

(3) Month (based on notification date)

Cases occurred in all months, 1,357 cases in May, and 952 cases in February.

(4) Region

On the difference in counties and cities, the incidence rate of tuberculosis in the east was higher than that in the west, and in the south was higher than that in the north. As for the incidence rate in various counties and cities, Hualien County (105.2 cases per 100,000 population) ranked the first, Taitung County (100.1 cases per 100,000 population) and Pingtung County (99.6 cases per 100,000 population) ranked second and third respectively; Kinmen County and Lienchiang County ranked last with 30.1 cases and 20.3 cases per 100,000 population respectively.

(5) Death cases

There were 762 death cases of tuberculosis in 2008, the mortality rate per 100,000 population was 3.3, accounting for 0.54% of total death toll. Including 578 male death cases and 184 female death cases, the male-to-female ratio was 3.14:1.0. The male mortality rate per 100,000 population was 4.98, and female 1.62.

According to the analysis of age group, the mortality rate increased as the age increased. 83% (632 cases) of 762 death cases of tuberculosis were old people of aged above 65.

The mortality rate of tuberculosis in Pingtung County (7.66 cases per 100,000 population) ranked the first in all counties and cities, and then Hualien County (7.01 cases per 100,000

population) and Kaohsiung County (5.31 cases per 100,000 population). On the overall distribution, the east and the south had a higher rate and the north had a lower rate.

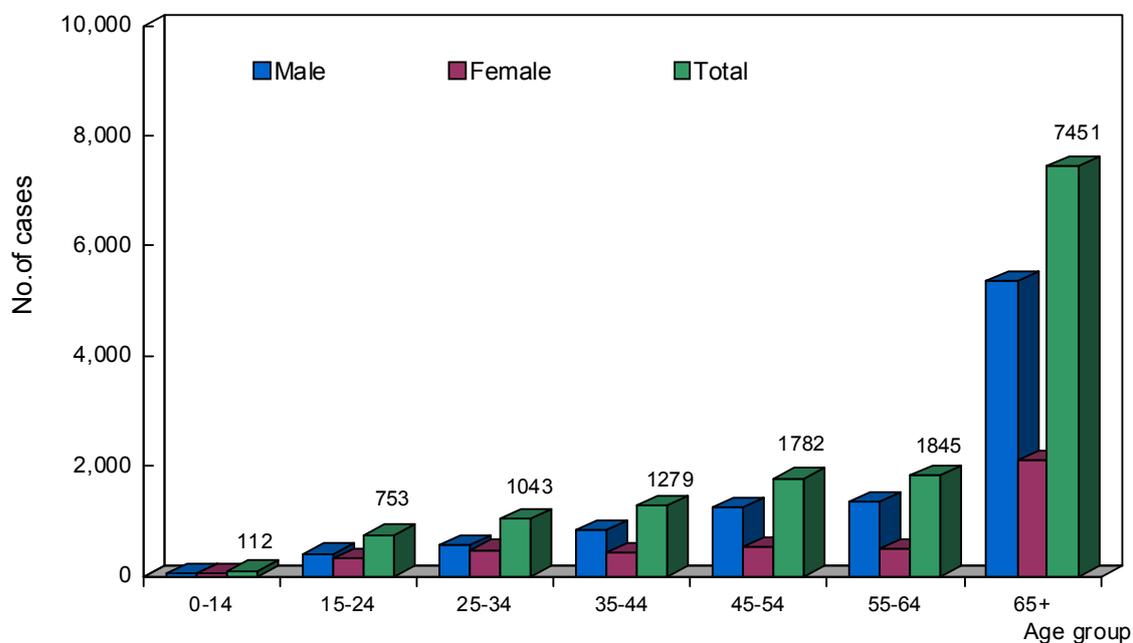


Figure 86 Tuberculosis cases number by age group and sex, 2008

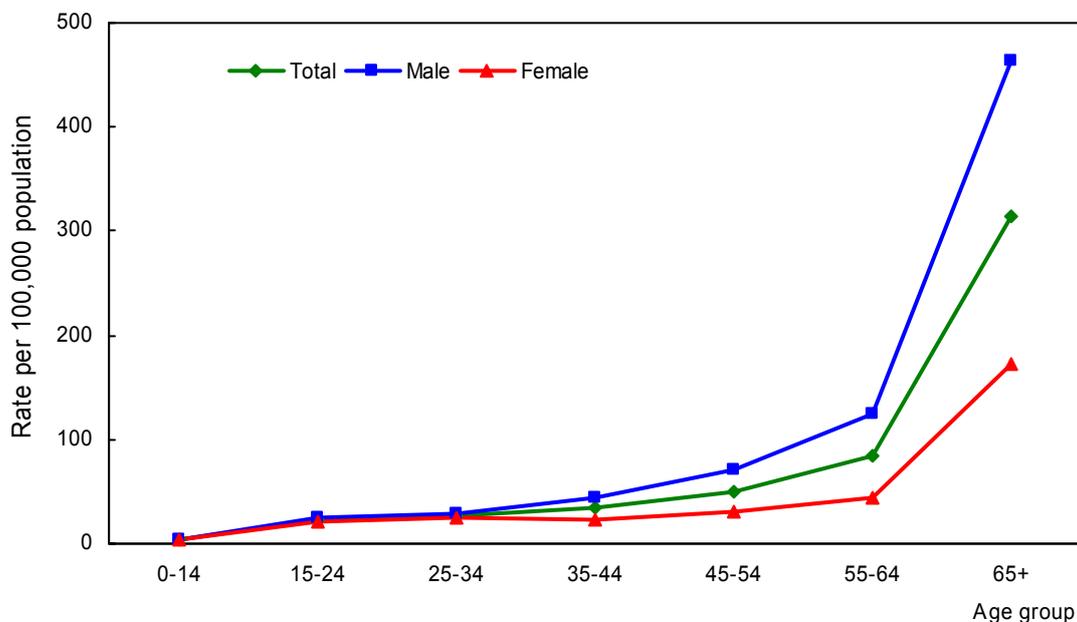


Figure 87 Incidence rate of Tuberculosis by age group and sex, 2008

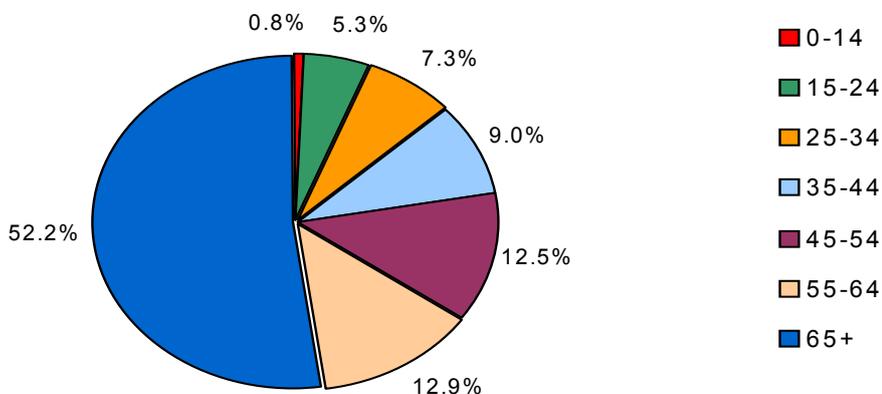


Figure 88 Distribution of Tuberculosis incidence by age group, 2008

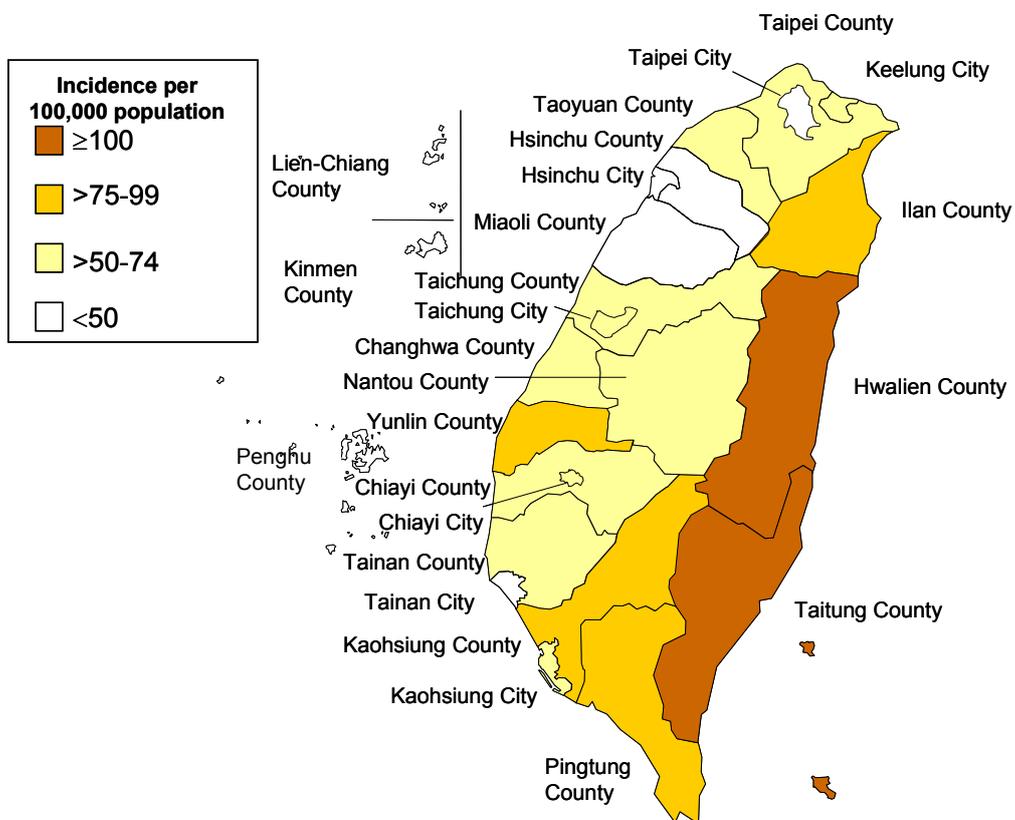


Figure 89 Geographical distribution by incidence of Tuberculosis cases, 2008

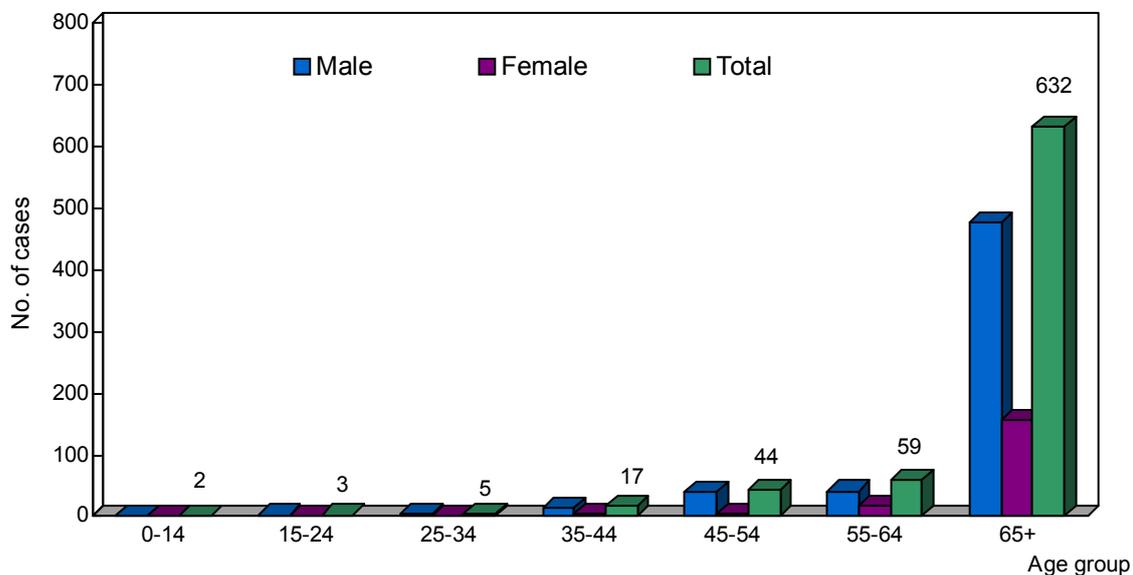


Figure 90 Mortality number of Tuberculosis by age group and sex, 2008

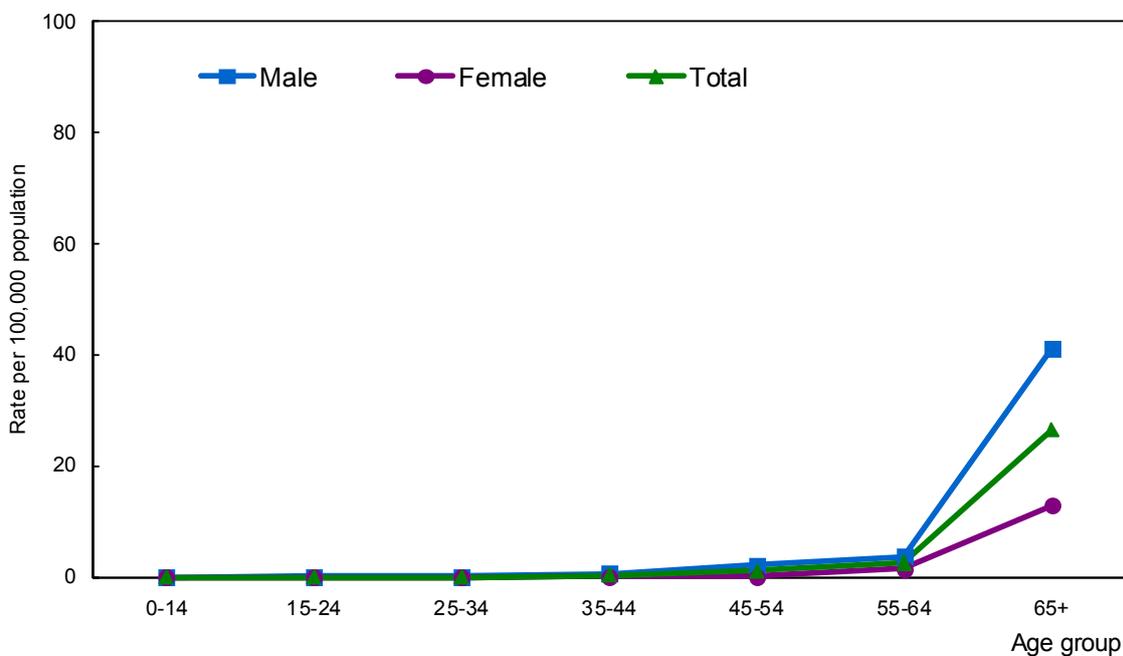


Figure 91 Mortality rate of Tuberculosis by age group and sex, 2008

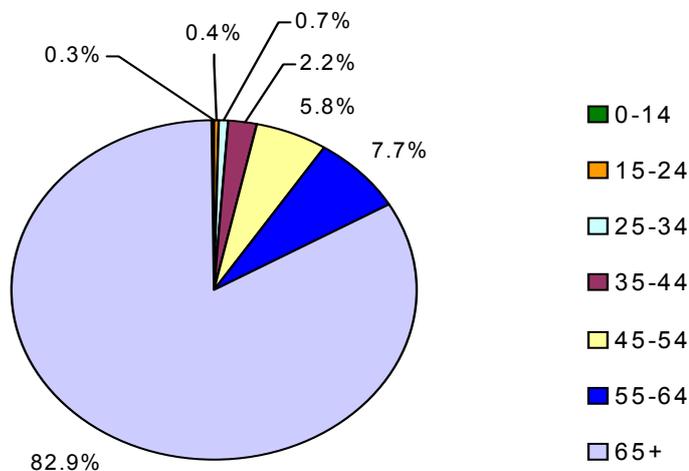


Figure 92 Distribution of Tuberculosis mortality by age group, 2008

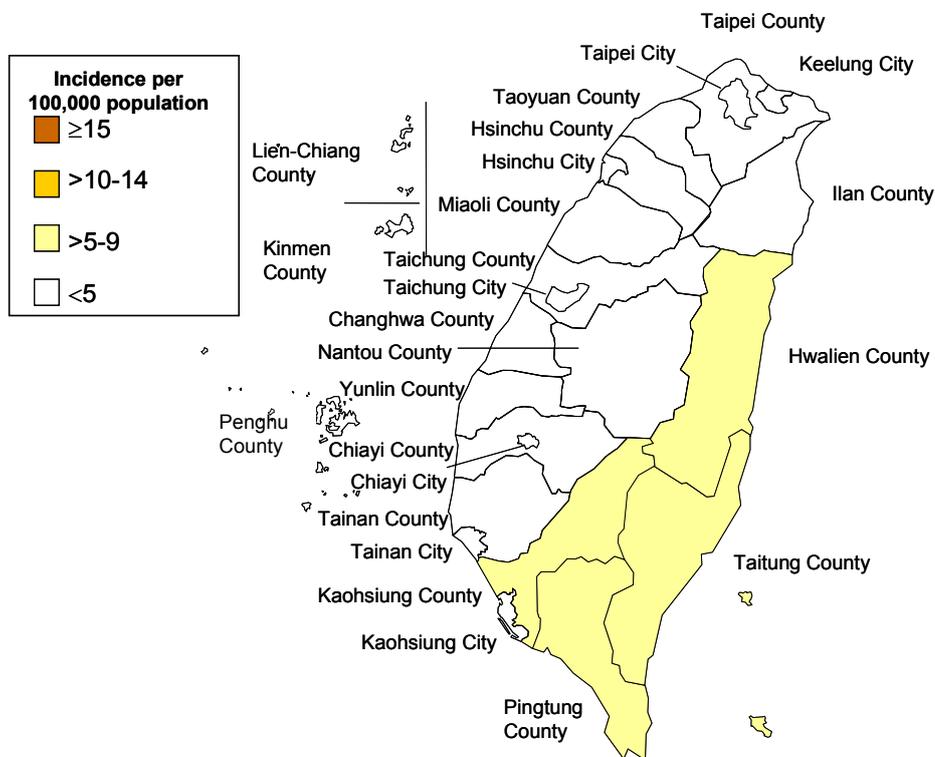


Figure 93 Geographical distribution by mortality of confirmed Tuberculosis cases, 2008

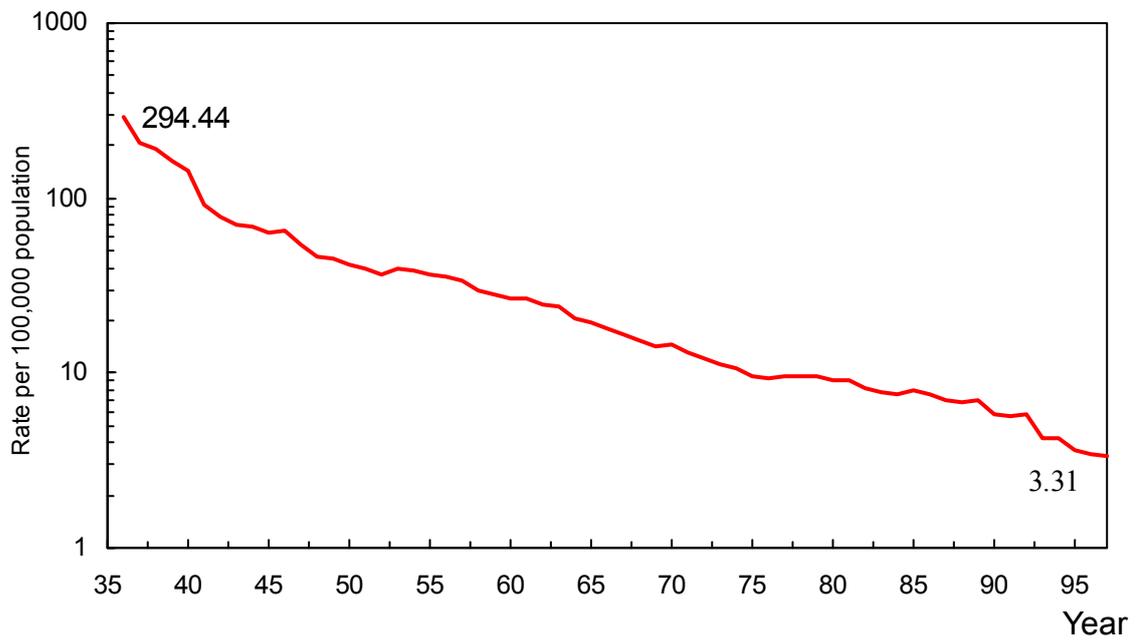


Figure 94 Trend of Tuberculosis mortality rate by year

Table 32 Confirmed tuberculosis cases—by geographical distribution, 2008

Locality	Midyear population	Total Death number	Death number from TB	Per 100,000 population	%
Taiwan	22,997,696	142,283	762	3.31	0.54
Taipei County	3,815,872	17,787	83	2.18	0.47
Yilan County	460,650	3,373	18	3.91	0.53
Taoyuan County	1,946,827	9,599	43	2.21	0.45
Hsinchu County	499,547	3,242	22	4.40	0.68
Miaoli County	560,280	4,258	15	2.68	0.35
Taichung County	1,554,420	8,690	45	2.89	0.52
Changhua County	1,313,645	8,690	57	4.34	0.66
Nantou County	532,735	4,261	24	4.51	0.56
Yunlin County	724,673	6,471	34	4.69	0.53
Chiayi County	550,038	4,917	21	3.82	0.43
Tainan County	1,104,978	8,629	35	3.17	0.41
Kaohsiung County	1,243,862	8,418	66	5.31	0.78
Pingtung County	887,201	7,488	68	7.66	0.91
Taitung County	232,754	2,188	12	5.16	0.55
Hualien County	342,368	3,135	24	7.01	0.77
Penghu County	92,849	756	1	1.08	0.13
Keelung City	389,688	2,621	13	3.34	0.50
Hsinchu City	402,203	2,196	14	3.48	0.64
Taichung City	1,061,013	4,993	25	2.36	0.50
Chiayi City	273,434	1,639	5	1.83	0.31
Tainan City	766,555	4,355	16	2.09	0.37
Taipei City	2,626,096	15,119	69	2.63	0.46
Kaohsiung City	1,523,099	9,017	50	3.28	0.55
Kinmen County	83,058	404	2	2.41	0.50
Lienchiang County	9,851	37	-	-	-

Table 33 Mortality of Tuberculosis—by age & sex, 2008

Age	Tuberculosis				Male				Female			
	Midyear population	Death number	Per 100,000 population	Per 100,000 population	Midyear population	Death number	Per 100,000 population	Per 100,000 population	Midyear population	Death number	Per 100,000 population	Per 100,000 population
Total	22,997,696	762	3.31	4.98	11,617,559	578	4.98	4.98	11,380,137	184	1.62	1.62
0-4	1,039,395	1	0.10	0.00	543,526	-	0.00	0.00	495,869	1	0.20	0.20
5-9	1,339,825	-	0.00	0.00	699,223	-	0.00	0.00	640,602	-	0.00	0.00
10-14	1,588,704	1	0.06	0.12	826,044	1	0.12	0.12	762,660	-	0.00	0.00
15-19	1,613,139	1	0.06	0.12	840,931	1	0.12	0.12	772,208	-	0.00	0.00
20-24	1,658,950	2	0.12	0.23	852,904	2	0.23	0.23	806,046	-	0.00	0.00
25-29	2,005,792	2	0.10	0.20	1,015,634	2	0.20	0.20	990,158	-	0.00	0.00
30-34	1,891,720	3	0.16	0.32	949,575	3	0.32	0.32	942,145	-	0.00	0.00
35-39	1,834,495	9	0.49	0.54	919,828	5	0.54	0.54	914,667	4	0.44	0.44
40-44	1,887,763	8	0.42	0.84	950,957	8	0.84	0.84	936,806	-	0.00	0.00
45-49	1,882,766	19	1.01	1.80	944,678	17	1.80	1.80	938,088	2	0.21	0.21
50-54	1,695,444	25	1.47	2.73	843,568	23	2.73	2.73	851,876	2	0.23	0.23
55-59	1,375,693	30	2.18	3.09	679,438	21	3.09	3.09	696,255	9	1.29	1.29
60-64	811,354	29	3.57	5.06	395,548	20	5.06	5.06	415,806	9	2.16	2.16
65+	2,372,656	632	26.64	41.10	1,155,705	475	41.10	41.10	1,216,951	157	12.90	12.90

Table 34 Confirmed tuberculosis cases—by geographical distribution, 2008

Locality	Total						Male						Female					
	Smear-positive	Others	Total	Midyear population	Per 100,000 population	Smear-positive	Others	Total	Midyear population	Per 100,000 population	Smear-positive	Others	Total	Midyear population	Per 100,000 population			
Taiwan	5,559	8,706	14,265	22,997,696	62.03	4,057	5,778	9,835	11,617,559	84.66	1,502	2,928	4,430	11,380,137	38.93			
Taipei County	831	1,316	2,147	3,815,872	56.26	607	847	1,454	1,906,170	76.28	224	469	693	1,909,702	36.29			
Yilan County	125	235	360	460,650	78.15	98	167	265	235,903	112.33	27	68	95	224,747	42.27			
Taoyuan County	395	627	1,022	1,946,827	52.50	288	432	720	986,489	72.99	107	195	302	960,338	31.45			
Hsinchu County	69	127	196	499,547	39.24	48	95	143	258,287	55.36	21	32	53	241,260	21.97			
Miaoli County	82	172	254	560,280	45.33	70	132	202	292,437	69.07	12	40	52	267,843	19.41			
Taichung County	251	585	836	1,554,420	53.78	178	391	569	790,537	71.98	73	194	267	763,883	34.95			
Changhua County	413	551	964	1,313,645	73.38	305	359	664	676,876	98.10	108	192	300	636,769	47.11			
Nantou County	144	239	383	532,735	71.89	108	164	272	275,641	98.68	36	75	111	257,094	43.17			
Yunlin County	246	335	581	724,673	80.17	170	214	384	380,256	100.98	76	121	197	344,417	57.20			
Chiayi County	147	214	361	550,038	65.63	119	161	280	288,281	97.13	28	53	81	261,757	30.94			
Tainan County	297	470	767	1,104,978	69.41	226	323	549	566,447	96.92	71	147	218	538,531	40.48			
Kaohsiung County	431	630	1,061	1,243,862	85.30	324	417	741	640,047	115.77	107	213	320	603,815	53.00			
Pingtung County	369	515	884	887,201	99.64	264	338	602	458,375	131.33	105	177	282	428,826	65.76			
Taitung County	102	131	233	232,754	100.11	79	86	165	122,619	134.56	23	45	68	110,135	61.74			
Hwallen County	177	183	360	342,368	105.15	118	130	248	177,704	139.56	59	53	112	164,664	68.02			
Penghu County	9	24	33	92,849	35.54	7	18	25	47,898	52.19	2	6	8	44,951	17.80			
Keelung City	122	146	268	389,688	68.77	81	99	180	197,333	91.22	41	47	88	192,355	45.75			
Hsinchu City	45	89	134	402,203	33.32	28	57	85	201,036	42.28	17	32	49	201,167	24.36			
Taichung City	186	405	591	1,061,013	55.70	144	261	405	518,163	78.16	42	144	186	542,850	34.26			
Chiayi City	54	91	145	273,434	53.03	36	57	93	135,197	68.79	18	34	52	138,237	37.62			
Tainan City	179	292	471	766,555	61.44	133	198	331	380,952	86.89	46	94	140	385,603	36.31			
Taipei City	445	733	1,178	2,626,096	44.86	304	448	752	1,274,252	59.02	141	285	426	1,351,844	31.51			
Kaohsiung City	429	580	1,009	1,523,099	66.25	313	372	685	756,914	90.50	116	208	324	766,185	42.29			
Kinmen County	11	14	25	83,058	30.10	9	10	19	44,012	43.17	2	4	6	39,046	15.37			
Lienchiang County	-	2	2	9,851	20.30	-	2	2	5,733	34.89	-	-	-	4,118	0.00			
Unknown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

Table 35 Confirmed tuberculosis cases—by age & sex, 2008

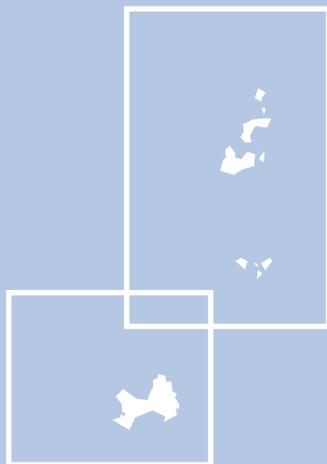
Age	Total				Male				Female						
	Smear-positive	Others	Total	Midyear population	Per 100,000 population	Smear-positive	Others	Total	Midyear population	Per 100,000 population	Smear-positive	Others	Total	Midyear population	Per 100,000 population
Total	5,559	8,706	14,265	22,997,696	62.03	4,057	5,778	9,835	11,617,559	84.66	1,502	2,928	4,430	11,380,137	38.93
0-4	3	17	20	1,039,395	1.92	2	10	12	543,526	2.21	1	7	8	495,869	1.61
5-9	1	28	29	1,339,825	2.16	1	19	20	699,223	2.86	-	9	9	640,602	1.40
10-14	20	43	63	1,588,704	3.97	9	20	29	826,044	3.51	11	23	34	762,660	4.46
15-19	97	185	282	1,613,139	17.48	59	121	180	840,931	21.40	38	64	102	772,208	13.21
20-24	154	317	471	1,658,950	28.39	71	167	238	852,904	27.90	83	150	233	806,046	28.91
25-29	192	355	547	2,005,792	27.27	99	185	284	1,015,634	27.96	93	170	263	990,158	26.56
30-34	171	325	496	1,891,720	26.22	95	181	276	949,575	29.07	76	144	220	942,145	23.35
35-39	250	322	572	1,834,495	31.18	190	178	368	919,828	40.01	60	144	204	914,667	22.30
40-44	291	416	707	1,887,763	37.45	222	259	481	950,957	50.58	69	157	226	936,806	24.12
45-49	375	459	834	1,882,766	44.30	296	287	583	944,678	61.71	79	172	251	938,088	26.76
50-54	428	520	948	1,695,444	55.91	324	342	666	843,568	78.95	104	178	282	851,876	33.10
55-59	437	573	1,010	1,375,693	73.42	343	397	740	679,438	108.91	94	176	270	696,255	38.78
60-64	325	510	835	811,354	102.91	255	352	607	395,548	153.46	70	158	228	415,806	54.83
65+	2,815	4,636	7,451	2,372,656	314.04	2,091	3,260	5,351	1,155,705	463.01	724	1,376	2,100	1,216,951	172.56

Table 36 Confirmed tuberculosis cases—by aboriginal locality / township, 2008

Locality	Township	Smear-positive	Others	Total	Midyear population	Per 100,000 population
	Total	206	200	406	197,353	205.72
Kaohsiung County	Maolin Township	2	5	7	1,766	396.38
Yilan County	Nanao Township	17	15	32	5,843	547.66
Hualien County	Sioulin Township	29	33	62	14,927	415.35
Nantou County	Renai Township	26	29	55	15,452	355.94
Taitung County	Yanping Township	10	6	16	3,597	444.82
Yilan County	Datong Township	6	10	16	5,823	274.77
Hualien County	Wanrong Township	8	5	13	7,083	183.54
Hualien County	Jhuosi Township	11	5	16	6,511	245.74
Hsinchu County	Jianshih Township	6	5	11	8,184	134.41
Pingtung County	Sandimen Township	5	4	9	7,270	123.80
Pingtung County	Shihzih Township	2	1	3	4,960	60.48
Pingtung County	Majia Township	4	9	13	6,480	200.62
Taitung County	Haiduan Township	4	8	12	4,556	263.39
Hsinchu County	Wufong Township	7	5	12	4,439	270.33
Kaohsiung County	Taoyuan Township	4	4	8	4,767	167.82
Taoyuan County	Fusing Township	11	9	20	10,536	189.83
Chiayi County	Alishan Township	1	2	3	6,171	48.61
Taichung County	Heping Township	4	11	15	10,841	138.36
Nantou County	Sinyi Township	17	12	29	17,212	168.49
Miaoli County	Taian Township	4	5	9	5,704	157.78
Taipei County	Wulai Township	-	1	1	5,503	18.17
Taitung County	Jinfong Township	-	1	1	3,326	30.07
Pingtung County	Laiyi Township	10	5	15	7,743	193.72
Taitung County	Daren Township	-	-	-	3,731	-
Pingtung County	Chunrih Township	6	4	10	4,964	201.45
Pingtung County	Taiwu Township	2	4	6	4,918	122.00
Kaohsiung County	Sanmin Township	2	1	3	3,476	86.31
Pingtung County	Mudan Township	6	1	7	4,868	143.80
Pingtung County	Wutai Township	1	-	1	2,710	36.90
Taitung County	Lanyu Township	1	-	1	3,992	25.05

2008

Statistics of Communicable Diseases
and Surveillance Report



IV

Appendix

— Republic of China (Taiwan), 2008

©Abbreviations and Symbols Used in Table

— No reported cases.

... Not under surveillance.

List of cases number update

Appendix1

Year	Measles		Hantavirus syndrome				Tuberculosis				Japanese encephalitis		Hansen's Disease		
			Hemorrhagic fever with renal syndrome		Hantavirus pulmonary syndrome		Open pulmonary tuberculosis		Other tuberculosis						
	reported	confirmed	reported	confirmed	reported	confirmed	reported	confirmed	reported	confirmed	reported	confirmed	reported	confirmed	
1994	98	33	214	13	4	4
1995	42	-	284	27	10	10
1996	47	-	332	21	15	15
1997	67	5	342	6	7	7
1998	50	9	417	22	7	7
1999	23	1	...	...	...	...	9,865	7,444	8,148	6,052	412	24	3	3
2000	48	6	...	...	...	...	10,718	8,097	7,981	5,813	387	13	4	4
2001	50	10	2	2	2	2	9,305	8,173	9,584	6,313	400	33	2	2	
2002	79	24	-	-	-	-	10,225	8,886	15,037	7,872	310	19	8	8	
2003	59	6	-	-	-	-	8,995	8,213	13,367	6,829	309	25	9	9	
2004	36	-	3	3	-	-	11,843	9,852	12,318	6,932	319	32	9	9	

Note : The case numbers marked in red is currently update.

Year	Acute hapatitis B		Acute hepatitis E		Mumps		Varicella		HIV infection		AIDS	
	reported	confirmed	reported	confirmed	reported	confirmed	reported	confirmed	reported	confirmed	reported	confirmed
1994	258	171	2	2	362	1	...	...	213	213	67	67
1995	321	214	2	2	181	1	...	...	262	262	100	100
1996	427	276	-	-	346	-	...	...	311	311	164	164
1997	585	346	2	-	256	1	...	...	383	383	137	137
1998	576	411	-	-	270	2	...	...	443	443	156	156
1999	533	377	2	1	261	1	1,263	-	508	508	182	182
2000	335	226	1	-	375	-	5,863	-	568	568	183	183
2001	367	355	1	1	444	-	5,316	-	689	689	166	166
2002	417	417	13	12	665	-	13,073	-	772	772	180	180
2003	334	327	12	11	676	-	12,273	-	861	861	230	230
2004	379	378	36	18	1,081	-	13,219	-	1,520	1,520	258	258

Note :

1. From 2002, the data analysis of HIV infection and AIDS was based on the cases of national. Before 2002, data analysis was included the cases of national and foreign nationality.
2. The caseload of HIV infection and AIDS were estimated from the date of diagnostic.
3. The case numbers marked in red is currently updated.

Category	Diseases	Reported Within	Mandatory Isolation	Legal Basis*
I	Smallpox, Plague, Severe Acute Respiratory Syndrome, Rabies, Anthrax, Human Infections with Influenza A(H5N1) Virus	24 hours	Isolation care at designated isolation care institution	1 - 2
II	Diphtheria, Typhoid Fever, Dengue Fever / Dengue Haemorrhagic Fever / Dengue Shock Syndrome, Meningococcal Meningitis, Paratyphoid Fever, Poliomyelitis (AFP), Shigellosis, Amoebiasis, Malaria, Measles, Acute Hepatitis A, Enterohaemorrhagic <i>E. coli</i> Infection, Hantavirus Syndrome, Cholera, Rubella, Multidrug-Resistant Tuberculosis, Chikungunya Fever, West Nile Fever, Epidemic Typhus Fever	24 hours	When necessary, patients may be placed in designated isolation care institutions for isolation care.	1 - 2
III	Pertussis, Tetanus, Neonatal Tetanus, Japanese Encephalitis, Tuberculosis (except MDR TB), Congenital Rubella Syndrome, Acute Hepatitis B, Acute Hepatitis C, Acute Hepatitis D, Acute Hepatitis E, Acute Hepatitis (unspecified), Mumps, Legionellosis, Invasive Haemophilus Influenzae Type b Infection, Syphilis, Gonorrhoea, Enteroviruses Infection with Severe Complications, Hansen's disease	one week	When necessary, patients may be placed in designated isolation care institutions for isolation care.	1 - 2 - 4 - 5
	HIV Infection, AIDS	24 hours		3 - 5
IV	Herpesvirus B Infection, Leptospirosis, Melioidosis, Botulism	24 hours	When necessary, patients may be placed in designated isolation care institutions for isolation care.	1 - 2
	Invasive Pneumococcal Disease, Q Fever, Endemic Typhus Fever, Lyme Disease, Tularemia, Scrub Typhus, Varicella, Cat-Scratch Disease, Toxoplasmosis, Severe Complicated Influenza Case	one week		
	Creutzfeldt-Jakob Disease	one month		
V	Rift Valley Fever, Marburg Haemorrhagic Fever, Yellow Fever, Ebola Haemorrhagic Fever, Lassa Fever	24 hours	Isolation care at designated isolation care institution	1 - 2

*Note :

1. "The Communicable Disease Control Act" amended in 77 articles and promulgated on July 18, 2007.
2. "Categories of Communicable Diseases and Prophylaxis of Category IV and V" announced by the Department of Health, the Executive Yuan, on October 9, 2007.
3. "HIV Infection Control and Patient Rights Protection Act" amended in 27 articles and promulgated on July 11, 2007. (original title : AIDS Prevention and Control Act)
4. " Hansen's disease Patients Human Rights Protection and Compensation Act" promulgated on August 13, 2008.
5. " Categories of Communicable Diseases and Prophylaxis of Category IV and V " announced and amended by the Department of Health, the Executive Yuan, on October 24, 2008.

Appendix 3

Report of cases of communicable and emerging infectious disease, include suspected cases

Please protect patient's privacy

Hospital	Hospital/Clinic	Code No.													Tel
	Diagnosed by Physician	Address of Hospital/Clinic													

I. The Patient	Name	Sex	<input type="checkbox"/> Male <input type="checkbox"/> Female	Date of Birth	(Y) (M) (D)	I.D. Number / Passport Number												
	Nationality	<input type="checkbox"/> National <input type="checkbox"/> Other		Tel	Office											Marital Status <input type="checkbox"/> Single <input type="checkbox"/> Married <input type="checkbox"/> Widowed <input type="checkbox"/> Divorced		
		Residence: <input type="checkbox"/> Alien Labor <input type="checkbox"/> Alien Identity: <input type="checkbox"/> Mainland Chinese			Home													
<input type="checkbox"/> Alien Bride <input type="checkbox"/> Mainland Bride <input type="checkbox"/> Unknown		Mobil																
Address		Occupation			Animal contact (within 3 months) <input type="checkbox"/> No <input type="checkbox"/> Yes													
II. Medical Record and Date	Medical Record No.	Date of Onset			(Y) (M) (D)	Travel history (within 3 months) <input type="checkbox"/> No <input type="checkbox"/> Yes, place: _____												
	Major Symptoms	Date of Diagnosis			(Y) (M) (D)	From: (Y) (M) (D) To: (Y) (M) (D)												
	Hospital Care	to _____ Hospital/Clinic			Specimen Collection	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date of Death			(Y) (M) (D)								
	Date Reported	(Y) (M) (D)	Date Received by Health Bureau			(Y) (M) (D)	Date Received by CDC			(Y) (M) (D)								
III. The Disease	Category I Communicable Diseases				Category III Communicable Diseases										Category IV Communicable Diseases			
	<input type="checkbox"/> Smallpox <input type="checkbox"/> Plague <input type="checkbox"/> Severe Acute Respiratory Syndrome <input type="checkbox"/> Rabies <input type="checkbox"/> Anthrax <input type="checkbox"/> H5N1 Influenza Category II Communicable Diseases <input type="checkbox"/> Diphtheria <input type="checkbox"/> Typhoid Fever <input type="checkbox"/> Dengue Fever <input type="checkbox"/> Dengue Hemorrhagic Fever / Dengue Shock Syndrome <input type="checkbox"/> Meningococcal Meningitis <input type="checkbox"/> Paratyphoid Fever <input type="checkbox"/> Poliomyelitis <input type="checkbox"/> Acute Flaccid Paralysis <input type="checkbox"/> Shigellosis <input type="checkbox"/> Amoebiasis <input type="checkbox"/> Malaria <input type="checkbox"/> Measles <input type="checkbox"/> Acute Hepatitis A <input type="checkbox"/> EHEC (Enterohaemorrhagic <i>E. coli</i>) Infection Hantavirus Syndrome <input type="checkbox"/> Hemorrhagic Fever with Renal Syndrome <input type="checkbox"/> Hantavirus Pulmonary Syndrome <input type="checkbox"/> Cholera <input type="checkbox"/> Rubella <input type="checkbox"/> MDR-TB <input type="checkbox"/> Chikungunya Fever <input type="checkbox"/> West Nile Fever <input type="checkbox"/> Typhus				<input type="checkbox"/> Pertussis <input type="checkbox"/> Tetanus <input type="checkbox"/> Japanese Encephalitis <input type="checkbox"/> Tuberculosis <input type="checkbox"/> Congenital Rubella Syndrome Acute Hepatitis (except Hepatitis A) <input type="checkbox"/> Type B <input type="checkbox"/> Type C <input type="checkbox"/> Type D <input type="checkbox"/> Type E <input type="checkbox"/> Unspecified (070x) <input type="checkbox"/> Mumps <input type="checkbox"/> Legionellosis <input type="checkbox"/> Invasive Haemophilus Influenzae Type b Infection <input type="checkbox"/> Syphilis <input type="checkbox"/> Gonorrhoea <input type="checkbox"/> Neonatal Tetanus <input type="checkbox"/> Enteroviruses Infection with Severe Complications AIDS <input type="checkbox"/> HIV infection <input type="checkbox"/> AIDS Specify risk factors for HIV/AIDS infection : _____ Confirmation Unit of Western Blot : _____ Confirmation Unit of RT-PCR : _____ Confirmation Unit of DNA-PCR : _____ <input type="checkbox"/> Hansen's Disease										<input type="checkbox"/> Herpesvirus B Infection <input type="checkbox"/> Leptospirosis <input type="checkbox"/> Melioidosis <input type="checkbox"/> Botulism <input type="checkbox"/> Invasive Pneumococcal Disease <input type="checkbox"/> Q fever <input type="checkbox"/> Murine Typhus <input type="checkbox"/> Lyme Disease <input type="checkbox"/> Tularemia <input type="checkbox"/> Scrub Typhus <input type="checkbox"/> Varicella <input type="checkbox"/> Cat-Scratch Disease <input type="checkbox"/> Toxoplasmosis <input type="checkbox"/> Severe Complicated Influenza Case <input type="checkbox"/> Creutzfeldt-Jakob disease Category V Communicable Diseases <input type="checkbox"/> Rift Valley Fever <input type="checkbox"/> Marburg Haemorrhagic Fever <input type="checkbox"/> Yellow Fever <input type="checkbox"/> Ebola Haemorrhagic Fever <input type="checkbox"/> Lassa Fever <input type="checkbox"/> Others (0000) _____			
IV. Remarks	1. Tuberculosis : <input type="checkbox"/> Acid fast stain : <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Not tested <input type="checkbox"/> Tested but not detected · Date of Testing: _____ (y/m/d) <input type="checkbox"/> TB culture : <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Not tested <input type="checkbox"/> Tested but not detected · Date of Testing: _____ (y/m/d) <input type="checkbox"/> Typical tuberculosis pathology report · Date of Testing : _____ (y/m/d) · <input type="checkbox"/> pleural effusion <input type="checkbox"/> Chest and other X-ray examination : <input type="checkbox"/> Normal <input type="checkbox"/> No cavity <input type="checkbox"/> With cavity · Date of Examination: _____ (y/m/d) ;																	
	2. Testing result by reported hospital :																	

This form shall be in two copies; one copy is for the Health Bureau.
 ※ For outbreaks of communicable diseases or important communicable diseases (in red), please notify in advance the local health bureau by telephone or FAX, and then fill in and send this report. Diseases in red must be reported in 24 hours. Diseases in black shall be reported in one week. Diseases in green must be reported in one month. Diseases in blue are non-notifiable diseases, suspected cases must be reported as soon as possible.

For Health Agency

Signed by Person-in-charge		Signed by Section Chief	
----------------------------	--	-------------------------	--

Express Mail

Reply Letter

Floor __ No __ Alley __ Lane __ Section __ Road / Street _____
_____ Township / District _____ County / City

To : _____ Health Bureau, Disease Control Section
Floor __ No __ Alley __ Lane __ Section __ Road / Street _____
_____ Township / District _____ County / City

Instructions for filling in the report :

- (1) Leprosy were renamed as Hansen's disease and HIV infection were belong to category 3 of communicable disease Since Nov. 1, 2008, announced under Sue-So-Ji No. 0970001187 on October 24, 2008.
- (2) Botulism poisoning, rabies : On detection of suspected cases, please contact health agencies immediately for anti-toxin, vaccines or immunoglobulin for treatment.
- (3) On detection of acute intestinal tract communicable diseases such as suspected cholera, typhoid, dysentery, Pertussis, Meningococcal Meningitis specimens shall be collected for laboratory testing before medication. For specimen collection for cases of other communicable diseases, please refer to the "Manual of Standard Operational Procedures for Specimen Collection for Disease Control" of the Centers for Disease Control, or directly contact the local health bureau (station).
- (4) Acute Viral Hepatitis Unspecified- the serological test has been tagged items are negative. The reporting of Acute viral Hepatitis D,E and Unspecified shall send the specimen to CDC lab. For specimen collection of the rest acute viral hepatitis, please refer to the "Manual of Standard Operation Procedures for specimen collection of Disease control.
- (5) HIV infection : Cases must be confirmed positive by the Western Blot assay. When reporting, hospitals shall attach laboratory testing report of positive by the Western Blot or indicate agent of confirmation testing. AIDS : Cases must be confirmed positive by the Western Blot assay; cases are considered infected only when they show symptoms o f opportunistic infections such as candidiasis or pneumocystis carinii pneumonia (PCP) ;an additional "report of AIDS case" should be filled out.
HIV/AIDS, Gonorrhea and Syphilis : the married state of the case must be filled out.
- (6) This report may be mailed or faxed to the local health agency or internet communications. When necessary, report can be made directly by telephone to the local health agency (report will be filled out by person-in-charge.)
- (7) Website : <https://ida4.cdc.gov.tw/hospital>

For further information, please contact :
_____ Health Bureau, Disease Control Section
Hot Line : _____

appendix 4

2008 calendar for re-defined months

	January								February								March						
	Sun	Mon	Tue	Wed	Thu	Fri	Sat		Sun	Mon	Tue	Wed	Thu	Fri	Sat		Sun	Mon	Tue	Wed	Thu	Fri	Sat
week 1			1	2	3	4	5							4	2								4
week 2	6	7	8	9	10	11	12	week 6	3	4	5	6	7	8	9	week 10	2	3	4	5	6	7	8
week 3	13	14	15	16	17	18	19	week 7	10	11	12	13	14	15	16	week 11	9	10	11	12	13	14	15
week 4	20	21	22	23	24	25	26	week 8	17	18	19	20	21	22	23	week 12	16	17	18	19	20	21	22
week 5	27	28	29	30	31	1	2	week 9	24	25	26	27	28	29	1	week 13	23	24	25	26	27	28	29
																	30	31					

	April								May								June						
	Sun	Mon	Tue	Wed	Thu	Fri	Sat		Sun	Mon	Tue	Wed	Thu	Fri	Sat		Sun	Mon	Tue	Wed	Thu	Fri	Sat
week 14	30	31	1	2	3	4	5	week 18	27	28	29	30	1	2	3	week 23	1	2	3	4	5	6	7
week 15	6	7	8	9	10	11	12	week 19	4	5	6	7	8	9	10	week 24	8	9	10	11	12	13	14
week 16	13	14	15	16	17	18	19	week 20	11	12	13	14	15	16	17	week 25	15	16	17	18	19	20	21
week 17	20	21	22	23	24	25	26	week 21	18	19	20	21	22	23	24	week 26	22	23	24	25	26	27	28
	27	28	29	30				week 22	25	26	27	28	29	30	31		29	30					

	July								August								September						
	Sun	Mon	Tue	Wed	Thu	Fri	Sat		Sun	Mon	Tue	Wed	Thu	Fri	Sat		Sun	Mon	Tue	Wed	Thu	Fri	Sat
week 27	29	30	1	2	3	4	5							4	2	week 36	31	1	2	3	4	5	6
week 28	6	7	8	9	10	11	12	week 32	3	4	5	6	7	8	9	week 37	7	8	9	10	11	12	13
week 29	13	14	15	16	17	18	19	week 33	10	11	12	13	14	15	16	week 38	14	15	16	17	18	19	20
week 30	20	21	22	23	24	25	26	week 34	17	18	19	20	21	22	23	week 39	21	22	23	24	25	26	27
week 31	27	28	29	30	31	1	2	week 35	24	25	26	27	28	29	30		28	29	30				
									31														

	October								November								December						
	Sun	Mon	Tue	Wed	Thu	Fri	Sat		Sun	Mon	Tue	Wed	Thu	Fri	Sat		Sun	Mon	Tue	Wed	Thu	Fri	Sat
week 40	28	29	30	1	2	3	4								4	week 49	30	1	2	3	4	5	6
week 41	5	6	7	8	9	10	11	week 45	2	3	4	5	6	7	8	week 50	7	8	9	10	11	12	13
week 42	12	13	14	15	16	17	18	week 46	9	10	11	12	13	14	15	week 51	14	15	16	17	18	19	20
week 43	19	20	21	22	23	24	25	week 47	16	17	18	19	20	21	22	week 52	21	22	23	24	25	26	27
week 44	26	27	28	29	30	31	1	week 48	23	24	25	26	27	28	29	week 53	28	29	30	31			
									30														

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List of information providers

Centers for Disease Control, Department of Health, Executive Yuan
Lo-Sheng Sanatorium, Department of Health, Executive Yuan
Center for Disease Control of Taipei City Health Department
Taipei County Government Health Bureau
Keelung City Health Bureau
Yilan County Government Health Bureau
Kinmen County Health Bureau
Lienchiang County Health Bureau
Taoyuan County Government Health Bureau
Hsinchu City Health Bureau
Hsinchu County Government Health Bureau
Miaoli County Government Health Bureau
Taichung City Health Bureau
Taichung County Health Bureau
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