

Timeliness of Dengue Fever Reporting, Tainan City, 2014

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Abstract

The magnitude of dengue epidemic is affected by climate condition, vector distribution, and prevention and control efforts. In Tainan City, during 2014, the average days from illness onset to medical attendance was 0.8 for confirmed dengue cases, and the average days from onset to notification was 4.4. The majority of reports (n = 202, 49%) were from medical centers. Timely reporting of dengue fever cases facilitates subsequent disease controls. We recommended enhancing awareness of local clinics, reminding physicians of dengue symptoms, and increasing patient compliance with reporting and control efforts.

Keywords : Dengue fever, Reporting time

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Outbreak of Locally Acquired Cases of Dengue Fever, Shetou, Changhua County, 2015

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Abstract

On November 18, 2015, the Public Health Bureau of Changhua County was notified of a confirmed case of dengue fever. The patient, 34-year-old man, had fever for 3 days, and was a resident of Shetou township who had no history of recent travel off the town. Retrospective and prospective surveillance of potential cases with febrile illness within one month had identified 10 additional confirmed cases, with dates of onset ranging from late October to November 22. All the cases lived within 100-meter radius of the first case and had no history of travel to dengue endemic regions. The outbreak was stopped after the immediate implement of vector control measures.

Keywords: Indigenous dengue fever, Community clustering

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Numbers of New Cases and Cumulative Cases of Notifiable Infectious Diseases (by week of diagnosis)

Classification	Case diagnosis week Disease Diagnosed ¹	Week 24		Week 1–24	
		2016	2015	2016	2015
Category I	Plague	0	0	0	0
	Rabies	0	0	0	0
	SARS	0	0	0	0
	Smallpox	0	0	0	0
Category II	Acute Flaccid Paralysis	0	0	15	8
	Acute Viral Hepatitis type A	29	1	433	37
	Amoebiasis	7	7	126	173
	Anthrax	0	0	0	0
	Chikungunya Fever	1	0	7	3
	Cholera	0	0	0	4
	Dengue Fever	5	9	566	272
	Diphtheria	0	0	0	0
	Enterohemorrhagic E. coli Infection	0	0	0	0
	Epidemic Typhus Fever	0	0	0	0
	Hantavirus Pulmonary Syndrome	0	0	0	0
	Hemorrhagic Fever with Renal Syndrome	0	0	3	0
	Malaria	0	0	5	4
	Measles	0	0	4	24
	Meningococcal Meningitis	0	0	2	2
	Paratyphoid Fever	0	0	1	3
	Poliomyelitis	0	0	0	0
	Rubella	0	0	4	6
	Shigellosis	5	5	100	89
Typhoid fever	0	1	2	15	
West Nile Fever	0	0	0	0	
Category III	Acute Viral Hepatitis type B	1	2	44	60
	Acute Viral Hepatitis type C ⁵	7	5	98	104
	Acute Viral Hepatitis type D	0	0	1	1
	Acute Viral Hepatitis type E	1	0	9	1
	Acute Viral Hepatitis untype	0	0	0	0
	Congenital Rubella Syndrome	0	0	0	0
	Enteroviruses Infection with Severe Complications	0	0	7	3
	Haemophilus Influenza type b Infection	1	0	7	1
	Japanese Encephalitis	1	2	3	3
	Legionellosis	6	3	49	73
	Mumps ²	9	17	260	369
	Neonatal Tetanus	0	0	0	0
	Pertussis	0	4	8	61
	Tetanus ²	0	0	5	5
Category IV	Botulism	1	0	3	1
	Brucellosis	0	0	0	0
	Complicated Influenza	3	50	1835	587
	Complicated Varicella ⁴	0	0	20	29
	Endemic Typhus Fever	1	1	7	9
	Herpesvirus B Infection	0	0	0	0
	Invasive Pneumococcal Disease	7	5	328	291
	Leptospirosis	2	0	28	27
	Lyme Disease	0	0	0	0
	Melioidosis	1	0	6	14
	Q Fever	0	1	19	18
	Scrub Typhus	20	8	183	140
	Toxoplasmosis	0	0	5	6
Tularremia	0	0	0	0	
Category V	Ebola Virus Disease	0	0	0	0
	Ebola-Marburg Hemorrhagic Fever	0	0	0	0
	Novel Influenza A Virus Infections ⁶	0	0	0	0
	Lassa Fever	0	0	0	0
	Rift Valley Fever	0	0	0	0
	Middle East Respiratory Syndrome Coronavirus Yellow Fever	0 0	0 0	0 0	0 0

1. The following 8 chronic diseases are excluded from the table: MDR-TB, Tuberculosis, Syphilis, Gonorrhea, HIV Infection, AIDS, Hansen Disease and Creutzfeldt-Jakob Disease.
2. Reported cases.
3. Since 2014/1/1, "Varicella" was modified to "Complicated Varicella".
4. Since 2014/3/6, the case definition for confirmed Acute hepatitis C was changed from "meet the clinical and laboratory conditions" to "meet the clinical or laboratory conditions".
5. Since 2014/7/1, various subtypes of human cases of avian influenza are reported as "novel influenza A virus infections", a Category V Notifiable Infectious Disease. The original "H5N1 flu" and "H7N9 flu", which were respectively listed as a Category I Notifiable Infectious Disease and a Category V Notifiable Infectious Disease were removed from the list on the same day.
6. Since 2016/1/22, "Zika Virus Infection" was listed as a Notifiable Infectious Disease.

Suspected Clusters

- Ten clusters were reported, including 7 diarrhea clusters, 2 tuberculosis clusters, and 1 upper respiratory tract infection cluster.

Imported Infectious Diseases

- 14 confirmed cases were imported from 5 countries during Week 24 of 2016.

Disease \ Country	Indonesia	China	Malaysia	Turkey	Vietnam	Total
Dengue Fever	2		2			4
Amoebiasis	3					3
Melioidosis					1	1
Chikungunya Fever	1					1
Legionellosis		1				1
Hepatitis A	1					1
Hepatitis C				1		1
Hepatitis B		1				1
Hepatitis E	1					1
Total	8	2	2	1	1	14

Note: The statistics listed in this table include imported cases that were either confirmed or updated* in the previous week.

- A total of 317 confirmed cases were imported from 26 countries in 2016.
- Top 3 imported diseases : Dengue fever (130), Amoebiasis (58), Shigellosis (45).
- Top 3 countries responsible for most imported cases : Indonesia (144), Thailand (29), Malaysia (25).

Summary of Epidemic

- **Enterovirus** : The number of visits to outpatient services and ER for enterovirus infection has increased slowly and the peak of enterovirus season is fast approaching. Coxsackie A virus is currently the dominant strain circulating in the community. Sporadic cases of enterovirus 71 infection have been confirmed recently. This year, a total of 72 cases of enterovirus 71 infection, including 6 severe cases, 61 mild cases and 5 suspected severe cases, have been confirmed. The public is urged to enhance personal hygiene and stay vigilant for suspicious symptoms of enterovirus infection with severe complications in infants.

- **Dengue Fever** : Imported cases have continued to be reported. The occurrence of intermittent rain has become less frequent, yet it has still promoted mosquito growth, and elevated the risk of dengue transmission. The public is urged to clean up and remove any vector breeding sites and take prevention measures against mosquito bites.
- **Scrub Typhus** : The numbers of cases reported and confirmed are expected to continue increasing. The peak of scrub typhus season is during the months of June to July. The endemic areas are primarily eastern and outlying islands of Taiwan.
- **Japanese Encephalitis** : The peak of Japanese encephalitis season is during the months of June to July. The endemic areas are primarily central and southern Taiwan.

Numbers of New Cases and Cumulative Cases of Notifiable Infectious Diseases (by week of diagnosis)

Case diagnosis week		Week 25		Week 1—25	
Classification	Disease Diagnosed ¹	2016	2015	2016	2015
Category I	Plague	0	0	0	0
	Rabies	0	0	0	0
	SARS	0	0	0	0
	Smallpox	0	0	0	0
Category II	Acute Flaccid Paralysis	2	0	17	8
	Acute Viral Hepatitis type A	37	3	470	40
	Amoebiasis	6	7	132	180
	Anthrax	0	0	0	0
	Chikungunya Fever	0	0	7	3
	Cholera	0	0	0	4
	Dengue Fever	4	17	570	289
	Diphtheria	0	0	0	0
	Enterohemorrhagic E. coli Infection	0	0	0	0
	Epidemic Typhus Fever	0	0	0	0
	Hantavirus Pulmonary Syndrome	0	0	0	0
	Hemorrhagic Fever with Renal Syndrome	0	0	3	0
	Malaria	1	0	6	4
	Measles	1	1	5	25
	Meningococcal Meningitis	0	0	2	2
	Paratyphoid Fever	0	0	1	3
	Poliomyelitis	0	0	0	0
	Rubella	0	0	4	6
	Shigellosis	5	5	105	94
	Typhoid fever	0	2	2	17
West Nile Fever	0	0	0	0	
Category III	Acute Viral Hepatitis type B	0	0	44	60
	Acute Viral Hepatitis type C ⁵	5	2	103	106
	Acute Viral Hepatitis type D	0	0	1	1
	Acute Viral Hepatitis type E	1	0	10	1
	Acute Viral Hepatitis untype	0	0	0	0
	Congenital Rubella Syndrome	0	0	0	0
	Enteroviruses Infection with Severe Complications	1	0	8	3
	Haemophilus Influenza type b Infection	0	0	7	1
	Japanese Encephalitis	1	3	4	6
	Legionellosis	3	3	52	76
	Mumps ²	16	20	276	389
	Neonatal Tetanus	0	0	0	0
	Pertussis	0	1	8	62
	Tetanus ²	0	0	5	5
	Category IV	Botulism	0	0	3
Brucellosis		0	0	0	0
Complicated Influenza		2	38	1837	625
Complicated Varicella ⁴		0	2	20	31
Endemic Typhus Fever		0	1	7	10
Herpesvirus B Infection		0	0	0	0
Invasive Pneumococcal Disease		6	5	334	296
Leptospirosis		2	1	30	28
Lyme Disease		0	0	0	0
Melioidosis		0	1	6	15
Q Fever		4	2	23	20
Scrub Typhus		19	11	202	151
Toxoplasmosis		0	0	5	6
Tularremia	0	0	0	0	
Category V	Ebola Virus Disease	0	0	0	0
	Ebola-Marburg Hemorrhagic Fever	0	0	0	0
	Novel Influenza A Virus Infections ⁶	0	0	0	0
	Lassa Fever	0	0	0	0
	Rift Valley Fever	0	0	0	0
	Middle East Respiratory Syndrome Coronavirus	0	0	0	0
Yellow Fever	0	0	0	0	

1. The following 8 chronic diseases are excluded from the table: MDR-TB, Tuberculosis, Syphilis, Gonorrhoea, HIV Infection, AIDS, Hansen Disease and Creutzfeldt-Jakob Disease.
2. Reported cases.
3. Since 2014/1/1, "Varicella" was modified to "Complicated Varicella".
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6. Since 2016/1/22, "Zika Virus Infection" was listed as a Notifiable Infectious Disease.

Suspected Clusters

- Eighteen clusters were reported, including 7 tuberculosis clusters, 6 diarrhea clusters, 3 varicella clusters, and 2 upper respiratory tract infection clusters.

Imported Infectious Diseases

- 22 confirmed cases were imported from 11 countries during Week 25 of 2016.

Country Disease	Indonesia	Thailand	Japan	Australia	Singapore	Korea
Hepatitis A		5	2	1		1
Dengue Fever	1	1			1	
Amoebiasis	3					
Shigellosis	2					
Malaria						
Total	6	6	2	1	1	1

Note: The statistics listed in this table include imported cases that were either confirmed or updated* in the previous week.

Country Disease	Cambodia	Hong Kong	Sierra Leone	Malaysia	Philippines	Total
Hepatitis A		1				10
Dengue Fever					1	4
Amoebiasis				1		4
Shigellosis	1					3
Malaria			1			1
Total	1	1	1	1	1	22

Note: The statistics listed in this table include imported cases that were either confirmed or updated* in the previous week.

- A total of 340 confirmed cases were imported from 28 countries in 2016.
- Top 3 imported diseases : Dengue fever (134), Amoebiasis (62), Hepatitis A (51).
- Top 3 countries responsible for most imported cases : Indonesia (151), Thailand (35), Malaysia (26).

Summary of Epidemic

- Enterovirus** : The number of visits to outpatient services and ER for enterovirus infection is expected to decrease gradually for the upcoming summer vacation. Coxsackie A virus is currently the dominant strain circulating in the community. Sporadic cases of enterovirus 71 infection have been confirmed recently. This year, a total of 81 cases of enterovirus 71 infection, including 8 severe cases, 68 mild cases and 5 suspected severe cases, have been confirmed. The public is urged to enhance personal hygiene and stay vigilant for suspicious symptoms of enterovirus infection with severe complications in infants.

- **Dengue Fever** : Imported cases have continued to be reported. The recent high temperatures and occurrence of intermittent rain have still promoted mosquito growth, and elevated the risk of dengue transmission. The public is urged to clean up and remove any vector breeding sites and take prevention measures against mosquito bites.
- **Scrub Typhus** : The numbers of cases reported and confirmed are expected to continue increasing. The peak of scrub typhus season is during the months of June to July. The endemic areas are primarily eastern and outlying islands of Taiwan.
- **Japanese Encephalitis** : The peak of Japanese encephalitis season is during the months of June to July. The endemic areas are primarily central and southern Taiwan.

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