

### Health Behavior Survey and Community Center to Promote Health in Men Who Have Sex with Men

Pei-Ling Liu<sup>\*</sup>, Yen-Fang Huang, Chuan-Yin Kao, Chang-Hsun Chen

#### Abstract

The key to control global AIDS epidemic has to target to the five key populations, including the group of men who have sex with men, as these populations are at higher risk of HIV infection. Since 2010, Taiwan Centers for Disease Control and nongovernmental organizations continue to promote Community Center for men who have sex with men (MSM) in Taipei, Northern, Central, Southern and other places, in order to extend AIDS prevention, and provide consultation, education, screening and other services; and to assist linking the positive cases to medical resource system.

Results from this survey as of 2012 found that about 50% of MSM have heard about Community Center; among them, about 50% who have visited it, and 90% of the visitors reported they would recommend a friend to the Center. Fifty percent of respondents reported that they always or often use a condom every time during sex. The most often used addiction drug during sex is, in order, ecstasy, ketamine, and amphetamines; and those who use drugs during sex do not use a condom often. From 2012 to 2014, the total number of visitors increased from 5,992 to 6,334; the people receiving HIV screening increased from 2,228 to 2,337, and the proportion of positive screening results decreased from 3.0% to 1.1%.

Our results revealed that the MSM Community Center provides a specific venue to service, exclusive and friendly; and the provision of professional consulting service before and after screening has effectively improved its successful rate in HIV counseling and screening. All of these showed that the MSM Community Center has its unique benefits.

**Keywords:** MSM, HIV/AIDS, Community center

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## Transnational Health Monitoring of Infectious Diseases — Experience of the First Imported Case of Rubella in 2015

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### Abstract

With increasing international economic and touristic exchanges, the vehicles that business and recreational travel relied on, having the characteristics of long duration, adjacent seat, and confined space, are prone to transmission of air- and droplet- borne infectious diseases, such as tuberculosis, measles, and rubella. This article reported our experience of epidemiologic investigation and contact tracing of the first imported rubella case in 2015, and explored the difficulties, obstacles and concerns of transnational health monitoring of infectious diseases under time constrain. Our recommendations are: requesting pre-employment immunization certificate for those workers with higher exposure risks, providing a free dose of measles-mumps-rubella vaccine for women of child-bearing age who are tested negative for rubella antibody, refining operational protocols for prevention and control of communicable diseases, establishing standard operations and interface for synchronous match between the National Immigration System and the National Household and Conscription Registration System, and cultivating front line colleagues to prioritize resources on the prevention and control of communicable diseases more efficiently.

**Keywords:** Transnational infectious diseases, Health monitoring and analysis, IHR Focal Point, Rubella, Imported cases, Contacts

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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 <sup>1</sup>	Week 18		Week 1–18	
		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	1	13	7
	Acute Viral Hepatitis type A	26	1	239	27
	Amoebiasis	5	5	88	123
	Anthrax	0	0	0	0
	Chikungunya Fever	0	0	4	3
	Cholera	0	3	0	3
	Dengue Fever	5	6	533	202
	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	1	5	4
	Measles	1	1	3	2
	Meningococcal Meningitis	0	0	2	1
	Paratyphoid Fever	0	0	0	3
	Poliomyelitis	0	0	0	0
	Rubella	0	1	4	5
	Shigellosis	3	3	79	73
	Typhoid fever	1	0	2	12
	West Nile Fever	0	0	0	0
Category III	Acute Viral Hepatitis type B	2	3	31	41
	Acute Viral Hepatitis type C <sup>5</sup>	4	8	67	79
	Acute Viral Hepatitis type D	0	0	1	1
	Acute Viral Hepatitis type E	1	0	7	1
	Acute Viral Hepatitis untype	0	0	0	0
	Congenital Rubella Syndrome	0	0	0	0
	Enteroviruses Infection with Severe Complications	0	0	4	1
	Haemophilus Influenza type b Infection	1	0	4	1
	Japanese Encephalitis	0	0	0	0
	Legionellosis	3	3	37	56
	Mumps <sup>2</sup>	13	19	186	272
	Neonatal Tetanus	0	0	0	0
	Pertussis	0	2	6	48
	Tetanus <sup>2</sup>	0	1	3	2
	Category IV	Botulism	0	0	1
Brucellosis		0	0	0	0
Complicated Influenza		6	26	1817	372
Complicated Varicella <sup>4</sup>		0	2	15	23
Endemic Typhus Fever		0	1	3	2
Herpesvirus B Infection		0	0	0	0
Invasive Pneumococcal Disease		13	13	281	240
Leptospirosis		0	0	14	19
Lyme Disease		0	0	0	0
Melioidosis		0	0	5	11
Q Fever		2	0	13	14
Scrub Typhus		5	2	79	104
Toxoplasmosis		0	0	5	3
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 <sup>6</sup>	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".  
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.

### Suspected Clusters

- Fourteen clusters were reported, including 6 diarrhea clusters, 4 tuberculosis clusters, 2 varicella clusters, 1 upper respiratory tract infection cluster, and 1 influenza-like illness cluster.

### Imported Infectious Diseases

- 11 confirmed cases were imported from 6 countries during Week 18 of 2016.

Country Disease	Indonesia	Thailand	Malaysia	Hong Kong	Japan	India	Total
Dengue Fever	2	2	2				6
Hepatitis A		1		1	1		3
Typhoid fever						1	1
Amoebiasis	1						1
<b>Total</b>	3	3	2	1	1	1	11

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

- A total of 219 confirmed cases were imported from 22 countries in 2016.
- Top 3 imported diseases : Dengue fever (98), Amoebiasis (36), Shigellosis (34).
- Top 3 countries responsible for most imported cases : Indonesia (101), Philippines (19), Malaysia (18).

### Summary of Epidemic

- **Enterovirus** : As the enterovirus epidemic season has begun, the enterovirus activity is expected to increase continuously. Coxsackie A virus is currently the dominant strain circulating in the community. This year, a total of 24 cases of enterovirus 71 infection, including 3 severe cases, 19 mild cases and 2 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 continuously been reported. The recent average temperature in southern Taiwan is over 28-29°C, which favors mosquito growth. The public is urged to clean up and remove any vector breeding sites and take prevention measures against mosquito bites.

- **Zika Virus Infection** : The global epidemic of Zika virus infection has continued to increase. Thus far, at least 57 countries and/or territories worldwide, have reported local outbreaks of Zika virus infection, mainly in 37 countries and/or territories in Latin America and the Caribbean region.

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

Classification	Case diagnosis week Disease Diagnosed <sup>1</sup>	Week 19		Week 1—19	
		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	13	7
	Acute Viral Hepatitis type A	37	1	276	28
	Amoebiasis	3	10	91	133
	Anthrax	0	0	0	0
	Chikungunya Fever	0	0	4	3
	Cholera	0	1	0	4
	Dengue Fever	4	8	537	210
	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	1	1	4	3
	Meningococcal Meningitis	0	0	2	1
	Paratyphoid Fever	0	0	0	3
	Poliomyelitis	0	0	0	0
	Rubella	0	1	4	6
	Shigellosis	5	4	84	77
	Typhoid fever	0	1	2	13
West Nile Fever	0	0	0	0	
Category III	Acute Viral Hepatitis type B	1	2	32	43
	Acute Viral Hepatitis type C <sup>5</sup>	8	3	75	82
	Acute Viral Hepatitis type D	0	0	1	1
	Acute Viral Hepatitis type E	0	0	7	1
	Acute Viral Hepatitis untype	0	0	0	0
	Congenital Rubella Syndrome	0	0	0	0
	Enteroviruses Infection with Severe Complications	0	0	4	1
	Haemophilus Influenza type b Infection	1	0	5	1
	Japanese Encephalitis	1	0	1	0
	Legionellosis	2	2	39	58
	Mumps <sup>2</sup>	11	11	197	283
	Neonatal Tetanus	0	0	0	0
	Pertussis	0	0	6	48
	Tetanus <sup>2</sup>	0	0	3	2
	Category IV	Botulism	0	0	1
Brucellosis		0	0	0	0
Complicated Influenza		7	19	1824	391
Complicated Varicella <sup>4</sup>		0	0	15	23
Endemic Typhus Fever		0	1	3	3
Herpesvirus B Infection		0	0	0	0
Invasive Pneumococcal Disease		11	6	292	246
Leptospirosis		2	3	16	22
Lyme Disease		0	0	0	0
Melioidosis		0	0	5	11
Q Fever		0	0	13	14
Scrub Typhus		11	3	90	107
Toxoplasmosis		0	0	5	3
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 <sup>6</sup>	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, Gonorrhea, 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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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.

### Suspected Clusters

- Twelve clusters were reported, including 7 diarrhea clusters, 3 tuberculosis clusters, 1 influenza-like illness cluster, and 1 enterovirus cluster.

### Imported Infectious Diseases

- 17 confirmed cases were imported from 8 countries during Week 19 of 2016.

Country Disease	Indonesia	Thailand	India	Korea	Vietnam	China	Hong Kong	Malaysia	Total
Hepatitis A		3		1		1			5
Amoebiasis	3				1				4
Dengue Fever	3							1	4
Shigellosis	1		2						3
Measles							1		1
<b>Total</b>	<b>7</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>17</b>

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

- A total of 236 confirmed cases were imported from 23 countries in 2016.
- Top 3 imported diseases : Dengue fever (102), Amoebiasis (40), Shigellosis (37).
- Top 3 countries responsible for most imported cases : Indonesia (108), Philippines (19), Malaysia (18).

### Summary of Epidemic

- **Enterovirus** : As the enterovirus epidemic season has begun, the enterovirus activity is expected to increase continuously. Coxsackie A virus is currently the dominant strain circulating in the community. This year, a total of 31 cases of enterovirus 71 infection, including 3 severe cases, 25 mild cases and 3 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 continuously been reported. The recent average temperature in southern Taiwan is over 28°C with intermittent rain, which favors mosquito growth. The public is urged to clean up and remove any vector breeding sites and take prevention measures against mosquito bites.

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