

### Migrant Workers with SARS-COV-2 Detected after Departure in September 2020

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#### Abstract

Taiwan Center for Disease Control received notifications from 2 companies that 4 migrant workers had tested positive for SARS-CoV-2 after returning to the Philippines in September 2020. After investigation, the 4 Filipino workers did not know each other, nor did they live or work together. A total of 122 contacts were listed. The results of the nasopharyngeal swabs polymerase chain reaction test for SARS-CoV-2 were all negative. The health status of all employees in the two companies was monitored until September 25 and October 6, respectively. During this period, no employees had COVID-19 symptoms, thus the COVID-19 cluster was ruled out.

This investigation faced many challenges, such as limited information from the Filipino government, the suspect case workers' reluctance to respond to our investigation, and poor communication. The investigation relied on the collaboration between public health and the overseas manpower agency. This article describes the investigation of the suspected COVID-19 cluster and provides experience for managing similar situations in the future.

**Keyword:** COVID-19, cluster, migrant workers, confirmed overseas, IHR

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Weekly Data of Notifiable Inases (by week of diagnosis)

Case diagnosis year		Week 14★		Week 1–14			
Classification	Disease Diagnosed	2022	2021	2022		2021	
				Total cases★	Imported cases	Total cases★	Imported cases
Category I	Plague	0	0	0	0	0	0
	Rabies	0	0	0	0	0	0
	SARS	0	0	0	0	0	0
	Smallpox	0	0	0	0	0	0
Category II	Acute Flaccid Paralysis	1	1	7	0	8	0
	Acute Viral Hepatitis type A	0	1	79	0	18	0
	Amoebiasis	2	5	54	11	59	29
	Anthrax	0	0	0	0	0	0
	Chikungunya Fever	0	0	0	0	1	1
	Cholera	0	0	0	0	0	0
	Dengue Fever	0	0	0	0	4	4
	Diphtheria	0	0	0	0	0	0
	Enterohemorrhagic E. coli Infection	0	0	0	0	0	0
	Epidemic Typhus Fever	0	0	0	0	0	0
	Hantavirus syndrome	0	1	0	0	4	0
	Malaria	0	0	1	1	1	1
	Measles	0	0	0	0	0	0
	Meningococcal Meningitis	0	0	0	0	0	0
	Paratyphoid Fever	0	0	0	0	1	0
	Poliomyelitis	0	0	0	0	0	0
	Rubella	0	0	0	0	0	0
Shigellosis	2	7	24	0	56	0	
Typhoid fever	0	0	1	0	1	0	
West Nile Fever	0	0	0	0	0	0	
Zika virus infection	0	0	0	0	0	0	
Category III	Acute Viral Hepatitis type B	0	3	37	0	35	1
	Acute Viral Hepatitis type C	10	8	130	1	175	0
	Acute Viral Hepatitis type D	0	0	0	0	0	0
	Acute Viral Hepatitis type E	0	0	4	0	4	0
	Congenital Syphilis	0	0	0	0	0	0
	Congenital Rubella Syndrome	0	0	0	0	0	0
	Enteroviruses Infection with Severe Complications	0	0	0	0	1	0
	Haemophilus Influenza type b Infection	0	0	1	0	0	0
	Japanese Encephalitis	0	0	0	0	0	0
	Legionnaires' Disease	3	4	95	0	94	0
	Mumps	6	5	63	0	127	1
	Neonatal Tetanus	0	0	0	0	0	0
	Pertussis	0	0	0	0	0	0
Tetanus	0	0	1	0	2	0	
Category IV	Botulism	0	0	0	0	0	0
	Brucellosis	0	0	0	0	0	0
	Complicated Varicella	1	2	8	0	13	0
	Endemic Typhus Fever	0	1	0	0	6	0
	Herpesvirus B Infection	0	0	0	0	0	0
	Influenza Case with Severe Complications	0	0	0	0	1	0
	Invasive Pneumococcal Disease	3	6	49	0	95	0
	Leptospirosis	1	0	9	0	11	0
	Listeriosis	3	2	34	0	45	0
	Lyme Disease	0	0	1	1	0	0
	Melioidosis	0	0	0	0	5	0
	Q Fever	0	0	2	0	0	0
	Scrub Typhus	0	3	35	0	51	0
Toxoplasmosis	0	0	10	0	4	0	
Tularemia	0	0	0	0	0	0	
Category V	Ebola Virus Disease	0	0	0	0	0	0
	Lassa Fever	0	0	0	0	0	0
	Marburg Hemorrhagic Fever	0	0	0	0	0	0
	Middle East Respiratory Syndrome	0	0	0	0	0	0
	Coronavirus Infections	0	0	0	0	0	0
	Novel Influenza A Virus Infections	0	0	0	0	0	0
	Rift Valley Fever	0	0	0	0	0	0
	Severe Pneumonia with Novel Pathogens	2981	11	10165	6330	248	227
Yellow Fever	0	0	0	0	0	0	

- ★The weekly and cumulative total numbers include indigenous and imported cases of notifiable infectious diseases.
- MDR-TB, Tuberculosis, Syphilis, Gonorrhoea, HIV Infection, AIDS, Hansen's Disease and Creutzfeldt-Jakob Disease are excluded from the table.
- Numbers of mumps and tetanus cases are summed up by the week of report.

## Suspected Clusters

- Nineteen clusters related to diarrhea (13), tuberculosis (3), upper respiratory tract infection (3) were reported during week 14.

## Imported Infectious Diseases

- There were 826 imported cases from 44 countries during week 14.  
**Severe Pneumonia with Novel Pathogens:** 826 cases from Vietnam 309, Indonesia 163, the Philippines 53, USA 40, Singapore 33, Thailand 32, UK 23, Malaysia 16, Korea 16, Hong Kong 15, Australia 14, France 13, UAE 13, Germany 12, China 11, and the remaining 29 countries have less than 10 cases.
- During week 1–14, there were 6344 imported cases from 112 countries. The top three countries are Vietnam (1476), USA (1091), and Indonesia (794).
- During week 1–14, the notifiable diseases with the highest number of imported cases are Severe Pneumonia with Novel Pathogens (6330).

## Summary of Epidemic

- **Severe Pneumonia with Novel Pathogens :** There have been new clusters without known sources of infection under investigation in many counties, and the epidemic has risen after the national holiday. The risk of locally-acquired infection in Taiwan is rising. The number of new COVID-19 cases has decreased globally, but it is still critical. The risk of COVID-19 imported cases in Taiwan is persistence.

### Weekly Data of Notifiable Infectious Diseases (by week of diagnosis)

Case diagnosis year		Week 15★		Week 1–15			
Classification	Disease Diagnosed	2022	2021	2022		2021	
				Total cases★	Imported cases	Total cases★	Imported cases
Category I	Plague	0	0	0	0	0	0
	Rabies	0	0	0	0	0	0
	SARS	0	0	0	0	0	0
	Smallpox	0	0	0	0	0	0
Category II	Acute Flaccid Paralysis	1	3	8	0	11	0
	Acute Viral Hepatitis type A	2	1	81	0	19	0
	Amoebiasis	4	8	58	12	67	31
	Anthrax	0	0	0	0	0	0
	Chikungunya Fever	0	0	0	0	1	1
	Cholera	0	0	0	0	0	0
	Dengue Fever	0	0	0	0	4	4
	Diphtheria	0	0	0	0	0	0
	Enterohemorrhagic E. coli Infection	0	0	0	0	0	0
	Epidemic Typhus Fever	0	0	0	0	0	0
	Hantavirus syndrome	0	0	0	0	4	0
	Malaria	0	0	1	1	1	1
	Measles	0	0	0	0	0	0
	Meningococcal Meningitis	0	0	0	0	0	0
	Paratyphoid Fever	0	0	0	0	1	0
	Poliomyelitis	0	0	0	0	0	0
	Rubella	0	0	0	0	0	0
Shigellosis	1	5	25	0	61	0	
Typhoid fever	0	0	1	0	1	0	
West Nile Fever	0	0	0	0	0	0	
Zika virus infection	0	0	0	0	0	0	
Category III	Acute Viral Hepatitis type B	1	3	38	0	38	1
	Acute Viral Hepatitis type C	9	14	139	1	189	0
	Acute Viral Hepatitis type D	0	0	0	0	0	0
	Acute Viral Hepatitis type E	0	0	4	0	4	0
	Congenital Syphilis	0	0	0	0	0	0
	Congenital Rubella Syndrome	0	0	0	0	0	0
	Enteroviruses Infection with Severe Complications	0	0	0	0	1	0
	Haemophilus Influenza type b Infection	0	1	1	0	1	0
	Japanese Encephalitis	0	0	0	0	0	0
	Legionnaires' Disease	10	5	105	0	99	0
	Mumps	7	14	70	0	141	1
	Neonatal Tetanus	0	0	0	0	0	0
	Pertussis	0	0	0	0	0	0
Tetanus	0	0	1	0	2	0	
Category IV	Botulism	0	0	0	0	0	0
	Brucellosis	0	0	0	0	0	0
	Complicated Varicella	2	1	10	0	14	0
	Endemic Typhus Fever	0	2	0	0	8	0
	Herpesvirus B Infection	0	0	0	0	0	0
	Influenza Case with Severe Complications	0	0	0	0	1	0
	Invasive Pneumococcal Disease	0	3	49	0	98	0
	Leptospirosis	2	0	11	0	11	0
	Listeriosis	2	5	36	0	50	0
	Lyme Disease	0	0	1	1	0	0
	Melioidosis	0	0	0	0	5	0
	Q Fever	0	0	2	0	0	0
	Scrub Typhus	0	3	35	0	54	0
Toxoplasmosis	1	1	11	0	5	0	
Tularemia	0	0	0	0	0	0	
Category V	Ebola Virus Disease	0	0	0	0	0	0
	Lassa Fever	0	0	0	0	0	0
	Marburg Hemorrhagic Fever	0	0	0	0	0	0
	Middle East Respiratory Syndrome	0	0	0	0	0	0
	Coronavirus Infections	0	0	0	0	0	0
	Novel Influenza A Virus Infections	0	0	0	0	0	0
	Rift Valley Fever	0	0	0	0	0	0
Severe Pneumonia with Novel Pathogens	7117	16	17282	7264	264	243	
Yellow Fever	0	0	0	0	0	0	

1. ★The weekly and cumulative total numbers include indigenous and imported cases of notifiable infectious diseases.  
2. MDR-TB, Tuberculosis, Syphilis, Gonorrhoea, HIV Infection, AIDS, Hansen’s Disease and Creutzfeldt-Jakob Disease are excluded from the table.  
3. Numbers of mumps and tetanus cases are summed up by the week of report.

### Suspected Clusters

- Fifteen clusters related to diarrhea (13), tuberculosis (1), upper respiratory tract infection (1) were reported during week 15.

### Imported Infectious Diseases

- There were 935 imported cases from 37 countries during week 15.  
**Severe Pneumonia with Novel Pathogens:** 934 cases from Vietnam 354, Indonesia 150, the Philippines 41, Thailand 40, USA 16, UK 16, Korea 13, Spain 11, Malaysia 10 and the remaining 28 countries have less than 10 cases.  
**Amoebiasis:** 1 case from Indonesia.
- During week 1–15, there were 7279 imported cases from 112 countries. The top three countries are Vietnam (1830), USA (1108), and Indonesia (945).
- During week 1–15, the notifiable diseases with the highest number of imported cases are Severe Pneumonia with Novel Pathogens (7264).

### Summary of Epidemic

- **Severe Pneumonia with Novel Pathogens :** Taiwan is in the stage of widespread transmission of COVID-19, and it is expected that the number of cases increase rapidly. The epidemic of COVID-19 has decreased globally, but it is still critical. The risk of COVID-19 imported cases in Taiwan is persistence.

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