

Preliminary Results of Ship Sanitation Inspections, Taiwan, 2011–2017

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Abstract

In accordance with International Health Regulations 2005 (IHR 2005) and Regulations Governing Quarantine at Ports, 10 international and specifically designated ports in Taiwan have issued 6,802 Ship Sanitation Certificates (SSC) from 2011 to 2017. Among the abovementioned SSCs, 7.1% ships were issued a Ship Sanitation Control Certificate (SSCC), indicating higher public health risks. Among all ports, the highest number and proportion (14%) of SSCCs are issued by National Kaohsiung Port. Preliminary results showed that the sanitation of oil tankers and general cargo ships were worse than that of other types of ships, but the locations and reasons of sanitation defects found in various ships were similar. Thus, we recommended that more manpower or sufficient inspection time shall be assessed and arranged while carrying out ship sanitation inspections such as oil tankers and general cargo ships.

In conclusion, 4.6 sanitation defects are noted in each SSCC on average, which was 23 times more than those found in each Ship Sanitation Control Exemption Certificate (SSCEC) on average. The main locations with sanitation defects included kitchen, warehouse and food storage areas. The main reasons of sanitation defects were vectors such as cockroaches and flies found. In addition, we recommended revising the current ship sanitation inspection information system in order to record inspections completely. Moreover, the complete data could be provided back to the ports and compared with data from other countries.

Keywords: Ship sanitation, Ship Sanitation Certificate, international ports, quarantine, communicable disease

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Quarantine Measurements of Cruise Ships at Keelung Port During COVID-19 Pandemic, Taiwan, 2020

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Abstract

Keelung port, which has developed cruise ship economics and established regular quarantine measures in recent years, has become the dominant berth port of cruise ships in Taiwan. In response to the rapid change of worldwide COVID-19 pandemic, Taiwan banned international cruise ships from berthing at international ports on February 6, 2020. During the period from January 31 to February 8, 2020, three cruise ships (DP, WD and AQ) called at Keelung port, and different quarantine measures were carried out, including shore risk assessment mode, shore quarantine mode and boarding quarantine mode, respectively. While COVID-19 pandemic shows easing in the future, quarantine measures could certainly be loosened and the international ports for cruise ships would be reopened. To prevent the COVID-19 from entering to community, we suggest that various risk factors should be considered before and after cruise ships calling at the ports. Furthermore, competent authorities should take applicable quarantine measures according to the results of risk assessments.

Keywords : COVID-19, Keelung port, cruise ship, quarantine

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Weekly Data of Notifiable Inases (by week of diagnosis)

Case diagnosis year		Week 46★		Week 1–46			
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	0	28	0	27	0
	Acute Viral Hepatitis type A	0	3	115	1	65	0
	Amoebiasis	1	5	181	51	177	62
	Anthrax	0	0	0	0	0	0
	Chikungunya Fever	0	0	1	1	1	1
	Cholera	0	0	1	0	0	0
	Dengue Fever	4	0	78	58	11	11
	Diphtheria	0	0	0	0	0	0
	Enterohemorrhagic E. coli Infection	0	0	2	0	0	0
	Epidemic Typhus Fever	0	0	0	0	0	0
	Hantavirus syndrome	0	0	4	0	1	0
	Malaria	0	0	2	2	1	1
	Measles	0	0	1	0	0	0
	Meningococcal Meningitis	0	0	1	0	3	0
	Paratyphoid Fever	1	0	5	0	2	0
	Poliomyelitis	0	0	0	0	0	0
	Rubella	0	0	0	0	0	0
	Shigellosis	3	1	72	6	114	0
	Typhoid fever	0	0	3	1	2	0
	West Nile Fever	0	0	0	0	0	0
Zika virus infection	0	0	0	0	0	0	
Monkeypox	0	-	4	4	-	-	
Category III	Acute Viral Hepatitis type B	2	2	90	0	123	2
	Acute Viral Hepatitis type C	7	10	430	1	493	0
	Acute Viral Hepatitis type D	0	0	0	0	1	0
	Acute Viral Hepatitis type E	0	0	11	0	5	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	2	0	1	0
	Japanese Encephalitis	0	0	19	0	27	0
	Legionnaires' Disease	9	2	300	1	311	1
	Mumps	11	4	256	0	372	1
	Neonatal Tetanus	0	0	0	0	0	0
Pertussis	0	0	1	0	0	0	
Tetanus	0	0	7	0	3	0	
Category IV	Botulism	0	0	0	0	0	0
	Brucellosis	0	0	0	0	0	0
	Complicated Varicella	0	0	30	0	47	0
	Endemic Typhus Fever	1	0	12	0	30	0
	Herpesvirus B Infection	0	0	0	0	0	0
	Influenza Case with Severe Complications	1	0	4	1	1	0
	Invasive Pneumococcal Disease	2	2	158	0	180	0
	Leptospirosis	3	3	59	0	80	0
	Listeriosis	1	1	128	0	152	0
	Lyme Disease	0	0	1	1	1	1
	Melioidosis	2	0	23	1	19	0
	Q Fever	0	0	3	0	8	0
	Scrub Typhus	4	3	253	0	273	0
Toxoplasmosis	2	1	24	0	13	0	
Tularemia	0	0	0	0	1	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	1	0
	Rift Valley Fever	0	0	0	0	0	0
	Severe Pneumonia with Novel Pathogens	128730	42	8145925	34846	15721	1187
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, Gonorrhea, 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.
 4. Since 2022/6/23, " Monkeypox " was listed as a Notifiable Infectious Disease.
 5. Hantavirus Syndrome was applied since September 6, 2021.

Suspected Clusters

- Eleven clusters related to diarrhea (6), tuberculosis (3) and upper respiratory tract infection (2) were reported during week 46.

Imported Infectious Diseases

- There were 218 imported cases from 19 countries during week 46.
 - Severe Pneumonia with Novel Pathogens:** 213 cases from Thailand (11), Japan (9), and the remaining 17 countries have less than 5 cases, 169 unknowns.
 - Dengue Fever:** 4 cases from Vietnam (1), The Philippines (1), Thailand (1), India (1).
 - Shigellosis:** 1 case from Indonesia.
- During week 1–46, there were 34975 imported cases from 128 countries. The top three countries are Vietnam (4078), USA (2458), Indonesia (1325).
- During week 1–46, the notifiable diseases with the highest number of imported cases is Severe Pneumonia with Novel Pathogens (34846).

Summary of Epidemic

- **Severe Pneumonia with Novel Pathogens :** The number of daily new COVID-19 cases is declining in Taiwan, but the rate of decline is slower.

Weekly Data of Notifiable Inases (by week of diagnosis)

Case diagnosis year		Week 47★		Week 1-47			
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	0	29	0	27	0
	Acute Viral Hepatitis type A	1	2	116	1	67	0
	Amoebiasis	2	3	183	52	180	63
	Anthrax	0	0	0	0	0	0
	Chikungunya Fever	0	0	1	1	1	1
	Cholera	0	0	1	0	0	0
	Dengue Fever	1	0	79	59	11	11
	Diphtheria	0	0	0	0	0	0
	Enterohemorrhagic E. coli Infection	0	0	2	0	0	0
	Epidemic Typhus Fever	0	0	0	0	0	0
	Hantavirus syndrome	0	1	4	0	2	0
	Malaria	0	0	2	2	1	1
	Measles	0	0	1	0	0	0
	Meningococcal Meningitis	0	0	1	0	3	0
	Paratyphoid Fever	1	0	6	0	2	0
	Poliomyelitis	0	0	0	0	0	0
	Rubella	0	0	0	0	0	0
	Shigellosis	5	0	77	6	114	0
	Typhoid fever	1	0	4	2	2	0
	West Nile Fever	0	0	0	0	0	0
Zika virus infection	0	0	0	0	0	0	
Monkeypox	0	-	4	4	-	-	
Category III	Acute Viral Hepatitis type B	7	5	96	0	128	2
	Acute Viral Hepatitis type C	15	7	445	1	500	0
	Acute Viral Hepatitis type D	0	0	0	0	1	0
	Acute Viral Hepatitis type E	0	0	11	0	5	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	2	0	1	0
	Japanese Encephalitis	0	1	19	0	28	0
	Legionnaires' Disease	15	11	315	2	322	1
	Mumps	18	7	274	0	379	1
	Neonatal Tetanus	0	0	0	0	0	0
	Pertussis	0	0	1	0	0	0
Tetanus	1	0	8	0	3	0	
Category IV	Botulism	0	0	0	0	0	0
	Brucellosis	0	0	0	0	0	0
	Complicated Varicella	0	2	30	0	49	0
	Endemic Typhus Fever	3	0	15	0	30	0
	Herpesvirus B Infection	0	0	0	0	0	0
	Influenza Case with Severe Complications	6	0	10	1	1	0
	Invasive Pneumococcal Disease	4	2	162	0	182	0
	Leptospirosis	3	0	62	0	80	0
	Listeriosis	0	2	128	0	154	0
	Lyme Disease	0	0	1	1	1	1
	Melioidosis	0	0	23	1	19	0
	Q Fever	0	0	3	0	8	0
	Scrub Typhus	1	6	254	0	279	0
Toxoplasmosis	2	1	26	0	14	0	
Tularemia	0	0	0	0	1	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	1	0
	Rift Valley Fever	0	0	0	0	0	0
	Severe Pneumonia with Novel Pathogens	104724	59	8250638	35125	15780	1246
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.
4. Since 2022/6/23, " Monkeypox " was listed as a Notifiable Infectious Disease.
5. Hantavirus Syndrome was applied since September 6, 2021.

Suspected Clusters

- Seventeen clusters related to diarrhea (8), tuberculosis (3) and upper respiratory tract infection (6) were reported during week 47.

Imported Infectious Diseases

- There were 284 imported cases from 20 countries during week 47.
 - Severe Pneumonia with Novel Pathogens:** 280 cases from Japan (11), Vietnam (8), USA (6), Thailand (6), and the remaining 16 countries have less than 5 cases, 225 unknowns.
 - Dengue Fever:** 1 case from Vietnam.
 - Legionnaires' Disease:** 1 case from unknown.
 - Amoebiasis:** 1 case from Indonesia.
 - Typhoid fever:** 1 case from Indonesia.
- During week 1–47, there were 35258 imported cases from 130 countries. The top three countries are Vietnam (4087), USA (2464), Indonesia (1329).
- During week 1–47, the notifiable diseases with the highest number of imported cases is Severe Pneumonia with Novel Pathogens (35125).

Summary of Epidemic

- **Severe Pneumonia with Novel Pathogens :** The number of daily new COVID-19 cases is declining in Taiwan, but the rate of decline is slower.

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