## **OVERVIEW OF COMMUNICABLE DISEASES SITUATION**

In this issue of the Communicable Diseases Surveillance report, all notifications of infectious diseases received during the year 2013 have been included. However, notifications of cases seeking medical treatment in Singapore for infectious diseases have been excluded from selected morbidity statistics which reflect the status in Singapore citizens, Singapore permanent residents and foreigners residing in Singapore (i.e. non-citizens who have not been granted permanent residence status).

#### **AIR-/DROPLET-BORNE DISEASES**

In 2013, hand, foot and mouth disease (HFMD) continued to contribute significantly to the burden of air-/droplet-borne diseases. There were 31,741 notified cases (587.9 per 100,000 population) of HFMD, a decrease of 14.5% from 37,125 cases in 2012.

A total of 46 measles cases were notified in 2013 compared to 38 cases in 2012.

A total of 48 rubella cases (0.9 per 100,000 population) were notified compared with 64 cases in 2012. There was one case of congenital rubella reported in an infant who had been brought to Singapore for medical treatment. There were two reported termination of pregnancy resulting from acquired maternal rubella infection.

There were 495 notified cases of mumps (9.2 per 100,000 population) in 2013 compared to 521 cases (9.8 per 100,000 population) in 2012.

### **VECTOR-BORNE/ZOONOTIC DISEASES**

In 2013, dengue fever (DF)/dengue haemorrhagic fever (DHF) and chikungunya contributed significantly to the burden of vector borne diseases. A record high of 22,170 dengue fever (DF)/dengue haemorrhagic fever (DHF) cases were notified compared with 4,632 cases in Year 2012. The majority of the cases were infected locally. DEN-1 was the predominant circulating strain in 2013.

A total of 1059 chikungunya fever cases were notified in 2013 compared with 22 cases in Year 2012.

In addition, there were 111 notified cases of malaria in 2013, all except one were acquired overseas. All vector-borne diseases were thoroughly investigated on notification, followed by a multi-agency response. Intensive vector control remained the main strategy for the prevention and control of vector-borne diseases.

### **FOOD-/WATER-BORNE DISEASES**

There were 88 cases of Hepatitis A notified in 2013, a decrease of 18.5% compared to 108 cases in 2012. The incidence of enteric fevers (typhoid and paratyphoid fevers) showed a 24.1% decrease from 141 cases in 2012 to 107 cases in 2013. Campylobacteriosis and non-typhoidal salmonellosis contributed significantly to foodborne disease morbidity. There were 397 cases of campylobacteriosis and 1,735 cases of salmonellosis reported in 2013. Although most cases were sporadic in nature, strict measures were implemented to ensure that a high standard of food and environmental hygiene was maintained. These measures were carried out by the Ministry of Health (MOH), in close collaboration with the National Environment Agency (NEA) and the Agri-Food and Veterinary Authority (AVA).

## **ENVIRONMENT-RELATED DISEASES**

In 2013, 24 cases of legionellosis and 36 cases of melioidosis were notified. Eight patients died of melioidosis and melioidosis-related conditions giving an overall case fatality rate of 23.5%, higher than that reported in 2012 (6.5%).

## HIV/AIDS, STIs, TUBERCULOSIS & LEPROSY

The number of HIV/AIDS infection notifications decreased by 3.2% from 469 in 2012 to 454 in 2013.

The three main sexually transmitted infections (STIs) notified in Singapore in 2013 were chlamydia, gonorrhoea and syphilis. The overall incidence rate for STIs was 192 cases per 100,000 population. Chlamydia was the most common STI with an incidence rate of 43 cases per 100,000 population.

In 2013, a total of 2,028 new cases of TB were reported (1,420 residents and 608 long staying foreigners), a decrease of 7.9% from 2012.

In 2013, a total of 7 cases of leprosy were notified (4 residents and 3 non-residents). The resident incidence rate was 0.1 per 100,000 population.

The annual statistics on infectious disease notifications and deaths are presented in the following table. Detailed updates on individual diseases are provided in the respective chapters of the report.

# Infectious disease notifications and deaths in 2013

Diseases	No. of notified cases	No. of Deaths+	Morbidity rate*	Mortality rate*
Air-/Droplet-Borne Diseases				
Hand, Foot and Mouth Disease	31,741	0	587.9	0.0
Measles	46	0	0.9	0.0
Meningococcal Infection	3	0	0.1	0.0
Mumps	495	0	9.2	0.0
Rubella	48	0	0.9	0.0
Vector-Borne/Zoonotic Diseases				
Chikungunya Fever	1,059	0	19.6	0.0
Dengue Fever/Dengue Haemorrhagic Fever	22,170	8	410.6	0.1
Malaria	111	0	2.1	0.0
Food-/Water-Borne Diseases				
Campylobacteriosis	397	0	7.4	0.0
Cholera	2	0	0.0	0.0
Hepatitis A	88	0	1.6	0.0
Hepatitis E	55	0	1.0	0.0
Paratyphoid	23	0	0.4	0.0
Salmonellosis	1,735	0	32.1	0.0
Typhoid	84	0	1.6	0.0
Blood-Borne Diseases				
Hepatitis B	57	0	1.1	0.0
Hepatitis C	2	0	0.04	0.0
Environmental-Related Diseases				
Legionellosis	24	0	0.4	0.0
Melioidosis	36	3	0.7	0.1
HIV/AIDS, STIs, TB & Leprosy				
HIV/AIDS**	454	89	11.8	2.3
STIs	10,347	0	191.6	0.0
Tuberculosis***	2,028	46	37.6	1.2
Leprosy	7	0	0.1	0.0

+Source: Registry of Births & Deaths

\*Rates per 100,000 population, based on estimated mid-year total population, 2013

(Source: Singapore Department of Statistics)

\*\* Refers to Singaporeans/PR cases

\*\*\* Refers to Singaporeans/PR cases & long staying foreigners