# Disease Surveillance

Disease surveillance enables the health authority to identify prevailing incidence and trends of diseases, to conduct timely investigation, and to formulate and implement intervention strategies. In Hong Kong, systematic disease surveillance for infectious diseases and cancer is in place.

# **Infectious Diseases**

## **Notifiable Infectious Diseases**

According to the Quarantine and Prevention of Diseases Ordinance (Cap.141), there were 31 notifiable infectious diseases in 2005 (Table C). Among these, cholera, plague and yellow fever are quarantinable diseases. In 2005, Streptococcus suis infection was included in the list of notifiable infectious diseases. Medical practitioners are required to notify the Department of Health of all suspected and confirmed notifiable infectious diseases. The Department of Health will conduct surveillance and initiate control and prevention of the diseases.

A total of 20 183 cases of infectious diseases were notified in 2005. The number increased by 1.3% as compared with 19 920 cases in 2004. The top five diseases in terms of the number of notifications in 2005 were chickenpox (11 960 cases), tuberculosis (6 237 cases), food poisoning (972 outbreaks with 3 542 persons affected), viral hepatitis (202 cases) and scarlet fever (177 cases). Chickenpox and tuberculosis accounted for 59.3% and 30.9% of all notifications respectively.

# 疾病監察

疾病監察有助衞生當局確定當前的疾病發病率 及趨勢,從而作出適時調查,以及制定和推行 針對策略。目前,香港對傳染病及癌病均已設 立有系統的監察機制。

# 傳染病

# 須呈報的傳染病

根據《檢疫及防疫條例》(第141章),二零零五年本港共有31種須呈報的傳染病(表C)。當中,霍亂、鼠疫及黃熱病屬須檢疫的疾病。豬鏈球菌感染於二零零五年列入須呈報的傳染病。醫生均須向衞生署呈報所有懷疑及證實須呈報傳染病的個案,以便衞生署監察和發動傳染病防控。

二零零五年,共有20 183宗須呈報傳染病個案,較二零零四年的19 920宗增加1.3%。首五類呈報的傳染病以呈報宗數計為水痘(11 960宗)、結核病(6 237宗)、食物中毒(972宗,3 542人受影響)、病毒性肝炎(202宗)及猩紅熱(177宗)。水痘及結核病分別佔所有呈報個案的59.3%及30.9%。

Table C: List of Notifiable Infectious Diseases, 2005

表C:二零零五年須呈報的傳染病

Cholera	Japanese Encephalitis	Scarlet Fever
霍亂	日本腦炎	猩紅熱
Plague	Legionnaires' Disease	Severe Acute Respiratory Syndrome
瘟疫	退伍軍人病	嚴重急性呼吸系統綜合症
Yellow Fever	Leprosy	Streptococcus suis infection
黃熱病	麻風	豬鏈球菌感染
Acute Poliomyelitis	Malaria	Tetanus
急性脊髓灰質炎(小兒麻痺)	瘧疾	破傷風
Amoebic Dysentery	Measles	Tuberculosis
阿米巴痢疾	麻疹	結核病
Bacillary Dysentery	Meningococcal Infections	Typhoid Fever
桿菌痢疾	腦膜炎雙球菌感染	傷寒
Chickenpox	Mumps	Typhus
水痘	流行性腮腺炎	斑疹傷寒
Dengue Fever	Paratyphoid Fever	Viral Hepatitis
登革熱	副傷寒	病毒性肝炎
Diphtheria	Rabies	Whooping Cough
白喉	狂犬病	百日咳
Food Poisoning 食物中毒	Relapsing Fever 回歸熱	
Influenza A(H5), Influenza A(H7) or Influenza A(H9) 甲型流行性感冒(H5)、 甲型流行性感冒(H7)或 甲型流行性感冒(H9)	Rubella 風疹(德國麻疹)	

## **Chickenpox**

There were 11 960 notifications of chickenpox in 2005. The number was similar to that in 2004, which was 11 784. Similar to the previous years, the majority (77.0%) of cases occurred among children aged under ten.

#### **Tuberculosis**

In 2005, the number of tuberculosis notifications was 6 237 and the notification rate was 89.9 per 100 000 population. Compared with 2004, the number of notifications increased by 0.2% and the notification rate decreased by 0.6%. (Figure 8)

#### 水痘

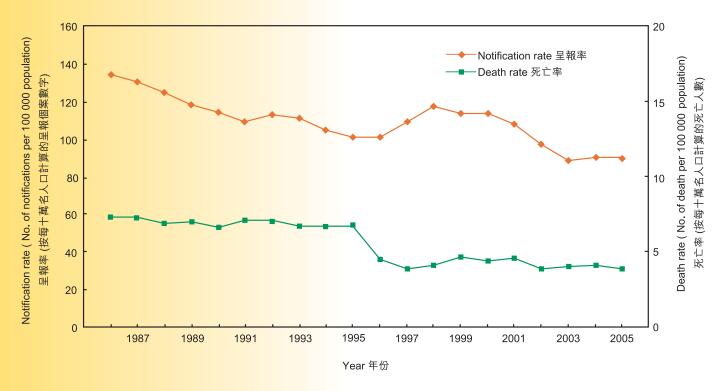
二零零五年,呈報的水痘個案有11 960宗,與二零零四年的11 784宗相若。一如往年,大部分個案(77.0%)的病患者均為十歲以下的小童。

## 結核病

二零零五年,呈報的結核病個案有6 237宗,呈 報率是每十萬名人口有89.9宗。跟二零零四年 比較,呈報個案數字增加了0.2%,而呈報率則 減少了0.6%。(圖8)

Figure 8 : Notifications and Death Rates of Tuberculosis, 1986 - 2005

**圖8 : 一九八六年至二零零五年結核病呈報率及死亡率** 



## **Viral hepatitis**

There were 202 notifications of viral hepatitis in 2005, of which 63 were hepatitis A, 104 were hepatitis B, one was hepatitis C, 33 were hepatitis E and one was unclassified. Compared with 2004, the number of notifications for hepatitis A and hepatitis B decreased by 47.5% and 20.6% respectively.

## Vaccine preventable diseases

There were 145 cases of mumps, 65 cases of measles, 53 cases of rubella, 32 cases of whooping cough and no case of tetanus notified to the Department of Health in 2005. The number of notifications of vaccine preventable diseases remained low in 2005. The coverage rates of vaccines included in the childhood immunisation programme were very high. The trends of selected vaccine preventable diseases are shown in Figure 9.

#### 病毒性肝炎

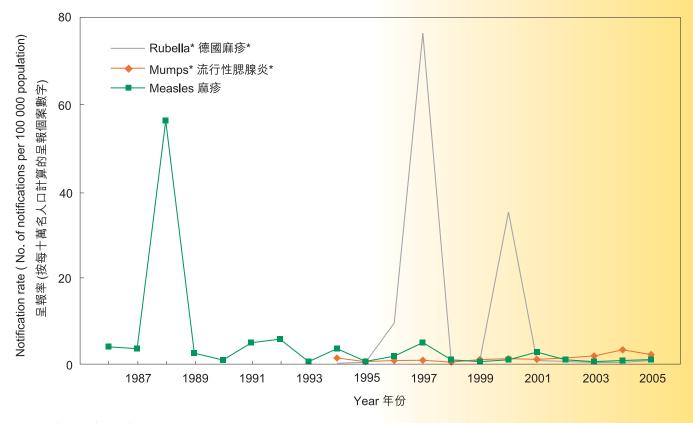
二零零五年,病毒性肝炎呈報個案有202宗, 其中63宗為甲型肝炎,104宗為乙型肝炎,一 宗為丙型肝炎,33宗為戊型肝炎,另有一宗 未能分類。跟二零零四年比較,甲型肝炎及 乙型肝炎的呈報個案數字分別減少了47.5%及 20.6%。

## 疫苗可預防的疾病

二零零五年,衞生署共接報145宗流行性腮腺炎、65宗麻疹、53宗德國麻疹及32宗百日咳。破傷風則沒有呈報個案。而疫苗可預防疾病的呈報數字維持在低水平。此外,在兒童免疫接種計劃中各疫苗的覆蓋率均處於非常高的水平。圖9顯示選定的疫苗可預防疾病的趨勢。

Figure 9 : Notification Rates of Selected Vaccine Preventable Diseases, 1986 - 2005

圖9 : 一九八六年至二零零五年選定的疫苗可預防疾病的呈報率



Notes: Case definition for mumps has been changed in 2003.

\* Notifiable since 1994.

註:

流行性腮腺炎於二零零三年採用新的病例定義。

\* 由一九九四年起須呈報的疾病。

#### **Foodborne diseases**

In 2005, there were 972 notifications of food poisoning outbreaks, with 3 542 persons affected, 129 cases of bacillary dysentery, 36 cases of typhoid fever, 33 cases of paratyphoid fever and five cases of cholera.

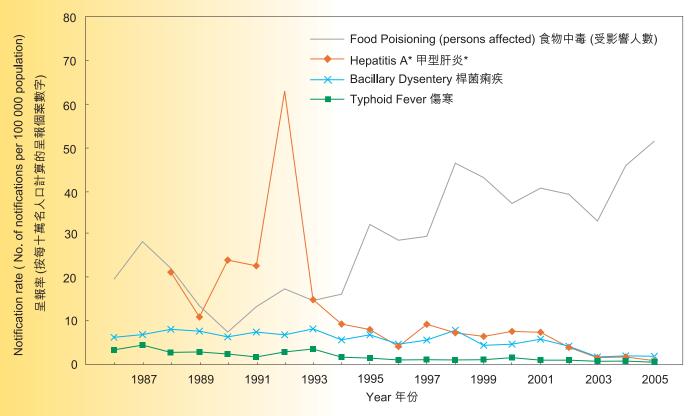
Bacteria remained the major cause of food poisoning outbreaks, accounting for 73.7% of all outbreaks. Twenty-six percent of all outbreaks were laboratory-confirmed and the three most common causative agents were Vibrio parahaemolyticus (34.9%), Salmonella species (27.0%) and Staphylococcus aureus (18.3%). Food poisoning caused by chemicals or biotoxins was also reported. There were 40 outbreaks (124 persons affected) caused by ciguatera toxin. Figure 10 shows the trends of selected foodborne diseases.

### 食物傳播的疾病

二零零五年,共有972宗食物中毒爆發呈報,涉及3542人;另有129宗桿菌痢疾、36宗傷寒、33宗副傷寒及五宗霍亂的呈報個案。

細菌仍然是引致食物中毒爆發的主因,佔所有個案的73.7%。當中經由實驗室證實的爆發佔所有呈報的26.0%。最常見的三種致病原是副溶血性弧菌(34.9%)、沙門氏菌(27.0%)及金黃色葡萄球菌(18.3%)。另外,呈報個案中亦有由化學物或生化毒素引起的。由雪卡毒引起的爆發有40宗(124人受影響)。圖10顯示選定的食物傳播疾病的趨勢。

Figure 10: Notification Rates of Common Foodborne Diseases, 1986 - 2005 圖10: 一九八六年至二零零五年常見的食物傳播疾病的呈報率



Note: \* The classification of Hepatitis A has been available since 1988. 註: \* 甲型肝炎的分類數字由一九八八年起提供。

#### **Vector-borne diseases**

Japanese encephalitis became a statutorily notifiable disease on 16 July 2004. Two local sporadic cases were reported in 2005.

There were 31 dengue fever cases reported in 2005. All were imported from Asian countries, with cases from Indonesia and the Philippines together contributed 65% of the total.

As for malaria, 32 cases were reported in 2005. Twelve cases were caused by Plasmodium falciparum, 17 were by Plasmodium vivax, one by Plasmodium malariae, one by Plasmodium ovale and the remaining one was due to mixed infection of Plasmodium falciparum and Plasmodium vivax. Among these 32 malaria cases, 31 cases were imported with 15 cases from South Asia, 13 from Africa and three from Southeast Asia. The remaining one was a local relapse case.

#### 傳病媒介傳播的疾病

日本腦炎於二零零四年七月十六日列為法定須 呈報的傳染病。二零零五年,共有兩宗零星的 本地感染個案。

在二零零五年,登革熱呈報個案有31宗。全部個案都是由亞洲國家傳入的,而印尼及菲律賓佔所有傳入個案的65%。

至於瘧疾,二零零五年的呈報個案有32宗,其中12宗由惡性瘧原蟲引起,17宗由間日瘧原蟲引起,一宗由三日瘧原蟲引起,一宗由卵形瘧原蟲引起,其餘一宗則由惡性及間日瘧原蟲混合感染。在這32宗瘧疾個案中,有31宗個案是外地傳入的;其中15宗源自南亞地區,13宗源自非洲及三宗源自東南亞。餘下一宗屬於本地復發個案。

In 2005, there were 38 reported cases of typhus including 30 scrub typhus and eight urban typhus.

二零零五年,斑疹傷寒呈報個案有38宗,其中30宗為叢林斑疹傷寒,另八宗為城市斑疹 傷寒。

#### **Other Infectious Diseases**

# Surveillance systems have also been set up to monitor other infectious diseases or conditions with public health importance such as human immunodeficiency virus (HIV) infection, influenzalike illness, hand, foot and mouth disease, acute conjunctivitis and acute diarrhoeal diseases, as well as antibiotic resistance.

The HIV surveillance programme of the Department of Health has an important role in monitoring the trend of HIV infection for formulating healthcare and prevention programme. The programme collects data regularly through voluntary reporting, sero-prevalence monitoring of selected groups and unlinked anonymous screening. All personal information is kept confidential. At the end of 2005, the number of reported HIV and Acquired Immune Deficiency Syndrome (AIDS) cases were 2 825 and 782 respectively. Sexual transmission continues to be the most important mode of spread of the infection.

A sentinel surveillance system is in place in Hong Kong to monitor influenza-like illness, hand, foot and mouth disease, acute conjunctivitis, acute diarrhoeal diseases and antibiotic resistance. The system operates through the support of a network of 64 general out-patient clinics in the public sector and 43 doctors in the private sector.

Results of the influenza-like illness sentinel surveillance system showed that the most prevalent strain of influenza virus during the year 2005 was Influenza A H3N2. The peak months in 2005 were from March to May.

# 其他傳染病

政府亦已設立監察系統,監控對公共衞生有重要影響的其他傳染病及疾病,例如愛滋病病毒感染、流感類病症、手足口病、急性結膜炎(紅眼症)和急性腸道傳染病,以及細菌的抗藥性。

衞生署愛滋病監察計劃對當局監察愛滋病病毒 感染的趨勢,從而制定護理和預防計劃十分重 要。這項計劃透過自願呈報、監察選定組別人 士血清中病毒抗體的普遍率和非聯繫不記名檢 查,定期搜集有關數字。所有個人資料均為保 密。至二零零五年年底,已呈報的愛滋病病毒 感染個案有2825宗,愛滋病個案則有782宗。 性接觸傳染仍然是最重要的傳播模式。

香港設立了定點監察系統,以監察流感類病症、手足口病、急性結膜炎(紅眼症)、急性腸道傳染病及細菌的抗藥性。這個系統是通過64間公營的普通科門診診療所及43名私家醫生的網絡運作。

流感類病症定點監察系統的監察結果顯示,二 零零五年最常見的流感病毒類型為甲型(H3N2) 病毒,發病高峰期為三月至五月。