

Department of Health

Public Health & Epidemiology Bulletin

Volume 6 Number 4

Homepage : <http://www.info.gov.hk/dh/>

Nov 1997

Contents

	Page
Syphilis in Hong Kong	25
Review of Occupational Diseases in 1996	28
News in Brief	30
Number of Notifications of Infectious Diseases	32
AIDS/HIV Surveillance	32

Advisory Board

Dr T S Lam
Dr S S Lee
Dr W L Lim
Dr K K Lo
Dr W K Lo
Dr Rose Mak
Dr W P Mak
Dr C M Tam
Dr S W Yan

Editorial Board

Dr T H Leung
Dr Eileen Liu
Dr Y C Lo
Dr K H Mak
Dr Monica Wong
Mr Simon Yeung

The publication is
produced by
Department of Health,
21/F, Wu Chung House,
213 Queen's Road East,
Hong Kong
All rights reserved

SYPHILIS IN HONG KONG

Dr K K Lo¹ Dr Emily Leung²

Introduction

After a decline in incidence for many years, syphilis has shown a recent increase in Hong Kong. Syphilis has been recognised as a co-factor in acquiring human immuno-deficiency virus (HIV) infection. As a consequence of the worldwide attention to the HIV epidemic, there is now renewed interest to the problem of syphilis.

Trend of Syphilis in Hong Kong

Sexually transmitted diseases (STDs) are not required to be notified by law in Hong Kong. Information about the occurrence of syphilis presented below is based on statistics obtained from the Government Social Hygiene Service. Diagnosis of early syphilis is based on strict criteria. In addition to the presence of typical physical signs, laboratory confirmation by means of darkground examination and serological tests are required.

In the late 1960s, a comprehensive control program was initiated and a good control of syphilis was achieved. At that time, the effective drug penicillin was used as a standardized regime for treatment of syphilis. A comprehensive control program was also introduced, providing free and effective treatment at Social Hygiene Clinics which were easily accessible. VDRL and darkground examinations, which were very effective screening tests, were introduced and applied on all cases with genital ulcers. The teams of health visitors were strengthened to conduct contact

¹ Consultant Dermatologist i/c

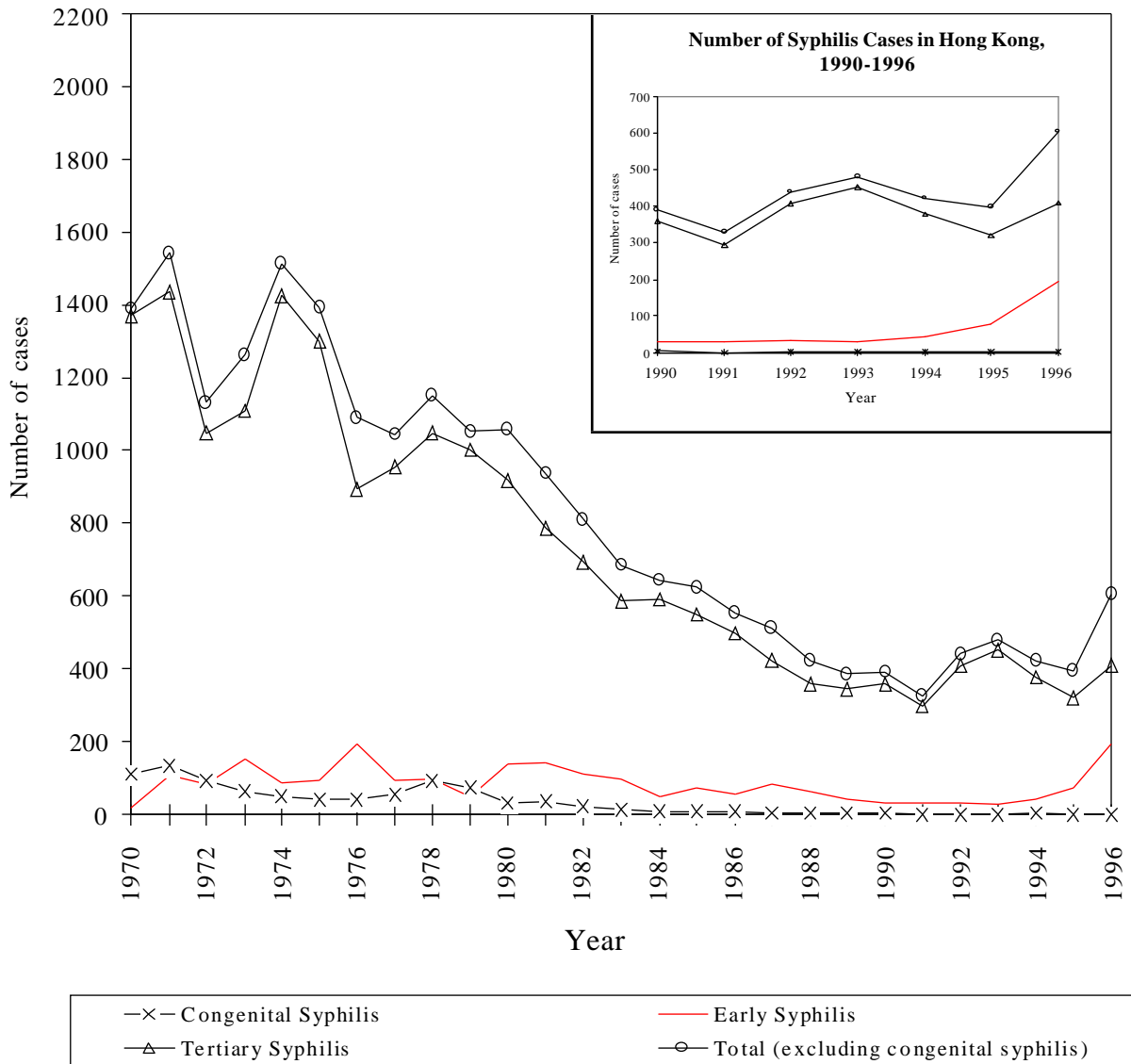
² Medical & Health Officer

investigation and to trace defaulters. There was also increased provision of medical and health care. Since then, the number of syphilis cases has shown a decline (Figure 1). The number of all syphilis cases (excluding cases of congenital syphilis) has decreased from 1 389 in 1970 to the lowest of 328 in 1991. The number of congenital syphilis cases has decreased from 114 in 1970 to 1 in 1996.

In recent years, non-specific urethritis and non-gonococcal urethritis, which are caused by chlamydia in 40 to 50% of cases, have

become the most common types of STDs in Hong Kong. In 1996, they accounted for over 46% of the new STD attendances at the Social Hygiene Clinics, while syphilis accounted for only 3.0%. However, the incidence of syphilis has shown an increase since 1991. The number of all syphilis cases (excluding cases of congenital syphilis) has increased from 328 in 1991 to 606 in 1996. This increasing trend was particularly obvious in the case of early syphilis. The number of early syphilis cases in 1991 was 32. It has shown a fivefold increase to 197 in 1996.

Figure 1 Number of Syphilis Cases in Hong Kong, 1970-1996



Reasons for Recent Increase

The increase of syphilis in the recent years is in line with the general trend of increase in other STDs seen at the Social Hygiene Clinics. This may be related to the change in behaviour of local people in recent years. Some suggest that people in Hong Kong have become more liberal about sex. As the society becomes more affluent, more people are travelling outside Hong Kong for business or for holiday and some people tend to have casual sexual encounters while they travel abroad. In over 60% of STD cases notified in 1996, it was likely that the diseases were contracted outside Hong Kong. This also makes contact tracing not feasible.

Another reason for the increase in syphilis is the lack of a high degree of awareness about syphilis. Syphilis can present as a painless genital ulcer which may be ignored by the patient. This may lead to further spread from untreated cases. Furthermore, many young practitioners have not seen classical cases of syphilis during their training and the diagnosis could be missed. A recent case of early congenital syphilis would illustrate the lack of awareness of syphilis among practitioners. The mother of the case was a foreigner who was married to a local citizen. She attended a private obstetrician in Hong Kong for antenatal care and later had her baby delivered in her home country. It was after the delivery then she and her baby were found to suffer from syphilis. They returned to Hong Kong and were managed in Social Hygiene Clinic. Should the private obstetrician have screened the mother for syphilis during her antenatal visits, this case of congenital syphilis could be prevented.

Towards a Better Control

The recent shift of emphasis in STD control programme from treatment and contact

tracing to health education is a right move towards a better control of HIV and STDs. As syphilis is a recognised co-factor for acquiring HIV, prevention against HIV and other STDs will reduce the incidence of STDs including syphilis. These measures include provision of free counselling service and education of the general public on safe sex practice.

Education focused on at risk groups will help to interrupt the transmission chain by discouraging unprotected sexual practices, encouraging early medical consultation and fostering better treatment compliance.

Education programmes should also be directed towards the medical profession. More emphasis should be focused on STDs in the undergraduate curriculum and regular refresher courses can be arranged for medical practitioners to heighten their awareness and update their knowledge on treatment regimes. Practitioners should be reminded that daily intramuscular injection of procaine penicillin for ten to fourteen days is the most effective regime for treating early syphilis and preventing complications, as compared to alternative regimes using erythromycin or tetracycline.

References

1. Judith N Wasserheit. "Epidemiological Synergy". *Sexually Transmitted Diseases*, 1992; 19: 61-77
2. Mary C Dickerson et al. "The Causal Role for Genital Ulcer Disease as a risk factor for Transmission of HIV". *Sexually Transmitted Diseases*, 1996; 23: 429-440
3. "Youth & Adolescents" Manual on HIV/AIDS for Social Welfare Personnel (Advisory Council on AIDS, Hong Kong). 1995; 115-117

REVIEW OF OCCUPATIONAL DISEASES IN 1996

Dr Y K Wan¹ Dr W K Lo²

In Hong Kong, there are 47 occupational diseases prescribed for compensation purposes under the Second Schedule of Employees' Compensation Ordinance, the Pneumoconiosis (Compensation) Ordinance and Occupational Deafness (Compensation) Ordinance.

In 1996, there were 522 confirmed cases of occupational diseases (Table 1). The figure is greater than those of the previous two years (327 cases in 1995 and 369 cases in 1994) because of the inclusion of 268 occupational deafness cases in 1996 under the Occupational Deafness (Compensation) Ordinance which was enacted on 1 July 1995. At present, to be eligible for noise induced hearing loss compensation, workers should have sensorineural hearing loss amounting to at least 40 dB in each ear. This is calculated by averaging the pure tone loss as measured by audiometry over the 1, 2 and 3 KHz frequency. In addition, the hearing loss in at least one ear should be due to noise and the worker should have a history of noise exposure at work for at least 10 years.

If occupational deafness cases were excluded, the number of occupational diseases in 1996 was less than the corresponding figures in 1995 and 1994. This was mainly due to a decrease in the number of silicosis cases in 1996. In 1996, there were 110 cases of silicosis, while in 1995 and 1994, there were 192 and 315 cases respectively. The increased number of silicosis cases in 1995 and 1994 was due to the intensified publicity programmes on the new compensation scheme for pneumoconiosis introduced in July 1993. In the new scheme, compensation is offered through periodic payments instead of a lump sum payment.

There were 54 confirmed cases of tenosynovitis of hand or forearm in 1996. The cases involved mainly office and clerical workers, manual labourers and factory assembling workers.

The gas poisoning incidents included poisoning by nitrogen oxides, hydrogen sulphide and oxygen deficiency.

Table 1 Confirmed Cases of Occupational Disease (1996)

Occupational Disease	No. of Cases	%
Occupational deafness	268	51.3
Silicosis	110	21.1
Tenosynovitis of hand or forearm	54	10.3
Gas poisoning	36	6.9
Occupational dermatitis	25	4.8
Asbestosis	9	1.7
Chemical induced upper respiratory tract inflammation	9	1.7
Occupational asthma	3	0.6
Compressed air illnesses	3	0.6
Tuberculosis infection	2	0.4
Cramp of hand or forearm	1	0.2
<i>Streptococcus suis</i> infection	1	0.2
Lead poisoning	1	0.2
Total	522	100

¹ Medical & Health Officer

² Consultant Community Medicine (Occupational Health)

Among the dermatitis cases, the causative agents included detergents and bleaching agents, organic solvent and engine oil, cement, shampoo and hair dyes.

There were 9 cases of asbestos-related diseases reported in 1996, the same number as that in 1995.

The nine cases of upper respiratory tract inflammation were all workers from the same chemical plant and chlorine gas was the causative irritant.

The occupational asthma cases were due to exposure to formaldehyde, toluene diisocyanates and welding fume. The compressed air illnesses comprised two cases of middle ear barotrauma and one case of type II decompression sickness. The two cases of tuberculosis infection were health care workers. The patient suffering from cramp of hand or forearm was a garment factory worker. The patient diagnosed to have *Streptococcus suis* infection was a cook while the one suffering from lead poisoning was a printing worker.

It is crucial for medical practitioners to report cases of occupational disease so that the health status of the working population can be monitored accurately. The notification of occupational diseases may initiate a chain of events which often includes the investigation of the index case and active case findings of other affected persons. This is followed by the recommendation of specific preventive measures and the evaluation of the effectiveness of these preventive measures at the workplace.

Under section 15 of the newly enacted Occupational Safety & Health Ordinance, medical practitioners are required to notify occupational diseases to the Commissioner for Labour in writing and on a form approved by the Commissioner. The list of notifiable occupational diseases is shown in Table 2. The notification forms can be obtained from Occupational Health Services, Labour Department, 15th Floor, Harbour Building, 38 Pier Road, Central, Hong Kong (telephone at 2852 4041 or fax at 2581 2049).

Table 2 Notifiable Occupational Diseases in Hong Kong

1 Radiation illness	17 Avian chlamydiosis	33 Dystrophy of the cornea
2 Heat cataract	18 Lead poisoning	34 Skin cancer
3 Compressed air illness	19 Manganese poisoning	35 Chrome ulceration
4 Cramp of hand or forearm	20 Phosphorus poisoning	36 Urinary tract cancer
5 Beat hand	21 Arsenic poisoning	37 Peripheral polyneuropathy
6 Beat knee	22 Mercury poisoning	38 Localised papillomatous or keratotic new skin growth
7 Beat elbow	23 Carbon bisulphide poisoning	39 Occupational vitiligo
8 Tenosynovitis of hand or forearm	24 Benzene poisoning	40 Occupational dermatitis
9 Anthrax	25 Poisoning by nitro-, amino- or chloro- derivatives of benzene	41 Chemical induced upper respiratory tract inflammation
10 Glanders	26 Dinitrophenol poisoning	42 Nasal or paranasal sinus cancer
11 Leptospirosis	27 Poisoning by halogen derivatives of hydrocarbons	43 Byssinosis
12 Extrinsic allergic alveolitis	28 Diethylene dioxide poisoning	44 Occupational asthma
13 Brucellosis	29 Chlorinated naphthalene poisoning	45 Silicosis
14 Tuberculosis in health care workers	30 Poisoning by oxides of nitrogen	46 Asbestos-related diseases
15 Parenterally contracted viral hepatitis in health care workers	31 Beryllium poisoning	47 Occupational deafness
16 <i>Streptococcus suis</i> infection	32 Cadmium poisoning	

NEWS IN BRIEF

Influenza A (H5N1)

Collaborating with other health agencies, the Government Virus Unit of the Department of Health identified an influenza A (H5N1) virus from the tracheal aspirate of a 3-year-old boy in August 1997. This virus, known to infect birds primarily, was for the first time ever detected in man. The boy died in May 1997 suffering from viral pneumonia, adult respiratory distress syndrome, bilateral pneumothorax, Reye's syndrome, septicemia and multiple organ failure.

Hong Kong has been a designated WHO National Collaborating Influenza Centre for influenza surveillance for over 35 years. The Government Virus Unit receives samples for influenza virus isolation and characterisation from patients attending hospitals and General Out-patient Clinics. It regularly sends samples to WHO Collaborating Centres for Reference and Research on Influenza for further typing and to other laboratories as part of an international networking program.

The isolation of the influenza A (H5N1) virus was confirmed independently by the National Institute of Public Health Research Laboratory in the Netherlands, as well as the Centres for Disease Control and Prevention (CDC) at Atlanta, USA in August 1997. The World Health Organisation was notified of the discovery following confirmation.

Investigations ensued immediately to locate the source of the virus and delineate the extent of infection. A special team was formed to co-ordinate investigations on influenza A (H5N1). It consisted of four experts from CDC, two leading microbiologists from local universities, and staff from the Department of Agriculture and Fisheries and Department of Health. Investigations were planned to address a specific list of questions, including the issue of contamination. During the course of investigations, the investigation team examined carefully the laboratory procedures leading to the isolation of the influenza virus, interviewed health care workers who attended the patient and reviewed all the medical records, obtained detailed history from the patient's family, school and neighbourhood, and visited a number of poultry farms which experienced avian influenza outbreaks earlier this year. Hundreds of human and chicken poultry blood samples were taken from the above sources to ascertain the presence of antibodies to influenza A (H5N1).

The investigation team concluded, after examining all the evidence, that the isolation of the influenza A (H5N1) virus was not due to contamination. An ELISA test is currently being developed at CDC, Atlanta to test the collected blood samples as well as some historical controls from serum archives. Parallel testing will be performed at CDC and the Government Virus Unit. The results of these tests will yield valuable information to address the issues about the source and extent of influenza A (H5N1) infection and the necessity of developing a vaccine.

In the meantime, the Department of Health has enhanced its influenza surveillance system to increase its capacity of detecting influenza viruses at the community level through 10 General Out-patient Clinics. It will continue to work closely with WHO and CDC to monitor and review the situation.

Department of Health's Homepage on Internet

The Department's homepage on Internet was launched on 23 July 1997 providing a new channel of communication between the Department and the public as well as the Internet users around the world.

The homepage contains a total of 10 topics including main services provided by the Department, its mission and vision, performance pledges and useful telephone numbers.

Some major health statistics and indices such as the ten leading causes of death in Hong Kong with breakdown in age and sex, number of notifications of notifiable diseases, life expectancy and crude death rate of Hong Kong people etc. can be obtained easily by downloading the information from the website.

Also accessible are major press releases issued by the Department which contain information on newly released AIDS figures, new services or expansion of services and special announcements.

The Public Health and Epidemiology Bulletin which is published on a quarterly basis can also be read in the homepage.

The address of Department of Health Homepage is "<http://www.info.gov.hk/dh/>". It can also be accessed through the homepage of the Government Information Centre, Hong Kong Special Administrative Region of the People's Republic of China.

The homepage will be updated regularly to provide Internet users with latest information.

Donormobile

The Central Health Education Unit of Department of Health received a donation of HK\$4.6 million from the Hong Kong Jockey Club Charities Trust to set up a mobile resource centre entitled "Donormobile". The Donormobile is a specially designed and equipped coach which serves as a mobile health education centre on organ donation. A handover and launching ceremony was arranged on 28 April 1997.

Facilities on board include three computers with touch-screen interactive games, two audio-visual booths, two models on human organs, six telephone hotlines, one touch-screen Q&A game port, a mini-library with relevant resource materials and lamination service for signed organ donation cards. Visitors will receive attractive souvenirs while those who have signed the organ donation card will receive a special pin as a recognition to their commitment.

The coach will be parked in public places near schools, major shopping centres, offices and housing estates for the public to get easy access. Regular visits will be conducted to schools where nursing staff will give counselling, health talks and video shows to the students. It will also participate in special events like carnivals. Besides, visits to other institutions and organizations can be arranged by appointment (Tel. : 2835 1821).

NUMBER OF NOTIFICATIONS OF INFECTIOUS DISEASES

DISEASE	3rd Quarter 1996	2nd Quarter 1997	3rd Quarter 1997
	Cases	Cases	Cases
1) Cholera	2	13	-
2) Plague	-	-	-
3) Yellow Fever	-	-	-
4) Acute Poliomyelitis	-	-	-
5) Amoebic Dysentery	3	2	2
6) Bacillary Dysentery	92	68	116
7) Dengue Fever	3	3	1
8) Diphtheria	-	-	-
9) Food Poisoning : <i>Outbreak</i>	146	83	121
<i>Persons Affected</i>	713	516	517
10) Legionnaires' Disease	-	-	1
11) Leprosy	2	4	1
12) Malaria	52	38	42
13) Measles	33	141	103
14) Meningococcal Infections	2	2	2
15) Mumps	15	10	21
16) Paratyphoid Fever	10	3	6
17) Rabies : <i>Human</i>	-	-	-
<i>Animal</i>	-	-	-
18) Relapsing Fever	-	-	-
19) Rubella	160	3 544	775
20) Scarlet Fever	10	20	22
21) Tetanus	4	1	2
22) Tuberculosis	1 741	2 022	1 890
23) Typhoid Fever	23	18	19
24) Typhus Fever	2	-	5
25) Viral Hepatitis :	104	218	116
- <i>A</i>	45	155	51
- <i>B</i>	47	17	12
- <i>Non-A Non-B</i>	9	2	3
- <i>Unclassified</i>	3	44	50
26) Whooping Cough	1	5	-

AIDS/HIV Surveillance

Cumulative Number of Cases	as at 31.3.97	as at 30.6.97
AIDS	263	274
HIV	821	855