

## Chapter 8

# Health

*No one in Hong Kong is deprived of medical care because of a lack of means. The Government provides a wide range of public services and facilities to meet the community's healthcare needs.*

*Concurrently, it spares no effort in combating health hazards. Its very strict ban on smoking in public places — indoor and outdoor — is just one of many examples of its commitment to keeping Hong Kong clean and healthy.*

### 2007 Figures at a Glance

<i>Infant Mortality Rate</i>	1.7* per 1 000 registered live births
<i>Maternal Mortality Ratio</i>	1.4* per 100 000 registered live births
<i>Life Expectancy 2007</i>	79.3* (Male)    85.4* (Female)
<i>2036</i>	82.7 (Male)    88.3 (Female) <i>projected</i>

(\* provisional figures)

Hong Kong has a quality healthcare system supported by a highly professional team of healthcare workers. The infant mortality rate has declined steadily over the past 20 years and was the lowest in the world in 2006. Hong Kong people's life expectancy has improved notably. In 2007, male life expectancy was 79.3\* years while female life expectancy was 85.4\* years (\* provisional figures). The life expectancies of both sexes in Hong Kong were the second highest in the world in 2006.

But Hong Kong's healthcare system comes at a price. According to Hong Kong's Domestic Health Accounts (DHA)<sup>1</sup>, Hong Kong's total health expenditure increased from 3.5 per cent of the Gross Domestic Product (GDP) in 1989-90 to 5.2 per cent in 2004-05. As a percentage of total health expenditure, the share of public health spending rose from 40 per cent to 55 per cent in the same period. Public health spending in the 2004-05 financial year amounted to \$37.2 billion, or 2.8 per cent of

<sup>1</sup> A series of accounts compiled over the years in accordance with the International Classification for Health Accounts (ICHA) Framework developed by the Organisation for Economic Cooperation and Development to keep track of Hong Kong's health spending and to allow for international comparison.

GDP. Hong Kong's ageing population, rising expectations of health care, and soaring medical costs pose a challenge to the Government in the long run and is a matter of concern to the community.

### **Organisational Framework**

The Food and Health Bureau is responsible for, among other things, formulating policies and allocating resources for the running of Hong Kong's health services. It also oversees the implementation of these policies to protect and promote public health, provide lifelong holistic health care to every citizen of Hong Kong, and ensure that no one is denied adequate medical treatment due to lack of means.

The Department of Health is the Government's health adviser and agency to execute healthcare policies and statutory functions. It safeguards the community's health through a range of promotional, preventive, curative and rehabilitative services.

The Hospital Authority (HA) is a statutory body established in 1990 under the Hospital Authority Ordinance to provide public hospital and related services. It offers medical treatment and rehabilitation services to patients through hospitals, specialist clinics, general outpatient clinics, and outreaching services that are organised into seven clusters which, together serve the whole of Hong Kong.

The Health and Medical Development Advisory Committee, chaired by the Secretary for Food and Health, has 12 members drawn from different sectors of the community. Its role is to review regularly the way healthcare services are provided in Hong Kong and to draw up a long-term plan to ensure the sustainable development of Hong Kong's healthcare system. In July 2005, the committee issued a discussion paper on the desired future healthcare service delivery model, which contained proposals that won wide public support. Its key recommendations include:

- (a) putting more emphasis on primary healthcare services and to promote the family doctor concept;
- (b) more collaboration and cooperation between the public and private sectors with the former focusing more on its priority areas;
- (c) caring for the elderly, patients with chronic diseases and patients in the rehabilitation stage in the community as far as possible; and
- (d) making use of information technology to establish a territory-wide electronic patient record system.

The recommendations are being implemented gradually. Issues relating to healthcare reform and financing arrangements are being studied for presentation to the public for consultation in 2008.

### **Primary Healthcare Services**

Primary healthcare is the first point of contact where individuals and their families are subject to a continuing healthcare process, which aims at avoiding hospitalisation and improving their health condition in general.

### *Clinic Services*

Public general outpatient services are primarily targeted at low-income families, patients with chronic diseases and other vulnerable groups. The Hospital Authority operates 74 general outpatient clinics in Hong Kong. In 2007, some 1.23 million people made 4.77 million visits to those clinics. Since the implementation of the telephone booking system for outpatient services in October 2006, about 90 per cent of patients with episodic illnesses have made bookings by telephone. Over 80 per cent of elderly people with episodic illnesses also made appointments by telephone. More than 60 per cent of elderly people using general outpatient services suffered from chronic diseases. To better assist them, a 'Chronic Disease Follow-up Appointment System' has been set up for them. For needy elderly people with episodic illnesses, the Hospital Authority has also reserved quotas for them to improve their access to general outpatient services. Continuing efforts were made at primary outpatient clinics to promote the development of family medicine, provide specialist training in family medicine, enhance the interface and integration of primary and secondary care, as well as upgrade the quality and efficiency of primary healthcare services. Some \$1.2 billion were spent on public general outpatient services in the 2006-07 financial year.

To promote the development of 'evidence-based' Chinese medicine practice and to enhance training opportunities for local Chinese medicine graduates, the Hospital Authority has opened nine Chinese medicine outpatient clinics as at end of 2007. During the year, a subvention of \$36.81 million was provided for the clinics. A total of 39 801 patients made 231 924 visits to the nine clinics, and 51 new graduates were recruited.

The majority of Hong Kong people seek outpatient services from the private sector, which is served by about 6 000 doctors in private practice and 154 clinics registered under the Medical Clinics Ordinance. Services are also provided by 5 619 registered Chinese medicine practitioners (including 79 with limited registration) and 2 847 listed Chinese medicine practitioners.

About 27 million and 6 million outpatients visit western medicine clinics and Chinese medicine practitioners' clinics in the private sector respectively each year. The majority of people in Hong Kong can afford their services.

### *Family Health*

Apart from general outpatient services, the public sector provides specialised services to citizens of particular age groups or who need specialist medical treatment.

The Department of Health provides a comprehensive range of health promotion and disease prevention services through its 31 maternal and child health centres and three woman health centres for children up to five years of age, and women aged 64 or below. Anticipatory guidance on child care and parenting is provided for parents and care-givers in the centres. Immunisation and health and developmental surveillance services are offered to children. Antenatal, postnatal, family planning, cervical screening and health education are provided for women. Some 27 000 expectant mothers and 58 000 newborns attended maternal and child health centres,

representing about 38 per cent and 83 per cent respectively of the total in 2007. Most of the other expectant mothers and newborns sought antenatal services from the private sector.

The government-subsidised Family Planning Association (FPA) of Hong Kong offers comprehensive services and health information on sexual and reproductive health treatment and counselling through its various clinics, youth health care centres, women's clubs, and libraries. In 2007, the subvention amounted to \$29.2 million and over 110 000 clients were served. A Breast Clinic has also been set up.

### *Student Health*

For primary and secondary school students, the Department of Health offers health assessment, health education and individual health counselling with emphasis on health promotion and disease prevention through its 12 student health service centres and three special assessment centres. A total of 765 779 students between the age of six and 19 received the services in the 2006-07 school year.

To further safeguard students' health, school health inspectors pay regular visits to schools to check on their environmental hygiene and sanitation standards, while health officers and nurses provide advice on the control of communicable diseases. Teams from the Department of Health pay annual visits to primary schools to vaccinate students against communicable diseases.

### *Elderly Health*

The Department of Health has set up 18 elderly health centres and 18 visiting health teams to enhance primary health care for the elderly, improve their ability to care for themselves, encourage healthy living and strengthen family support to minimise illness and disability of their elders. The elderly health centres provide people aged 65 or above with comprehensive primary healthcare services which include health assessments, physical check-ups, counselling, curative treatment, and health education. The 18 visiting health teams conduct health promotion activities for the elderly and provide training for carers to enhance their health knowledge and skill in caring for the elderly. In 2007, the elderly health centres recorded 38 174 enrolments and 182 497 attendances for health assessment and medical consultation, while the visiting health teams made 275 132 client contacts.

### *Community Health*

In line with the world trend of focusing more on developing ambulatory and community care programmes, the allocation of public funding for public hospital services has been changing from the institution-based approach to a population-based approach to encourage the mobilisation of resources from institutions to community settings. By so doing, the Hospital Authority has enhanced its related services to minimise the needs for inpatient services by the public and facilitated patients' rehabilitation in the community. In 2007, the Hospital Authority continued to step up training for family physicians, community paediatricians, community physicians, general practitioners and community-allied health practitioners to support the development and provision of the community mode of health care. To provide outreach medical, nursing and allied health services for the rehabilitation of

discharged patients in the community, the Hospital Authority has strengthened its community outreach teams that are providing community nursing services, community geriatric assessment, community psychiatric nursing services, and other community allied health services. Care-givers trained on the job in homes are permitted also to render community health services on a collaborative basis. The HA spent \$600 million on community health services in 2006-2007, during which community nurses made 814 700 visits to the homes of elderly people as well as 790 200 appointments to counsel them and psychiatric patients.

Over 80 per cent of people receiving community nursing care are old people. Medical support for the elderly, discharged from public hospitals, has improved greatly in recent years. Medical officers now make weekly visits to these old people at their homes to assess their state of health and medical needs under the supervision of community geriatric assessment teams. Some 210 such visits were made in 2007. Volunteer groups have also been set up to help old people who have been discharged from hospitals. A telephone nursing consultation service has also been set up to provide home instructions and advice on disease management. Another improvement was the stationing of more community nurses at care centres and non-governmental organisations to provide on-site care for people in the district.

With regard to rehabilitation and palliative services, the hospital clusters under the Hospital Authority will continue to establish more ambulatory care centres to take on discharged patients for short-term rehabilitation and to start an integrated palliative day care centre to provide a full spectrum of physical, rehabilitative, psychological and spiritual services to the patients and families in need.

### *Dental Health*

There are eight School Dental Clinics run by the School Dental Service Division of the Department of Health to provide preventive dental services which include annual dental check-ups and basic dental care to about 387 000 primary students each year, or about 94 per cent of the total number of primary school children in Hong Kong. In addition to the 11 government dental clinics that provide emergency dental services to the general public, the department also offers specialist oral healthcare services in seven public hospitals to inpatients and others with special oral health needs. The department also monitors the level of fluoridation in water supplied to the public to reduce dental decay among people living in Hong Kong.

### *Mental Health*

Information on public mental health services is in Chapter 10.

### *Other Special Services*

The Department of Health runs a range of specialist clinics and centres for the public. They include 20 methadone clinics, 19 tuberculosis and chest clinics, seven social hygiene clinics, four dermatology clinics, two integrated treatment centres, four clinical genetic clinics, six child assessment centres, and two travel health centres. More than 7.2 million visits to these clinics were recorded in 2007.

## **Secondary, Tertiary and Specialised Healthcare Services**

Secondary, tertiary and specialised healthcare services are provided mainly in hospitals run by the Hospital Authority. As at December 31, 2007, there were 27 784 hospital beds, comprising 20 364 acute beds, 2 151 infirmary beds, 4 589 beds for the mentally ill and 680 beds for the mentally handicapped. In addition, there were 3 438 beds in private hospitals, 2 945 in nursing homes and 761 in institutions run by the Correctional Services Department. In all, the number of beds per thousand of population is about five.

### *Specialist Outpatient Service*

Secondary and tertiary ambulatory services in the public sector are provided mainly through the Hospital Authority's specialist clinics. At these clinics, patients' symptoms are assessed, and arrangements made for specific tests to be carried out to facilitate diagnosis, treatment, as well as follow-up treatment for patients who require long-term specialist care. About \$5.6 billion were allocated in 2006-2007 for providing such services.

Most public hospitals have specialist clinics for internal medicine, surgery, as well as obstetrics, gynaecology, paediatrics, orthopaedics and traumatology, ear nose and throat, neurosurgery, oncology and cardiothoracic surgery. Many hospitals also have subspecialist clinics for cardiology, respiratory medicine, kidney disorders and other illnesses.

In 2007, members of the public made almost 6.02 million visits to specialist outpatient clinics and about 1.78 million to allied health outpatient departments in public hospitals. To cope with the heavy demand for their services, the specialist clinics in public hospitals have implemented a triage system for screening new referrals to see which patients need more urgent attention. Patients with what is classified as Priority I and II conditions are seen within two weeks and eight weeks respectively. The triage criteria have been communicated to private practitioners to facilitate preliminary examination of patients. The specialist clinics in many public hospitals have also worked with the family medicine specialist clinics within the same cluster to conduct preliminary assessment of patients with stable and low-risk medical conditions so as to shorten the waiting time for new referrals. Patients in stable condition would either be referred back to the primary care practitioners in the private sector or the Hospital Authority's general outpatient clinics.

### *Acute Inpatient Service*

Inpatient services are offered to patients who require intensive therapy for their acute illness. In 2006-2007, about \$17 billion were allocated for the provision of such services which are available in major acute hospitals under the Hospital Authority. Supported by full ancillary services, clinicians in public hospitals are able to effectively treat patients with different medical needs through a comprehensive range of clinical specialities, including internal medicine, surgery, neurosurgery, clinical oncology, cardiology, obstetrics and other such operations and treatments.

In 2007, some 1.2 million inpatients and day patients were treated and discharged from public hospitals. In line with the international trend, the Hospital

Authority will continue to strengthen ambulatory and community care programmes for patients to receive rehabilitation services near their homes as far as possible. This represents a paradigm shift in the provision of health services from a disease model to a holistic health model, and from focusing on episodic acute hospital care to adopting a life-course approach with an emphasis on preventive, curative and rehabilitative health care. As a result, despite the rapid increase in demand for medical services due in part to an ageing population, the number of patient days, bed occupancy rates and average length of stay in public hospitals remained relatively constant over the past few years.

### *Accident and Emergency Services*

There are 16 public hospitals under the Hospital Authority providing accident and emergency services. These hospitals provide a high standard of service for people critically ill or injured who need urgent medical attention, or for victims of disasters. About \$1.4 billion were allocated for the provision of such services in the 2006-2007 financial year.

In 2007, 1.18 million people paid 2.07 million visits to the accident and emergency departments of public hospitals, representing 5 681 attendances per day. Since April 1999, patients attending the accident and emergency departments of public hospitals have been classified under five categories according to their state of health or injuries: Critical (Category 1), Emergency (Category 2), Urgent (Category 3), Semi-urgent (Category 4), and Non-urgent (Category 5). The triage system has proven to be an effective means of ensuring that patients with more urgent conditions are promptly attended to. In 2007, over 95 per cent of patients in categories 1 and 2 received treatment within the pledged waiting time.

### *Medical Charges and Waiver*

Fees for public hospital services in Hong Kong are affordable to the general public. Medical charges of public hospitals and clinics are heavily subsidised by the Government with an average subsidy level as high as 95 per cent. People receiving help under the Comprehensive Social Security Assistance Scheme are exempted from payment of public medical charges. Other needy groups are also helped through a medical fee waiver mechanism. Recipients of this waiver include low-income patients, chronically ill patients and elderly patients with financial difficulties.

### *Private Hospitals*

Hong Kong's 12 private hospitals served about 19.4 per cent of the hospital inpatients in 2006.

### *Public Hospital Development Programmes*

A number of hospital projects are under way to provide for the development of healthcare services in different parts of Hong Kong. These projects include the extension block of Prince of Wales Hospital, preparatory work for the redevelopment of Yan Chai Hospital and preparatory work for the redevelopment of Caritas Medical Centre Phase 2.

## **Health Promotion**

### *Healthy Lifestyle*

In the 2006-07 financial year, the Department of Health spent \$203.8 million on health promotion initiatives. The Central Health Education Unit of the Department of Health continues to play a leading role in formulating the direction of, and providing resources for, public health education. The unit comprises professionals from different disciplines to ensure health promotion is carried out effectively.

In 2007, the unit carried out a variety of health promotion activities that involved everyone in the community. The activities included the 'Exercise Prescription Project' which promoted physical activities; health education and ways to combat influenza and avian influenza; the 'Maintain Cough Manners' campaign to urge people to observe good manners when coughing; and the publication of leaflets on health subjects in different languages for the city's ethnic minorities.

The Department of Health launched a campaign on healthy eating, called 'EatSmart@school.hk' in September 2006. Since then more than half of Hong Kong's primary schools had participated in at least one of the campaign's activities, while the campaign's website recorded almost 20 million hits.

Encouraged by the drive's success, the department launched a similar campaign in 2007 on healthy eating for restaurant goers, called 'EatSmart@restaurant.hk' in which more than 300 food premises took part. The campaign will be extended further in 2008 to cover all eateries.

The department's Community Liaison Division is committed to establishing close ties with District Councils and the public to promote a healthy environment in their respective districts.

The Adolescent Health Programme is another example of the department's projects designed to improve the psychosocial health of secondary school students. A total of 350 secondary schools with about 122 000 students and 4 400 parents and teachers received services under the programme in the 2006-07 school year.

### *Oral Health Education*

Educational and promotional activities were organised throughout the year by the department's Oral Health Education Unit to stress the importance of oral health. The activities were carried out under an outreach programme, known as the 'Oral Health Education Bus' programme, designed specifically for kindergarten and pre-school students. Information on oral health is disseminated to the public through the department's oral health education homepage, [www.toothclub.gov.hk](http://www.toothclub.gov.hk), and a 24-hour interactive telephone hotline.

In September 2007, a campaign was launched to urge people to take proper care of their teeth. The Love Teeth Campaign message reads: 'It's not good enough to brush twice a day. Proper teeth cleaning technique is the way!' It advises people to use dental floss to clean their teeth and to be alert to gum disease.



### *AIDS Counselling and Education*

Human immunodeficiency virus (HIV) prevention and health promotion programmes in Hong Kong are underpinned by the concerted efforts of the Government and non-governmental organisations (NGOs). The department's Red Ribbon Centre collaborates with its community partners to promote public awareness and prevention of HIV and to discourage discrimination against HIV patients. In 2007, the centre organised 26 major activities and 122 focused programmes, benefiting around 70 000 participants.

A 24-hour, trilingual (Cantonese, Putonghua and English) AIDS hotline 2780-2211 has been set up to provide information to the public on AIDS (Acquired Immune Deficiency Syndrome), sexually transmitted diseases and HIV testing. Appointments for counselling and HIV antibody tests may be made on the hotline. In 2007, some 16 000 calls were made to nurse counsellors on the hotline by people seeking AIDS counselling. Over 1 million condoms were distributed to promote safer sex. There is also a telephone hotline called The Gay Men HIV Testing Hotline 2117-1069 and a website [www.21171069.com](http://www.21171069.com) set up for men who have sex with men.

### *Organ Donation*

The Department of Health joined hands with the Hospital Authority, the Hong Kong Medical Association and various NGOs to promote organ donation. In collaboration with the Hong Kong Medical Association, the department also launched a territory-wide organ donation promotion campaign entitled 'Light up lives. Support organ donation' in 2007.

A territory-wide campaign was launched to encourage organ donation. Appeals were made to various government departments, NGOs and private companies to solicit their support in making organ donation cards/forms readily accessible to their staff and clients, and actively encouraging them to sign on. Posters were also put up and car screen stickers were distributed to motorists to help spread the word.

Twenty-three liver transplants, seven heart transplants, 53 renal transplants, one lung transplant and 213 cornea transplants were carried out in Hong Kong's public hospitals in 2007.

## **Smoking and Health**

### *Legislation*

To further protect the public from the hazards of second-hand smoking, the Legislative Council enacted the Smoking (Public Health) (Amendment) Bill 2005 in October 2006 to expand statutory no smoking areas to all indoor workplaces and public places, to strengthen the regulation on advertisement, promotion, packaging and labelling of tobacco products, as well as to strengthen law enforcement efforts. China is a signatory to the Framework Convention on Tobacco Control (FCTC) of the World Health Organisation (WHO), rendering provisions of the convention to be applicable to Hong Kong. The amendment bill has significantly enhanced Hong Kong's tobacco control regime and its compliance with the FCTC. With effect from

January 1, 2007, all indoor workplaces, indoor areas of restaurant premises, bars open to all ages, karaoke establishments and other indoor public places, child care centres, schools, hospitals, escalators, parks, as well as swimming pools and beaches under the management of the Leisure and Cultural Services Department have all become statutory no smoking areas.

### *Implementation and Enforcement*

The Tobacco Control Office was set up in 2001 to coordinate the Government's efforts to enforce anti-smoking laws and to promote a smoke-free culture in Hong Kong.

One of the Tobacco Control Office's key tasks was to assist managers and staff of establishments in the statutory no smoking areas to observe the Smoking (Public Health) Ordinance. In 2007, the office organised over 100 workshops for more than 5 000 staff responsible for the management of statutory no smoking area premises from various sectors. The office also distributed more than 1 million copies of educational materials including implementation guidelines and no-smoking signs to the participants.

Tobacco Control Office inspectors have the power to issue summonses to people breaking the no-smoking laws. At end-2007 the office had issued some 3 700 such summonses.

### *Publicity and Education*

An independent statutory body, called the Hong Kong Council on Smoking and Health, has also been set up to help disseminate information on the hazards of smoking and to advise the Government on matters related to smoking, passive smoking and health.

During 2007, the council conducted a number of community involvement campaigns to nurture a smoke-free culture in public places and workplaces. The council also gave 157 talks on health to primary and secondary schoolchildren and held an interactive stage show in 49 primary schools which was watched by 62 278 students. In addition, the council launched a territory-wide publicity drive called 'Smoke-Free Hong Kong' which included broadcasts on TV and radio. The council runs a website [www.smokefree.hk](http://www.smokefree.hk) and a telephone hotline to receive enquiries and suggestions from the public on smoking and health.

### *Taxation*

Taxation is widely recognised as one of the most effective tobacco control measures especially among younger smokers. The current tax on tobacco products amounts to \$804 for each 1 000 cigarettes, or \$16 for a packet of 20 cigarettes.

### *Smoking Cessation*

Sixteen full-time and 14 part-time centres have been set up in public hospitals and outpatient clinics to help smokers kick the habit. The centres are manned by trained nurses and pharmacists who provide counselling and medicines to help

people stop smoking. Smokers trying to quit smoking can make appointments or make enquiries on a hotline, called 'quit-line' operated by the council.

## **Disease Prevention and Control**

The Department of Health spent \$1,253 million on disease prevention and control at its maternal, child health and elderly health centres and other such places in 2007.

### *Centre for Health Protection*

The Centre for Health Protection (CHP) has been in operation since its establishment on June 1, 2004. It collaborates with its counterparts overseas to prevent and control outbreaks of diseases. It observes three dictates in carrying out this task: real-time surveillance, rapid intervention and responsive risk communication.

Much effort has been put into developing the existing information systems, which include a public health information system and a laboratory information system. A study is being carried on a plan to develop a communicable disease information system that enables real-time exchange of data on communicable diseases.

The centre has upgraded its facilities for conducting diagnosis and clinical tests to strengthen its surveillance of communicable diseases. Measures are also in place for strengthening infection surveillance and for analysing data on epidemiology and health care. The centre issues surveillance reports on a regular basis, as well as reports on laboratory safety and quality assurance. Protection against, and prevention of, known diseases were also strengthened. Stronger control over the spread of tuberculosis, HIV/AIDS and sexually transmitted infections are just a few examples. A board of scientific advisers, comprising experts from different disciplines and seven scientific committees, was set up to pool professional expertise. Training and research programmes were launched regularly.

In addition to drawing up risk communication strategies and action plans, the centre, through conducting health educational campaigns and publicity programmes with district councils, has been able to release information and guidelines about diseases to the public regularly to give them a better understanding of different diseases and to increase their awareness of public health threats so that preventive measures can be taken swiftly. In addition, links with other health authorities and agencies on the Mainland, Macao and the World Health Organisation have been reinforced to share professional knowledge and experience in combating diseases.

### *Contingency Planning for Infectious Disease Outbreaks*

To enhance government and community preparedness to cope with major outbreaks of infectious diseases, the Centre for Health Protection continues to review and update its plans for dealing with disease outbreaks. A plan for mobilising volunteers in the event of an outbreak is also in place.

The centre organised as well as participated in a number of drills during the year to test Hong Kong's preparedness for an outbreak of infectious disease. In September 2007, a drill codenamed 'Exercise Chestnut' was conducted in collaboration with the Food and Health Bureau, the Hospital Authority and nine government departments to review frontline operations for dealing with an outbreak of an avian flu that can be passed from human to human. More than 250 people took part in the exercise. Six experts from the Mainland and Macao participated as observers.

The authorities in Hong Kong, Macao and the Mainland are acutely aware that effective communication and cooperation among them and neighbouring countries are vital in combating the spread of infectious diseases. In November 2006, the CHP joined hands with the health authorities on the Mainland and Macao to organise 'Exercise Great Wall,' which was a success and was repeated in 2007.

### *Other Communicable Diseases*

There are a total of 32 statutory notifiable infectious diseases in Hong Kong. During the year, some 25 000 cases of notifiable infectious diseases were reported, of which some 5 500 were tuberculosis cases.

Children in Hong Kong are protected against communicable diseases such as tuberculosis, hepatitis B, poliomyelitis, diphtheria, tetanus, pertussis, measles, mumps and rubella under a scheme called 'Childhood Immunisation Programme'. Incidences of many communicable diseases in Hong Kong are relatively few.

The current estimated number of people infected with HIV in Hong Kong is about 3 600. The number of newly reported cases is about 400 each year.

### *Non-communicable Diseases*

Health problems in Hong Kong are mostly associated with lifestyle and among them, chronic diseases top the list. The biggest killers are cancer, heart and cerebrovascular diseases, together accounting for about 55 per cent of all registered deaths in 2007. Elderly people are the biggest victims and will continue to be at the top of the mortality list as the population ages. The Centre for Health Protection will continue reinforcing protection against non-communicable diseases through a scheme called the 'Behavioural Risk Factor Surveillance System'.

A Cancer Coordinating Committee has been set up to formulate plans and to make recommendations for effectively preventing and controlling cancer in Hong Kong which claimed more than 12 000 lives in 2007.

To reduce the mortality rate of cervical cancer victims, the Department of Health, in collaboration with other health care providers, launched a Cervical Screening Programme in 2004 to provide screening for women aged between 25 and 64. It has also devised a Cervical Screening Information System (CSIS) to collect and analyse data on cervical smears. In 2007, 96 633 women, registered under the programme, underwent cervical screening.

At the district level, the Hospital Authority has a number of programmes for elderly people in their districts to reduce the re-admission rates. There are also training programmes for carers to enhance self-care of the chronically ill.

## **Health Regulatory Activities**

### *Healthcare Professionals*

Under existing legislation, 12 categories of healthcare professionals need to be registered with their respective boards or councils before being allowed to practise in Hong Kong. As at December 31, 2007, they numbered: 11 961 doctors, 2 025 dentists, 5 619 Chinese medicine practitioners, 36 965 nurses (including registered and enrolled nurses), 4 693 midwives, 1 722 pharmacists, 97 chiropractors, 2 086 physiotherapists, 1 268 occupational therapists, 2 661 medical laboratory technologists, 1 947 optometrists and 1 628 radiographers.

To become a registered Chinese medicine practitioner (CMP) to practise in Hong Kong, a person must have satisfactorily completed a recognised undergraduate degree training course in Chinese medicine practice or its equivalent approved by the Chinese Medicine Practitioners Board of the Chinese Medicine Council of Hong Kong, and have passed the licensing examination before applying to be registered as a CMP. As a transitional arrangement for the registration of CMPs, people who have been practising Chinese medicine in Hong Kong before January 3, 2000 were eligible to become listed CMPs. Depending on their practising experience and academic qualification, listed CMPs could be registered through direct registration, passing the Registration Assessment or passing the licensing examination. The Chinese Medicine Council of Hong Kong conducted Part I and Part II of the 2007 Chinese Medicine Practitioners Licensing Examination in June and August respectively. By year-end, 5 619 and 2 847 Chinese medicine practitioners were registered (including 79 Chinese medicine practitioners with limited registration) and listed respectively with the Chinese Medicine Council of Hong Kong.

### *Western Medicines*

The regulation of Western medicines in Hong Kong is stipulated under the Pharmacy and Poisons Ordinance. Acting on the authority of the Pharmacy and Poisons Board, the Department of Health registers and approves the marketing of pharmaceutical products, issues licences to drug manufacturers, importers, wholesalers and retailers, and takes action against illegal sale of controlled drugs in collaboration with the Hong Kong Police Force. Legislative controls are also enforced on poisons, antibiotics and dangerous drugs.

During 2007, 3 754 applications for registration of pharmaceutical products were approved. At year-end, there were 19 410 pharmaceutical products registered in Hong Kong.

### *Chinese Medicines*

The subsidiary legislation on Chinese medicines was passed by the Legislative Council in April 2003. Since then, any person engaged in retail or wholesale of Chinese medicines, manufacture or wholesale of proprietary Chinese medicines

(pCm), is required to obtain a licence. Any pCm sold, imported or possessed in Hong Kong must be registered. The Chinese Medicine Council of Hong Kong is now the responsible body for devising and implementing regulatory measures for Chinese medicine. Applications for Chinese medicine trader licences and for registration of proprietary Chinese medicines have been accepted since April 2003. By the end of 2007, 9 052 and 16 197 applications respectively were received.

### *Organ Transplantation*

Under the Human Organ Transplant Ordinance, transplant of human organs and importation of human organs for transplant purposes are regulated, and commercial dealings in human organs intended for transplant are prohibited. Approval from the statutory Human Organ Transplant Board is required for transplantation of human organs between persons who are not genetically related or a couple whose marriage has subsisted for not more than three years. The board also collects certain information about transplant operations in prescribed statutory forms.

In 2007, the board received a total of 16 applications for organ transplants between living non-related persons. No organs were imported into Hong Kong for transplant purposes during 2007.

### *Human Reproductive Technology*

Human reproductive technology activities are regulated to ensure the procedures are conducted in a safe and informed manner, and to safeguard the welfare of the child born through such technology. The Human Reproductive Technology Ordinance<sup>2</sup> and regulations, namely the Human Reproductive Technology (Licensing) Regulation and the Human Reproductive Technology (Fees) Regulation, came into full effect on August 1, 2007. Reproductive technology service providers and embryo researchers who wish to conduct relevant activities as regulated by the ordinance should obtain a licence for the activity issued by the Council on Human Reproductive Technology. The ordinance confines the application of reproductive technology procedures to infertile married couples, regulates surrogacy arrangements and the use of embryos and gametes for research and other purposes, and prohibits commercial dealings in gametes or embryos and using donated gametes in surrogacy arrangement. For the purpose of regulating human reproductive technology activities, the council has made reference to international practices and has drawn up a code of practice setting out the requirements, standards and good practices for embryo researchers and reproductive technology practitioners in consultation with the reproductive technology profession, social workers, legal practitioners, academia and ethical groups.

### *Port Health*

To prevent the introduction of quarantinable diseases and other serious infectious diseases into Hong Kong through air, land or sea immigration control points, the Port Health Office under the Department of Health enforces quarantine

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<sup>2</sup> Except Section 33(4)(a) of the ordinance.

measures stipulated by the International Health Regulations and the Quarantine and Prevention of Disease Ordinance.

Travellers arriving in Hong Kong at various immigration control points are required to undergo temperature screening as a precautionary measure to reduce the risk of them bringing avian influenza into Hong Kong. The Port Health Office also provides preventive services including medical consultation, vaccination, prophylactic medication and advice on travel-related risks to Hong Kong residents before they travel. The office has a working relationship with the travel industry. Travel health information is further disseminated via the website, [www.travelhealth.gov.hk](http://www.travelhealth.gov.hk)

### *Radiation Health*

Under the Radiation Ordinance, the Radiation Board was set up to control the import, export, possession and use of radioactive substances and irradiating apparatus. On the other hand, the Radiation Health Unit of the Department of Health advises the Government on the health effects of radiation fields and protection of public health in areas such as nuclear incidents and management of radioactive materials and wastes. It safeguards public health against ionising radiation through licensing control and inspection of premises where radioactive substances or irradiating apparatuses are present or in use. It also conducts health checks and radiation monitoring for radiological practitioners, maintains the radiation dosimetry metrology standards for environmental level and occupational protection level radiation dosimetry measurements of Hong Kong, and provides the related standard calibration services.

As a service improvement initiative, it has taken up the import licensing services for radioactive substances and irradiating apparatus from the Trade and Industry Department since July 10, 2006. This arrangement enables a 'one-stop shop' service for traders and users of radiation sources, and 'cradle to grave' management of radioactive substances, all under one centralised office.

In 2007, the unit assessed and issued 10 225 licences and permits according to the Radiation Ordinance, and 3 161 licences and permits according to the Import (Radiation) (Prohibition) Regulations, and provided monitoring service to 9 509 occupationally exposed persons. The average radiation exposure of the occupationally exposed persons was 0.08 mSv against an annual statutory limit of 20 mSv.

## **Training of Medical and Health Personnel**

### *Doctors*

The University of Hong Kong and the Chinese University of Hong Kong provide basic training of doctors. They took in 129 and 130 medical students respectively in 2007. During the year, 18 medical graduates with professional qualifications obtained outside Hong Kong passed the licensing examination conducted by the Medical Council of Hong Kong. The Hong Kong Academy of Medicine is an independent statutory body with the authority to approve, assess and accredit specialist training within the medical and dental professions. Its 15 colleges conduct training and examinations to award specialist qualifications to qualifying candidates.

Apart from endeavouring to provide the community with public health care services, the Hospital Authority also undertakes training of specialists. Each year, the majority of medical graduates of the two local universities are offered appointment to the Hospital Authority and receive specialist training while working in the HA. During the year, over 300 medical graduates were offered appointment to the Hospital Authority and over 2 000 doctors received specialist training there. Generally, doctors are required to undergo about seven years of training before acquiring specialist qualification. To attract more medical graduates to join the public healthcare sector and receive specialist training, the Hospital Authority introduced a new career structure for doctors in 2007 to improve the remuneration package of those under training and to ensure they have sufficient time to complete their training. They will be employed as specialists on permanent terms after they have acquired specialist qualification.

### *Dentists*

Training in dentistry is available at the University of Hong Kong, which enrolled 51 dental students in 2007. During the year, nine candidates who completed their dental training outside Hong Kong passed the licensing examination conducted by the Dental Council of Hong Kong.

### *Chinese Medicine Practitioners*

Three local universities offer full-time undergraduate degree courses in Chinese medicine. In 2007, 103 full-time local Chinese medicine bachelor's degree graduates who passed the licensing examination were registered as Chinese medicine practitioners.

### *Allied Health Professionals*

For allied health professionals, degree programmes in the fields of medical laboratory science, physiotherapy, occupational therapy, optometry and radiography were offered by the Hong Kong Polytechnic University, which enrolled 35, 63, 45, 35 and 36 students respectively in 2007.

To address the increasing demand for services and to develop new services, the Hospital Authority established the Institute of Advanced Allied Health Studies in July 2007 to provide systematic, continuous training for professionals of various allied health grades to upgrade the overall service standards. Courses offered by the institute cover areas such as clinical knowledge, skills, management and personal development, and include a three-year training course provided for new recruits of allied health services. About 120 new recruits completed the course in 2007.

### *Nurses*

The University of Hong Kong, the Chinese University of Hong Kong and the Hong Kong Polytechnic University provide basic Registered Nurses training. The three universities recruited 596 nursing students into their four-year general nursing degree programmes in 2007, while the Hong Kong Polytechnic University enrolled 120 nursing students into its three-year higher diploma nursing programme. In addition, the Hong Kong Sanatorium and Hospital Limited and St Teresa's Hospital provide



basic Enrolled Nurses training. Together, they recruited 110 nursing pupils into their two-year certificate nursing programmes. During the year, 43 nurses with professional nursing qualifications obtained outside Hong Kong, passed the licensing examinations for registered nurses or enrolled nurses conducted by the Nursing Council of Hong Kong and were awarded practising certificates.

The Hospital Authority provides basic Registered Nurses training through its three-year higher diploma programme at the School of Nursing at Queen Elizabeth Hospital. A total of 100 registered nurses graduated from this course and 110 student nurses were recruited in 2007. During the year, the Hospital Authority also recruited 110 pupil nurses into its two-year Enrolled Nurses training programme, specifically designed for the welfare sector.

In addition, the Hospital Authority is committed to strengthening the core competence of nurses and enhancing the quality of nursing care. In line with the overall strategies on healthcare services of the Hospital Authority, its Institute of Advanced Nursing Studies seeks to strengthen the training of nurses in the primary and community care services and to organise training courses to encourage nurses to improve their professional standards through continuous learning. Courses offered by the institute include specialist nursing care certificate courses, a professional competence enhancement programme and e-learning programmes. During the year, the Hospital Authority also strived to promote the exchange of nurses among Hong Kong, the Mainland, Macao and other countries.

## **Laboratory Services**

### *Government Laboratory*

The Government Laboratory offers a comprehensive range of analytical and advisory services to support the Government in upholding its various commitments in the protection of public health. In the financial year 2006-07, \$90.88 million were spent for the Government Laboratory to provide analytical services for public health purposes.

In 2007, 158 735 tests on a wide range of food samples were carried out for surveillance and for verifying compliance with the statutory standards. The laboratory has also rendered urgent analytical services on various ad hoc issues during the year, including the examination of oilfish samples, tests for pesticide residues in fruit samples and residues of malachite green, nitrofuans (and its metabolites) and other antibiotics in fish and canned food samples respectively. To strengthen the support for the newly established Centre for Food Safety, additional manpower has been engaged in food examination since April 2007 with a view to addressing the expected increase in workload under the stepped-up food surveillance programme, the food tests required in increasing food complaint investigations and emergency food safety incidents, and coping with the substantial scientific researches involved in the extension of the scope of food surveillance. In addition, the former Hong Kong Institute of Immunology under the Department of Health at Pok Fu Lam will be converted into a Food Safety Testing Laboratory under the Government Laboratory to cope with the additional workload arising from the establishment of the Centre for

Food Safety. The Food Safety Testing Laboratory is expected to be commissioned in early 2008.

The laboratory has continued to provide a comprehensive analytical service to ensure the quality of Western and Chinese medicines that constitute an indispensable part of the healthcare system. In 2007, a total of 40 889 tests were carried out on western pharmaceutical products for compliance with the international or other acceptable standards in quality and safety. At the same time, 53 442 tests were conducted on Chinese herbal medicines for their harmful elements and pesticide residue contents, and proprietary Chinese medicines for the detection of adulteration with western drugs or controlled substances, as well as harmful elements contents. In addition, the laboratory provided full support for investigations into cases of adverse reaction or intoxication incidents related to inadvertent substitution or contamination of herbs in Chinese medicines. Active participation was sustained in the development of regulatory standards for Chinese medicinal herbs in Hong Kong.

The laboratory sustained year-round surveillance of tar and nicotine yields in cigarettes. Some 12 960 examinations were conducted during the year for affirmation of the data declared by tobacco traders. Results were published in the annual table for public information.

### *Public Health Laboratory Services*

The Public Health Laboratory Centre and the Clinical Pathology Laboratory Centre of the Department of Health provide clinical diagnostic and public health laboratory services to the public and private health sectors for patient care and for other public health uses. The centres also process clinical and surveillance specimens to see if they contain infectious substances. The centres conducted more than 2 million such tests in 2007.

The Public Health Laboratory Centre has been designated by the World Health Organisation as the National Influenza Centre, the National Poliovirus Laboratory, the National Measles Laboratory, Regional Measles Reference Laboratory, Avian (H5) Influenza Reference Laboratory, SARS Reference Laboratory and a Supranational TB Reference Laboratory.

### *Hospital Laboratory Services*

Hospital laboratories located in regional hospitals under the Hospital Authority provide a wide range of laboratory services in anatomical pathology, chemical pathology, haematology, blood bank, microbiology, immunology and tissue typing to ensure that all public hospitals, including those without onsite laboratories, have access to comprehensive laboratory services. These laboratories are supported by advanced information technology systems and automated devices to achieve operational efficiency. They were also accredited by a number of local and international accreditation bodies. In 2007, these hospital laboratories carried out more than 150 million tests.

### **Auxiliary Medical Service**

The Auxiliary Medical Service (AMS) is a government department established under the Security Bureau. With a staff of 95 civil servants, it manages a government-financed auxiliary service comprising 4 418 volunteers. In addition to doctors and nurses, all of its members are qualified personnel known as Disaster Medical Assistants. Its main role is to reinforce the regular medical, health and ambulance services during emergencies and to provide backup during ordinary times. The Director of Health serves as AMS's commissioner and is responsible to the Chief Executive for the running of the service.

In addition to regular training, AMS members also carry out joint exercises with the Fire Services Department, the Hospital Authority and the Department of Health to familiarise themselves with the techniques of lifesaving, treating patients and handling sudden outbreaks of infectious diseases.

In preparation for the 2008 Olympic Equestrian Events, the AMS deployed its doctors, nurses and members to assist the Hospital Authority and the Fire Services Department in providing medical and first aid services during a trial run of the 2008 Olympic and Paralympic Equestrian Events, 'Good Luck Beijing — HKSAR 10th Anniversary Cup', which was held in Hong Kong in August 2007. The AMS engaged nearly 600 members including 38 doctors and 128 nurses.

A Health Protection Unit has been set up to assist the Department of Health in the event of outbreaks of infectious diseases. Members of the new unit have been undergoing training conducted by doctors and nurses. So far 220 members have been trained. The unit also took part in a refresher course on containing outbreaks of infectious diseases such as the bird flu. In 2007, the AMS was again applauded for its community work and was presented with 'Caring Organisation' award.

### *Websites*

Food and Health Bureau: [www.fhb.gov.hk](http://www.fhb.gov.hk)

Department of Health: [www.dh.gov.hk](http://www.dh.gov.hk)

Centre for Health Protection: [www.chp.gov.hk](http://www.chp.gov.hk)

Hospital Authority: [www.ha.org.hk](http://www.ha.org.hk)

Auxiliary Medical Service: [www.ams.gov.hk](http://www.ams.gov.hk)