

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 health services and constantly reviews and upgrades them. Through surveys and international forums, new services and reforms are introduced. Smoking in public places is banned in Hong Kong as are spitting, littering and other such practices detrimental to public health.

2008 Figures at a Glance

<i>Infant Mortality Rate</i>	1.8* per 1 000 registered live births	
<i>Maternal Mortality Ratio</i>	2.5* per 100 000 registered live births	
<i>Life Expectancy 2008</i>	79.4* (Male)	85.5* (Female)
2036	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 2008, male life expectancy was 79.4* years while female life expectancy was 85.5* 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)¹ for 1989-90 to 2004-05, 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

¹ 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 Co-operation and Development to keep track of Hong Kong's health spending and to allow for international comparison.

same period. Public health spending in the 2004-05 financial year amounted to \$37.2 billion, or 2.8 per cent of 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, forming policies and allocating resources for the running of Hong Kong's health services. It also ensures these policies are carried out effectively 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 out-patient 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 (HMDAC), chaired by the Secretary for Food and Health, has 11 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.

Healthcare Reform

In July 2005, the HMDAC issued a discussion paper on the future of healthcare services, which contained proposals that won extensive public support. Its key recommendations include:

- (a) putting more emphasis on primary healthcare services and promoting the family doctor concept;
- (b) strengthening collaboration and co-operation 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.

In accordance with the proposals made by the HMDAC, the Government published the Healthcare Reform Consultation Document 'Your Health, Your Life' in March 2008, putting forward a package of inter-connected reform proposals on the

following aspects and initiating the first-stage public consultation which lasted for three months:

- (a) improve primary care;
- (b) promote public-private partnership in healthcare;
- (c) develop electronic health record sharing;
- (d) strengthen public healthcare safety net; and
- (e) reform healthcare financing arrangement.

The Report on the First Stage Public Consultation on Healthcare Reform was released in December, summarising the views of different sectors of the community and the general public. Results showed that the community generally recognised the need for healthcare reform; that the community had a clear consensus on the service reform proposals and felt that the Government should act on them. The majority of members of the public also saw the need to address the issue of healthcare financing to sustain the development of Hong Kong's healthcare system. Most agreed that there was a need to discuss the issue further.

The Government is committed to increasing the recurrent funding for healthcare services, and making the best use of the increased funding over the next few years to introduce service reforms and improve healthcare services. Meanwhile, based on the views collected in the first stage of public consultation, the Government will continue to explore issues about healthcare financing and consider proposals before consulting the public further.

Primary Healthcare Services

People requiring primary healthcare do not need to go to a hospital for it. It's the first step in the healthcare process. Public healthcare organisations provide general outpatient services, as well as specialised healthcare, or specialist medical treatment, for special age groups. Primary healthcare consists of a wide range of public health services, including health promotion and disease prevention services.

According to the DHA for 2004-05, Hong Kong's expenditure on primary healthcare, which includes spending on public general out-patient clinics, private out-patient services (general and specialist) and dental care, amounted to about \$19.2 billion in 2004-05, with the share of the public expenditure accounting for 24 per cent.

In 2008, the Government set up a 'Working Group on Primary Care' consisting of healthcare professionals from the public and private sectors, patients' representatives and service users to formulate concrete proposals for reforming and strengthening healthcare. The team has several task forces under it. The Government will explore a new method of rendering primary healthcare in accordance with the community health centre model which enlists the help of the public and private sectors and non-governmental organisations (NGOs). The Government will introduce a number of pilot models to strengthen primary healthcare services.

Clinic Services

Public outpatient clinic services are offered primarily to low-income families, patients with chronic diseases and other vulnerable groups. In 2008, some 1.29 million people used these services, with 4.9 million attendances recorded. At present, the Hospital Authority operates 74 general outpatient clinics in Hong Kong.

The Government lends its support to the development of family medicine, provides specialist training in family medicine and facilitates the integration of primary and secondary healthcare. Some \$1.5 billion was spent on outpatient and family medicine services during the 2007-08 financial year.

To promote the development of 'evidence-based' Chinese medicine practice and to increase training opportunities for local Chinese medicine graduates, the Hospital Authority opened 12 Chinese medicine outpatient clinics in 2008. A Government subvention of \$61 million was provided for the clinics. A total of 53 904 patients made 312 281 visits to the 12 clinics, and 85 new graduates were recruited into the clinics.

The majority of Hong Kong people seek outpatient services provided by about 3 700 medical practitioners' offices and clinics in the private sector. Services are also provided by 5 932 registered Chinese medicine practitioners (including 72 with limited registration) and 2 823 listed Chinese medicine practitioners.

About 27 million outpatient visits are made to western medicine clinics and six million to Chinese medicine practitioners' clinics in the private sector each year. The majority of people in Hong Kong can afford these services.

Family Health

The Department of Health provides a range of health promotion and disease prevention services through its 31 maternal and child health centres and three women health centres for children up to five years of age, and women aged 64 or below. Guidance services on child care and parenting are provided for parents and care-givers in the centres. Immunisation and health and development checks are offered to children. Antenatal, postnatal, family planning, cervical screening and health education are provided for women. Some 26 000 expectant mothers and 61 000 newborns attended maternal and child health centres, representing about 33 per cent and 78 per cent respectively of the total in 2008.

The government-subsidised Family Planning Association (FPA) of Hong Kong offers services and health information on sexual and reproductive health treatment and counselling at its clinics, youth healthcare centres, women's clubs, and libraries which received a subsidy amounting to \$32.66 million in the 2007-08 financial year. Over 100 000 people received these services in 2008.

Student Health

The Department of Health provides health checks and individual counselling to primary and secondary school students at its 12 student health service centres and three special assessment centres. A total of 752 021 students between the age of six and 19 received the services in the 2007-08 school year.

In addition, school health inspectors pay regular visits to schools to check on their hygiene standards, while health officers and nurses provide advice on preventing communicable diseases. Teams from the Department of Health make annual visits to primary schools to immunize students against communicable diseases.

Elderly Health

The Department of Health has 18 elderly health centres and 18 visiting health teams to render primary health care to the elderly, improve their ability to care for themselves, encourage healthy living and family support for them. These centres provide health assessments, physical check-ups, counselling, curative treatment, health education and other healthcare services to people aged 65 and above. The visiting health teams conduct health promotion activities for the elderly and provide training for carers to improve their skills in caring for the elderly. In 2008, the elderly health centres recorded 38 453 enrolments and 175 857 attendances for health assessment and medical consultation, while the visiting health teams provided service through 261 360 client contacts.

Community Health

In line with the international trend of focusing more on developing ambulatory and community care programmes, the Hospital Authority has improved its community healthcare services to reduce reliance on inpatient services and facilitate patients' rehabilitation in the community. In 2008, the Hospital Authority continued to step up training for family physicians, community paediatricians, community physicians, general practitioners and other community health practitioners to improve community health care. The Hospital Authority has also strengthened its services to facilitate rehabilitation of discharged patients in the community.

The Hospital Authority spent \$700 million on community health services in the 2007-08 financial year, during which community nurses conducted 781 300 visits to the homes of elderly people and 813 400 counselling sessions for elderly people and patients with mental problems.

Over 80 per cent of people receiving community nursing care are elderly people. Medical officers under the Community Geriatric Assessment Teams visit them weekly at their homes to assess their health and medical needs. Volunteer groups have also been set up to provide support to elderly people discharged from hospital. A telephone service is in place for people to seek advice on disease management at home. Another improvement is the stationing of more community nurses at care centres and NGOs to provide on-site care for people in the community.

With regard to rehabilitation and palliative services, the hospital clusters under the Hospital Authority will continue to set up more ambulatory care centres to take on discharged patients for short-term rehabilitation and to establish integrated palliative day care centres to provide a full spectrum of physical, rehabilitative, and psychological 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 366 000 primary students in the 2007-08 school year, or about 95 per cent of the total number of primary school children in Hong Kong.

In addition to the 11 government dental clinics that provide basic dental services to the general public for pain relief and tooth extraction, 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

To strengthen community nursing care for patients with mental problems, the Hospital Authority has launched a pilot scheme in Kowloon West Cluster and New Territories East Cluster to provide post-discharge community support to frequently readmitted psychiatric patients to assist in their rehabilitation. In addition, the Hospital Authority piloted the Consultation-Liaison psychiatric services at Accident and Emergency Departments in the Kowloon East Cluster and the Kowloon Central Cluster to provide psychiatric consultation service for patients with acute psychiatric conditions to relieve their conditions as early as possible and reduce unnecessary admission. Information on other public mental health rehabilitation 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, three clinical genetic clinics, six child assessment centres, and two travel health centres. More than 7.1 million visits to these clinics were recorded in 2008.

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, 2008, there were 27 229 hospital beds, comprising 20 423 general beds, 2 041 infirmary beds, 4 105 beds for the mentally ill and 660 beds for the mentally handicapped. In addition, there were 3 712 beds in private hospitals, 3 347 in nursing homes and 760 in institutions run by the Correctional Services Department. In all, the number of beds per thousand of population is about five.

According to the DHA, spending on secondary, tertiary and specialised healthcare services, including public specialist outpatient and inpatient services, as well as private inpatient services, amounted to about \$34.8 billion in 2004-05. The expenditure on public specialist outpatient and inpatient services accounted for 84 per cent of the expenditure on secondary, tertiary and specialised healthcare services.

Specialist Outpatient Service

Secondary and tertiary ambulatory medical services in the public sector are provided mainly through the Hospital Authority's specialist clinics. At these clinics, patients' symptoms are assessed before diagnosis, treatment, as well as follow-up treatment for patients who require long-term specialist care. About \$5.9 billion were allocated in the 2007-08 financial year 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, nephrology and other illnesses.

In 2008, members of the public made close to 6.02 million visits to specialist outpatient clinics and about 1.86 million visits to allied health outpatient departments in public hospitals. To cope with the large demand for their services, the specialist clinics in public hospitals implement a triage system for screening newly referred patients to see who needs urgent attention.

Patients with Priority I and II conditions are seen within two weeks and eight weeks respectively. The triage criteria have been sent to private practitioners to facilitate their initial examination of patients. The specialist clinics in many public hospitals also work 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 newly referred patients.

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 provided to patients who require intensive therapy for their acute illnesses. In the 2007-08 financial year, about \$18.2 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 range of clinical specialities, including internal medicine, surgery, neurosurgery, clinical oncology, cardiology, obstetrics and other such operations and treatments.

In 2008, some 1.27 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 the development of ambulatory and community care programmes for patients to receive rehabilitation services near their homes as far as possible. This is a major shift in the provision of health services from a disease treatment 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.

Accident and Emergency Service

There are 16 public hospitals under the Hospital Authority providing accident and emergency services. These hospitals deliver a high standard of services for people critically ill or injured who need urgent medical attention, or for victims of disasters. About \$1.6 billion were allocated for the provision of such services in the 2007-08 financial year.

In 2008, about 1.2 million people paid about 2.12 million visits to the accident and emergency departments of public hospitals, on average 5 780 attendances per day. Patients attending the accident and emergency departments of public hospitals are 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 proved to be an effective means of ensuring that patients with more urgent needs are promptly attended to. In 2008, 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 of 95 per cent. People receiving assistance under the Comprehensive Social Security Assistance Scheme are exempted from payment of public medical charges. Other needy groups are also assisted 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 314 024 inpatients in 2007, representing 20.4 per cent of the total number of inpatients in the territory.

According to the DHA, the expenditure on private inpatient services in 2004-05 was about \$5.7 billion, accounting for about 21 per cent of the overall expenditure on inpatient services in both the public and private sectors.

Public Hospital Development Programmes

A number of hospital projects are under way to enhance 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, preparatory work for the redevelopment of Caritas Medical Centre Phase 2, and expansion of Tseung Kwan O Hospital. Also on the drawing board are a General Outpatient Clinic, an Integrated Community Mental Health Support Services Centre and a Long Stay Care Home in Tin Shui Wai Area 109.

Public-private Partnership Projects in Healthcare Services

The Government carried out a series of pilot projects through the Hospital Authority in 2008 to promote the concept of public-private partnership (PPP) in healthcare services. The projects included the Cataract Surgeries Programme,

launched in February 2008, which subsidised the cataract operations performed by private ophthalmologists on patients participating in the scheme. During the year, a total of 76 ophthalmologists took part in the programme and 4 576 patients enrolled in the programme, of which 2 474 underwent cataract surgery.

The Hospital Authority also started carrying out the PPP pilot scheme in Tin Shui Wai in June. Chronically-ill patients living in Tin Shui Wai North whose condition is stable, but who need long-term follow-up treatment at general outpatient clinics may join the scheme. Participating patients receive a Government subsidy and are allowed to choose any doctor taking part in the project to attend to them. At the end of 2008, six private doctors and 722 patients had enrolled in the project. About 1 000 chronically-ill patients are expected to benefit from the project.

Developing Electronic Health Record (eHR) Sharing

To explore the feasibility and acceptability of electronic health record (eHR) sharing, the Government continues to implement the 'Public-Private-Interface Electronic Patient Record Sharing' pilot project. It enables participating private hospitals, private practitioners and other healthcare providers to access their patients' records kept at the Hospital Authority, subject to the patient's consent. By the end of 2008, more than 1 300 private healthcare professionals had taken part in the project, including all of the territory's 12 private hospitals and 10 other private or non-governmental organisations providing healthcare services to the elderly and chronically-ill patients. More than 54 000 patients had also enrolled in the project.

Meanwhile, the Government is joining hands with the public and private healthcare sectors, IT service providers and stakeholders in the community to develop a territory-wide, patient-oriented eHR sharing system and will set up an office under the Food and Health Bureau to co-ordinate the work on developing the system and to address matters such as policies, legal implications, privacy and security, by leveraging the Hospital Authority's systems and know-how.

Health Promotion

Healthy Lifestyle

The Central Health Education Unit of the Department of Health is responsible for formulating the direction of public health education. In the 2007-08 financial year, the Department of Health spent \$200 million on health promotion.

In 2008, the unit carried out a number of promotional activities, including one called 'Exercise Prescription Project' which encourages physical activities; campaigns on preventing infectious diseases such as the one on proper use of antibiotics and the publication of leaflets on health in different languages for the territory's cosmopolitan community.

Nearly 80 per cent of Hong Kong's primary and secondary schools are today participating in a campaign on healthy eating, called 'EatSmart@school.hk' launched in 2006. To date, the campaign's website has recorded almost 35 million hits. The Department of Health is also running a campaign named 'EatSmart@restaurant.hk' in which some 440 eateries took part this year.

The current Adolescent Health Programme is another example of the department's determination to improve the psychosocial health of secondary school students. Some 340 secondary schools, 102 000 students and 5 300 parents and teachers enrolled in and received services under the programme during the 2007-08 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 for primary school pupils. Information on oral health is conveyed to the public through the department's oral health education homepage, www.toothclub.gov.hk, and a 24-hour interactive telephone hotline.

In October, a campaign was launched to urge people to take proper care of their teeth. The 'Love Teeth Campaign' message reads: 'Love your Teeth. Start Flossing.' It encourages people to use dental floss to clean their teeth thoroughly.

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 the 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 2008, the centre organised 29 major activities and 174 special programmes, from which some 80 000 participants benefited. The number of new and active HIV patients reported in 2008 was 435, compared with 414 in 2007.

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 service and HIV antibody tests may be made on the hotline. In 2008, about 15 000 calls were made to nurse counsellors on the hotline by people seeking AIDS counselling. About one 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 to advise men who have sex with men. In 2008, the Gay Men HIV Testing Hotline received about 370 calls for counselling and HIV testing.

Organ Donation

The Department of Health joined hands with the Hospital Authority, the Hong Kong Medical Association and NGOs to promote organ donation. In 2008, the department, together with the relevant organisations, launched the Centralised Organ Donation Register (CODR), to promote organ donation as a charitable life-saving act. Potential donors are encouraged to record their names in the register, expressing their wish to donate their organs after death and to make their wish

known to their families. The goal is to get people to recognise voluntary organ donation as a commendable act.

Some 29 liver transplants, 65 renal transplants, five heart transplants, one heart-lung transplant and 179 cornea transplants were carried out with cadaveric organs in Hong Kong's public hospitals in 2008.

Smoking and Health

Legislation

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. To further protect the public from the hazards of second-hand smoking and to enhance Hong Kong's compliance with the FCTC, the Government amended the Smoking (Public Health) Ordinance in October 2006 to expand statutory no smoking areas to all indoor workplaces and public places and to strengthen the regulation on advertisement, promotion, packaging and labelling of tobacco products.

Under the amended Smoking (Public Health) Ordinance, smoking is now banned at 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. Extending the smoking ban to qualified establishments (namely qualified bars, clubs, nightclubs, bathhouses, mahjong-tin kau premises and designated mahjong rooms in qualified clubs) will take effect from July 1, 2009.

In addition, the Fixed Penalty (Smoking Offences) Ordinance enacted in 2008 requires people who smoke illegally at statutory no-smoking areas and in public transport to pay a fixed penalty of \$1,500. In addition to the Police and tobacco control inspectors, staff of the Leisure and Cultural Services Department, Food and Environmental Hygiene Department and Housing Department are also empowered to serve fixed penalty notices on offenders.

Implementation and Enforcement

A main task of the Tobacco Control Office (TCO), set up in 2001, is to enforce the smoking ban at statutory no-smoking areas. It conducted over 13 000 inspections and issued over 7 300 summons for smoking offences in 2008. Another of its key tasks is to assist managers and staff of establishments in the statutory no-smoking areas to observe the Smoking (Public Health) Ordinance. In 2008, TCO organised 18 seminars on tobacco control and prevention. Some 640 people attended the seminars. They included venue managers of no-smoking areas and the public. The TCO also distributed over 580 000 sets of health education materials (including guidelines, posters, no smoking signs and pamphlets) to venue managers of statutory no smoking areas and the public. It will continue to provide training and support to relevant stakeholders and the public.

Publicity and Education

An independent statutory body, the Hong Kong Council on Smoking and Health (COSH), has also been set up to advise the Government on matters relating to smoking, passive smoking and health and to publicise the hazards of smoking. COSH conducted a number of publicity and community involvement campaigns to nurture a smoke-free culture and encourage smokers to stop smoking. The council also conducts education and publicity campaigns at kindergartens, primary and secondary schools through health talks and theatre programmes. The aim is to encourage students to say 'no' to smoking and to support actively a smoke-free environment. COSH's publicity and educational programmes attracted an attendance of about 68 000 people in 2008. In addition, the council launched a territory-wide publicity drive called 'Smoke-Free Hong Kong' which included broadcasts on TV and radio. The council also operates a website www.smokefree.hk and a telephone hotline to receive enquiries and suggestions from the public on smoking and health.

Smoking Cessation

The Department of Health offers smoking cessation services at four clinics. It also makes announcements of public interest on TV and radio, conducts seminars and issues health education materials to increase public awareness of the harmful effects of smoking and secondhand smoke, and solicits public support for a smoke-free environment and the anti-smoking law.

To strengthen its efforts on smoking prevention and cessation, the department has entered into a funding and service agreement with the Tung Wah Group of Hospitals for provision of a three-year pilot community-based smoking cessation programme which commences in January 2009. The programme covers a range of activities and services including smoking cessation service, education for the public, training for healthcare professionals and research projects. Four smoking cessation centres have been set up across Hong Kong to provide smoking cessation services free of charge.

The Hospital Authority has also been providing smoking cessation services to the public through its two full-time and 27 part-time centres in public hospitals and outpatient clinics. The centres are manned by trained nurses and pharmacists who provide counselling and medicines to help people stop smoking. Smokers trying to quit can make appointments or make enquiries on a hotline, called 'quit-line' operated by the Hospital Authority.

Disease Prevention and Control

The new Prevention and Control of Disease Ordinance and its subsidiary legislation, namely the Prevention and Control of Disease Regulation came into effect on July 14, 2008 to replace the former Quarantine and Prevention of Disease Ordinance. The Ordinance ensures that the laws of Hong Kong are in line with the requirements of the International Health Regulations (2005) of the World Health Organisation and strengthens the infectious disease control structure of Hong Kong so that the territory can tackle infectious diseases in a more effective manner and cope with public health emergencies.

The Department of Health spent \$1,212 million on disease prevention and control at its maternal, child health and elderly health centres and other such places in the 2007-08 financial year.

Centre for Health Protection

The Centre for Health Protection has been in operation since June 1, 2004. It collaborates with its local and international counterparts to prevent and control outbreaks of diseases. It works on three principles: real-time surveillance, rapid intervention and responsive risk communication.

The Centre has been constantly strengthening its infection surveillance and data analyses on epidemiology and health care. By setting up an effective reporting and monitoring system as well as upgrading facilities for conducting diagnosis and clinical tests, the centre has kept track of communicable diseases effectively. The centre issues surveillance reports on a regular basis, as well as reports on laboratory safety and quality assurance. Prevention and control of, and education on known diseases such as tuberculosis, HIV/AIDS and sexually transmitted diseases were also strengthened. A board of scientific advisers, comprising experts from different disciplines, and seven scientific committees meet periodically to assist the centre in formulating policies to improve the local health protection system. Training and research programmes were also launched regularly.

In addition to drawing up risk communication strategies and action plans, the centre, through health educational campaigns and publicity programmes with district councils, has given information and guidelines about diseases to the public regularly 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 improve government and community preparedness to cope with major outbreaks of infectious diseases, the Centre for Health Protection continues to review and update its strategies for dealing with such outbreaks. A plan for mobilising volunteers in the event of an outbreak is also in place. For the 2008 Olympic and Paralympic Equestrian Events, the centre drew up an emergency response plan for tackling infectious disease outbreaks should they occur during the events.

The centre organised as well as participated in a number of drills during the year to test Hong Kong's preparedness for such outbreaks. On June 6, a drill codenamed 'Equator' was conducted together with other departments and organisations to test the overall preparedness and response to public health incidents during the Olympic and Paralympic Equestrian Events. On June 19, the centre and the Port Health Office under the Department of Health, together with the Shenzhen Entry-Exit Inspection and Quarantine Bureau, conducted an exercise codenamed 'Compass', at Shenzhen Bay Port to test the emergency response of the two places to cross-boundary health hazards.

Hong Kong has also maintained close communication and co-operation with the Mainland and Macao. The three places jointly conducted a drill codenamed 'Exercise Great Wall 2008' on December 16 to test their joint response to public health hazards occurring at their common boundaries.

Other Communicable Diseases

The number of statutory notifiable infectious diseases occurring in Hong Kong has increased from 32 to 45 since July 14. During the year, about 16 700 cases of notifiable diseases were reported, of which about 5 700 were diagnosed as tuberculosis.

Children in Hong Kong are protected against communicable diseases such as tuberculosis, hepatitis B, poliomyelitis, diphtheria, tetanus, pertussis, measles, mumps and rubella under a plan called 'Childhood Immunisation Programme'. To minimise the adverse effects of vaccination, the inactivated oral poliovirus vaccine (OPV) and whole-cell pertussis (wP) vaccine were replaced by the inactivated poliovirus vaccine (IPV) and acellular pertussis (aP) respectively. On the advice of experts and the Centre for Health Protection, the Government has also decided to include pneumococcal conjugate vaccine in the Childhood Immunisation Programme starting from September 1, 2009.

In addition, the Government introduced in November the new 'Influenza Vaccination Subsidy Scheme' to encourage children to be vaccinated against influenza. The vaccine given to Hong Kong children between the age of 6 months and under 6 years by participating doctors, is subsidised.

Non-communicable Diseases

Health problems in Hong Kong are mostly associated with lifestyle. The biggest killers are cancer, heart and cerebrovascular diseases, which together accounted for about 55 per cent of all registered deaths in 2008. Elderly people are the biggest victims of these chronic non-communicable diseases which will continue to cause the largest number of deaths in Hong Kong as the population ages. The Department of Health drew up a strategic framework called 'Promoting Health in Hong Kong: A Strategic Framework for Prevention and Control of Non-communicable Diseases' in 2008 to combat this problem. A steering committee comprising representatives from the Government, public and private sectors, academia, professional bodies, industry and other key partners was formed to oversee the framework's implementation. Meanwhile, the Centre for Health Protection will continue to step up surveillance, prevention and control of non-communicable diseases through a scheme called the 'Behavioural Risk Factor Surveillance System' and other health surveys.

A Cancer Co-ordinating Committee has been formed to make recommendations for preventing and controlling cancer which claimed more than 12 000 lives in Hong Kong in 2008.

To reduce the mortality rate of cervical cancer victims, the Department of Health, together with other healthcare providers, launched a Cervical Screening Programme in 2004 to provide screening for women aged between 25 and 64. It

has also introduced a Cervical Screening Information System to collect and analyse data on cervical smears. In 2008, a total of 96 771 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 re-admission rates. There are also training programmes for carers to help the chronically ill better care for themselves.

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, 2008, they numbered: 12 215 doctors, 2 074 dentists, 5 932 Chinese medicine practitioners, 37 447 nurses (including registered and enrolled nurses), 4 756 midwives, 1 785 pharmacists, 109 chiropractors, 2 137 physiotherapists, 1 319 occupational therapists, 2 703 medical laboratory technologists, 1 974 optometrists and 1 660 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, undergoing the Registration Assessment or taking the licensing examination. The Chinese Medicine Council of Hong Kong conducted Part I and Part II of the 2008 Chinese Medicine Practitioners Licensing Examination in June and August respectively. By year-end, 5 932 and 2 823 Chinese medicine practitioners were registered (including 72 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 2008, 3 985 applications for registration of pharmaceutical products were approved. At year-end, there were 19 165 pharmaceutical products registered in Hong Kong.

Chinese Medicines

The regulation of Chinese medicines in Hong Kong is subject to the Chinese Medicine Ordinance. 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 2008, 9 980 and 16 408 applications respectively were received.

Human 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 living 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 2008, the board received a total of 26 applications for organ transplants between living non-related persons. One organ was imported into Hong Kong for transplant purposes during the same year.

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 Ordinance² and its 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 embryos or gametes and using donated gametes in surrogacy arrangement. With reference to international practices and in consultation with the reproductive technology profession, social workers, legal practitioners, academia and ethical groups, the council has drawn up a code of practice setting out the requirements, standards and good practices for embryo researchers and reproductive technology practitioners.

² Except section 33(4)(a) of the ordinance.

Port Health

To prevent and control cross-boundary spread of infectious diseases and other serious diseases into Hong Kong, the Port Health Office, under the Department of Health, enforces quarantine measures according to the International Health Regulations and the Prevention and Control 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 close working relationship with the travel industry. Travel health information is available via the website, www.travelhealth.gov.hk.

Radiation Health

The Radiation Board was set up under the Radiation Ordinance to control the import, export, possession and use of radioactive substances and irradiating apparatus. As the executive arm of the Radiation Board, the Radiation Health Unit of the Department of Health 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 provides 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. On the other hand, the Radiation Health Unit 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.

In 2008, the unit assessed and issued 10 746 licences and permits according to the Radiation Ordinance, and 3 262 licences and permits according to the Import (Radiation) (Prohibition) Regulations, and provided monitoring service to 9 615 occupationally exposed persons. The average radiation exposure of the occupationally exposed persons was 0.09 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. During the year, eight 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 providing the community with public healthcare 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 to receive specialist training while working in the Hospital Authority. The Hospital Authority created a total of 350 such specialist training posts in 2008. To improve the remuneration package of doctors under training and to ensure they have sufficient time to complete their training, the Hospital Authority introduced a new career structure for doctors in 2007. Under the new structure, over 200 doctors completed the training at the Hospital Authority and obtained specialist qualification during the year.

Dentists

Training in dentistry is available at the University of Hong Kong, which admitted 51 dental students in 2008. During the year, 12 candidates who completed their dental training outside Hong Kong passed the licensing examination conducted by the Dental Council of Hong Kong.

Chinese Medicine Practitioners

The University of Hong Kong, the Chinese University of Hong Kong and the Hong Kong Baptist University offer full-time undergraduate degree courses in Chinese medicine. In 2008, 75 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 30, 63, 40, 40 and 34 students respectively in 2008.

In 2008, the Hospital Authority started the model of professional development for the allied health grades to equip the allied health staff in various disciplines with specialised knowledge and skills. During the year, the Diagnostic Radiographer, Physiotherapist and Occupational Therapist grades have introduced the new model in specialist services relating to diagnostic ultrasound, musculoskeletal and mental health respectively.

To address the service demand and tie in with the new model of professional development, the Hospital Authority established the Institute of Advanced Allied Health Studies in 2007. In addition to devising a structured long-term training plan for allied health staff, the institute also runs courses on specialist and multi-disciplinary training and personal development, which include a three-year in-service training course organised for new recruits of 12 allied health grades. About 188 new recruits enrolled in the course in 2008.

Nurses

The University of Hong Kong, the Chinese University of Hong Kong, the Hong Kong Polytechnic University and the Open University of Hong Kong provide basic

registered nurses training. The four universities recruited 809 nursing students into their four-year general nursing degree programmes in 2008, while the Hong Kong Polytechnic University enrolled another 117 nursing students into its three-year higher diploma nursing programme and 28 students into its three-year Master's Degree of Nursing Programme.

In addition, the Hong Kong Sanatorium and Hospital Limited and St Teresa's Hospital provide basic enrolled nurses training. Together, they recruited 139 nursing pupils into their two-year certificate nursing programmes. At the same time, the two-year programme of Diploma in General Nursing (Enrolled Nurses) jointly run by the Hong Kong Baptist Hospital and the School of Professional and Continuing Education of the University of Hong Kong also enrolled 57 students. During the year, 44 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. A total of 96 registered nurses graduated from this course and 300 student nurses were recruited in 2008. The Hospital Authority also organises a two-year enrolled nurses basic training programme and recruited a total of 190 pupil nurses in 2008. During the year, the Hospital Authority also recruited 110 pupil nurses into its two-year enrolled nurses basic training programme, specifically designed for the social 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, professional competence enhancement programmes 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 2007-08, \$122.20 million were spent for the Government Laboratory to provide analytical services for public health purposes.

In 2008, 127 006 tests were carried out on a wide range of food samples to ensure that they were safe for consumption and that they complied with statutory standards. The laboratory has also provided urgent analytical services for various ad hoc issues during the year, including the testing of melamine in food such as milk

products. To cope with increasing demand for food safety testing, part of the food testing operation was moved into the Food Safety Laboratory at Pok Fu Lam in early 2008.

The laboratory also started outsourcing some of its routine testing work to commercial laboratories to better utilise its existing resources to carry out new food tests resulting from its broadened surveillance operation, and to respond swiftly to urgent food safety problems.

The laboratory continues to provide a service for analysing the quality of western and Chinese medicines that are indispensable to health care. In 2008, a total of 45 446 tests were carried out on western pharmaceutical products for compliance with international or other acceptable quality and safety standards. At the same time, 70 260 tests were conducted on Chinese herbal medicines to see if they contain harmful substances, or pesticide residues. Tests were also carried out on proprietary Chinese medicines to ensure they are not adulterated with western drugs, controlled substances, and other harmful ingredients.

The laboratory also provided full support for investigations into incidents of people falling ill from taking Chinese medicine containing wrong, or contaminated herbs. The laboratory participated in drawing up regulatory standards for Chinese medicinal herbs sold in Hong Kong.

The laboratory continued its year-round surveillance of tar and nicotine yields in cigarettes. Some 13 560 examinations were conducted during the year to check on the data declared by tobacco traders. The results were released to the public.

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 two million such tests in 2008.

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 are also accredited by a number of local and

international accreditation bodies. These hospital laboratories carried out more than 180 million tests in 2008.

Auxiliary Medical Service

The Auxiliary Medical Service (AMS) is a government department under the Security Bureau with a staff of 92 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 Disaster Medical Assistants. Its main role is to reinforce regular medical, health and ambulance services during emergencies and to provide backup during ordinary times. The Director of Health is the AMS's commissioner and is responsible to the Chief Executive for the efficient 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.

During the 2008 Olympic and Paralympic Equestrian Events, AMS deployed over 700 volunteers, including 76 doctors, 190 nurses and 204 Disaster Medical Assistants for duty. They rendered medical and first aid services in the warm-up and training areas of the competition venues. Ambulance coverage was also provided at the hotels for participants' family members.

The AMS's Health Protection Unit (HPU) responded promptly to the needs of the community in March 2008 during the outbreak of avian flu and influenza. Instructors conducted health talks at schools and social welfare agencies on preventive measures and on ways to keep healthy. It continues to develop new programmes to serve the public. A pilot Cardiac Pulmonary Resuscitation training scheme – with emphasis on practicality – has been launched. Feedback has been positive and more courses will be conducted to teach more people how to help victims of heart attacks effectively.

Websites

Food and Health Bureau: www.fhb.gov.hk

Department of Health: www.dh.gov.hk

Centre for Health Protection: www.chp.gov.hk

Hospital Authority: www.ha.org.hk

Auxiliary Medical Service: www.ams.gov.hk

Health and Medical Development Advisory Committee: www.fhb.gov.hk/hmdac

Healthcare Reform: www.beStrong.gov.hk