

## Chapter 8

# Health

*Hong Kong's public and private medical sectors provide extensive healthcare services, including a low-cost public healthcare 'safety net' that ensures no one in Hong Kong is denied medical care due to lack of means.*

### 2014 Figures at a Glance

<i>Infant Mortality Rate</i>			1.7* per 1,000 registered live births
<i>Maternal Mortality Ratio</i>			4.9* per 100,000 registered live births
<i>Life Expectancy</i>	2014	81.2*(Male)	86.7* (Female)
	2041 (projected)	84.4 (Male)	90.8 (Female)

(\*provisional figures)

Hong Kong has a high quality healthcare system supported by a highly professional team of healthcare workers. The infant mortality rate has fallen steadily over the past 20 years, from 4.9 per 1,000 live births in 1992 to 1.5 per 1,000 live births in 2012, one of the lowest in the world. In 2014, Hong Kong's male and female life expectancy, at 81.2 years and 86.7 years respectively, were among the highest in the world.

Hong Kong's Domestic Health Accounts (DHA)<sup>1</sup> show that Hong Kong's total health expenditure increased from 3.6 per cent to 5.2 per cent of Gross Domestic Product (GDP) over the period 1989-90 to 2011-12. Over the same period, public health spending (\$49.3 billion in 2011-12, or 2.5 per cent of GDP) rose from 39 per cent to 48 per cent of total health expenditure. The government's recurrent funding for health has witnessed substantial growth over the past five years. By 2014, the government recurrent expenditure on health had increased by about \$17.1 billion to \$52.4 billion, representing an increase of over 48 per cent from \$35.3 billion in 2009. Recurrent expenditure on health accounted for 17 per cent of the government's recurrent expenditure in 2014.

<sup>1</sup> A series of accounts compiled over the years in accordance with the International Classification for Health Accounts 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.

## Organisational Framework

The Food and Health Bureau (FHB) formulates policies and allocates resources for Hong Kong's healthcare services, with the aim of protecting and promoting public health, providing lifelong holistic healthcare to every citizen, and ensuring that no one is denied medical care due to lack of means.

The Department of Health (DH) is the government's health adviser and executes 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), established under the Hospital Authority Ordinance, provides public hospital and related services. It offers medical treatment and rehabilitation services to patients through hospitals, specialist clinics, general outpatient clinics, and outreach services organised into seven 'clusters' that together serve the whole of Hong Kong.

The Health and Medical Development Advisory Committee, chaired by the Secretary for Food and Health and with members from different sectors of the community, advises government on the formulation of policies and strategies for the long-term development of medical and health services.

## Healthcare Reform

In response to the challenges of an ageing population, advances in medical technology, and rising healthcare costs, the government has embarked on a number of new initiatives to enhance the long-term sustainability of the healthcare system:

- **Private health insurance** – the FHB published for consultation in December 2014 a proposal for a voluntary and government-regulated private health insurance scheme. The Voluntary Health Insurance Scheme sets minimum requirements for individual indemnity hospital insurance plans, which aim to enhance consumer protection and enable more people to use private health services.
- **Healthcare manpower planning** – the FHB is conducting a strategic review on healthcare manpower planning and professional development, covering 13 statutorily regulated healthcare professions, to ensure an adequate supply of healthcare manpower to meet Hong Kong's long-term healthcare needs.
- **Private healthcare service development** – the FHB released a consultation document on a proposal to enhance the regulation of private healthcare facilities (including private hospitals) for better safety and quality of private healthcare services and for greater price transparency.

## Primary Care Services

Primary care is the first step in the healthcare process and covers a wide range of public health services, including health promotion and disease prevention, general outpatient services and

special health services for people in specific age groups who do not require immediate hospital care.

### ***Clinic Services***

Primary care services in Hong Kong are mainly provided by the private sector. Public general outpatient clinic services under the HA are primarily targeted at serving the elderly, low-income families and chronic disease patients. The HA operates 73 general outpatient clinics throughout the territory. In 2014, some 1.52 million people used these services, with 6.17 million attendances recorded. On average, about 31 million outpatient visits are made to private Western medicine clinics in Hong Kong each year.

To promote the development of 'evidence-based' Chinese medicine practice and to increase training opportunities for local university graduates in Chinese medicine, the HA has collaborated with non-governmental organisations (NGOs) and local universities to set up 18 public Chinese medicine clinics. In 2014, these clinics provided services for about 160,000 patients involving more than one million attendances. Private Chinese medicine clinics (including about 40 Chinese medicine clinics operated by local universities and NGOs on a self-financing basis) recorded about 7.5 million attendances each year.

### ***Family Health***

The DH provides a range of health promotion and disease prevention services through its 31 maternal and child health centres and three women's health centres for children up to five years of age, and women aged 64 or below. The maternal and child health centres offer an Integrated Child Health and Development Programme for parents and caregivers to promote children's holistic health and well-being. The programme's core components are parenting, immunisation, and health and developmental surveillance.

Antenatal, postnatal, family planning, and cervical screening services are provided for women. These centres also provide health education, including psycho-social health, personal relationships, and physical health and healthy lifestyle for women. Some 29,000 expectant mothers and 58,200 newborn children attended maternal and child health centres in 2014, representing about 49 per cent and 96 per cent of the total numbers of expectant mothers and newborn children in Hong Kong respectively.

The Family Health Service under the DH also provides information on child care, parenting and health through various channels such as information leaflets, seminars/workshops, websites and a 24-hour information hotline. The Family Planning Association of Hong Kong offers services and health information on sexual and reproductive health treatments and counselling at its clinics, youth healthcare centres, activity and resource centre and women's clubs. In 2014, over 200,000 people used its services.

### ***Student Health***

The DH provides health screening and individual counselling to primary and secondary school students through its 12 student health service centres and three special assessment centres. In the 2013-14 school year, about 648,000 primary and secondary students joined these programmes. In addition, school health inspectors check schools' hygiene standards. School

Immunisation Teams under the auspices of the DH's Centre for Health Protection visit primary schools every year to administer free vaccinations for students.

Under the School Dental Care Service (SDCS), the DH's eight school dental clinics provided preventive dental services including annual dental check-ups and basic dental care to about 308,000 primary students (about 96 per cent of all Hong Kong primary students) in the 2013-14 school year. Students with intellectual and/or physical disabilities (such as cerebral palsy) studying in special schools can use the services under the SDCS until the age of 18.

### **Elderly Health**

The DH's 18 elderly health centres and 18 visiting health teams provide primary healthcare to the elderly, improve their ability to care for themselves and encourage healthy living and their family's support. The centres provide health assessments, curative treatment, health education and counselling to people aged 65 and above on a membership basis. The visiting health teams conduct health promotion activities for the elderly and provide training to improve carers' skills. In 2014, the centres recorded around 39,000 enrolments and 166,000 attendances for health assessment and medical consultation, while the visiting health teams provided service to 319,000 persons.

### **Community Health**

The HA's community healthcare services aim to reduce reliance on inpatient services and help patients' rehabilitation in the community. In 2014, the HA conducted 1.99 million home visits and outreach care services, including those for elderly people and mental patients.

Over 80 per cent of those receiving HA's community nursing care services are elderly people. Community geriatric assessment teams visit residential care homes for the elderly regularly to provide medical and nursing care to residents who are unable to visit the specialist outpatient clinics. These teams also train the carers to help them take care of frail residents.

### **Dental Health**

Eleven government dental clinics provide emergency dental services to the general public for pain relief and tooth extraction, and seven public hospitals offer specialist oral healthcare services to inpatients and others with special oral healthcare needs. The DH also monitors the level of fluoridation in water supplied to the public to reduce dental decay.

The DH's Oral Health Education Unit carries out various target-oriented educational activities to promote oral health, such as the 'Bright Smiles Mobile Classroom' for primary students. Information on oral health is also provided through the oral health education homepage and a 24-hour interactive hotline. In addition, the DH organises the annual 'Love Teeth Campaign' to encourage good dental habits.

In 2011, the government launched a pilot project to provide outreach dental care services for elderly persons residing in residential care homes or receiving services in day care centres through outreach teams operated by NGOs. In October 2014, the government turned the outreach pilot project into a recurrent programme.

In 2013, the FHB launched a four-year pilot project to provide dental services for patients with intellectual disability (ID), covering ID adults who are recipients of Comprehensive Social Security Assistance (CSSA), disability allowance or medical fee waiver of the HA. Eligible patients can receive subsidised check-ups, dental treatment and oral health education in the designated dental clinic, or other necessary dental services under intravenous sedation or general anaesthesia in the designated hospital.

The DH also conducts ‘Dandelion Oral Care Action’, a special oral health promotion programme to educate children with mild to moderate ID in special schools to take care of their oral hygiene themselves.

### **Mental Health**

The government adopts a holistic approach in promoting mental health through a service delivery model that covers prevention, early identification, timely intervention and treatment, and rehabilitation for persons in need. Government funding for mental health services has increased from \$3.75 billion in 2009-10 to \$5.06 billion in 2013-14.

As a major medical service provider for people with mental disorders in Hong Kong, the HA provides a spectrum of services ranging from inpatient facilities, day hospitals and specialist outpatient clinics to community outreach services. In 2013-14, over 208,000 persons with mental health problems received treatment and support through the HA’s various psychiatric services.

Psychiatric inpatient care is essential to facilitate symptom control, behavioural management and early recovery for patients experiencing acute psychiatric crisis. In 2013-14, some 15,000 patients received inpatient care in the HA’s psychiatric units, of whom about 650 required long-term care and had been hospitalised for more than one year. The HA maintained 3,607 psychiatric beds and the bed occupancy rate remained steady at around 80 per cent.

Psychiatric day hospitals provide a range of treatment and rehabilitation services for patients who attend for a number of hours in a week. The HA provided about 889 psychiatric day hospital places in 2013-14.

In line with the international trend to focus more on community and ambulatory care in the treatment of mental illness, the HA also operates cluster-based community psychiatric services covering the 18 districts of Hong Kong. In 2013-14, about 260,000 community psychiatric outreach attendances and about 98,000 psychogeriatric outreach attendances were recorded. The HA also extended the case management programme for patients with severe mental illness to cover all districts in 2014-15, serving some 17,000 patients residing in the community.

### **Other Special Services**

The DH operates various specialist clinics and centres including 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. These clinics and centres recorded about 6.6 million attendances in 2014.

### **Healthcare Services Provided by Private and Non-governmental Organisations**

The private care sector is the main provider of primary care in Hong Kong, and complements the public sector by providing a range of specialist and hospital services. Doctors of Western medicine, Chinese medicine practitioners, dentists, and other healthcare professionals (including nurses, chiropractors, physiotherapists, occupational therapists, pharmacists and optometrists) are healthcare service providers in the private sector.

NGOs also provide healthcare services at different levels in Hong Kong, including operating community clinics offering primary care services. In addition, many NGOs organise health promotion, educational and other healthcare-related activities. Some NGOs also provide health assessment services for the elderly, and medical check-ups for women. The Hong Kong St John Ambulance provides first aid training and services, while the Hong Kong Red Cross provides first aid training to promote first aid knowledge and skills. The Hong Kong Cancer Fund raises public awareness of cancer and encourages people to undertake regular cancer screening to minimise cancer risks.

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

Secondary, tertiary and specialised healthcare services are provided mainly in the HA's hospitals and specialist clinics. In 2013-14, the HA spent about \$39.7 billion on specialist outpatient and inpatient services. At the end of 2014, there were 27,631 public hospital beds, comprising 21,323 general beds, 2,041 infirmary beds, 3,607 beds for the mentally ill and 660 beds for the mentally handicapped. In addition, there were 3,906 beds in private hospitals, 4,964 in nursing homes and 821 in institutions run by the Correctional Services Department. There are 5.1<sup>2</sup> beds per thousand of population. Spending on secondary, tertiary and specialised healthcare services, including both public sector and private sector amounted to about \$50.1 billion in 2011-12, of which spending on public specialist outpatient and inpatient services accounted for 75 per cent.

In 2013-14, about \$9.1 billion was spent on secondary and tertiary ambulatory medical services provided by the HA's specialist clinics. The HA has specialist clinics for a wide range of specialties, including internal medicine, surgery, obstetrics and gynaecology, paediatrics, orthopaedics and traumatology, ear, nose and throat, ophthalmology, psychiatry, neurosurgery, oncology and cardio-thoracic surgery.

In 2014, the HA's specialist outpatient clinics recorded over 7.14 million attendances. Appointments for new patients are made on the basis of the severity of their clinical condition in order to ensure that patients with acute conditions will be given priority in accessing the required services. Patients in stable condition are referred to primary care practitioners in the private sector or the HA's general outpatient clinics for follow-up.

### **Allied Health Service**

Allied health professionals working under the HA include audiologists, clinical psychologists, dietitians, occupational therapists, optometrists, orthoptists, physiotherapists, podiatrists,

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<sup>2</sup> Including all hospital beds in HA hospitals, private hospitals, nursing homes and correctional institutions.

prosthetists and orthotists, speech therapists and medical social workers. They provide rehabilitative and extended care for patients receiving inpatient, outpatient, ambulatory and community care services to help patients to reintegrate into society. In 2014, the HA's allied health outpatient departments recorded about 2.39 million attendances.

### ***Inpatient Services***

In 2013-14, \$30.6 billion was spent on inpatient services provided by HA hospitals. A total of 1.61 million inpatients and day patients were discharged from public hospitals in 2014.

### ***Accident and Emergency Services***

Accident and emergency services are provided at 17 HA hospitals, delivering a high standard of service for critically ill or injured persons who need urgent medical attention and providing medical support for victims of disasters. In 2013-14, \$2.3 billion was spent on these services. In 2014, 1.29 million people paid 2.23 million visits to the accident and emergency departments of public hospitals, an average of around 6,100 attendances per day.

Patients attending the accident and emergency departments of public hospitals are classified under five categories according to their clinical condition: critical cases are classified under Category 1, emergency cases under Category 2, urgent cases under Category 3, semi-urgent cases under Category 4, and non-urgent cases under Category 5. The triage system ensures that patients with more urgent needs receive prompt treatment. In 2014, all Category 1 patients received immediate treatment while over 96 per cent of Category 2 patients were treated within 15 minutes.

### ***Medical Charges and Waiver***

Fees for public hospital and clinic services for the general public are subsidised up to 96.8 per cent by the government, with people receiving assistance under the CSSA Scheme exempted from paying. Other needy groups (including low-income patients, the chronically ill, and elderly patients with financial difficulties) are assisted through a medical fee waiver scheme.

### ***Private Hospitals***

Hong Kong's 11 private hospitals served 362,376 inpatients in 2013, representing 19 per cent of the total number of inpatients in the territory. Spending on private inpatient services amounted to \$12.6 billion in 2011-12, accounting for 33 per cent of overall expenditure on inpatient services in the public and private sectors.

## **Healthcare Service Development and Infrastructure**

### ***Public Hospital Development Projects***

A number of public hospital development projects are in progress to help improve healthcare services in different parts of Hong Kong. In 2014, Caritas Medical Centre's new ambulatory/rehabilitation block came into operation and the construction works for Yan Chai Hospital's new wellness centre were completed. Other ongoing projects include the remaining works for the redevelopment of Yan Chai Hospital and Caritas Medical Centre, and the construction of Tin Shui Wai Hospital and Hong Kong Children's Hospital. Preparatory works for the expansion of

United Christian Hospital and the redevelopment of Kwong Wah Hospital and Queen Mary Hospital are also under way.

### ***Public-private Partnership Projects in Healthcare Services***

The government has launched a series of clinical public-private partnership projects through the HA, including the Cataract Surgeries Programme which subsidises patients for cataract surgery performed by private ophthalmologists. By the end of 2014, 113 private ophthalmologists had participated in the programme and more than 20,000 patients had enrolled, of whom over 15,400 had received cataract surgery.

The Haemodialysis Public-Private Partnership Programme provides private haemodialysis services to eligible patients with end-stage renal disease currently under the HA's care. The programme will provide 188 haemodialysis places in 2014-15.

The Pilot Project on Enhancing Radiological Investigation Services through Collaboration with the Private Sector subsidises patients from selected cancer groups for Computed Tomography and Magnetic Resonance Imaging services at private healthcare service providers. By the end of 2014, five private healthcare service providers had participated in the project involving 7,762 attendances with 16,708 investigations completed.

The HA launched the General Outpatient Clinic (GOPC) Public-Private Partnership Programme in Kwun Tong, Wong Tai Sin and Tuen Mun districts in mid-2014 to subsidise HA's GOPC patients with hypertension (with or without hyperlipidemia) in stable condition to receive treatment by private doctors. As at the end of 2014, 84 private doctors and about 2,000 patients had participated in the programme.

### ***Developing Electronic Health Record (eHR) Sharing***

The government's Public-Private-Interface Electronic Patient Record Sharing Pilot Project, launched in 2006, aims to enhance continuity of care for patients by enabling participating private healthcare providers and other registered institutions to view the HA's records, subject to patients' consent. As at the end of 2014, more than 405,000 patients, 3,341 private healthcare professionals (2,488 private medical practitioners and 853 nurses), 11 private hospitals and 78 other private organisations or NGOs providing healthcare-related services (including their 439 residential care homes or centres) had participated in the project.

Building on the experience and success of the pilot project, the government is implementing a 10-year programme to develop a territory-wide eHR Sharing System (eHRSS). The development of the core infrastructure of the eHRSS and its main complementary components has been completed. The Electronic Health Record Sharing System Bill was introduced into the Legislative Council in April 2014. Subject to the passage of the bill, the government plans to launch the eHRSS in 2015.



## **Health Promotion**

### ***Healthy Lifestyle***

The DH's Central Health Education Unit formulates and implements health promotion strategies. It runs various promotional campaigns and programmes to provide the public with information and advice on a range of health-related topics and to encourage healthy eating and regular physical activity.

In the 2013-14 school year, over 600 pre-primary institutions participated in the 'StartSmart@school.hk' campaign; about 450 primary schools (including special schools) participated in the 'EatSmart@school.hk' campaign. In 2014, about 640 restaurants took part in the 'EatSmart@restaurant.hk' campaign, while 'Health@work.hk' project promoted health in the workplace.

In addition, to prevent communicable diseases, the unit provided the public with updated information and health advice on infectious diseases through the media, webpages, promotional leaflets, posters, telephone education hotline and large-scale publicity activities. It also produced health education materials in various languages to raise awareness of the need to prevent communicable diseases and related hygiene measures among ethnic minorities.

In addition, some 325 secondary schools, about 79,000 students and 900 parents and teachers enrolled in the Adolescent Health Programme and received its services.

### ***AIDS Counselling and Education***

The DH's 'Red Ribbon Centre' collaborates with its community partners to enhance public awareness and prevention of human immunodeficiency virus (HIV) and to promote caring and acceptance of HIV patients. In 2014, the centre organised 17 major activities and 74 special programmes, with some 85,000 participants.

Information on Acquired Immune Deficiency Syndrome (AIDS), sexually transmitted infections and multilingual AIDS hotlines is available at the DH's website.

Appointments for counselling and HIV antibody/rapid tests may be made on the hotline 2780 2211. In 2014, the hotline received about 22,000 calls, of which 17,516 calls sought AIDS counselling from nurse counsellors. About 940,000 condoms were distributed to promote safer sex. There are also a Gay Men HIV Testing Hotline (2117 1069) and a website. In 2014, the Gay Men HIV Testing Hotline received 298 calls for counselling and HIV antibody/rapid testing.

### ***Organ Donation and Transplant***

The DH promotes organ donation in various ways (including a dedicated page on Facebook) in collaboration with the HA, healthcare professional bodies and NGOs. As at the end of 2014, over 150,000 persons had registered with the Centralised Organ Donation Register to express their wish to donate their organs after death.

The number of patients waiting for kidney, liver, heart and lung transplants stood at 1,965, 98, 28 and 22 respectively as at the end of 2014. During the year, there were 36 liver, 63 renal, nine

heart, four double-lung and 337 cornea donations from the deceased in Hong Kong's public hospitals.

The Human Organ Transplant Ordinance regulates the transplant of human organs and importation of human organs for transplant purposes, and prohibits commercial dealings in human organs intended for transplant. 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. In 2014, the board received a total of 19 applications for organ transplants between living non-related persons and 61 human organs were imported into Hong Kong for transplant purposes.

Under the ordinance, applications can be made to the DH for exemption of certain commercial products made from human tissue that have been subjected to processing, enabling patients with a genuine medical need for a transplant to benefit from the use of these products. As at the end of 2014, the DH had received 32 applications for exemption and approved 33 products.

### ***Smoking and Health***

China is a state party to the Framework Convention on Tobacco Control of the World Health Organisation, making provisions of the convention applicable to Hong Kong. Hong Kong's current tobacco control policy aims to discourage smoking, contain the proliferation of tobacco use and minimise the impact from passive smoking through a progressive and multi-pronged approach, comprising legislation, publicity, education, enforcement, smoking cessation and taxation.

### ***Legislation and Enforcement***

The Smoking (Public Health) Ordinance stipulates statutory no-smoking areas and regulates the advertisement, promotion, packaging and labelling of tobacco products. Smoking is banned in all indoor areas of workplaces and public places, including restaurants and bars, as well as outdoor areas, including the open areas of schools, leisure grounds, bathing beaches and public transport facilities. Persons smoking in statutory no-smoking areas and on public transport carriers are liable to a fixed penalty of \$1,500 under the Fixed Penalty (Smoking Offences) Ordinance. All advertisements and promotions for tobacco products are prohibited in Hong Kong.

In 2014, the DH's Tobacco Control Office (TCO) conducted over 29,000 inspections and issued 193 summonses and 7,834 fixed penalty notices for smoking offences. In addition, the TCO distributes health education materials (including guidelines, posters, no smoking signs and pamphlets) to venue managers of statutory no-smoking areas and to the public.

### ***Taxation***

The government increased tobacco duty rates by 11.7 per cent in February 2014 to curb cigarette consumption.

### **Publicity and Education**

The Hong Kong Council on Smoking and Health (COSH), an independent statutory body, advises the government on smoking, passive smoking and health, and on publicising the hazards of smoking. The COSH conducts various publicity, education and community involvement campaigns. It also operates a website and a telephone hotline to receive enquiries and suggestions from the public on smoking and health. In 2014, the COSH's publicity and educational programmes attracted an attendance of about 240,000 people.

### **Smoking Cessation and Prevention of Youth Smoking**

The TCO provides advice on how to quit smoking, counselling services and pharmaceutical treatment through various channels, including a hotline, clinics and an interactive online cessation centre. In 2014, over 13,000 telephone calls were received by the smoking cessation hotline. The TCO also broadcasts announcements on TV and radio, conducts seminars and issues health education materials to increase public awareness of the harmful effects of smoking and second-hand smoke. The TCO collaborates with a number of NGOs to run community-based smoking cessation programmes, including the use of Chinese medicine acupuncture, peer-led phone counselling, smoking cessation services at the workplace, smoking cessation programmes for ethnic minorities and new immigrants and health promotional activities at schools to promote a smoke-free culture.

The HA provides smoking counselling and cessation services through its 10 full-time and 46 part-time 'Smoking Counselling and Cessation Centres'. It also operates a telephone hotline providing booking and enquiry services for smokers who wish to quit smoking.

### **Disease Prevention and Control**

The DH spent \$2.6 billion on disease prevention and control at its maternal, child health and elderly health centres and similar facilities in 2013-14.

### **Centre for Health Protection**

The Centre for Health Protection (CHP) collaborates with its local and international counterparts to prevent and control diseases in Hong Kong. It works on three principles: real-time surveillance, rapid intervention and responsive risk communication. To carry out its mission, the CHP works to protect the health of the community, promote healthy living in the community, and partner with stakeholders to achieve its objectives. The CHP keeps track of communicable diseases and issues surveillance reports on a regular basis, as well as reports on laboratory data.

A board of scientific advisers, comprising experts from different disciplines, and seven scientific committees meet periodically to assist the CHP in formulating effective policies to improve the local health protection system. Regular training and research programmes are also conducted.

The CHP maintains close liaison with District Councils and Healthy Cities projects at district level to disseminate health information and guidelines on diseases, alert the public to health threats and facilitate rapid implementation of preventive measures. In addition, professional knowledge and experience in combating diseases are shared with other health authorities and agencies in the Mainland, in Macao and the World Health Organisation.

### ***Prevention and Control of Infectious Diseases***

Under the Prevention and Control of Disease Ordinance, there are 48 statutory notifiable infectious diseases in Hong Kong. In 2014, about 16,000 cases were reported, of which about 7,800 and 5,100 were diagnosed as chickenpox and tuberculosis respectively.

In December 2013, Hong Kong confirmed its first human case of avian influenza A(H7N9). Up to December 2014, Hong Kong confirmed a total of 11 human cases of avian influenza A(H7N9), which upon investigation were all considered to be sporadic imported cases. The government activated the 'Serious Response Level' under the Preparedness Plan for Influenza Pandemic from 2 December 2013 to 12 June 2014 and on 27 December 2014 implemented a comprehensive range of response measures.

The CHP continually reviews and updates its strategies for coping with major outbreaks of infectious diseases (including Ebola virus disease), ensuring that both the government and the community are prepared to deal with them. A plan for mobilising volunteers in the event of an outbreak is also in place. The CHP organises drills from time to time to test Hong Kong's preparedness.

### ***Vaccination Programmes***

Children in Hong Kong are protected against communicable diseases such as tuberculosis, hepatitis B, poliomyelitis, diphtheria, tetanus, pertussis, measles, mumps, rubella, chickenpox and pneumococcus under a 'Childhood Immunisation Programme'.

The 'Government Vaccination Programme' provides eligible persons in target groups with free seasonal influenza and pneumococcal vaccinations each year at public hospitals and clinics. In addition, under two 'Vaccination Subsidy Schemes', children aged between six months and less than six years and elderly people aged 65 or above can receive subsidised seasonal influenza vaccinations at private clinics. A subsidised pneumococcal vaccination at private clinics is also available for elderly people who have not previously received one. Over 1,600 private doctors participate in the 'Vaccination Subsidy Schemes'.

### ***Non-communicable Diseases***

The biggest killers in Hong Kong are cancer, heart and cerebrovascular diseases, which together accounted for about 51 per cent of all registered deaths in 2014. Elderly people are the major victims of these chronic non-communicable diseases.

A Cancer Co-ordinating Committee chaired by the Secretary for Food and Health makes recommendations for the prevention and control of cancer, which claimed more than 13,700 lives in Hong Kong in 2014. In 2014, about 106,000 women registered under the DH's cervical screening programme for women aged between 25 and 64 underwent cervical screening.

## **Health Regulatory Activities**

### ***Healthcare Professionals***

As at end-2014, 13,417 doctors, 2,343 dentists, 9,655 Chinese medicine practitioners (CMPs) (including both listed and registered CMPs), 48,047 nurses (including both registered and

enrolled nurses), 4,669 midwives, 2,390 pharmacists, 192 chiropractors, 2,624 physiotherapists, 1,677 occupational therapists, 3,228 medical laboratory technologists, 2,140 optometrists, 2,042 radiographers and 387 dental hygienists were registered in Hong Kong.

### **Western Medicines**

Western medicines in Hong Kong are regulated under the Pharmacy and Poisons Ordinance. Acting on the authority of the Pharmacy and Poisons Board, the DH evaluates and approves applications for the registration of pharmaceutical products, issues licences to drug manufacturers, importers and exporters, wholesalers and retailers, and takes action against the illegal sale of controlled drugs. The DH also enforces regulatory controls on poisons, antibiotics and dangerous drugs for medicinal use.

In 2014, the Pharmacy and Poisons Board approved 882 applications for registration of pharmaceutical products and as at year-end 19,209 pharmaceutical products were registered in Hong Kong.

In 2009, a government committee's report on the regulation of pharmaceutical products put forward 75 recommendations. Various recommendations relating to the DH have been implemented, including increasing the requirement for microbiological monitoring in the process of drug manufacturing by local drug manufacturers, stepping up inspections of local drug traders, providing additional information on the type of sales restriction (eg prescription only medicine) for each registered pharmaceutical product and providing updated information on the safe use of drugs on the website of the DH's Drug Office. The DH is following up with the implementation of the remaining recommendations, including those that involve legislative amendments.

### **Chinese Medicines**

Chinese medicines are regulated under the Chinese Medicine Ordinance, which requires any person engaged in the retail or wholesale of Chinese herbal medicines or the manufacture or wholesale of proprietary Chinese medicines to obtain a licence. Licensed manufacturers may apply for a Certificate for Manufacturer, certifying that they follow the requirements of Good Manufacturing Practice in the manufacture and quality control of proprietary Chinese medicines. The Chinese Medicine Council of Hong Kong (CMCHK) is the statutory body responsible for devising and implementing regulatory measures for Chinese medicines. All proprietary Chinese medicines must be registered before they can be sold, imported or possessed in Hong Kong. As a transitional arrangement, proprietary Chinese medicines manufactured or on sale on 1 March 1999 are eligible for a transitional registration status upon submission of acceptable basic test reports. By the end of 2014, there were 6,775 licensed Chinese medicines traders (including 12 holding Certificate for Manufacturer), and 8,568 proprietary Chinese medicines had obtained transitional registration status, and 440 proprietary Chinese medicines had been issued with 'Certificate of registration of proprietary Chinese medicine'.

Registered products must have the relevant registration number affixed and their labels and package inserts should also comply with the relevant statutory requirements.

Under the Chinese Medicine Ordinance, an application can be made to the CMCHK's Chinese Medicine Board for a certificate for the purpose of conducting a clinical trial or medicinal test of any proprietary Chinese medicine.

In September 2014, the HA launched a two-year Integrated Chinese-Western Medicine (ICWM) Pilot Project, which provides patients of selected disease areas (including stroke rehabilitation, low back pain and palliative care for cancer) with ICWM in-patient treatment and follow-up Chinese medicine out-patient service. The project aims to make use of ICWM's advantages to provide appropriate medical treatment for patients; gather experience for the development of Chinese medicine in-patient services and the establishment of the Chinese medicine hospital; facilitate the training of Chinese medicine graduates; and explore the development of Chinese medicine specialisation.

### **Human Reproductive Technology**

Activities using human reproductive technology are regulated to ensure the procedures are conducted in a safe and informed manner, and to safeguard the welfare of children born through the technology. The Human Reproductive Technology Ordinance confines the application of human 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 the use of donated gametes in surrogacy arrangements. Reproductive technology service providers and embryo researchers who wish to conduct relevant activities under the ordinance must apply for a licence issued by the Council on Human Reproductive Technology set up under the legislation. As at the end of 2014, the council had issued 48 licences, including 15 treatment licences, 31 artificial insemination-by-husband licences and two research licences.

In accordance with international practice and in consultation with the medical profession, social workers, the legal profession, academia and ethical groups, the council has promulgated a code of practice setting out the requirements, standards and good practices for embryo researchers and reproductive technology practitioners.

### **Port Health**

To prevent and control cross-boundary spread of infectious and other serious diseases into and out of Hong Kong, the DH's Port Health Office enforces quarantine measures according to the International Health Regulations and the Prevention and Control of Disease Ordinance. Travellers arriving in Hong Kong at boundary control points are required to undergo temperature screening as a precautionary measure.

The Port Health Office also provides Hong Kong residents with disease preventive services including medical consultation, vaccination, prophylactic medication and advice on travel-related risks before they travel. The office has a close working relationship with the travel industry and provides travel health information on the DH's website.

### **Radiation Health**

Set up under the Radiation Ordinance, the independent Radiation Board controls the import, export, possession and use of radioactive substances and irradiating apparatus. As the executive

arm of the Radiation Board, the DH's Radiation Health Unit (RHU) carries out licensing controls and conducts inspections of radioactive substances or irradiating apparatus. It also provides health surveillance and radiation monitoring for radiation worker, maintains the metrology standards for environmental and occupational protection level radiation dosimetry measurements, and provides the related standard calibration services. The RHU advises the government on the protection of public health in nuclear incidents and management of radioactive substances and wastes.

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

### ***Doctors***

Degree courses in medicine and surgery are offered at the University of Hong Kong and the Chinese University of Hong Kong, which admitted a total of 424 medical students to the six-year bachelor degree programme in 2014. In 2014, 73 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 which approves, assesses and accredits specialist training within the medical and dental professions. Its 15 colleges conduct training and examinations to award specialist qualifications to qualifying candidates.

The HA also trains specialist doctors. Each year, the majority of medical graduates of the two local universities are offered appointment to the HA for specialist training while working in the HA. The HA recruited about 310 doctors for specialist training in 2014 and some 310 doctors completed training at the HA and obtained specialist qualifications.

### ***Dentists***

Degree courses in dentistry are offered at the University of Hong Kong, which admitted 53 dental students to its six-year bachelor degree programme in 2014. In 2014, three 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 Chinese University of Hong Kong, the Hong Kong Baptist University and the University of Hong Kong offer full-time undergraduate degree courses in Chinese medicine. In 2014, 71 full-time local Chinese medicine bachelor's degree graduates who passed the licensing examination were registered as Chinese medicine practitioners (CMPs).

The 18 public Chinese medicine clinics are required to employ new Chinese medicine degree graduates from local universities as junior CMPs and to provide them with three years of training. As at the end of 2014, these public Chinese medicine clinics provided 72 CMPs places for their first year of training and 144 CMPs places for their second and third years of training.

### **Allied Health Professionals**

The Hong Kong Polytechnic University offers degree programmes for allied health professionals in physiotherapy, radiography, occupational therapy, medical laboratory science and optometry. In 2014, 107, 94, 89, 41 and 39 students enrolled in these programmes respectively.

The HA's Institute of Advanced Allied Health Studies devises structured long-term training plans for allied health staff and runs courses on specialist and multi-disciplinary training, clinical and personal development. These include a three-year in-service training course for new recruits of allied health grades. In 2014, 60 training courses and a number of overseas scholarships were offered.

### **Nurses**

The University of Hong Kong, the Chinese University of Hong Kong, the Hong Kong Polytechnic University, the Open University of Hong Kong and the Tung Wah College provide pre-registration nursing training. They recruited 1,371 nursing students into their five-year full-time nursing degree programmes in 2014. In addition, the Hong Kong Polytechnic University and the Chinese University of Hong Kong enrolled another 112 nursing students into their three-year Master's Degree of Nursing programmes.

The Hong Kong Baptist Hospital, the Hong Kong Sanatorium and Hospital, the St Teresa's Hospital, the Union Hospital and the HKU SPACE Community College provide pre-enrolment nursing training. They recruited 312 pupil nurses into their two-year Higher Diploma in Enrolled Nurse (General) training programmes in 2014. In addition, the Open University of Hong Kong enrolled 151 and 82 pupils into their two-year Higher Diploma in Nursing programme and Higher Diploma in Mental Health Nursing programme respectively. During 2014, 39 nurses with professional nursing qualifications obtained outside Hong Kong passed the Nursing Council of Hong Kong's licensing examination and were awarded practising certificates for registered nurses or enrolled nurses.

The HA's three-year higher diploma programme provides basic registered nurse training and 300 registered nurse students were recruited in 2014. The HA also recruited 70 pupil nurses to its two-year enrolled nurse basic training programme in 2014 and recruited 180 pupil nurses to its two-year enrolled nurse basic training programme for the social welfare sector.

The HA's Institute of Advanced Nursing Studies seeks to strengthen specialty care training for nurses and encourage them to improve professional standards through continuous learning. The institute provides simulation training for new nursing graduates to strengthen their skills in clinical care and handling medical emergencies. It also provides experienced nurses with scholarships to attend overseas training for international exposure.

### **Laboratory Services**

#### **Government Laboratory**

The Government Laboratory offers a comprehensive range of analytical, investigatory and advisory services to support the government in upholding its various commitments to the



protection of public health. In the financial year 2013-14, it spent \$200 million on providing analytical services for the protection of public health.

In 2014, a total of 194,986 tests were carried out on a wide range of foods to ensure they were fit for consumption and complied with the legal requirements. The laboratory also conducted 12,778 tests arising from investigations into food complaints. The laboratory outsources some routine food testing work to private laboratories to better utilise its resources for developing new testing methods and coping with the broadened scope of testing services.

In 2014, the laboratory performed over 57,600 tests on pharmaceutical products and over 85,700 tests on Chinese medicines to ensure they met recognised quality and safety standards and that the proprietary Chinese medicines were free from Western drugs adulteration or harmful ingredients. The laboratory also provided support for investigations into the use of undeclared Western drugs in preparations and incidents of intoxication suspected to have been caused by misused or contaminated herbs. The laboratory assists the DH in the development of Hong Kong Chinese Materia Medica Standards. It also conducts year-round surveillance of tar and nicotine yields in cigarettes. Over 12,500 checks on data declared by tobacco traders were carried out and the results released to the public.

### **Public Health Laboratory Services**

The DH's Public Health Laboratory Services Branch conducts laboratory tests for clinical and surveillance specimens and provides clinical diagnostic and public health laboratory services to the public and private health sectors for patient care and for other public health purposes. The branch conducted more than six million such tests in 2014.

The branch's Public Health Laboratory Centre has been designated by the World Health Organisation as a National Influenza Centre, a National Poliovirus Laboratory, a National Measles Laboratory of the Hong Kong Special Administrative Region, a Supranational TB Reference Laboratory, a Regional Reference Laboratory for measles in the Western Pacific Region, a Global Influenza A(H5) Reference Laboratory and a SARS Reference Laboratory.

### **Hospital Laboratory Services**

Hospital laboratories in the HA hospitals 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 on-site laboratories, have access to comprehensive laboratory services. These laboratories are supported by advanced information technology systems and automated devices to achieve operational efficiency, and also accredited by a number of local and international accreditation bodies.

### **Auxiliary Medical Service**

The Auxiliary Medical Service (AMS) is a government department under the Security Bureau, with 99 civil servants, 4,602 volunteer members and 1,400 cadets. The volunteers come from all walks of life, including doctors, nurses, pharmacists and paramedical personnel, and are all qualified Disaster Medical Assistants. The AMS's main role is to reinforce regular medical, health

and ambulance services during emergencies and to provide backup during normal times. In addition, the AMS Cadet Corps provides youths aged between 12 and 17 with training in discipline and medical skills, helping them develop self-discipline and a sense of responsibility.

The AMS First Aid Bicycle Team provides first aid coverage along the cycling tracks between Sha Tin and Tai Po and mans the first aid posts on the tracks in Ma On Shan, Sha Tin and Tai Po during weekends and public holidays. In 2014, the team provided 6,780 man-hours of services. The AMS also runs programmes on first aid at schools and gives talks to the public on heart disease, cardiopulmonary resuscitation, drug abuse and other health related subjects.

In 2014, AMS volunteers were also deployed at the quarantine centre at Lady MacLehose Holiday Village to support the Department of Health's quarantine operation during the avian influenza A(H7N9) alert.

### **Websites**

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

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

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

eHealth Record Office: [www.eHealth.gov.hk](http://www.eHealth.gov.hk)

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

Gay Men HIV Testing Hotline: [www.21171069.com](http://www.21171069.com)

Healthcare Reform: [www.myhealthmychoice.gov.hk](http://www.myhealthmychoice.gov.hk)

Hong Kong Council on Smoking and Health: [www.smokefree.hk](http://www.smokefree.hk)

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

Oral Health Education Unit: [www.toothclub.gov.hk](http://www.toothclub.gov.hk)

Organ Donation Website under the Department of Health: [www.organdonation.gov.hk](http://www.organdonation.gov.hk)

Travel Health Service of the Department of Health: [www.travelhealth.gov.hk](http://www.travelhealth.gov.hk)

Virtual AIDS Office of the Department of Health: [www.info.gov.hk/aids/](http://www.info.gov.hk/aids/)