

## Chapter 9

# 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.*

The Food and Health Bureau formulates policies and allocates resources for healthcare services, with the aim of protecting and promoting public health, providing lifelong holistic care to every resident and ensuring no one is denied medical help due to lack of means.

The Department of Health is the government's health adviser and executes policies and statutory functions. It safeguards the community's health through promotional, preventive, curative and rehabilitative services.

The Hospital Authority, established under the Hospital Authority Ordinance, provides public hospital and related services. It offers medical treatment and rehabilitation services through hospitals, specialist clinics, general outpatient clinics and outreach services organised into seven clusters that together serve the whole city.

### Figures at a Glance

Infant mortality rate	2018	1.5* per 1,000 registered live births	
Maternal mortality ratio	2018	1.8* per 100,000 registered live births	
Life expectancy at birth	2018	82.2* (Male)	87.6* (Female)
	2066 ( <i>projected</i> )	87.1 (Male)	93.1 (Female)

\*provisional figures

Hong Kong has a quality healthcare system supported by a highly professional team of workers. The infant mortality rate was 1.5\* per 1,000 live births in 2018, among the lowest in the world. Male and female life expectancy at birth, respectively at 82.2 years and 87.6 years, was among the world's highest.

Hong Kong's Domestic Health Accounts<sup>1</sup> show total health expenditure increased from 3.6 per cent to 6.2 per cent of Gross Domestic Product from 1989-90 to 2017-18. Over the same period, public health spending (\$85.2 billion in 2017-18, or 3.1 per cent of GDP) rose from 40 per cent to 51 per cent of total health expenditure. The government's recurrent funding for health has risen substantially over the past five years, from \$49.9 billion in 2013 to \$71.2 billion by 2018, an increase of about 43 per cent. On a year-on-year basis, the recurrent funding for health grew more than 15 per cent from \$61.9 billion in 2017. It accounted for 18 per cent of the government's recurrent expenditure in 2018.

## Healthcare Reform

In response to the challenges of an ageing population, the government is undertaking a number of initiatives to enhance the long-term sustainability of the healthcare system:

- **Voluntary Health Insurance Scheme** – The scheme will be implemented fully on 1 April 2019. It aims to regulate the quality of individual indemnity hospital insurance plans and enhance transparency, in order to increase consumers' confidence in purchasing hospital insurance, thereby facilitating their use of private healthcare services when needed and relieving pressure on the public healthcare system in the long run.
- **Manpower planning and professional development** – The government is following up actively on the 10 recommendations of the *Report of the Strategic Review of Healthcare Manpower Planning and Professional Development* with a view to planning ahead for long-term manpower demand and fostering professional development.
- **Regulation of private healthcare facilities** – Enacted in November, the Private Healthcare Facilities Ordinance will introduce a new regulatory regime for private healthcare facilities that fits the present landscape of private healthcare services, including the regulation of day procedure centres. It will further protect patient safety and consumer rights.

## Primary Care Services

Primary care is the first step in the healthcare process. It covers a wide range of public services, including health promotion and disease prevention, general outpatient services and special services for people in specific age groups who do not need immediate hospital attention.

Primary care services are provided mainly by the private sector and non-governmental organisations (NGOs). On average, private Western clinics handle about 31 million outpatient visits each year. NGOs operate community clinics, and many also organise health promotions and educational activities. Some NGOs provide health assessments for the elderly and medical check-ups for women.

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<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 Cooperation and Development to keep track of Hong Kong's health spending and to allow for international comparison.

The Hospital Authority operates 73 general outpatient clinics, including community health centres. These focus on serving the elderly, low-income families and chronic disease patients. The body also runs family medicine specialist clinics as a key component of its primary care services. In 2018, some 1.63 million people used these services, with 6.4 million attendances recorded.

To push ahead with district-based primary health care, the bureau will take forward the setting up of district health centres in all 18 districts. Each centre will be operated by an NGO with government funding to promote medical-social collaboration, public-private partnership and district-based service. It will focus on primary, secondary and tertiary prevention, including health promotion, health assessment, chronic disease management and community rehabilitation.

Eighteen Chinese medicine centres for training and research promote the development of evidence-based Chinese medicine and provide training placements for graduates of local Chinese medicine bachelor's degree programmes under a tripartite collaboration model involving the Hospital Authority, NGOs and local universities. There were about 1.2 million attendances in 2018. Private Chinese medicine clinics record about eight million attendances each year.

### **Family Health**

The Family Health Service under the Department of Health disseminates information on children's and women's health. The department provides health promotion and disease prevention services through its 31 maternal and child health centres (MCHCs) and three women's health centres for children from birth to five years of age and women aged 64 or below respectively. MCHCs offer an Integrated Child Health and Development Programme for parents and caregivers to promote the holistic health and well-being of children.

For women, MCHCs and women's health centres offer antenatal, postnatal, family planning and cervical screening services, as well as health education on areas including psycho-social health, personal relationships, physical health and healthy lifestyles. Some 25,200 expectant mothers and 55,000 newborn children attended MCHCs in 2018.

The Family Planning Association of Hong Kong offers services and information on sexual and reproductive health treatment and counselling. In 2018, more than 400,000 people used its services or took part in its programmes.

### **Student Health**

Health screening and individual counselling are available to primary and secondary students through the department's 12 student health service centres and three special assessment centres. In the 2017-18 school year, about 634,000 students joined these programmes. School health inspectors check schools' hygiene conditions in accordance with the Education Ordinance, while the department's Centre for Health Protection sends school immunisation teams to primary schools every year to administer free vaccinations for students.

Under the School Dental Care Service, the department's eight school dental clinics provide preventive dental services, including annual check-ups and basic care, in the 2017-18 school year to about 349,300 primary students, comprising 96 per cent of all Hong Kong primary students. At special schools, students with disabilities can use these services until age 18.

### **Elderly Health**

The department's 18 elderly health centres and 18 visiting health teams provide primary health care to the elderly, improve their ability to care for themselves, encourage healthy living and strengthen family support so as to minimise illness and disability. The centres provide health assessment, treatment, education and counselling to people aged 65 and above. The visiting teams conduct health promotion activities for the elderly and provide training to improve carers' skills. In 2018, there were about 48,000 enrolments and 184,000 attendances for health assessment and medical consultation, as well as some 478,000 attendances at health promotion activities.

The Elderly Health Care Voucher Scheme subsidises the elderly to receive private primary care in the community that best suits their health needs. In 2018, eligible elderly residents each received a one-off voucher amount of \$1,000 in addition to the annual \$2,000. They were also allowed to accumulate \$5,000 of vouchers as a regular measure, up from \$4,000. Close to 1.2 million elderly residents had made use of the vouchers by end-2018, accounting for about 94 per cent of the eligible population.

### **Community Health**

Community health care aims to reduce reliance on inpatient services and help patients recover in the community. In 2018, the Hospital Authority conducted 2.09 million home visits and outreach care services for, among others, elderly and mental patients.

More than 80 per cent of those receiving the Hospital Authority's community nursing services are elderly. In addition, community geriatric assessment teams visit residential care homes for the elderly regularly to provide medical and nursing care to frail residents who are unable to attend specialist outpatient clinics. These teams also train carers at the homes to care for their residents as well.

The Patient Support Call Centre provides telephone support to high-risk elderly patients discharged from public hospitals, offering advice on disease management and care support and arranging referrals to appropriate services for patients in need.

### **Oral Health**

Eleven government dental clinics provide emergency services in pain relief and tooth extraction, while seven public hospitals offer specialist oral health care. The department also monitors the level of fluoridation in public drinking water to reduce dental decay.

The department's Oral Health Education Unit holds targeted educational activities to promote oral health, such as the Bright Smiles Mobile Classroom for primary students. Information on oral health is available through the unit's homepage. The department also organises an annual Love Teeth Campaign to encourage good dental habits.

Outreach dental teams set up by NGOs receive government subsidies and provide free dental services, including fillings, extractions and dentures, to elderly people in residential care homes and similar facilities.

A new three-year programme named Healthy Teeth Collaboration was launched in July following the completion of a four-year pilot project, to continue providing dental services to adults with intellectual disability who were recipients of Comprehensive Social Security Assistance (CSSA), the Disability Allowance or the Hospital Authority's medical fee waiver. Eligible patients get subsidised checkups, treatment and oral health education at designated clinics, and treatment under intravenous sedation or general anaesthesia at designated hospitals.

### **Mental Health**

The government adopts an integrated approach in promoting mental health, encompassing prevention, early identification, timely intervention and rehabilitation. Cross-sectoral and multidisciplinary support and care are available through the collaboration of government bodies including the Food and Health Bureau, Labour and Welfare Bureau, Education Bureau, Hospital Authority, Social Welfare Department and Department of Health.

The Hospital Authority is a major medical service provider for people with mental disorders. Its psychiatric services include inpatient facilities, day hospitals, specialist outpatient clinics and community outreach. In 2017-18, about 251,300 people received treatment and support through these services.

The Advisory Committee on Mental Health, set up in December 2017, advises the government on mental health policies, including the establishment of more integral and comprehensive approaches to tackle multifaceted mental health issues. It assists the government in developing policies, strategies and measures to enhance mental health services. It also follows up on and monitors the implementation of the recommendations of the *Mental Health Review Report* promulgated in April 2017, including those concerning the Dementia Community Support Scheme and Student Mental Health Support Scheme.

Since its establishment, the committee has discussed ways to enhance mental health services for children and adolescents; mental health promotion, education and destigmatisation; and mental health prevalence surveys.

Based on the committee's recommendations, the government commissioned two universities in 2018 to conduct three territory-wide mental prevalence surveys covering children, adolescents and the elderly, in order to gather comprehensive information on the mental health status of the Hong Kong population.

### **Other Special Services**

Specialist facilities under the department include 19 methadone clinics, 17 chest clinics, seven social hygiene clinics, four dermatological clinics, two integrated treatment centres, four centres and clinics providing services related to clinical genetics, seven child assessment centres and two travel health centres. These facilities recorded over 2.6 million attendances in 2018.

## **Secondary, Tertiary and Specialised Health Care**

These services are available mainly in the Hospital Authority's hospitals and specialist outpatient clinics. As at end-2018, the city had 28,929 public hospital beds, comprising 22,561 general beds, 2,041 infirmary beds, 3,647 beds for the mentally ill and 680 beds for the mentally handicapped. There were also 4,657 beds in private hospitals, 5,974 in nursing homes and 874 in institutions run by the Correctional Services Department. There were 5.4<sup>2</sup> beds per 1,000 people. Public hospitals spent \$40 billion on inpatient services in 2017-18 and discharged 1.83 million inpatients and day inpatients in 2018.

The Hospital Authority's specialist outpatient clinics arrange appointments for new patients based on the urgency of their clinical conditions, to ensure those with acute conditions receive priority. Patients in stable condition are referred to family medicine and general outpatient clinics, or to primary care practitioners in the private sector for follow-up. In 2018, the Hospital Authority's specialist outpatient clinics recorded 7.87 million attendances.

In 2017-18, spending on both public and private inpatient and specialist outpatient services totalled about \$82.7 billion, of which 71 per cent was spent on the public sector. The Hospital Authority's specialist clinics spent about \$11.5 billion on providing medical services.

### **Allied Health Service**

Allied health professionals working under the Hospital Authority include audiologists, clinical psychologists, dietitians, occupational therapists, optometrists, orthoptists, physiotherapists, podiatrists, prosthetists and orthotists, speech therapists and medical social workers. They provide rehabilitative and extended care to help patients receiving inpatient, outpatient, ambulatory and community care services to reintegrate into society. In 2018, the Hospital Authority's allied health outpatient departments recorded about 2.83 million attendances.

### **Accident and Emergency Services**

Eighteen public hospitals provide accident and emergency services, delivering a high standard of service for critically ill or injured people and victims of disasters.

Patients are classified under five categories according to their clinical conditions: critical cases come 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 patients with more urgent needs receive prompt treatment. In 2018, all Category 1 patients received immediate treatment and over 95 per cent of Category 2 patients were treated within 15 minutes.

These services spent some \$3.1 billion in 2017-18 and handled 2.15 million visits by 1.26 million people in 2018, an average of about 5,900 attendances per day.

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<sup>2</sup> Consisting of all beds in the Hospital Authority's hospitals, private hospitals, nursing homes and correctional institutions.

### ***Medical Charges and Waivers***

Fees for public hospital and clinic services are government-subsidised at a rate of 96.8 per cent. Under a medical fee waiver mechanism, the Hospital Authority grants waivers to needy groups including CSSA recipients, low-income patients, the chronically ill, elderly patients with financial difficulties and, from 2017, older Old Age Living Allowance (OALA) recipients with more financial needs, who were renamed Higher OALA recipients aged 75 or above on 1 June 2018.

### ***Private Hospitals***

Private hospitals complement the public sector by providing a range of specialist and hospital services. The 12 private hospitals served 374,732 inpatients in 2017, representing 17 per cent of the city's total number of inpatients. Spending on private inpatient services amounted to \$23.6 billion in 2017-18, accounting for 37 per cent of overall expenditure on public and private inpatient services.

## **Major Developments**

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

In 2018, phase 1 redevelopment of Kwai Chung Hospital and substructure and utilities diversion works for the extension of Tuen Mun Hospital's Operating Theatre Block were substantially completed. Other new or ongoing projects included main works for phase 1 redevelopment of Queen Mary Hospital and the extension of Tuen Mun Hospital's Operating Theatre Block; preparatory works for phase 2 stage 1 redevelopment of Prince of Wales Hospital, redevelopment of Our Lady of Maryknoll Hospital and phase 1 redevelopment of Grantham Hospital; preparatory and foundation works for the construction of a new acute hospital at the Kai Tak Development Area; expansion of Haven of Hope Hospital; demolition and substructure works for the expansion of United Christian Hospital and phase 1 redevelopment of Kwong Wah Hospital; refurbishment of Hong Kong Buddhist Hospital; and expansion of the Hong Kong Red Cross Blood Transfusion Service Headquarters.

### ***Public-private Partnership Programmes***

The government takes part in clinical public-private partnership programmes through the Hospital Authority. Services covered include cataract surgery, patient empowerment, haemodialysis, radiological investigation, infirmary services and colon assessment.

The Hospital Authority's General Outpatient Clinic Public-Private Partnership Programme subsidises clinically stable patients with hypertension and/or diabetes mellitus under the care of its general outpatient clinics so they can opt to receive primary care from the private sector. A total of 378 private doctors and 29,842 patients throughout the 18 districts were participating in the programme in end-2018.

### ***Sharing of Electronic Health Records***

The territory-wide Electronic Health Record Sharing System (eHRSS) allows public and private healthcare providers to view and share the electronic health records of consenting patients. The eHRSS has been operating smoothly since its commissioning in 2016 and entered stage 2 development in July 2017 to, among other things, widen the sharable scope of data and

develop a Patient Portal to help patients manage their health more proactively. Stage 2 is expected to be completed by end-2022.

As at end-2018, close to 950,000 members of the public and over 1,600 organisations, including all 12 private hospitals, private clinics, elderly homes and welfare groups, had registered in addition to the Hospital Authority and the Department of Health. More than 46,800 accounts had been created for healthcare professionals working under these healthcare providers, comprising about 11,200 doctors, 30,700 nurses, 540 dentists, and 4,400 other healthcare professionals specified under the Electronic Health Record Sharing System Ordinance, to use the system.

### **Genomic Medicine**

In October, the launch of a large-scale genome sequencing project, the Hong Kong Genome Project, was announced in the Policy Address to promote the clinical application of, and innovative scientific research on, genomic medicine.

### **Health Promotion**

#### **Healthy Lifestyle**

The Department of Health's Central Health Education Unit formulates and implements strategies and measures to promote healthy eating, regular physical activity and mental wellness. The unit also updates information and health advice on infectious diseases, and produces materials in various languages to raise awareness among ethnic minorities of how to prevent communicable diseases and adopt a healthy lifestyle.

The department works with the Education Bureau to conduct campaigns such as StartSmart@school.hk and EatSmart@school.hk, which respectively drew the participation of more than 640 kindergartens and child care centres, and over 480 primary schools, including special schools, in the 2017-18 school year. The Joyful@School campaign, another joint collaboration with the Education Bureau, promotes mental well-being among primary and secondary students. The department is also working on a mental health promotion and public education initiative.

The Adolescent Health Programme fosters mental health and healthy use of the internet among 310 participating secondary schools as well as over 1,700 parents, teachers, social workers and other stakeholders.

The department's EatSmart@restaurant.hk campaign encourages restaurants to provide healthier choices for the community. About 680 restaurants joined the campaign in 2018.

Joyful@Healthy Workplace is carried out jointly by the Department of Health, the Labour Department and the Occupational Safety and Health Council. As at December, the programme had drawn over 1,300 organisations involving more than 390,000 employees.



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

The Department of Health's Red Ribbon Centre works with community partners to enhance awareness and prevention of human immunodeficiency virus (HIV) and to promote the care and acceptance of HIV patients. In 2018, the centre organised 69 major activities for 81,700 participants.

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

Appointments for counselling and HIV antibody tests may be made on the hotline 2780 2211 or the 27802211.com website. In 2018, the hotline received about 15,300 calls. Nurse counsellors handled 15,600 calls for AIDS counselling. About 725,000 condoms were distributed to promote safer sex. There are also a 21171069.com website and a Gay Men HIV Testing Hotline (2117 1069), which received 140 calls in 2018 for counselling and HIV antibody tests.

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

The department, working with the Hospital Authority, healthcare professional bodies and NGOs, promotes organ donation on different fronts. The promotion work is coordinated by the Committee on Promotion of Organ Donation. It invites companies, schools and other organisations to become signatories of the Organ Donation Promotion Charter.

By end-2018, more than 570 organisations had signed the charter and more than 297,000 people 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 double-lung transplants stood at 2,237, 69, 51 and 19 respectively. During the year, there were 60 kidney, 34 liver, 17 heart, six double-lung and 346 cornea donations from the deceased in public hospitals. There was one single-lung donation.

The Human Organ Transplant Ordinance regulates the transplant of human organs and import 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 the transplant 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 2018, the board received 12 applications for organ transplants between living non-related persons and Hong Kong imported 75 human organs for transplant purposes. The ordinance was amended to provide for paired and pooled donation arrangements. A pilot Paired Kidney Donation Programme was also launched by the Hospital Authority in the fourth quarter.

Under the ordinance, applications can be made to the department to exempt certain commercial products made from processed human tissue, enabling patients with genuine medical needs to benefit from the use of these products. Forty-six products were on the exemption list as at end-2018.

### **Smoking and Health**

China is a state party to the Framework Convention on Tobacco Control of the World Health Organisation (WHO), so provisions of the convention are applicable to Hong Kong. The city's 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.

The Smoking (Public Health) Ordinance stipulates statutory no-smoking areas, regulates the packaging and labelling of tobacco products, and prohibits all advertisements and promotions for such products. Smoking is banned in all indoor areas of workplaces and public places, including restaurants and bars, as well as some outdoor areas, including the open areas of schools, leisure grounds, bathing beaches and public transport facilities. Offenders are liable to a fine of \$1,500 under the Fixed Penalty (Smoking Offences) Ordinance.

The emergence of alternative smoking products, including e-cigarettes and heat-not-burn products, poses new health risks and challenges. These products are often packaged as less harmful substitutes and employ promotional tactics targeted at youngsters and non-smokers, paving the way for the eventual consumption of conventional cigarettes. It is possible for the public to underestimate their harmful effects and eventually reaccept the image of smoking and the related behaviours. To protect public health, the Chief Executive announced in the Policy Address a legislative amendment proposal to ban the import, manufacture, sale, distribution and advertising of alternative smoking products. The government is undertaking the relevant legislative amendment procedures.

The department's Tobacco and Alcohol Control Office enforces regulations set out in the two ordinances above. In 2018, it conducted 32,255 inspections and issued 140 summonses and 8,684 fixed penalty notices for smoking offences. A special task force was formed to enhance the enforcement action at night and during holidays. The office also distributes guidelines, posters, no-smoking signs and pamphlets to the public and the venue managers of statutory no-smoking areas.

In addition, the office provides advice on how to quit smoking, counselling services and pharmaceutical treatment through a smoking cessation hotline (1833 183), clinics and an interactive online cessation centre. In 2018, the hotline handled more than 8,900 phone calls. The office also raises awareness of the harmful effects of smoking and second-hand cigarette smoke. It works with NGOs to run community-based cessation programmes that include Chinese medicine acupuncture, peer-led phone counselling, cessation services at the workplace, programmes for ethnic minorities and new immigrants, and school activities.

The Hong Kong Council on Smoking and Health, an independent statutory body, advises the government on smoking, passive smoking and health, and publicises the hazards of smoking. The council also conducts publicity, education and community involvement campaigns, and receives enquiries and suggestions from the public on smoking and health.

The Hospital Authority manages 15 full-time and 54 part-time smoking counselling and cessation centres. It operates a hotline, 2300 7272, providing booking and enquiry services for people who wish to quit smoking.

### ***Sale and Supply of Intoxicating Liquor to Minors***

The Dutiable Commodities (Amendment) Bill 2017 was passed in February 2018 and came into operation on 30 November to prohibit the sale or supply of intoxicating liquor to minors in the course of business. In conjunction, the department's Tobacco Control Office was renamed Tobacco and Alcohol Control Office in November. Apart from tobacco control, the office also enforces the prohibition of the sale or supply of intoxicating liquor to minors.

### **Disease Prevention and Control**

The department spent \$4.2 billion on disease prevention and control at its maternal and child health centres, elderly health centres and similar facilities in 2017-18.

#### ***Centre for Health Protection***

The Centre for Health Protection collaborates with 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. The centre keeps track of communicable diseases and issues surveillance reports and laboratory data reports regularly.

A board of scientific advisers and six scientific committees meet periodically to help the centre formulate policies to improve the health protection system.

The centre maintains close liaison with district councils and Healthy Cities projects at the district level and solicits their support to disseminate health information and guidelines, alert the public to health threats, facilitate rapid implementation of preventive measures, and carry out other health promotion activities. It also shares professional knowledge and experience in combating diseases with health authorities in the Mainland, Macao and WHO.

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

The Prevention and Control of Disease Ordinance specifies 50 statutory notifiable infectious diseases in Hong Kong. During the year, 16,524 cases were reported, of which 7,592 and 4,326 were diagnosed as chickenpox and tuberculosis respectively.

The centre continually reviews and updates its strategies for coping with major outbreaks of infectious diseases, including an influenza pandemic, the Ebola virus disease, Middle East Respiratory Syndrome and Zika virus infection, ensuring both the government and the community are prepared to deal with them.

Up to December 2018, Hong Kong had confirmed 21 human cases of avian influenza A (H7N9) since the city reported its first human case in December 2013. All were sporadic imported cases and the last imported case was reported in March 2017.

### **Vaccination**

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

Under the programme, the government will, starting from the 2019-20 school year, introduce free vaccination against the human papillomavirus to school girls of particular age groups as a public health strategy for the prevention of cervical cancer.

The government provides free and subsidised seasonal influenza vaccinations to people aged 50 or above, children and other eligible groups under the Government Vaccination Programme and the Vaccination Subsidy Scheme. The programme provides eligible people with free vaccination each year at public hospitals and clinics, residential care homes for the elderly and for persons with disabilities, and designated institutions serving people with intellectual disabilities. Private doctors enrolled in the scheme can receive a subsidy of \$210 for each vaccination they give to eligible groups.

Both initiatives also provide free and subsidised 23-valent pneumococcal polysaccharide vaccine (23vPPV) to eligible people aged 65 or above, and 13-valent pneumococcal conjugate vaccine (PCV13) to eligible high-risk elderly. The subsidies paid to private doctors for 23vPPV and PCV13 are \$250 and \$730 per dose respectively.

In October, the government launched the School Outreach Vaccination Pilot Programme and enhanced the Vaccination Subsidy Scheme. Through a mix of government and public-private partnership delivery modes, free outreach influenza vaccination activities were conducted at more than 570 primary schools, kindergartens and child care centres. As at end-2018, more than 270,000 children aged from six months to below 12 had received vaccination, consisting of more than 40 per cent of the age group.

### **Non-communicable Diseases**

The major killers in Hong Kong are cancer, heart and cerebrovascular diseases, which together accounted for about 51 per cent of all registered deaths in 2017. Elderly people are the major victims of these chronic non-communicable diseases.

The Cancer Coordinating Committee, chaired by the Secretary for Food and Health, steers and recommends strategies and work for the prevention and control of cancer, which claimed more than 14,400 lives locally in 2018. The Department of Health's Cervical Screening Programme encourages women aged between 25 and 64 who have ever had sex to undergo regular cervical cancer screening. In 2018, some 102,000 registered women were screened.

In August, the department regularised the Colorectal Cancer Screening Programme to subsidise asymptomatic Hong Kong residents aged between 50 and 75 to undergo screening for the prevention of colorectal cancer. By end-2018, around 117,600 participants had joined the programme.

To prevent and control non-communicable diseases, the government launched Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong, which set out nine targets to be achieved by 2025 and a systematic portfolio of initiatives to reduce the burden of non-communicable diseases.

## **Regulatory Activities**

### ***Healthcare Professionals***

As at the year end, 14,651 doctors, 2,553 dentists, 10,054 listed and registered Chinese medicine practitioners, 56,723 registered and enrolled nurses, 4,445 midwives, 2,890 pharmacists, 234 chiropractors, 3,250 physiotherapists, 2,224 occupational therapists, 3,767 medical laboratory technologists, 2,220 optometrists, 2,393 radiographers and 472 dental hygienists were registered in Hong Kong.

The Pilot Scheme of Accredited Registers for Healthcare Professions enhances the society-based registration arrangements of healthcare professions not subject to statutory registration, so as to ensure the professional competency of healthcare professionals and provide more information for the public to make informed decisions when choosing service providers. As at end-2018, the Hong Kong Institute of Speech Therapists and the Hong Kong Institute of Audiologists had been accredited and authorised as the accredited healthcare professional bodies responsible for administering the registers of their professions.

### ***Western Medicine***

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

In 2018, the board approved 3,469 applications to register pharmaceutical products. As at the year end, 17,323 pharmaceutical products were registered.

In April, the department launched a public consultation on the regulation of advanced therapy products. It received broad support for the proposed regulatory control of such products under the existing regulatory framework for pharmaceutical products.

### ***Chinese Medicine***

Chinese medicine is 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. The Chinese Medicine Council of Hong Kong is the statutory body that devises and implements regulatory measures for Chinese medicine. 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 sold in Hong Kong on 1 March 1999 are eligible for a transitional registration status if an application is made within a specified period and upon the submission

of acceptable basic test reports. As at end-2018, there were 7,033 licensed Chinese medicine traders, including 19 holding the Certificate for Manufacturer; 6,620 proprietary Chinese medicines with transitional registration status; and 1,714 with a Certificate of Registration of Proprietary Chinese Medicine.

As announced in the 2018 Policy Address, the government has incorporated Chinese medicine into the healthcare system. It will formulate a holistic Chinese medicine policy and allocate additional resources to subsidise defined services, such as outpatient services provided in the 18 Chinese medicine centres for training and research as well as inpatient services with integrated Chinese-Western medicine treatment in selected public hospitals. The government is spearheading the development of the first Chinese medicine hospital, which will provide government-subsidised inpatient and outpatient services.

The Hong Kong Chinese Materia Medica (HKCMM) Standards Project aims to ensure the safety and quality of common Chinese herbal medicines. It is supported by local universities and overseas and Mainland experts. As at end-2018, the department had released reference standards for 299 commonly used Chinese medicines under the project.

The Government Chinese Medicines Testing Institute has been conducting six projects at its temporary site after consulting the industry, while the department is working on establishing a permanent site.

The department's Chinese Medicine Division, which is designated by the WHO as a WHO Collaborating Centre for Traditional Medicine, helps the WHO formulate policies and strategies and sets regulatory standards for traditional medicine.

### ***Integrated Chinese-Western Medicine Pilot Programme***

The Hospital Authority is implementing a pilot programme making use of integrated Chinese-Western medicine to maximise the outcome of patient care, gain experience in the development of Chinese medicine inpatient services, and facilitate postgraduate Chinese medicine development and training. The pilot programme covers stroke, lower back pain, shoulder and neck pain and cancer palliative care, and is operating in seven public hospitals.

### ***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 the 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 must apply for a licence issued by the Council on Human Reproductive Technology, set up under the legislation. As at the end of 2018, the council had issued 50 licences, comprising 18 treatment licences, 29 artificial insemination-by-husband licences and three research licences.

The council's code of practice sets out the requirements, standards and good practices for embryo researchers and reproductive technology practitioners.

### **Port Health**

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

The office also operates two travel health centres to provide outbound travellers with disease preventive services, including medical consultation, vaccination, prophylactic medication and advice on travel-related risks. It works closely with the travel industry and provides travel health information on the department's website.

### **Radiation Health**

Set up under the Radiation Ordinance, the independent Radiation Board enforces the ordinance so as to control the production, sale, possession and use of radioactive substances and irradiating apparatus. The board's executive arm is the department's Radiation Health Unit, which licenses and inspects radioactive substances and irradiating apparatus. It also provides health surveillance and radiation monitoring for radiation workers, maintains metrology standards in radiation dosimetry measurements and provides calibration services on radiation dosimeters. The unit advises on the management of radioactive substances and wastes and, in case of nuclear incidents, on the protection of public health.

## **Training of Healthcare Professionals**

### **Doctors**

Degree courses in medicine and surgery are offered at the University of Hong Kong (HKU) and the Chinese University of Hong Kong (CUHK), which admitted a total of 478 medical students to their bachelor's degree programmes in 2018. Another 51 medical graduates with professional qualifications obtained outside Hong Kong passed licensing examinations 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.

The Hospital Authority trains specialist doctors, offering appointments to nearly all the medical graduates of the two universities each year for on-the-job specialist training. In 2017-18, about 370 doctors were recruited for specialist training. Around 260 doctors were awarded specialist qualifications by the Hong Kong Academy of Medicine in 2018.

### **Dentists**

HKU offers degree courses in dentistry, admitting 74 students to its bachelor's degree programme in 2018. Nineteen candidates who completed their dental training outside Hong Kong passed licensing examinations conducted by the Dental Council of Hong Kong.

### **Chinese Medicine Practitioners**

CUHK, HKU and Hong Kong Baptist University offer full-time undergraduate degree courses in Chinese medicine. In 2018, 76 full-time local bachelor's degree graduates who passed the licensing examination were registered as Chinese medicine practitioners.

The 18 Chinese medicine centres for training and research employ fresh graduates as Chinese medicine practitioner trainees for three years. As at end-2018, these centres had 216 training places, including 72 places for the first year of training.

### **Allied Health Professionals**

Hong Kong Polytechnic University (PolyU) and Tung Wah College offer degree programmes for allied health professionals. In 2018, PolyU admitted 134, 115, 102, 56 and 47 students to its publicly funded degree programmes in physiotherapy, radiography, occupational therapy, medical laboratory science and optometry respectively. Tung Wah admitted 29, 19, 50 and 50 students respectively to its self-financing degree programmes in medical laboratory science, radiation therapy, occupational therapy and physiotherapy, the last of which is undergoing professional accreditation while the other three have been accredited. In the 2018-19 academic year, students of the three accredited programmes are receiving government subsidy under the Study Subsidy Scheme for Designated Professions/Sectors.

The Hospital Authority's Institute of Advanced Allied Health Studies devises structured long-term training plans for allied health staff members and runs courses on specialist and multidisciplinary training, and clinical and personal development. These include three years of in-service training for new recruits of allied health grades. In 2018, the institute offered 95 training courses and 64 overseas scholarships.

### **Nurses**

HKU, CUHK, PolyU, the Open University of Hong Kong (OUHK), Tung Wah College and Caritas Institute of Higher Education provide pre-registration nursing training. They recruited 1,608 students into their nursing degree programmes in 2018. PolyU and CUHK enrolled another 119 students in their Master's Degree of Nursing programmes.

Hong Kong Baptist Hospital, Hong Kong Sanatorium and Hospital, St Teresa's Hospital, Union Hospital and Tung Wah College provide pre-enrolment nursing training. They recruited 461 pupil nurses into their two-year Higher Diploma in Enrolled Nurse (General) programmes in 2018. OUHK enrolled 230 and 44 pupils in its two-year Higher Diploma in General Health and Higher Diploma in Mental Health Nursing programmes respectively. Twenty-four nurses with professional nursing qualifications obtained outside Hong Kong passed the Nursing Council of Hong Kong's licensing examinations and received practising certificates for registered nurses or enrolled nurses.



Government-subsidised, self-financing undergraduate programmes in nursing offered 860 places in 2018-19.

The Hospital Authority's three-year higher diploma programme provides basic registered nurse training and enrolled 300 students in 2018. Another 100 pupil nurses were admitted to its two-year enrolled nurse basic training programme.

The Hospital Authority's Institute of Advanced Nursing Studies strengthens specialty care training for nurses and encourages them to improve professional standards through continuous learning. New graduates undergo simulation training to strengthen their skills in clinical care and medical emergencies. Experienced nurses can apply for 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 commitment to protect public health. It carries out tests to ensure pharmaceutical products and Chinese medicines meet quality and safety standards and to verify proprietary Chinese medicines are free from western drug adulteration or harmful ingredients. It performed more than 135,560 such tests in 2018. The laboratory also supports investigations into the use of undeclared western drugs in preparations and intoxication incidents suspected to have been caused by misused or contaminated Chinese herbal medicines.

The laboratory provides analytical support in the identification of the chemical markers of unregistered proprietary Chinese medicines, and helps develop the HKCMM Standards. It conducts year-round surveillance of tar and nicotine yields in cigarettes.

### ***Public Health Laboratory Services***

The Department of Health's Public Health Laboratory Services Branch conducts laboratory tests on clinical and surveillance specimens and provides clinical diagnostic and public health laboratory services to the public and private sectors for patient care and other public health purposes.

The branch's Public Health Laboratory Centre is designated by the WHO as a National Influenza Centre, National Poliovirus Laboratory, National Measles Laboratory of the Hong Kong Special Administrative Region, Supranational TB Reference Laboratory, Regional Reference Laboratory for measles in the Western Pacific Region, Global Influenza A(H5) Reference Laboratory and Severe Acute Respiratory Syndrome Reference Laboratory.

## **Auxiliary Medical Service**

The Auxiliary Medical Service is a government department under the Security Bureau, with 99 civil service positions plus about 6,000 adult volunteers and cadets. It reinforces regular medical and ambulance services during emergencies and provides backup in normal circumstances.

The volunteers come from all walks of life and include doctors, nurses, pharmacists and paramedics. All are qualified Disaster Medical Assistants. The cadets, aged 12 to 17, receive training in discipline and medical skills to develop self-discipline and a sense of responsibility.

During weekends and public holidays, the department deploys members at first aid stations in country parks and along cycling tracks, and assigns First Aid Bicycle Teams to cycling tracks in the New Territories. It also runs programmes on first aid at schools and gives talks to the public on cardiopulmonary resuscitation and other health topics.

### **Websites**

AIDS hotline website: [www.27802211.com](http://www.27802211.com)  
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)  
Cervical Screening Programme: [www.cervicalscreening.gov.hk](http://www.cervicalscreening.gov.hk)  
Colorectal Cancer Screening Programme: [www.colonscreen.gov.hk](http://www.colonscreen.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)  
Family Health Service: [www.fhs.gov.hk](http://www.fhs.gov.hk)  
Food and Health Bureau: [www.fhb.gov.hk](http://www.fhb.gov.hk)  
Gay men HIV information website: [www.21171069.com](http://www.21171069.com)  
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: [www.organdonation.gov.hk](http://www.organdonation.gov.hk)  
Red Ribbon Centre: [www.rrc.gov.hk](http://www.rrc.gov.hk)  
School Dental Care Service: [www.school dental.gov.hk](http://www.school dental.gov.hk)  
Travel Health Service: [www.travelhealth.gov.hk](http://www.travelhealth.gov.hk)  
Vaccination Schemes: [www.chp.gov.hk/en/features/17980.html](http://www.chp.gov.hk/en/features/17980.html)  
Virtual AIDS Office: [www.aids.gov.hk](http://www.aids.gov.hk)