

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	2019	1.4* per 1,000 registered live births	
Maternal mortality ratio	2019	0* per 100,000 registered live births	
Life expectancy at birth	2019	82.3* (Male)	88.1* (Female)
	2066 (projected)	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 1.4* per 1,000 live births in 2019, among the lowest in the world. Male and female life expectancy at birth, respectively at 82.3* years and 88.1* years, was among the world's highest.

Hong Kong's Domestic Health Accounts¹ 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 \$54.1 billion in 2014 to \$80.6 billion by 2019, an increase of about 49 per cent. On a year-on-year basis, the recurrent funding for health grew more than 13 per cent from \$71.2 billion in 2018. It accounted for 18 per cent of the government's recurrent expenditure in 2019.

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 was implemented fully on 1 April. It aims to regulate the quality of individual indemnity hospital insurance plans and enhance market transparency, in order to increase consumers' confidence in purchasing hospital insurance, thereby facilitating their use of private health care 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 in 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. It is adopting a multi-pronged approach to boost manpower, including by increasing the number of local subsidised healthcare training places and attracting more qualified non-locally trained healthcare professionals to practise in Hong Kong.
- **Regulation of private healthcare facilities** – The Private Healthcare Facilities Ordinance, enacted in 2018, provides a new regulatory regime for private healthcare facilities that fits the present landscape of private healthcare services while further protecting patient safety and consumer rights. The government is implementing the regulatory regime in phases based on the types of private healthcare facilities and their risk levels.

Primary Health Care

Primary health 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.

Services are provided mainly by the private sector and non-governmental organisations (NGOs). On average, private Western clinics handle about 30 million outpatient visits each year. NGOs

¹ 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.

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.

The public sector provides primary health care mainly through the Department of Health and Hospital Authority. The Hospital Authority operates 73 general outpatient clinics, including community health centres. These clinics focus on serving the elderly, low-income families and chronic disease patients. In 2019, some 1.65 million people used these services, with 6.33 million attendances recorded.

To push ahead with district-based primary health care, the bureau is spearheading 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 services. It will focus on primary, secondary and tertiary prevention, including health promotion, health assessment, chronic disease management and community rehabilitation. The first district health centre, in Kwai Tsing, began operation in September.

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 24,400 expectant mothers and 53,000 newborn children attended MCHCs in 2019.

The Family Planning Association of Hong Kong offers services and information on sexual and reproductive health treatment and counselling. In 2019, more than 400,000 people used its services or took part in its programmes.

Student Health

In November, the numbers of student health service centres and special assessment centres under the department increased by one each, to 13 and four respectively, providing health screening and individual counselling to primary and secondary students. In the 2018-19 school year, about 639,000 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 give students free vaccinations.

Under the School Dental Care Service, the department's eight school dental clinics provided preventive dental services, including annual check-ups and basic care, in the 2018-19 school

year to about 359,300 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 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 2019, there were about 51,000 enrolments and 191,000 attendances for health assessment and medical consultation, as well as some 478,000 attendances at promotional activities under the Elderly Health Service.

The Elderly Health Care Voucher Scheme subsidises the elderly to receive private primary care in the community that best suits their health needs. In 2019, eligible residents each received a one-off voucher amount of \$1,000 in addition to the annual \$2,000. They were also allowed to accumulate \$8,000 of vouchers as a regular measure, up from \$5,000. By end-2019, close to 1.3 million elderly residents had made use of the vouchers, accounting for about 98 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 2019, the Hospital Authority conducted 2.07 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.

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 Division 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 division'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.

Healthy Teeth Collaboration, a three-year programme launched by the department in 2018, provides dental services to adults with intellectual disability who are recipients of Comprehensive Social Security Assistance (CSSA), the Disability Allowance or the Hospital Authority's medical fee waiver. In September, the department also set up a Special Care Service in Hong Kong Children's Hospital and an outreach dental programme in special child care centres under the Social Welfare Department to provide dental care for pre-school children under six with intellectual disability.

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 services are available through collaboration among government bodies and other relevant organisations 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 2018-19, about 261,800 people received treatment and support through these services.

The Advisory Committee on Mental Health advises the government on mental health policies, including the establishment of more integrated and comprehensive approaches to tackle multifaceted mental health issues. It helps the government develop policies, strategies and measures to enhance mental health services. It also follows up on and monitors the implementation of recommendations in the *Mental Health Review Report*.

Since its establishment in 2017, the committee has advised the government on commissioning two universities to conduct three territory-wide mental health prevalence surveys, covering children, adolescents and the elderly; taking forward the ongoing mental health promotion and public education initiative; launching the Mental Health Workplace Charter; exploring a new service protocol for child and adolescent mental health services; and strengthening manpower in the Hospital Authority's Child and Adolescent Psychiatric Service and the Department of Health's Child Assessment Service.

Other Special Services

Specialist facilities under the department include 19 methadone clinics, 17 chest clinics, eight social hygiene clinics, four dermatological clinics, one integrated treatment centre, four centres and clinics providing services related to clinical genetics, seven child assessment centres and two travel health centres. These facilities recorded around 2.4 million attendances in 2019.

Secondary, Tertiary and Specialised Health Care

These services are available mainly in the Hospital Authority's hospitals and specialist outpatient clinics. As at end-2019, the city had 29,417 public hospital beds, comprising 23,049 general beds, 2,041 infirmary beds, 3,647 beds for the mentally ill and 680 for the mentally handicapped. There were also 5,056 private hospital beds, comprising 4,652 inpatient beds and 404 day beds; 6,127 beds in nursing homes and 874 in institutions run by the Correctional Services Department. There were 5.5² beds per 1,000 population. Public hospitals spent \$42.9 billion on inpatient services in 2018-19 and discharged 1.88 million inpatients and day inpatients in 2019.

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 2019, the Hospital Authority's specialist outpatient clinics recorded eight 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. In 2018-19, the Hospital Authority's specialist clinics spent about \$12.4 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 2019, the Hospital Authority's allied health outpatient departments recorded 2.93 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 2019, 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 \$3.3 billion in 2018-19 and handled 2.2 million visits by 1.28 million people in 2019, an average of about 6,000 attendances per day.

² 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 96.9 per cent. Under a medical fee waiver mechanism, the Hospital Authority grants waivers to needy groups including CSSA recipients, low-income patients, Higher Old Age Living Allowance recipients aged 75 or above, the chronically ill and elderly patients with financial difficulties.

Private Hospitals

Private hospitals complement the public sector by providing a range of specialist and hospital services. The 12 private hospitals served 375,027 inpatients in 2018, 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.

End-of-life Care

In September, the government launched a public consultation on legislative proposals about advance directives and dying in place, both of which are important measures to respect the healthcare choice of a person who is approaching the end of life.

Major Developments

Public Hospital Development Projects

In 2019, the refurbishment of Hong Kong Buddhist Hospital was substantially completed. Demolition and substructure works for phase 1 redevelopment of Kwong Wah Hospital was also completed and the main works began. 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; phase 2 and 3 redevelopment of Kwai Chung Hospital; preparatory and foundation works for phase 2 stage 1 redevelopment of Prince of Wales Hospital and the construction of a new acute hospital at the Kai Tak Development Area; preparatory works for the redevelopment of Our Lady of Maryknoll Hospital, phase 1 redevelopment of Grantham Hospital and the expansion of North District Hospital and Princess Margaret Hospital (Lai King Building); the expansion of Haven of Hope Hospital; demolition and substructure works for the expansion of United Christian Hospital; and the 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 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 to opt for primary care from the private sector. A total of 417 private doctors and 35,137 patients were participating in the programme as at end-2019.

In the second quarter of 2019, the Hospital Authority launched the Glaucoma Public-Private Partnership Programme on a pilot basis to subsidise clinically stable glaucoma patients under the care of its eye specialist outpatient clinics in the Hong Kong West, Kowloon Central and New Territories East clusters to opt for specialist care from the private sector. Sixty-one private ophthalmologists and 577 patients were participating in the programme as at end-2019.

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. Stage 2 development of the eHRSS includes widening the sharable scope of data and developing a Patient Portal to help patients manage their health more proactively, and is expected to be completed by end-2022.

As at end-2019, around 1.22 million residents and over 1,800 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. About 50,000 accounts had been created for healthcare professionals working under these healthcare providers to use the system, comprising about 12,900 created for doctors, 31,100 for nurses, 570 for dentists and 4,700 for other professionals specified under the Electronic Health Record Sharing System Ordinance.

Genomic Medicine

In December, the Steering Committee on Genomic Medicine submitted a report to the government on the study of strategies for developing genomic medicine in Hong Kong.

Chinese Medicine

As announced in the 2019 Policy Address, more recurrent resources will be devoted to develop Chinese medicine in Hong Kong. In September, tenders were invited from non-profit-making organisations to operate a Chinese medicine hospital. A \$500 million Chinese Medicine Development Fund was launched in mid-2019 to enhance overall industry standards, including nurturing talent, promoting research and enhancing the public's knowledge of Chinese medicine.

At the district level, 18 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. Starting from March 2020, the government will subsidise up to 620,000 places annually for general consultation, *tuina* and acupuncture services at these centres, so patients pay only a standard fee of \$120 per visit. There were about 1.1 million attendances in 2019. Private Chinese medicine clinics record about eight million attendances each year.

Integrated Chinese-Western Medicine Pilot Programme

The Hospital Authority is developing integrated Chinese-Western medicine (ICWM) inpatient services at designated public hospitals, with the objectives of using ICWM to provide better patient care, gain experience in developing 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 available at seven public hospitals. From March 2020, ICWM inpatient services will become cheaper as the government increases resources to lower the additional daily fee paid by patients from \$200 to \$120.

Health Promotion

Healthy Lifestyle

The Department of Health's Health Promotion Branch formulates and implements strategies and measures to promote healthy eating, regular physical activity and mental wellness. The branch 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 650 kindergartens and child care centres, and over 490 primary schools, including special schools, in the 2018-19 school year. Another joint campaign with the bureau, the three-year Joyful@School launched in the 2016-17 school year, promotes the mental well-being of primary and secondary students. The department is also carrying out a mental health promotion and public education initiative.

The Adolescent Health Programme promotes mental health and healthy use of the internet in over 300 secondary schools.

In 2019, the department launched the EatSmart Restaurant Star+ campaign as the enhanced version of EatSmart@restaurant.hk to encourage restaurants to provide a wider choice of healthy dishes. As at December, there were about 1,000 EatSmart restaurants.

The department works with community partners to organise the 'I'm So Smart' Community Health Promotion Programme, which aims to combat the growing problem of non-communicable diseases by promoting a healthy diet and regular physical activities. In 2019-20, the programme focused on reducing dietary salt intake and physical inactivity.

The department maintains close liaison with Healthy Cities projects, NGOs and other community partners and solicits their support to carry out health promotion activities, disseminate health information, alert the public to health threats and facilitate rapid implementation of preventive measures.

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 1,700 organisations involving more than 520,000 employees.

In November, the Department of Health launched the Mental Health Workplace Charter to foster employers' adoption of measures that would promote mental well-being, encourage

active listening and communication and create an inclusive and mental health-friendly workplace.

AIDS Counselling and Education

The department'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 2019, the centre organised 56 major activities for 57,300 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 2019, the hotline received about 11,600 calls. Nurse counsellors handled 13,700 calls for AIDS counselling. About 691,500 condoms were distributed to promote safer sex. There are also a 21171069.gov.hk website and a Gay Men HIV Testing Hotline (2117 1069), which received 140 calls in 2019 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. By end-2019, the Centralised Organ Donation Register had recorded more than 317,000 registrations.

The number of patients waiting for kidney, liver, heart and lung transplants stood at 2,268, 60, 54 and 24 respectively. During the year, there were 42 kidney, 23 liver, eight heart, seven double-lung and 324 cornea donations from the deceased in public hospitals.

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 2019, the board received nine applications for organ transplants between living non-related persons and Hong Kong imported 68 human organs for transplant purposes. Under a pilot Paired Kidney Donation Programme, the Hospital Authority performs organ matching regularly on renal patients and their relatives who have joined the programme.

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, heated tobacco products and herbal cigarettes, poses new health risks and challenges. To protect public health, the government introduced the Smoking (Public Health) (Amendment) Bill 2019 for Legislative Council scrutiny, proposing to ban the import, manufacture, sale, distribution and advertising of alternative smoking products.

The Department of Health's Tobacco and Alcohol Control Office enforces regulations set out in the two ordinances above. In 2019, it conducted over 34,600 inspections and issued 67 summonses and 8,068 fixed penalty notices for smoking offences. The office also distributes guidelines, posters, no-smoking signs and pamphlets to the public and the venue managers of statutory no-smoking areas.

The office promotes smoking prevention and cessation through public education and programmes based in the school or community. It works with NGOs to operate smoking cessation clinics as well as cessation programmes targeting workplaces, ethnic minorities and new immigrants. More support is rendered via a quit line (1833 183) and mobile application.

The Hospital Authority manages 15 full-time and 55 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.

The Hong Kong Council on Smoking and Health, an independent statutory body, advises the government on smoking, passive smoking and health matters, 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 matters.

Disease Prevention and Control

The department spent \$5.8 billion on disease prevention and control at its maternal and child health centres, elderly health centres and similar facilities in 2018-19.

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 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, 15,280 cases were reported, of which 6,898 and 4,051 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, measles, Middle East Respiratory Syndrome, Zika virus infection and dengue fever, ensuring both the government and the community are prepared to deal with them.

Vaccination

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

Starting from the second term of the 2019-20 school year, the government will, under the programme, provide free vaccination against the human papillomavirus to school girls of suitable grades as a public health strategy in preventing cervical cancer.

The government provides free and subsidised seasonal influenza vaccinations (SIVs) to eligible people, including those aged 50 or above and children, under the Government Vaccination Programme and the Vaccination Subsidy Scheme. The programme provides free vaccinations at public hospitals and clinics, residential care homes for the elderly and for persons with disabilities, residential child care centres, and designated institutions serving people with intellectual disabilities. The scheme grants participating private doctors 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 people. The subsidies paid to private doctors for 23vPPV and PCV13 are \$250 and \$730 per dose respectively.

In October, the government regularised the SIV School Outreach (Free of Charge) programme to cover more primary schools and to extend a pilot run to kindergartens, kindergartens-cum-child care centres and child care centres. As nasal influenza vaccine has not been widely used in Hong Kong in the past, the department is conducting a trial that provides the vaccine in selected schools, to test the feasibility and logistical arrangements of applying this vaccine in

vaccination programmes. Since the launch of various 2019-20 SIV programmes, the number of doses administered had increased 18 per cent year on year by end-2019.

Non-communicable Diseases

The major killers in Hong Kong are cancer, cardiovascular diseases including heart and cerebrovascular diseases, chronic respiratory diseases and diabetes mellitus, which together accounted for about 57 per cent of all registered deaths in 2018.

The government is implementing *Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong*. The action plan, launched in May 2018, sets out nine targets to be achieved by 2025 and a systematic portfolio of initiatives to reduce the burden of 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 nearly 14,600 lives locally in 2018. In July 2019, the government launched the Hong Kong Cancer Strategy to reduce the cancer burden in the local population and improve the quality of life and survivorship of cancer patients. The government promotes as the primary preventive strategy the adoption of a healthy lifestyle, which includes no smoking, avoiding alcohol consumption, eating a balanced diet and engaging in regular physical activity. It also provides population-based cancer screening based on evidence. The department's Cervical Screening Programme encourages women aged between 25 and 64 who have ever had sex to undergo regular cervical cancer screening. In 2019, nearly 98,000 women were screened.

The department is implementing the Colorectal Cancer Screening Programme to subsidise in phases asymptomatic Hong Kong residents aged between 50 and 75 to undergo screening for the prevention of colorectal cancer. Around 167,300 participants had joined the programme as at end-2019.

Regulatory Activities

Healthcare Professionals

As at the year end, 15,004 doctors, 2,611 dentists, 10,173 listed and registered Chinese medicine practitioners, 59,082 registered and enrolled nurses, 4,483 midwives, 3,001 pharmacists, 262 chiropractors, 3,510 physiotherapists, 2,403 occupational therapists, 3,862 medical laboratory technologists, 2,250 optometrists, 2,479 radiographers and 495 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-2019, the Hong Kong Institute of Speech Therapists, Hong Kong Institute of Audiologists, Hong Kong Academy of Accredited Dietitians, Hong Kong Association of Educational Psychologists and Hong Kong Institute of Clinical Psychologists had been accredited to be responsible for administering the registers of their professions. The pilot scheme will serve as

a basis for the government to study how to formulate a statutory registration regime for the relevant accredited 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 2019, the board approved 3,299 applications to register pharmaceutical products. As at the year end, 16,186 pharmaceutical products were registered.

In October, the government gazetted the Pharmacy and Poisons (Amendment) Bill to better regulate advanced therapy 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-2019, there were 7,233 licensed Chinese medicine traders, including 20 holding the Certificate for Manufacturer; 5,948 proprietary Chinese medicines with transitional registration status; and 2,278 with a Certificate of Registration of proprietary Chinese medicines.

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-2019, the department had released reference standards for 299 commonly used Chinese herbal medicines under the project.

The Government Chinese Medicines Testing Institute is undertaking six research projects at its temporary site after consulting the industry, and have published initial research results on the Chinese Medicine Regulatory Office website. The department is working on establishing a permanent site.

The department's Chinese Medicine Regulatory Office, 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.

Human Reproductive Technology

The Human Reproductive Technology Ordinance regulates the application of human reproductive technologies to ensure the procedures are conducted in a safe and informed manner, and to safeguard the welfare of children born through the technologies. As at end-2019, the Council on Human Reproductive Technology had issued 47 licences, comprising 18 treatment licences, 28 artificial insemination-by-husband licences and one research licence, in accordance with the ordinance.

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 or out of Hong Kong, the department's Port Health Division enforces health quarantine measures according to the International Health Regulations and the Prevention and Control of Disease Ordinance. Thermal imaging systems screen the temperatures of inbound travellers at all boundary control points.

The division also operates two travel health centres to provide outbound travellers with disease preventive services, including travel health risk assessment, 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 Division, 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 division advises on the management of radioactive substances and wastes and, in case of nuclear incidents, on the protection of public health.

Training of Healthcare Personnel

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 566 medical students to their bachelor's degree programmes in 2019. Another 53 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 2018-19, about 450 doctors were recruited for specialist training. Around 320 doctors were awarded specialist qualifications by the Hong Kong Academy of Medicine in 2019.

Dentists

HKU offers degree courses in dentistry, admitting 80 students to its bachelor's degree programme in 2019. Twenty-seven 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 (HKBU) offer full-time undergraduate degree courses in Chinese medicine. During the year, 82 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-2019, 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 (TWC) offer degree programmes for allied health professionals. In 2019, PolyU admitted 151, 112, 100, 57 and 49 students to its publicly funded degree programmes in physiotherapy, radiography, occupational therapy, medical laboratory science and optometry respectively. TWC admitted 45, 15, 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. Students of all four self-financing degree programmes receive government subsidies 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 2019, the institute offered 79 training courses and 47 overseas scholarships.

Nurses

HKU, CUHK, PolyU, HKBU, the Open University of Hong Kong (OUHK), Caritas Institute of Higher Education and TWC provide pre-registration nursing training. They recruited 2,114 students into their nursing degree programmes in 2019. PolyU and CUHK enrolled another 120 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 TWC provide pre-enrolment nursing training. They recruited 426 pupil nurses into their two-year Higher Diploma in Enrolled Nurse (General) programmes in 2019. OUHK enrolled

228 and 59 pupils in its two-year Higher Diploma in General Health and Higher Diploma in Mental Health Nursing programmes respectively. Twenty-two 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 pre-registration nursing training and enrolled 300 students in 2019. Another 100 pupil nurses were admitted to its two-year pre-enrolment nursing 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 competence and skills in clinical care and medical emergencies. The Hospital Authority also offers scholarships for experienced nurses to attend overseas training and gain international exposure.

Laboratory Services

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.

Laboratories of the branch's Microbiology Division are variously 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 and rubella 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 6,500 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.

The department mobilises members to perform first aid duties during natural disasters, large-scale incidents, public activities and festivals. During weekends and public holidays, its members man first aid stations in country parks and along cycling tracks, with First Aid Bicycle Teams

assigned to cycling tracks in the New Territories. The department also runs first aid programmes at schools and gives public talks on cardiopulmonary resuscitation and other health topics.

Websites

AIDS hotline website: www.27802211.com
Auxiliary Medical Service: www.ams.gov.hk
Centre for Health Protection: www.chp.gov.hk
Cervical Screening Programme: www.cervicalscreening.gov.hk
Colorectal Cancer Screening Programme: www.colonscreen.gov.hk
Department of Health: www.dh.gov.hk
eHealth Record Office: www.eHealth.gov.hk
Family Health Service: www.fhs.gov.hk
Food and Health Bureau: www.fhb.gov.hk
Gay men HIV information website: www.21171069.gov.hk
Hong Kong Council on Smoking and Health: www.smokefree.hk
Hospital Authority: www.ha.org.hk
Oral Health Education Unit: www.toothclub.gov.hk
Organ Donation: www.organdonation.gov.hk
Red Ribbon Centre: www.rrc.gov.hk
School Dental Care Service: www.school dental.gov.hk
Travel Health Service: www.travelhealth.gov.hk
Vaccination schemes: www.chp.gov.hk/en/features/17980.html
Virtual AIDS Office: www.aids.gov.hk
Voluntary Health Insurance Scheme Office: www.vhis.gov.hk