

Chapter 9

Health

Hong Kong's public and private medical sectors provide comprehensive 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	2020	82.7* (Male)	88.1* (Female)
	2069 (<i>projected</i>)	88.4 (Male)	93.9 (Female)

*provisional figures

Hong Kong has an excellent healthcare system supported by a highly professional team of workers. The infant mortality rate in 2019 was among the lowest in the world. Male and female life expectancy at birth was among the world's highest in 2020.

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 2018-19. Over the same period, public health spending (\$91.1 billion in 2018-19, or 3.2 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 \$56.5 billion in 2015 to \$87.1 billion by 2020, an increase of about 54 per cent. On a year-on-year basis, the recurrent funding for health grew more than 8 per cent from \$80.6 billion in 2019. It accounted for 18 per cent of the government's recurrent expenditure in 2020.

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 in April 2019. It aims to regulate the quality of individual indemnity hospital insurance products and improve market transparency, providing consumers with greater confidence in purchasing health insurance and choosing private healthcare services, thereby alleviating pressure on the public healthcare system in the long run.
- **Manpower planning and professional development** – The government continues to follow up the recommendations in the *Report of the Strategic Review on Healthcare Manpower Planning and Professional Development* in order to plan for long-term manpower demand and to foster 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 services, including health promotion and disease prevention, general outpatient and allied health services, and special services for people in specific age groups who do not need immediate hospital attention.

General outpatient and allied services are provided mainly by the private sector and non-governmental organisations (NGOs). On average, private Western clinics handle about

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.

30 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.

The public sector provides primary health care mainly through the Department of Health and the Hospital Authority. The Hospital Authority operates 73 general outpatient clinics, including community health centres. Service users are mainly the elderly, low-income families and chronic disease patients. In 2020, some 1.62 million people used these services, with 5.75 million attendances recorded.

To enhance district-based primary health care, the bureau aims to set up 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 2019, and operators were commissioned in September 2020 to operate centres in Sham Shui Po and Wong Tai Sin from June 2021 and June 2022 respectively.

Family Health

The department's Family Health Service 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 18,000 expectant mothers and 40,000 newborn children attended MCHCs in 2020.

The Family Planning Association of Hong Kong offers services and information on sexual and reproductive health treatment and counselling. In 2020, more than 270,000 people used its services or took part in its programmes.

Student Health

The department has 13 student health service centres and four special assessment centres, providing health screening and individual counselling to primary and secondary students. In the 2019-20 school year, about 632,000 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 2019-20 school

year to about 359,500 primary students, comprising 97 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 2020, there were about 19,000 enrolments and 89,000 attendances for health assessment and medical consultation, as well as some 160,000 attendances at promotional activities organised by 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. The annual voucher amount for each eligible person is \$2,000, with a maximum accumulation limit of \$8,000. By 31 December, close to 1.35 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 2020, the Hospital Authority conducted 1.85 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 services. 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.

Under the Outreach Dental Care Programme for the Elderly, 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.

The department's Healthy Teeth Collaboration programme provides dental services to adults with intellectual disability who are recipients of Comprehensive Social Security Assistance (CSSA) or the Disability Allowance, or are eligible for the Hospital Authority's medical fee waiver. The department's Special Oral Care Service in Hong Kong Children's Hospital and the Social Welfare Department's outreach dental programme in special child care centres 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 2019-20, about 270,700 people received treatment and support through these services.

The Advisory Committee on Mental Health advises the government on mental health policy. It also follows up on and monitors the implementation of recommendations in the *Mental Health Review Report* to further enhance mental health services. The committee launched 'Shall we Talk', a mental health promotion and public education initiative, in July, and initiated a pilot scheme to test out a new service protocol to provide a better service for children and adolescents with mental health needs.

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 2.2 million attendances in 2020.

Secondary, Tertiary and Specialised Health Care

These services are available mainly in the Hospital Authority's hospitals and specialist outpatient clinics. As at 31 December, the city had 29,791 public hospital beds, comprising 23,466 general beds, 2,001 infirmary beds, 3,647 beds for the mentally ill and 677 for the mentally handicapped. There were also 5,050 private hospital beds, comprising 4,682 inpatient beds and 368 day beds; 6,465 beds in nursing homes and 874 in institutions run by the Correctional Services

Department. There were 5.6² beds per 1,000 population. Public hospitals spent \$47.8 billion on inpatient services in 2019-20 and discharged 1.6 million inpatients and day inpatients in 2020.

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 2020, the Hospital Authority's specialist outpatient clinics recorded 7.15 million attendances.

In 2018-19, spending on both public and private inpatient and specialist outpatient services totalled about \$90.1 billion, of which 71 per cent was spent on the public sector. In 2019-20, the Hospital Authority's specialist clinics spent about \$13.5 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 2020, the Hospital Authority's allied health outpatient departments recorded 2.25 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 2020, 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 \$3.7 billion in 2019-20 and handled 1.64 million visits by 1.01 million people in 2020, an average of about 4,500 attendances per day.

Medical Charges and Waivers

Fees for public hospital and clinic services are government-subsidised at a rate of 97.3 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.

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

Private Hospitals

Private hospitals complement the public sector by providing a range of specialist and hospital services. The 12 private hospitals served 376,135 inpatients in 2019, representing 17 per cent of the city's total number of inpatients. Spending on private inpatient services amounted to \$26.3 billion in 2018-19, accounting for 38 per cent of overall expenditure on public and private inpatient services.

End-of-life Care

In September 2019, 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 2020, the expansion of the Hong Kong Red Cross Blood Transfusion Service Headquarters was substantially completed. Demolition and substructure works for the expansion of United Christian Hospital were also completed and the main works began. Other new or ongoing projects included main works for phase 1 redevelopment of Kwong Wah Hospital and Queen Mary Hospital and for phases 2 and 3 of Kwai Chung Hospital; preparatory and foundation works for phase 1 redevelopment of Grantham Hospital, phase 2 stage 1 redevelopment of Prince of Wales Hospital and the construction of a new acute hospital at the Kai Tak Development Area; and preparatory works for the redevelopment of Our Lady of Maryknoll Hospital, and the expansion of North District Hospital and Lai King Building in Princess Margaret Hospital.

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, colon assessment and glaucoma treatment.

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. As at 31 December, 576 private doctors and 38,416 patients were participating in the programme.

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 to include Chinese medicine information and radiological images, and developing a mobile app (eHealth) to help patients manage their health more proactively. It is expected to be completed by end-2022.

As at 31 December, around 1.35 million residents and over 2,000 organisations, including all 12 private hospitals and other healthcare providers such as private clinics, elderly homes and welfare groups, had registered for eHRSS, in addition to the Hospital Authority and the Department of Health. About 51,000 accounts had been created for healthcare professionals, comprising about 13,600 for doctors, 31,500 for nurses, 600 for dentists and 5,300 for other professionals specified under the Electronic Health Record Sharing System Ordinance.

Genomic Medicine

In December 2019, the Steering Committee on Genomic Medicine submitted a report to the government on strategies for developing genomic medicine in Hong Kong. In May 2020, the Hong Kong Genome Institute was set up to implement the Hong Kong Genome Project, a project to sequence 40,000 to 50,000 genomes. The pilot phase will focus on patients with undiagnosed disorders and hereditary cancers and their family members. The sequencing results may help the diagnosis or clinical management of participants, and the resulting genome database will facilitate relevant scientific research.

Chinese Medicine

The government plans to establish a Chinese Medicine Hospital in Hong Kong, promoting service development, education and training, innovation and research. In September, the government invited tenders for the hospital's operation, with the target for the hospital to commence services by phases from the second quarter of 2025. The \$500 million Chinese Medicine Development Fund, established in mid-2019, has launched subsidy programmes for various purposes, including to support training in Chinese medicine, to enhance good manufacturing practices for proprietary Chinese medicines, to improve clinic facilities, for scientific research and for promotional activities.

At the district level, 18 Chinese Medicine Clinics cum Training and Research Centres promote the development of 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. In March, the government launched a subsidised Chinese medicine outpatient service providing an annual quota of around 620,000 attendances for general consultation, acupuncture and bone setting/*tui na* services. The fee for each attendance in respect of each category is \$120. There were about 1.05 million attendances in 2020. Private Chinese medicine clinics record about eight million attendances each year.

Integrated Chinese-Western Medicine Pilot Programme

The Hospital Authority is implementing the Integrated Chinese-Western Medicine (ICWM) Pilot Programme at designated public hospitals to gain experience in developing, and explore the feasibility of providing, Chinese medicine inpatient services, and facilitate the development of Chinese medicine training. Seven public hospitals are participating in the pilot programme, which covers stroke, low back pain, shoulder and neck pain and cancer palliative care. From March, the government reduced the additional daily fee for ICWM inpatient services 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, in which more than 650 kindergartens and child care centres and over 470 primary schools, including special schools, participated in the 2019-20 school year. In the same school year, the Adolescent Health Programme promoted mental health and healthy use of the internet in about 230 secondary schools.

The department's EatSmart Restaurant Star+ campaign encourages restaurants to provide a wider choice of healthy dishes. As at 31 December, there were over 900 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. The programme was cancelled in 2020 due to COVID-19.

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.

The Mental Health Workplace Charter aims 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. As at 31 December, over 530 organisations had signed the charter, involving more than 440,000 employees.

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 2020, the centre organised 29 major activities for 12,400 participants.

Information on Acquired Immune Deficiency Syndrome (AIDS) and sexually transmitted infections is available on the department's website and a multilingual AIDS hotline. Appointments for counselling and HIV antibody tests may be made via the hotline or the website. In 2020, the hotline received about 9,400 calls. Nurse counsellors handled 13,300 calls for AIDS counselling. About 391,800 condoms were distributed to promote safer sex. There are also a Gay Men HIV Information website and a Gay Men HIV Testing Hotline, which received 190 calls in 2020 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-2020, the Centralised Organ Donation Register had registered more than 330,000 prospective donors. The number of patients waiting for kidney, liver, heart and lung transplants stood at 2,302, 72, 78 and 29 respectively. During the year, there were 55 kidney, 27 liver, 10 heart, eight double-lung and 267 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 2020, the board received 13 applications for organ transplants between living non-related persons and Hong Kong imported 39 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 World Health Organisation (WHO) Framework Convention on Tobacco Control, and its provisions are therefore 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 the advertising and promotion of such products. Smoking is banned in all indoor areas of workplaces and public places, as well as some outdoor areas, such as the open areas of schools and healthcare facilities, parks, bathing beaches and public transport facilities. Offenders are liable to a fine of \$1,500 under the Fixed Penalty (Smoking Offences) Ordinance.

The department's Tobacco and Alcohol Control Office enforces the two ordinances' provisions. In 2020 (up to September), it conducted over 25,460 inspections and issued 45 summonses and 4,992 fixed penalty notices for smoking offences.

The emergence of alternative smoking products, including e-cigarettes, heated tobacco products and herbal cigarettes, poses new health risks and challenges. The Smoking (Public Health) (Amendment) Bill 2019 proposes to ban the import, manufacture, sale, distribution and advertising of alternative smoking products.

The office promotes compliance with the law and smoking prevention and cessation through publicity and school or community-based programmes. It provides a 'Quitline' telephone hotline, and works with NGOs to operate smoking cessation clinics as well as cessation programmes targeting workplaces, ethnic minorities and new immigrants.

The Hospital Authority manages 15 full-time and 55 part-time smoking counselling and cessation centres. It operates a hotline 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 \$7.2 billion on disease prevention and control at its maternal and child health centres, elderly health centres and similar facilities in 2019-20.

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, and facilitate rapid implementation of preventive measures. It also shares professional knowledge and experience in combating diseases with health authorities in the Mainland and Macao and with the WHO.

Prevention and Control of Infectious Diseases

The Prevention and Control of Disease Ordinance specifies 51 statutory notifiable infectious diseases in Hong Kong. In 2020, 16,453 cases were reported, of which 8,889 and 3,699 were diagnosed as COVID-19 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.

Measures to Combat COVID-19

Hong Kong, like the rest of the world, was seriously affected by the COVID-19 pandemic in 2020. The government closely monitored the local and global situation, and took a range of measures against the pandemic covering the following areas:

- **Acting in accordance with the law** – The government invoked the Prevention and Control of Disease Ordinance to introduce specific regulations on a range of activities,

including the operation of premises, entry into Hong Kong, provision of personal information, mask wearing, group gathering, virus tests and the use of vaccines. Departments used their statutory powers to implement anti-epidemic measures and continue to take law enforcement action against offenders.

- **Professional leadership** – An advisory group of four experts was formed to provide advice to the government. The government also took account of the WHO's advice and maintained communication and cooperation with the National Health Commission and various Mainland provinces and cities on joint prevention and control of COVID-19. The government also consulted the Department of Health's Scientific Committees on vaccine procurement and appointed an advisory panel to advise on the efficacy and safety of individual vaccines.
- **Facilities and equipment** – The government took a range of measures to ensure sufficient anti-pandemic supplies. These included subsidising local research and development and the production of face masks, face shields and other personal protective equipment; constructing additional temporary quarantine centres; and converting AsiaWorld-Expo into community treatment facilities. With the Central Government's support, the government provided an additional 950 beds in the community treatment facilities at AsiaWorld-Expo and developed the North Lantau Hospital Hong Kong Infection Control Centre to accommodate about 820 negative pressure beds.
- **Application of technology** – Applications of technology included: electronic wristbands for monitoring persons under quarantine and the 'StayHomeSafe' app; the 'LeaveHomeSafe' QR code and app for assisting in tracing contacts of confirmed cases; the Local Situation Dashboard to provide the public with the latest information on cases; the CuMask+™ that could be reused dozens of times and was provided free to the public; and the reagent for rapid tests and the building sewage testing technology that helped detect confirmed cases.
- **Information transparency** – Up-to-date information was regularly provided to the public through various channels, including daily briefings by the Centre for Health Protection and the Hospital Authority; press conferences by the Chief Executive and Bureau Secretaries; and press releases and posts on various social media platforms by relevant bureaus and departments.
- **Testing with precision** – Hong Kong's limited testing capacity at the beginning of the pandemic was increased substantially with the introduction (with the Central Government's support) of laboratories from the Mainland. In September, with the Central Government's support, the 14-day Universal Community Testing Programme was launched and over 1.7 million members of the public took the test. The government also targeted persons at high risk to undergo compulsory testing, and encouraged members of the public to undergo testing on a voluntary basis.

- **Adjustments to social distancing measures** – Reducing the flow of people and social contact is an effective way to prevent the spread of disease. The government adjusted social distancing measures in the light of the pandemic’s development so that commercial and social activities, work and school classes could be maintained to an appropriate extent.
- **Prevention of imported cases** – The government imposed various measures to prevent imported cases, including requiring travellers arriving in Hong Kong from countries outside China to undergo compulsory quarantine at designated hotels. The government also adjusted the testing and self-isolation requirements for consular and diplomatic officers, air crew members and other exempted persons from time to time in accordance with the prevailing risk assessment to minimise the risk of virus transmission from imported cases.

In September, with the aim of procuring COVID-19 vaccines for the entire Hong Kong population, the government announced that it would join the WHO’s COVAX scheme and enter into advance purchase agreements with individual vaccine developers to obtain supplies of vaccines at an earlier time. In December, the government made advance procurement for vaccines. Its aim is to provide free vaccinations on a voluntary basis to the majority of Hong Kong’s population during 2021.

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 has provided free vaccination under the programme against the human papillomavirus to school girls of suitable grades as a public health strategy in preventing cervical cancer.

From October each year, the government provides free and subsidised seasonal influenza vaccinations (SIV) to eligible people, including those aged 50 or above and children, under the Government Vaccination Programme and the Vaccination Subsidy Scheme. In 2020, the scope of eligible groups was extended to cover persons receiving the standard rate of Comprehensive Social Security Assistance as ‘100% disabled’ or ‘requiring constant attendance’. 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 \$240 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 \$300 and \$760 per dose respectively.

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 56 per cent of all registered deaths in 2019.

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 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 14,900 lives locally in 2019. The government’s Hong Kong Cancer Strategy aims 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 2020, around 17,700 women were screened.

The department fully implemented the Colorectal Cancer Screening Programme on 1 January, subsidising asymptomatic Hong Kong residents aged between 50 and 75 to undergo screening for the prevention of colorectal cancer. In 2020, nearly 62,000 participants were screened.

In November, the department commenced a Population Health Survey to update information on the population’s health status, health-related lifestyles and other health parameters.

Regulatory Activities

Healthcare Professionals

As at 31 December, 15,298 doctors, 2,651 dentists, 10,449 listed and registered Chinese medicine practitioners, 61,295 registered and enrolled nurses, 4,561 midwives, 3,097 pharmacists, 282 chiropractors, 3,685 physiotherapists, 2,571 occupational therapists, 3,983 medical laboratory technologists, 2,266 optometrists, 2,554 radiographers and 497 dental hygienists were registered in Hong Kong.

The Pilot Accredited Registers Scheme for Healthcare Professions enhances the society-based registration arrangements for 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 31 December, 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 serves as a basis for the government to study how to formulate a statutory registration regime for the relevant accredited professions.

Western Medicines

Western medicines in Hong Kong are regulated under the Pharmacy and Poisons Ordinance. Acting on the authority of the Pharmacy and Poisons Board, the 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 2020, the board approved 2,880 applications to register pharmaceutical products. As at 31 December, 15,396 pharmaceutical products were registered.

In July, Pharmacy and Poisons (Amendment) Bill to better regulate advanced therapy products was passed in the Legislative Council.

Chinese Medicines

Chinese medicines are regulated under the Chinese Medicine Ordinance, which requires any person engaged in the retail or wholesale of Chinese herbal medicines or the manufacture or wholesale of proprietary Chinese medicines to obtain a licence. The Chinese Medicine Council of Hong Kong is the statutory body that devises and implements regulatory measures for Chinese medicines. All proprietary Chinese medicines must be registered before they can be sold, imported or possessed in Hong Kong. As a transitional arrangement, proprietary Chinese medicines manufactured or 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-2020, there were 7,408 licensed Chinese medicine traders, including 21 holding the Certificate for Manufacturer; 5,585 proprietary Chinese medicines with transitional registration status; and 2,668 with a Certificate of Registration of proprietary Chinese medicines.

The Hong Kong Chinese Materia Medica 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 31 December, the department had released reference standards for 330 commonly used Chinese herbal medicines under the project.

The Government Chinese Medicines Testing Institute has started a number of research projects after consulting the industry, and has published research results on the Chinese Medicine Regulatory Office website.

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 31 December, the Council on Human Reproductive Technology had issued 46 licences, comprising 17 treatment licences, 26 artificial insemination-by-husband licences and three research licences, 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.

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

The Radiation Board was established under the Radiation Ordinance to enforce control of the production, sale, possession and use of radioactive substances and irradiating apparatus. The department's Radiation Health Division (the board's executive arm) licenses and inspects radioactive substances and irradiating apparatus to ensure the safe use of ionising radiation. It also provides health surveillance and radiation monitoring for radiation workers, provides calibration services on radiation dosimeters and advises on the safe 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 563 medical students to their bachelor's degree programmes in 2020. Non-locally trained medical graduates may apply for registration to practise in Hong Kong after passing the Medical Council of Hong Kong's licensing examination, but the 2020 examinations were cancelled because of COVID-19.

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 all qualified medical graduates of the two universities each year for on-the-job specialist training. In 2019-20,

about 470 doctors were recruited for specialist training. Around 300 doctors were awarded specialist qualifications by the Hong Kong Academy of Medicine in 2020.

Dentists

HKU offers degree courses in dentistry, admitting 78 students to its bachelor's degree programme in 2020. Non-locally trained dental graduates may apply for registration to practise in Hong Kong after passing the Dental Council of Hong Kong's licensing examination, but the 2020 examinations were cancelled because of COVID-19.

Chinese Medicine Practitioners

Hong Kong Baptist University (HKBU), CUHK and HKU offer full-time undergraduate degree courses in Chinese medicine. In 2020, 79 full-time local bachelor's degree graduates who passed the licensing examination were registered as Chinese medicine practitioners.

The 18 Chinese Medicine Clinics cum Training and Research Centres launched a training programme for Chinese medicine practitioner trainees in March to assist them in developing a solid clinical foundation and enhance professional standards. As at end-2020, there were 216 training places, including 72 places for the first year of training.

Allied Health Professionals

Caritas Institute of Higher Education (CIHE), Hong Kong Polytechnic University (PolyU), Open University of Hong Kong (OUHK) and Tung Wah College (TWC) offer degree programmes for allied health professionals. In 2020, PolyU admitted 147, 111, 102, 55 and 48 students to its publicly funded degree programmes in physiotherapy, radiography, occupational therapy, medical laboratory science and optometry respectively. TWC admitted 43, 13, 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 of TWC's four self-financing degree programmes receive government subsidies under the Study Subsidy Scheme for Designated Professions/Sectors. In September, CIHE and OUHK started to run self-financing degree programmes in physiotherapy, and admitted 51 and 46 students respectively.

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 2020, the institute offered 63 training courses and 22 overseas scholarships.

Nurses

CIHE, CUHK, HKBU, HKU, OUHK, PolyU and TWC provide pre-registration nursing training. They recruited 2,151 students into their nursing degree programmes in 2020. CUHK and PolyU enrolled another 127 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 326 pupil nurses into their two-year Higher Diploma in Enrolled Nurse (General) programmes in 2020. OUHK enrolled 230 and 60 pupils in its two-year Higher Diploma in General Health and Higher Diploma in Mental Health Nursing programmes respectively. Twenty-five 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 1,160 places in 2019-20.

The Hospital Authority's three-year higher diploma programme provides pre-registration nursing training and enrolled 300 students in 2020. 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 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 Polio Laboratory, National Measles Laboratory, Supranational Tuberculosis Reference Laboratory, Regional Reference Laboratory for Measles and Rubella in the Western Pacific Region, Global Influenza A(H5) Reference Laboratory, Global Severe Acute Respiratory Syndrome Reference Laboratory and COVID-19 Reference Laboratory.

Auxiliary Medical Service

The Auxiliary Medical Service (AMS) is a government department under the Security Bureau, with 99 civil service positions and over 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.

The AMS provides first aid during natural disasters, large-scale incidents, public activities and festivals. During weekends and public holidays, its members man first aid stations in country parks, with First Aid Bicycle Teams covering cycling tracks in the New Territories. The AMS also runs first aid programmes at schools and gives public talks on cardiopulmonary resuscitation and other health topics.

In 2020, the AMS provided important support to the Department of Health and the Hospital Authority in the fight against COVID-19, with members assisting at quarantine, treatment and testing facilities. Members also escorted persons to quarantine centres, and assisted in the enforcement of compulsory testing orders. They also trained staff of designated quarantine hotels and monitored their performance.

Websites

AIDS hotline website: www.27802211.com
Auxiliary Medical Service: www.ams.gov.hk
Cancer Online Resource Hub: www.cancer.gov.hk
Centre for Health Protection: www.chp.gov.hk
Cervical Screening Programme: www.cervicalscreening.gov.hk
Change for Health: www.change4health.gov.hk
Colorectal Cancer Screening Programme: www.colonscreen.gov.hk
Department of Health: www.dh.gov.hk
District Health Centre: www.dhc.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 Division: www.toothclub.gov.hk
Organ Donation: www.organdonation.gov.hk
Red Ribbon Centre: www.rrc.gov.hk
School Dental Care Service: www.schooldental.gov.hk
'Shall We Talk' initiative: shallwetalk.hk
Student Health Service: www.studenthealth.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