



# **TOWARDS 2025**

# Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong





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### FOREWARD



#### Prof Sophia CHAN Siu-chee, JP Secretary for Food and Health

Similar to many countries and jurisdictions, Hong Kong is facing an increasing threat of non-communicable diseases (NCD) which will give rise to increasing mortality, morbidity and disability if not addressed promptly. The health conditions of individuals also have a bearing on families, healthcare systems, and the entire society and economy as a whole.

The Government of the Hong Kong Special Administrative Region is fully committed to protecting people's health. Since 2008, the Government has launched a strategic framework to prevent and control NCD and set up a high-level multidisciplinary and intersectoral steering committee (SC) under my chairmanship to oversee the overall implementation. The publication of the document, *"Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong"*, bears the fruit of the invaluable efforts and views contributed by numerous stakeholders. It presents an overview of NCD in the global and local contexts, sets out the overarching principles, approaches and strategic directions in line with the World Health Organization (WHO) recommendations and proposes a list of actions that Hong Kong will pursue to achieve the committed NCD targets as we move towards 2025.

The SC will closely monitor and review progress of implementation of the stated actions. Moreover, the SC will keep in view global, regional and local developments together with the latest evidence and consider implementing the appropriate strategies accordingly.



The Government is committed to fighting against NCD on all fronts and alleviating its burden. But we cannot achieve this alone. The Government will continue to foster co-operation across sectors and work in close partnership with the community and members of the public to build a health-enhancing physical and social environment and promote the health of all Hong Kong people.



#### PREFACE



#### Dr Constance CHAN Hon-yee, JP Department of Health

Today, non-communicable diseases (NCD) such as cardiovascular diseases, cancers, diabetes and chronic respiratory diseases represent a leading threat to human health and development. According to the World Health Organization (WHO), of 56.4 million global deaths in 2015, 39.5 million, or 70%, were due to NCD.

While Hong Kong's health indices rank among the best in the world, like many parts of the developed world, Hong Kong is having an ageing population. With a steadily increasing life expectancy at birth for both sexes, the proportion of population aged 65 or above is projected to rise markedly, from 17% in 2016 to 37% in 2066. Driven by population ageing, changing health risk profiles, social changes and globalisation, Hong Kong is facing the unprecedented threat of NCD, with the number of people coming down with these major NCD keeps growing.

Fortunately, a growing body of evidence is available to show that leading causes and underlying risk factors for NCD can be effectively tackled through population-based interventions that encourage healthy lifestyles including healthy eating, physical activity, and reduced consumption of tobacco and alcohol.

The Department of Health is taking a proactive and coordinated approach to the prevention and control of NCD. In 2008, we launched the "*Promoting Health in Hong Kong: A Strategic Framework for Prevention and Control of Non-communicable Diseases*" to guide and give impetus to the efforts.



While a range of NCD prevention and control work has been/is being undertaken in Hong Kong, there is scope for a more effective, sustainable and forward looking approach on improving population health.

In light of WHO's call for development of multisectoral action plan with clear targets and indicators to track national progress and achievements in NCD prevention and control, there is a need for Hong Kong to adopt a new approach and hence this strategy and action plan, to guide multi-level and cross-sectoral actions. In the coming years, I look forward to seeing more government bureaux/departments and relevant parties outside the Government working together on policies, systems, programmes and actions to address NCD through strengthening health advocacy; fostering partnership building in creating supportive environment; and enhancing NCD surveillance and progress monitoring.

Yet, successful implementation of the new strategy would not be possible without your support. By choosing healthy ways of living, you too can contribute to our fight against the rising trend of NCD. Every action counts!



### **ABBREVIATIONS**

Abbreviation	Full name
AAPC	Average annual percentage change
A-SBI	Alcohol screening and brief intervention
ASIR	Age-standardised incidence rate
ASMR	Age-standardised mortality rate
AUDIT	Alcohol Use Disorders Identification Test
BMI	Body mass index
C&SD	Census and Statistics Department
CCC	Cancer Coordinating Committee
CCF	Community Care Fund
CCS	Global NCD Country Capacity Survey
CEWG	Cancer Expert Working Group on Cancer
	Prevention and Screening
CFS	Centre for Food Safety
СНР	Centre for Health Protection
CIR	Crude incidence rate
CMR	Crude mortality rate
COSH	Hong Kong Council on Smoking and Health
CRC	Colorectal cancer
CRSS	Committee on Reduction of Salt and Sugar in Food
CSP	Cervical Screening Programme
CSSA	Comprehensive Social Security Assistance
CVD risk	Cardiovascular disease risk
DALYs	Disability-adjusted life years
DBP	Diastolic blood pressure
DEVB	Development Bureau
DH	Department of Health
EDB	Education Bureau
eHRSS	Electronic Health Record Sharing System
FCTC	Framework Convention on Tobacco Control
FEHD	Food and Environmental Health Department
FHB	Food and Health Bureau
FHS	Family Health Service
Global NCD Action Plan	Global Action Plan for the Prevention and Control
	of Noncommunicable Diseases 2013-2020



Abbreviation	Full name	
GMF	Global monitoring framework	
GOPC	General out-patient clinic	
GOPC PPP programme	General Outpatient Clinic Public-Private	
	Partnership Programme	
HA	Hospital Authority	
HAQ	Health Assessment Questionnaire	
НерВЗ	Three doses of hepatitis B vaccine	
HHS	Heart Health Survey	
HK Code	Hong Kong Code of Marketing of Formula Milk	
	and Related Products, and Food Products for	
	Infants & Young Children	
НКСІР	Hong Kong Childhood Immunisation Programme	
HKSAR	Hong Kong Special Administrative Region	
Hong Kong 2030+	Hong Kong 2030+: Towards a Planning Vision and	
	Strategy Transcending 2030	
HPV	Human papillomavirus	
ICD	International Statistical Classification of Diseases	
	and Related Health Problems	
LCSD	Leisure and Cultural Services Department	
МСНС	Maternal and Child Health Centre	
Meq	Morphine-equivalent	
MSW	Medical Social Workers	
MVPA60	At least 60 minutes of moderate-to-vigorous-	
	intensity physical activities daily	
NCD	Non-communicable disease(s)	
NDA	New development area	
NGO	Non-governmental organisation	
NSA	No smoking area	
PCO	Primary Care Office	
PE	Physical education	
PHS	Population Health Survey	
PlanD	Planning Department	
Political Declaration	Political Declaration on NCD Prevention and	
	Control	
PPI	Pre-primary institution	



Abbreviation	Full name
SAP	Towards 2025: Strategy and Action Plan to
	Prevent and Control Non-communicable Diseases
	in Hong Kong
SBP	Systolic blood pressure
SC	Steering Committee on Prevention and Control of
	Non-Communicable Diseases
SCASTI	Scientific Committee on AIDS and Sexually
	Transmitted Infections
SCPPP	Public-Private Partnership Programme on Smoking
	Cessation
SCVPD	Scientific Committee on Vaccine Preventable
	Diseases
SD	Standard deviation
SDG	Sustainable development goals
SHS	Student Health Service
SHSC	Student Health Service Centre
ТСО	Tobacco Control Office
TD	Transport Department
ТНВ	Transport and Housing Bureau
UN	United Nations
WGAH	Working Group on Alcohol and Health
WGDPA	Working Group on Diet and Physical Activity
WHA	World Health Assembly
WHO	World Health Organization



### **EXECUTIVE SUMMARY**

# RATIONALE FOR A NON-COMMUNICABLE DISEASE STRATEGY AND ACTION PLAN

Hong Kong faces an increasing problem of non-communicable diseases (NCD) which is compounded by population ageing. In 2016, the major NCD, namely cardiovascular diseases including heart diseases and stroke, cancers, diabetes and chronic respiratory diseases, accounted for about 55% of all registered deaths. In the same year, they caused about 104 600 potential years of life lost before age of 70. Poor health impacts on the individual, family and healthcare system, and if not addressed, on society and economy. At least a third of all NCD can be prevented through lifestyle choices if supported by a health-enhancing physical and social environment.

# NON-COMMUNICABLE DISEASE PREVENTION AND CONTROL STRATEGY IN HONG KONG

Since 2008, the Government has launched a strategic framework to prevent and control NCD and has set up a high-level Steering Committee on Prevention and Control of NCD (SC), chaired by the Secretary for Food and Health and comprising representatives from the Government, public and private sectors, academia, professional bodies, industry representatives and other key partners, to deliberate on and oversee the overall roadmap for implementation. Three working groups were set up, with two focusing on promotion of healthy diet, physical activity and reduction of alcohol-related harm. To combat the threat posed by NCD and in line with the World Health Organization (WHO)'s "Global Action Plan for the Prevention and Control of NCD 2013-2020" (Global NCD Action Plan), the SC, in 2018, formulated and endorsed a strategy and action plan for prevention and control of NCD by 2025 which defines a set of 9 local NCD targets to be achieved by the same year. This resulted in the publication of the document, "Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong" (SAP).



#### SCOPE

Aligning with the WHO's Global NCD Action Plan, the SAP focuses on four NCD (namely cardiovascular diseases, cancers, chronic respiratory diseases and diabetes) and four shared behavioural risk factors (namely unhealthy diet, physical inactivity, tobacco use and harmful use of alcohol) that are potentially preventable or modifiable and have significant impact on population health.

#### GOAL

The SAP aims to reduce NCD burden including disability and premature death in Hong Kong by 2025.

#### **OBJECTIVES**

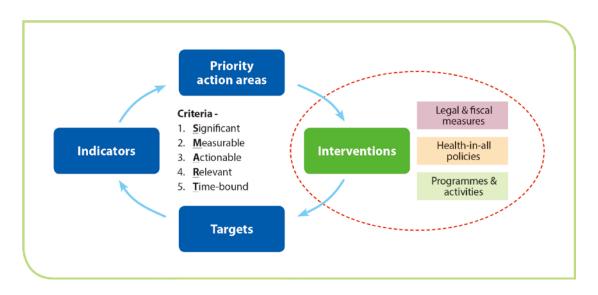
The SAP sets out to prevent and control NCD by achieving the following objectives:-

- (a) Create equitable health-promoting environments that empower individuals to lead healthy lives;
- (b) Strengthen health literacy and capacity of individuals to make healthy choices;
- (c) Strengthen health systems for optimal management of NCD through primary health care and universal health coverage; and
- (d) Monitor progress of NCD prevention and control actions with clear targets and indicators adapted from the WHO's global monitoring framework (GMF).



#### ACCOUNTABILITY FRAMEWORK

Measuring and monitoring NCD helps Hong Kong see where we stand and what actions are most needed. New goals can be set, programmes evaluated and continued progress made towards improving population health. The accountability framework depicted below underpins these crucial elements.



#### **OVERARCHING PRINCIPLES AND APPROACHES**

The SAP builds upon public health and health promotion principles and approaches covering:-

- Upstream approach
- Life-course approach
- Focus on equity
- Multisectoral actions
- Health system strengthening
- Universal health coverage
- Evidence-based strategies
- Empowerment of people and communities



#### **KEY PRIORITY ACTION AREAS**

The SAP is developed to improve the health of Hong Kong people. It will drive a variety of actions falling within five key areas that fit the acronym **HeALTH**.

- <u>He</u>althy Start
- <u>A</u>lcohol Free
- <u>Live Well and Be Active</u>
- <u>T</u>obacco Free
- <u>H</u>ealthy Diet



#### **TARGETS BY 2025**

Together, we will work to achieve the following 9 targets by 2025<sup>1</sup>:-

#### Target 1

A 25% relative reduction in risk of premature mortality from cardiovascular diseases, cancers, diabetes, or chronic respiratory diseases

#### Target 2

At least 10% relative reduction in the prevalence of binge drinking and harmful use of alcohol (harmful drinking/ alcohol dependence) among adults and in the prevalence of drinking among youth

#### Target 3

A 10% relative reduction in the prevalence of insufficient physical activity among adolescents and adults

#### Target 4

A 30% relative reduction in mean population daily intake of salt/sodium

#### Target 5

A 30% relative reduction in the prevalence of current tobacco use in persons aged 15+ years

#### Target 6

Contain the prevalence of raised blood pressure

#### Target 7

Halt the rise in diabetes and obesity

#### Target 8

Prevent heart attacks and strokes through drug therapy and counselling

Target 9

Improve availability of affordable basic technologies and essential medicines to treat major NCD

<sup>&</sup>lt;sup>1</sup> The local NCD targets are adapted from the WHO's GMF of 9 global voluntary targets and 25 indicators. The baseline selected by WHO for all global voluntary targets and indicators is 2010. However, due to local data availability, the baseline adopted by Hong Kong for each target and indicator may vary, with the most recent available data adjacent to 2010 being selected.



#### **NEW STRATEGIC DIRECTIONS**

The need to accelerate actions to beat NCD is high on the global and local political agenda. Going forward, we have set new strategic directions in line with WHO's recommendations:-

- (i) Government demonstrating leadership;
- Schools transformed into healthy settings (e.g. Health Promoting Schools);
- (iii) Supportive physical and social environments created for physical activity;
- (iv) Effective partnerships with primary care professionals; and
- (v) Consideration and adoption of "best buys" and other recommended interventions<sup>2</sup> at appropriate stages.

#### MAKING IT HAPPEN

Developing the SAP represented but one milestone in Hong Kong's commitment to address NCD.

While the Government has a leading role in taking the agenda forward, successful prevention and control of NCD relies on collaborative efforts by various important stakeholders including government bureaux and departments, academia, non-governmental organisations, private sector and individuals. We urge everyone to support the SAP and join hands to make Hong Kong a healthier city.

<sup>&</sup>lt;sup>2</sup> Tackling NCDs: 'best buys' and other recommended interventions for the prevention and control of noncommunicable diseases. Geneva: World Health Organization, 2017. Available at: http://apps.who.int/iris/bitstream/10665/259232/1/WHO-NMH-NVI-17.9-eng.pdf



### **1 BACKGROUND**

#### 1.1 NON-COMMUNICABLE DISEASES: A GLOBAL AND LOCAL HEALTH CHALLENGE

- 1.1.1 Non-communicable diseases (NCD), also known as chronic diseases, tend to be of long duration and are the result of a combination of genetic, physiological, environmental and behavioural factors. These diseases are driven by forces that include rapid unplanned or poorly planned urbanisation, globalisation of unhealthy lifestyles and population ageing. The main types of NCD are cardiovascular diseases (like heart diseases and stroke), cancers, chronic respiratory diseases (such as chronic obstructive pulmonary disease and asthma) and diabetes. As the leading cause of death globally, NCD kill 40 million people each year, equivalent to 70% of all deaths globally. The yearly number of deaths included over 14 million people who died between the ages of 30 and 70 years and the majority of these premature deaths could have been prevented or delayed<sup>3</sup>. According to the World Health Organization (WHO)'s projections, the total annual number of deaths from NCD will increase to 55 million by 2030 if 'business as usual' continues<sup>4</sup>.
- 1.1.2 Like many other countries, Hong Kong faces an increasing problem of NCD. Due to population ageing, changing risk profile in the population, social changes and globalisation, the proportion of registered deaths attributed to cancers and heart diseases had increased from 12.2% and 9.4% in 1961 to 30.5% and 13.3% in 2016 respectively. In 2016, 25 771 registered deaths were attributed to the four major NCD (namely cardiovascular diseases including heart diseases and stroke, cancers, diabetes and chronic respiratory diseases) and accounted for about 55% of all registered deaths in that year.

<sup>&</sup>lt;sup>3</sup> Noncommunicable diseases. Geneva: World Health Organization, June 2017. Available at http://www.who.int/mediacentre/factsheets/fs355/en/

<sup>&</sup>lt;sup>4</sup> Global action plan for the prevention and control of noncommunicable diseases 2013-2020. Geneva: World Health Organization, 2013.

Available at http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236\_eng.pdf?ua=1



In the same year, NCD caused about 104 600 potential years of life lost before the age of 70. NCD cause significant morbidity and are costly to treat, which can be reflected by considerable numbers of hospital discharges and deaths. In 2016, the aforesaid four disease groups altogether accounted for 17% (or 370 579 episodes) of all hospital inpatient discharges and deaths<sup>5</sup>. Poor health impacts on the individual, family and healthcare system, and if not addressed, on society and economy.

# 1.2 GLOBAL DEVELOPMENTS IN PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES

1.2.1 At the global level and recognising the imminent threat that NCD places on national development and economic growth, Heads of State assembled at the United Nations (UN) General Assembly and adopted the "Political Declaration on NCD Prevention and *Control*" (Political Declaration) in September 2011. The Political Declaration called for development of multisectoral policies to create equitable health-promoting environments that empower individuals to make healthy choice and lead healthy lives. To realise these commitments, the 66th World Health Assembly (WHA) endorsed the WHO's "Global Action Plan for the Prevention and Control of NCD 2013-2020" (Global NCD Action Plan) in May 2013<sup>6</sup>. The Global NCD Action Plan provides a road map and a menu of policy options for all Member States and other stakeholders, to take coordinated and coherent action at all levels to attain, among others, a 25% relative reduction in premature mortality from cardiovascular diseases, cancers, diabetes or chronic respiratory diseases by 2025. Central to the Global NCD Action Plan are the following overarching principles and approaches:-

<sup>&</sup>lt;sup>5</sup> 2016 Statistics of Inpatient Discharges and Deaths. Hong Kong SAR: Hospital Authority, Department of Health and Census and Statistics Department.

<sup>&</sup>lt;sup>5</sup> Global action plan for the prevention and control of noncommunicable diseases 2013-2020. Geneva: World Health Organization, 2013.

Available at http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236\_eng.pdf?ua=1



- (a) Life-course approach
- (b) Empowerment of people and communities
- (c) Evidence-based strategies
- (d) Universal health coverage
- (e) Management of real, perceived or potential conflicts of interest
- (f) Human rights approach
- (g) Equity-based approach
- (h) National action, internal cooperation and solidarity
- (i) Multisectoral actions

# World Health Organization's global monitoring framework for prevention and control of non- communicable diseases

- 1.2.2 In May 2013, the 66<sup>th</sup> WHA adopted a global monitoring framework (GMF) to enable tracking of national progress in preventing and controlling major NCD cardiovascular diseases, cancers, chronic respiratory diseases and diabetes and their four shared behavioural risk factors tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol, which sets out **9 voluntary global targets** and **25 indicators** to track the implementation of the Global NCD Action Plan. The 9 targets<sup>7</sup> are:-
  - A 25% relative reduction in risk of premature mortality from cardiovascular diseases, cancers, diabetes, or chronic respiratory diseases;
  - (ii) At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context;
  - (iii) A 10% relative reduction in prevalence of insufficient physical activity;
  - (iv) A 30% relative reduction in mean population intake of salt/sodium;
  - (v) A 30% relative reduction in prevalence of current tobacco use in persons aged 15 years or above;

<sup>&</sup>lt;sup>7</sup> About 9 voluntary global targets - Global Monitoring Framework for NCDs. Geneva: World Health Organization. Available at http://www.who.int/nmh/ncd-tools/definition-targets/en/



- A 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure according to national circumstances;
- (vii) Halt the rise in diabetes and obesity;
- (viii) At least 50% of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes; and
- (ix) An 80% availability of the affordable basic technologies and essential medicines, including generics, required to treat major NCD in both public and private facilities.
- 1.2.3 As target setting and monitoring are ways to draw attention to NCD and help mobilise resources to address NCD priorities, WHO strongly encourages Member States to consider to develop national targets based on their national circumstances for NCD monitoring.

### "Best buys" and other recommended interventions for prevention and control of non-communicable diseases

1.2.4 Clear evidence exists that preventive interventions and improved access to health care can reduce the burden of NCD, disability and mortality. Policy makers of all countries have to make choices on how best to allocate resources for health and health care<sup>8</sup>. To assist Member States to address NCD, WHO has identified a menu of policy options and cost-effective interventions for each of the four key risk factors (unhealthy diet, physical inactivity, harmful use of alcohol, and tobacco use) and four major diseases (cardiovascular diseases, diabetes, cancer and chronic respiratory diseases). In May 2017, the 70th WHA endorsed an updated set of "best buys" and other recommended interventions <sup>9</sup>, comprising 88 interventions

Resolution WHA53.14. Global strategy for the prevention and control of noncommunicable diseases. In: Fifty-third World Health Assembly, Geneva, 33 March 2000. Geneva: World Health Organization, 2000.

<sup>&</sup>lt;sup>9</sup> Tackling NCDs: 'best buys' and other recommended interventions for the prevention and control of noncommunicable diseases. Geneva: World Health Organization, 2017. Available at http://apps.who.int/iris/bitstream/10665/259232/1/WHO-NMH-NVI-17.9-eng.pdf



including 16 "best buys"<sup>10</sup>. The list of "best buys" and other interventions recommended by WHO are summarised in **Annex I.** 

#### Time-bound national commitments

- 1.2.5 In July 2014, the progress of implementation of the commitments of the 2011 Political Declaration was comprehensively reviewed at a high-level meeting by the UN General Assembly. In September 2015, world leaders, in the UN General Assembly, made "reduction in premature mortality from NCD" one of the targets to achieve sustainable developments in economic growth, social inclusion and environmental protection in the context of the sustainable development goals (SDG).
- 1.2.6 This was followed by the First WHO Global Meeting of National NCD Programme Directors and Managers in February 2016 to support national NCD programme directors and managers in their effort to implement 4 time-bound national commitments which are considered instrumental to achieving 10 progress indicators. Systematic implementation and achievement of the progress indicators will strengthen national health system responses and accelerate actions against the leading risk factors for NCD. The time-bound national commitments<sup>11</sup> are:-
  - By 2015 Set national NCD targets for 2025 or 2030 and monitor results;
  - (b) By 2015 Develop national multisectoral action plan;
  - (c) By 2016 Implement the "best buy" interventions to reduce NCD risk factors; and
  - (d) By 2016 Implement the "best buy" interventions to strengthen health systems to address NCD.

Available at: http://www.who.int/nmh/events/2014/a-res-68-300.pdf?ua=15

<sup>&</sup>lt;sup>10</sup> According to the updated Appendix 3 of the WHO Global NCD Action Plan 2013-2020, "best buys" are interventions that are considered to be the most cost-effective and feasible for implementation, for which the WHO CHOICE analysis found an average cost-effectiveness ratio of  $\leq$  I\$100/DALY averted in low- and lower middle-income countries (LMICs).

<sup>&</sup>lt;sup>11</sup> Outcome document of the high-level meeting of the General Assembly on the comprehensive review and assessment of the progress achieved in the prevention and control of non-communicable diseases. United Nation, 17 July 2014.



1.2.7 Looking ahead, the UN General Assembly in 2018 will be holding the third High-level Meeting on the prevention and control of NCD tentatively in September, which will undertake a comprehensive review of the global and national progress achieved in putting measures in place that protect people from NCD towards SDG.

# Overseas experience in prevention and control of non-communicable diseases

1.2.8 To understand the status and progress being made at the country level in achieving the four time-bound commitments and the 10 progress indicators, regular global NCD Country Capacity Surveys (CCS) have been conducted by WHO, the latest one in 2017. According to the report of CCS 2017<sup>12</sup> to date, about 50% of all WHO Member States (194 countries) have set national NCD targets along the thinking of WHO and about 50% have implemented operational multisectoral strategies to address NCD. Experience from Mainland China<sup>13</sup>, Australia<sup>14 15 16</sup>, New Zealand<sup>17</sup>, United Kingdom<sup>18</sup>, United States of America<sup>19</sup>

<sup>&</sup>lt;sup>12</sup> Noncommunicable Diseases Progress Monitor 2017. Geneva: World Health Organization, 2017. Available at: http://apps.who.int/iris/bitstream/10665/258940/1/9789241513029-eng.pdf?ua=1

<sup>&</sup>lt;sup>13</sup> Medium-to-Long Term Plan of China for the Prevention and Treatment of Chronic Diseases (2017-2025). The General Office of the State Council of the People's Republic of China, 2017. Available at: http://www.gov.cn/zhengce/content/2017-02/14/content\_5167886.htm (Chinese version only)

<sup>&</sup>lt;sup>14</sup> Australia: the healthiest country by 2020. National Preventative Health Strategy – the roadmap for action. Australia: Commonwealth of Australia, 2009. Available at: http://www.health.gov.au/internet/preventativehealth/publishing.nsf/Content/nphs-roadmap-toc

<sup>&</sup>lt;sup>15</sup> A Rob Moodie, Penny Tolhurst and Jane E Martin. Australia's health: being accountable for prevention. Med J Aust 2016; 204 (6): 223-225. doi: 10.5694/mja15.00968. Available at: https://mja.com.au/system/files/issues/204\_06/10.5694mja15.00968.pdf

<sup>&</sup>lt;sup>16</sup> Australia: the healthiest country by 2020 A discussion paper prepared by the National Preventative Health Taskforce. Australia: Commonwealth of Australia, 2008. Available at: http://www.health.gov.au/internet/preventativehealth/publishing.nsf/Content/A06C2FCF439ECDA 1CA2574DD0081E40C/\$File/discussion-28oct.pdf

 <sup>&</sup>lt;sup>17</sup> Health targets. New Zealand: Ministry of Health, 2017. Available at: http://www.health.govt.nz/new-zealand-health-system/health-targets

<sup>&</sup>lt;sup>18</sup> Public Health Policy and Strategy Unit/Public Health England. Government response to the consultation Refreshing the Public Health Outcomes Framework (2015). London: Department of Health, 2016. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/520455/PHOF\_co

nttps://www.gov.uk/government/upioads/system/upioads/attachment\_data/me/520455/PHOF\_co ns\_response.pdf

<sup>&</sup>lt;sup>19</sup> Healthy People 2020 Leading Health Indicators: Progress Update. United States: Department of Health and Human Services, 2014. Available at: https://www.healthypeople.gov/sites/default/files/LHI-ProgressReport-ExecSum\_0.pdf



and Singapore<sup>20</sup> are some experiences to take reference from.

1.2.9 As part of the Western Pacific Region of WHO, Hong Kong Special Administrative Region (HKSAR) has also taken part in this regular CCS coordinated by the WHO Regional Office. Although Hong Kong's status will unlikely feature in the UN report, her performance will be checked and gauged against the Member States in the Western Pacific Region.

# 1.3 LOCAL DEVELOPMENTS IN PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES

Developing a local strategy to prevent and control non-communicable diseases

- 1.3.1 In the 2007-08 Policy Agenda, the HKSAR Government undertook to develop a comprehensive strategy to prevent and control NCD and enhance health promotion to improve the population's health.
- 1.3.2 In October 2008, the Department of Health (DH) published a strategic framework document entitled "*Promoting Health in Hong Kong: A Strategic Framework for Prevention and Control of Non-communicable Diseases*"<sup>21</sup>, which provided an armory of overarching principles and strategies for the prevention and control of NCD. A high-level Steering Committee on Prevention and Control of NCD (SC) was established in late 2008 to deliberate and oversee the overall roadmap and strategy. The Secretary for Food and Health chairs the SC which has members drawn from the Government, public and private sectors, academia and professional bodies, industry and other key partners.

<sup>&</sup>lt;sup>20</sup> Healthy Living Master Plan. Singapore: Health Promotion Board, 2014. Available at: https://www.moh.gov.sg/content/dam/moh\_web/Publications/Reports/2014/HLMP/MOH\_Healthy %20Living%20Master%20Plan\_Inside%20Page\_8d.pdf

<sup>&</sup>lt;sup>21</sup> Promoting Health in Hong Kong: A Strategic Framework for Prevention and Control of Non-communicable Diseases. Hong Kong SAR: Department of Health, 2008. Available at: http://www.change4bealth.gov.bk/en/strategic\_framework/structure/steering\_committee/promotiat:

http://www.change4health.gov.hk/en/strategic\_framework/structure/steering\_committee/promoting\_health/index.html



1.3.3 Under the steer of the SC, three working groups were set up to advise on specific priority areas. The Working Group on Diet and Physical Activity was established in December 2008 to tackle imminent problems caused by unhealthy dietary habits, physical inactivity and obesity. The Working Group on Alcohol and Health was established in June 2009 to tackle problems related to alcohol-related harm. The "Action Plan to Promote Healthy *Diet and Physical Activity Participation in Hong Kong*<sup>22</sup> and the "Action Plan to Reduce Alcohol-related Harm in Hong Kong"<sup>23</sup> were launched in September 2010 and October 2011 respectively, and both have been fully implemented. Many of the action items have become regular features of the Government's NCD response or have resulted in further initiatives tailored to changing social and environmental circumstances. The Working Group on Injuries was established in February 2012 which produced the "Action Plan to Strengthen *Prevention of Unintentional Injuries in Hong Kong*<sup>24</sup> in February 2015 to reduce unintentional injuries. Implementation of this action plan is in progress.

#### Redefinition of the functional role of the Steering Committee

1.3.4 In light of increasing local burden and global developments in NCD prevention and control, the SC agreed at its 7<sup>th</sup> meeting held on 9 August 2016 to re-define its terms of reference to align with the WHO's Global NCD Action Plan. The terms of reference and membership of the SC is at Annex II.

<sup>&</sup>lt;sup>22</sup> Action Plan to Promote Healthy Diet and Physical Activity Participation in Hong Kong. Hong Kong SAR: Department of Health, 2010. Available at: http://www.change4health.gov.hk/en/strategic\_framework/structure/working\_group\_dpa/action\_plan/index.html

 <sup>&</sup>lt;sup>23</sup> Action Plan to Reduce Alcohol-related Harm in Hong Kong. Hong Kong SAR: Department of Health, 2011. Available at:

http://www.change4health.gov.hk/en/strategic\_framework/structure/working\_group\_on\_ah/actio n\_plan/index.html

 <sup>&</sup>lt;sup>24</sup> Action Plan to Strengthen Prevention of Unintentional Injuries in Hong Kong. Hong Kong SAR:
 Department of Health, 2014. Available at:

http://www.change4health.gov.hk/en/strategic\_framework/structure/working\_group\_injuries/action\_plan/index.html



#### Setting up of a Task Force underpinning the Steering Committee

- 1.3.5 The SC further endorsed the setting up of a Task Force, with members drawn from and outside the SC to deliberate and propose a set of local NCD targets and indicators based on WHO guidance as well as make recommendations on systems, programmes and actions required to achieve the time-bound commitments, indicators and targets. The terms of reference and membership of the Task Force is at **Annex III**.
- 1.3.6 The Task Force was set up in November 2016 and met four times to consider a number of issues pertaining to the task. Regular reports were produced for consideration of the SC. Views and recommendations made by the Task Force became the backbone of the Hong Kong's NCD strategy and action plan up to 2025, which are contained in **Chapter 3** of this document. **Annex IV** highlights the meetings and papers discussed by the Task Force.



### **2** LOCAL SITUATION ANALYSIS

# 2.1 OVERVIEW OF DATA AVAILABILITY AND SOURCES FOR NON-COMMUNICABLE DISEASE SURVEILLANCE

- 2.1.1 Recognising that a well-planned monitoring system using indicators, definitions and data collection methods compatible with the World Health Organization (WHO)'s global monitoring framework (GMF) can serve as an important basis for tracking progress of non-communicable disease (NCD) control, a stock-taking exercise was carried out to review data availability and consider the relevance and feasibility of developing a NCD monitoring framework for Hong Kong using WHO's GMF as benchmark.
- 2.1.2 In Hong Kong, information on NCD morbidity and mortality and their related risk factors is available from various sources, such as disease registries (e.g. Hong Kong Cancer Registry) or administrative collections, health service data (e.g. the Department of Health (DH)'s Family Health Service and Student Health Service (SHS)'s data pertaining to children under age 15) or research-based data. Health-related data are also available from health surveys conducted by DH and other organisations, such as the DH's Population Health Survey (PHS) (that includes household guestionnaire interviews, physical measurements and biochemical measurements for people aged 15 or above) about every 10 years; the DH's Behavioural Risk Factor Survey (which is a telephone survey of people aged 18-64) every year from 2004 to 2016; the DH's Injury Survey (which is a household survey of unintentional injuries of people of all ages) about every 10 years and the Census and Statistics Department (C&SD)'s Thematic Household Survey on pattern of smoking every 2 to 3 years. Social and demographic data used as denominators are provided through the Population Census and other regular household surveys conducted by C&SD of the Hong Kong Special Administrative Region Government.



- 2.1.3 In sum, local data sources and figures generally exist to enable local NCD tracking and international comparison. However, certain limitations and information gaps exist. For instance, some indicators might not be able to fully meet the definitions or specifications advised by WHO or satisfying surveillance and monitoring needs due to reasons such as incomplete coverage especially for younger age group, data collection methods potentially affecting accuracy of measurements (e.g. 'self-reported' but not 'measured' data), or too infrequent data collection limiting usefulness for tracking and trend analysis. To satisfy future data need for local NCD surveillance, a more systematic, streamlined and sustainable approach to NCD surveillance needs to be put in place.
- 2.1.4 At the same time, a few indicators are lacking. This refers to difficulty in setting quantifiable indicators for Target 8 (regarding access to drug therapy and counselling to prevent heart attacks and strokes) and Target 9 (regarding availability of affordable basic technologies and essential medicines to treat major NCD). In addition, there are concerns about a lack of incidence data on major NCD (except cancers) to assess the extent of growth of NCD problems; and well-planned cohort studies to keep track of evolving trends and risk profiles. Such information are considered important for priority setting, informing healthcare policies, resource allocation, better health care planning and service delivery, and equitable use of services for NCD control, irrespective of socioeconomic background, education level and income. To date, local studies to quantify social and economic benefits of behavioural risk factor reduction (e.g. correlation of increased physical activities with medical cost savings), which could produce strong evidence to inform policy, legislative or fiscal measures to support lifestyle changes, are limited. In moving forward, ongoing efforts are required to explore how these data collection needs could be met.



#### 2.2 NON-COMMUNICABLE DISEASE STATUS OF LOCAL POPULATION

- 2.2.1 Notwithstanding the data limitations mentioned above, current data were able to reveal increasing burden of some NCD-related conditions, despite Hong Kong performing fairly well in some areas (e.g. premature mortality and prevalence of tobacco use have been steadily decreasing). In particular, the Report of PHS 2014/15<sup>25</sup> released in November 2017 was a wake-up call of the adult (aged 15 or above) population's behavioural patterns and NCD status.
- 2.2.2 The PHS 2014/15 showed that among the local population aged 15 to 84, the prevalence of hypertension, diabetes and high blood cholesterol were 27.7%, 8.4% and 49.5% respectively. For every person known to be suffering from any of these conditions, at least one other person with the disease went undiagnosed and untreated. It is estimated that at the age of 40, about half of local adults suffered from and would require treatment or counselling for at least one of the conditions listed By the usual retirement age of 65, about 10% of above. individuals will be suffering from all of the three conditions, with heavy reliance on the healthcare system for disease maintenance. The fact that half (50.0%) of local people aged 15 to 84 are overweight or obese<sup>26</sup> would make the situation worse as overweight/obesity are significant risk factors for NCD development, including cancers.
- 2.2.3 Comparing results of PHS 2014/15 with those from PHS 2003/04<sup>27</sup> or Heart Health Survey 2004/05<sup>28</sup>, obvious increases

https://www.chp.gov.hk/files/pdf/heart\_health\_survey\_eng.pdf

<sup>&</sup>lt;sup>25</sup> Report of Population Health Survey 2014/15. Hong Kong SAR: Department of Health. Available at: https://www.chp.gov.hk/en/static/51256.html

<sup>&</sup>lt;sup>26</sup> Prevalence of overweight or obesity was compiled based on the classification of body mass index (BMI) categories for Chinese adults adopted by the Department of Health, i.e.  $BMI \ge 23.0 \text{ kg/m}^2$  and < 25.0 kg/m<sup>2</sup> as overweight and  $BMI \ge 25.0 \text{ kg/m}^2$  as obese.

 <sup>&</sup>lt;sup>27</sup> Executive summary of the Report of Population Health Survery 2003/04. Hong Kong SAR: Department of Health. Available at:

https://www.chp.gov.hk/files/pdf/report\_on\_population\_health\_survey\_2003\_2004\_en.pdf

<sup>&</sup>lt;sup>28</sup> Executive summary of the Report of Heart Health Survey 2004/05. Hong Kong SAR: Department of Health. Available at:



were noted in the crude rates and absolute numbers of people with hypertension, diabetes and high blood cholesterol. The prospect looks gloomier if unhealthy lifestyle patterns are taken into consideration. For instance, PHS 2014/15 revealed that about 86.3% of local people aged 15 to 84 had salt intake in excess of WHO's recommended limit of less than 5 grams a day; among the local people aged 15 or above, 94.4% consumed less than the WHO recommended 5 servings of fruit and vegetables a day; 13.0% did not have adequate level of physical activity to be of benefit to health; and 61.4% had consumed alcohol (a proven cancer causing agent and factor for over 200 disease and injury conditions) in the last 12 months.

2.2.4 Data from other sources were also collected to compile the local NCD status and behavioural risk patterns. More details can be found in Targets 1 to 9 of Chapter 3.

## 2.3 OVERVIEW OF HONG KONG SITUATION VIS-A-VIS WORLD HEALTH ORGANIZATION'S "BEST BUYS" AND OTHER RECOMMENDED INTERVENTIONS FOR TACKLING KEY RISK FACTORS FOR NON-COMMUNICABLE DISEASES

2.3.1 To tackle the increasing challenges posed by NCD, public health actions taken should be based on the best available evidence. To examine the adequacy of current locally adopted NCD interventions, they were compared with and summarised against WHO's "best buys" and other recommended interventions for reducing NCD in Tables 1a to 1e. In summary, a range of NCD prevention and control work is being undertaken in Hong Kong. To a large extent, many interventions focus on raising public awareness and encouraging individual behavioural changes among the targeted audience. Unless upstream policy, fiscal and administrative means are implemented, the effect on improving population health is expected to be limited and, at best, short-lived.



Overview of Hong Kong situation vis-a-vis World Health Organization's "best buys" and other recommended interventions (based on WHO CHOICE analysis) for tackling key risk factors for non-communicable diseases

#### Guide to interpreting these tables:

- (a) The WHO CHOICE analysis assessed and categorised 88 interventions (published in peer reviewed journal with demonstrated and quantifiable effect size) based on their feasibility and cost-effectiveness ratio (expressed as International dollars (I\$) per disability adjusted life year (DALY)) of  $\leq$  I\$ 100 per DALY averted in low- and lower middle-income countries (LMICs); cost-effectiveness ratio > I\$ 100 per DALY averted; and those for which WHO CHOICE analysis could not be conducted. The absence of WHO-CHOICE analysis does not necessarily mean that an intervention is not cost-effective, affordable or feasible – rather, there were methodological or capacity reasons for which the WHO-CHOICE analysis could not be completed at the current time. The subsequent tables show three categories of interventions:-
  - "Best buys" are those interventions considered the most cost-effective and feasible for implementation, with an average cost effectiveness ratio ≤ I\$100/DALY averted in LMICs
  - "Effective interventions" are interventions with an average cost-effectiveness ratio > I\$100/DALY averted in LMICs
  - "Other recommended interventions" are interventions that have been shown to be effective but for which no cost-effective analysis was conducted

(b) Local Status : Adopted		Partially adopted	Not adopted	
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### Table 1a: Unhealthy diet

#### Local situation

WHO recommendation interventions		Local situation	
		(Refer to Targets 4, 6 and 7 of Chapter 3 for more details)	
	Reduce salt intake through the	- No policy exists.	
	reformulation of food products	_	
Best buys	Reduce salt intake through the establishment of a supportive environment in public institutions such as hospitals, schools, workplaces and nursing homes	<ul> <li>Hong Kong has been implementing various programmes and issued guidelines to encourage supply of healthy dishes/food with less salt, oil and sugar at different settings (e.g. Centre for Food Safety (CFS)'s "Reduce Salt, Sugar, Oil. We Do!" programme and "Trade Guidelines for Reducing Sodium in Foods"; DH's "EatSmart@restaurant.hk" Campaign and "EatSmart@school.hk" Campaign and "Nutritional Guidelines on Snacks for students", etc.).</li> </ul>	
	Reduce salt intake through a behaviour change communication and mass media campaign Reduce salt intake through the implementation of front-of-pack labelling	<ul> <li>Hong Kong has been organising various publicity and education programmes to reduce population salt consumption.</li> <li>The "Salt/Sugar" Label Scheme for Prepackaged Food Products was launched in October 2017.</li> </ul>	
Effective interventions	Eliminate industrial trans-fats through the development of legislation to ban their use in the food chain	<ul> <li>There is currently no legislation to limit saturated fatty acids or eliminate partially hydrogenated vegetable oils (the main source of industrially produced trans-fats) in the food supply.</li> <li>Guidelines on reducing fats (total, saturated and trans-fats) in food were provided to the trade by CFS.</li> </ul>	
	Reduce sugar consumption through effective taxation on sugar-sweetened beverages	- No policy exists.	



#### Table 1a: Unhealthy diet (cont'd)

#### n inte ----nti

promote the intake of fruit and vegetables

WHO recommendation interventions	Local situation (Refer to Targets 4, 6 and 7 of Chapter 3 for more details)	
Promote and support exclusive breastfeeding for the first 6 months, including promotion of breastfeeding	<ul> <li>In April 2014, the Committee on Promotion of Breastfeeding was set up at Food and Health Bureau (FHB) to advise the Government on strategies and actions to promote and support breastfeeding.</li> </ul>	
Implement subsidies to increase the intake of fruit and vegetables	- No policy exists.	
Replace trans-fats and saturated fats with unsaturated fats through reformulation, labelling, fiscal policies or agricultural policies	<ul> <li>There is currently no legislation to limit saturated fatty acids or eliminate partially hydrogenated vegetable oils (the main source of industrially produced trans-fats) in the food supply.</li> <li>Guidelines on reducing fats (total, saturated and trans-fats) in food were provided to the trade by CFS.</li> </ul>	
Limit portion and package sizes	- No policy exists.	
Implement nutrition education and counselling in different settings (e.g. in preschools, schools, workplaces and hospitals) to increase the intake of fruit and vegetables	<ul> <li>DH's SHS provides dietary advice and counselling on healthy weight management to help students make healthy lifestyle choices.</li> <li>DH's Central Health Education Unit has been implementing various health educational activities/programmes to promote intake of fruit and vegetables in schools, workplace and in the community.</li> </ul>	
Implement nutrition labelling to reduce total energy intake, sugars, sodium and fats	<ul> <li>The Government has implemented a mandatory nutrition labelling scheme for prepackaged foods since 1 July 2010 to help consumers make informed food choices.</li> <li>This labelling scheme requires prepackaged foods to present specified nutrition information, usually in a tabular format on the back or side of packaging.</li> </ul>	
Implement mass media campaigns on healthy diets to reduce the intake of total fat, saturated fats, sugars and salt, and	<ul> <li>Hong Kong has implemented various public awareness programmes to promote healthy eating.</li> </ul>	

**Other recommended interventions** 



### Table 1b: Physical inactivity

#### WHO recommendation interventions

Local situation

		(Refer to Targets 3 and 7 of Chapter 3 for more details)
Best buys	Implement community wide public education and awareness campaign for physical activity	<ul> <li>Hong Kong has implemented various public awareness programmes to promote physical activity mainly through Leisure and Cultural Services Department (LCSD).</li> </ul>
Effective Intervention	Provide physical activity counselling and referral as part of routine primary health care services	- No organised programme exists.
ıtions	Implement whole-of-school programme that includes quality physical education, availability of adequate facilities and programmes	<ul> <li>Physical Game Workshop for Teachers in Pre-primary institutions was organised under the "StartSmart@school.hk" Campaign of DH.</li> <li>Curriculum Documents for Physical Education (PE) in Primary and Secondary schools were issued by Education Bureau (EDB) and basic facilities in local primary and secondary schools were available for the implementation of PE curriculum.</li> </ul>
l interven	Ensure that macro-level urban design supports active transport strategies	- The Government is proposing to (i) incorporate "active design" considerations under the " <i>Hong Kong 2030+: Towards a</i>
Other recommended interventions	Provide convenient and safe access to quality public open space and adequate infrastructure to support walking and cycling	under the "Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030" (Hong Kong 2030+) to promote walking, cycling, exercising and recreational pursuits, by improving accessibility to nature and outdoor leisure pursuits, enhancing the connectivity of the city, creating desirable conditions for walking and cycling, reinventing our public spaces for the enjoyment of all, and adopting an enhanced standard for public open space provision; and (ii) to promote walkability under the theme "Walk-in-HK" with a view to fostering a pedestrian-friendly environment and encouraging people to walk more, etc.



# Table 1 b: Physical inactivity (cont'd)

	WHO recommendation interventions	Local situation (Refer to Targets 3 and 7 of Chapter 3 for more details)
recommended interventions	Implement multi-component workplace physical activity programmes	<ul> <li>DH and the Occupational Safety and Health Council launched the "Joyful@Healthy Workplace" Campaign in August 2016 to assist employers and employees to create healthy and joyful working environment. The campaign focuses on three areas, "mental well-being", "healthy eating" and "regular physical activity".</li> </ul>
Others reco	Promotion of physical activity through organised sport groups and clubs, programmes and events	<ul> <li>Hong Kong has been organising a wide variety of sports and recreational activities and sport events to promote physical activity mainly through LCSD.</li> </ul>



#### Table 1 c: Harmful use of alcohol

#### WHO recommendation interventions

Local situation

		(Refer to Target 2 of Chapter 3 for more details)
	Increase excise taxes on alcoholic beverages	<ul> <li>Tax is not levied on alcoholic beverages (beer, wine, and spirits) with an alcohol strength of less than 30% in Hong Kong.</li> </ul>
	Enact and enforce bans or comprehensive restrictions on exposure to alcohol advertising	<ul> <li>Under the Broadcasting Ordinance (Cap. 562) and the Broadcasting (Miscellaneous Provisions) Ordinance (Cap. 391), all television programme service licensees and sound broadcasting licensees have to comply with the Codes of Practice issued by the Office of the Communications Authority. Under the Codes of Practice, there are restrictions on advertising alcoholic beverages to young people. There is no restriction on other advertising means or other forms of marketing and promotion of alcoholic beverages.</li> </ul>
Best buys	Enact and enforce restrictions on the physical availability of retailed alcohol	<ul> <li>It is an offence under the Dutiable Commodities (Liquor) Regulations (Cap. 109B) to sell liquor except on the authority of a liquor licence or a temporary liquor licence at any premises for consumption on those premises; or at a place of public entertainment or a public occasion for consumption at the place or occasion.</li> <li>There was no prohibition on the sale or supply of intoxicating liquor to minors in both licensed premises or non-licensed premises including retail stores. In order to plug the loophole, the Government had introduced the Dutiable Commodities (Amendment) Bill 2017 (the Bill) into the Legislative Council and the Bill was passed on 8 February 2018. The enacted regulation will commence in the second half of 2018.</li> </ul>



### Table 1 c: Harmful use of alcohol (cont'd)

#### WHO recommendation interventions

Local situation

	(Refer to Target 2 of Chapter 3 for more details)					
Effective interventions	Enforcing drink driving laws (breath-testing)	<ul> <li>With effect from 9 February 2009, uniform police officers can require a person who is driving or attempting to drive a vehicle on a road to perform an alcohol breath test without the need for reasonable suspicion (Cap. 374, Ref 39B).</li> </ul>				
	Offer brief advice for hazardous drinking	- Under Actions 14 and 15 of the "Action Plan to Reduce Alcohol-related Harm in Hong Kong", guidelines and health education materials for alcohol screening and brief intervention (A-SBI) for primary care professionals has been developed for promulgation.				
	Carry out regular reviews of prices in relation to level of inflation and income	- There is currently no adjustment of level of taxation for inflation for beer, wine and spirits.				
	Establish minimum prices for alcohol where applicable	- No policy exists.				
Other recommended interventions	Enact and enforce an appropriate minimum age for purchase or consumption of alcoholic beverages and reduce density of retail outlets	<ul> <li>Regulation 28 of the Dutiable Commodities (Liquor) Regulations (Chapter 109B) provides that 'no licensee shall permit any person under the age of 18 years to drink any intoxicating liquor on any licensed premises'. There is no prohibition on the consumption of alcoholic beverages by minors in non-licensed premises or public places.</li> </ul>				
	Restrict or ban promotions of alcoholic beverages in connection with sponsorships and activities targeting young people	- No legislation exists.				
	Provide prevention, treatment and care for alcohol use disorders and comorbid conditions in health and social services	- Clinical and social services for people with alcohol-related problems are provided by the Tuen Mun Alcoholic Problem Clinic, a few psychiatric departments in the Hospital Authority and some non-governmental organisations.				
	Provide consumer information about, and label, alcoholic beverages to indicate, the harm related to alcohol	<ul> <li>No governmental policies exist to mandate labelling of alcohol and nutritional content of alcoholic beverages. Currently, such practice is voluntary.</li> </ul>				



## Table 1 d: Tobacco use

#### **WHO recommendation interventions**

Local situation

		(Refer to Target 5 of Chapter 3 for more details)			
	Increase excise taxes and prices on tobacco products	<ul> <li>The duty on tobacco products was last increased by about 41.5% and about 11.7% in 2011 and 2014 respectively to tie in with the Government's tobacco control measures.</li> </ul>			
	Implement plain/standardised packaging and/or large graphic health warnings on all tobacco products	- Graphic health warnings have appeared on tobacco products since 2007.			
Best buys	Enact and enforce comprehensive bans on tobacco advertising, promotion and sponsorship	<ul> <li>All cigarettes advertising and sponsorship in the electronic media was banned in 1990 and subsequently all print and display tobacco advertising was banned in 1999.</li> </ul>			
ă	Eliminate exposure to second-hand tobacco smoke in all indoor workplaces, public places, public transport	<ul> <li>The Smoking (Public Health) Ordinance (Cap. 371) was amended in 2006 to, inter alia, extend the statutory smoking ban to cover all indoor working places and public places as well as many outdoor places.</li> </ul>			
	Implement effective mass media campaigns that educate the public about the harms of smoking/tobacco use and second-hand smoke	<ul> <li>The Tobacco Control Office (TCO) of DH and the Hong Kong Council on Smoking and Health have implemented various mass media campaigns to inform and educate the public on smoking and health matters.</li> </ul>			
Effective interventions	Provide cost-covered, effective and population-wide support (including brief advice, toll-free quit line services) for tobacco cessation services to all those who want to quit	- DH operates an integrated Smoking Cessation Hotline (Quitline: 1833 183) to provide general professional counselling and information on smoking cessation, and arrange referrals to various smoking cessation services in Hong Kong.			



#### Table 1 d: Tobacco use (cont'd)

	WHO recommendation interventions	Local situation (Refer to Target 5 of Chapter 3 for more details)	
interventions	Implement measures to minimise illicit trade in tobacco products	<ul> <li>To protect revenue from dutiable commodities stipulated in the Dutiable Commodities Ordinance, Chapter 109, Laws of Hong Kong, the Illicit Cigarette Investigation Division under the Revenue and General Investigation Bureau of the Customs and Excise Department takes</li> </ul>	
	Ban cross-border advertising, including	<ul> <li>sustained and vigorous enforcement actions in combating illicit cigarettes<sup>29</sup>.</li> <li>Enforcement on cross-border advertising</li> </ul>	
Other recommended	using modern means of communication	(e.g. online advertising on Facebook) is only possible for cases that happened within but not outside Hong Kong.	
õ	Provide mobile phone based tobacco cessation services	- A mobile Quit Smoking App has been launched by TCO of DH to assist smokers to overcome tobacco dependence.	

<sup>&</sup>lt;sup>29</sup> Source: http://www.customs.gov.hk/en/enforcement/revenue/index.html



## Table 1e: Primary and secondary prevention of major NCD

**Note:** Only selected items of WHO recommended interventions are highlighted

	WHO recommendation interventions	<b>Local situation</b> (Refer to Targets 1 and 7 of Chapter 3 for more details)		
	Prevention of cervical cancer by screening women aged 30-49 years	<ul> <li>Women aged 25 to 64 who ever had sex are encouraged to have regular cervical cancer screening under the Cervical Screening Programme of DH.</li> <li>To strengthen cervical cancer screening services especially among low-income groups, a three-year Community Care Fund (CCF) Pilot Scheme on Subsidised Cervical Cancer Screening and Preventive Education for Eligible Low-income Women was launched in December 2017.</li> </ul>		
Best buys	Vaccination against human papillomavirus of 9-13 year old girls	<ul> <li>The Scientific Committee on Vaccine Preventable Diseases and the Scientific Committee on AIDS and Sexually Transmitted Infections have regularly reviewed the scientific evidence and local situation and would make recommendations as appropriate.</li> <li>Three prophylactic vaccines against human papillomavirus (HPV) infection are currently available in Hong Kong.</li> <li>CCF provided financial support to a 3-year "Free Cervical Cancer Vaccination Pilot Scheme" to teenage girls from eligible low-income families with effect from October 2016.</li> </ul>		
erventions	Population-based colorectal cancer (CRC) screening at age >50 years, linked with timely treatment	- The CRC Screening Pilot Programme is being run by DH and will last for a period of 36 months. Experience gained will inform policy about regularisation of the programme.		
ided int	Prevention of liver cancer through hepatitis B immunisation	<ul> <li>Hepatitis B vaccine is included in the Hong Kong Childhood Immunisation Programme of DH.</li> </ul>		
Other recommended interventio	Lifestyle interventions for preventing type 2 diabetes	- The FHB issued the "Hong Kong Reference Framework for Diabetes Care in Adults in Primary Care Settings" and three other reference frameworks for the care of different chronic diseases and population groups in primary care settings, to support the tackling of NCD through primary care.		



## 3 LOCAL STRATEGY AND ACTION PLAN FOR NON-COMMUNICABLE DISEASE PREVENTION AND CONTROL

## 3.1 GOAL AND OBJECTIVES

- 3.1.1 After thorough consideration of overseas experiences and evidence, together with the comprehensive review of local data on population health and behavioural risk patterns, as well as the state of preventive actions, the *"Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong"* (SAP) was drawn up.
- 3.1.2 The SAP aims to reduce non-communicable disease (NCD) burden including disability and premature death in Hong Kong by 2025, and it sets out to do so by achieving the following objectives:-
  - (a) Create equitable health-promoting environments that empower individuals to lead healthy lives;
  - (b) Strengthen health literacy and capacity of individuals to make healthy choices;
  - (c) Strengthen health systems for optimal management of NCD through primary health care and universal health coverage; and
  - (d) Monitor progress of NCD prevention and control actions with clear targets and indicators adapted from the World Health Organization (WHO)'s global monitoring framework (GMF).

#### 3.2 SCOPE

3.2.1 Aligning with the WHO's "Global Action Plan for the Prevention and Control of NCD 2013-2020" (Global NCD Action Plan), the main focus of this SAP is on four NCD (namely cardiovascular diseases, cancers, chronic respiratory diseases and diabetes) and four shared behavioural risk factors (namely unhealthy diet, physical inactivity, tobacco use and harmful use of alcohol). The Hong Kong Special Administrative Region Government recognises that there are many other conditions of public health importance that are closely associated with the four major NCD, for example, mental disorders, violence and injuries, poisoning, and other NCD. NCD and their risk factors also have strategic



links to the health systems and universal health coverage. Despite the close links, one strategy and action plan to address all of them in equal detail would be unwieldy. Further, the tasks on control of some of these conditions have been taken up by existing or other high-level steering or advisory committees<sup>30</sup>. There is thus a need to avoid overlapping of scope and duplicating efforts in NCD control.

### 3.3 ACCOUNTABILITY FRAMEWORK

- 3.3.1 To achieve the set goal and objectives, an accountability framework with key components of priority action areas, interventions, targets and indicators (depicted in Figure 1) is adopted to steer accountable and cost-effective NCD actions. The accountability framework is underpinned by certain prerequisites:-
  - (a) Recognise government leadership;
  - (b) Build community and cross-sectoral partnerships for achieving co-benefits;
  - (c) Enhance health services' response and engage primary care actors for health promotion and NCD reduction;
  - (d) Strengthen surveillance and intelligence capacity; and
  - (e) Secure resources and build professional capacity.

<sup>&</sup>lt;sup>30</sup> Some examples include-

the Steering Committee on Primary Healthcare Development was announced in the Chief Executive's 2017 Policy Address to comprehensively review the existing planning of primary healthcare services, develop a blueprint for the sustainable development of primary healthcare services for Hong Kong, devise service models to provide primary healthcare services via district-based medical-social collaboration in the community, and develop strategies to raise community awareness and exploit the use of big data to devise strategies that best fit the needs of the community;

<sup>-</sup> the Advisory Committee on Mental Health was established in December 2017 to advise on mental health policies, including the establishment of more integral and comprehensive approaches to tackle multifaceted mental health issues in Hong Kong;

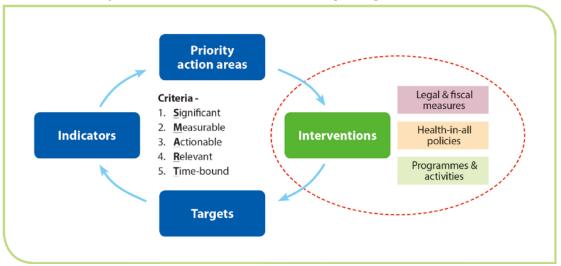
<sup>-</sup> the Cancer Coordinating Committee was established in 2011 to give advice on strategies and steer the work on cancer prevention and control;

<sup>-</sup> the Committee on Promotion of Breastfeeding was set up in April 2014 to advise on strategies and actions to promote and support breastfeeding; and

<sup>-</sup> the Committee on Prevention of Student Suicides was established in 2016 to make recommendations on appropriate preventive measures to prevent student suicides at primary, secondary and tertiary education levels, etc.



Figure 1: Formulating an action-focused accountability framework for NCD prevention and control for Hong Kong



## 3.4 **OVERARCHING PRINCIPLES AND APPROACHES**

3.4.1 Based on the WHO's Global NCD Action Plan<sup>31</sup>, the SAP embraces the following overarching principles and approaches:-

#### (a) Upstream approach

Prevention is better than cure. Sufficient medical evidence is available to show that most premature deaths from NCD are preventable through lifestyle modification – quitting smoking, avoiding alcohol, having a balanced diet and engaging in regular physical activity – possible only within a supportive and health-enhancing environment. There has been suggestion that eliminating health risk behaviours would prevent 80% of heart disease, stroke, type 2 diabetes and 40% of cancers<sup>32,33</sup>. Therefore, by helping people practise healthy lifestyles, NCD can be prevented and overall health of the population can be improved. While appropriate treatment is important for those with diseases, the upstream approach offers the most cost-effective means for NCD control, saving billions of dollars required to provide secondary and tertiary care after people become sick.

<sup>&</sup>lt;sup>31</sup> Global action plan for the prevention and control of noncommunicable diseases 2013-2020. Geneva: World Health Organization, 2013.

<sup>&</sup>lt;sup>32</sup> Spring B., Moller A.C., Coons M.J. Multiple health behaviours: overview and implications. J Public Health (Oxf). 2012 Mar; 34(Suppl 1): i3–i10.

<sup>&</sup>lt;sup>33</sup> Ezzati M, Lopez AD, Rodgers A, et al. Comparative Quantification of Health Risks: Global and Regional Burden of Disease Attributable to Selected Major Risk Factors. Geneva: World Health Organization; 2004.



#### (b) Life-course approach

The risks of developing NCD accumulate with age and are influenced by factors acting at all stages of life. Thus, interventions throughout life can help prevent progress of diseases. By utilising opportunities at all life stages, starting with proper infant feeding practices, including promotion of breastfeeding and health promotion for children, adolescents and youth followed by promotion of a healthy working life, healthy ageing and care for people with NCD in later life, it will be possible to achieve reduction in premature deaths in the highly productive stages of life, fewer disabilities, more people enjoying better quality of life, and lower costs of medical treatment and care services.

#### (c) Focus on equity

Policies and programmes should aim to reduce inequalities in NCD burden due to social determinants such as education, gender, socioeconomic status, ethnicity and migrant status.

#### (d) Multisectoral actions

NCD prevention, tackling of underlying risk factors and health promotion must begin where people live, learn, work, worship and play. Effective NCD prevention and control necessarily requires multisectoral approaches at all levels of government including an all-of-government and whole-of-society approach across health, education, environment, food, social welfare, social and economic development, sports, trade, transport, urban planning, and not the least, finance, to create a health supporting environment which would enable people to make healthy choices and live healthily.

## (e) Health system strengthening

Revitalisation and reorientation of health care services are required for health promotion, disease prevention, early detection and integrated care, particularly at the primary care level.



### (f) Universal health coverage

All people, particularly the poor and vulnerable, should have access, without discrimination, to the needed promotive, preventive, curative, rehabilitative and palliative basic health services, as well as essential, safe, affordable, effective and quality medicines and diagnostics without exposing users to financial hardship.

## (g) Evidence-based strategies

Strategies and practices for the prevention and control of NCD need to be based on latest scientific evidence and/or best practices. While cost-effectiveness analysis is a useful tool, it should not be used as the sole basis for decision-making. When selecting interventions for the prevention and control of NCD, consideration should be given to effectiveness, cost-effectiveness, affordability, implementation capacity, feasibility, national circumstances, impact on health equity of interventions, and to the need to implement a combination of policies, population-wide setting-based programmes and individual interventions.

#### (h) Empowerment of people and communities

Empowerment is a process through which people gain control over decisions and actions that influence health. The public should be empowered, through enhancing healthy literacy of the population, to make healthy behavioural choices, equipped with appropriate skills to interact effectively with healthcare services, and provided with opportunities to assume responsibility and participate in self-care. Community partners should be empowered and involved in the activities for the prevention and control of NCD, including advocacy, policy, planning, service provision, monitoring, research and evaluation.



#### 3.5 **KEY PRIORITY ACTION AREAS**

- 3.5.1 Considering NCD prevention should target upstream at risk factor prevention and reduction using a life-course approach, the following five key action areas (fitting the acronym HeALTH) has been adopted for Hong Kong.
  - Healthy Start •
  - Alcohol Free
  - Live Well and Be Active
  - **T**obacco Free
  - <u>H</u>ealthy Diet
- 3.5.2 Actions will be underpinned by the following strategic directions:-
  - Government demonstrating leadership; (i)
  - (ii) Schools transformed into healthy settings (e.g. Health Promoting Schools);
  - (iii) Supportive physical and social environments created for physical activity;
  - (iv) Effective partnerships with primary care professionals; and
  - Consideration and adoption of "best buys" and other (v) recommended interventions<sup>34</sup>, such as banning of trans fat in food preparation, imposing sugar tax, restriction of alcohol marketing, raising alcohol tax, etc., at appropriate stages.
- 3.5.3 While working upstream, the Government recognises that considerable improvements have to be made in the healthcare system to achieve continuous and significant reduction in NCD morbidity and mortality by 2025. For examples, there should be better utilisation of existing and/or new public-private partnership programmes, introduction of effective healthcare financing models, greater application of healthcare vouchers, enhancements in the primary care system, and so on.

Tackling NCDs: 'best buys' and other recommended interventions for the prevention and control of noncommunicable diseases. Geneva: World Health Organization, 2017.



## 3.6 FACTSHEETS OF NON-COMMUNICABLE DISEASE TARGETS, INDICATORS AND MULTISECTORAL ACTIONS

- 3.6.1 Based on a thorough stock-take of available NCD data and a selection process<sup>35</sup> to identify the most reliable and sustainable data sources for ongoing use, and consideration of the relevance of the WHO's GMF<sup>36</sup> to the local setting, a set of 9 targets and 34 indicators, comprising 25 key indicators (derived from the WHO's GMF) and 9 supplementary indicators (of local relevance<sup>37</sup>) have been adopted for local NCD monitoring. Table 2 (Pages 33 - 35) lists out an overview of the NCD targets and indicators for Hong Kong towards 2025. The baseline selected by WHO for all global voluntary targets and indicators is 2010. However, due to local data availability, the baseline adopted by Hong Kong for each target and indicator may vary, with the most recent available data adjacent to 2010 being selected. For easy reference to WHO's 25 indicators, the numbering of key indicators follows WHO's GMF. For the sake of easy differentiation, a letter "S" is used to indicate the supplementary indicators.
- 3.6.2 A range of NCD policies, programmes and actions have been included in this SAP insofar as they are <u>significant</u> (with substantial contribution to local NCD preventable mortality and morbidity), <u>relevant</u> (in the local and international contexts), <u>actionable</u> (by relevant sector of community and stakeholders), <u>measurable</u> (by WHO's GMF and ECHO report <sup>38</sup>) and <u>time-bound</u> (can be implemented based on a set time frame). These actions are included after consulting stakeholders from across sectors, and most importantly soliciting their support for and commitment in implementing them. The Department of Health (DH), Hospital Authority (HA) and various government bureaux and departments such as Leisure and Cultural Services Department, Education Bureau, Centre for Food Safety, Housing Authority, etc. have key roles to play.

<sup>&</sup>lt;sup>35</sup> Factors taken into account in the selection process include age coverage, data collection/measurement methods, monitoring frequency, data ownership and comparability with official figures, etc.

<sup>&</sup>lt;sup>36</sup> Details of the WHO's GMF can be found from the following link: http://www.who.int/nmh/global\_monitoring\_framework/2013-11-06-who-dc-c268-whp-gap-ncdstechdoc-def3.pdf?ua=1

<sup>&</sup>lt;sup>37</sup> By taking reference from the WHO Global Reference List of 100 Core Health Indicators and recommendations by the WHO Commission on Ending Childhood Obesity, 9 supplementary indicators are added to make up the local set of NCD indicators. Some examples are breastfeeding rate, screen time and sleep time.

<sup>&</sup>lt;sup>38</sup> Officially called "Report of the Commission on Ending Childhood Obesity".



- 3.6.3 For the sake of easy communication with stakeholders, health promotion partners and the public, the local NCD targets, indicators and multisectoral actions are set out in greater detail under 9 target-based factsheets (Targets 1 to 9, see Pages 36 111 aligning with WHO's 9 global targets. Content of each factsheet is organised under the following headings:-
  - (a) *"Preamble"* highlights what the particular target is about and why it is important in the context of NCD prevention and control;
  - (b) *"Local situation"* presents the latest available figures and trends (over a reasonable timeframe) to describe the status of the NCD problem<sup>39</sup>;
  - (c) *"Local target"* specifies the expected outcome by 2025;
  - (d) "Actions to achieve target" highlights Government policies, strategies, programmes and actions of high impact that have been/are currently undertaken, as well as specific interventions to be introduced/enhanced/explored to achieve the stated NCD targets by 2025; and
  - (e) "Definitions and specifications of local indicators" specifies the most reliable data source(s) of key and/or supplementary indicators (as appropriate), what will be measured and how for each indicator.

#### 3.7 FUTURE NON-COMMUNICABLE DISEASE SURVEILLANCE

3.7.1 The WHO has provided a STEPwise approach for NCD risk factor surveillance. These steps include questionnaire, physical measurements and biochemical measurements. To cater for future data need for local NCD surveillance and meet reporting requirements as specified in the WHO's GMF, DH will strengthen NCD surveillance with effect from 2018 by conducting household-based health behaviour questionnaire surveys every two years, supplemented by physical and biochemical

<sup>&</sup>lt;sup>39</sup> Considering the need to monitor local trends and enable comparison with international counterparts, selected indicators may be presented as 'crude' rates <u>and</u> 'age-standardised' rates. Others such as Target 7 indicator "Detection rate of overweight and obesity in primary and secondary students" may be presented in two ways, one adopting the 'local definition of childhood overweight/obesity ' <u>and</u> the other adopting 'WHO's definition using body mass index cut-off values'. Further, in Targets 6 and 7, WHO's definitions of hypertension, diabetes and high blood cholesterol were adopted to facilitate international comparison, therefore the prevalence figures of hypertension, diabetes and high blood cholesterol would be slightly different from those presented in the Report of PHS 2014/15.



measurements every four to six years. This would markedly improve the accuracy, reliability and usefulness of NCD risk factor and biomedical monitoring for the adult population, and facilitate monitoring of the Government's NCD actions.

3.7.2 As HA's services are currently used by majority of the local population, its clinical database is potentially the largest and most comprehensive data source to track NCD status. DH will consider to take reference from indicators (such as attendances for diabetes) already captured in HA's Key Performance Indicators reports, and explore the feasibility of tracking other NCD conditions (e.g. hypertension) via HA.



#### Table 2: Summary of local NCD targets and indicators for NCD monitoring

#### Target 1: Reduce premature mortality from NCD

A 25% relative reduction in risk of premature mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases by 2025

#### Key indicators [Monitoring frequency]

- 1 Unconditional probability of dying between ages of 30 and 70 from four non-communicable diseases (4 NCD), namely cardiovascular diseases, cancers, diabetes or chronic respiratory diseases [Annual]
- 2 Cancer incidence and mortality, by type of cancer, per 100 000 population breakdown by age and sex [Annual]
- 20 Access to palliative care assessed by morphine-equivalent consumption of strong opioid analgesics (excluding methadone) per death from cancer [Annual]
- 22 Availability of vaccines against human papillomavirus (HPV) as part of a national immunisation schedule [Annual]
- 24 Vaccination coverage of hepatitis B vaccine measured by proportion of children who received three doses of Hep-B vaccine (HepB3) and the timeliness of vaccination (as reflected by median and interquartile range) for HepB3 among preschool children [Every 2-3 years]
- 25 Proportion of women between the ages of 30 and 49 screened for cervical cancer at least once [Every 2 years]



#### Target 2: Reduce harmful use of alcohol

At least 10% relative reduction in the prevalence of binge drinking and harmful use of alcohol (harmful drinking/alcohol dependence) among adults and in the prevalence of drinking among youth by 2025

#### Key indicators [Monitoring frequency]

- 3 Estimated total alcohol consumption per capita (aged 15+ years) within a calendar year in litres of pure alcohol [Annual]
- 4a Prevalence of binge drinking at least monthly among adolescents [Every 1 or 2 years]
- 4b Age-standardised prevalence of binge drinking at least monthly among adults (aged 18+ years) [Every 2 years]
  - Proportion of persons (aged 15+ years) who had an Alcohol Use Disorders Identification Test (AUDIT) score of 16 or above, which indicates harmful drinking or probable alcohol dependence [Every 2 years]

#### **Supplementary indicators** [Monitoring frequency]

- Prevalence of ever drinking, 12-month drinking and 30-day drinking among young people [Every 2 or 4 years]
- Proportion of adolescents reported having the first sip at age below 16 years [Every 2 years]
- Proportion of adolescents reported starting a monthly drinking habit at age below 16 years [Every 2 years]



## Table 2: Summary of local NCD targets and indicators for NCD monitoring (cont'd)



#### **Target 3: Reduce physical inactivity**

A 10% relative reduction in the prevalence of insufficient physical activity among adolescents and adults by 2025

Key indicators [Monitoring frequency]

- 6 Prevalence of insufficiently physically active adolescents [Annual]
  - Age-standardised prevalence of insufficiently physically active persons aged 18+ years [Every 2 years]



7

#### Target 4: Reduce salt intake

A 30% relative reduction in mean population daily intake of salt/sodium by 2025

#### Key indicators [Monitoring frequency]



Age-standardised mean intake of salt (sodium chloride) per day in grams among persons aged 18-84 years [Every 4-6 years]



#### Target 5: Reduce tobacco use

A 30% relative reduction in the prevalence of current tobacco use in persons aged 15+ years by 2025 when compared to the baseline prevalence in 2010

#### Key indicators [Monitoring frequency]



9 Prevalence of current tobacco use among adolescents [Every 2 years]

Age-standardised prevalence of daily cigarette smoking among persons aged 18+ years [Every 2-3 years]

#### Supplementary indicators [Monitoring frequency]





Target 6: Contain the prevalence of raised blood pressure Contain the prevalence of raised blood pressure by 2025

#### Key indicators [Monitoring frequency]



11a) Age-standardised (and crude) prevalence of raised blood pressure among persons aged 18-84 years [Every 4-6 years]



Age-standardised (and crude) mean systolic blood pressure (SBP) among persons aged 18-84 years [Every 4-6 years]



# Table 2: Summary of local NCD targets and indicators for NCD monitoring (cont'd)

	Target 7: Halt the rise in diabetes and obesity         Halt the rise in diabetes and obesity by 2025
Key	indicators [Monitoring frequency]
12	Age-standardised (and crude) prevalence of raised blood glucose/diabetes among persons aged 18-84 years [Every 4-6 years]
13	Detection rate of overweight and obesity in primary and secondary students, based on:         • Local definition         [Annual]         • [Annual]
14	Age-standardised (and crude) prevalence of overweight and obesity in persons aged 18-84 years, based on:         • Local classification         [Every 4-6 years]         • WHO's classification         [Every 4-6 years]
15	Age-standardised mean proportion of total energy intake from saturated fatty acids in persons aged 18+ years [About every 10 years]
16	Age-standardised prevalence of low fruit and vegetables consumption among persons aged 18+ years [Every 2 years]
17	Age-standardised prevalence of raised total cholesterol and mean total cholesterol among persons aged 18- 84 years [Every 4-6 years]
21	Adoption of national policies that limit saturated fatty acids and eliminate partially hydrogenated vegetable oils (the main source of industrially produced trans-fats) in the food supply
23	Adoption of national policies to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans-fatty acids, free sugars, or salt
Sup	plementary indicators [Monitoring frequency]
<b>S5</b>	Prevalence of overweight and obesity in children under 5 years of age [Annual]
56	Ever breastfeeding rate on discharge from hospitals [Every 2 years]
57	Rate of exclusive breastfeeding for 4 months [Every 2 years]
58	Proportion of upper primary and secondary school students who spent 2 hours or more a day on the internet or electronic screen products for purposes not related to school work [Annual]
<b>S9</b>	Proportion of upper primary and secondary school students who had sleep time less than 8 hours a day on a typical night of a school day [Annual]

Target 8: Prevent heart attacks and strokes through drug therapy and counselling No specific local target at the moment due to lack of quantifiable indicators



## Target 9: Improve availability of affordable basic technologies and essential medicines to treat major NCD

No specific local target at the moment due to lack of quantifiable indicators



# TARGET 1

Reduce premature mortality from NCD



## A PREAMBLE

Non-communicable diseases (NCD) are the major causes of ill-health, disability and death, both globally and locally. Unless urgent action is taken, it is anticipated that the burden attributed to NCD will continuously increase in the decades ahead. In light of the World Health Organization (WHO)'s *"Global Action Plan for the Prevention and Control of NCD 2013-2020"* (Global NCD Action Plan) which provides a road map and a menu of policy options for implementation collectively between 2013 and 2020 to attain 9 voluntary global targets, the Steering Committee on Prevention and Control of NCD (SC), chaired by the Secretary for Food and Health, endorsed at its meeting in January 2018 to align strategies and implement a set of local NCD targets and indicators in line with the WHO's Global NCD Action Plan and global monitoring framework (GMF)<sup>40</sup>. In the coming years, Hong Kong should work collectively on policies, systems, programmes and actions to address NCD. Five key action areas targeted will be <u>he</u>althy start, <u>a</u>lcohol free, <u>l</u>ive well and be active, <u>t</u>obacco free and <u>h</u>ealthy diet (fitting the acronym **HeALTH**).

## **B** LOCAL SITUATION

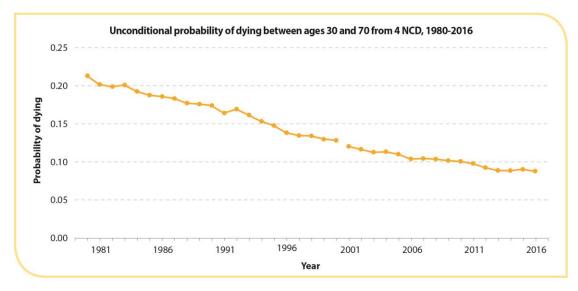
The ensuing paragraphs provide a snapshot of local situation regarding Indicator (1) on risk of premature mortality from four major non-communicable diseases (4 NCD), namely cardiovascular diseases, cancers, diabetes or chronic respiratory diseases; and Indicators (2), (20), (22), (24) and (25) related to the prevention and control of cancers (the top killer disease in Hong Kong), as set out in the WHO's GMF. For local situation of other important NCD indicators, e.g. prevalence of key risk factors for NCD, namely tobacco use, harmful use of alcohol, unhealthy diet, physical inactivity, overweight and obesity, and raised blood pressure/glucose/cholesterol, etc., please refer to Section B of Targets 2 to 9. Detailed definitions, specifications and data sources of the indicators set for Hong Kong are provided in Section E of each target.

<sup>&</sup>lt;sup>40</sup> The WHO's GMF sets out 9 voluntary global NCD targets and 25 indicators, which provide Member States a vision for progress by 2025.



#### Indicator (1): Premature NCD mortality

In Hong Kong, the unconditional probability of dying between ages of 30 and 70 from 4 NCD, namely cardiovascular diseases, cancers, diabetes or chronic respiratory diseases (denoted by  $_{40}q_{30}$ ) steadily decreased from 0.215 to 0.099 during the period 1980-2010, corresponding to the average annual rate of decline at 2.7% per year compounded continuously. In the ensuing period 2010-2016,  $_{40}q_{30}$  continued to decline from 0.099 to 0.086, corresponding to the average annual rate of the average annual rate of decline at 2.2% per year compounded continuously. The diagram below shows the estimated  $_{40}q_{30}$  for Hong Kong over the period 1980-2016.



- Note: Figures for 1980-2000 are compiled based on causes of death data coded according to the International Statistical Classification of Diseases and Related Health Problems (ICD) 9th Revision, while classification of causes of death from 2001 onwards is based on ICD 10th Revision
- Sources: Census and Statistics Department

Department of Health

#### Indicator (2): Cancer incidence and mortality

The 5 most common cancers in 2015 were colorectal cancer, lung cancer, breast cancer, prostate cancer and liver cancer, together accounting for 57.1% of all newly diagnosed cancer cases. Tables below show the statistics of the 5 most common cancers by sex in 2015 and the 5 leading causes of cancer deaths by sex in 2016 respectively.



	Site	Number of new cases	Relative Frequency	CIR	ASIR	Trend (AAPC) of ASIR 2006-2015
Both	Colorectum	5 036	16.6%	69.1	38.4	Stable (0.0%)
Sexes	Lung	4 748	15.7%	65.1	35.9	Downward (-1.7%)*
	Breast	3 920	12.9%	53.8	34.6	Upward (+2.8%)*
	Prostate	1 831	6.0%	54.4	28.9	Upward (+3.2%)*
	Liver	1 791	5.9%	24.6	14.1	Downward (-2.1%)*
Male	Lung	2 930	19.1%	87.1	47.1	Downward (-2.3%)*
	Colorectum	2 891	18.8%	85.9	47.3	Upward (+0.6%)*
	Prostate	1 831	11.9%	54.4	28.9	Upward (+3.2%)*
	Liver	1 356	8.8%	40.3	22.7	Downward (-2.0%)*
	Stomach	686	4.5%	20.4	11.0	Downward (-2.8%)*
Female	Breast	3 900	26.1%	99.3	63.8	Upward (+2.4%)*
	Colorectum	2 145	14.4%	54.6	30.1	Downward (-0.5%)*
	Lung	1 818	12.2%	46.3	25.6	Stable (-0.2%)
	Corpus uteri	978	6.5%	24.9	15.9	Upward (+3.6%)*
	Thyroid	641	4.3%	16.3	12.3	Upward (+4.2%)*

#### The 5 most common cancers by sex in 2015

#### Notes:

- 1) CIR: Crude incidence rates are expressed per 100 000 population for both sexes and gender-specific rates are expressed per 100 000 population in respective gender
- ASIR: Age-standardised incidence rate per 100 000 standard population (based on the world standard population specified in GPE Discussion Paper Series: No.31, EIP/GPE/EBD, WHO, 2001)
- 3) AAPC: Average annual percentage change (based on the trend analysis over the ten years from 2006 to 2015 by the Department of Health, which is based on the age-standardised rates complied based on the world standard population of WHO (2001)); \* represents the AAPC is statistically significant from zero
- Sources: Hong Kong Cancer Registry, Hospital Authority Census and Statistics Department Department of Health



The S reading causes of cancer acatilis by sex in 2010						
Site	Number	Relative	CMR	ASMR	Trend (AAPC) of ASMR	
	of deaths	Frequency			2007-2016	
Lung	3 780	26.6%	51.5	26.1	Downward (-2.5%)*	
Colorectum	2 089	14.7%	28.5	14.0	Downward (-1.0%)*	
Liver	1 540	10.8%	21.0	11.0	Downward (-2.7%)*	
Stomach	710	5.0%	9.7	4.9	Downward (-3.5%)*	
Breast	704	5.0%	9.6	5.5	Stable (0.0%)	
Lung	2 529	29.9%	74.9	38.2	Downward (-2.9%)*	
Colorectum	1 208	14.3%	35.8	18.0	Downward (-1.2%)*	
Liver	1 135	13.4%	33.6	18.0	Downward (-2.7%)*	
Stomach	427	5.1%	12.7	6.4	Downward (-3.6%)*	
Prostate	410	4.9%	12.1	5.5	Stable (+0.4%)	
Lung	1 251	21.7%	31.6	15.2	Downward (-1.9%)*	
Colorectum	881	15.3%	22.2	10.5	Downward (-1.4%)*	
Breast	702	12.2%	17.7	10.2	Stable (-0.1%)	
Liver	405	7.0%	10.2	4.9	Downward (-3.1%)*	
Pancreas	310	5.4%	7.8	4.0	Stable (+0.4%)	
	Site Lung Colorectum Liver Stomach Breast Lung Colorectum Liver Stomach Prostate Lung Colorectum Breast Lung Liver	SiteNumber of deathsLung3 780Colorectum2 089Liver1 540Stomach710Breast704Lung2 529Colorectum1 208Liver1 135Stomach427Prostate410Lung1 251Colorectum881Breast702Liver405	Site         Number of deaths         Relative Frequency           Lung         3 780         26.6%           Colorectum         2 089         14.7%           Liver         1 540         10.8%           Stomach         710         5.0%           Breast         704         5.0%           Liver         1 135         13.4%           Stomach         427         5.1%           Prostate         410         4.9%           Lung         1 251         21.7%           Colorectum         881         15.3%           Breast         702         12.2%           Liver         405         7.0%	Site         Number of deaths         Relative Frequency         CMR           Lung         3 780         26.6%         51.5           Colorectum         2 089         14.7%         28.5           Liver         1 540         10.8%         21.0           Stomach         710         5.0%         9.7           Breast         704         5.0%         9.6           Lung         2 529         29.9%         74.9           Colorectum         1 208         14.3%         35.8           Liver         1 135         13.4%         33.6           Stomach         427         5.1%         12.7           Prostate         410         4.9%         12.1           Lung         1 251         21.7%         31.6           Colorectum         881         15.3%         22.2           Breast         702         12.2%         17.7           Liver         405         7.0%         10.2	Site         Number of deaths         Relative Frequency         CMR         ASMR           Lung         3 780         26.6%         51.5         26.1           Colorectum         2 089         14.7%         28.5         14.0           Liver         1 540         10.8%         21.0         11.0           Stomach         710         5.0%         9.7         4.9           Breast         704         5.0%         9.6         5.5           Lung         2 529         29.9%         74.9         38.2           Colorectum         1 208         14.3%         35.8         18.0           Liver         1 135         13.4%         33.6         18.0           Liver         1 135         13.4%         31.6         15.2           Colorectum         427         5.1%         12.7         6.4           Prostate         410         4.9%         12.1         5.5           Lung         1 251         21.7%         31.6         15.2           Colorectum         881         15.3%         22.2         10.5           Breast         702         12.2%         17.7         10.2           Liver	

#### The 5 leading causes of cancer deaths by sex in 2016

#### Notes:

- CMR: Crude mortality rates are expressed per 100 000 population for both sexes and 1) gender-specific rates are expressed per 100 000 population in respective gender
- ASMR: Age-standardised mortality rate per 100 000 standard population (based on the world 2) standard population specified in GPE Discussion Paper Series: No.31, EIP/GPE/EBD, WHO, 2001)
- 3) AAPC: Average annual percentage change (based on the trend analysis over the ten years from 2007 to 2016 by the Department of Health, which is based on the age-standardised rates complied based on the world standard population of WHO (2001)); \* represents the AAPC is statistically significant from zero
- Sources: Census and Statistics Department Department of Health

#### Indicator (20): Palliative care

Local consumption of morphine-equivalent (Meg) strong opioid analgesics (excluding methadone) for palliative care in 2016 was estimated to be 3 462.5 mg/cancer death per year<sup>41</sup>.

#### Indicator (22): Vaccination for human papillomavirus (HPV)

While three proplylactic vaccines (2-valent, 4-valent and 9-valent) against HPV infection are currently available in Hong Kong, there is no population-based HPV vaccination programme for all teenage girls at the time of writing.

<sup>&</sup>lt;sup>41</sup> In 2016, the annual local consumption level of the five concerned opioid analgesics, namely morphine, fentanyl, hydromorphone, oxycodone and pethidine were 25 462 g, 131 g, 0 g, 6 969 g and 13 832 g respectively.



#### Indicator (24): Vaccination for hepatitis B

A total of six territory-wide surveys were conducted from 2001 to 2015 for immunisation coverage among children aged 2 to 5 years (from birth cohort of year 1995 and after). The percentages of surveyed children who have received three doses of hepatitis B vaccine (HepB3) have consistently been over 95%. The latest survey conducted in 2015 showed that the median time of HepB3 vaccination was around 6 months which was comparable for local (median: 6.3, interquartile range: 6.2-6.6) and non-local children (6.4, 6.2-6.9).

#### Indicator (25): Cervical cancer screening

Results of the Population Health Survey 2014/15 showed that among women between the ages of 30 and 49 in Hong Kong, 62.9% had been screened for cervical cancer at least once by cervical smear test.

## C LOCAL TARGET

A 25% relative reduction in risk of premature mortality from cardiovascular diseases, cancers, diabetes, or chronic respiratory diseases by 2025<sup>42</sup>

## D ACTIONS TO ACHIEVE TARGET

Attaining the ultimate target of "reducing premature mortality from NCD" will be closely related to achieving other targets on improving healthcare system for effective management of NCD and reducing underlying risk factors (behavioural or biological) for NCD in the wider population as set out in **Targets 2 to 9**. Details of the actions to be taken/pursued in the coming years, to achieve the committed targets for Hong Kong, are listed in **Section D** of each target.

<sup>&</sup>lt;sup>42</sup> The voluntary global target for premature mortality from 4 NCD: '25% relative reduction in risk of premature mortality from 4 NCD over the 15 year period 2010 – 2025' is set by the WHO at a relative reduction of 2% per year.



#### 1) Background of Government initiatives to prevent and control NCD

#### NCD Prevention and Control Strategy

- The Government accords high priority to the work on prevention and control of NCD in order to alleviate its burden on healthcare and society. In the 2007-08 Policy Agenda, the Administration undertook to develop a comprehensive strategy to prevent and control NCD and enhance health promotion to improve the population's health.
- In 2008, the Department of Health (DH) published the strategic framework document entitled "*Promoting Health in Hong Kong: A Strategic Framework for Prevention and Control of Non- communicable Diseases*". As part of the strategy, a high-level intersectoral SC chaired by the Secretary for Food and Health was set up to oversee the overall roadmap and strategy.
- The strategic framework focused strategically on reducing a "cluster" of modifiable "behavoural risk factors" and environmental determinants that can induce parallel changes in those biomedical risk factors that mediate and increase the risk of the major NCD. Key to this strategy is a population-based, life course approach that empowers the individual and engages the community in partnership to create environments that support healthy life choices<sup>43</sup>. This is well illustrated by our tobacco control policy which adopts legislation, enforcement, taxation, publicity and education, as well as support for smokers to quit.
- In 2016, the SC met and agreed, in light of increasing NCD burden globally and locally, to re-define the SC's terms of reference to align with the WHO's Global NCD Action Plan and to come up with a set of local NCD targets and indicators applicable for the next couple of years which will be based on WHO guidance and recommendations on systems, programmes and actions required to achieve the time-bound commitments, indicators and targets.

<sup>&</sup>lt;sup>43</sup> More details about the strategic framework is available at: https://www.change4health.gov.hk/en/strategic\_framework/structure/steering\_committee/index.html



#### Cancer Prevention and Control Strategy

To address the key NCD, namely cancers, the Government set up the Cancer Coordinating Committee (CCC) in 2001 under the chairmanship of Secretary for Food and Health to give advice on strategies and steer the work on cancer prevention and control. This embraces cancer surveillance, cancer prevention and screening, cancer treatment, and cancer research and development. The CCC's membership is drawn from a broad base comprising public, private, professional and academic sectors. Underpinning the CCC is the Cancer Expert Working Group on Cancer Prevention and Screening (CEWG) which meets regularly to review scientific evidence from abroad and locally, and formulate recommendations for cancer prevention and screening in Hong Kong<sup>44</sup>.

#### Vaccination Strategy

- The Scientific Committee on Vaccine Preventable Diseases (SCVPD) under the Centre for Health Protection (CHP) of DH provides science-based advice on vaccine use at the population level. It makes recommendations regarding the Hong Kong Childhood Immunisation Programme (HKCIP) from the public health perspective. The Maternal and Child Health Centres of DH strategically located throughout the territory provide free immunisation to local children up to the age of 5 years in accordance with the HKCIP<sup>45</sup>.
- In 1988, the universal hepatitis B immunisation programme for newborns began; this is an effective preventive strategy for liver cancer. With effect from 2000, the three doses regime (newborn, 1 month, 6 month) of hepatitis B vaccination has been implemented.
- In Hong Kong, HPV vaccine is recommended by the SCVPD and the Scientific Committee on AIDS and Sexually Transmitted Infections (SCASTI) under CHP of DH for individual protection against cervical infection and cancer arising from specific types of HPV viruses. As to whether free/subsidised population-based vaccination should be provided to the

<sup>45</sup> Sources:

<sup>&</sup>lt;sup>44</sup> The latest recommendations on screening for seven cancers revised in 2016 can be found at: http://www.chp.gov.hk/en/content/9/25/31932.html

<sup>-</sup>http://www.chp.gov.hk/en/sas6/101/110/106.html

<sup>-</sup>http://www.fhs.gov.hk/english/main\_ser/child\_health/child\_health\_recommend.html

<sup>-</sup>http://www.dh.gov.hk/english/press/2011/110722-3.html



local population, the two Scientific Committees conduct ongoing review of emerging scientific evidence and will make recommendations most suited to the local context.

### Primary Care Development Strategy

- In 2010, the Food and Health Bureau (FHB) issued the "Primary Care Development in Hong Kong Strategy Document", which paved the way for the publication of four landmark reference frameworks<sup>46</sup> for preventive care in primary care settings, to support the tackling of NCD through primary care. The reference frameworks aim to:-
  - (a) facilitate the provision of continuing, comprehensive and evidence-based care in the community;
  - (b) empower patients and their carers; and
  - (c) raise public awareness of the importance of proper prevention and management of chronic diseases.

#### 2) Existing actions/interventions/programmes/policies

- Under the SC, three action plans targeting diet and physical activity, alcohol harms and injury prevention were published in 2010, 2011 and 2015 respectively, under which multisectoral actions have been/will continue to be implemented and stepped up.
- Grounded on CEWG's recommendations on cervical cancer screening, DH launched the territory-wide Cervical Screening Programme (CSP) in March 2004, in collaboration with healthcare professionals across sectors, to facilitate and encourage women aged 25 to 64 who ever had sex to receive regular cervical cancer screening by cytology every three years after two consecutive normal screens. Over 560 000 eligible women have participated in the programme as of 31 December 2017.

<sup>&</sup>lt;sup>46</sup> Reference frameworks include:

<sup>-</sup> Hong Kong Reference Framework for Diabetes Care in Adults in Primary Care Settings

<sup>-</sup> Hong Kong Reference Framework for Hypertension Care in Adults in Primary Care Settings

<sup>-</sup> Hong Kong Reference Framework for Preventive Care for Children in Primary Care Settings

<sup>-</sup> Hong Kong Reference Framework for Preventive Care for Older Adults in Primary Care Settings



- To strengthen cervical cancer screening services especially among low-income groups, a three-year Community Care Fund (CCF) Pilot Scheme on Subsidised Cervical Cancer Screening and Preventive Education for Eligible Low-income Women was launched on 13 December 2017.
- Taking reference from recommendations of the SCVPD and SCASTI, the CCF provided financial support to a 3-year "Free Cervical Cancer Vaccination Pilot Scheme" to teenage girls from eligible low-income families with effect from October 2016. The scientific committees will keep a close watch on emerging evidence regarding costs and benefits of introducing a population-based HPV vaccination, and make recommendations for Hong Kong accordingly.
- To reduce burden arising from colorectal cancer (CRC), DH launched a 3-year "CRC Screening Pilot Programme" on 28 September 2016 to provide subsidised CRC screening for Hong Kong residents born from 1946 to 1955 by phases.

#### 3) Specific actions to be taken or explored to achieve target by 2025

- Work closely with relevant sectors in society for successful implementation of the multisectoral NCD action plan and monitor action progress against the committed targets using indicators agreed for Hong Kong. (FHB/DH)
- Continue fostering public-private partnerships, engaging civil societies and networking with stakeholders in NCD prevention and control locally and abroad. (FHB/DH)
- Strengthen NCD surveillance by the following means:-
  - Keep track of population NCD status and key behavioural (e.g. smoking, alcohol drinking, physical inactivity, unhealthy diet, salt intake) and biomedical (e.g. diabetes and obesity, raised blood pressure, raised total cholesterol, etc.) risks, based on WHO's STEPwise approach;
  - Conduct the second population-based Food Consumption Survey to keep track of the population intake of foods (e.g. salt, fruit and vegetables, oil and fat, etc.) that are associated with diet-related NCD;



- Explore data sharing (e.g. clinical data on diabetes and other NCD) and big data analytics by the Hospital Authority (HA); and
- Enhance surveillance of risk factors for NCD among children and adolescents. (DH/Food and Environmental Hygiene Department)
- Explore the feasibility of implementation of "best buys"<sup>47</sup> and timely implementation of other recommended interventions to reduce NCD risk factors and strengthen health systems to address NCD based on WHO guidance. (All government bureaux/departments)
- Enhance cancer surveillance by strengthening steer and support to the Hong Kong Cancer Registry to produce cancer data of use for policy formulation, policy-driven research, cancer service planning and evaluation of preventive/screening programmes. (FHB/DH/HA)
- Further promote awareness and uptake of cervical cancer screening by eligible women through stepping up publicity and community actions especially for under-screened groups. (FHB/DH)
- Provide subsidised CRC screening to average-risk population aged 50 to 75 as recommended by the CEWG. (DH)
- Keep abreast with emerging evidence on prevention and screening of cancers and other NCD of public health importance. (DH)
- In view of the fact that green living promotion (such as commuting by walking and cycling; eating greener with more seasonal fruits and local vegetable products but less meat; drinking water in own bottle in place of processed beverages) can yield co-benefits for other important issues (e.g. energy saving, cleaner air and addressing climate change) while contributing to NCD prevention and control, FHB/DH will broaden the current partnership base by working with other government bureaux/departments and non-health sectors (such as city development, urban planning, transport and environment) in promotion of healthy living

<sup>&</sup>lt;sup>47</sup> According to the updated Appendix 3 of the WHO Global NCD Action Plan 2013-2020, "best buys" are interventions that are considered to be the most cost-effective and feasible for implementation, for which the WHO CHOICE analysis found an average cost-effectiveness ratio of ≤ I\$100/DALY averted in low- and lower middle-income countries.

<sup>(</sup>Source: http://apps.who.int/iris/bitstream/10665/259232/1/WHO-NMH-NVI-17.9-eng.pdf)



by advocating for and promoting multiple co-benefits that can be gained in promoting healthy eating and physical activities. (Development Bureau/Planning Department, Environment Bureau/Environmental Protection Department, FHB/DH and Transport and Housing Bureau/Transport Department).

## E DEFINITIONS AND SPECIFICATIONS OF LOCAL INDICATORS

<u>*Key indicators*</u> (derived from the WHO's  $GMF^{48}$ )

Indicator (1): Unconditional probability of dying between ages of 30 and 70 from four non-communicable diseases (4 NCD), namely cardiovascular diseases, cancers, diabetes or chronic respiratory diseases denoted by  $_{40}q_{30}$ )

- Monitoring frequency: annual
- Source: Database of registered death records maintained by the Department of Health

Indicator (2): Cancer incidence and mortality, by type of cancer per 100 000 population breakdown by age and sex

- Monitoring frequency: annual
- Sources: Hong Kong Cancer Registry, Hospital Authority (for cancer incidence) and database of registered death records maintained by the Department of Health (for cancer mortality)

Indicator (20): Access to palliative care assessed by morphine-equivalent consumption of strong opioid analgesics (excluding methadone) per death from cancer

- Monitoring frequency: annual
- Source: Drug Office, Department of Health
- Morphine-equivalent (Meq) volumes are estimated by: (1\*morphine) + (83.3\*fentanyl) +(5\*hydromorphone) +(1.33\*oxycodone) +(0.25\*pethidine)

<sup>&</sup>lt;sup>48</sup> Detailed definitions and specifications of all indicators set out under the WHO' GMF are available at: http://www.who.int/nmh/ncd-tools/indicators/GMF\_Indicator\_Definitions\_Version\_NOV2014.pdf



Indicator (22): Availability of vaccines against human papillomavirus (HPV) as part of a national immunisation schedule

- Monitoring frequency: annual
- Source: Department of Health

Indicator (24): Vaccination coverage of hepatitis B vaccine measured by proportion of children who received three doses of hepatitis B vaccine (HepB3) and the timeliness of vaccination (as reflected by median and interquartile range) for HepB3 among preschool children

- Monitoring frequency: every 2-3 years
- Source: Immunisation Survey, Department of Health

Indicator (25): Proportion of women between the ages of 30 and 49 screened for cervical cancer at least once

- Monitoring frequency: every 2 years
- Source: Population Health Survey / Health Behaviour Survey, Department of Health
- Definition of "cervical cancer screening" is: cervical smear test performed on women with no symptom prior to the test<sup>49</sup>

<sup>&</sup>lt;sup>49</sup> According to WHO's definition under the GMF, apart from pap smear, cervical cancer screening methods can also be visual inspection with acetic acid/vinegar (VIA) and HPV test.



# **TARGET 2** Reduce harmful use of alcohol



## A PREAMBLE

Alcohol use is a component cause of more than 200 disease and injury conditions, including heart diseases, cancers, liver diseases, a range of mental and behavioural disorders, and other non-communicable diseases (NCD). Alcohol use accounts for considerable health-care resource use, personal social suffering, morbidity, death and consequences. Reducing alcohol-attributable disease burden is a global public health priority as affirmed by the World Health Organization (WHO)'s "Global Strategy to Reduce the Harmful Use of Alcohol"50. Globally, alcohol is estimated to be the seventh-leading risk factor in 2016 in both DALYs (disability-adjusted life years) (4.2%) and deaths  $(5.2\%)^{51}$ . Both total consumption of alcohol and drinking patterns such as heavy episodic drinking contribute to alcohol-related harm. The risk of most alcohol-attributable health conditions is correlated with the overall levels of alcohol consumption with no evidence of a threshold effect for cancers and hypertension 51,52. There is simply no safe drinking level.

## **B** LOCAL SITUATION

Below provides a snapshot of local situation regarding Indicators (3), (4a), (4b) and (5) derived from the WHO's global monitoring framework (GMF) and Indicators (S2) to (S3) of local relevance on alcohol consumption. Detailed definitions, specifications and data sources of these key/supplementary indicators are provided in **Section E**.

<sup>&</sup>lt;sup>50</sup> Global strategy to reduce harmful use of alcohol. Geneva: World Health Organization, 2010. Available at: http://www.who.int/substance\_abuse/activities/gsrhua/en/

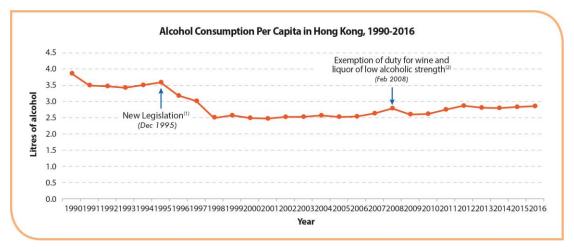
<sup>&</sup>lt;sup>51</sup> Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet 2017; 390: 1345–422.

 <sup>&</sup>lt;sup>52</sup> Rehm J et al. The relation between different dimensions of alcohol consumption and burden of disease - an overview. Addiction, 2010, 105(5).817-843.



#### Indicator (3): Harmful use of alcohol: adult per capita consumption

The estimated total alcohol consumption per capita (aged 15+ years) fell from 3.87 litres in 1990 to 2.62 litres in 2010 but gradually increased to 2.86 litres in 2016. The chart below shows the estimated alcohol consumption per capita (aged 15+ years) over the period 1990-2016.



#### Notes:

\*Alcohol consumption per capita is used for monitoring the trend and for international comparison of alcohol consumption at the population level, but may not be able to fully reflect the actual drinking amount in local population because the accuracy of the figure may be affected by many factors, such as stockpiling and tourist consumption, etc

- (1) Legislation to combat drink driving in Hong Kong was first introduced in December 1995
- (2) The exemption of duty for wine and liquor with an alcoholic strength of not more than 30% has been implemented since February 2008
- Sources: Census and Statistics Department, Customs and Excise Department and company reports of local beer manufacturers

## Indicator (4a): Harmful use of alcohol: heavy episodic drinking among adolescents

During the 2015/16 school year, the proportion of students who had binge drinking at least monthly was 1.0%. The corresponding figures for primary and secondary school students were 0.8% and 1.2% respectively.

**Indicator (4b): Harmful use of alcohol: heavy episodic drinking among adults** According to the Population Health Survey (PHS) 2014/15, the age-standardised prevalence of binge drinking on at least one occasion monthly among persons aged 18+ years was 2.4% (Crude rate: 2.3%).



Indicator (5): Harmful use of alcohol: alcohol-related morbidity and mortality Results of the PHS 2014/15 showed that the proportion of persons aged 15+ years who had an Alcohol Use Disorders Identification Test (AUDIT) score of 16 or above, indicating harmful drinking or probable alcohol dependence, was 0.4%.

## Indicator (S1): Prevalence of ever drinking, 12-month drinking and 30-day drinking among young people

The prevalence of ever drinking, 12-month drinking and 30-day drinking among primary 4-6, secondary 1-6 and post-secondary students decreased from 61.4%, 43.4% and 23.2% in 2008/09 to 56.2%, 41.3% and 20.2% in 2014/15 respectively. The table below shows the prevalence of alcohol use by education level. It is worth noting that while ever drinking, 12-month drinking and 30-day drinking rates for primary 4-6 and secondary 1-6 students showed a downward trend between 2008/09 and 2014/15, corresponding rates for post-secondary students either did not fall or showed a rising trend.

School year	2008/09	2011/12	2014/15		
	Ever drinking (%)				
Primary 4-6	40.1	28.3	26.0		
Secondary	64.9	59.0	56.8		
Post-secondary	78.6	77.7	78.7		
Overall	61.4	56.0	56.2		
	12-month drinking (%)				
Primary 4-6	20.9	14.5	13.4		
Secondary	46.1	42.6	39.2		
Post-secondary	64.6	65.7	67.1		
Overall	43.4	41.0	41.3		
	30-day drinking (%)				
Primary 4-6	10.1	4.6	3.9		
Secondary	24.2	18.7	17.7		
Post-secondary	37.5	33.1	37.6		
Overall	23.2	18.4	20.2		

#### Prevalence of alcohol use among primary 4-6, secondary 1-6 and post-secondary students in 2008/09, 2011/12 and 2014/15

Source: Survey of Drug Use among Students, Narcotics Division of Security Bureau



Indicator (S2) and Indicator (S3): Proportion of adolescents reported having the first sip (S2) or starting a monthly drinking habit (S3) at age below 16 years

Findings on the proportions of adolescents reported having the first sip at age below 16 years and starting a monthly drinking habit at age below 16 years will be available from the School-based Tobacco Survey among Students conducted from 2018/19 onwards.

## C LOCAL TARGET

At least 10% relative reduction in the prevalence of binge drinking and harmful use of alcohol (harmful drinking/alcohol dependence) among adults and in the prevalence of drinking among youth by 2025<sup>53</sup>.

## D ACTIONS TO ACHIEVE TARGET

## 1) Background of Government initiatives to reduce alcohol-related harm

 Reducing alcohol-related harm has been accorded primary importance in the prevention and control of NCD in Hong Kong. To this end, a Working Group on Alcohol and Health (WGAH) was formed in June 2009 under the Steering Committee on Prevention and Control of NCD chaired by the Secretary for Food and Health. The WGAH published the "Action Plan to Reduce Alcohol-related Harm in Hong Kong" in October 2011, which set out 5 priority areas, 10 recommendations and 17 specific actions to reduce alcohol-related harm<sup>54</sup>, including some of the "best buys"<sup>55</sup> and other recommended interventions identified by the WHO in the "Global Strategy to Reduce the Harmful Use of Alcohol". The action plan has been fully implemented. Many of the action items have become regular

(Source: http://apps.who.int/iris/bitstream/10665/259232/1/WHO-NMH-NVI-17.9-eng.pdf)

<sup>&</sup>lt;sup>53</sup> The WHO sets a voluntary global target of 'at least 10% relative reduction in the harmful use of alcohol by 2025, as appropriate, within the national context'.

<sup>&</sup>lt;sup>54</sup> More details about the action plan is available at: https://www.change4health.gov.hk/en/strategic\_framework/structure/working\_group\_on\_ah/inde x.html

<sup>&</sup>lt;sup>55</sup> According to the updated Appendix 3 of the WHO Global NCD Action Plan 2013-2020, "best buys" are interventions that are considered to be the most cost-effective and feasible for implementation, for which the WHO CHOICE analysis found an average cost-effectiveness ratio of ≤ I\$100/DALY averted in low- and lower middle-income countries.



features of the Government's NCD response or have inspired further initiatives tailored to the changing social and environmental circumstances.

#### 2) Existing actions/interventions/programmes/policies

- The Department of Health (DH) has carried out public education regarding alcohol-related harm, in particular among young people. To step up educational efforts to combat underage drinking, DH launched a territory-wide health campaign entitled "Young and Alcohol Free" campaign in late 2016, with young people as the primary target, together with their parents, teachers and caregivers, working through parent groups, schools, healthcare professionals and relevant government bureaux/departments using a variety of means and channels. Examples are printed materials, telephone education hotline, website, electronic publications, announcements in the public interest, game booths, school-based curriculum teaching, competitions and workshops, public health talks, community events, media interviews and social media promotion.
- In late 2017, DH launched a public educational drive entitled "Alcohol Fails" campaign, targeting at the general public and working with healthcare professionals. The campaign aims to provide up-to-date evidence on alcohol-related harm; raise public awareness of the importance of making informed choices about drinking; dissociate alcohol drinking from healthy ways of living, namely exercising and socialising; personal skills to recognise and slash at-risk drinking patterns; and foster partnerships with healthcare professionals, community groups, media, etc., to build environments that are supportive of an alcohol-free lifestyle.
- At present, resources allocated for provision of services catering to the need of at-risk drinkers and people with alcohol dependence are considered not adequate. For example, a few psychiatric departments in Hospital Authority provide alcohol problem clinics at a level similar to the Tuen Mun Alcoholic Problem Clinic. Outside the public sector, one non-governmental organisation (NGO), the Tung Wah Group of Hospitals Integrated Center for Addition Prevention and Treatment and "Stay Sober Stay Free" Alcohol Abuse Prevention and Treatment Service, makes up most of the limited clinical and social support services for people with



alcohol-related problems.

- 3) Specific actions/interventions/programmes/polices to be introduced, enhanced or explored to achieve target by 2025
- Impose a statutory regulatory regime to prohibit commercial sale and supply of intoxicating liquor to minors, in addition to the prohibition of minors from drinking alcohol on licensed premises as laid down in the Dutiable Commodities (Liquor) Regulations (Cap. 109B). The enacted regulation to cover all forms of commercial sale and supply of alcohol, including internet sale will commence in the second half of 2018. (Food and Health Bureau (FHB)/DH)
- Encourage primary care professionals to carry out alcohol screening and brief interventions (A-SBI) to identify and manage at-risk drinkers as an integral part of practice, by promulgating the A-SBI guidelines and related health education materials developed under Actions 14 and 15 of the *"Action Plan to Reduce Alcohol-related Harm in Hong Kong"* to primary care professionals. (DH)
- Engage advocates and community partners in anti-alcohol education targeting general public to strengthen public literacy about harmful effects of drinking especially on youth, making alcohol-free choices part of healthy living. (DH)
- Strengthen treatment services for people with alcohol problems or supporting people who want to cut down or stop drinking, e.g. the Government to make reference to the model of smoking cessation services to allocate resources to fund local NGOs to provide free or heavily subsidised alcohol treatment services for persons with harmful drinking. (FHB/DH)
- Keep in view and explore the feasibility and timely implementation of "best buys"<sup>56</sup> or other recommended interventions/policies to reduce alcohol-related harm based on WHO guidance. (All government

<sup>&</sup>lt;sup>56</sup> According to the updated Appendix 3 of the WHO Global NCD Action Plan 2013-2020, "best buys" are interventions that are considered to be the most cost-effective and feasible for implementation, for which the WHO Choice analysis found an average cost-effectiveness ratio of  $\leq$  I\$100/DALY averted in low- and lower middle-income countries.

<sup>(</sup>Source: http://apps.who.int/iris/bitstream/10665/259232/1/WHO-NMH-NVI-17.9-eng.pdf)



bureaux/departments)

#### E DEFINITIONS AND SPECIFICATIONS OF LOCAL INDICATORS

<u>*Key indicators*</u> (derived from the WHO's  $GMF^{57}$ )

Indicator (3): Estimated total alcohol consumption per capita (aged 15+ years) within a calendar year in litres of pure alcohol

- Monitoring frequency: annual
- Sources: deduction from recorded data of (i) Census and Statistics Department; (ii) Customs and Excise Department; and (iii) company reports of local beer manufacturers

Indicator (4a): Prevalence of binge drinking at least monthly among adolescents

- Monitoring frequency: every 1 or 2 years depending on source
- Sources:
  - Health Assessment Questionnaire (HAQ) self-administered by students (Primary 4 and 6, Secondary 2, 4 and 6) attending Student Health Service Centres, Department of Health every year
  - (2) School-based Tobacco Survey among Students, Food and Health Bureau every 2 years
- Definitions: (i) "binge drinking" is defined as having 5 or more cans/glasses of alcoholic drinks in total (approximately 60 grams of pure alcohol) within a few hours; (ii) "adolescents" refer to those aged between 10-19 years, roughly corresponding to the primary 4-6 and secondary 1-6 students

### Indicator (4b): Age-standardised prevalence of binge drinking at least monthly among adults (aged 18+ years)

- Monitoring frequency: every 2 years
- Source: Population Health Survey / Health Behaviour Survey, Department

<sup>&</sup>lt;sup>57</sup> The WHO recommends 3 indicators for monitoring, namely:

<sup>-</sup>Indicator (3): Total (recorded and unrecorded) alcohol per capita (aged 15+ years) consumption within a calendar year in litres of pure alcohol (Expected frequency: annual)

<sup>-</sup>Indicator (4): Age-standardised prevalence of heavy episodic drinking (defined as those who report drinking 6 (60 g) or more standard drinks on a single occasion) among adolescents and adults (Expected frequency: every 5 years)

<sup>-</sup>Indicator (5): Alcohol-related morbidity and mortality among adolescents and adults (aged 15+ years) (Expected frequency: every 5 years)



of Health

 Definition: "binge drinking" is defined as drinking at least 5 cans of beers, 5 glasses of table wine or 5 pegs of spirits (approximately 60 grams of pure alcohol) on a single occasion

Indicator (5): Proportion of persons (aged 15+ years) who had an Alcohol Use Disorders Identification Test (AUDIT) score of 16 or above, which indicates harmful drinking or probable alcohol dependence

- Monitoring frequency: every 2 years
- Source: Population Health Survey / Health Behaviour Survey, Department of Health

### <u>Supplementary indicators related to youth drinking</u> (of local relevance) Indicator (S1): Prevalence of ever drinking, 12-month drinking and 30-day drinking among young people

- Monitoring frequency: every 2 or 4 years depending on source
- Sources:
  - (1) Survey of Drug Use among Students, Narcotics Division of Security Bureau every 4 years
  - (2) School-based Tobacco Survey among Students, Food and Health Bureau every 2 years
- Definition: "young people" refers to those aged between 10-24 years<sup>58</sup>, roughly corresponding to primary 4-6, secondary 1-6 and post-secondary students

Indicator (S2): Proportion of adolescents reported having the first sip at age below 16 years

- Monitoring frequency: every 2 years
- Source: School-based Tobacco Survey among Students, Food and Health Bureau
- Definition: "adolescents" refers to those aged between 10-19 years, roughly corresponding to primary 4-6 and secondary 1-6 students

<sup>&</sup>lt;sup>58</sup> The WHO defines 'adolescents' as those people between 10 and 19 years of age, while the United Nations defines 'youth' as 15–24 years. 'Young people' (10–24 years) is a term used by the WHO to combine adolescents and youth. (Source:

http://apps.who.int/adolescent/second-decade/section2/page1/recognizing-adolescence.html)



Indicator (S3): Proportion of adolescents reported starting a monthly drinking habit at age below 16 years

- Monitoring frequency: every 2 years
- Source: School-based Tobacco Survey among Students, Food and Health Bureau
  - Definition: "adolescents" refers to those aged between 10-19 years, roughly corresponding to primary 4-6 and secondary 1-6 students



## **TARGET 3** Reduce physical inactivity



### A PREAMBLE

Physical inactivity is one of the leading behavioural risk factors for non-communicable diseases (NCD). According to the "Global Recommendations on Physical Activity for Health" published by the World Health Organization (WHO)<sup>59</sup>, physical inactivity is estimated to be the principal cause for approximately 21-25% of breast and colon cancer burden, 27% of diabetes and approximately 30% of ischaemic heart disease burden. Maintaining high amounts and intensities of physical activity starting from childhood and continuing into adult years will bring many health benefits, including increased physical fitness (both cardiorespiratory fitness and muscular strength), reduced body fatness, favourable cardiovascular and metabolic disease risk profiles, enhanced bone health and reduced symptoms of depression. Physical activity promotes positive self-esteem, builds resilience, and promotes teamwork and social interaction. Children (aged 5+) and adolescents (up to 17 years of age) are encouraged to have at least 60 minutes of moderate-to-vigorous-intensity physical activity every day and adults should engage in at least 150 minutes of moderate-intensity physical activity per week.

### **B** LOCAL SITUATION

Below provides a snapshot of local situation regarding Indicators (6) and (7) on physical inactivity, derived from the WHO's global monitoring framework (GMF). Detailed definitions, specifications and data sources of these key indicators are provided in **Section E**.

### Indicator (6): Physical inactivity in adolescents

According to the data collected by Health Assessment Questionnaire (HAQ) of the Student Health Service Centres in 2015/16 school year, the proportion of students who were insufficiently physically active was 93%. The corresponding figures for primary and secondary students were 91% and 96% respectively.

<sup>&</sup>lt;sup>59</sup> Global recommendations on physical activity for health. Geneva: World Health Organization, 2010. Available at: http://www.who.int/dietphysicalactivity/publications/9789241599979/en/



#### Indicator (7): Physical inactivity in adults

According to the Population Health Survey (PHS) 2014/15, the age-standardised prevalence of insufficiently physically active persons aged 18+ years was 12.4% (Crude rate: 13.0%). In the PHS 2014/15, physical activity among adults, as measured by the Global Physical Activity Questionnaire (GPAQ), was made up of three components, namely work-related activity, recreational activity and physical activity during For many adults, the last component is the major contributor of commuting. health-related physical activity, largely as a result of city planning and transport design.

### C LOCAL TARGETS

A 10% relative reduction in the prevalence of insufficient physical activity among adolescents and adults by 2025<sup>60</sup>

### D ACTIONS TO ACHIEVE TARGET

Regular physical activity is not only associated with improved physical, mental and social well-being. It also contributes to sustainable development in the community (such as energy saving, cleaner air and alleviating the effects of climate change). The creation of an active society requires a multisectoral approach with collaboration of health and non-health sectors. A combination of focused media and educational interventions combined with environmental modification holds the most promise.

### 1) Background of Government initiatives to promote active lifestyle

 Promoting physical activity participation is considered a priority action area in the prevention and control of NCD in Hong Kong. To this end, a Working Group on Diet and Physical Activity (WGDPA) was formed in December 2008 under the Steering Committee on Prevention and Control of NCD chaired by the Secretary for Food and Health. The "Action Plan to Promote Diet and Physical Activity Participation in Hong Kong" launched in September 2010 by the WGDPA provided a platform for intersectoral actions to integrate physical activity into people's lifestyles,

<sup>&</sup>lt;sup>60</sup> The WHO sets a voluntary global target of '10% relative reduction in prevalence of insufficient physical activity by 2025'.



knowingly or not<sup>61</sup>.

- The Sports Commission, chaired by the Secretary for Home Affairs, was established on 1 January 2005 to advise the Government on policies, strategies and implementation framework for sports development in Hong Kong. The Commission is underpinned by three Committees to help develop and promote sports participation in the community, elite sport and major sports events in Hong Kong. Among the three committees, the Community Sports Committee advises on wider participation in sports through partnership with different sectors of the community, and on funding priorities for supporting community sports programme and initiatives. The Leisure and Cultural Services Department (LCSD) is responsible for development and management of recreation and sports facilities, as well as for organisation of a wide range of activities in order to promote recreation and sports at all levels in the community<sup>62,63</sup>.
- The Government is proposing to (i) incorporate "active design" considerations under the "Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030" (Hong Kong 2030+)<sup>64</sup> to promote walking, cycling, exercising and recreational pursuits, by improving accessibility to nature and outdoor leisure pursuits, enhancing the connectivity of the city, creating desirable conditions for walking and cycling, reinventing our public spaces for the enjoyment of all, and adopting an enhanced standard for public open space provision; and (ii) to promote walkability under the theme "Walk-in-HK" with a view to fostering a pedestrian-friendly environment and encouraging people to walk more, etc<sup>65,66</sup>.

https://www.change4health.gov.hk/en/strategic\_framework/structure/working\_group\_dpa/index.html Source: http://www.sportscommission.hk/eng/index.htm Source:

<sup>&</sup>lt;sup>61</sup> More details about the action plan is available at:

http://www.hab.gov.hk/file\_manager/en/documents/policy\_responsibilities/msec\_sport4\_2005sc3 .pdf

 <sup>&</sup>lt;sup>64</sup> Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030. Hong Kong SAR: Development Bureau and Planning Department, 2016. Available at: http://www.hk2030plus.hk/index.htm

<sup>&</sup>lt;sup>65</sup> The Hong Kong Special Administrative Region of the People's Republic of China: The Chief Executive's 2017 Policy Address: Policy Agenda. Hong Kong SAR, 2017. Available at: https://www.policyaddress.gov.hk/2017/eng/pdf/Agenda.pdf

<sup>&</sup>lt;sup>66</sup> Hong Kong's Climate Action Plan 2030+. Hong Kong SAR: Environmental Bureau, 2017. Available at: https://www.climateready.gov.hk/files/report/en/HK\_Climate\_Action\_Plan\_2030+\_booklet\_En.pdf



To promote cycling as a zero-carbon mode for leisure or short-distance travel in new towns or new development areas (NDAs), the Government has been building in phases a tailor-made recreational cycle-track network in the New Territories to provide a continuous cycle track since 2009. Under the Government's policy of fostering a bicycle-friendly environment in new towns or NDAs, the Transport Department (TD) has commissioned a consultancy study and drawn up a list of about 900 sites in new towns for implementing improvement measures at cycle tracks. The first batch of improvement works has started in 2016 in phases, with a target for completion in two years<sup>66</sup>.

### 2) Existing actions/interventions/programmes/policies

- With scheduled implementation of the "Action Plan to Promote Diet and Physical Activity Participation in Hong Kong", many interventions have become regular features of the Government's NCD response or have resulted in further initiatives such as "StartSmart@school.hk" Campaign, "I'm so Smart" Community Health Promotion Programme, "Sports for All" promotional activities, ongoing review and enhancement of recreation, sports and leisure facilities and programmes, review of booking arrangements and venue charges, etc.
- Through managing various sports and leisure facilities; organising and promoting a wide variety of sports and recreational activities and promotional campaigns; and working with other government departments (including the Department of Health), sports associations and community partners, LCSD has been arousing public awareness on the importance of having regular exercises in pursuit of healthy lifestyle; and encouraging people of all age groups to participate actively in sports activities<sup>67,68</sup>. These activities include diversified sports training courses, recreation programmes and district competitions for people of different age groups and physical abilities. Besides, programmes targeting specific groups are also designed for the participation of parents and their children, the middle-aged, working people and special groups (e.g. the elderly and persons with disabilities). Furthermore, major

<sup>&</sup>lt;sup>67</sup> Source:

http://www.hab.gov.hk/file\_manager/en/documents/policy\_responsibilities/msec\_sport4\_2005sc3.pdf <sup>68</sup> Source: http://www.lcsd.gov.hk/en/index.html



campaigns/events such as "Health Exercise for All Campaign" and "Sport for All Day" are organised to encourage more members of the public to take part in recreation and sports activities.

### 3) Specific actions/interventions/programmes/polices to be introduced, enhanced or explored to achieve target by 2025

For promoting physical activity participation among children and adolescents:-

- Encourage students (for children aged 5-17) to engage in physical activities for at least 60 minutes of moderate-to-vigorous-intensity (MVPA60) physical activities daily in accordance with the recommendation of WHO, through the Physical Education (PE) Key Learning Area Curriculum Guide. The Education Bureau (EDB) will spearhead a pilot project of 20 schools in 2017/18 school year to gather and consolidate field experience of creating an active school through a Support from community partners will be whole-school approach. enlisted. (EDB, DH and other health promoting partners)
- Scale up the WHO Health Promoting School programme to foster a self-sustaining health-enhancing learning environment in a greater number of schools, based on the experience gained from the Healthy Schools Project spearheaded by the Chinese University of Hong Kong. (DH and EDB)
- Collaborate with stakeholder groups which may contribute positively to an active learning culture in schools and educational institutions. Examples are the Active Schools Project spearheaded by the Hong Kong Elite Athletes Association; the School Physical Fitness Award Scheme jointly run with the Hong Kong Child Health Foundation, the Physical Fitness Association of Hong Kong China and EDB; the School Sports Programme and related sub-programmes led by LCSD, the Physical Activities Development Model for Primary Schools Project funded by the Hong Kong Jockey Club Charities Trust and the Jump Rope for Heart Programme by the Hong Kong College of Cardiology. (EDB, DH and Home Affairs Bureau (HAB)/LCSD)



- Promote healthy use of internet and electronic screen products for children, adolescents, parents and teachers to avoid excessive screen time and reduce physical inactivity. (DH)
- Increase physical activities of the members of public, including students, parents and teachers and promote a sporting culture in schools through "Opening up School Facilities for Promotion of Sports Development Scheme", which encourages more sport activities to be organised using school facilities. (EDB and HAB)
- Recommend to the Quality Education Fund Steering Committee to continue including "Healthy Lifestyle and Positive Development of Students" as a priority theme. (EDB)
- Adopt a more comprehensive approach to cover the overall benefits of physical activities on mental health and academic performance, etc. in future communication strategies. (DH and EDB)

For promoting physical activity participation among adults:-

- Provide new/enhance existing recreational and sports facilities. (HAB/LCSD)
- Provide public swimming pools including heated pools to allow people to enjoy swimming throughout the year. (HAB/LCSD)
- Provide new/enhance existing recreational and sports programmes. (HAB/LCSD)
- Promote Fitness Walking by organising briefing sessions on an ongoing basis and encourage the use of a Fitness Walking App for acquiring more information and self-practice. (LCSD)
- Broaden the current partnership base by working with other government bureaux/departments and non-health sectors (such as city development, urban planning and urban design, transport and environment) in the development of enabling environment and promotion of healthy living by



advocating for and promoting multiple co-benefits that can be gained while promoting physical activities to achieve energy saving, cleaner air and addressing climate change. Examples are "Walk-in-HK" initiative by the Transport and Housing Bureau (THB), "Hong Kong 2030+" initiative especially reinventing the public realm and the promotion of active design by the Development Bureau (DEVB) and the Planning Department (PlanD), health and wellbeing promotion among building users by Green Building Council. (DEVB/PlanD/Drainage Services Department, FHB/DH, Environment Bureau/Environmental Protection Department and THB/TD)

### E DEFINITIONS AND SPECIFICATIONS OF LOCAL INDICATORS

### <u>*Key indicators*</u> (derived from the WHO's GMF<sup>69</sup>)

### Indicator (6): Prevalence of insufficiently physically active adolescents

- Monitoring frequency: annual
- Source: Health Assessment Questionnaire (HAQ) self-administered by students (Primary 4 and 6, Secondary 2, 4 and 6) attending Student Health Service Centres, Department of Health
- Definitions: (i) "insufficiently physically active" is defined as not doing physical activities (i.e. any exercise and activity) for at least 60 minutes in total every day in the past 7 days that made the students breathe harder and their heartbeats faster than usual<sup>70</sup>; (ii) adolescents are referring to those aged between 10-19 years, roughly corresponding to primary 4-6 and secondary 1-6 students

<sup>&</sup>lt;sup>9</sup> The WHO recommends 2 indicators for monitoring, namely:

<sup>-</sup>Indicator (6): Prevalence of insufficiently physical active adolescents (aged 10-19 years) defined as less than 60 minutes of moderate to vigorous intensity activity daily (Expected frequency: every 5 years)

<sup>-</sup>Indicator (7): Age-standardised prevalence of insufficiently physical active persons aged 18+ years (defined as less than 150 minutes of moderate-intensity activity per week, or equivalent)

<sup>&</sup>lt;sup>70</sup> The relevant question in HAQ is: "During the past 7 days, on how many days did you do physical activities (i.e. any exercise and activity) for AT LEAST 60 minutes in total that made you breathe harder and your heartbeats faster than usual?"



### Indicator (7): Age-standardised prevalence of insufficiently physically active persons aged 18+ years

- Monitoring frequency: every 2 years
- Source: Population Health Survey / Health Behaviour Survey, Department of Health
- Definition: "insufficiently physically active" is defined as less than 150 minutes of moderate-intensity activity per week, or equivalent



## **TARGET 4** Reduce salt intake



### A PREAMBLE

As stated in the World Health Organization (WHO)'s "Guideline: Sodium intake for adults and children", high salt consumption contributes to raised blood pressure and increases the risk of heart disease and stroke. The WHO recommends a salt (sodium chloride) intake of less than 5 grams (approximately 2 grams of sodium) per adult person per day for the prevention of cardiovascular diseases<sup>71</sup>. Also, the WHO sets a voluntary global target of a 30% relative reduction in mean population daily intake of salt/sodium over a period of 15 years by 2025.

A 30% relative reduction in mean population daily intake of salt/sodium by 2025 is a huge challenge to Hong Kong people and the Hong Kong Special Administrative Region Government alike. That said, Hong Kong will do its best to bring about a reduction in the salt intake of its population.

### **B** LOCAL SITUATION

Below provides a snapshot of local situation regarding Indicator (8) on salt intake, derived from the WHO's global monitoring framework (GMF). Detailed definition, specification and data source of this key indicator are provided in Section E.

### Indicator (8): Salt intake

Various academic studies which were not commissioned by the Government and were conducted around 1995 and 2011 respectively indicated that the average daily sodium intake of adult population in Hong Kong then could be as high as 10 grams<sup>72</sup>.

According to the Department of Health (DH)'s Population Health Survey 2014/15 which for the first time studied the mean daily salt intake of people in Hong Kong based on sodium excretion measured from 24-hour urine collection, the age-standardised mean intake of salt among persons aged 18-84 years was 8.8 grams per day (Crude mean: 8.8 grams). The

<sup>&</sup>lt;sup>71</sup> For children, the recommended maximum level of intake of 2 g/day sodium in adults should be adjusted downwards based on the energy requirements of children relative to those of adults. (Source: http://apps.who.int/iris/bitstream/10665/77985/1/9789241504836\_eng.pdf)

<sup>&</sup>lt;sup>72</sup> Woo J. Nutrition and health issues in the general Hong Kong population. Hong Kong Med J 1998;4:383-8.



corresponding figures for male and female were 9.8 grams and 8.0 grams (Crude mean: 9.8 grams for male, 7.9 grams for female) respectively.

### C LOCAL TARGET

A 30% relative reduction in mean population daily intake of salt/sodium by  $2025^{73}$ 

### D ACTIONS TO ACHIEVE TARGET

### 1) Background of Government initiatives to promote reduction of salt in food

- The Government has been promoting healthy diet all along, which is fundamental to reducing the salt intake of our population. To emphasise the importance of the task of reducing the salt (and sugar) intake of our population, the Government set up an advisory body - the Committee on Reduction of Salt and Sugar in Food (CRSS) - in March 2015 to make recommendations to the Secretary for Food and Health on the policy and work plans to reduce the intake of salt (and sugar) of the population. Also, the Government had appointed various renowned public health experts from the Mainland and overseas to advise on international experiences in promoting the reduction of salt (and sugar).
- It takes time for individuals to change their dietary habits. Having taken into account the circumstances of Hong Kong, both the Government and CRSS are adopting a step-by-step approach in achieving salt reduction. The first and foremost task is to promote a culture of low salt diet. It is imperative that individuals internalise the awareness of the adverse health effect of unhealthy diet into healthy dietary habits and look for less salty food. Also, it is imperative that the food trade sees the business prospects, in addition to social responsibility, for product reformulation, change in recipe and product sourcing to respond to consumers' call for salt reduction.

<sup>&</sup>lt;sup>73</sup> The WHO sets a voluntary global target of '30% relative reduction in mean population intake of salt/sodium by 2025'.



### 2) Existing actions/interventions/programmes/policies

### "Intervention at an early age"

- We believe that children who have picked up healthy dietary habit stand a higher chance of keeping that habit for life. Schools and family play a pivotal role in helping children to develop healthy dietary habit.
- DH has been promoting healthy dietary habits to children and parents through collaboration with pre-primary institutions and primary schools. Key initiatives include:
  - (a) the "StartSmart@school.hk" Campaign which was launched in 2012 to promote healthy eating and physical activity among preschoolers at kindergartens and child care centres. In 2016/17 school year, DH strengthened the emphasis on salt (and sugar) reduction;
  - (b) the "EatSmart@school.hk" Campaign, with particular emphasis on salt (and sugar) reduction since the 2016/17 school year. Primary schools participating in the Campaign develop policies and implement measures on healthy lunches and snacks through home-school co-operation; and
  - (c) the "Salt Reduction Scheme for School Lunches" which was launched in September 2017. As at 1 March 2018, participating school lunch suppliers have committed to provide over 880 sodium-reduced lunch options for about 450 primary schools in the 2017/18 school year, with the average level of sodium reduction being 8%.

#### "Enhancing transparency of information"

- There are a great variety of foods available in the market. Also, restaurants offer all sorts of dishes. It is not easy for consumers to identify low salt (and low sugar) products or relatively healthy dishes. Enhancing the transparency of information will help consumers make a healthier choice. Key initiatives include:
  - (a) the "Salt/Sugar" Label Scheme for Prepackaged Food Products which was launched in October 2017. Prepackaged food products that are in compliance with the definitions of "low salt", "no salt", "low sugar"



and "no sugar" under the Food and Drugs (Composition and Labelling) Regulations (Cap. 132W) may display those eye-catching labels; and

(b) the "Calorie" indication pilot scheme which was launched at the staff canteens of public hospitals since 2016. At present, more than 80 per cent of the staff canteens of public hospitals have indicated the calorie counts of all dishes<sup>74</sup> on their menus.

### "Strengthening publicity and education"

Key initiatives include:

- (a) the Centre for Food Safety (CFS)'s Facebook page on Hong Kong's Action on Salt and Sugars Reduction which features Government's initiatives and activities in reducing salt (and sugar) in food;
- (b) the Food and Health Bureau (FHB)'s HK\$4.5 million funding scheme to district/local community groups to organise activities at the community level, in collaboration with the 18 District Councils in Hong Kong (whose members are returned by popular elections);
- (c) DH's "I'm So Smart" Community Health Promotion Programme which was launched in 2012 to mobilise community partners to promote healthy eating and physical activity in the community;
- (d) TV programmes, radio programmes and youtube videos;
- (e) CFS's joint studies with the Consumer Council on the salt contents of Hong Kong's popular food items;
- (f) DH's "EatSmart@restaurant.hk" Campaign which was launched in 2008 to encourage and assist restaurants to provide dishes with more fruit and vegetables and less oil, salt and sugar. DH launched a free EatSmart Restaurant mobile application in 2015 to facilitate the public to locate the EatSmart Restaurants;

<sup>&</sup>lt;sup>74</sup> Drinks, food products with soups and pop-up dishes are excluded.



- (g) CFS's "Reduce Salt, Sugar, Oil. We Do!" programme which was launched in 2014 calling for food premises to follow CFS's advice on reducing salt and sugar; and
- (h) publicity campaigns in any forms, including competitions for students.
- 3) Specific actions/interventions/programmes/polices to be introduced, enhanced or explored to achieve target by 2025
- "Intervention at an early age", "enhancing transparency of information" and "strengthening publicity and education" are merely the first step of our efforts in reducing salt intake of our people. To bring Hong Kong closer to the voluntary target of a 30% reduction in salt intake, we need the support of the whole community to put belief into practice. This includes cooking and eating healthier at home, at schools, in restaurants, and at all time. Also, we need the support of the catering industry to prepare food with less salt and the food trade in sourcing more low salt products which there are no local production, and product reformulation for locally produced products.
- We have been discussing with the trade on product reformulation to reduce salt in food. Such work involves complicated factors including modification of formulation, production technologies, consumers' receptiveness, market demand and business considerations. This is a longer-term goal which will take more time to achieve concrete results. We will continue to strive for the goal.

Specific actions include:

- Continue to further cultivate a culture of low-salt-and-sugar diet in the community along the three directions of "starting from an early age", "enhancing transparency of information", and "strengthening publicity and education" as the first steps recommended by CRSS. (FHB/DH/Food and Environmental Hygiene Department (FEHD))
- Continue to implement the "Salt Reduction Scheme for School Lunches". The target is to cut down the average sodium level of primary school



lunchbox to not more than 500 milligrams in 10 years by gradually lowering the sodium level of school lunches with an average reduction of 5 to 10% per year. (DH and Education Bureau (EDB))

- Continue to encourage and support preprimary institutions to adopt lower-salt and healthier ways of food preparation for young children. (DH and EDB)
- Step up public education and understanding of salt consumption on health, and provide useful tips to cut down on salt intake while cooking or eating out. (DH/FEHD)
- Encourage supplier-initiated food reformulation to reduce the salt content of food during cooking and in the manufacturing process. (FEHD)

### E DEFINITIONS AND SPECIFICATIONS OF LOCAL INDICATORS

<u>*Key indicator*</u> (derived from the WHO's  $GMF^{75}$ )

Indicator (8): Age-standardised mean intake of salt (sodium chloride) per day in grams among persons aged 18-84 years

- Monitoring frequency: every 4-6 years
- Source: Population Health Survey, Department of Health
- Daily salt intake estimated by 24-hour urinary sodium excretion

<sup>&</sup>lt;sup>75</sup> The WHO recommends an indicator for monitoring, namely: Indicator (8): Age-standardised mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years (Expected frequency: every 5 years)



## **TARGET 5** Reduce tobacco use



### A PREAMBLE

The tobacco epidemic is one of the biggest public health issues. Risks to health from tobacco result from direct consumption of both smokeless and smoked tobacco, and from exposure to second-hand smoke<sup>76</sup>. Tobacco kills people prematurely. On average, tobacco users lose 15 years of life. Up to half of all tobacco users will die of tobacco related causes. Smoking contributes to 14% of all deaths from non-communicale diseases (NCD), including heart diseases, cancers, diabetes and lung disease<sup>77</sup>. Globally, tobacco use and exposure to second hand smoke are estimated to cause more than 7 million deaths each year<sup>78</sup>. There is no proven safe level of tobacco use or of second-hand smoke exposure. All (daily and occasional) users of tobacco are at risk of a variety of poor health outcomes across the life-course, and for NCD in adulthood<sup>79</sup>.

### **B** LOCAL SITUATION

Below provides a snapshot of local situation regarding Indicator (9) derived from the World Health Organization (WHO)'s global monitoring framework (GMF) and a supplementary indicator (S4) of local relevance on tobacco use. Detailed definitions, specifications and data sources of these key/supplementary indicators are provided in **Section E**.

### Indicator (9): Tobacco use in adolescents

Prevalence of current tobacco use among primary 4-6 and secondary 1-6 students aged 10 and above decreased from 2.6% in 2010/11 to 2.1% in 2014/15 (see Table below).

<sup>&</sup>lt;sup>76</sup> Global estimate of the burden of disease from second-hand smoke. Geneva: World Health Organization, 2011. Available at:

http://www.who.int/tobacco/publications/second\_hand/global\_estimate\_burden\_disease/en/

<sup>&</sup>lt;sup>77</sup> World No Tobacco Day 2017Brochure: Tobacco threatens us all. Geneva: World Health Organization, 2017. Available at: http://www.who.int/campaigns/no-tobacco-day/2017/brochure/en/

<sup>&</sup>lt;sup>78</sup> WHO Tobacco fact sheet (Updated March 2018). Available at: http://www.who.int/mediacentre/factsheets/fs339/en/

 <sup>&</sup>lt;sup>79</sup> WHO global report: mortality attributable to tobacco. Geneva: World Health Organization, 2012.
 Available at:

http://www.who.int/tobacco/publications/surveillance/rep\_mortality\_attributable/en/



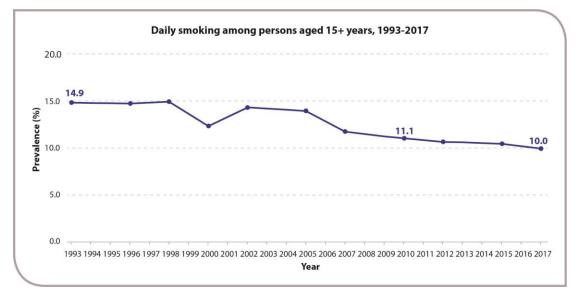
### Current smoking among primary 4 to 6 and secondary 1 to 6 students aged 10 and above in 2010/11, 2012/13 and 2014/15

School year	Proportion of current smokers		
2010/11	2.6%		
2012/13	2.7%		
2014/15	2.1%		

**Note**: Survey estimates with finer age breakdown for 18, 19 and 20+ are not available **Source**: School-based Survey on Smoking among Students, Food and Health Bureau

#### Indicator (S4): Tobacco use in adults

Among persons aged 15+ years, the prevalence of daily cigarette smoking dropped steadily from about 23.3% in 1982 to 10.0% in 2017.



Source: Thematic Household Survey, Census and Statistics Department

### C LOCAL TARGET

Hong Kong currently enjoys a record low smoking prevalence. We have made reference to the WHO's proposed target<sup>80</sup>, and will work towards "a 30% relative reduction in the prevalence of current tobacco use in persons aged 15+ years by 2025 when compared to the baseline prevalence in 2010".

<sup>&</sup>lt;sup>80</sup> The WHO sets a voluntary global target of 'a 30% relative reduction in prevalence of current tobacco use'.



### D ACTIONS TO ACHIEVE TARGET

### 1) Background of Government initiatives to promote reduction of tobacco use

- To protect public health, it is the established policy of the Government to discourage smoking, contain the proliferation of tobacco use and protect the public from exposure to second-hand smoke as far as possible. Hong Kong adopts a progressive and multi-pronged approach comprising legislation, enforcement, publicity, education, smoking cessation and taxation. Moreover, China is a signatory of and has ratified the Framework Convention on Tobacco Control (FCTC) of WHO, the application of which has been extended to Hong Kong since 2006. Our current policy on tobacco control has full regard to the provisions of FCTC.
- Over the past decades, we have been progressively stepping up tobacco control on all fronts, having regard to the expectations and acceptance of our community. At the same time, we have been increasing resources for publicity, education, smoking cessation and enforcement of the tobacco control legislation. The declining trend in smoking prevalence in Hong Kong reflected the effectiveness of our approach in tobacco control and the sustained efforts by the community as a whole.

### 2) Existing actions/interventions/programmes/policies

### Statutory no-smoking areas (NSAs)

 The Government has been taking various measures to strengthen tobacco control through legislation and enforcement since 2006, when the Smoking (Public Health) Ordinance was amended to significantly expand the statutory smoking ban and strengthen other tobacco control regime. Statutory smoking ban now covers all indoor working places and public places as well as many outdoor places. The smoking ban has been further extended to the public transport facilities that meet the criteria specified in the Smoking (Public Health) Ordinance since December 2010. Since end-March 2016, the smoking ban has been further extended to eight bus interchanges at tunnel portal areas.



### <u>Health warning</u>

 Graphic health warnings have appeared on tobacco products since 2007. To further enhance their effectiveness as a deterrent and educate smokers about the health risks associated with smoking, we have worked on the amendment exercise to enlarge graphic health warnings from covering at least 50% to 85% of the two largest surfaces of the packet, increase the number of forms of health warning from six to twelve, and display details of the Quitline. The new requirements have come into operation on 21 December 2017 with another 6 months for adaptation which will end on 20 June 2018.

### <u>Tobacco duty</u>

 WHO's FCTC states that price and tax are effective and important means of reducing tobacco consumption. Tobacco duty increase is long established and part and parcel of our multi-pronged approach to tobacco control. Over the years, tobacco duty has been increased progressively in tandem with the strengthening of overall tobacco control. The duty on tobacco products was last increased by about 41.5% and about 11.7% in 2011 and 2014 respectively to tie in with the Government's tobacco control measures.

### Law enforcement

- In 2017, the Tobacco Control Office (TCO) of the Department of Health (DH) received over 21 340 smoking complaints and enquiries and conducted over 33 150 inspections at different locations. TCO issued 9 711 Fixed Penalty Notice according to the Fixed Penalty (Smoking Offence) Ordinance and 149 summonses. TCO will follow up on every smoking complaint received and arrange for active and more frequent inspections for locations with serious smoking problems.
- To further strengthen enforcement actions to combat smoking offences, a task force has been set up with support from retired disciplinary officers to proactively carry out inspections especially at the locations with serious smoking problems and at odds hours.



#### Cessation service

- Smoking cessation is an integral and indispensable part of the Government's tobacco control policy to complement other tobacco control measures, including taxation. At present, DH and the Hospital Authority provide smoking cessation services to the general public. In addition, DH has been funding local non-governmental organisations (NGOs) and university to provide free smoking cessation services.
- TCO of DH also operates an integrated quitline and channels referrals to public sectors and community-based subvented services, and adopt different approaches like acupuncture, outreach smoking cessation service to workplace, helping ethnic minorities and new immigrants, etc.
- The Primary Care Office (PCO) of DH has launched a Pilot Public-Private Partnership Programme on Smoking Cessation (Pilot SCPPP) to engage private doctors to encourage smoker patients to attempt smoking cessation during consultations. The Pilot SCPPP will last for 2 years with a quota of 450 smokers each year. TCO has arranged training for doctors before enrolment to the programme.

#### Education and promotion

- The Government endeavours to enhance the awareness of the general public on the harmfulness of smoking, to prevent people especially younger people from picking up smoking habit, and to encourage smokers to quit smoking. Our health promotion efforts include general publicity, health education and promotional activities on tobacco control through TV and radio announcements of public interest, internet advertisements, enquiry hotline, health education materials and seminars, etc. DH has also stepped up public education to enhance understanding of the health hazards of e-cigarette use. Additionally, DH also works with NGOs to organise health promotional activities at schools to promote a smoke-free culture.
- In April 2012, TCO was designated by WHO as the Collaborating Centre for Smoking Cessation and Treatment of Tobacco Dependence. The Centre serves as a regional hub to support smoking cessation trainings and programme evaluation in particular helping the Western Pacific Region. In addition, it also coordinates local training activities and engages a



consortium of service providers in Hong Kong as key smoking cessation partners.

 The Hong Kong Council on Smoking and Health (COSH) is a statutory body vested with functions to protect and improve the health of the community by informing and educating the public on smoking and health matters; conducting and coordinating research into the cause, prevention and cure of tobacco dependence; and advising Government, community health organisations or any public body on matters relating to smoking and health. COSH has taken up the role over the past years as an active player and commentator on all issues relating to tobacco control.

### 3) Specific actions/interventions/programmes/polices to be introduced, enhanced or explored to achieve target by 2025

- The smoking ban has been extended to the eight bus interchanges located at tunnel portal areas since 2016. Our evaluation study revealed that the vast majority of respondents agreed that the new smoking ban could protect them from being harmed by secondhand smoke. They also supported a suggestion on further expansion of statutory NSAs. The Government will consider further expanding the statutory NSAs to include more public facilities to safeguard public health. (Food and Health Bureau (FHB)/DH)
- In view of the potential harmful effect to health, renormalisation of the smoking behaviour and the recommendations of WHO, we are working with relevant bureaux/departments on the details of strengthening the regulatory regime on e-cigarettes and heat-not-burn products. (FHB/DH)
- WHO encourages its members to raise taxes on tobacco products periodically and recommends raising tobacco taxes to account for at least 75% of retail prices. In this connection, the Government will continue to monitor the proportion of tobacco duty to retail price and raise taxes as necessary. (FHB/DH)
- Pilot SCPPP aims to test a new model which may complement existing government-funded smoking cessation services, hoping to assist hard-to-reach smokers in the community to quit smoking. Private



primary care doctors will be engaged to recruit their smoking patients and offer opportunistic counselling. Pharmacotherapy may be prescribed if indicated. Follow-up consultations will be arranged and quit rate will be assessed. Evaluation will be conducted after 2 years to assess effectiveness. (DH)

### E DEFINITIONS AND SPECIFICATIONS OF LOCAL INDICATORS

<u>*Key indicators*</u> (derived from the WHO's  $GMF^{81}$ )

### Indicator (9): Prevalence of current tobacco use among adolescents

- Monitoring frequency: every 2 years
- Source: School-based Survey on Smoking among Students commissioned by the Food and Health Bureau
- Definition: (i) "current smoking" was defined as any smoking in the past 30 days for those reported that they smoked daily or smoked occasionally; (ii) "adolescents" are defined as primary 4-6 and secondary 1-6 students aged 10 and above

### Indicator (10): Age-standardised prevalence of daily cigarette smoking among persons aged 18+ years

- Monitoring frequency: every 2-3 years
- Source: Thematic Household Survey, Census and Statistics Department
- Definition: "daily cigarette smokers" refers to those persons who at the time of enumeration had a daily cigarette smoking habit (although they might not smoke on certain days because of illness or other reasons)

<sup>&</sup>lt;sup>81</sup> The WHO recommends 2 indicators for monitoring, namely:

<sup>-</sup> Indicator (9): Prevalence of current tobacco use among adolescents (Expected frequency: every 5 years)

<sup>-</sup> Indicator (10): Age-standardised prevalence of current tobacco use among persons aged 18+ years (Expected frequency: every 5 years)



### **Supplementary indicator** (of local relevance)

### Indicator (S4): Crude prevalence of daily cigarette smoking among persons aged 15+ years

- Monitoring frequency: every 2-3 years
- Source: Thematic Household Survey, Census and Statistics Department
- Definition: "daily cigarette smokers" refer to those persons who at the time of enumeration had a daily cigarette smoking habit (although they might not smoke on certain days because of illness or other reasons)



# **TARGET 6**

Contain the prevalence of raised blood pressure



### A PREAMBLE

Raised blood pressure (hypertension) is a major cardiovascular risk factor. If left uncontrolled, it can cause heart attacks, stroke, dementia, renal failure and blindness. According to the World Health Organization (WHO)'s "Global brief on hypertension"<sup>82</sup>, raised blood pressure was estimated to kill 9 million people every year. The harmful use of alcohol, tobacco use, being overweight and obese, physical inactivity, and high salt intake all contribute to the incidence of hypertension. If no action is taken to reduce exposure to these factors, cardiovascular disease incidence, including hypertension, will increase. Hypertension rarely causes symptoms in the early stages and many people go undiagnosed. Those who are diagnosed may not have access to treatment and may not be able to successfully control their illness over the Early detection, adequate treatment and good control of long term. hypertension has been identified as one of the WHO's "best buys"<sup>83</sup> to reduce the burden of cardiovascular disease<sup>84,85</sup>.

### **B** LOCAL SITUATION

Below provides a snapshot of local situation regarding Indicators (11a) and (11b) on high blood pressure, derived from the WHO's global monitoring framework (GMF). Detailed definition, specifications and data sources of these key indicators are provided in **Section E**.

### Indicator (11a): Raised blood pressure

Results of the Population Health Surveys (PHS) conducted in 2003/04 and 2014/15 showed that the age-standardised prevalence of raised blood pressure among persons aged 18-84 years decreased from 21.4% to 17.8%.

<sup>&</sup>lt;sup>82</sup> A global brief on hypertension: Silent killer, global public health crisis. Geneva: World Health Organizaton, 2013. Available at:

http://www.who.int/cardiovascular\_diseases/publications/global\_brief\_hypertension/en/
 <sup>83</sup> According to the updated Appendix 3 of the WHO Global NCD Action Plan 2013-2020, "best buys" are interventions that are considered to be the most cost-effective and feasible for implementation, for which the WHO Choice analysis found an average cost-effectiveness ratio of ≤ l\$100/DALY averted in low- and lower middle-income countries.

<sup>(</sup>Source: http://apps.who.int/iris/bitstream/10665/259232/1/WHO-NMH-NVI-17.9-eng.pdf) <sup>84</sup> WHO Report 2011. Scaling up action against NCDs: How much will it cost? Geneva: World Health

Organization, 2011. Available at: http://www.who.int/nmh/publications/cost\_of\_inaction/en/ <sup>85</sup> Frieden TR, Bloomberg MR. Saving an additional 100 million lives. Lancet. 2018 Feb

<sup>17;391(10121):709-712.</sup> Available at: http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)32443-1/fulltext



#### Indicator (11b): Mean blood pressure

According to the PHS 2014/15, the age-standardised mean systolic blood pressure (SBP) among persons aged 18-84 years was 117.1 mmHg (Crude mean: 120.3 mmHg).

Prevalence of raised blood pressure<sup>#</sup> and mean SBP among persons aged 18-84 years in 2003/04 and 2014/15

Year	Age-standardised	Crude	Age-standardised	Crude mean
	prevalence	prevalence	mean SBP	SBP
2003/04	21.4%	24.3%^	124.7 mmHg	126.5
				mmHg
2014/15	17.8%	22.1%~	117.1 mmHg	120.3
				mmHg

Notes:

# Raised blood pressure is defined as systolic blood pressure (SBP)  $\geq$ 140 mmHg and/or diastolic blood pressure (DBP)  $\geq$ 90 mmHg at the time of conducting measurements <u>disregarding known history of</u> <u>the disease</u><sup>86</sup>

^ Estimated number of persons ('000) = 1301.3

~ Estimated number of persons ('000) = 1285.7

Sources: Population Health Survey 2003/04 and Population Health Survey 2014/15, Department of Health

### C LOCAL TARGET

Contain the prevalence of raised blood pressure by 2025<sup>87</sup>.

### D ACTIONS TO ACHIEVE TARGET

Most of the known risk factors for raised blood pressure (e.g. being overweight and obese, high salt intake, physical inactivity, tobacco use and harmful use of alcohol) are common to other biomedical risk factors and major non-communicable diseases (NCD). By modifying the prevalence of risk factors among individuals, their risk of developing NCD can be decreased. Thus,

<sup>&</sup>lt;sup>86</sup> Persons with previously doctor-diagnosed hypertension or on medication for raised blood pressure would be excluded if the measured SBP is <140 mmHg and/or DBP is <90 mmHg at the time of conducting measurements.

<sup>&</sup>lt;sup>87</sup> The WHO sets a voluntary global target of '25% relative reduction in prevalence of raised blood pressure or containing the prevalence of raised blood pressure by 2025, according to national circumstances'.



achieving the target to contain the prevalence of raised blood pressure serves concurrently to achieve other targets of halting the rise in overweight and obesity, reducing harmful use of alcohol, and lowering salt intake. Other than prevention, it will also require an affordable total-risk management approach to individual care to maintain blood pressure at optimal levels.

### 1) Background of Government initiatives to prevent and control hypertension

### Promoting Healthy Diet and Physical Activity

 Under the steer of the Steering Committee on Prevention and Control of NCD chaired by the Secretary for Food and Health, two working groups on diet and physical activity, and alcohol were formed in 2008 and 2009 respectively. The "Action Plan to Promote Diet and Physical Activity Participation in Hong Kong" and the "Action Plan to Reduce Alcohol-related harm in Hong Kong" launched in 2010 and 2011 respectively, provided platforms for intersectoral actions, to tackle the imminent problems caused by obesity, unhealthy diet, physical inactivity and harmful use of alcohol<sup>88</sup>.

#### Salt Reduction Strategy

The Government has been promoting healthy diet all along, which is fundamental to reducing the salt intake of our population. To emphasise the importance of the task of reducing the salt (and sugar) intake of our population, the Government set up an advisory body – the Committee on Reduction of Salt and Sugar in Food – in March 2015 to make recommendations to the Secretary for Food and Health on the policy and work plans to reduce the intake of salt (and sugar) of the population. Also, the Government appointed various renowned public health experts from the Mainland and overseas to advise on international experiences in promoting the reduction of salt (and sugar). Details of the salt reduction strategy are set out in Target 4 on salt reduction.

<sup>&</sup>lt;sup>8</sup> More details about the action plans are available at:

<sup>-</sup> https://www.change4health.gov.hk/en/strategic\_framework/structure/working\_group\_dpa/index.html

<sup>-</sup>https://www.change4health.gov.hk/en/strategic\_framework/structure/working\_group\_on\_ah/index.html



### Primary Care Development

- In 2010, the Food and Health Bureau (FHB) issued the "Primary Care Development in Hong Kong Strategy Document", which paved the way for the publication of the "Hong Kong Reference Framework for Hypertension Care in Adults in Primary Care Settings" and three other reference frameworks for the care of different chronic diseases and population groups in primary care settings<sup>89</sup>, to support the tackling of NCD through primary care. The reference frameworks aim to:-
  - (a) facilitate the provision of continuing, comprehensive and evidence-based care in the community;
  - (b) empower patients and their carers; and
  - (c) raise public awareness of the importance of proper prevention and management of chronic diseases.

### 2) Existing actions/interventions/programmes/policies

The Department of Health (DH), Education Bureau (EDB), Centre for Food Safety (CFS), Leisure and Cultural Services Department and Housing Department join forces to promote healthy lifestyle habits (e.g. low salt intake, high fruit and vegetables intake and physical activity) through various public awareness programmes/campaigns. Health promotion "EatSmart@restaurant.hk" such programmes as Campaign, "Startsmart@school.hk" Campaign, "EatSmart@school.hk" Campaign, "Joyful@Healthy Workplace" Programme, "I'm so Smart" Community Health Promotion Programme, Nutrition Labelling Publicity and Education Campaign, "Reduce Salt, Sugar, Oil. We Do!" programme and many others provide opportunities for raising awareness and increasing adoption of healthier eating habits and participation in physical activity.

<sup>&</sup>lt;sup>89</sup> The four landmark reference frameworks are:

<sup>-</sup>Hong Kong Reference Framework for Diabetes Care in Adults in Primary Care Settings

<sup>-</sup>Hong Kong Reference Framework for Hypertension Care in Adults in Primary Care Settings

<sup>-</sup> Hong Kong Reference Framework for Preventive Care for Children in Primary Care Settings

<sup>-</sup>Hong Kong Reference Framework for Preventive Care for Older Adults in Primary Care Settings



- DH, EDB and CFS have also issued various guidelines for students, parents, and schools, food traders, for example:- "Nutritional Guidelines on Snacks for Students", "Nutritional Guidelines on Lunch for Students" issued by DH and "Trade Guidelines for Reducing Sodium in Foods" issued by CFS, etc.
- Anti-tobacco and anti-alcohol activities are organised by DH in collaboration with health promotion partners as important means to raise public's health literacy and empower individuals to make informed choices.

### 3) Specific actions/interventions/programmes/polices to be introduced, enhanced or explored to achieve target by 2025

- Continue to strengthen the health system at all levels, in particular emphasising comprehensive primary care for management of NCD (including raised blood pressure) based on the family doctor model. The primary care doctors' role could be markedly strengthened as member of the primary care team to provide opportunistic screening for high blood pressure (in line with primary care reference framework) and to support patients to adopt healthier lifestyles for risk factor reduction. (FHB/DH/Hospital Authority (HA) and medical community)
- Continue promulgating the "Hong Kong Reference Framework for Hypertensive Care in Adults in Primary Care Settings" to health professionals across different sectors and to facilitate the provision of continuing, comprehensive, evidence-based, affordable and holistic care in the community. (FHB/DH/HA and medical community)
- Review and update the reference framework for hypertensive care in primary care settings on a regular basis in keeping with latest evidence. (DH)
- Implement the "Salt Reduction Scheme for School Lunches" from September 2017 onwards benefiting about 450 primary schools in Hong Kong. The target is to cut down the average sodium level of primary school lunchbox to not more than 500 milligrams in 10 years by gradually lowering the sodium level of school lunches with an average reduction of 5 to 10% per year. (DH and EDB)



- Continue the salt reduction strategy. (FHB/Food and Environmental Hygiene Department)
- Keep in view of "best buys"<sup>90</sup> or other recommended interventions to address the obesogenic environment based on WHO guidance. (All government bureaux/departments)

### E DEFINITIONS AND SPECIFICATIONS OF LOCAL INDICATORS

**<u>Key indicators</u>** (derived from the WHO's GMF<sup>91</sup>)

### Indicator (11a): Age-standardised (and crude) prevalence of raised blood pressure among persons aged 18-84 years

- Monitoring frequency: every 4-6 years
- Source: Population Health Survey, Department of Health
- Definition: "raised blood pressure" is defined as systolic blood pressure (SBP) ≥140 mmHg and/or diastolic blood pressure (DBP) ≥90 mmHg

### Indicator (11b): Age-standardised (and crude) mean SBP among persons aged 18-84 years

- Monitoring frequency: every 4 to 6 years
- Source: Population Health Survey, Department of Health

(Source: http://apps.who.int/iris/bitstream/10665/259232/1/WHO-NMH-NVI-17.9-eng.pdf) <sup>1</sup> The WHO recommends an indicator for monitoring, namely:

<sup>&</sup>lt;sup>90</sup> According to the updated Appendix 3 of the WHO Global NCD Action Plan 2013-2020, "best buys" are interventions that are considered to be the most cost-effective and feasible for implementation, for which the WHO Choice analysis found an average cost-effectiveness ratio of  $\leq$  I\$100/DALY averted in low- and lower middle-income countries.

 <sup>-</sup>Indicator (11): Age-standardised prevalence of raised blood pressure among persons aged 18+ years (defined as SBP >=140 mmHg and/or DBP >=90 mmHg) and mean SBP (Expected frequency: every 5 years)



# TARGET 7

Halt the rise in diabetes and obesity



# A PREAMBLE

Diabetes is an important public health problem, one of four priority non-communicable diseases (NCD) targeted for action. According to the World Health Organization (WHO)'s "Global report on diabetes"<sup>92</sup>, more than 400 million adults (8.5% of the world's population) were living with diabetes in 2014. Diabetes caused 1.5 million deaths in 2012. Higher-than-optimal blood glucose caused an additional 2.2 million deaths, by increasing the risks of cardiovascular and other diseases. Diabetes of all types (type1, type 2, impaired glucose tolerance, impaired fasting glycaemia, gestational diabetes) can lead to complications in many parts of the body, including heart attack, stroke, kidney failure, leg amputation, vision loss and nerve damage, leading to disability and premature death. Diabetes imposes a large economic burden on the health-care system and the wider economy. Overweight and obesity are the strongest risk factors for type 2 diabetes. Several dietary practices are linked to unhealthy body weight and/or type 2 diabetes risk, including high intake of saturated fatty acids, high total fat intake and inadequate consumption of dietary fibre. High intake of sugar-sweetened beverages, which contain considerable amounts of free sugars, increases the likelihood of being overweight or obese, particularly among children. Early childhood nutrition affects the risk of obesity and type 2 diabetes later in life. Obesity also increases the likelihood of developing other NCD such as cancers.

# **B** LOCAL SITUATION

The ensuring paragraphs provide a snapshot of local situation regarding Indicators (12) to (17), (21) and (23) derived from the WHO's global monitoring framework (GMF); and Indicators (S5) to (S7) of local relevance, on diabetes and obesity, as well as their key underlying risk factors and availability of relevant policies to address them. Detailed definition, specifications and data sources of these key/supplementary indicators are provided in Section E.

<sup>&</sup>lt;sup>92</sup> Global report on diabetes. Geneva: World Health Organization, 2016. Available at: http://www.who.int/diabetes/global-report/en/



#### Indicator (12): Raised blood glucose/diabetes

Results of the Population Health Survey (PHS) 2014/15 showed that the age-standardised prevalence of raised blood glucose/diabetes among persons aged 18-84 years was 3.9%, which was lower than that estimated from the Heart Health Survey (HHS) 2004/05 (4.6%), as shown in below Table. The crude prevalence was stable at 5.2% for both surveys.

Prevalence of raised blood	glucose/diabetes <sup>#</sup>	among	persons	aged	18-84
years in 2004/05 and 2014/15					

Year	Age-standardised prevalence	Crude prevalence
2004/05	4.6%	5.2%^
2014/15	3.9%	5.2%~

Notes: # Raised blood glucose/diabetes is defined as fasting plasma glucose concentration ≥ 7.0 mmol/L (126 mg/dl) at the time of conducting measurements or on medication for raised blood glucose disregarding known history of diabetes or raised blood sugar but not on medication for these conditions<sup>93</sup>

^ Estimated number of persons ('000) = 234.1

~ Estimated number of persons ('000) = 301.7

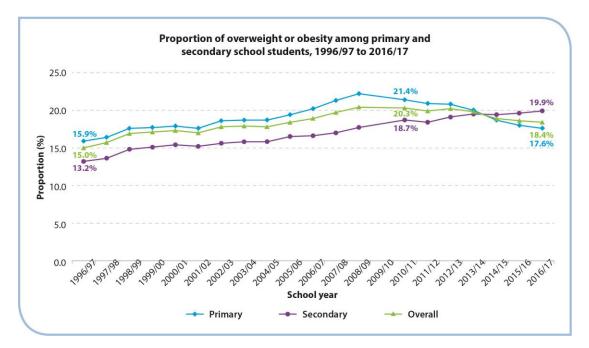
Sources: Heart Health Survey 2004/05 and Population Health Survey 2014/15, Department of Health

<sup>&</sup>lt;sup>93</sup> Persons with previously doctor-diagnosed diabetes or high blood sugar but was not on medication for these conditions would be excluded if the measured fasting plasma glucose concentration < 7.0 mmol/L (i.e. 126 mg/dl) at the time of conducting measurements.



#### Indicator (13): Overweight and obesity in adolescents

Using local definition of overweight (including obesity), the proportion of students considered overweight or obese increased from 15.0% in 1996/97 to 20.3% in 2010/11 and then decreased to 18.4% in 2016/17. As shown in the chart below, the corresponding proportions for primary school students decreased from 21.4% in 2010/11 to 17.6% in 2016/17, while the corresponding proportions for secondary school students continued to rise, from 18.7% in 2010/11 to 19.9% in 2016/17.



- **Note:** In 2009/10 school year, the Student Health Service of the Department of Health had to take part in the Human Swine Influenza Vaccination Programme, and therefore annual appointments were only provided to Primary 1 to Secondary 1 students. Due to the incomplete coverage, the detection rates for 2009/10 school year were not shown
- **Source:** Data based on anthropometric measurement of primary and secondary students attending Student Health Service Centres, Department of Health.

Based on WHO's definition<sup>94</sup>, the detection rates of overweight and obesity among students (aged 10-19 years) in 2016/17 school year were 16.6% and 7.9% respectively, and the combined detection rate of overweight and obesity was 24.5%.

<sup>&</sup>lt;sup>94</sup> According to WHO growth reference for school-aged children and adolescents, "overweight" is defined as ≥ 1 standard deviation (SD) of BMI for age and sex, and "obese" is defined as ≥ 2 SD of BMI for age and sex.



#### Indicator (14): Overweight and obesity in adults

Using local classification of body mass index (BMI) categories for Chinese adults at BMI  $\ge$  23 kg/m<sup>2</sup>, the age-standardised prevalence of overweight and obesity among persons aged 18-84 years, estimated from the two rounds of PHS, increased from 37.2% in 2003/04 to 47.0% in 2014/15 (see Table below). Using WHO's cut-off levels (i.e. BMI  $\ge$  25 kg/m<sup>2</sup>), the age-standardised prevalence of overweight and obesity among persons aged 18-84 years, estimated from the PHS 2014/15, was 27.9% (Crude prevalence: 30.4%).

# Prevalence of overweight and obesity among persons aged 18-84 years in 2003/04 and 2014/15

Year	WHO's definition		Local classification	
	Age-standardised prevalence	Crude prevalence	Age-standardised Crude prevalence prevalence	
2003/04	20.0%	21.9% <sup>¶</sup>	37.2%	40.3%^
2014/15	27.9%	30.4% <sup>∀</sup>	47.0%	50.8%~

Notes: <sup>1</sup> Estimated number of persons ('000) = 1177.6; <sup>♥</sup> Estimated number of persons ('000) = 1764.0

 ^ Estimated number of persons ('000) = 2164.1; ~ Estimated number of persons ('000) = 2947.3

 Sources: Population Health Survey 2003/04 and Population Health Survey 2014/15, Department of Health

#### Indicator (15): Saturated fat intake

Findings on the mean proportion of total energy intake from saturated fatty acids will be available when the Centre for Food Safety (CFS)'s Second Food Consumption Survey will be completed by 2020/21.

#### Indicator (16): Low fruit and vegetable consumption

According to the PHS 2014/15, the age-standardised prevalence of low fruit and vegetable consumption among persons aged 18+ years was 94.6% (Crude prevalence: 94.4%).

#### Indicator (17): Raised (and mean) total cholesterol

Results of the PHS 2014/15 showed that the age-standardised prevalence of raised total cholesterol among persons aged 18-84 years was 46.5%, higher than that estimated from the HHS 2004/05 (38.4%). The age-standardised mean total cholesterol in 2014/15 was 5.0 mmol/L (Crude mean: 5.1 mmol/L), as shown in the Table below.



Prevalence of raised total cholesterol<sup>#</sup> and mean total cholesterol among persons aged 18-84 years in 2004/05 and 2014/15

Year	Age-standardised prevalence	Crude prevalence	Age-standardised mean	Crude mean
2004/05	38.4%	41.9%^	4.8 mmol/L	4.9 mmol/L
2014/15	46.5%	51.3%~	5.0 mmol/L	5.1 mmol/L

Notes: <sup>#</sup>Raised total cholesterol is defined as total cholesterol ≥ 5.0 mmol/L (190mg/dl) at the time of

conducting measurements disregarding known history of the disease 95

^ Estimated number of persons ('000) = 1880.2

~ Estimated number of persons ('000) = 2976.2

Sources: Heart Health Survey 2004/05 and Population Health Survey 2014/15, Department of Health

#### Indicator (21): Elimination of trans-fats in food supply

While there is currently no legislation to limit saturated fatty acids or eliminate partially hydrogenated vegetable oils (the main source of industrially produced trans fats) in the food supply, the CFS promotes healthy eating by providing guidelines to the trade on reducing fats (total, saturated and trans-fats) in food<sup>96</sup>, and promoting the benefits of reducing dietary intake of fats (total, saturated and trans-fats).

 <sup>&</sup>lt;sup>95</sup> Persons with previously doctor-diagnosed hypercholesterolaemia would be excluded if the measured total cholesterol is <5.0mmol/L at the time of conducting measurements.</li>
 <sup>96</sup> The guidelines include:

<sup>-</sup> Trade Guidelines on Reducing Trans Fats in Food

<sup>-</sup> Trade Guidelines for Reducing Sugars and Fats in Foods

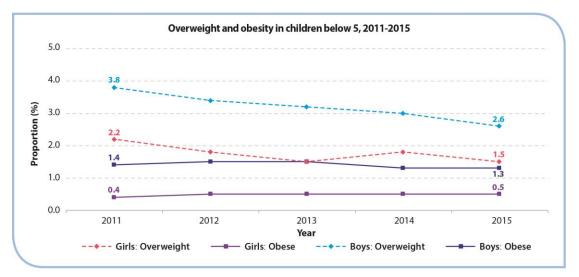


#### Indicator (23): Marketing of foods to children

While there is currently no legislation to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans-fatty acids, free sugars, or salt<sup>97</sup>, all schools are advised to formulate a school policy to promote healthy eating among students. Schools have been reminded not to allow promotion of unhealthy food in schools as stated in the "*Nutritional Guidelines on Lunch for Students"* and "*Nutritional Guidelines on Snacks for Students"* issued by the Department of Health (DH), which have been incorporated in circulars and guidelines issued by the Education Bureau (EDB). Compliance is monitored under the voluntary "EatSmart School Accreditation Scheme" in which schools achieving the accreditation are required to follow the Nutritional Guidelines. In pre-primary institutions, similar recommendations are also stated in the "*Nutritional Guidelines for Children aged 2 to 6*" issued by the DH.

#### Indicator (S5): Overweight and obesity in children below 5

Routine clinical data of weight and height of 4-year-old children attending Maternal and Child Health Centres (MCHCs) for services revealed that the proportions of overweight boys and girls decreased from 3.8% and 2.2% in 2011 to 2.6% and 1.5% in 2015 respectively. The proportions of obese boys (1.3%-1.5%) and girls (0.4%-0.5%) have been stable over the same period.



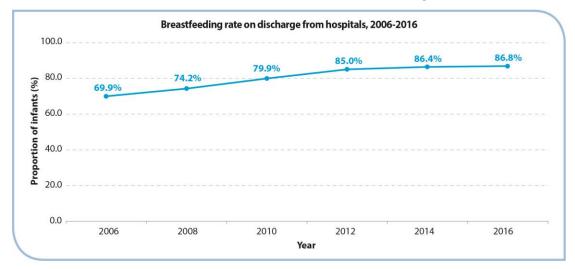
**Source:** Routine clinical data of weight and height of 4-year-old children attending Maternal and Child Health Centres, Department of Health

<sup>&</sup>lt;sup>97</sup> The Hong Kong Code of Marketing of Formula Milk and Related Products, and Food Products for Infants & Young Children issued on 13 June 2017 does not fall under this classification.



#### Indicator (S6): Ever breastfeeding rate on discharge from hospitals

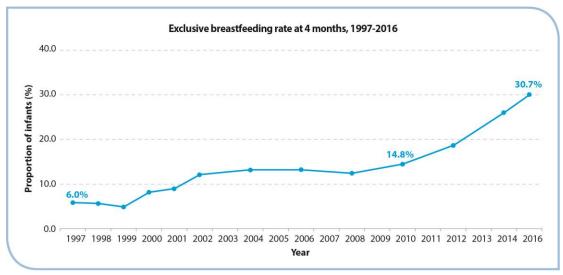
According to the data on breastfeeding collected by local birthing hospitals, ever breastfeeding rates on discharge from hospitals has steadily increased from 69.9% in 2006 to 86.8% in 2016 as shown in below Figure.



Source: Collected from monthly report of ever breastfeeding rate from hospitals with maternity units

#### Indicator (S7): Rate of exclusive breastfeeding for 4 months

According to the breastfeeding surveys regularly conducted by the Family Health Service of DH among infants who attended the routine 12-month visit at MCHCs, the rate of exclusive breastfeeding at 4 months has increased from 6.0% among babies born in 1997 to 30.7% among babies born in 2016 (see below Figure).



Source: Breastfeeding Survey, Department of Health



#### Indicator (S8): Internet use in adolescents

According to the data collected by Health Assessment Questionnaire (HAQ) of the Student Health Service Centres (SHSCs) in 2015/16 school year, the proportion of students who spent 2 hours or more a day on the internet or electronic screen products for purposes not related to school work was 44%. The corresponding figures for primary and secondary school students were 26% and 65% respectively.

#### Indicator (S9): Sleep time in adolescents

From data collected from HAQ of the SHSCs in 2015/16 school year, the proportion of students who had sleep time less than 8 hours a day on a typical night of a school day was 58%. The corresponding figures for primary and secondary school students were 41% and 79% respectively.

# C LOCAL TARGET

Halt the rise in diabetes and obesity by 2025<sup>98</sup>.

# D ACTIONS TO ACHIEVE TARGET

Maintaining a healthy weight is the key to preventing diabetes. Attaining this target of halting the rise in diabetes and obesity will be closely related to achieving targets to reduce harmful use of alcohol and reduce physical inactivity in the wider population.

# 1) Background of Government initiatives to prevent and control diabetes and obesity

# Promoting Healthy Diet and Physical Activity

• Obesity has been accorded high priority for action in the prevention and control of NCD in Hong Kong. Under the steer of the Steering Committee on Prevention and Control of NCD chaired by the Secretary for Food and Health, the Working Group on Diet and Physical Activity (WGDPA) was set up in December 2008. The "Action Plan to Promote Diet and Physical Activity Participation in Hong Kong" launched in September 2010 by the WGDPA provided a platform for intersectoral actions, to tackle root causes of an imminent problems caused by obesity through

<sup>&</sup>lt;sup>98</sup> The WHO sets a voluntary global target of 'halting the rise in diabetes and obesity by 2025'.



promoting healthy diet and physical activity.<sup>99</sup>

# Prevention and Control of Childhood Obesity

 Overweight and obese children are likely to remain obese into adulthood, developing life-threatening NCD such as diabetes at a younger age. In 2014, the then Director General of WHO appointed a high level Commission on Ending Childhood Obesity which produced its report in January 2016 leading to the development of an implementation plan with six key areas of action. These are (i) promote intake of healthy foods, (ii) promote physical activity, (iii) preconception and pregnancy care, (iv) early childhood diet and physical activity, (v) health, nutrition and physical activity for school-age children, and (vi) weight management. Hong Kong's effort to combat childhood obesity follows closely the directions outlined in the implementation plan.

#### Breastfeeding Promotion Strategy

- The Government endeavours to protect, promote and support breastfeeding. In April 2014, the Committee on Promotion of Breastfeeding was set up at Food and Health Bureau (FHB) to advise the Government on strategies and actions to promote and support breastfeeding, and to oversee all these activities to ensure that the implementation is co-ordinated, effective and sustainable <sup>100</sup>. Comprehensive strategy had been endorsed by the Committee on It included strengthening professional Promotion of Breastfeeding. support for breastfeeding in healthcare facilities through implementing Baby-Friendly Hospitals initiatives, supporting working mothers to sustain breastfeeding by promoting breastfeeding friendly workplace policy, promulgating breastfeeding friendly public premises and provision of baby care facilities, strengthening public education, enhancing surveillance on local breastfeeding situation, and launching of the voluntary "Hong Kong Code of Marketing of Formula Milk and Related Products and Food Products for Infants and Young Children" (HK Code), which promotes good marketing practices of the following designated products for infants and young children under 36 months old:
  - Infant formula;

<sup>&</sup>lt;sup>99</sup> More details about the action plan is available at:

https://www.change4health.gov.hk/en/strategic\_framework/structure/working\_group\_dpa/index.h tml

<sup>&</sup>lt;sup>100</sup> Source: http://www.info.gov.hk/gia/general/201706/13/P2017061300473.htm



- Follow-up formula;
- Formula milk related products: Feeding bottles and teats; and
- Prepackaged food products for infants and young children.

# Primary Care Development

- In 2010, FHB issued the "Primary Care Development in Hong Kong Strategy Document", which paved the way for the publication of the "Hong Kong Reference Framework for Diabetes Care in Adults in Primary Care Settings" and three other reference frameworks for the care of different chronic diseases and population groups in primary care settings<sup>101</sup>, to support the tackling of NCD through primary care. The reference frameworks aim to:
  - (a) facilitate the provision of continuing, comprehensive and evidence-based care in the community;
  - (b) empower patients and their carers; and
  - (c) raise public awareness of the importance of proper prevention and management of chronic diseases.

# 2) Existing actions/interventions/programmes/policies

- With the accomplishment of the "Action Plan to Promote Diet and Physical Activity Participation in Hong Kong", many interventions have become regular features of the Government's NCD response or have led to development of further initiatives tailored to changing social and environmental circumstances, for examples:-
  - "StartSmart@school.hk" Campaign, "EatSmart@school.hk" Campaign, voluntary "EatSmart School Accreditation Scheme", "I'm so Smart" Community Health Promotion Programme, Report of Advisory Group on Health Effects of Use of Internet and Electronic Screen Products, HK Code, education kits and training workshops on breastfeeding for health professionals, parenting programme on weaning, regular health check-ups, counselling and necessary referrals for students on weight management, Reference Frameworks for preventive care in

<sup>&</sup>lt;sup>101</sup> The four landmark reference frameworks are:

<sup>-</sup> Hong Kong Reference Framework for Diabetes Care in Adults in Primary Care Settings

<sup>-</sup> Hong Kong Reference Framework for Hypertension Care in Adults in Primary Care Settings

<sup>-</sup> Hong Kong Reference Framework for Preventive Care for Children in Primary Care Settings

<sup>-</sup> Hong Kong Reference Framework for Preventive Care for Older Adults in Primary Care Settings



primary care settings, etc. (DH and health promotion partners within and outside the Government)

- The DH's "EatSmart@restaurant.hk" Campaign which was launched in 2008 to encourage and assist restaurants to provide dishes with more fruit and vegetables and less oil, salt and sugar through voluntary recognition scheme. A free EatSmart Restaurant mobile application was launched in 2015 to facilitate the public to locate EatSmart Restaurants. (DH)
- DH's MCHCs provide dietary advice to expectant mothers and those who have given birth, to maintain an optimal weight gain during pregnancy and prepare the mother for nutritional demands of pregnancy, childbirth and lactation. (DH)
- The Student Health Service (SHS) of DH offers annual free health assessment to all local day school students whereby body weight and height are measured and tracked over time. To empower students (especially those with body weight for height exceeding optimal range) in weight management with support from family members, SHS provides dietary advice and counselling on healthy weight management to help students make healthy lifestyle choices. (DH)
- Public education is carried out regarding maintenance of optimal waist circumference and heightening community awareness of the adverse effects of overweight and obesity. (DH)
- CFS has been striving to safeguard food safety and promote healthy eating in Hong Kong, including conducting relevant risk assessment studies, implementing nutrition labelling scheme in prepackaged foods, providing guidelines to the trade on reducing dietary sodium, sugar and fats, and promoting the benefits of reducing dietary intake of salt and sugar. There are further details of CFS' work on these in Target 4. (CFS)
- "Sports for All" promotional programmes, continuous review and enhancement on provision of recreation and sports programmes, leisure facilities, booking arrangements and charges of venues,



Workshops on Pre-school Children's Health and Physical Activities, and Workshops on Pre-school Children's Gymnastics-For-All for kindergarten teachers, etc. (Leisure and Cultural Services Department, EDB or other health promotion partners)

# 3) Specific actions/interventions/programmes/polices to be introduced, enhanced or explored to achieve target by 2025

Targeting children and adolescents:-

- Encourage more pre-primary institutions (PPIs) and primary schools to provide healthy lunch and snacks to students, and not to promote unhealthy foods in schools as stated in related guidelines, such as the "Nutritional Guidelines for Children aged 2 to 6", "Nutritional Guidelines on Lunch for Students" and "Nutritional Guidelines on Snacks for Students" issued by DH. (DH and EDB)
- Encourage students (for children aged 5-17) to engage regularly in • activities for at least 60 minutes of physical moderate-to-vigorous-intensity physical activities daily (MVPA60) in accordance with the recommendation of WHO, through the Physical Education (PE) Key Learning Area Curriculum Guide. EDB will spearhead a pilot project of 20 schools in 2017/18 school year to gather and consolidate field experience of creating an active school through a whole-school approach. Support from community partners will be enlisted. (DH, EDB and other health promoting partners)
- Scale up the WHO Health Promoting School programme to foster a self-sustaining health-enhancing learning environment in a greater number of schools, based on the experience gained from the Healthy Schools Project spearheaded by the Chinese University of Hong Kong. (DH and EDB)
- Provide professional input and support from public health perspective to community and academic partners who are conducting research and promotional projects to develop active students. Examples are the Physical Fitness Association of Hong Kong China, the Hong Kong Elite Athletes Association, the Physical Activities Development Model for



Primary Schools Project funded by the Hong Kong Jockey Club Charities Trust, the Department of Paediatrics and Adolescent Medicine of the University of Hong Kong, and the Jump Rope for Heart Programme organised by the Hong Kong College of Cardiology, just to name a few. (DH)

- Increase physical activities of the member of public, including students, parents and teachers and promote sport culture in schools through "Opening up School Facilities for Promotion of Sports Development Scheme", which encourages more sport activities to be organized using school facilities. (EDB and Home Affairs Bureau)
- Recommend to the Quality Education Fund Steering Committee to continue including "Healthy Lifestyle and Positive Development of Students" as a priority theme. (EDB)
- Promulgate recommendations on healthy use of Internet and electronic screen products for children, adolescents, parents and teachers to protect children from the harmful effect of excessive screen time. (DH)
- Strengthen support and education to families with obese children. (DH/Hospital Authority (HA))
- Continue enhancing measures to promote, protect and support breastfeeding, including stepping professional up support for breastfeeding in healthcare facilities; strengthening public's acceptance and support of breastfeeding; supporting working mothers to sustain breastfeeding by encouraging the community to adopt breastfeeding friendly workplace policy; promoting and supporting breastfeeding in public places through promotion of breastfeeding friendly premises and provision of babycare facilities; promulgating the voluntary HK Code to stakeholders; strengthening the various surveillance on local breastfeeding. (DH)
- Collaborate with stakeholders which may contribute positively to a healthy eating environment in schools, e.g. the On-site Meal Portioning Funding Scheme through the Environment and Conservation Fund administered by the Environmental Protection Department. (Environmental Protection Department and DH)



 Keep in view global and regional developments and emerging evidence on strategies to address the obesogenic environment based on WHO guidance. (DH)

Targeting adults:-

- Continue to strengthen the health system at all levels, in particular emphasising comprehensive primary care for early detection and management of NCD (including diabetes and obesity) based on the family doctor-based primary care team model. The primary care team could be markedly strengthened to provide opportunistic screening for high blood sugar (in line with primary care reference framework) and to support patients to adopt healthier lifestyles for risk factor reduction. (FHB/DH/HA and medical community)
- Continue promulgating the "Hong Kong Reference Framework for Diabetes Care in Adults in Primary Care Settings" to health professionals across different sectors and to facilitate the provision of continuing, comprehensive, evidence-based, affordable and holistic care in the community. (FHB/DH/HA and medical community)
- Review and update the reference framework for diabetes care in primary care settings with emphasis on weight management on a regular basis in keeping with latest evidence. (DH)
- Keep in view global and regional developments and emerging evidence on strategies based on WHO guidance. (FHB/DH/Food and Environmental Hygiene Department)



# **E** Definitions and specifications of local indicators

**<u>Key indicators</u>** (derived from the WHO's GMF<sup>102</sup>)

Indicator (12): Age-standardised (and crude) prevalence of raised blood glucose/diabetes among persons aged 18-84 years

- Monitoring frequency: every 4-6 years
- Source: Population Health Survey, Department of Health
- Definition: fasting plasma glucose concentration ≥ 7.0 mmol/L (126 mg/dl) or on medication for raised blood glucose

Indicator (13): Detection rate of overweight and obesity in primary and secondary students

- Monitoring frequency: annual
- Source: Anthropometric measurement of primary and secondary students attending the Student Health Service Centres of Department of Health
- Definitions:
  - According to WHO growth reference for school-aged children and adolescents, "overweight" is defined as ≥ 1 standard deviation (SD) of body mass index (BMI) for age and sex, and "obese" is defined as ≥ 2 SD of BMI for age and sex<sup>103</sup>
  - According to local definition: "overweight (including obesity)" is defined as weight exceeding 120% of the median weight-for-height for male students with height between 55 and 175cm and for female students with height between 55 and 165cm; and BMI ≥25 kg/m<sup>2</sup> for male students with height >175cm and for female students with height >165cm

<sup>&</sup>lt;sup>102</sup> The WHO recommends the following indicators for monitoring diabetes and obesity, namely:

Indicator (12): Age-standardised prevalence of raised blood glucose/diabetes among persons aged 18+ years (defined as fasting plasma glucose concentration >=7.0 mmol/L (26 mg/dl) or on medication for raised blood glucose (Expected frequency: every 5 years)

<sup>-</sup> Indicator (13): Prevalence of overweight and obesity in adolescents (aged 10-19 years) (Expected frequency: every 5 years)

<sup>-</sup> Indicator (14): Age-standardised prevalence of overweight and obesity in persons aged 18+ years (Expected frequency: every 5 years)

<sup>&</sup>lt;sup>103</sup> Definition adopted in the WHO's GMF.



# Indicator (14): Age-standardised (and crude) prevalence of overweight and obesity in persons aged 18-84 years

- Monitoring frequency: every 4-6 years
- Source: Population Health Survey, Department of Health
- Definitions:
  - According to WHO's classification (for adult Europeans): BMI  $\ge 25$  kg/m<sup>2</sup> for overweight and  $\ge 30$  kg/m<sup>2</sup> for obesity<sup>104</sup>
  - According to classification for Chinese adults in Hong Kong:  $BMI \ge 23$  kg/m<sup>2</sup> for overweight and  $\ge 25$  kg/m<sup>2</sup> for obesity
  - BMI is calculated based on <u>measured</u> weight in kilogram and height in metre

# Indicator (15): Age-standardised mean proportion of total energy intake from saturated fatty acids in persons aged 18+ years

- Monitoring frequency: About every 10 years
- Source: Hong Kong Population-based Food Consumption Survey, Centre for Food Safety, Food and Environmental Hygiene Department

# Indicator (16): Age-standardised prevalence of low fruit and vegetable consumption among persons aged 18+ years

- Monitoring frequency: every 2 years
- Source: Population Health Survey / Health Behaviour Survey, Department of Health
- Definition: "low fruit and vegetable consumption" is defined as consuming less than five total servings (400 grams) of fruit and vegetables on average every day

# Indicator (17): Age-standardised prevalence of raised total cholesterol and mean total cholesterol among persons aged 18-84 years

- Monitoring frequency: every 4-6 years
- Source: Population Health Survey, Department of Health
- Definition: total cholesterol ≥5.0 mmol/ L (or 190 mg/dl)

<sup>&</sup>lt;sup>104</sup> Definition adopted in the WHO's GMF.



<u>Indicator</u> (21): Adoption of national policies that limit saturated fatty acids and eliminate partially hydrogenated vegetable oils (the main source of industrially produced trans-fats) in the food supply<sup>105,106</sup>

<u>Indicator</u> (23): Adoption of national policies to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans-fatty acids, free sugars, or salt<sup>107</sup>

# **Supplementary indicators related to childhood obesity**<sup>108</sup> (of local relevance)

# Indicator (S5): Prevalence of overweight and obesity in children under 5 years of age

- Monitoring frequency: annual
- Source: Routine clinical data of weight and height of 4-year-old children attending the Maternal & Child Health Centres of Family Health Service, Department of Health

<sup>&</sup>lt;sup>105</sup> According to the WHO's GMF, indicators (21) is defined as "adoption of a policy to limit saturated fatty acids and virtually eliminate partially hydrogenated vegetables oils in the food supply", and requires country to respond 'yes' or 'no'. According to the WHO's NCD Country Capacity Survey, both voluntary or industry self-regulation and legislation are considered as policy.

<sup>&</sup>lt;sup>106</sup> Trans fatty acids in foods originate from three main sources: (i) bacterial transformation of unsaturated fatty acids in the rumen of ruminant animals. They can subsequently be present in the meat and milk of the animal; (ii) hydrogenation and deodorization of unsaturated vegetable oils (or occasionally fish oils) high in polyunsaturated fatty acids; and (iii) during the heating and frying of oils at high temperatures. According to the WHO's 2009 Scientific Update on Trans Fatty Acids, ruminant trans fatty acids cannot be removed entirely from the diet, while their intake is low in most populations and to date there is no conclusive evidence supporting an association with coronary heart disease risks in the amounts usually consumed. In contrast, the removal of partially hydrogenated vegetables oils (the main source of trans fats in processed foods) from the food supply would result in substantial health benefits.

<sup>&</sup>lt;sup>107</sup> According to the WHO's GMF, indicators (23) is defined as "existence of a policy to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans-fatty acids, free sugars, or salt", and requires country to respond 'yes' or 'no'. According to the WHO's NCD Country Capacity Survey, both voluntary or industry self-regulation and legislation are considered as policy. This indicator does not apply to the following designated products for infants and young children under 36 months old, which have been covered under the scope of the *International Code of Marketing of Breast-milk Substitutes* and the *Guidance on ending the inappropriate promotion of foods for infants and young children* as provided in resolution WHA69.9 on maternal, infant and young child nutrition:

<sup>-</sup>Infant formula;

<sup>-</sup>Follow-up formula;

<sup>-</sup>Formula milk related products: Feeding bottles and teats; and

<sup>-</sup> Prepackaged food products for infants and young children.

<sup>&</sup>lt;sup>108</sup> Making reference to the WHO's Global Reference List of 100 Core Health Indicators and the actions recommended by the WHO Commission on Ending Childhood Obesity, these additional indicators are recommended for progress monitoring.



#### Indicator (S6): Ever breastfeeding rate on discharge from hospitals

- Monitoring frequency: every 2 years
- Source: Data collected from monthly report of ever breastfeeding rate from hospitals with maternity units by Family Health Service, Department of Health

#### Indicator (S7): Rate of exclusive breastfeeding for 4 months

- Monitoring frequency: every 2 years
- Source: Breastfeeding survey conducted by the Family Health Service, Department of Health

Indicator (S8): Proportion of upper primary and secondary school students who spent 2 hours or more a day on the internet or electronic screen products for purposes not related to school work<sup>109</sup>

- Monitoring frequency: annual
- Source: Health Assessment Questionnaire (HAQ) self-administered by students (Primary 4 and 6, Secondary 2, 4 and 6) attending the Student Health Service Centres, Department of Health

Indicator (S9): Proportion of upper primary and secondary school students who had sleep time less than 8 hours a day on a typical night of a school day<sup>110</sup>

- Monitoring frequency: annual
- Source: Health Assessment Questionnaire (HAQ) self-administered by students (Primary 4 and 6, Secondary 2, 4 and 6) attending the Student Health Service Centres, Department of Health

<sup>&</sup>lt;sup>109</sup> According to the Report of Advisory Group on Health Effects of Use of Internet and Electronic Screen Products, it is recommended that children age 6-12 years old should limit recreational screen time to no more than 2 hours a day, and prolonged screen time should be avoided for children 12-18 years old.

<sup>&</sup>lt;sup>110</sup> According to US National Sleep Foundation, recommended sleep time for children 6-13 years old is 9-11 hours (7-12 hours may be appropriate), and that for children 14-17 is 8-10 (7-11 hours may be appropriate).



# TARGET 8

Prevent heart attacks and strokes through drug therapy and counselling



# A PREAMBLE

Cardiovascular disease is the world's leading cause of mortality, accounting for approximately 17 million deaths in a year, and nearly one in three deaths. An estimated 7.4 million of these deaths were due to heart attacks and 6.7 million were due to strokes. The likelihood of cardiovascular disease increases continuously as the level of a risk factor such as blood pressure increases. People with multiple risk factors, such as smoking, raised blood pressure, raised cholesterol and/or diabetes have a higher 10-year risk of cardiovascular events such as stroke, coronary heart disease, peripheral artery disease and heart failure occurring. Population-based interventions alone will not be sufficient to prevent heart attacks and strokes for people at such risk level. Providing drug therapy (including glycaemic control of diabetes and control of hypertension using a total-risk approach) and counselling to high-risk individuals are identified as "best buys"<sup>111</sup> by the World Health Organization (WHO) to prevent heart attacks and strokes<sup>112,113,114</sup>. These can only be possible by having health systems that are effective, efficient, affordable, accessible and equitable.

# **B** LOCAL SITUATION

 While elaborations under Target 9 clearly show that a dual healthcare system exists to provide affordable care to local citizens, access to services and quality of care could be further improved by increasing public awareness of lifestyle risk factors on health and utilisation of preventive and primary care services in identification and prompt management of biomedical risk factors such as high blood pressure, high blood sugar, abnormal lipid profile and overweight/obesity.

<sup>&</sup>lt;sup>111=</sup> According to the updated Appendix 3 of the WHO Global NCD Action Plan 2013-2020, "best buys" are interventions that are considered to be the most cost-effective and feasible for implementation, for which the WHO Choice analysis found an average cost-effectiveness ratio (expressed as International dollars (I\$) per disability adjusted life year (DALY)) of ≤ I\$100/DALY averted in low- and lower middle-income countries.

 <sup>(</sup>Source: http://apps.who.int/iris/bitstream/10665/259232/1/WHO-NMH-NVI-17.9-eng.pdf)
 <sup>112</sup> A global brief on hypertension: Silent killer, global public health crisis. Geneva: World Health Organization, 2013. Available at:

http://www.who.int/cardiovascular\_diseases/publications/global\_brief\_hypertension/en/
 <sup>113</sup> Non-communicable Diseases Global Monitoring Framework: Indicator Definitions and Specifications. Geneva: World Health Organization, 2014. Available at:

http://www.who.int/nmh/ncd-tools/indicators/GMF\_Indicator\_Definitions\_Version\_NOV2014.pdf
 <sup>114</sup> WHO Report 2011. Scaling up action against NCDs: How much will it cost? Geneva: World Health Organization, 2011. Available at: http://www.who.int/nmh/publications/cost of inaction/en/



- The Population Health Survey (PHS) 2014/15 shows that among individuals aged 15-84 years, only 52.5% of individuals found to have high blood pressure reported their condition previously diagnosed by a doctor, only 45.9% of persons found to have diabetes had known history of the disease, and only 29.8% of individuals with hypercholesterolaemia had known history of the condition. The corresponding percentages among persons aged 40-84 years were 56.2%, 47.3% and 33.9% respectively.
- With a significant proportion of adult population undetected and untreated for existing biomedical risk factors, the tendency of their health conditions progressing to advanced diseases is high with risk of medical complications such as heart attack and stroke. The burden of these medical conditions to individuals, families, healthcare system and society is high.

# C LOCAL TARGET

No specific target on "preventing heart attacks and strokes through drug therapy and counselling" at the moment<sup>115</sup> due to lack of quantifiable indicators. Please refer to Section E for details.

# D ACTIONS TO ACHIEVE TARGET

For Hong Kong to be able to achieve the ultimate target of "a 25% relative reduction in risk of premature mortality from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases by 2025" (i.e. Target 1), a healthcare system that can effectively manage non-communicable diseases (NCD) and prevent NCD deaths is most critical in the immediate term, while behavioural risk factor reduction may take years to produce effect.

# 1) Specific action(s) to be taken, enhanced or explored to achieve target by 2025

• Explore to collect relevant data on drug therapy and counselling in the next round of the PHS, so as to better describe and quantify the local situation. Access to and analysis of big data may also shed light of these

<sup>&</sup>lt;sup>115</sup> The WHO sets a voluntary global target of 'at least 50% eligible people receive drug therapy and counselling (including glycemic control) to prevent heart attacks and strokes by 2025'.



issues. In the meantime, the proportions of adults being diagnosed of hypertension, diabetes and/or hypercholesterolaemia among those found to be suffering from these conditions will be tracked by the PHS every 4 to 6 years. (Department of Health (DH)/Hospital Authority (HA))

- Continue to strengthen the health system at all levels, with emphasis on risk factor reduction, evidence-based screening for early detection and management of NCD using a locally relevant, effective and sustainable primary medical care approach. (Food and Health Bureau (FHB)/DH)
- The Steering Committee on Primary Healthcare Development announced in the Chief Executive's 2017 Policy Address will comprehensively review the existing planning of primary healthcare services, develop a blueprint for the sustainable development of primary healthcare services for Hong Kong, devise service models to provide primary healthcare services via district-based medical-social collaboration in the community, and develop strategies to raise community awareness and exploit the use of big data to devise strategies that best fit the needs of the community. (FHB)
- On an ongoing basis, develop, update and promulgate use of the reference frameworks and evidence-based practices for preventive care in primary care settings to facilitate the provision of continuous, comprehensive and evidence-based care in the community. (DH)
- Regularly review and update drug lists and clinical protocols based on scientific and clinical evidence to ensure equitable access by patients to cost-effective drugs and therapies of proven safety and efficacy for treatment of major NCD in all public hospitals and clinics. (HA)
- Strengthen public education (using a life-course approach) and raise health literacy regarding aetiology, prevention, early detection and management of NCD. (DH/HA)



# E LOCAL INDICATOR

Relevant local data source(s) for Indicator (18) set out under the WHO's global monitoring framework<sup>116</sup> is NOT available. While data collected in the PHS 2014/15 allow calculation of the 'number of persons eligible for drug therapy and counselling' among the local population based on 10-year cardiovascular disease risk (CVD risk)<sup>117</sup>, the 'proportion of eligible person receiving drug therapy and counselling to prevent heart attacks and strokes' remains unknown, as data related to drug therapy and counselling<sup>118</sup> to prevent heart attacks and strokes were not collected.

<sup>&</sup>lt;sup>116</sup> The WHO recommends an indicators for monitoring, namely:

 <sup>-</sup>Indicator (18): Proportion of eligible persons (defined as aged 40 years and older with a 10-year CVD risk ≥30% including those with existing cardiovascular disease) receiving drug therapy and counselling (including glycemic control) to prevent heart attacks and strokes (Expected frequency: every 5 years)

<sup>&</sup>lt;sup>117</sup> A 10-year CVD risk of ≥30% is defined according to age, sex, other relevant socio-demographic stratifiers where available, blood pressure, smoking status (current smokers OR those who quit smoking less than one year before the assessment), total cholesterol, and diabetes (previously diagnosed OR a fasting plasma glucose concentration >7.0 mmol/L (126 mg/dl).

<sup>&</sup>lt;sup>118</sup> The WHO defines:

<sup>- &#</sup>x27;drug therapy' as taking medication for raised blood glucose/diabetes, raised total cholesterol, or raised blood pressure, or taking aspirin or statins to prevent or treat heart disease; and 'counselling' as receiving advice from a doctor or other health worker to quit using tobacco or not start, reduce salt in diet, eat at least five servings or fruit and/or vegetables per day, reduce fat in diet, start or do more physical activity, maintain a healthy body weight and lose weight.



# **TARGET 9**

Improve availability of affordable basic technologies and essential medicines to treat major NCD



# A PREAMBLE

Without effective medicines and essential diagnostic and monitoring equipment made available at health facilities to treat non-communicable diseases (NCD), patients will suffer short and long term adverse effects from their disease. Sustainable health-care financing, health policies that safeguard equitable access, adequate and reliable procurement systems for basic health technologies and essential NCD medicines, training of healthcare workers, and evidence-based treatment guidelines and protocols are all necessary for effective management of NCD<sup>119</sup>.

# **B** LOCAL SITUATION

- Hong Kong has a dual track healthcare system under which the public and private healthcare sectors complement each other. The public sector is the predominant provider of secondary and tertiary healthcare services. Around 88% of in-patient services are provided in public hospitals. Patients receive medical treatment and rehabilitation services in specialist clinics and through outreaching services. The public healthcare system provides the Hong Kong population with equitable access to healthcare services at highly subsidised rates. Basic technologies and essential medicines are available and affordable in all public facilities. As the safety net for all, the public sector focuses its services on lower-income and under-privileged groups and illnesses that incur high cost, advanced technology and multi-disciplinary professional team work, amongst other priorities. The private sector complements the public healthcare system by offering choice to those who can afford and are willing to pay for healthcare services with personalised choices and better amenities<sup>120</sup>.
- Primary medical care<sup>121</sup> is predominantly provided by the private sector, by solo practitioners or group practices, in the form of out-patient curative care with some preventive elements. The public sector on the

<sup>&</sup>lt;sup>119</sup> Policy briefs - Global NCD target: Improve access to technologies and medicines to treat NCDs. Geneva: World Health Organization, 2016. Available at:

http://www.who.int/beat-ncds/take-action/policy-brief-improve-medicine-access.pdf?ua=1
 <sup>120</sup> Information extracted from page 26 of the Consultation Document on Voluntary Health Insurance Scheme. (Available at:

http://www.vhis.gov.hk/doc/en/full\_consultation\_document/consultation\_full\_eng.pdf)

<sup>&</sup>lt;sup>121</sup> Primary medical care refers to the medical part of primary healthcare which is the first contact of patients with their consulting doctors.



other hand is responsible for general health promotion and education, disease prevention and control, as well as preventive healthcare services for specific populations such as pregnant women, infants and children, students, with partial coverage for women and the elderly through services offered by the Department of Health (DH). The Hospital Authority (HA) provides primary curative care through general out-patient clinics (GOPCs) mainly to low-income, chronically-ill and poor elders<sup>122</sup>.

- To uphold the Government's policy that no one will be denied adequate medical care due to lack of means, the HA puts in place a medical fee waiver mechanism to provide assistance to needy patients. Recipients of Comprehensive Social Security Assistance (CSSA) are waived from payment of their public healthcare expenses. For non-CSSA patients who cannot afford the medical fees and charges due to, for example, serious or chronic illnesses, HA has a mechanism in place for them to seek financial assistance from Medical Social Workers (MSW) stationed in public hospitals. The applicants' eligibility for waiver is assessed based on both financial and non-financial criteria<sup>123</sup>.
- The Government launched in 2009 the Elderly Health Care Voucher Scheme with aims to supplement existing public healthcare services (e.g. GOPCs and Specialist Out-patient Clinics) by providing financial incentive for Hong Kong eligible elders to receive preventive and curative care from the private healthcare sector that best suits their needs, based on the family doctor concept<sup>124</sup>. With effect from July 2017, Hong Kong identity card holders aged 65 and above can settle the fees of primary care services provided by service providers participating in the Elderly Health Care Voucher Scheme with an annual voucher amount of HKD2 000.
- In 2010, the Food and Health Bureau (FHB) issued the "Primary Care Development in Hong Kong Strategy Document", which paved the way for the publication of the four landmark reference frameworks for preventive care in primary care settings<sup>125</sup>, to support the tackling of NCD through

<sup>&</sup>lt;sup>122</sup> Information extracted from page 19 of the Consultation Document on Healthcare Reform – Your Health Your Life. (Available at:

http://www.fhb.gov.hk/beStrong/files/consultation/Condochealth\_full\_eng.pdf)

<sup>&</sup>lt;sup>123</sup> Source: http://www.legco.gov.hk/yr16-17/english/panels/hs/papers/hs20170717cb2-1843-2-e.pdf

<sup>&</sup>lt;sup>124</sup> Source: http://www.hcv.gov.hk/eng/pub\_background.htm

 <sup>&</sup>lt;sup>125</sup> The four landmark reference frameworks are:
 - Hong Kong Reference Framework for Diabetes Care in Adults in Primary Care Settings



primary care. The reference frameworks aim to:-

- (a) facilitate the provision of continuing, comprehensive and evidence-based care in the community;
- (b) empower patients and their carers; and
- (c) raise public awareness of the importance of proper prevention and management of chronic diseases.
- The General Outpatient Clinic Public-Private Partnership Programme (GOPC PPP programme) was launched by the HA in mid-2014 in three pilot districts with aims to provide choice to patients for receiving primary care services from the private sector, enhance patient access to primary care services, promote family doctor concept, help the HA manage demand for general outpatient service and foster the development of the territory-wide Electronic Health Record Sharing System (eHRSS)<sup>126</sup>. Taking into account the initial positive feedback from medical professional bodies, patients, private doctors and staff as well as the strong community call, the Programme has been expanded by phases and will be rolled out to 18 districts by the end of 2018.
- In view of the above, it is considered that high levels of access by the general public have been made possible for basic technologies and essential medicines to manage NCD through universal coverage by a dual healthcare system engaging the public and private sectors. Despite the lack of specific data quantifying availability and affordability of quality, safe and efficacious essential NCD medicines in both public and private facilities, target (9) relating to health system response, set out under the World Health Organization (WHO)'s global monitoring framework (GMF), is considered achieved in the local context.

<sup>-</sup>Hong Kong Reference Framework for Hypertension Care in Adults in Primary Care Settings

<sup>-</sup> Hong Kong Reference Framework for Preventive Care for Children in Primary Care Settings

<sup>-</sup>Hong Kong Reference Framework for Preventive Care for Older Adults in Primary Care Settings <sup>126</sup> Source: https://www3.ha.org.hk/ppp/homepage.aspx?lang=eng



# C LOCAL TARGET

No specific target on "improving availability of affordable basic technologies and essential medicines to treat major NCD" at the moment<sup>127</sup> due to lack of quantifiable indicators. Please refer to Section E for details.

# D ACTIONS TO ACHIEVE TARGET

For Hong Kong to be able to achieve the ultimate target of "a 25% relative reduction in risk of premature mortality from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases by 2025" (i.e. Target 1), a healthcare system that can effectively manage NCD and prevent NCD deaths is most critical in the immediate term, while behavioural risk factor reduction may take years to produce effect.

# Specific action(s) to be taken, enhanced or explored to achieve target by 2025

- Continue to strengthen the health system at all levels, with emphasis on risk factor reduction, evidence-based screening for early detection and management of NCD using a locally relevant, effective and sustainable primary medical care approach. (FHB/DH)
- The Steering Committee on Primary Healthcare Development announced in the Chief Executive's 2017 Policy Address will comprehensively review the existing planning of primary healthcare services, develop a blueprint for the sustainable development of primary healthcare services for Hong Kong, devise service models to provide primary healthcare services via district-based medical-social collaboration in the community, and develop strategies to raise community awareness and exploit the use of big data to devise strategies that best fit the needs of the community. (FHB)
- Continue to support the long-term sustainable development of our dual track healthcare system to ensure equitable access to healthcare services. (FHB)

<sup>&</sup>lt;sup>127</sup> The WHO sets a voluntary global target of '80% availability of the affordable basic technologies and essential medicines, including generics, required to treat major NCD in both public and private facilities by 2025'.



- On an ongoing basis, develop, update and promulgate use of the reference frameworks and evidence based practices for preventive care in primary care settings to facilitate the provision of continuous, comprehensive and evidence-based care in the community. (DH)
- Regularly review and update drug lists and clinical protocols based on scientific and clinical evidence to ensure equitable access by patients to cost-effective drugs and therapies of proven safety and efficacy for treatment of major NCD in all public hospitals and clinics. (HA)

# E LOCAL INDICATOR

Relevant local data source(s) for Indicator (19) set out under the WHO's  $GMF^{128}$  is NOT available. Currently, there is no systematic assessment of primary health care facilities in both public and private sectors in Hong Kong.

<sup>&</sup>lt;sup>128</sup> The WHO recommends an indicators for monitoring, namely

<sup>-</sup>Indicator (19): Availability and affordability of quality, safe and efficacious essential NCD medicines, including generics, and basic technologies in both public and private (primary health care) facilities (Expected frequency: every 5 years)



# 4 MAKING IT HAPPEN

- 4.1 Developing the "Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong" (SAP) represented but one milestone in Hong Kong's commitment to address non-communicable diseases (NCD). With systematic implementation of this SAP, it is envisaged that our population will enjoy higher standards of health, well-being and quality of life at every age, and hence contributing to higher productivity and more sustainable development for Hong Kong.
- 4.2 The Government will have a leading role in taking the agenda forward. In order to drive, oversee and coordinate implementation of actions and monitor progress, an organisational set-up with adequate staffing and resources will be most important.
- 4.3 To keep the momentum going, the Government will, on a regular basis, publish updated indicators and communicate widely with the community, media, stakeholders and health promotion partners as a means to continuously engage them in the monitoring process and multisectoral actions for NCD prevention and control.
- 4.4 Furthermore, the Government will organise large scale, systematic and outcome-based health communication campaigns with the aim of raising public awareness of lifestyle factors (such as healthy diet, physical activity, avoidance of tobacco and alcohol), their relevance to biomedical states (such as body weight, blood pressure, blood sugar, blood lipids) and NCD risk, and helping people make changes for better health.
- 4.5 Successful prevention and control of NCD relies on collaborative efforts by various important stakeholders including government bureaux and departments, academia, non-governmental organisations, private sector and individuals. We urge everyone to support the SAP and join hands to make Hong Kong a healthier city.



# ANNEXES

# Annex I

List of "best buys" and other recommended interventions for prevention and control of NCD based on WHO guidance

### Guide to interpreting these tables:

The WHO CHOICE analysis assessed and categorised 88 interventions (published in peer reviewed journal with demonstrated and quantifiable effect size) based on their feasibility and cost-effectiveness ratio (expressed as International dollars (I\$) per disability adjusted life year (DALY)) of  $\leq$  I\$ 100 per DALY averted in low- and lower middle-income countries (LMICs); cost-effectiveness ratio > I\$ 100 per DALY averted; and those for which WHO CHOICE analysis could not be conducted. The absence of WHO-CHOICE analysis does not necessarily mean that an intervention is not cost-effective, affordable or feasible – rather, there were methodological or capacity reasons for which the WHO-CHOICE analysis could not be completed at the current time. The subsequent tables show three categories of interventions:-

- "Best buys" are those interventions considered the most cost-effective and feasible for implementation, with an average cost effectiveness ratio ≤ I\$100/DALY averted in LMICs
- "Effective interventions" are interventions with an average cost-effectiveness ratio > I\$100/DALY averted in LMICs
- "Other recommended interventions" are interventions that have been shown to be effective but for which no cost-effective analysis was conducted



# Risk factor: Unhealthy diet

	Recommended interventions based on WHO CHOICE analysis	
	Reduce salt intake through the reformulation of food products	
Best buys	Reduce salt intake through the establishment of a supportive environment in public institutions such as hospitals, schools, workplaces and nursing homes	
Be	Reduce salt intake through a behaviour change communication and mass media campaign	
	Reduce salt intake through the implementation of front-of-pack labelling	
Eliminate industrial trans-fats through the development of legislation ban their use in the food chain Reduce sugar consumption through effective taxation		
Effe	Reduce sugar consumption through effective taxation on sugar-sweetened beverages	
S	Promote and support exclusive breastfeeding for the first 6 months, including promotion of breastfeeding	
tion	Implement subsidies to increase the intake of fruit and vegetables	
iterven	Replace trans-fats and saturated fats with unsaturated fats through reformulation, labelling, fiscal policies or agricultural policies	
ed in	Limit portion and package sizes	
Other recommended interventions	Implement nutrition education and counselling in different settings (e.g. in preschools, schools, workplaces and hospitals) to increase the intake of fruit and vegetables	
ler rec	Implement nutrition labelling to reduce total energy intake, sugars, sodium and fats	
Oth	Implement mass media campaigns on healthy diets to reduce the intake of total fat, saturated fats, sugars and salt, and promote the intake of fruit and vegetables	



# **Risk factor: Physical inactivity**

Recommended interventions	based on WHC	OCHOICE analysis
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Best buys	Implement community wide public education and awareness campaign for physical activity	
Effective Interventions	Provide physical activity counselling and referral as part of routine primary health care services	
ed	Ensure that macro-level urban design supports active transport strategies	
Other recommended interventions	Implement whole-of-school programme that includes quality physical education, availability of adequate facilities and programmes	
er recommen interventions	<ul> <li>Provide convenient and safe access to quality public open space and adequate infrastructure to support walking and cycling</li> <li>Implement multi-component workplace physical activity programmes</li> <li>Promotion of physical activity through organised sport groups and clubs,</li> </ul>	
int		
ot		
	programmes and events	

#### **Risk factor: Harmful use of alcohol**

#### **Recommended interventions based on WHO CHOICE analysis**

	Increase excise taxes on alcoholic beverages	
Best buys	Enact and enforce bans or comprehensive restrictions on exposure	
st b	to alcohol advertising	
Be	Enact and enforce restrictions on the physical availability of	
	retailed alcohol	
Enforcing drink driving laws (breath-testing)		
Effective Interventio	Offer brief advice for hazardous drinking	
tions	Carry out regular reviews of prices in relation to level of inflation and income	
ent	Establish minimum prices for alcohol where applicable	
Other recommended interventions	Enact and enforce an appropriate minimum age for purchase or consumption of alcoholic beverages and reduce density of retail	
led	outlets	
lend	Restrict or ban promotions of alcoholic beverages in connection	
E E	with sponsorships and activities targeting young people	
eco	Provide prevention, treatment and care for alcohol use disorders	
	and comorbid conditions in health and social services	
Othe	Provide consumer information about, and label, alcoholic	
	beverages to indicate, the harm related to alcohol	



# **Risk factor: Tobacco use**

#### Recommended interventions based on WHO CHOICE analysis

	Recommended interventions based on who choice analysis
	Increase excise taxes and prices on tobacco products
	Implement plain/standardised packaging and/or large graphic health warnings on all tobacco products
Best buys	Enact and enforce comprehensive bans on tobacco advertising, promotion and sponsorship
Best	Eliminate exposure to second-hand tobacco smoke in all indoor workplaces, public places, public transport
	Implement effective mass media campaigns that educate the public about the harms of smoking/tobacco use and second-hand smoke
Effective Interventions	Provide cost-covered, effective and population-wide support (including brief advice, toll-free quit line services) for tobacco cessation services to all those who want to quit
ded ons	Implement measures to minimise illicit trade in tobacco products
Other ecommended interventions	Ban cross-border advertising, including using modern means of communication
reco inte	Provide mobile phone based tobacco cessation services

# Disease: Cardiovascular disease and diabetes

	Recommended interventions based on WHO CHOICE analysis	
Best buys	Drug therapy and counselling for people with high risk ( $\geq$ 30%) or moderate to high risk ( $\geq$ 20%) of developing a fatal and non-fatal cardiovascular events in the next 10 years	
Effective interventions	Treatment of new cases of acute myocardial infarction with drug therapy or primary percutaneous coronary interventions Treatment of acute ischaemic stroke with intravenous thrombolytic therapy Primary and secondary prevention of rheumatic fever and rheumatic heart diseases	
Other recommended interventions	Treatment of congestive cardiac failure with drug therapy Cardiac rehabilitation post myocardial infarction Anticoagulation for medium- and high-risk atrial fibrillation Drug treatment of ischaemic stroke Care of acute stroke and rehabilitation	



#### **Disease: Diabetes**

	Recommended interventions based on WHO CHOICE analysis	
Preventive foot care for people with diabetes		
Best buys	Diabetic retinopathy screening for all diabetes patients	
est	Effective glycaemic control for people with diabetes, along with	
ă	standard home glucose monitoring for people treated with insulin	
s id	Lifestyle interventions for preventing type 2 diabetes	
Other commended terventions	Influenza vaccination for patients with diabetes	
Oth ecomn nterve	Preconception care among women of reproductive age who have diabetes	
i. R	Screening and treatment of people with diabetes for proteinuria	

#### **Disease: Cancer**

	Recommended interventions based on WHO CHOICE analysis
o ب	Vaccination against human papillomavirus of 9-13 year old girls
Best buys	Prevention of cervical cancer by screening women aged 30-49
	years
SL	Screening with mammography (once every 2 years for women
ioi ve	aged 50-69 years) linked with timely diagnosis and treatment of
ctiv	breast cancer
Effective interventions	Treatment of CRC, cervical cancer and breast cancer stages I and II
int	Basic palliative care for cancer: home-based and hospital care
ided ion	Prevention of liver cancer through hepatitis B immunisation
Other Recommended intervention	Population-based CRC screening at age >50 years, linked with timely treatment
	Oral cancer screening in high-risk groups linked with timely treatment



#### **Disease: Chronic respiratory diseases**

	Recommended interventions based on WHO CHOICE analysis
Best buys	Symptoms relief for patients with asthma with inhaled salbutamol
	Symptoms relief for patients with chronic obstructive pulmonary disease with inhaled salbutamol
	Treatment of asthma with low-dose inhaled beclometasone and short acting beta agonist
Other Recommended interventions	Access to improved stoves and cleaner to reduce indoor air pollution
	Cost-effective interventions to prevent occupational lung diseases
	Influenza vaccination for patients with chronic obstructive pulmonary disease

Source: Adopted from the WHO's publication "Tackling NCDs: 'best buys' and other recommended interventions for the prevention and control of noncommunicable diseases (2017)"



# Annex II

Steering Committee on Prevention and Control of Non-communicable Diseases (from 24 November 2016 to 23 November 2018)

# **Terms of Reference**

- 1 To steer the direction of work on NCD prevention and control in accordance with WHO's Global Action Plan for the Prevention and Control of NCD 2013-2020;
- 2 To advise and oversee implementation of the time-bound commitments and achievement of the progress indicators;
- 3 To develop a set of voluntary targets and indicators based on local NCD situations, and monitor their achievements; and
- 4 To continue monitoring the implementation of outstanding action items of the three Action Plans.

# Chairperson

Prof Sophia CHAN Siu-chee, JP

# **Deputy Chairperson**

Dr Constance CHAN Hon-yee, JP

# **Non-official Members**

Prof Juliana CHAN Chung-ngor Dr Peter CHAN Hung-chiu Ms Amy CHAN Lim-chee, JP Mr CHIM Hon-ming Dr CHOI Kin Dr CHOW Chun-bong, BBS, JP Prof FUNG Hong, JP (till January 2018) Mrs Josephine KAN CHAN Kit-har Ms Lisa LAU Man-man, BBS, MH, JP Ms Susanna LEE Wai-yee Ms LEE Yi-ying Prof Gabriel Matthew LEUNG, GBS, JP Dr Lobo LOUIE Hung-tak



Dr LUI Siu-fai, MH, JP Ms Scarlett PONG Oi-lan, BBS, JP Dr Thomas TSANG Ho-fai (since January 2018) Dr Margaret WONG Fung-yee Mr Simon WONG Kit-lung, JP

### **Ex-officio Members**

Mr Howard CHAN Wai-kee, JP Dr CHEUNG Wai-lun, JP (till January 2018) Dr Tony KO Pat-sing (since January 2018) Mr Raymond FAN Wai-ming, JP (till January 2018) Mr FONG Kai-leung (till February 2018) Dr Rita HO Ka-wai Dr HO Yuk-yin, JP (till June 2017) Mrs HONG CHAN Tsui-wah (till June 2017) Ms Ida LEE Bik-sai (since March 2018) Mr Albert LEE Kwok-wing, JP (till August 2017) Dr Samuel YEUNG Tze-kiu (since September 2017) Mr WOO Chun-sing (since July 2017) Miss Rosaline WONG Lai-ping (since August 2017) Dr WONG Ka-hing, JP

#### Secretary

Dr Regina CHING Cheuk-tuen, JP



# Annex III

Task Force underpinning the Steering Committee on Prevention and Control of Non-communicable Diseases

### **Terms of Reference**

- 1 To advise and support the Steering Committee in the development of a set of local non-communicable disease targets and indicators based on World Health Organization guidance; and
- 2 To make recommendations to the Steering Committee on systems, programmes and action plans required to achieve effective non-communicable disease prevention and control.

#### Convenor

Dr LUI Siu-fai, MH, JP

#### Members

Prof Juliana CHAN Chung-ngor Dr Peter CHAN Hung-chiu Ms Amy CHAN Lim-chee, JP Mr CHIM Hon-ming Dr CHOI Kin Dr CHOW Chun-bong, BBS, JP Prof FUNG Hong, JP Mrs Josephine KAN CHAN Kit-har Mr James LAM Yat-fung Ms Lisa LAU Man-man, BBS, MH, JP Ms Susanna LEE Wai-yee Ms LEE Yi-ying Prof Gabriel Matthew LEUNG, GBS, JP Dr Lobo LOUIE Hung-tak Ms Scarlett PONG Oi-lan, BBS, JP Dr Margaret WONG Fung-yee Mr Simon WONG Kit-lung, JP



### **Co-opted Members**

Representative of Education Bureau Representatives of Department of Health Representative of Food and Environmental Hygiene Department Representative of Hospital Authority Representative of Leisure and Cultural Services Department Representative of Social Welfare Department Representative of Housing Department

#### Secretary

Dr Regina CHING Cheuk-tuen, JP



# **Annex IV**

# Meetings and topics discussed by the Task Force

Meeting dates	Papers considered and discussed
(12 December 2016)	<ul> <li>Work Schedule, Membership and Terms of Reference [TFPC(NCD) Paper No. 01/2016]</li> <li>Overview of Data Availability and Status of Local NCD Monitoring [TFPC(NCD) Paper No. 02/2016]</li> <li>Proposed Non-Communicable Disease Priority Action Areas and Approach in Selecting Local Targets and Indicators [TFPC(NCD) Paper No. 03/2016]</li> </ul>
Second meeting (24 February 2017)	<ul> <li>World Health Organization (WHO)'s Recommended Programmes for NCD</li> <li>Prevention and Control and their Relevance to Hong Kong [TFPC(NCD) Paper No. 01/2017]</li> </ul>
Third meeting (4 August 2017)	<ul> <li>Proposed Interventions for Prevention and Control of NCD in Hong Kong [TFPC(NCD) Paper No. 02/2017]</li> </ul>
Fourth meeting (29 November 2017)	<ul> <li>Proposed targets and indicators for Prevention and Control of NCD in Hong Kong [TFPC(NCD) Paper No. 03/2017]</li> </ul>

# Timeline of meetings of the Task Force and Steering Committee

