

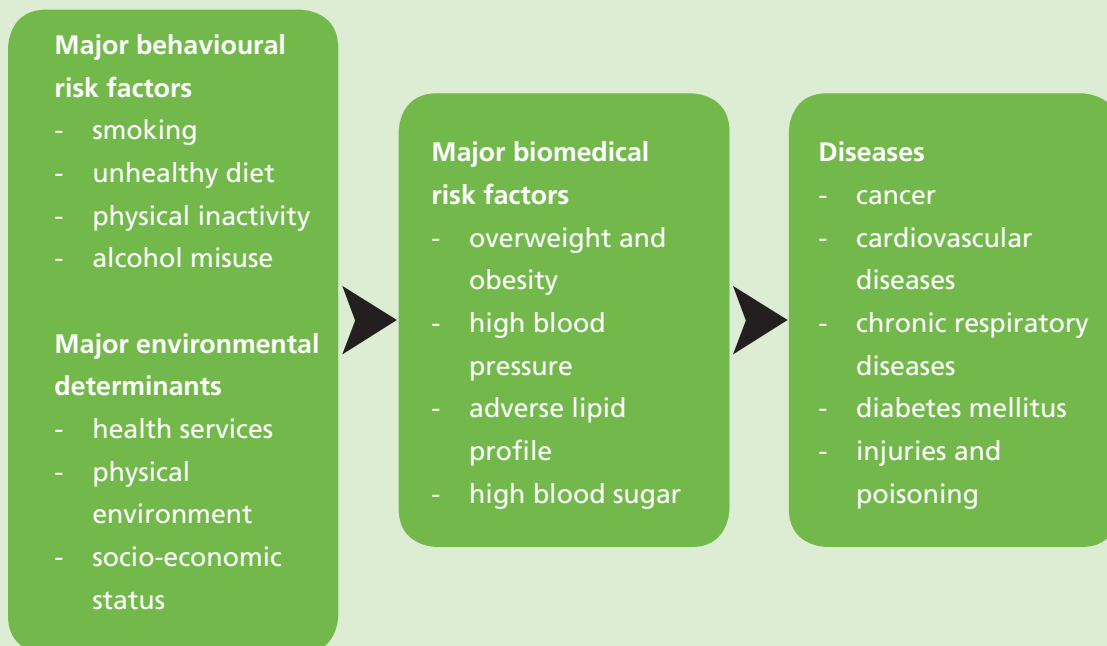
### Principle

- 5.2 Based on WHO's Global Strategy for Prevention and Control of NCD, the principles for establishing the strategy are —
- shared responsibility across the Government, professional groups, non-government agencies, business sector and the community;
  - diversity in approach, targeting the whole population, specific population subgroups and individuals most at risk;
  - concentrating on promotion, prevention and early intervention; and
  - evidence-based, outcome-focused and addressing health determinants.

### Scope

- 5.3 In Hong Kong, a limited number of NCD account for a significant proportion of disease burden on the community and healthcare system. At the same time, several risk factors work together to predispose and give rise to these diseases. Accumulated knowledge and experience in health promotion and disease prevention shows that strategically focused interventions on a "cluster" of modifiable behavioural risk factors and environmental determinants can induce parallel changes in those biomedical risk factors, thereby reduce the risk of developing NCD. To optimise health gains, this strategic framework will focus on the major risk factors that are potentially preventable or modifiable and have significant impact on the health of the Hong Kong population (Exhibit 40 and 41).

## Exhibit 40: Scope of the NCD prevention and control framework



## Exhibit 41: Facts on selected risk factors and NCD

### *Air Pollution and Respiratory Diseases*

Ambient air pollutants include a wide range of particulates and gases. Air pollution in Hong Kong is mainly caused by emissions from local motor vehicles/power plants and from industries/power plants in the vicinity. The impact of air pollution on respiratory system has been widely recognised. Studies have reported that significant associations were found between hospital admissions for chronic respiratory diseases and the concentration level of respirable suspended particulates, nitrogen dioxide, sulphur dioxide and ozone.<sup>1</sup> Another epidemiological study found a reduction of chronic bronchitis symptoms and bronchial hyper-responsiveness in young children after the enforcement of regulations for controlling the concentration level of sulphur dioxide in ambient air.<sup>2</sup>

### *Alcohol and Injuries*

Alcohol misuse not only contributes to adverse health effects, but also to intentional injuries (e.g. suicide), unintentional injuries (e.g. road traffic accidents, falls) and social problems. Alcohol misuse is involved in a quarter of intentional injury death cases annually. For all unintentional injury deaths, 40-60% of all injury deaths are attributed to alcohol consumption.<sup>3</sup> A local epidemiological study on all motor vehicle deaths in 1999 found that one in ten (10.3%) accidents had involved alcohol.<sup>4</sup>

### ***Diet and CVD***

The WHO recommends intake of a minimum of 400 gram of fruit and vegetables per day for the prevention of NCD, including heart diseases and stroke. Low fruit and vegetables intake, a common dietary pattern in developed areas, is now among the top ten risk factors contributing to global mortality. Worldwide, low intake of fruit and vegetables is estimated to cause about 31% of ischaemic heart disease and 11% of stroke.<sup>5</sup>

### ***Physical Activity and Diabetes Mellitus***

To maintain health, the WHO recommends people to engage in not less than 30 minutes of physical activity of moderate intensity every day, or at least on most days of the week.<sup>6</sup> There is strong epidemiological evidence for the protective effect of physical activity against developing type 2 diabetes mellitus.<sup>7</sup>

### ***Smoking and Cancer***

Lighting up cigarettes will release many chemicals such as tar, nicotine, carbon monoxide etc, which cause harm to the entire respiratory system. Compared to non-smokers, men who smoke are about 23 times more likely to develop lung cancer and women who smoke are about 13 times more likely so. Smoking causes about 90% of lung cancer deaths in men and almost 80% in women. Smoking is also associated with cancers of the oral cavity, larynx, pharynx, esophagus and bladder. For smoking-attributable cancers, the risk generally increases with the number of cigarettes smoked and the number of years of smoking, and generally decreases after quitting completely.<sup>8</sup>