



## chapter 1

### WHAT IS PUBLIC HEALTH?

Canadians are rightly proud of their system of publicly funded health care, which is made up of doctors, nurses and other health care professionals; hospitals and laboratories; and home care and related services. Sometimes the concept of “publicly funded health care” is confused with “public health.” It’s important to understand the difference.

Publicly funded health care refers to health care that is financed entirely or in large part by taxes, instead of by private payments made to insurance companies or directly to health care providers. Public health, on the other hand, is the organized efforts of society to keep people healthy and prevent injury, illness and premature death. Public health is a combination of programs, services and policies that protect and promote the health of all.<sup>1</sup>

Until only a few decades ago, health care at the individual level – in the sense of the management and cure of a person’s disease – was considered a personal responsibility, not a concern of the state. In contrast, threats to collective health, especially the risk of contagion, were the subject of state regulation from early times. The first act to enforce sanitation in England dates back to 1388. In 1403, Venice established the first formal system of quarantine, with its requirement that sea travelers from countries thought to be affected by the plague remain aboard ship for 40 days (to give the disease time to incubate).

Indeed, the word “quarantine” comes from the Latin word for 40.

The Sanitary Reform Movement in England, starting with Edwin Chadwick’s 1842 report on urban squalor and lack of sanitation, soon spread through the industrialized world. To establish the conditions for better health, focus was put on the proper disposal of sewage and waste and the provision of clean water. Much of the progress achieved during the 19th century in controlling infectious diseases can be traced to improvements in sanitation together with the introduction of vaccination – and both are still central to public health today.

Also in the 19th century, the introduction of the census, including the collection of information about births and deaths, allowed public health workers to start developing methods for measuring the health of populations. To this was added the new science of epidemiology, the study of the distribution of diseases and their determinants.

Other scientific advances enabled public health to offer pasteurization of milk, tuberculosis sanatoria, control over sexually transmitted diseases and immunization. Nor were advances limited to the prevention and control of infectious diseases: in the 18th and 19th centuries, there was action against the nutritional, occupational and environmental causes of disease; later, efforts were directed to promoting the health of pregnant women and children.

Today in Peel, public health is the responsibility of the Regional Municipality, with Regional Council as the governing body. Peel Public Health is part of the Department of Health Services. Funding is provided by the Government of Ontario and the Region of Peel.

Much of the work of Peel Public Health is carried out in partnership with the voluntary sector, school boards, business, labour, governments at all levels and other health care agencies and professionals. Our aim is to improve and maintain the health of the population; reduce disparities in health across the population; prepare for, and respond to, emergencies and outbreaks of disease; and enhance the sustainability of the health care system.

Public health action is needed to control communicable diseases – this is obvious. Not so obvious is the role of public health in preventing chronic disease. Here are some basic facts to keep in mind.

Risk factors for chronic disease are distributed in such a way that most people have only slightly elevated risk, while a small number of people have much higher risk. However, occurrence of chronic disease is greatest among those with only slightly elevated risk, because although the individual risk level is relatively low, the number of people in this group is large.

So the question arises: Are differences across populations in the average prevalence of chronic diseases, such as obesity and cardiovascular disease explained by, in these instances, individuals in each population deciding collectively to eat less and/or exercise more, all else being the same? That would be unlikely. The logical explanation is that the decisions of the individuals are influenced by commonly experienced cultural and environmental factors. Similarly, the increase in body weight over time in Canada cannot be explained by people deciding, for no particular reason, to eat more and/or exercise less. Again, logic tells us that societal changes – changes in the way we go about our daily lives – have influenced our eating and physical activity habits.

It follows that exhortations to individuals to improve their health-related behaviours would not be sufficient on their own to bring about a significant reduction in the major causes of ill health and death. Likewise, prevention efforts that focus exclusively on high-risk individuals fail to address the root of the problem, and thus would reduce only minimally the overall level of disease.

For substantial progress to occur, change must take place within our social, economic, natural, built and political environments. The solutions we seek will come through better education, regulation, community development and social policies and programs. Together, these factors are known as the determinants of health.

Think of the determinants of health as the “causes of the causes” of ill health. You’ll read more about them in the next chapter. In addition, throughout this report, you’ll encounter numerous examples of population segments that have higher risk of particular diseases than the population as a whole – largely as a result of different exposures to the determinants of health. Action at the societal level – what is known as a “population health approach” – is required to maintain and improve the health of people who are at risk due to their experiences with the determinants of health.

For some health conditions, an individual – focused strategy must also be put in place. For example, it is important to provide individualized preventive services (including immunizations and cancer screenings) for a range of diseases to everyone in the population; to seek out those at high risk in order to prevent disease onset; and to closely monitor and treat disease at an early stage to avoid progression and complications. This approach to health care is known as “clinical prevention.”

The two approaches – population health and clinical prevention – are complementary, and their roles vary according to the disease, risk factor and available preventive actions.<sup>2</sup>