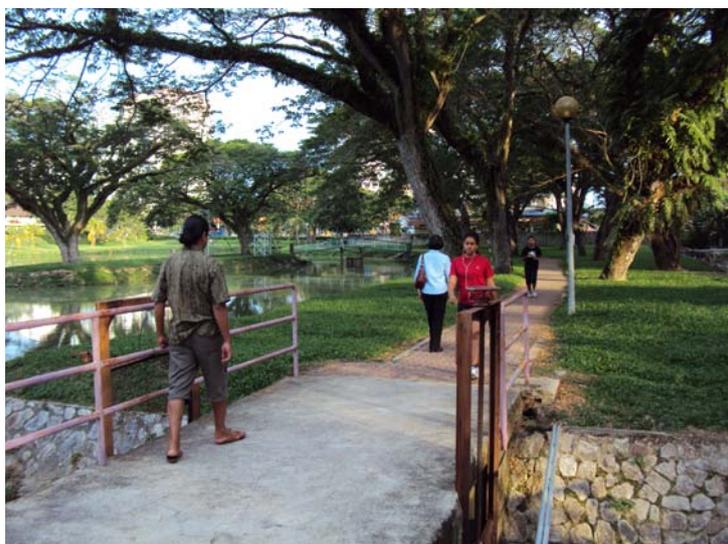


**Broadening the Focus
from Tobacco Control to
NCD Prevention:
Enabling Environments
for Better Health**



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1 Introduction

1.1 Purpose of this Guide

This guide is focused on policy interventions that lead to creating enabling environments for the prevention of non-communicable diseases (NCDs). NCDs have gained global attention in recent years because of their dramatic increase around the world and because of their growing burden in low- and middle-income countries.

For decades, the international health community has sought to address NCDs through its focus on tobacco control. Tobacco has gained significant attention as a risk factor for poor health since the release of the 1st Surgeon General's report on the topic in 1964. Today it ranks as the highest ranked preventable risk factor for the global burden of NCDs.¹ By 2001, tobacco production and use also began to receive international recognition as significant contributors to poverty and obstacles to sustainable development. The global tobacco control movement has demonstrated the importance of policy-based measures to address the burden of tobacco at the population level, and to create an enabling environment to facilitate a reduction in tobacco use.

However, to reduce the burden of NCDs and prevent them from becoming an even greater burden worldwide, it is important to focus on *all* of the modifiable risk factors: tobacco use, physical inactivity, unhealthy diets, and alcohol abuse. This guide is designed to support those organizations and individuals who are interested in working on these NCD

¹ Lozano, R., et. al. (2012) "Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2012: a systematic analysis for the Global Burden of Disease Study 2010." *The Lancet* 380 (9859): 2095-2128.

risk factors. This guide provides:

- ✧ Background information on NCDs
- ✧ Lessons learned from the tobacco control movement
- ✧ An explanation of how these lessons can be applied to other risk factors
- ✧ Key information needed to begin working on physical inactivity, unhealthy diets and alcohol abuse, as well as sources of additional information

Having a background in tobacco control is not necessary to use this guide or to start an NCD program. This guide will be helpful to any organization that wishes to start a program focused on physical activity, healthy diets and prevention of the harmful use of alcohol. This guide does not cover the specifics of tobacco control, except to use the lessons learned to highlight the way forward for the broader NCD risk factors.

This guide is focused on the prevention of NCDs, not their treatment. People suffering from NCDs of course require care and it is necessary for healthcare organizations to advocate for treatment options for their patients. However, many NCDs cannot be cured and lead to a lifetime of difficulties and limitations that drastically reduce quality of life, while the costs of treating NCDs are extraordinarily high. Therefore, we believe the best way to address NCDs is to prevent them in the first place. The burden on national health systems will be reduced if there are fewer cases of NCDs, while leading to a better quality of life for many.

1.2 How to Use this Guide

This guide is full of information you can use to start working on physical activity, healthy diets, and alcohol control. Chapter 2 broadly describes the problems of NCDs; chapters 3 and 4 highlight the key lessons that have been learned by the tobacco control movement and explain how

these lessons can be applied to the other NCD risk factors. Chapters 5, 6, and 7 provide in-depth information about physical activity, healthy diets, and alcohol control, respectively. Each of these chapters begins by describing the relevant risk factors and explaining current recommendations for what or how much people should be doing to reduce their risk. They then describe what an “enabling environment” would look like for each risk factor and outline the research that can be carried out to address these issues. The guide’s final chapter describes strategies that can be used to change policy for each of the risk factors.

Key information is highlighted throughout the guide in boxes. Blue boxes contain key messages from each of the sections. Red boxes provide key definitions to help you understand terminology. Green boxes contain information about government jurisdiction and “potential allies”. As you will need different allies for different issues, we have included suggestions for you to consider. However, each country is different and you should look into your own situation and determine who might be best to work with in relation to your particular interests. Orange boxes provide suggestions about ways to gather more information. Lastly, purple boxes contain examples, helpful links, and important quotes. All of the boxes help you find key information for moving forward.

Understanding an issue takes time and as you work in an area, you will become more comfortable with the material. It is important to remember to build on the work that you have already been doing. If you are a tobacco control advocate, you will already have advocacy skills and you will already be connected to some key government officials and local allies. Build on that experience as you begin your program. If you need more direct assistance, please contact HealthBridge directly.

2 Why is Working on NCDs Important?

According to the World Health Organization, in 2008 almost two-thirds of global deaths were due to NCDs; nearly 80% of these deaths occurred in low- and middle-income countries. Although NCDs can include any disease that is non-communicable in nature, the burden of disease is comprised mainly of cardiovascular diseases, cancers, diabetes and chronic lung diseases. The combined burden of these diseases is rapidly increasing in lower-income countries and is projected to increase by 17% between 2005 and 2015.² The NCD epidemic is thwarting poverty reduction efforts, and is thus an important development issue.³ The

WHO notes that “A large proportion of NCDs are preventable. They share modifiable behavioural risk factors such as tobacco use, unhealthy diet, lack of physical activity, and the harmful use of alcohol... If no action is taken, over the next three decades, the cost of NCD burden will amount to trillions of dollars of lost resources.”⁵

political declaration of the UN High Level Meeting on NCDs, held in 2012, notes “with grave concern the vicious cycle whereby non-communicable diseases and their risk factors worsen poverty, while poverty contributes to rising rates of non-communicable diseases, posing a threat to public health and economic and social development”.⁴

² World Health Organization (2012). *A comprehensive global monitoring framework including indicators and a set of voluntary global targets for the prevention and control of noncommunicable diseases*. Second WHO Discussion Paper, 22 March 2012.

³ World Health Organization (2010). *Global Status Report on Noncommunicable Diseases*.

⁴ Political Declaration of the UN High Level Meeting on NCD (2012).

⁵ World Health Organization. *Comprehensive global monitoring framework*.

Four modifiable risk factors are responsible for most major NCDs: unhealthy diets, physical inactivity, tobacco use, and the harmful use of alcohol. Combined, these risk factors cause more than two-thirds of all new cases of NCDs, and further increase the risk of complications in people who are already ill.⁶ Reducing these risk factors, on the other hand, could prevent 80% of premature heart disease, 80% of premature stroke, 80% of type 2 diabetes, and 40% of cancer.⁷ If people had healthier diets and were more active, the incidence of heart disease, stroke, and, to a lesser extent, at least three types of cancer would decline. The effect is particularly strong in terms of reduced morbidity: people may still die of an NCD, but with a healthier lifestyle, that death will come later and with fewer years of preceding illness.⁸

Morbidity refers to the state of being diseased or unhealthy.

Mortality refers to the number of people who died within a population.

In addition to the obvious health concerns, there are economic costs associated with the rise of NCDs. People who suffer from an illness are less productive, which will result in lost earnings. This is of particular concern for lower-income families, as it can have a devastating effect on a household whose main wage earner has an NCD. In addition, the costs associated with treating NCDs may overwhelm already stretched healthcare systems. For example, disease related to physical inactivity is estimated to cost \$377 million

⁶ Beaglehole R et al. (2011). Priority actions for the non-communicable disease crisis. *The Lancet*, 377(1775): 1438-1447.

⁷ World Health Organization (2012). *Interventions on diet and physical activity: what works – Summary Report*. Accessed 12/12/2012 from: <http://www.who.int/dietphysicalactivity/summary-report-09.pdf>

⁸ Cecchini M, Sassi F, Lauer J, Lee Y, Guajardo-Barron V, Chirsholm D. (2010). “Tackling of unhealthy diets, physical inactivity, and obesity: health effects and cost-effectiveness.” *The Lancet*, 376(9754): 1775-1784.

each year in Australia, \$2.1 billion in Canada, and \$24 billion in the U.S. As physical inactivity levels increase, these figures continue to rise.⁹ A recent study in Vietnam demonstrated that the direct health costs associated with just five tobacco-related diseases exceeded USD 473 million annually.¹⁰ This level of economic cost to the healthcare systems of low-and middle-income countries would be impossible to manage.

Most importantly, many of the deaths related to NCDs are preventable. As the next chapter shows, the tobacco control experience has demonstrated that, to be effective, prevention efforts must be comprehensive and focus on policies that create more health-promoting environments.

Key Messages:

- ✧ NCDs account for a large portion of death and illness in the world
- ✧ NCDs are thwarting poverty reduction and economic development efforts
- ✧ NCDs have major economic costs and can devastate low-income families
- ✧ NCDs have four shared modifiable risk factors: physical inactivity, unhealthy diets, tobacco use, and excessive use of alcohol
- ✧ Many NCDs can be prevented or dramatically reduced by addressing the risk factors
- ✧ Expenditures to reduce NCD risk factors will result in reduced morbidity and will save the economy in both healthcare costs and productivity loss.

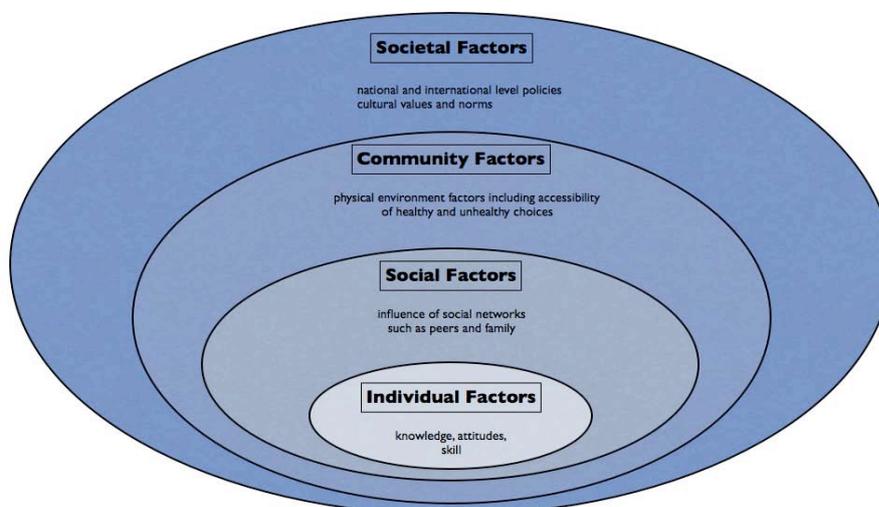
⁹ Duncan M, Spence J, Mummery K. (2005). "Perceived environment and physical activity: a meta-analysis of selected environmental characteristics." *International Journal of Behavioral Nutrition and Physical Activity*, 2:11.

¹⁰ Pham Thi Hoang Anh and Le Thi Thu (2012). *Health costs attributable to smoking in Vietnam: Final research report*. HealthBridge: Ottawa. These figures include direct health care costs only; when the indirect costs are added, the total cost exceeds USD 1.2 billion annually.

3 What are the Lessons Learned from Tobacco Control?

Tobacco control advocates from around the world have been working to reduce tobacco-related diseases for decades. As a result of their efforts, we have a much greater understanding of the factors that discourage or encourage people to use tobacco. What we learned is that behaviour is influenced at multiple levels. One way to explain these different levels is to look at the Social-Ecological Model¹¹:

Figure 1: Social-Ecological Model for Health Promotion



What this model explains is that the choices and decisions made by smokers and non-smokers are influenced by:

- ◆ **Societal Factors:** the influence of national level policies and broader social norms. For example, taxation makes

¹¹ CDC (2007). *CDC's State-Based Nutrition and Physical Activity Program to Prevent Obesity and Other Chronic Diseases: Social-Ecological Model*. HHS/CDC/NPAO. 2007.

tobacco more expensive, which reduces its desirability, especially among the youth and low-income earners.

- ◆ **Community Factors:** the influence of the physical environment. For example, having smoke-free restaurants makes it easier for people not to smoke.
- ◆ **Social Factors:** the influence of friends and peers. For example, if their friends or family members smoke, people are more likely to smoke.
- ◆ **Individual Factors:** the influence of an individual's attitudes, knowledge, and beliefs. For example, if a person believes that smoking is cool, he is more likely to smoke.

What was learned in tobacco control was that no single intervention on its own was sufficient to reduce tobacco use within the population. It is important to change the societal and community factors **first** before trying to change social and individual factors. **Making sure that the places where people live, work and play support healthy behaviour is more likely to lead to success in changing attitudes and behaviours than is focusing on individual factors alone.**

Knowledge is by no means necessary to engage in healthier practices. For instance, many people avoid tobacco without knowing the health consequences of smoking. Meanwhile, many educated smokers are well aware that smoking is harmful to their health and is the cause of a number of diseases.

Making sure that the places where people live, work and play support healthy behaviour is more likely to lead to success in changing attitudes and behaviours than is focusing on individual factors alone.

The evidence shows that an enabling environment must exist **before** people (both smokers and non-smokers) can be expected to change their behaviour. The more the environment supports non-smokers, the easier it is for the population not to smoke. There are various policy measures

to reduce tobacco use, especially banning all forms of advertising and sponsorship, making more places smoke-free, improving package warnings, and raising taxes on tobacco products. These efforts make tobacco less affordable and available, and are all society or community factors that contribute to an enabling environment. Supporting people with these environmental changes leads to behaviour change at the population level. As more and more public places have become smoke-free through legislation, people's tolerance of public smoking has declined, even if they do not understand the threat posed by second-hand smoke. Smoking has become denormalized in Canada, Thailand, and in many other countries in just one generation. In Thailand, for example, such policies have led to a significant reduction in smoking; whereas in 1991 Thailand had a male smoking rate of 59% and a female rate of 5%, according to the WHO, those rates are now 42% and 2%.¹²

Denormalize refers to the process where an object or action is made to seem not normal or legitimate.

This is not to say that public education plays no role in tobacco control. People need to understand the reasons that policies are used to improve the environment; and understanding may lead them to support the policy changes that need to happen. In addition, just because the environment enables healthy behaviour, people may not automatically engage in more healthy behaviour. People still smoke even with high taxes, smoke-free places, and no advertising of tobacco products. However, tobacco control has shown that without the enabling environment, population level behaviour change is unachievable.

¹² WHO Tobacco Free Initiative, http://www.whothailand.org/en/Section3/Section104_307.htm

It is also critical to adopt a multi-sectoral approach that brings together various parties in national and local governments. Ministries of health often do not have the jurisdiction to make the necessary changes, nor are NCDs always seen to be a priority health issue, particularly in low- and middle-income countries. This means that we need to engage with a variety of ministries beyond the Ministry of Health, such as ministries of finance, trade, industry, and agriculture. The tobacco control movement learned early on that moving beyond a ‘health-only’ focus led to far-reaching and more sustainable policy changes and actions. It also learned that tobacco control is an important poverty reduction measure beyond its direct impact on health.

Some key organizations and websites that you can visit for more information about tobacco control include:

- ✉ *The Frameworks Convention Alliance (FCA) – www.fctc.org*
- ✉ *GLOBALink – www.panacealink.org*
- ✉ *The International Union Against Tuberculosis and Lung Disease (The Union) – www.tobaccofreeunion.org*
- ✉ *HealthBridge – www.healthbridge.ca*

Negotiations of the WHO Framework Convention on Tobacco Control (FCTC) require inter-ministerial and inter-disciplinary cooperation and collaboration. In most countries, the Ministry of Health had to work with a number of other ministries to get the FCTC signed and ratified, as the entire business of tobacco control extends far beyond tobacco’s health consequences.

It is also important to create a movement that facilitates the sharing of lessons, knowledge and experience. The tobacco control community has been successful because government and civil society groups have worked together for change through the Framework Convention on Tobacco

Control. Opportunities to share lessons learned, to identify challenges and opportunities, and to provide support within and across countries were created through such venues as the World Conference on Tobacco Health and through global networks such as the Framework Convention Alliance and GLOBALink. In addition, creating a global movement meant that everyone's efforts were focused on the same key issues and strategies. This opportunity to share helped tobacco control leaders understand the issues and work together to create the global changes that we are now seeing and continuing to pursue.

Key Messages:

- ✧ *Behaviour is influenced at different levels.*
- ✧ *Comprehensive programs are needed – no single intervention on its own was sufficient to reduce tobacco use in the population.*
- ✧ *Creating enabling environments is the most important first step in changing behaviour. This means making sure that the places where people live, work, and play support healthy behaviour.*
- ✧ *Using a multi-sectoral approach is necessary because health issues are impacted by a variety of sectors and government departments.*
- ✧ *Creating a “movement” provides support to those working on the issue.*

4 Tobacco Control to NCD Prevention

An important lesson from tobacco control is that there are proven, effective policies that can reduce the harms caused by tobacco. Those policies that have been proven to be effective in tobacco control can be adapted to apply to NCDs more broadly. If a key lesson learned has been the importance of making changes to societal- and community-level factors to influence behaviour related to tobacco use, how does this apply to other NCD risk factors? By focusing on policies related to the physical environment, the fiscal environment, and the information environment, similar policy changes can be used to impact behaviour related to other risk factors: diet, physical activity, and alcohol use.

4.1 Policies that Create Enabling Environments

As we learned from the previous section, working on policies will be critical if we want to see lasting behaviour change. This means demonstrating to governments the necessity of developing and enacting policies that address unhealthy behaviours and promote healthy ones. The chapters that follow focus on specific policies that deal with physical activity, healthy diets, and alcohol control. Broadly speaking, tobacco control's focus on a comprehensive mix of policy measures can be adapted to the NCD context. Examples of relevant policies include:

4.1.1 *Physical Environment Policies*

The physical environment has an enormous influence on people's daily behaviour. Tobacco control advocates focused on creating smoke-free-spaces as a way of creating

a physical environment that, by not being conducive to public smoking, was supportive to changing social norms, supporting people who wanted to quit smoking, and protecting all people from the harms of second-hand smoke. Creating physical environments that are enabling may be even more important for physical activity and healthy diets.

Department for Transport of London: "In order to increase levels of physical activity, it is necessary to reduce use of the car."¹³

Policy measures that aim to improve the physical environment for physical activity include, for example, improving the way that communities are designed so that people are able to reach their destinations by foot or bicycle in a safe, convenient, enjoyable, and physically active manner. Policies that positively affect community access and availability of healthy foods include restricting the sale of unhealthy foods, ensuring that local fresh fruit and vegetable markets are widely available, and supporting the establishment and maintenance of community gardens. A policy measure that changes the physical environment for alcohol control is one that restricts the locations where alcohol products are sold.

4.1.2 Fiscal Environment Policies

The most effective method in tobacco control has been raising the cost of tobacco products through taxation and other fiscal measures. This has, in turn, reduced the appeal and affordability of smoking. There are many examples that could be applied to other NCD risk factors, such as raising taxes on alcohol, raising taxes on unhealthy foods, providing

¹³ Roger L Mackett and Belinda Brown, "Transport, Physical Activity and Health: Present knowledge and the way ahead." Scanning Study commissioned by the Department for Transport, London, Great Britain, December 2011.

subsidies to make healthy foods more available and more affordable, and increasing the costs associated with driving a motor vehicle, such as raising taxes on automobiles and their usage, while reducing the tax on bicycles and increasing subsidies for public transport.

4.1.3 Information Environment Policies

The information environment includes all of the information that is presented to the public about a particular product or issue. Corporations have an interest in promoting their products in the most attractive way to consumers. This has resulted in misleading information being shared about tobacco products. Tobacco control advocates have successfully stopped misleading messages about tobacco use through bans on cigarette promotion and the use of mandatory product labelling that explains the risks of using tobacco. Advertising bans and regulations, as well as labelling, specifically address the information environment and can be adapted to other risk factors. Ensuring

WBB Trust in Bangladesh has worked on tobacco control since 1998 and, using that foundation, began applying its techniques to NCDs in 2004. Its experience in networking, capacity building, use of the media, research and advocacy were exactly the skills needed to begin working on physical activity and healthy diets.

appropriate food labelling and banning advertising for alcohol are two such examples. Likewise, safe walking and cycling routes can be supported by well-marked signage and advertising programmes.

While the specific details are important, the key issue is that what has worked with tobacco control will also work with NCDs: a focus on

changing policies will lead to changes in the physical, fiscal, and information environment and will, in turn, lead to positive behaviour change.

There are, however, some significant differences between tobacco control and NCD prevention. Tobacco control is inherently negative: it involves attempting to reduce an unhealthy behaviour (tobacco use). The policies it seeks to implement are aimed at deterring tobacco use, not at replacing it with something healthier. In contrast, NCD prevention more broadly incorporates both positive and negative approaches. It involves making unhealthy choices less attractive, convenient, and/or affordable (for example, reducing the consumption of salty and highly processed foods). But it also involves making the healthy choices more attractive, convenient, and affordable (increased consumption of fresh fruits and vegetables). As such, it goes beyond the usual policy measures that are required by tobacco control, and into other areas that influence how people live. Rather than simply discouraging unhealthy diets and low activity levels, it *promotes* healthy diets and seeks to create an environment that *facilitates* physical activity.

In the early days of tobacco control, emphasis was put on changing individual behaviour through positive messages and education, including through in-school programs. There will be many who will want these activities to be the focus for the other NCD risk factors. But experience has clearly shown that these efforts are bound to fail if they are not supported by policy changes that create an enabling environment. Only when the emphasis in tobacco control shifted from public education to policies that changed the enabling environment did rates of tobacco use, in country after country, begin to fall significantly. That decline was maintained as long as the policies were implemented.

Table 1: Summary of how tobacco control policies can be applied to other NCD risk factors

Tobacco control	Alcohol	Diet	Physical activity
Tobacco taxes set to increase beyond inflation/cost of living	Alcohol taxes set to increase beyond inflation/cost of living	Raise taxes on foods high in sugar, fat, salt	Raise fuel and car tax Reduce/remove tax on bicycles
Ban point of sale advertising of tobacco and other advertising, promotion, & sponsorship	Ban point of sale advertising of alcohol and other advertising, promotion, & sponsorship	Ban unhealthy food ads on children's TV programming; consider other advertising bans	Ban car ads or insist on truthful advertising (cars stuck in traffic, cars' effect on environment)
Place strong, clear, large pictorial & graphic warnings on tobacco products	Place strong, clear, large pictorial & graphic warnings on alcohol products	Improve nutrition labelling to include both healthy and unhealthy contents, preferably related to % of daily dietary needs	Use street signage to indicate safe cycling & walking routes
Make public places, work places, etc. smoke-free	Reduce the number of outlets that sell alcohol	Ban sales of soft drinks & fast food at educational and health sites; consider other work place bans	Create attractive, safe spaces for walking and cycling

4.2 How to Change Policy

Just as we have been successful, to a large degree, in creating enabling environments for tobacco control by changing policy, so too we can change the environment through policy for other major, preventable NCD risk factors. Tobacco control has shown that it is possible to overcome the tobacco industry's opposition and to pass and implement health-promoting policies. So too is it possible to overcome opposition from the alcohol industry, Big Food, and the combined lobby of road builders, the oil industry, and car manufacturers to achieve an enabling environment for overall NCD control. To overcome that opposition, many of the lessons learned by tobacco control advocates will be important to apply to NCD control. They include:

- Conduct research to build the case for policy change
- Develop strategic alliances with likeminded organizations and experts
- Build the capacity of allies, current and potential
- Produce and disseminate clear, practical, easy-to-read materials that will support the capacity of policy makers to implement changes
- Work with the media to raise issues and provide solutions to the public and policymakers
- Be involved in direct advocacy with policymakers and other important individuals and agencies

“Big Food” is a term used to describe multinational corporations that profit from manufacturing or selling food, including such giants as Nestlé, Kraft, Coca Cola, and McDonalds. According to Oxfam, the “Big 10” food and beverage companies together make \$1 billion each day.¹⁴

¹⁴ Oxfam (2013). *Behind the Brands: Food Justice and the ‘Big 10’ food and beverage companies*. Accessed from <http://www.oxfam.org/en/grow/policy/behind-brands>

One of the key lessons learned from tobacco control is that behaviour is influenced at different levels; comprehensive programs are thus needed to generate changes at a population level. There are many policy measures that can be taken to make healthy choices the easier choices. There are also policy measures that can make unhealthy options unattractive and unaffordable. Clearly no one action and no single policy will successfully reduce NCDs on its own, just as no one policy successfully reduced the harms of tobacco. The same strategies used in tobacco control to create enabling environments – conducting research, developing alliances, producing materials, working with the media, and direct advocacy – can be applied to NCD control. However, as each country and city is unique, the specific activities should be grounded in the needs of local communities. Below are some examples.

4.2.1 Conducting Research

Research is enormously helpful for better understanding the existing situation and providing evidence that will support specific recommendations to policymakers. In tobacco control, for example, research studies examined the link between tobacco use and poverty at the household level; the results were used to highlight the important role that tobacco control could play in poverty reduction, thus generating greater interest in tobacco control policies in low-income countries.

Before directly addressing NCD risk factors, one of the first steps, described in more detail in the following sections, is to collect information about the different plans and policies that already exist in your community. You will need to identify the different government departments and the different policies that are currently in place. However, not all policies that exist ‘on the books’ are actually being implemented or enforced. Therefore, it is not sufficient to

merely conduct a policy review. It is important to also understand what the physical and information environments actually look like, and whether and how policies are being implemented.

There are, for example, a number of tools available to help measure the quality of the physical activity environment. Park audit tools can help to identify a number of opportunities available in parks for physical activity. Activity audit tools can measure the various types of activities that are taking place in parks, which in turn will give a good idea about how parks are being used by the general public. Park perception tools can help measure how people are currently using the parks and what they like about their parks; they can also help to identify areas that need improvement. Active transportation audit tools can help to measure how supportive a particular neighbourhood or city is for walking and cycling.

A good place to start to address healthy diets would be to conduct a small study on the extent to which junk food is marketed to children through television programmes. By reviewing popular children's programs and counting the number of ads that promote unhealthy foods, together with the number of

In Thrissur, India, the Evangelical Social Action Forum (ESAF) conducted a study on walking conditions that included an observation of the existing walking environment and interviews with pedestrians. The result was an informative study that can be used in advocacy campaigns. WBB Trust also conducted research on walking conditions in Dhaka; using results from the observation and pedestrian surveys, WBB made many recommendations to improve the walking environment. In Sri Lanka, researchers are studying how public spaces can contribute to daily physical activity and what qualities of public space make them more or less popular for that purpose.

ad-minutes per one hour of programming, a rough estimate of how much time children may be exposed to messages encouraging them to eat unhealthy foods quickly becomes evident.

It is also important to study the physical environment in order to understand how accessible and affordable healthy food options are in your community or city. Studies could look at where existing retail outlets are located and what they sell. This will help to identify if there are places where people are unable to access healthy food within walking

Each year in the Canadian province of Ontario, Public Health Departments conduct the “Nutritious Food Basket” survey. This is a tool that helps monitor the cost and affordability of eating a healthy diet. The Basket describes approximately 60 foods that represent a nutritious diet for individuals in various age and gender groups. This information has been used as an advocacy tool to highlight the nutritional vulnerability of the poor. The Guidance Document can be found here: <http://www.mhp.gov.on.ca/en/healthy-communities/public-health/guidance-docs/NutritiousFoodBasket.PDF>

distance of their homes. If local information about affordability is not readily available for your community, you could do a comparison of the cost of healthy foods against unhealthy foods in different retail outlets.

Research for alcohol control could include developing a local map of alcohol outlets, similar to what was done for tobacco sales, in terms of geographic, population, and commercial densities, capacity, and mix of outlets. A study on advertising would also be of benefit. You could

analyze the messages in alcohol ads¹⁵, look at how alcohol is portrayed in media, poll youth to see whether the sponsorship of sporting events by alcohol companies leads them to associate drinking with fitness, or see how various events encourage drinking.¹⁶

Lastly, additional ways to collect information that do not entail original research include searching for articles on the internet, conducting media scans to understand how the media is currently portraying the issue, and talking to local government officials. It is particularly important to have an understanding of how local government authorities view the issues. This will indicate if there are already allies in local government or if you need to create them.

4.2.2 Developing Strategic Alliances

Few health organizations have on staff experts on urban planning, transportation planning or fiscal policies. This is often a concern to new organizations that want to begin working on enabling environments for NCD control. However, it is not necessary to be an expert in all areas to be effective. The role of health organizations is to provide health expertise and bring health messages to the table. As a health organization, if your goal is to increase physical activity, it is sufficient to know the basics. For instance, if you want to improve walkability, you need to know that sidewalks should be sufficiently wide and free of obstacles to enable safe walking; you do not need to know how to build sidewalks. The specific details of how wide sidewalks

¹⁵ If you are new to analyzing ads, you may need some guidance. Many sources are available on the Internet, including the Center for Media Literacy (www.medialit.org) and the videos and writing of Jean Kilbourne (www.jeankilbourne.com).

¹⁶ Alcohol Policy Network, (No date). *Putting Municipal Alcohol Policies in Context*. Accessed from: http://www.apolnet.ca/thelaw/policies/MAPs/bi_map1.html

need to be to be safe would depend on pedestrian volumes, while the surface material needed would depend on what is best for the climate/context of the location. These are matters that can be addressed by transportation experts – with whom you can build a collaborative partnership.

There will be times when being the voice for public health will not be enough. There may be instances where you will need experts to speak to specific non-health issues; for example, an urban planner to speak on city design, or an economist to speak about taxation. What is important is to identify experts who understand the need of an enabling

After many years of work in tobacco control, WBB Trust in Bangladesh became interested in transport issues. Within two years, it added urban planning to its portfolio, as it realized that the two (transport and urban planning) are essentially inseparable. WBB staff began their work by searching for articles on the Web. They visited the planning department at their local engineering university and started to meet regularly with professors and students there. They began to accumulate transport policies and urban plans, and to work with an experienced transport engineer who was providing input into those policies and plans.

environment to make healthy choices the easy choice. Where do we find such people? Possibilities include university planning or design departments and government or private planners who understand the importance of active transportation and parks and who have seen how these ideas work in practice in various cities. Allies must understand how city and transportation planning impact the way that people use the city; they must provide messages that are coherent and consistent with public health messages. When building strategic alliances health organizations must make

sure that experts on individual issues are in clear alignment with the public health perspective.

Throughout this guide, suggestions of key allies are made. Groups working with the poor may be great allies for active transportation, as transportation systems built for cars typically create situations where the poor are unable to travel safely or conveniently. In addition, parks, open spaces, and retail food outlets typically under-serve areas where the poor live. Alcohol outlets may over-serve or target poorer areas. Women's groups may prove powerful allies, especially when transportation is unfriendly to women's independent travel. Women's groups that address violence against women are particularly important for alcohol control issues. Women's groups may also be interested in working on issues related to healthy diets, as women traditionally are responsible for food purchasing and preparation. Children's groups may be great allies to help advocate for parks, active transportation, and issues that deal with advertising of food or alcohol. Lastly, environmental groups and other health groups may be interested in supporting your work in a variety of areas.

4.2.3 Building Capacity

Although many allies and partners will already understand the importance of an enabling environment

In 2011, HealthBridge Vietnam (HBV) began working with local architects and a national trade journal to challenge the government's planned closure of local markets. HBV focused its messages on the health, environment, and economic impacts that the closures would have in Hanoi. In subsequent meetings, HBV's allies began to use HealthBridge's messages to articulate their concerns about potential market closures. This lent credibility to the key messages, as government officials heard similar arguments from many different groups.

for NCD prevention, many others allies will not have thought about health issues at all. For example, those involved in the food trade or in urban infrastructure are unlikely to have thought about the impact that these issues have on the health of the population. Therefore, there may be cases where it is important to build the capacity of the people you need to be your partners and allies. Capacity building activities, such as workshops, seminars, conferences, trainings, and meetings, are also a great opportunity to build your own organization's capacity and credibility, and to begin working directly with the people who ultimately decide how communities are built.

When developing training curricula and materials, talk to organizations in other countries that are interested in the same issues to find out what training they offer. People from these organizations might make great guest speakers. Identify experts who can train local officials and invite them to participate. And capacity building should not stop with a workshop or a training session: ongoing mentorship and partnership is often the best way to engage allies to achieve change over the long term. A government counterpart in the department of planning will never become an expert in public health; (s)he will need continuous support to be a champion for change.

4.2.4 Producing Materials

One way to draw attention to the importance of enabling environments for prevention of NCDs, and to gain credibility and visibility at the same time, is to prepare a range of materials on the issue. Research will be important here. If there are no reports that talk about the current state of parks in your city, or the situation that pedestrians face, preparing a report that addresses those issues is a good way to highlight the issues and identify your organization as a key stakeholder. Research for advocacy can be highly

effective in reaching policy makers, but too often research is left unreported; it is very important that all research be effectively communicated to the public as well as to partners. In addition to research for advocacy, providing written comments on urban and transportation plans is an effective way to bring attention to the issues. It is often the case that very few organizations comment on city plans and policies. It is even less likely that health issues are being communicated to planners and integrated into plans, despite the important role that cities play in health. As a health organization, you can provide a public health perspective to these plans and policies.

Depending on the complexity of the plan, you may want to engage an expert to help review the plans and policies. More information about reviewing plans and policies will be found in the following chapters.

4.2.5 Working with the Media

Tobacco control advocates understand the importance of working with the media. Marketing and advertising are among the most effective ways that information is shared. The media has an important role to play in ensuring that accurate messages are given to the public. However, journalists need to properly hear and understand the message to be able to communicate it to the public. Preparing press releases and articles for journalists are two important ways that you can begin working with the media.

It is equally important to develop relationships with members of the media to give them an opportunity to understand the issues in depth. You can do this by organizing workshops for journalists, conducting one-on-one meetings, and organizing field visits. The advantage to some meetings being undertaken on a one-on-one basis is that it allows the person to raise all the questions they have

and gain whatever clarification they need. Another important media activity is having a presence on social media. Social media has become a vital tool in social activism worldwide. This is an especially successful strategy when you wish to reach a younger audience. It is vital that these be ongoing activities, not single, one-off activities that are unlikely to have any lasting impact.

4.2.6 Direct Advocacy

In addition to providing comments on plans and policies, direct advocacy that engages the community is important. Just as in tobacco control, “making noise” about an issue is often an important step in creating enabling environments. Making noise, conveniently, is also a great way to engage allies. There are a variety of ways to engage in direct advocacy; what works in one country may be ineffective in other countries. Some possibilities include:

In Dhaka, WBB regularly gathers local people to threatened parks and playing fields to resist attempts to encroach or bulldoze them. They do not always win in such efforts, but they are much more likely to win than if they remain silent, and they have had many victories to date!!

- ✧ Organizing face-to-face meetings with policy makers
- ✧ Organizing workshops with policy makers and journalists
- ✧ Writing letters to policy makers and newspapers
- ✧ Organizing public events.

Where plans are being made for new urban areas or to renovate existing ones, you can contribute your voice to planning meetings and via the media. Ask for better conditions for pedestrians and cyclists and for an assurance that there will be sufficient parks and open spaces. You can also advocate for walkable access to healthy food outlets,

and controls on where fast food restaurants and alcohol outlets can be located. Lastly, you can advocate for policies that create compact cities to preserve farmland and allow for urban agriculture.

Key Messages:

- ✧ *Research is very helpful for understanding better the existing situation and for providing evidence to make specific recommendations to policymakers.*
- ✧ *Experts and allies are needed to create enabling environments; health organizations cannot do it alone.*
- ✧ *Capacity building activities, such as workshops, seminars, conferences, trainings, and meetings, are a great opportunity to raise the profile of an issue, to build credibility, and to begin to work directly with the people who ultimately decide how communities are built.*
- ✧ *Public reports that address the issues can raise their profile and identify key stakeholders.*
- ✧ *Providing written comments on urban and transportation plans is a great way to have your voice heard.*
- ✧ *The media has an important role to play in ensuring that accurate messages are given to the public.*
- ✧ *It is important to form relationships with members of the media to give them an opportunity to understand the issues in depth.*
- ✧ *Direct advocacy that engages the community is critical to gaining local buy-in.*

5 Physical Activity

Physical inactivity is the fourth leading risk factor in global mortality. Rates of physical inactivity are on the rise in many countries. As populations become less active, NCD rates increase and general health levels decline. Regular physical activity, on the other hand, reduces the risk of many diseases: coronary heart disease, stroke, hypertension, some cancers, diabetes, and depression. Physical activity is linked to a longer, healthier life; it helps people to maintain their ideal weight, to maintain their cardio-respiratory function and muscular fitness, and to have strong bones.

5.1 What is recommended?

Physical activity is any body movement that results in energy expenditure and includes activities such as walking, cycling, playing, dancing, household chores, and sports. Physical activity is important for everyone, regardless of age, body weight, and health status. The World Health Organization (WHO) makes several recommendations for how much physical activity is needed in minutes, dependent on age, to achieve health benefits. Health benefits can be achieved by accumulating these minutes of physical activity over ten-minute increments, which is easier to achieve by encouraging people to be active throughout the day. The more opportunities that people have to integrate physical activity into their day-to-day lives, the more likely it is that they will be able to maintain these beneficial behaviours.

Table 2: Global Recommendations on Physical Activity for Health

Age¹⁷	Minimum Recommendation	Sample Activities*
Children (ages 5 to 17)	60 minutes of vigorous to moderate activity per day	Vigorous intensity = running, jumping Moderate intensity = walking, bicycling Depending on the level of activity, playing games or sports could be deemed vigorous or moderate
Adults (18-64)	75 minutes of vigorous activity OR 150 minutes of moderate activity per week	Vigorous intensity = running, sports, dancing Moderate intensity = walking, bicycling, doing chores, yoga Depending on the level of activity, playing games or sports could be deemed vigorous or moderate
Older Adults (65+)	75 minutes of vigorous activity OR 150 minutes of moderate activity per week Older adults with mobility problems should do activities to enhance balance and prevent falls 3 or more days per week	Vigorous intensity = running Moderate intensity = walking, bicycling, doing chores, yoga When older adults cannot do the recommended amount of activity, they should be as active as their abilities allow

* Moderate or intensive activity should increase one's heart beat and breathing rates, but should not cause injury.

¹⁷ WHO (2010). *Global Recommendations on Physical Activity for Health*.

More details about the WHO recommendations can be found on its website (<http://www.who.int/en>); the key message is that physical activity is necessary to achieve and maintain health. A *minimum* of 20-30 minutes of activity per day is a good target. Organizations working on physical

For more information about physical activity visit the WHO website at <http://www.who.int/en/> and the following documents:

- *Global Recommendations on Physical Activity for Health*
- *Global Strategy on Diet, Physical Activity and Health*

activity should focus on encouraging the entire population to move a little more, rather than on having a small number of people moving a lot. At a population level, what is important is to improve the

environment so that more people naturally engage in more physical activity as a regular part of their daily routine.

5.2 What are the types of physical activity and why is that important?

An enabling environment for physical activity is one in which people are able to be active as a regular part of their day-to-day routine. To better understand what an enabling environment would look like, we need to recognize and understand different types of physical activity. Physical

8-80 Cities is a non-profit organization dedicated to transforming cities where people can walk, bike, access public transit and visit vibrant parks, streets and other public places. Visit its website at www.8-80cities.org

activity can be categorized into four types:

- a. Leisure/recreational
- b. Transportation-related
- c. Work-related
- d. Household-related

For the purposes of this guide, we focus on leisure and active transportation activities, as these types of

activities are the most likely to help people achieve their recommended levels of physical activity.

5.2.1 Recreational Activities

Recreational physical activities typically take place during leisure time. Examples of “recreational” activities include playing sports, walking with a friend in a park, going for a bicycle ride, and playing outside. These are activities that often do not have another purpose other than fun and physical activity. Less healthy behaviours that occur during leisure time are sedentary, such as spending hours at the computer and/or watching television. Several studies have linked high levels of TV viewing to weight gain, and similarly, a reduction in TV viewing to weight loss.¹⁸

In order to encourage physical activity during leisure time, recreational facilities of different types must be available close to where people live. This is what creates an enabling environment. Examples of recreational facilities include:

- ✧ Parks for sports, walking, bicycling, and playing;
- ✧ Sidewalks for walking;
- ✧ Trails for walking, running or bicycling;
- ✧ Bicycle lanes for cycling

The layout of the local neighbourhood is very important for encouraging recreational activity: the closer someone lives to recreational facilities, the easier it will be for them to go there and use the facilities. On the other hand, the farther away a park is from

Groups that work on children’s issues are natural allies to help you work on encouraging more and better parks in your community. Bicycle groups or coalitions can help. Businesses that sell bicycles might also be good allies as they have a financial interest in having more people ride bicycles.

¹⁸ For example, see Ding D, Sugiyama T, and Owen N. (2012) “Habitual active transport, TV viewing and weight gain: a four year follow-up study.” *Preventive Medicine* 54:201–204.

someone’s home, the less likely he or she will use the park on a regular basis. Having park facilities located close to people’s homes is particularly important for meeting children’s physical activity levels. Also, safe sidewalks are important for people to be able to walk to a destination rather than drive.

Unfortunately, many people, especially adults but also children overburdened with homework, state that they do not have enough time to be regularly active; as a result, “time” becomes a barrier to getting people to become more active. In addition, recreational activities are often the first activities that are eliminated when our schedules get busier.

The Project for Public Spaces in the United States is an organization dedicated to helping people create and sustain public spaces that build stronger communities. Visit its website at www.pps.org.

Therefore, we need to consider other ways to encourage people to regularly be active.

According to the WHO, the best approach is to stress “the importance of physical activity as part of

everyday life, not an optional extra to tack on at the end of a busy day.”¹⁹

5.2.2 Active Transportation

Transportation-related physical activity is known as “active transportation” by health professionals and as “non-motorized transportation (NMT)” by planning and transportation professionals. Each of these terms refers to physical activities that serve the practical purpose of transporting someone from one place to another. These activities can involve substituting an automobile trip with a

¹⁹ Nick Cavill, Sonja Kahlmeier and Francesca Raciopp, ed. *Physical activity and health in Europe: evidence for action*. WHO Europe 2006.

physical activity such as walking or cycling. Thus, encouraging transportation-related physical activity involves changing behaviour, including increasing the use of human-powered transportation and reducing the use of motorized vehicles such as motorbikes or cars.

For it to be safe, reliable, convenient, and comfortable, active transportation requires specific facilities such as:

- ✧ Sidewalks
- ✧ Trails
- ✧ Bicycle Lanes
- ✧ Safe intersections and road crossings
- ✧ Places to walk and cycle to such as shops, workplaces, and schools located near residences

Just as with leisure-time physical activity, the local neighbourhood is particularly important for encouraging active transportation. People need destinations to walk or cycle to, and those destinations must be within a reasonable distance from their home. In addition, active transportation almost always occurs on public streets; therefore, how streets are designed and built becomes particularly important.

Encouraging more active transportation allows us to deal with the problem of people not having enough time to be active. Active transportation directly addresses the issue of time, as people are not being asked to do something in addition to what they already do. Instead, the focus is on encouraging people to do the same task (travelling to work,

The Advocacy Council of the International Society for Physical Activity and Health (ISPAH) states that “‘Active transport’ is the most practical and sustainable way to increase physical activity on a daily basis.”²⁰

²⁰ Global Advocacy for Physical Activity, http://64.26.159.200/icpaph/en/documents/GAPA_PAInvestmentsWork_FINAL.pdf

school, or the store) in an active way. This allows people to

According to the WHO: “There is a strong body of evidence that indicates that trying to increase physical activity by advocating leisure time physical activity would not result in population change in activity that is sufficient to stop increases in body weight. This has major implications for urban design and other environmental and social policy measures designed to make everyday walking a routine feature of life.”²¹

integrate regular physical activity into their daily lives. When one has relatively short distances to travel, such a change would not require much additional time or motivation. Physical activity can thus easily become part of a routine, and will be is easy to maintain once begun.

Although active transport is particularly important for adults’ physical activity

levels, it is also important for children. A recent study looking at British school children found that those who travelled to school by active means engaged in more moderate to vigorous physical activity overall than those children who travelled passively.²² In the absence of school fitness programs, it is the opportunity to walk or cycle to school that makes the difference for children’s physical activity levels.

²¹ WHO (2010). *A Prioritized Research Agenda for Prevention and Control of Noncommunicable Diseases*. Accessed at:

http://whqlibdoc.who.int/publications/2011/9789241564205_eng.pdf

²² Smith L, Sahlqvist S, Ogilvie D, Jones A, Griffin SJ, and van Sluijs E. (2012). “Is active travel to non-school destinations associated with physical activity in primary school children?” *Preventive Medicine* 54:224–228.

Key Messages:

- ❖ *Active transport is the most practical and sustainable way to increase physical activity on a daily basis*
- ❖ *Physical inactivity is the fourth leading risk factor in global mortality*
- ❖ *Physical activity is important for everyone, regardless of age, body weight, and health status.*
- ❖ *The more opportunities that people have to integrate activities in their day-to-day lives, the more likely it is that they will be able to maintain these beneficial behaviours.*
- ❖ *Recreational physical activities are those activities that take place during leisure time.*
- ❖ *The local neighbourhood is particularly important for encouraging recreational activity: the closer someone lives to recreational facilities, the easier they will be to get to and people will be more likely to access them.*
- ❖ *Active transportation refers to activities that serve the practical purpose of transporting someone from one place to another.*

5.3 Policies that create enabling environments

We know from the experience of tobacco control advocates that simply telling people to engage in a healthy behaviour (not smoking) will have little effect on behaviour at a population level. This is also the case for physical activity. Busy lives and other concerns keep most of the population from being regularly active. Whatever the reasons given for not wanting or not being able to make time for activity, it is true that it is far easier to be regularly active when that activity is incorporated into one's daily routine. **To increase the number of people who are regularly active, it is important to make the healthy choice the easiest choice.** By creating an enabling environment, we

ensure that the communities where people live, work and play give everyone the option to be active.

Given the importance of having an enabling environment for physical activity, it is important to look at the specific policy factors that could create an enabling environment. With tobacco control, policies are intended to make tobacco use less attractive, affordable, and convenient. Although the specific policy measures are different for tobacco control and physical activity, the essential approach is the same with one significant difference: we want to make physical activity more attractive, affordable and convenient, and the alternatives to physical activity, such as driving, less

The Carrot and Stick Approach can be thought of as policy measures that both reward (carrot) and punish (stick) to create the desired behaviour.

attractive, affordable and convenient. Both approaches are necessary and can be thought of as “carrots” and “sticks”. In order to better understand the policy measures, we will look at policies that act as “carrots”

and “sticks” and ultimately change the physical environment, the fiscal environment, and the information environment.

5.3.1 Physical Environment Policies

In order to create a physical environment that supports both recreation-related and transportation-related activity, we must change the policy environment in terms of how our cities are designed and how our transportation systems are organized. Research from the United States makes it clear that neighbourhood design affects people’s health, including weight.²³ Such studies consistently demonstrate

²³ For example, McCormack G and Shiell A. (2011). In search of causality: a systematic review of the relationship between the built environment and physical activity among adults. *International Journal of Behavioral Nutrition*

the association between environment variables – such as resident density, connectivity, and land use mix – with walking and cycling.²⁴ Residents from communities deemed highly walkable enjoyed higher rates of walking and cycling than did residents living in low-walkable communities. These studies suggest that it is purposeful trips, such as going shopping, that are the source of overall differences in walking trips between high and low walkable neighbourhoods.²⁵ Furthermore, low income groups are the most affected by neighbourhood design because they have less access to transportation and fewer options for recreation.²⁶

Studies from the United States have important implications for low- and middle-income countries. The United States has been building its cities to support greater levels of car infrastructure since the 1950s. The results are clear: cities and towns that no longer support active forms of transportation. In many places one now needs a private automobile to go to work, school, and shopping. The impact of building cities this way has been higher levels of physical inactivity and increased rates of obesity. Although low- and middle-income countries have historically built their cities and towns to support high levels of active transportation,

and Physical Activity, 8: 125; Friel S, Chopra M, Satcher D. (2007). Unequal weight: equity oriented policy responses to the global obesity epidemic. *British Medical Journal*, 335(7632): 1241-1243; Lovasi G, Hutson M, Guerra M, Neckerman K. (2009). Built environments and obesity in disadvantaged populations. *Epidemiologic Reviews*, 31(1): 7-20.

²⁴ Papas M, Alberg A, Ewing R, Helzlouer K, Gary T, Klassen A. (2007). The built environment and obesity. *Epidemiologic Reviews*, 29(1): 129-143.

²⁵ Saelens, B. E., Sallis, J. F., & Frank, L. D. (2003). Environmental correlates of walking and cycling: Findings from the transportation, urban design, and planning literatures. *Annals of Behavioral Medicine : A Publication of the Society of Behavioral Medicine*, 25(2), 80-91.

²⁶ Friel S, Chopra M, Satcher D. (2007). Unequal weight: equity oriented policy responses to the global obesity epidemic. *British Medical Journal*, 335(7632): 1241-1243.

that is now changing. These countries are moving towards the North American model of building ever greater levels of car infrastructure.

By examining what this design structure is doing to the health of the American population, we can also project what the likely impacts will be on low- and middle-income country cities; in fact, these cities are already beginning to see increases in NCDs and obesity. The research suggests that designing neighbourhoods that are more conducive to walking and bicycling use would help many people achieve

The population-wide Agita Sao Paulo physical activity programme in Brazil successfully reduced the level of physical inactivity in the general population by using a multi-strategy approach of building pathways; widening paths and removing obstacles; building walking or running tracks with shadow and hydration points; maintaining green areas and leisure spaces; having bicycle storage close to public transport stations and at the entrances of schools and workplaces; and implementing private and public incentive policies for mass active transport.²⁷

sufficient levels of physical activity for health benefits. We could reasonably expect that such results are applicable worldwide.

As they are in the midst of planning for expansion, many cities in developing countries offer a unique opportunity to design and create enabling physical environments **before** massive road infrastructure is built, which could lead to the prevention of NCDs on a very large scale. It is, therefore, important that we begin to address these issues now to prevent the

²⁷ Friel S, Chopra M, Satcher D. (2007). Unequal weight: equity oriented policy responses to the global obesity epidemic. *British Medical Journal*, 335(7632): 1241-1243.

future problems that will otherwise occur as a result of increased motorized transportation.

To better understand these policies, urban planning and transportation planning policies are discussed below. However, it is important to note that urban and transportation planning are in fact dependent upon each other; both need to support active transportation and recreational activity to result in a more active population.

Urban Planning

Urban planning deals with the design and organization of urban space and activities. Urban planning policies are critical for physical activity because it is these policies that determine how practical, convenient, and attractive physical activity will be as an option for both transportation- and recreation-related physical activity. Urban planning policies determine how close schools and parks will be to where people live, how attractive the buildings and public spaces will be, and what facilities will be available to help people feel safe and comfortable.

*Urban planners and architects are the two main professions that work on policy-related urban planning; but the urban planning process is often a highly political process. City “Planning Departments” are traditionally in charge of developing city plans, and you must develop close relationships with city officials. In addition, national-level government departments often influence urban planning. Ministries of Construction, of Planning, or of Municipal Affairs may have rules and policies that control how cities are to be built. In creating your **multi-sectoral** effort, it will be important to involve planners, architects, and designers. If you are working on parks, there may be separate departments that deal with parks and trees or forestry.*

Urban planning policies that support parks and open spaces are critically important for promoting *recreational* physical activity. Parks are key places where people can be active.

For more information about the important role that public spaces play in improving health, the environment, and quality of life, refer to the book “Public Spaces: How they Humanize Cities” by visiting the HealthBridge website www.healthbridge.ca

They are also important spaces for social interaction. There is an important place in local communities for both small neighbourhood parks that are located close to residences and larger community parks that may serve more than

one neighbourhood. These different park types provide different recreational opportunities and encourage physical activity in different ways. For example, small neighbourhood parks may provide playground equipment and give children an opportunity to play outside on a regular basis, provided that they are within walking distance of where children live. Larger community parks, on the other hand, may include sport fields and walking paths, giving people the opportunity to come together to engage in more organized or social forms of physical activity. Studies have shown that parks and green spaces can reduce health disparities and obesity. The connection may be strongest for children living in urban areas and for women.²⁸

In terms of promoting active transportation, planning and health literature suggests there are three main areas within urban planning policy that impact physical activity levels.

²⁸ Lovasi G, Hutson M, Guerra M, Neckerman K. (2009). Built environments and obesity in disadvantaged populations. *Epidemiologic Reviews*, 31(1): 7-20.

Density refers to the number of people and jobs in a defined area. Density is important because it affects the distances that people must travel between workplaces, shops, schools and homes. A high density of people and jobs support local businesses, and this in turn makes walking and cycling possible because the businesses are located close to where people live. Research shows that as density increases, the distance people travel by automobile declines, and walking, bicycling and public transit use increases.²⁹ Density is important because it gives us diversity.

Diversity is sometimes called “mixed-use.” It means having a mix of uses within a single neighbourhood, such as homes, workplaces, stores and services. Diversity also refers to the variety of options available for each of the different uses. Is there one store or many stores? Is there one type of home or are there many types of homes, suitable for both young and old? People walk more when there are more businesses

When a major park was threatened in Vietnam, HealthBridge staff joined with other groups and individuals to save the park and to ensure that it continued to be a popular spot for people’s daily exercise. The campaign focused on shining a spotlight on the city’s plans and showing just how accessible and popular the park was for all members of the city, including the poor. By gaining media attention through a seminar, local advocacy, and an extremely lively web-based discussion, advocates were able to bring the issue to the attention of policymakers, who then reversed their decision to destroy the park; policymakers went even further, and began to save other public spaces from encroachment.

²⁹ Holtzclaw, J. et al. (2002). Location Efficiency: Neighbourhood and Socio-Economic Characteristics Determine Auto-Ownership and Use-Studies in Chicago, Los Angeles, and San Francisco. *Transportation Planning and Technology*, 25(1), p. 1-27.

close to their homes.³⁰ Diversity also includes having different types of destinations within close walking distance; when this is available, people are more likely to choose an active form of transportation.³¹ A comfortable walking distance for most people is a five- to ten-minute walk, or a distance of 400 to 800 metres. By bringing destinations closer, diversity makes walking and cycling possible as transportation options.

For a more detailed understanding of how density, diversity, and design impacts health and what the literature tells us is important, refer to the publication “Hanoi at a Cross-Roads: Streets for People or Cars?” on the HealthBridge website www.healthbridge.ca

Design makes walking and cycling an attractive option. Bleak, desolate landscapes are unsafe, unpleasant, or actually threatening, which makes it much less likely that people will willingly use active transportation in such areas. Urban planning policies that impact design

can change the way that we feel about a place. Good urban planning policies create places where people enjoy what they see and reduce or eliminate the number of vehicles that are able to intrude in the pedestrian realm. Because walking and cycling travel is much slower than travel by car, people are able to notice changes in landscape much more easily. In well-designed cities, people can:

- enjoy the landscape and different types of buildings
- sit if they want to take a break
- walk at any time because the route is well-lit, has shade on hot days, and shelter in case of rain.

³⁰ Duncan M, Spence J, Mummery K. (2005). Perceived environment and physical activity: a meta-analysis of selected environmental characteristics. *International Journal of Behavioral Nutrition and Physical Activity*, 2:11.

³¹ Duncan, Spence and Mummery. Perceived environment.

Urban planning policies that impact on parks and open spaces, as well as on density, diversity, and design, can be found in a number of different planning documents, depending on the process within your own city or town. Examples of the types of planning documents that your city may use include: Official Plans, Master Plans, Secondary Plans, and Site Plans. Each of these documents provides a different amount of detail. For example, a Master Plan is usually a big picture document that provides vision statements for a whole city or area but not very much detail. A site plan, on the other hand, may only cover a very small area, but will go into a lot of detail. Your city or town may also use other documents. What is important for you is to understand how planning decisions are made in your community and what planning documents are used to provide policy directions.

In 2006, the Canadian province of Ontario created a Growth Plan for the areas surrounding the city of Toronto. This plan covers an area of 31,562 km² and is intended to create complete communities that offer more local options for living, working, learning, shopping, and playing. The plan is also intended to limit sprawl, protect farmland, and protect green spaces. See www.placestogrow.ca. The City of Toronto has achieved a population density of 700 residents and jobs. Four other areas of the city are required to achieve densities of 400 residents and jobs by 2031. This level of density will support both active and public transit.

There are many different types of policies that you can work towards that will help you achieve a walkable community. Which specific policies are needed will depend very much on your own city's context. There is no "one size fits all" policy that will create the enabling environment you need for physical activity. You will need to do some work to identify

which policy documents your city uses and which policies are included in those documents (see the orange box below for helpful tips). However, the density, diversity, and design approach can be a good framework for reviewing plans and identifying specific policies that might be useful.

If your city has **density** policies, these will usually be found in documents that plan for the entire city or for a large section of it. Density policies typically outline a minimum density target that needs to be achieved in a given area. Density can refer to either the number of jobs or the number of people, or to a mix of both. The key for your city is to understand the level of density that is needed to create an appropriate mix of jobs and retail opportunities. This will be different for each city. Most cities will need to achieve a population density of no less than 200 residents and jobs per gross

Gross hectare refers to the total population of an area divided by the total amount of land, including parks, roads, and other natural features.

hectare to be able to effectively support active travel.

There are a number of urban planning policies that impact **diversity**. Any policy that addresses where parks, stores, and employment will be located in relation to where people live is a policy that has an impact on diversity. Often these policies are shown on maps. Examples include:

- Maps that show where all existing and new parks are to be located. A good rule of thumb is that all residents should be within 400 to 800 m of a park.
- Maps that show where existing and new schools are to be located. A good rule of thumb is that children should live within 1500m of a school, as that is a reasonable walking distance even for younger children.
- Maps that show where existing and new stores, retail, and food markets are to be located. A good rule of

thumb is that all residents should be able to walk to a food market within 800m of where they live.

Finally, there are many ways that planning policies can reflect good **design** principles and create an attractive active transportation environment. Examples include:

- * Policies that require all buildings to include active use facilities such as businesses and retail – not parking – on the ground floor. This creates eyes on the street for safety and makes for a more interesting streetscape.

- * Policies that require all building entrances to be connected directly to the sidewalk, as this makes it easier for pedestrians to access the building.

- * Policies that reduce or limit parking. When parking is allowed, there should be policies that require it to be located underground or at the rear of buildings. Parking should never be allowed in front of buildings, as this prevents pedestrians from being able to see into store windows and makes it difficult for them to access the buildings.

In 2004 the San Francisco Department of Public Health, along with 20 partner organizations, developed a tool called the Sustainable Communities Index. This tool was used to help assess and improve the social, economic and environmental conditions needed for a healthy city. The Index has indicators and targets that are used to “ensure access to daily goods and service needs”, to “increase park, open space, and recreational facilities”, and to “increase accessibility, beauty, safety, and cleanliness of public spaces.” Visit www.sustainablesf.org.

* Policies that outline the frequency at which street trees are planted, where benches and other street furniture such as trash bins are located, and where pedestrian and cycling street lighting is to occur.

*In Copenhagen's city centre, car parking was reduced each year by 2-3% over a period of twenty years; in the end, there was a 40% reduction in the number of parking spaces available in downtown area. Despite the reduction in parking, there was a slight **increase** in the number of people coming into the city centre city; they mostly arrive by public transport (45%) or by bicycle (19%). Once in the city centre, the numbers are even more impressive: only 5% travel by bus and 4% by car or taxi, but 14% move about on bicycle and 80% on foot. As two Danish architects explain, "The number of parking places has been reduced, and it is harder to come into the city centre by car. In contrast, there is now more reason to come, as the city centre has been made much more attractive." As a result, more walking and more cycling occur.³²*

Activities for you to do: Find out what local and national level government departments deal with urban planning issues. Talk to people in those departments and ask them what planning documents they use to guide the organization and design the community. Review these documents. Examples of questions to ask yourself include: What do they say about density? Is it enough to support local businesses? What do these documents say about diversity? Are different uses like residences, businesses, offices, and schools mixed together and are they close enough that people could walk or do the policies encourage travelling by car? Does the city have any guidelines that outline the design features for the community? Will there be trees, benches, and pedestrian lighting?

³² Gehl, J and Gemzøe, L, *Public Spaces - Public Life*, Copenhagen. The Danish Architectural Press & The Royal Danish Academy of Fine Arts School of Architecture Publishers, Copenhagen, 2004.

Transportation Planning

Transportation planning deals with the design, organization and implementation of the transportation system, including roads, sidewalks, bicycle lanes, and public transit. Transportation planning policies are critical for creating enabling environments that support active transportation that almost always occurs on city streets: they determine how safe and convenient it will be to use active travel by deciding if there will be sidewalks and bicycle lanes, what the quality of those spaces will be, and how safe it will be to cross the street. Neighbourhood streets serve two physical activity purposes. They can be destinations for recreational physical activity, such as walking or jogging, or they can be routes for active transportation. **Ensuring that local streets support walking can successfully promote greater levels of recreational activity.** The literature is clear: people must be able to travel safely and comfortably on foot or bicycle if they are going to choose active transportation over motorized vehicles.

Transportation planners and engineers are the two main professions that work on policy-related transportation planning; but often the transportation planning process is highly political. City Transportation Departments are responsible for developing plans that guide a city's transportation network. You will need to develop close relationships with city officials. National government departments also often play a role in transportation planning. Ministries of Construction, of Transportation, or of Municipal Affairs may have rules and policies that impact on city transportation systems. Local police departments also have jurisdiction over enforcing speed limits and parking rules. Finally, development banks, such as the World Bank, often provide funds and therefore influence large transportation projects. In creating your multi-sectoral effort, it will be important to engage transportation planners, engineers, and designers.

From both a safety and comfort perspective, communities that are built with the idea that the movement of cars is the greatest priority negatively impact on walking and cycling: these communities are typically built with wide streets and large parking lots and encourage high traffic volumes and speeds.³³ This creates an unsafe situation for pedestrians and cyclists because higher speeds mean that crashes are more likely to maim or kill. In this type of community

Connectivity refers to the directness or availability of different routes from one point to another within a neighbourhood. A highly connected pedestrian or cycling network allows people to use many possible routes to their destinations. When sidewalks and bicycle lanes are not connected or the route is very indirect, the distances that people must travel will be much greater.

pedestrian and cycling routes between destinations are rarely well-connected. This means that it will take longer for pedestrians or cyclists to get to where they are going, thereby reducing the comfort and convenience of active transportation. Studies show that having sidewalks that are well connected is positively related to more people walking to commercial centres, even when other factors, such as density and land-use mix, were constant.³⁴ Well connected walking and cycling networks

are crucial for encouraging people to walk or cycle as a mode of transportation.

³³ Frank, L.D., Kavage, S., & Litman, T., (2006). *Promoting public health through Smart Growth. Building healthier communities through transportation and land use policies and practices*. Prepared for SmartGrowthBC.

³⁴ Saelens, B. E., Sallis, J. F., & Frank, L. D. (2003). Environmental correlates of walking and cycling: Findings from the transportation, urban design, and planning literatures. *Annals of Behavioral Medicine: A Publication of the Society of Behavioral Medicine*, 25(2), 80-91.

From a safety perspective, sidewalks that are broken and obstructed can cause people to trip and fall. Lack of safe ways to cross the street puts pedestrians in danger. Although safety is important for everyone, the issue of safety is of particular concern for children and the elderly. Studies have found that parental concerns about safety are strongly associated with children's active commuting to school. Parental concerns were related to safety issues such as presence and quality of walking and cycling facilities, as well as traffic danger. Children were five times more likely to actively travel to schools when parents had few concerns than when parents had many concerns.³⁵ For the elderly, the risk of falling is a major concern, as falls can be life threatening. Poor sidewalk conditions can increase the risk to the elderly of falling, and can be impossible to navigate for seniors with disabilities. Research from the United States suggests that falling and tripping accidents are far more frequent than pedestrian-automobile collisions, which supports the idea that sidewalks need to be well maintained and clear of obstructions.³⁶

The physical environment can also impact individuals and families living in poverty. Most low-income individuals living in low- and middle-income countries do not have access to private vehicles. The poor pay a disproportionate amount of their monthly income on food and shelter, which leaves little to spend on transportation. This means that the poor rely on walking and sometimes cycling as their primary modes of travel. Thus, people living on low incomes are more seriously

³⁵ Kerr, J., Rosenberg, D., Sallis, J. F., Saelens, B. E., Frank, L. D., & Conway, T. L. (2006). Active commuting to school: Associations with environment and parental concerns. *Medicine and Science in Sports and Exercise*, 38(4), 787-794.

³⁶ Loukaitou-Sideris, A. (2006). Is it safe to walk? Neighborhood safety and security considerations and their effects on walking. *Journal of Planning Literature*, 20(3), 219-232.

impacted when the physical environment does not support these active modes of travel. Income, mobility, and time constraints together limit the range of destinations within reach of low-income individuals and families. Low-income households have much greater difficulty reaching all destinations within a region, including employment, commercial, and retail.³⁷

Active transportation has important implications for road safety, climate change, and air quality. There may be groups already working on the issues related to active transportation or non-motorized travel in your country. These groups make natural allies in your efforts to encourage better policies for pedestrians and cyclists.

Transportation planning policies can be found in a variety of documents, depending on the process within your city or town. Examples of the types of documents include Official Plans, Master Plans, Transportation Master Plans, and Transit Plans. Your city or town may also use other transportation documents; in many cities, these documents will be the same as the urban planning documents. It is important to understand how transportation decisions are made in your community and which documents are used to provide the policy direction (see the orange box).

There is much evidence to suggest that there are specific things that transportation departments can do to make the transportation system supportive of active transportation. As with urban planning, how the specific policies should be worded will depend, in part, on the local context. However,

³⁷ Frank, L. D., Engelke, P., & Schmid, T. (2003). *Health and community design: The impacts of the built environment on physical activity*. Island Press.

some examples of policies that help create enabling environments for pedestrians and cyclists include:

- * Policies that specifically state that street systems are to give priority to pedestrians and then cyclists. This is very important, as governments often do not recognize the importance of pedestrians and cyclists in their transportation plans. Recognizing the extremely important role that these groups play is necessary for a well functioning transportation system.

- * Policies that require continuous sidewalks and bicycle lanes, on both sides of the street. They should be separated from roads and at a width that can support a reasonable volume of pedestrians and cyclists. In many neighbourhoods, sidewalks should be at least 1.5 metres wide; in commercial areas, they should be at least 4 metres wide. This is important because continuous sidewalks and bicycle lanes

create connectivity. Having wide enough sidewalks and lanes is important because when the sidewalks are too busy, people will need to move onto the road and into traffic. This dramatically increases the chances that pedestrians and cyclists will be hit by a motor vehicle.

- * Policies, including enforcement provisions, which require sidewalks and bicycle lanes to be free of motorbike and car parking. This is important because when cars and

The International Charter for Walking shows how to create a culture where people choose to walk. It provides a common framework to help authorities refocus their existing policies, activities, and relationships to ensure that people want to walk for their day-to-day activities. Governments, organizations, and individuals can sign the charter; support for the charter is currently at 4117 signatures from 88 different countries. Visit <http://www.Walk21.com/charter> for more information.

motorbikes are parked on the sidewalks and bicycle lanes, pedestrians must move onto the road and into traffic.

* Policies that require safe and convenient pedestrian crossings at regular intervals (no more than 150 metres apart). Increasing the number of intersections and ensuring that they are 4-way intersections means more walking. It is safer because pedestrians are given many options to cross the road. More intersections also have the added benefit of encouraging cars to travel at lower speeds. It is important to note, however, that the presence of intersections will not be enough. Those intersections need mechanisms to ensure

The Victoria Transport Policy Institute is an independent research organization that provides a variety of resources available free on their website to help improve transportation planning and policy analysis. Visit www.vtppi.org

that cars stop for pedestrians.

* Policies that provide safe ways for cyclists to navigate through various city intersections. One example is the bike box, shown at this site (A bike box allows bicycles to pull up farther than cars

and thus clear the intersection first):

<http://www.streetsblog.org/2008/03/25/eyes-on-the-street-portland-bike-boxes/>.

* Policies that ensure that sidewalk and bicycle lanes are regularly maintained and clear of debris. This speaks directly to both safety and comfort.

* Policies that reduce speed limits. This promotes pedestrian and cyclist safety, reduces the chances of being hit by a motor vehicle, and reduces the likelihood of serious injury or death when collisions do occur.

Activities for you to do: Talk to people at your local transportation planning department and ask them what documents they use to guide the transportation decisions in your city. Review these documents. Examples of questions to ask yourself include: What do they say about the pedestrian and cyclist priority? Beyond saying that pedestrians and cyclists are a priority, does the document have any additional policies that you might consider pedestrian- or cyclist-friendly? Or, are the transportation documents primarily trying to improve the situation for motorized travel? Is there funding attached to sidewalk and bicycle lanes? Are sidewalks required at an appropriate width on all roads?

5.3.2 Fiscal Policies

Countries that have implemented fiscal measures to reduce the attractiveness and affordability of tobacco products have seen significant declines in tobacco use. Fiscal or taxation policies can be used in similar ways to make the alternative to physical activity, which is driving a private automobile, unappealing and unaffordable. Fiscal policies that target private automobiles, often called “car control measures,” are vital because it is impossible to have excellent conditions for pedestrians and cyclists while cars and motorbikes dominate the roads. Policies to reduce motorized traffic are essential, and taxation is an obvious strategy that can support such reductions.

Taxation policies related to import taxes are usually defined in National Ministries of Finance documents. National Departments of Transportation are typically the main government body responsible for licensing fees. Local Departments of Finance or local Departments of Transportation are typically involved in congestion charges and parking fees. Police or Traffic Departments might also be involved.

One set of fiscal policies involves making driving a private automobile more expensive. This can be done in two ways. The first way is to tax petrol/gasoline, which is typically done at the national level. The second way is to tax the distance that people actually drive; this is usually done at a regional or city level. Both policies have the potential to change driver behaviour and to encourage the use of alternative modes of travel – where such alternatives exist – provided that the tax is sufficiently large.³⁸ In terms of taxing the distance that people drive, this is often referred to as Road Pricing. Road Pricing involves charging motorists directly for driving on a particular road or in a particular area. Congestion Pricing is the same as road pricing but uses higher rates during congested periods. Road Pricing has successfully been used to reduce traffic congestion in cities such as Oslo, London, Melbourne, Seoul, and Singapore.³⁹

In Singapore, the number of commuters who drive to the Central Business District fell from 56% in 1975 to 23% in 1983 after the introduction of road pricing. Over the same period, bus usage rose from 33% to 69% of commuters. Building roads to achieve the same benefit in Singapore would have cost US\$1.5 billion. Singapore now uses an effective electronically-monitored and charged Electronic Road Pricing System.

As a result of the congestion fee in central London (England), car traffic has fallen by 30%, truck traffic by 10%, and vehicle kilometres traveled by cars by 34%. Cycling journeys increased by 20%. The system also benefits public transit users who can use active transportation to and from the transit stop.

³⁸ Harischandra, K., Isola, J., Rahman, L., and Suen, A., (2011). *Going Forward: Prospects for Transitioning from Gas Taxes to Vehicle-Miles Travelled Fees*. Accessed from: https://publicpolicy.stanford.edu/system/files/Carnegie_GasTaxes.pdf

³⁹ *The Leapfrog Factor: Clearing the air in Asian cities*. Center for Science and the Environment, India, 2006.

An additional set of fiscal policies target car ownership (as opposed to driving) and makes owning a motor vehicle more costly. Examples of fiscal policies include: annual vehicle ownership licensing fees; vehicle import taxes that place taxes on every car that is imported into a country; sales taxes on every vehicle sold; and parking fees that increase the cost of keeping a vehicle parked. Of these fiscal measures, all but parking fees are typically charged at a national level.

In Singapore, taxes include a 45% import duty on a car's open market value, a registration fee that ranges from US\$1,000 for a private car to \$5,000 for a company car, and an additional fee of 150% of the vehicle's market value. The total tax is 200% of the vehicle's market value. Singapore also charges an annual road tax which is assessed based on car's engine capacity. There is also a quota system that limits the total number of vehicles to the 1990 level. Before buying a car, the would-be owner must buy the right to own a car, or what is locally known as a certificate of entitlement. That certificate must be renewed every ten years at the currently prevailing registration price. The result is both significant funds that can be used to maintain the entire transportation system and a reduction in private vehicles.

In Toronto (Canada), a Business Association called the "Toronto Region Board of Trade" is one of the leading organizations advocating for fiscal policies such as congestion charges, taxes, and parking fees. Its members realize that lots of cars stuck in traffic are bad for business and bad for the economy. They have written papers and developed a website dedicated to focusing attention on this issue. Consider approaching your lead business associations and talk to them about how car congestion is hurting your economy. For more information, Visit the Board of Trades website at www.bot.com

In addition to taxation policies that put controls on cars, there are also policies that can make physical activity more attractive. Many countries heavily tax imported bicycles. This makes bicycling less affordable and therefore less appealing. Reducing or eliminating these taxes would be helpful in making cycling affordable. In Canada, for example, one province eliminated the point of sale retail tax on all bicycles and bicycle safety equipment. This effectively reduced the purchase price for a bicycle by 7%. Although no one has studied the impact of this policy on the purchase and use of bicycles, any measure that makes bicycle ownership more affordable will have a positive impact.

Activities for you to do: Talk to people at your local finance department and ask them what documents outline the current car control measures in your city. Talk to your national Ministry of Finance or Revenue and inquire about where you can find information regarding taxes that might impact the transportation system. Review these documents. Examples of questions to ask yourself include: are there any measures that control cars and motorbikes? Are there tax policies that could be considered to discourage private automobile ownership? Talk to your local Transportation or Police Department and find out what policies are in place to control cars within your city.

5.3.3 Information Environment Policies

The information environment for physical activity does not deal directly with physical activity. There is little in the way of marketing, packaging, or labelling that applies directly to physical activity. However, the automobile industry has invested significant amounts to portray driving as a modern, exciting, activity that is associated with wealth and status. Most of the ads portray cars or motorbikes driving on empty roads, speeding along with happy passengers. Very few, if

any, of these advertisements portray driving as it really is in most cities: a slow, frustrating, and noisy experience. All of this advertising is changing the social norms regarding driving and is, in part, encouraging the increasing motorization that we are seeing in virtually every country. Unlike tobacco control, there are almost no examples of countries that have put limits on advertising for private automobiles. However, in Great Britain, a Member of Parliament tried to introduce legislation that would require 25% of all car ads to discuss only environmental impact data.⁴⁰ The legislation was modeled after the health warnings on cigarette packets. The warnings are intended to highlight the environmental impact of owning vehicles and would highlight the consequences of dangerous climate change.

Activities for you to do: Look at the automobile advertising in your community. Does it appear that driving is being accurately portrayed? Are people stuck in traffic or are they driving in wide-open roads? Find out which national department in your country regulates advertising. What regulations does your country have to prevent misleading advertising?

⁴⁰ The Guardian (2009). Car ads 'should carry climate health warnings'. Accessed from <http://www.guardian.co.uk/environment/2009/may/05/car-advert-health-warnings>

Key Messages:

- ✧ *Creating a physical environment that supports both recreation- and transportation-related activity involves changing the policy environment in terms both of how our cities are designed and how our transportation systems are organized.*
- ✧ *Low income groups are the most affected by how neighbourhoods are designed, because they have less access to transport and fewer options for recreation.*
- ✧ *Residents from communities deemed highly walkable had higher rates of walking/cycling in comparison to residents from low-walkable communities.*
- ✧ *Urban planning policies are critical for physical activity because it is these policies that decide how practical, convenient, and attractive physical activity is as an option for both transportation- and recreation-related physical activity.*
- ✧ *Urban planning policies determine how close schools and parks are located to where people live, how attractive the buildings and public spaces are, and what facilities are available for people to feel safe and comfortable.*
- ✧ *Transportation planning policies determine if there will be sidewalks and bicycle lanes, what the quality of those spaces will be, and how safe it will be to cross the street. In addition, transportation policies help to determine how attractive driving is.*
- ✧ *Fiscal, including taxation, policies, make the main alternative to physical activity, driving a private automobile, less appealing and affordable. Fiscal policies targeting private automobiles, often called “car control measures” are vital because it is impossible to have excellent conditions for pedestrians and cyclists while allowing cars and motorbikes to dominate the roads.*
- ✧ *A significant investment is made by the automobile industry to portray driving as a modern, exciting activity that is associated with wealth and the upper class. Most of the ads portray cars or motorbikes driving on empty roads, speeding along with happy passengers. Very few, if any, of these advertisements portray driving as it really is in most cities: a slow, frustrating, and noisy experience.*

6 Healthy Diets

Having a healthy diet is another key determinant in the fight against NCDs. As many as 2.6 million deaths per year are directly related to an insufficient intake of fruits and vegetables. If people ate the minimum amount of fruits and vegetables recommended by the WHO, heart disease and stroke could decline by 31% and 19%, respectively; stomach, oesophageal, lung and colorectal cancer could also decline by as much as 19%, 20%, 12% and 2%, respectively.⁴¹ An article published in *The Lancet*⁴² points out that encouraging the consumption of foods that are low in saturated and trans fats, salt, and sugar will lead to health gains in a number of areas. Benefits would include reductions in the proportion of the population that is overweight, and in cardiovascular disease and some cancers.

6.1 What is recommended?

In order for the body to function optimally, it is important to get a mix of nutrients. It is, therefore, necessary to eat a variety of foods since different foods provide different nutrients. Understanding which foods contain which nutrients and how much of each you need is complicated. This makes “diet” the most complicated risk factor for NCDs. Cultural norms are also important in defining what we eat. Mexicans and Guatemalans eat tortillas, most Asians eat rice, Northern Europeans eat bread, and Italians eat pasta. These differences make deciding on one set of recommendations about what we should eat difficult.

⁴¹ Lock K, Pomerleau J, Causer L, Altmann D, McKee M. (2005). The global burden of disease attributable to low consumption of fruit and vegetables: implications for the global strategy on diet. *Bulletin World Health Organization*, 83(2): 100-108.

⁴² Beaglehole R et al. (2011). Priority actions for the non-communicable disease crisis. *The Lancet*, 377(1775): 1438-1447.

However, there are several specific actions that make it easier to understand what makes a healthy diet. The World Health Organization suggests that in order to have a healthy diet we should⁴³:

- ✓ limit energy intake from total fats and shift fat consumption away from saturated fats to unsaturated fats and towards the elimination of trans-fatty acids
- ✓ increase consumption of fruits and vegetables, legumes, whole grains, and nuts
- ✓ limit the intake of free sugars
- ✓ limit salt (sodium) consumption from all sources and ensure that salt is iodized

*For more information about healthy diets visit the World Health Organizations website at <http://www.who.int/en/> and the following documents:
* Fruit and vegetable promotion around the world
* Global Strategy on Diet, Physical Activity and Health*

In tobacco control, the main goal is to ensure that the population avoids using tobacco products. Promoting healthy diets differs from tobacco control in that in order to have a healthy diet, one must eat healthy foods *and*

avoid unhealthy foods. It is not sufficient to merely eat healthy foods. Likewise, it is not sufficient to merely avoid unhealthy foods. Both are needed for a healthy diet.

⁴³ World Health Organization (2004). Global Strategy on Diet, Physical Activity and Health. Accessed from: <http://www.who.int/dietphysicalactivity/goals/en/index.html>

6.2 What is healthy versus unhealthy food and why is it important?

We learned from tobacco control that creating an enabling environment is important if we are going to decrease tobacco use at a population level. In terms of healthy diets, we must create an environment in which people are able to eat healthy foods and avoid unhealthy foods.

6.2.1 Eating more healthy foods

Our food is made up of the nutrients our bodies need to be healthy. The nutrients in our food are classified as:

- ✧ Carbohydrates – act as a fuel to provide energy and occur as either starch or sugars.
- ✧ Proteins – provide the material necessary for the growth and repair and maintenance of the body.
- ✧ Fats – are a fuel to provide energy.
- ✧ Minerals – are required in very small quantities per day but are essential for on-going health and include calcium, iron, phosphorus and zinc.
- ✧ Vitamins – are highly complex organic compounds that are essential to maintain a healthy body; small amounts must be absorbed from food on an ongoing basis.
- ✧ Fibre – provides the bulk to carry the waste products of digestion out of the body.

Different foods provide different types of nutrients, which is why it is important to eat a variety of foods every day. But the body needs different amounts of each of these nutrients. Eating too much or too little can create problems. For example, although we need fat in our diet, a diet that is too high in fat will increase the risk of obesity and has been linked to cardiovascular diseases. Fruits and vegetables contain many different vitamins needed for health. But our

bodies do not store all vitamins, so we need to have a variety of foods that contain different vitamins every day.

To help people understand what they need, many countries have established dietary guidelines. The goals of these national guidelines are to outline what a population should be eating to avoid nutrient deficiency and to reduce the risk of NCDs. These guidelines are intended to help people make food choices to stay healthy. Although the food guides look different and reflect the differences in cultural food preferences, the principles of healthy diets are the same. We should eat more grains, vegetables and fruit and lesser amounts of meats, dairy, and oils.

Figure 2: Sample: Indian Food Guide. Source: <http://www.indianfoodsco.com>

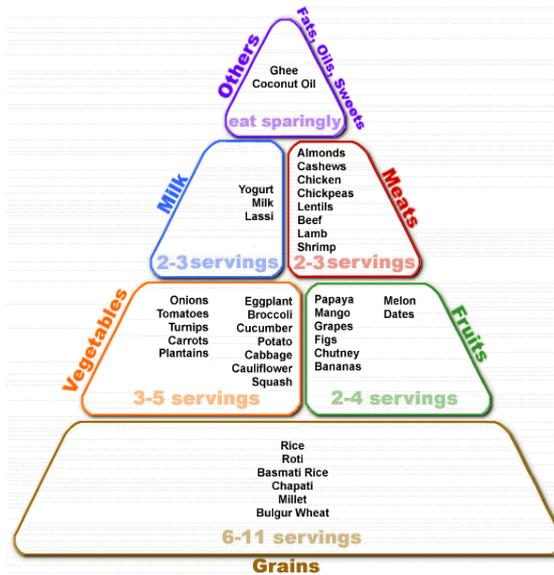
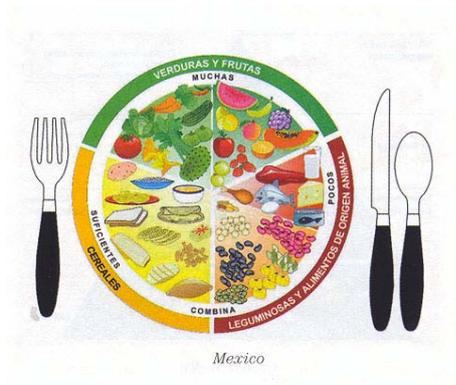


Figure 3: Sample: Mexican Food Guide. Source: <http://familyconsumersciences.com>



Despite the complexity of healthy eating, there are some simple messages that might help us better understand what is necessary. The first key message is the importance of eating diets that are focused on whole grains, lots of fruits and vegetables, and legumes. This would go a long way to providing the nutrients and fibre that people need to be healthy.

Just as with physical activity, the neighbourhood is particularly important for encouraging the consumption of healthy foods. For people to choose healthy options, those options need to be available close to where they live and at a price that they can afford. The farther away healthy food options are from people's homes, the less likely they will be to buy them. When markets and vendors bring those foods close to where people live, it makes it easier for people to choose healthy foods. Choosing healthy foods is important, and therefore we need to ensure that the environment enables these choices. However, studies also suggest that just eating healthy food is not enough. We also need to avoid unhealthy foods if we want to be healthy.

6.2.2 Avoiding highly processed foods

In addition to eating healthy foods, it is important to avoid unhealthy foods. Unhealthy foods can most easily be thought of as highly processed foods that have little nutritional value and are often high in fat and salt or sugar. These foods are typically packaged and are responsible for

From 1975 to 1995, Norway used a combination of policy measures to successfully reverse a population trend towards high fat, energy-dense diets. Over 20 years, the consumption of saturated fat was reduced by 18%. As a result, blood cholesterol fell by 10% and deaths from coronary heart disease fell by 50% among middle-aged men. Regulations were developed that promoted the availability of healthy foods in retail shops and among street vendors and institutions. Food processing and labelling were better regulated, and measures were taken to improve public and professional education and information.⁴⁴

our excessive intake of salt, sugar, fats, and calories, but with little protein, vitamins or minerals. These foods are major contributors to obesity and chronic diseases and do nothing to provide us with the nutrients we need to keep our bodies healthy.

There are many examples of highly-processed foods (sometimes called “junk” food) including salted snacks, sweet desserts, fried fast foods, and sugary carbonated drinks. Unfortunately, identifying unhealthy foods is not always easy, as some foods can be considered either healthy or unhealthy depending on their ingredients and the preparation methods used. For example, when preparing food at home, the person preparing the food is able to decide what fresh

⁴⁴ Friel S, Chopra M, Satcher D. (2007). Unequal weight: equity oriented policy responses to the global obesity epidemic. *British Medical Journal*, 335(7632): 1241-1243.

food to include, control how much salt will go into the dish, and how much oil to use. When buying food prepared by someone else, the person purchasing this food has no control over these decisions.

The neighbourhood is also important to help people avoid unhealthy foods. When unhealthy options are available on every street corner, and advertised throughout the city and on television, they become more desirable and accessible.

6.2.3 Why is this important?

Unfortunately, all around the world we are seeing people shift their diets by increasing the consumption of highly processed, high energy foods in the place of more traditional natural foods.⁴⁵ In Asia, for example, changes in diet include people eating less rice and instead eating more wheat, high protein and energy-dense foods, and convenience food and beverages.⁴⁶ This is known as the “nutrition-transition”⁴⁷ in eating patterns. To understand why food choices are changing and what we can do to help people have healthy diets, we need to consider the environments in which people now make food choices.

⁴⁵ Hawkesworth, S., Dangour, A.D., Johnston, D., Lock, K., Poole, N., Rushton, J., Uauy, R., Waage, J., (2010). Feeding the world’s healthily: the challenge of measuring the effects of agriculture on health. *Philosophical Transactions of the Royal Society B*, 365(1554), p. 3083- 3097. Accessed on February 22, 2011 from

<http://rstb.royalsocietypublishing.org/content/365/1554/3083.full>

⁴⁶ Pingali, P., (2004). Westernization of Asian Diets and the transformation of food systems: Implications for policy and research. *ESA Working Paper No. 04-17*. Available from www.fao.org/esa.

⁴⁷ Popkin, B.M., (2006). Global nutrition dynamics: the world is shifting rapidly toward a diet linked with noncommunicable diseases. *American Journal of Clinical Nutrition*, 84, p. 289-298.

Key Messages:

- ✧ A healthy diet is a key determinant in the fight against NCDs.
- ✧ In order to be healthy, the body needs a mix of nutrients which is best achieved by eating a variety of foods.
- ✧ Many countries have developed national guidelines to help people understand what they should be eating every day.
- ✧ Eating healthy foods -- mostly whole grains, vegetables, fruits, and legumes -- will help people get the nutrients they need to stay healthy.
- ✧ Avoiding processed foods high in sugar, fat, and salt is also important to prevent NCDs.

6.3 Policies that Create Enabling Environments

Based on the tobacco control experience and various studies, it is clear that strategies to improve diets that are focused on changing individual factors will do little to change eating patterns over the long-term. It is unrealistic to expect that people will be able to eat healthy foods and avoid unhealthy foods if there is not an environment that supports those choices. We must first concentrate on environmental and policy approaches if we are to have any hope of creating sustained changes and controlling chronic diseases.⁴⁸

In the past, what food was available in a community was largely determined by what could be grown nearby. However, with increased globalization, this is no longer the case. Food access and availability in a city or country is determined by a complex set of factors including:

⁴⁸ Brownson, R.C., Haire-Joshu, D., and Luke, D.A., (2006). Shaping the Context of Health: A review of Environmental and Policy Approaches in the Prevention of Chronic Diseases. *Annual Review Public Health*, 27, p. 341-370.

- ◆ Trade laws that govern what is grown for export. Many countries have begun to grow non-food cash crops such as cotton, coffee, and tobacco, which has led to a decrease in the amount of land available to produce traditional food crops for local diets.⁴⁹
- ◆ Trade laws that govern what food can be imported into a country. Many countries have seen a rise in the amount of highly processed foods as the barriers associated with importing food have been reduced or eliminated.⁵⁰
- ◆ Agricultural subsidies that can either encourage unhealthy foods (by subsidizing the production of foods that might go into highly processed foods) or may encourage healthy foods by subsidizing the production of fruits, vegetables and legumes.
- ◆ Changes in the types of retail outlets selling food have resulted in a rapid increase in the influence of global food corporations. Local wet markets are more likely to sell fresh, local fruits and vegetables and fresh meats and fish. Supermarkets in developing countries, on the other hand, have specifically focused on processed, dry, and packaged foods because they enable economies of scale and have long shelf lives.⁵¹ Supermarkets have proven to be an easy entrance into the market for large international food companies selling highly processed foods that want to expand to new markets. A Guatemala study reveals that when shopping at supermarkets rather than traditional retail outlets such as wet markets, consumers buy more highly and partially

⁴⁹ Labonte, R., Mohindra, K.S., and Lencucha, R., (2011). Farming international trade and chronic disease. *Globalization and Health*, 7:21.

⁵⁰ Labonte, R., Mohindra, K.S., and Lencucha, R., (2011). Farming international trade and chronic disease. *Globalization and Health*, 7:21.

⁵¹ Asfaw, A., (2007). Supermarket Purchases and the Dietary Patterns of Households in Guatemala. *International Food Policy Research Institute Discussion Paper 00696*.

processed food items, such as pastries, cookies, crackers, chocolate, ice cream, and so forth, at the expense of staple food items such as corn and beans.⁵²

- ◆ Increasing urbanization results in more land being used for cities and less for growing food. City planning policies that allow cities to sprawl into the countryside also increases the distance that people live from food production and reduces the amount of land that is available to grow food. This, in turn, has a negative impact on both the availability of a varied and nutritious diet with enough fruits and vegetables, and the access of the urban poor to such a diet.⁵³

The City of Detroit, MI, requires a minimum distance of 500 ft between specified standard, carry-out, fast-food and drive-in restaurants and elementary, junior high, and high schools. See: <http://www.preventioninstitute.org/sa/policies/pdf/text/Detroit-Zoning%20and%20Fast%20Food.pdf>

All of these factors determine what food is available within a city and within a country. These factors also influence the price of food. The cost of food has an obvious impact on what people will purchase. This is especially the case for

the poor. Changing community food environments have shifted food purchases more towards supermarkets; supermarkets are able to reduce the prices of packaged, highly processed foods because of the economies of scale associated with these types of foods. The result is the purchase and consumption of more energy dense, nutrient poor foods, higher calorie intake, and reduced consumption of fresh fruit and vegetables. The consumption of pastry,

⁵² *Ibid.*

⁵³ WHO/FAO (2003). Diet, Nutrition, and the Prevention of Chronic Diseases. Accessed from <ftp://ftp.fao.org/docrep/fao/005/ac911e/ac911e00.pdf>

prepared foods, and chocolates has increased globally by nearly 105 percent per year over the past 15 years.⁵⁴

Tobacco control advocates have experience with many of the issues noted above and have tackled the problems created by these issues through policy changes. Although the specific policy measures are different for tobacco control and healthy diets, the essential approach is the same with one change: we want to make healthy foods attractive, affordable and convenient, and unhealthy foods less attractive, affordable or convenient. Both approaches are necessary and can be thought of as the “carrots” and “sticks”.

6.3.1 Physical Environment Policies

The physical environment for food can be defined as the places where food is grown and distributed; this includes farms, urban community gardens, and kitchen gardens. The physical environment for food also includes the number and type of retail food outlets, the location of the outlets, and how accessible those outlets are for residents. There are many types of retail food outlets, including wet markets, local mobile vendors (or hawkers), supermarkets, small local stores, and restaurants. These outlets are the places where food is distributed.

The location of retail food outlets is critically important in determining people’s access to food within an urban environment. In deciding where to shop, consumers are strongly influenced by how far they must travel.⁵⁵ The farther away an outlet is to where people live, the less

⁵⁴ Pingali, P., (2004). Westernization of Asian Diets and the transformation of food systems: Implications for policy and research. *ESA Working Paper No. 04-17*. Available from www.fao.org/esa.

⁵⁵ Hawkes, C., (2008). Dietary Implications of Supermarket Development: A Global Perspective. *Development Policy Review*, 26(6), p. 657-692.

accessible that retail outlet is. Distance to retail food outlets is particularly important to low-income residents, children, and the elderly, as they are the least likely to have access to motorized transportation. Therefore, it makes sense to enact policies to ensure that retail food outlets that sell healthy foods are easily accessible – meaning within walking distance – of where people live, work or go to school. A recent study found that when people purchased their food at a location more than 2.9 km from their homes, their weight relative to their height was higher than those who bought their food closer to home.⁵⁶

If ensuring that people have easy access to healthy foods close to home is important for healthy diets, then the opposite is also desirable.

Potential allies could include associations that work with vendors and local markets. For example, in Vietnam a local NGO is partnering with the local Women's Trade Union that works with local women vendors.

Policies that restrict the location of food outlets that sell unhealthy food options may reduce the accessibility of unhealthy food. Two recent studies found that obesity rates are higher where there are more fast

food restaurants relative to the population, and more convenience stores where highly processed foods are readily available meant more obesity and overweight.⁵⁷ We need to be careful about such policies, however, as restrictive policies may have negative impacts on low-income consumers, who may find that their decisions about where to shop become even more constrained. This in turn will likely significantly increase their transportation costs

⁵⁶ Papas M, Alberg A, Ewing R, Helzlsouer K, Gary T, Klassen A. (2007). The built environment and obesity. *Epidemiologic Reviews*, 29(1): 129-143.

⁵⁷ Papas M, Alberg A, Ewing R, Helzlsouer K, Gary T, Klassen A. (2007). The built environment and obesity. *Epidemiologic Reviews*, 29(1): 129-143.

simply to get food.⁵⁸ The key is to ensure that policies work to support healthy retail food outlets within walking distance (400 metres to 800 metres) of all residents and restrict unhealthy food outlets.

Urban policies are most likely to influence where food is located in a community. A zoning bylaw is one example of an urban planning policy that local governments can use. Zoning bylaws can control the food environment because through them, city officials decide what is available in a given neighbourhood. Zoning policies can make healthy food accessible and unhealthy food less accessible by⁵⁹:

- Allowing community food gardens and local wet markets in every community.
- Limiting commercial food retail, such as fast food businesses, or allowing incentives to those businesses that increase access to healthy food.

When HealthBridge worked to change the government policy of destroying local wet markets in Hanoi, it created an image of the catchment area for current markets and how greatly people's access to fresh produce would be reduced if the current markets were turned into commercial shopping centres. As a result of advocacy efforts, the government agreed to review its policy for closing traditional wet markets.

For example, zoning policies, if available, can control a fast food business's ability to occupy a retail space, limit how many fast food restaurants are allowed in a given neighbourhood, and require these outlets to maintain a minimum distance from local schools.

⁵⁸ Hawkes, C., (2008). Dietary Implications of Supermarket Development: A Global Perspective. *Development Policy Review*, 26(6), p. 657-692.

⁵⁹ Centers for Disease Control and Prevention (2010). Healthy Places: Zoning. Accessed from <http://www.cdc.gov/healthyplaces/healthtopics/healthyfood/zoning.htm>

Urban planners and architects are the two main professions that work on policy related to urban planning and who would be involved in planning where markets and stores are located. City “Planning Departments” would be involved in developing any zoning bylaws, if that policy tool is available in your community. In addition, national level government departments often play a role in deciding on commercial activities. Ministries of Trade, of Agriculture, of Construction, of Planning, or of Municipal Affairs may have rules and policies that explain how food is to be distributed. In creating your **multi-sectoral** effort, it will be important to involve these departments and ministries.

In addition, policies that promote and encourage vendors can positively affect the accessibility of healthy foods to the population. In many countries, food is sold by mobile vendors who walk up and down streets. Unfortunately, many countries have begun restricting these vendors, using a variety of reasons to prevent them from legally selling their goods. Many of these reasons are related to a belief that they create unsafe pedestrian and park environments. However, few studies have demonstrated that vendors create problems for pedestrians; in fact, vendors provide an important service by ensuring that there are “eyes on the street”.

“Eyes on the street” refers to the surveillance that naturally occurs when a number of people use a street or public space. Having many people providing “eyes on the street” can reduce crime, encourage the exchange of ideas, and promote a sense of community.

Policies that encourage vendors can have the benefit of bringing healthy food options, such as fresh fruits and vegetables, close to where people live, thereby enabling those with mobility problems the option of eating a healthier diet.

Lastly, urban planning policies that impact the food environment include policies that encourage compact cities, reduce sprawl, and

encourage urban agriculture. These policies determine how close farms that grow healthy foods are to consumers and how much land is available for growing food. Urban planning policies that preserve farmland and encourage urban agriculture include:

- Urban containment policies where new growth in cities is directed to specific areas and away from farmland. These policies typically designate land on city boundaries as green space and prohibit the construction of buildings in these areas.
- Compact city policies whereby new growth in a city is kept within the already existing city boundaries. These policies add density to cities and have the added benefit of helping low-density neighbourhoods achieve the needed number of people (and hence businesses and other destinations) to support walkable communities.
- Urban agriculture policies where open spaces in neighbourhoods are used to grow food. One study in Toronto, Canada found that community gardens were perceived by gardeners to provide numerous health benefits, including improved access to food, improved nutrition, increased physical activity and improved mental health. Community gardens were also seen to promote social health and community cohesion.⁶⁰

In the city of Hue (Vietnam), residents have been growing food on the historic wall for many years. The government is currently developing a master plan for this area and is including the community gardens as part of those plans.

⁶⁰ Wakefield, S., Yeudall, F., Tarron, C., Reynolds, J., Skinner, A. (2007). Growing urban health: community gardening in South-East Toronto. *Health Promotion International*, 22(2), p. 92-101.

- Policies that encourage the establishment and expansion of local wet markets can increase access as well as availability of healthy food, especially fresh fruits and vegetables, in local neighbourhoods.⁶¹

Activities for you to do: Find out what local and national level government departments deal with food growing and distribution. Talk to people in those departments and ask them what planning documents they use to guide the organization and design of food distribution. Review these documents. Do these documents include information about ensuring a variety of retail options? Do these documents recognize the importance of having food outlets close to where people live? Do these documents put restrictions on outlets that sell unhealthy foods? Are there provisions to save farmland and promote urban agriculture?

Just as with physical activity, there are important climate change and air quality implications for healthy foods. When healthy foods are not grown and available nearby they must be transported. Sometimes food travels across the world before being consumed. Consider approaching organizations that work on climate change and air quality and find out if they are interested in working on the issue of healthy foods.

⁶¹ Center for Disease Control and Prevention (2010). Farmers Markets, Community Supported Agriculture, and Local Food Distribution. Accessed from: <http://www.cdc.gov/healthyplaces/healthtopics/healthyfood/markets.htm>

6.3.2 Fiscal Environment Policies

In addition to the important role that the physical environment plays in determining healthy diets, what food is available in those outlets and at what price also determines how easy it is for people to make healthy eating choices. Fiscal factors are particularly important in determining how attractive different healthy and unhealthy foods are to consumers. The fiscal policies that we will be most able to influence are policies that impact taxation and agriculture subsidies.

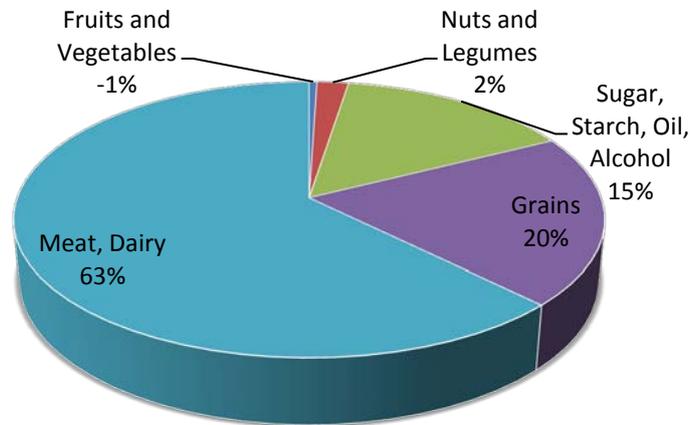
Fiscal policies related to healthy diets are almost always national level policies. Ministries of Agriculture, of Trade, and of Finance are the most obvious ministries to be involved in create an enabling fiscal policy environment.

Agricultural Subsidies

In many countries, governments heavily subsidize the growing of foods that, when processed, are known contributors to NCDs. For example, in the United States, there is a strong incentive for farmers to grow grains, sugar, starch and oil and to support livestock rather than to grow fruits and vegetables. A report by the Physicians Committee for Responsible Medicine found that the majority of American agriculture subsidies go to meat and dairy, and then grain, with less than 1% going to fruit and vegetable growers.⁶²

⁶² Physicians Committee for Responsible Medicine (PCRM, no date). *Agriculture and Health Policies in Conflict: How Food Subsidies Tax our Health*. Accessed from: <http://www.pcrm.org/health/reports/agriculture-and-health-policies-ag-versus-health>

Figure 4: Foods that American Agriculture Subsidies Support. Source: PCRM



The same phenomenon occurs in the European Union, where producers of cereals, beef, olive oil and milk receive subsidies while farmers growing fruit and vegetables do not.⁶³ The result of these subsidies is that highly processed food becomes subsidized as well. Corn, for example is heavily subsidized in the United States. Corn is then converted into an inexpensive but highly caloric sweetener called high fructose corn syrup. This corn syrup is used in virtually all processed foods. An additional example is the range of subsidies associated with grains for cattle and other livestock, which results in artificially inexpensive meat and dairy. This meat is then used by the fast food industry and sold at inexpensive prices to encourage greater consumption of meat and dairy.

⁶³ LS Elinder, K Lock, MG Blenkus (2006). Chapter: Public Health, food and agriculture policy in the European Union. *Health in all Policies*. Accessed from: http://www.amsa.at/images/2006_Health_in_all_policies.pdf#page=120

There are three ways that policy measures can address the issue of subsidies. One is to reduce the subsidies on those

In addition to being an issue related to healthy diets, agricultural subsidies can also create food security issues in countries. Many subsidized foods are grown for export. When farmland is diverted from growing food for local people to growing food, or other products like cotton and tobacco, for export, this can create a food security issue. Consider meeting with local experts in food security to discuss the ways in which you could potentially work together.

products that are likely to lead to NCDs, such as highly processed grains, sugars, oils, and meats. The second option is to increase subsidies on those products that you want more of, such as fruits and vegetables. The final option is to combine the two. Regardless of the approach you take, the literature is very clear that to decrease obesity and NCDs, we must change the type of food being subsidized.

Taxation

As we have learned in tobacco control, product price exerts an enormous influence on consumer behaviour. The simplest way to address prices is through taxation, as higher taxes are typically passed on to the consumer. In country after country, it has been shown that higher taxes (and thus higher prices) lead to a decline in tobacco consumption, especially among youth and the poor. On the contrary, a reduction in taxes results in higher rates of tobacco consumption. Consumer behaviour related to food

In Nepal, the least expensive food product available on the market is seasoned instant noodles in a tiny package, which has great appeal to children. It is not possible to buy a piece of fresh fruit for the same low price. When junk food is more affordable than healthy food, it is difficult to convince those with little money to eat a more healthy diet.

consumption is also likely to be susceptible to price changes. Research from the United States, where sugared beverages are taxed, has proven that increasing prices with taxes has successfully reduced the consumption of sugared beverages. As prices of carbonated sugary drinks increased by 6.8%, sales dropped by 7.8%; an increase of 12% in the price of sugary drinks resulted in a sales drop of 14.6%.⁶⁴

Although the exact formula for applying taxes is somewhat complicated, it is by no means impossible. Soft drinks are

The U.S. state of Connecticut imposes state sales tax on candy, confectionery (candy and other food high in sugar, such as gum), and carbonated soft drinks (soda). It also taxes “meals,” which is food prepared or packaged for immediate consumption. This includes individual, single-serving packages of snacks, such as chips, pretzels, or cookies.

easy to define. Juices or juice drinks that contain mostly sugar and essentially no fruit could also easily be defined. As for fast and junk food, specifications in terms of the quantity of (saturated) fat, salt, and sugar, and lack of nutrients or fresh ingredients, could also

be specified. What has been possible for tobacco can no doubt be achieved with foods.

6.3.3 Information Food Environments

Activities for you to do: Find out what national level government departments deal with agricultural subsidies and food taxation. Talk to people in those departments and ask them what subsidies and taxation are currently in place for food. Review these documents and assess what foods are being subsidized and taxed.

⁶⁴ Brownell, K.D., and Frieden, T.R., (2009). Ounces of Prevention – the Public Policy Case for Taxes on Sugared Beverages. *New England Journal of Medicine*, 360, p. 1805-1808.

Information food environments are defined as the information that is available regarding food. What people know and understand about food and nutrition comes from the information food environment. Examples of “information” include media reports, marketing, labelling and advertising, which are affected by government and industry policies. These policies in turn affect the attitudes and appeal of certain foods.

In most countries, the days of TV ads, newspaper ads, and

Many different government departments could potentially regulate advertising and marketing. Ministries of Health and of Culture are two possible examples. Some countries have chosen to establish independent regulators of advertising. In the United Kingdom the regulator is the “Advertising Standards Authority”, in Canada it is the Canadian Radio-Television and Telecommunications Commission, and in India it is the Advertising Standards Council of India.

billboards promoting cigarettes are long gone. Many of the other activities that tobacco companies engaged in, such as sponsoring concerts and sporting events, handing out free cigarettes, and using brand colours on other products, have also been eliminated. However, at one time tobacco companies spent significant amounts of money promoting their products through these means. International food companies use the same approaches that tobacco companies once used. The U.S. Federal Trade Commission⁶⁵ conducted a study of food company advertising spending patterns in 2009. It found that the 48 companies studied spent a total of \$9.65 billion on food marketing. Of that amount, \$1.79 billion was spent on marketing directed towards youth. Another study compared television

⁶⁵ Federal Trade Commission (2012). A Review of Food Marketing to Children and Adolescents. Accessed from: <http://www.ftc.gov/os/2012/12/121221foodmarketingreport.pdf>

advertising to children in several countries across 5 continents and found that children were exposed to high volumes of television advertising for unhealthy foods, featuring child-oriented persuasive techniques. The most frequently advertised food groups were fast-food restaurant meals (12% of food advertisements), chocolate and confectionery (12%), low-fat dairy products (9%), high-fat, high-sugar, or high-salt spreads and sauces (8%), and full-fat dairy products (8%).⁶⁶

The techniques used by global food companies to target youth include blending traditional media such as television

A recent media report in Canada reported that documents had been located that suggest the sugar industry used Big Tobacco tactics to deflect growing concern over the health effects of sugar. The documents describe industry lobby efforts to sponsor scientific research, silence media reports critical of sugar, and block dietary guidelines that limit sugar consumption.⁶⁷

and billboards with newer media, such as the internet, digital marketing, packaging, and cross promotions with popular movie or television characters.⁶⁸

Considerable evidence exists that establishes the link between unhealthy food marketing and children's food

preferences and choices.⁶⁹ Children's preferences, in turn,

⁶⁶ Kelly, B. et al, (2010). Television Food Advertising to Children: A Global Perspective. *American Journal of Public Health*, 100(9), p. 1730- 1736.

⁶⁷ CBC News (2013). Sugar industry's secret documents echo tobacco tactics. Accessed from: <http://www.cbc.ca/news/health/story/2013/03/08/f-vp-crowe-big-sugar.html>

⁶⁸ Federal Trade Commission (2012). A Review of Food Marketing to Children and Adolescents. Accessed from: <http://www.ftc.gov/os/2012/12/121221foodmarketingreport.pdf>

⁶⁹ Kelly, B. et al, (2010). Television Food Advertising to Children: A Global Perspective. *American Journal of Public Health*, 100(9), p. 1730- 1736.

play an important role in what their parents buy.

An additional component of the information food environment is how food is packaged and labelled. In tobacco control, many countries have advanced their packaging and warning labels so that consumers are aware of the health problems that tobacco products create.

Although some argue about the effectiveness of pack warnings on cigarettes, it is undoubtedly true that consumers have a right to some basic information about the products that they consume. This is also the case for food. People are not inherently aware that unhealthy foods are bad for them. People have the right to understand what they are eating. Not only can nutrition

labelling be printed on the packages of highly processed foods sold in retail outlets, but food sold in fast food restaurants can also display nutrition information on its packaging.

The precise content of the labels should be tested in focus groups to ensure that people understand what is written and to determine if the labels are impacting decisions. However, it is important that regardless of what the label looks like, the claims on the product must be truthful and not misleading.

The Walt Disney Company recently acknowledged the powerful role that television can play in influencing children's behaviour. It instituted a junk-food advertising ban on programs for kids and will begin imposing strict new standards for food and beverage advertising during Saturday morning shows on Disney-owned ABC television stations, on Radio Disney and online.⁷⁰

⁷⁰ Dawn C. Chmielewski, "Disney bans junk-food advertising on programs for children." Los Angeles Times, June 6, 2012.

Policies that will prove to be the most effective in changing the information environment include advertising bans, especially to children, advertising standards that ensure that marketing of products is truthful and not misleading, and package labelling of products.

Organizations advocating for children's health are possible allies in fighting for better advertising and marketing controls. National Ministries of Health or Consumer Affairs would be the most likely to be involved in developing labelling legislation and guidelines.

Activities for you to do: Look at the food advertising in your community. What is being advertised? Are there any ads for fresh fruits and vegetables? Are the ads for processed food telling people that their products are high in sugar, fat, and salt? Are products labelled in your country? Are the labels consistent and easy to understand? Find out which national department in your country regulates advertising. What regulations does your country have to prevent misleading advertising?

Figure 5: Sample of Food Label from the United States. Source: <http://whatscookingamerica.net>

Nutrition Facts			
Serving Size 4 oz. (113g)			
Servings Per Container 4			
Amount Per Serving			
Calories 280	Calories from Fat 130		
% Daily Value*			
Total Fat 14g	22%		
Saturated Fat 3.5g	18%		
Trans Fat 2.5g			
Cholesterol 120mg	40%		
Sodium 640mg	27%		
Total Carbohydrate 13g	4%		
Dietary Fiber 1g	4%		
Sugars 0g			
Protein 24g			
Vitamin A 2%	• Vitamin C 2%		
Calcium 2%	• Iron 6%		
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:			
	Calories	2,000	2,500
Total Fat	Less Than	65g	80g
Saturated Fat	Less Than	20g	25g
Cholesterol	Less Than	300mg	300 mg
Sodium	Less Than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g
Calories per gram:			
Fat 9 • Carbohydrate 4 • Protein 4			

In 1980, the Canadian province of Quebec enacted legislation that prohibits advertising products such as fast food and toys that target children. The ban covered both print and electronic media. A recent study examined data collected over a 30 year period and found that people in that province buy less junk food and their children tend to weigh less than their North American counterparts. The researchers found that regulation reduced household fast food consumption by as much as 13% each week, the equivalent of \$88 million in 2010 dollars and 13 to 18 billion fewer fast food calories a year. Although the Quebec ban was the first of its kind, other countries such as Norway, Sweden, and Greece have enacted similar bans.⁶⁶ For more information refer also to the WHO document titled “Marketing of food and non-alcoholic beverages to children” at <http://www.who.int/en/>

Key Messages:

- ✧ Food access and availability is determined by a complex set of factors including trade laws, subsidies, the changing physical environment, and increased urbanization
- ✧ Policies such as zoning bylaws can encourage healthy food options close to home and restrict where unhealthy food sellers can locate
- ✧ Promoting and encouraging vendors can support those with mobility problems to access healthy foods
- ✧ Policies that encourage compact cities and encourage urban agriculture can increase access and availability of healthy food
- ✧ Policies are needed that lower subsidies for unhealthy food and/or raise subsidies for healthy foods
- ✧ Taxation policies on unhealthy foods can decrease affordability and therefore desirability
- ✧ Marketing and advertising restrictions are needed to reduce the attractiveness of unhealthy products, and labeling is needed to ensure accurate information is given to the public.

⁷¹ Dhar, T., and Baylis, K., (2011). Fast Food Consumption and the Ban on Advertising Targeting Children: The Quebec Experience. *Journal of*

7 Alcohol

Tobacco and alcohol have much in common, and as such alcohol control may be a natural expansion for organizations already working on tobacco control. Both are addictive substances that can cause disease and early death; and both are substances that have harmful effects on non-users as well as users. Alcohol control, like tobacco control, is also an important issue for poverty alleviation. Spending on tobacco and alcohol represents a drain on household income, leading to deterioration in quality of life both for the person spending the money and for his or her dependents. And both can create direct health care related costs that the poor are least able to afford. The contribution of tobacco use to poverty has been well documented and a similar effect is true for alcohol. A study from Sri Lanka investigated the harm from both alcohol and tobacco use in terms of economic cost to the individual. That study found that although the poor spent less than those with higher income on alcohol and tobacco, the expenditure constituted a much larger slice of their income. This unnecessary expenditure compromised their ability to meet their basic needs.⁷²

Before looking at how the lessons from tobacco control can be applied to alcohol control, it is first important to understand what is being recommended, why it is important, and what an enabling environment looks like.

Marketing Research. Accessed from:
http://www.marketingpower.com/aboutama/documents/jmr_forthcoming/fast_food_consumption.pdf

⁷² De Silva, V., Samarasinghe, D., and Hanwella, R. (2011), Association between concurrent alcohol and tobacco use and poverty. *Drug and Alcohol Review*, 30: 69–73.

7.1 What is recommended?

Drinking alcohol is an important risk factor for some cancers, including mouth, liver, breast and colon, and average long-term consumption levels as low as one or two drinks per day have been causally linked with significant increases in risk. However, unlike tobacco for which there is no safe level of use, low levels of alcohol use have been shown to provide health benefits, such as lowering risk of heart disease, stroke, and diabetes.⁷³ Because alcohol can be used safely and is an important part of many people's lifestyles, the key strategy for alcohol control is to reduce risk.

There are two alcohol consumption measures that largely determine its impact on disease and injury:⁷⁴

- the total volume of alcohol consumed, and
- the pattern of drinking.

A broad range of alcohol consumption patterns, from occasional hazardous drinking to daily heavy drinking, creates significant public health problems. In addition to the NCD risks, hazardous and heavy drinking increases the risk of injury and violence, including spousal violence, in nearly all countries. One of the key characteristics of the hazardous pattern of drinking is the presence of heavy drinking occasions, defined as consumptions of 60 or more grams of pure alcohol.

⁷³ Butt, P., Beirness, D., Gliksman, L., Paradis, C., & Stockwell, T. (2011). *Alcohol and health in Canada: A summary of evidence and guidelines for low risk drinking*. Ottawa, ON: Canadian Centre on Substance Abuse.

⁷⁴ World Health Organization (2011). *Alcohol*. Accessed from <http://www.who.int/mediacentre/factsheets/fs349/en/index.html>

Organizations that work to prevent violence against women are obvious allies for working on alcohol control policies. Alcohol abuse by men is associated with an increased likelihood of inflicting injury during a domestic violence incident.¹ Other groups that may be interested in working on this issue include groups working on road safety as drinking and driving is a significant cause of injury and death.

Some countries have chosen to establish high risk drinking guidelines that outline what maximum threshold people would need to stay within in order to reduce their short-term and long-term risks. Canada, for example, established the following guidelines to reduce long-term risks:⁷⁵

- * Women: 0-2 standard drinks per day and no more than 10 standard drinks per week.
- * Men: 0-3 standard drinks per day and no more than 15 standard drinks per week.
- * Both men and women should always have some non-drinking days per week to minimize tolerance and habit formation.

Unfortunately, there is a lack of international consensus at this time about what constitutes harmful or excessive alcohol consumption on a daily basis, a weekly basis and when driving. In addition, there is no agreement internationally about the ratios of consumption guidelines for men and women.⁷⁶

⁷⁵ Butt, P., Beirness, D., Gliksman, L., Paradis, C., & Stockwell, T. (2011). Alcohol and health in Canada: A summary of evidence and guidelines for low risk drinking. Ottawa, ON: Canadian Centre on Substance Abuse.

⁷⁶ Furtwaengler, N.A.F.F., and de Visser, R.O., (2013). Lack of international consensus in low-risk drinking guidelines. *Drug and Alcohol Review*, 32(1), p. 11-18.

Despite there being no international consensus, it is important to remember that it is not necessary to eliminate

alcohol consumption entirely, but it is important to control the amount that is consumed on a daily and weekly basis.

A summary of the research that was used to develop Canada's low risk drinking guidelines can be found at:

<http://www.ccsa.ca/2011%20CCSA%20Documents/2011-Summary-of-Evidence-and-Guidelines-for-Low-Risk%20Drinking-en.pdf>

Despite the evidence that it is possible to consume small amounts of alcohol safely, many people argue that alcohol should be banned altogether. This was also the case with tobacco control: many people

believe that tobacco products should be banned. There is little evidence, however, that a ban on alcohol is necessary or desirable, especially given that it can be used safely and is an important part of many people's lifestyle and culture. The argument for banning tobacco is stronger, and yet it has been deemed impractical by tobacco control advocates. In both cases it would be very difficult to implement and would increase the likelihood of creating a thriving black market which can create problems of its own, including crime and violence. Thus for both tobacco and alcohol, the greatest gain in public health is likely to occur from comprehensive measures for control, not from an outright ban.

For more information about alcohol visit the World Health Organizations website at <http://www.who.int/en/> and the following documents:

- *Q&A: Is harmful use of alcohol a public health problem?*
- *Global Status Report on Alcohol and Health, 2011*

7.2 Policies that Create Enabling Environments

Based on the tobacco control experience, it is safe to assume that strategies to control alcohol that are focused on changing individual factors will do little to change drinking patterns over the long-term. People are surrounded by enticements to drink in the form of direct advertising and in the messaging contained in TV shows and movies. These messages are incredibly pervasive and persuasive. Therefore, we must first concentrate on environmental and policy approaches as the focus of change if we are to reduce the risk associated with excessive consumption.

Given the importance of enabling environments, it is important to look at the specific policy factors that could create an enabling environment for alcohol control. With tobacco control, the policies are intended to make tobacco use less attractive, affordable, or convenient. The policy measures are very similar for alcohol control: we want to make excessive drinking unattractive, unaffordable, and inconvenient. The main policy measures have been grouped into three categories: physical environment policies, information policies, and fiscal policies.

7.2.1 Physical Environment Policies

The tobacco control movement has focused on ensuring the establishment of smoke-free public places and, to a lesser extent, controlling the places that tobacco can be purchased. The focus for the alcohol control movement has predominantly been focused on controlling the number and location of outlets that sell alcohol. Having parks within walking distance of residences makes going to parks easier and more convenient; this is also the case with alcohol: having outlets that sell alcohol close to where people live makes accessing it much easier. Substantial international

research shows that having a high number of outlets for purchasing alcohol in a given area, as well as having those outlets in close proximity to where people live, is associated with high-risk drinking and alcohol-related problems.⁷⁷ The regulation of alcohol outlet density may be a useful public health tool for the reduction of excessive alcohol consumption and related harms.⁷⁸

National level governments may be involved in regulating alcohol through Ministries of Health, Consumer Affairs, or Attorney General. These ministries may issue licenses for sale and establish regulations. In addition, local city governments may regulate where outlets that sell alcohol are able to locate through planning or business departments.

There are several policy measures that can make accessing alcohol more difficult and inconvenient. Cities can require that any establishment selling alcohol must apply for a licence to do so. This gives the city control over the number and location of such establishments. In addition, when developing urban master plans at a city or neighbourhood level, local planning officials can determine where alcohol establishments are permitted to be located. Lastly, local zoning bylaws can set a limit on the number of outlets selling alcohol either for consumption at home or at the establishment itself (such as a bar or restaurant). This helps

⁷⁷ Giesbrecht, N., et al. (2011). Alcohol in Canada: reducing the toll through focused interventions and public health policies. *CMAJ*, 183(4), p. 450-455; West, J.H. et al., (2010). Does proximity to retailers influence alcohol and tobacco use among Latino adolescents? *Journal of Immigrant and Minority Health*, 12(5), p. 626-633.

⁷⁸ Campbell C.A., et al., (2009). The Effectiveness of Limiting Alcohol Outlet Density as a Means of Reducing Excessive Alcohol Consumption and Alcohol-Related Harms. *American Journal of Preventative Medicine*, 37(6), p. 556-569; Giesbrecht, N., et al. (2011). Alcohol in Canada: reducing the toll through focused interventions and public health policies. *CMAJ*, 183(4), p. 450-455.

to avert the likelihood that different establishments will lower their prices to compete for customers.

In the Canadian province of British Columbia, a Liquor Control and Licensing Branch regulates the sale of alcohol in bars, restaurants, and places that allow personal manufacturing. It also regulates alcohol served at special occasion events. Anyone wishing to sell alcohol must get a license. This Branch also enforces the rules by having inspectors visit establishments. An inspector may suspend, fine, or cancel licenses for establishments that do not comply with the law.⁷⁴

The U.S. state of California has set a maximum number of alcohol outlets at 1 for every 1,250 people. San Francisco is currently under a moratorium and no new alcohol outlet licenses are permitted in the city. When an existing business with a liquor license closes or ceases to use its license, that license may be bought or traded by another business owner within the city, if the proposed new business is not in an area of "undue concentration" which is defined by the police as districts where the number of reported crimes is 20% or greater than the city average.⁷⁵

7.2.2 Fiscal Policies

Fiscal policies, such as taxation, are used to make alcohol less affordable and therefore less desirable. Taxation has been demonstrated to be the single most effective measure for reducing tobacco use and evidence from countries that have instituted alcohol taxation policies shows a similar trend. A study in Finland looked at the consequences of reducing the import and excise duties on alcoholic beverages and found that alcohol consumption increased

⁷⁹ Ministry of Energy, Mines, and Natural Gas and Responsible for Housing (2013). Liquor Control and Licensing Branch. Accessed from: <http://www.pssg.gov.bc.ca/lclb/>

⁸⁰ San Francisco Department of Public Health (no date). Indicator C.1.e Alcohol outlet density. Accessed from: <http://www.sustainablesf.org/indicators/view/73>

10% in the year the changes were made. The authors concluded that alcohol taxation and alcohol prices affect consumption levels; heavy drinkers are particularly responsive to price.⁸¹ This result has also been found in low- and middle-income countries (LMIC); a systematic review of research into the effects of price and taxation on alcohol consumption in LMICs found that as taxation and price increases, consumption decreases.⁸²

Taxation on alcohol would typically be decided at a national level. Ministries involved may include the same ministries as would be involved in tobacco, including Health, Trade, Revenue, or Finance.

Higher taxes should lead to higher prices, which would reduce the attractiveness of alcohol, particularly for youth and the low-income. Several studies have addressed the effects of alcohol prices on the drinking behaviours of youth and young adults. This population is at particular risk because it exhibits relatively high levels of binge drinking and of alcohol-related problems; such lifelong habits can be set at a young age. One analysis of the literature concluded that raising the prices of alcoholic beverages postpones drinking initiation and addiction formation among adolescents and young adults.⁸³ The amount of the tax applied to alcohol products needs to be sufficiently high to reduce consumption. Organizations wishing to work on this

⁸¹ Makela, P., and Osterberg, E., (2009). Weakening of one more alcohol control pillar: a review of the effects of the alcohol tax cuts in Finland in 2004. *Addiction*, 104(4), p. 554-563.

⁸² Sornpaisarn, B., et al. (2013). Elasticity of alcohol consumption, alcohol-related harms, and drinking initiation in low- and middle-income countries: A systematic review and meta-analysis. *International Journal of Alcohol and Drug Research*, 2(1), 45-58

⁸³ Xu, X., and Chaloupka, F.J. (2011). The Effects of Price on Alcohol Use and Its Consequences. *Alcohol Research & Health*, Volume 34, Issue Number 2

issue should ensure that prices increase as the alcohol content increases. Taxation should be charged at rates indexed to the cost of living. It is important to prevent prices from falling below fixed minimum retail prices also indexed to the cost of living.⁸⁴

The process of working for tax increases on alcoholic beverages should be very similar as for tobacco, although the groups supporting such a campaign may differ. The key issue is to point out how excessive alcohol consumption represents an economic as well as health burden to governments, and so it is reasonable to recoup some of those costs through higher taxes. The more difficult aspect is to control illicit alcohol, which escapes taxation and may be more dangerous than other forms of the beverage.

7.2.3 Advertising and Marketing Policies

Advertising and marketing policies include all those regulations and guidelines that deal with advertising, promotion, sponsorship, packaging, and labelling of alcohol products. Comprehensive bans on promotion, advertising, and sponsorship of tobacco products has contributed to significant declines in tobacco use and the same can be expected of alcohol. Alcohol advertisements increase expectancies about what will be experienced when drinking alcohol, which leads to a greater likelihood of drinking. The issue of advertising alcohol and its impact on youth has been widely studied; a systematic review of 13 longitudinal studies of more than 38,000 young people found convincing evidence of media exposure and alcohol advertising

⁸⁴ Giesbrecht, N., et al. (2011). Alcohol in Canada: reducing the toll through focused interventions and public health policies. *CMAJ*, 183(4), p. 450-455.

impacting on subsequent alcohol use, including initiation of drinking and heavier drinking among existing drinkers.⁸⁵

Youth and children's organizations would make good allies, given the focus of alcohol companies on targeting young people.

There is evidence that people in developing countries, and in groups of low socio-economic status in developed countries, are often specifically targeted by alcohol advertisers and distributors. Research in the United States has documented that alcohol-related health and social problems are disproportionately high in those low-income communities that are heavily exposed to alcohol advertising and that have a high density of alcohol sales outlets.⁸⁶

The way in which alcohol is packaged and labelled can also be a determinant in encouraging or discouraging alcohol consumption. One study that examined packaging and branding for wine found that both younger inexperienced consumers and older frequent wine consumers were influenced by brand and packaging.⁸⁷ However, more research is needed to determine what information and messages people will understand and react to, because uniform labelling could have unintended consequences. You will need to be particularly cautious about industry-led

⁸⁵ Anderson, P., (2009). Is it time to ban alcohol advertising? *Clinical Medicine*, 9(2), p. 121-124.

⁸⁶ World Health Organization (2010). *Equity, social determinants and public health programmes*. Editors Erik Blas and Anand Sivasankara Kurup. Accessed from: http://www.who.int/sdhconference/resources/EquitySDandPH_eng.pdf#page=21

⁸⁷ Mueller, S., and Szolnoki, G., (2010). The relative influence of packaging, labelling, branding and sensory attributes on liking and purchase intent: Consumers differ in their responsiveness. *Food Quality and Preference*, 21(7), p. 774-783.

initiatives regarding labelling. A recent Australian study examined the impact of an alcohol industry-led initiative that required more visible standard drink labels on all alcohol packaging. The authors of this study concluded that the standard drink labelling initiated by the industry actually served to further increase heavy drinking among young people, who used this information to help them choose the strongest drink at the lowest cost.⁸⁸

In tobacco control, many countries have advanced their packaging and warning labels so that consumers are aware of the health problems that tobacco products create. Although some argue about the effectiveness of pack warnings on cigarettes, consumers have a right to some basic information about the products that they consume. This is also the case for alcohol. Current warnings on alcohol products are typically quite vague or targeted to specific groups such as pregnant women. Research needs to be done, utilizing focus group discussions and other methods, to identify hard-hitting messages that people will understand, believe, and react to. Such messages need to be aimed not only at current drinkers but also at those considering or just starting to drink, as well as those thinking about quitting.

Policies that will prove to be most effective in changing the information environment include advertising bans and advertising standards that ensure that marketing of products is truthful and not misleading.

⁸⁸ Jones S.C., and Gregory, P., (2009). The impact of more visible standard drink labelling on youth alcohol consumption: Helping young people drink (ir)responsibly? *Drug and Alcohol Review*, 28(3), p. 230-234

All European countries, with the exception of the UK, have a ban on one or more types of alcohol advertising. Self-regulation has reportedly failed to prevent marketing that has an impact on younger people. Since advertising commonly crosses country borders, there is an argument to harmonize advertising rules across Europe banning alcohol advertising targeted at young people; this would be a highly cost-effective measure to reduce harmful alcohol use, and one that is supported by European citizens and by case law.⁸⁹

The same arguments about free speech that were used by the industry to fight tobacco ad bans are likely to be used with alcohol control. However, government has both the authority and the responsibility to protect consumers from misleading messages about harmful products. The fact that most countries have banned tobacco advertising proves that it is possible to overcome industry opposition and therefore the banning of advertising of alcohol should also be possible. Although it is possible to drink safely, ads for alcohol tend to glorify drinking and are particularly reprehensible; few ads are as unsubtle as one billboard witnessed in Nepal for whiskey: “Your friend in hard times.”

The extent of alcohol advertising, marketing and sponsorship by government-run alcohol retailing systems and alcohol producers is worrisome. It is a likely contributor to the rising rate of alcohol consumption over the past 13 years. Therefore, policies to restrict the marketing of alcohol products through advertising, promotions and sponsorship, as has been done for tobacco, is recommended to control the harms of alcohol.

When we consider the ways to regulate marketing, we need

⁸⁹ Anderson, P., (2009). Is it time to ban alcohol advertising? *Clinical Medicine*, 9(2), p. 121-124.

to recognize and regulate all types of advertising including:⁹⁰

- ❖ sponsorship of youth events such as concerts and sporting events
- ❖ point of purchase advertising
- ❖ product placement in movies and television
- ❖ school and campus marketing
- ❖ the Internet

In addition, the regulations themselves may be implemented in different ways:⁹¹

- ❖ Restricting advertising placement, which could include restrictions on the placement of ads where the audience is comprised of greater than 30% minors.
- ❖ Partial restriction, which could include banning one or two ways to advertise. For example, banning on television but not in print.
- ❖ Total restriction, which would be a complete ban of all types of advertising.

For more information visit Forut at www.forut.no and the Institute of Alcohol Studies at <http://www.ias.org.uk/>

⁹⁰ Fortin, R.B., Rempel, B., (2005). The Effectiveness of Regulating Alcohol Advertising: Policies and Public Health. Accessed from: http://www.apolnet.ca/resources/pubs/rpt_Effectiveness-Dec05.pdf

⁹¹ Fortin, R.B., Rempel, B., (2005). The Effectiveness of Regulating Alcohol Advertising: Policies and Public Health. Accessed from: http://www.apolnet.ca/resources/pubs/rpt_Effectiveness-Dec05.pdf

Key Messages:

- ✧ *Alcohol is similar to tobacco in that both are addictive substances that can cause disease and early death*
- ✧ *Unlike tobacco, there are safe levels of alcohol consumption, however there is no consensus on what the safe limits are*
- ✧ *Alcohol control is important for poverty reduction and economic development*
- ✧ *There is no consensus on what constitutes harmful or excessive use of alcohol*
- ✧ *Policies that limit physical access to alcohol can be effective in reducing the harmful use of alcohol*
- ✧ *Taxation can be an important strategy for reducing alcohol consumption, but the risk of illicit alcohol production and consumption can be a concern as illicit alcohol may be more dangerous than other forms*
- ✧ *Marketing and advertising restrictions can reduce the attractiveness of alcohol especially to youth*

8 Conclusion

Non-communicable diseases are receiving ever more attention as their toll on health and life continues to mount. Fortunately, NCDs are to a large extent preventable, and we have a good knowledge base of what measures are likely to prove effective in reducing the burden of NCDs. International experience on tobacco control is particularly useful here, as a field governed largely by evidence. There is much to learn from tobacco control, and those with experience working on it are particularly suited to expanding their role to address NCDs overall.

The main lesson learned from tobacco control is that policy changes, however difficult they are to achieve, are vastly more effective than approaches such as school programs and public education that aim to change individual behaviour without facilitating those changes through enabling environments. The experience of tobacco control advocates in achieving behaviour change through laws, policies, and taxation are directly relevant to overall NCD prevention and control. Just as tobacco control required countering the intensive lobbying of a powerful industry, so too will we have to counter even more powerful industries when working on NCDs, including the auto, oil, road building, alcohol, soft drink, and fast food industries.

Exciting opportunities exist within the field of NCD prevention. If we take a holistic approach to NCD prevention, we not only can reduce the incidence and prevalence of NCDs, but simultaneously we can reduce other health problems and dramatically increase quality of life. Herein lies the great challenge: can we achieve a wide range of secondary benefits through a series of policies that

will lead to an enabling environment for a more healthy but also potentially much happier life?

We need to be ambitious and work for large changes, creating policies that will affect change for the long term. Our efforts will be rewarded. A healthier diet and more active lifestyle (in terms of active transport, or purposive physical activity) will not only bring down NCDs but also could mean less traffic congestion, less air and noise pollution, fewer fatal and serious road crashes, and more friendly, convivial communities. And who wouldn't want that?

9 Afterword: the multiple benefits of a holistic approach to NCD control

Although this guide is concerned mostly with the health aspects of NCDs, it merits notice that the same policies that would lead to healthier diets would have multiple additional benefits. Less industrial agriculture (which tends to be sold to supermarkets and fast food chains) and more local, small-scale, and preferably organic, farming would be better for our soil. It would require less fuel both in food production (fewer or no petroleum-based fertilizers and pesticides; less or no use of tractors and so on) and in food distribution. It would mean less control of our food supply by a few giant multinationals (Monsanto, McDonalds, Cargill) and more local control. It would benefit independent farmers and business people rather than global corporations. And let us not forget—food would also taste better if it were grown for nutrition and flavour rather than long-distance shipping.

Tobacco control is not just about health, important though health is. It is also about the environment and the economy. Growing and consuming tobacco products harm the environment and contribute to deforestation. The use of tobacco leads to health costs, as well as other costs in terms of lost time due to illness, and lost the money that is spent on tobacco rather than on basic needs. As such, tobacco use contributes to an overall impoverishment of our environment, our economies, and our lives. So too do NCDs. Excessive alcohol consumption, for instance, not only causes disease but also wreaks havoc on families and is an important contributor to violence and to accidents. The presence of many fast food restaurants not only contributes to unhealthy diets but is aesthetically displeasing and tends

to cause damage to the local economy, taking business away from small, locally-owned establishments. Environments that are unsuitable for walking and cycling also tend to be highly polluted (in terms of both smog and noise), unattractive, and unpleasant. Fewer trips by car and more trips by foot and bicycle mean fewer traffic deaths and injuries, less pollution, and significantly less individual and national expenditure on transport. More fruit trees and more vegetable gardens mean not only more healthy foods available but advantages to the environment and local economy. When we address NCDs in a holistic manner, we can succeed not only in reducing the disability and deaths caused by NCDs but also in creating more liveable environments that will lead to fewer other health problems and stronger, more vibrant, healthier local economies and societies.

Focus is of course important in work, but sometimes if we are too focused on single achievements we miss the opportunity to do something even greater. The growing prevalence of NCDs presents us with both a challenge and an opportunity. It is not possible to make significant reductions in NCDs without addressing a wide range of issues, but even if it were, that would not be the smart approach. By working effectively on NCDs, we can reduce a wide range of other problems as well and make our communities vastly more liveable. Let us not throw away this opportunity. Many of those with years of experience on tobacco control are tired of the fact that we are only discouraging a negative behaviour without having anything positive to offer in its place. This is not the case with NCDs. While the approach to two of the main risk factors (tobacco and alcohol) is negative, in terms of trying to eliminate or limit use, the approach to the other two can be positive. The work is not just about reducing bad foods in the diet but about encouraging healthy diets that can also benefit the

environment and the economy. It is not just about increasing physical activity but about changing the environment to improve people's independent mobility, to reduce pollution and transport expense, and to make our cities more liveable.

As the Advocacy Council of the International Society for Physical Activity and Health (ISPAH) in Canada states, "increased active transport will achieve co-benefits such as improved air quality, reduced traffic congestion, and reduced CO emissions."⁹²

NCD prevention provides exciting opportunities to work for dramatic improvements in people's quality of life and in the surrounding environment. It is up to us to ensure that those opportunities are fully utilized and that we make a far greater impact on people's lives than we would by keeping too narrow a focus. A holistic approach to NCD control can result not only in better health but in an improved environment and local economy, and the greater liveability of our cities. Once again, though the work will not be easy, the multiple benefits make it well worth the effort.

⁹² Global Advocacy for Physical Activity (GAPA) the Advocacy Council of the International Society for Physical Activity and Health (ISPAH). *NCD Prevention: Investments that Work for Physical Activity*. February 2011. Available from: www.globalpa.org.uk/investmentsthatwork