Chapter 4: Opportunities for Prevention and Control

Key messages

- The global NCD policy of WHO, a policy that focuses on strategic NCDs, is well established, and the role of government efforts depends on the disease burden; on health and non-health sector capacity, priorities, and resources; and on the policy environment.
- Many opportunities for NCD prevention and control are available and affordable. Feasible strategies exist.
- Both prevention and treatment of NCDs are needed. The challenge is determining the strategic mix with the goal of keeping those people at low or moderate risk from becoming high risk through population-level reduction of risk factors (prevention); and to keep those at high risk from developing disease-related complications and disability through individual clinic-based efforts (treatment).
- For population-based interventions, one study of 23 low- and middle-income countries estimated that, if tobacco control measures and salt interventions were implemented together, 13.8 million deaths could be averted, at a cost of less than US$0.40 per person a year in low-income and lower middle-income countries.
- For individual-based interventions, one study of the same 23 countries showed that, over 10 years, scaling up a multidrug regimen could avert 17.9 million deaths from CVD. The 10-year average annual cost per head would be US$1.08, ranging from US$0.43–0.90 in low-income countries to US$0.54–2.93 in middle-income countries.

Global and National Policy Context for NCDs

In 2000, the World Health Assembly adopted a resolution (WHA/53.17) endorsing a WHO Global Strategy for the prevention and control of NCDs. The Director-General of WHO was requested to continue giving priority to the prevention and control of NCDs and the member states were requested to develop national policy frameworks and to promote initiatives.

In 2003 and 2004, the World Health Assembly adopted the Framework Convention on Tobacco Control (Box 4.1) and the Global Strategy on Diet, Physical Activity and Health. In 2008, it endorsed the 2008–2013 Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases. The plan focuses on four types of NCDs—CVD, cancers, chronic respiratory diseases, and diabetes—because current evidence indicates that these make a large contribution to mortality in the majority of low- and middle-income countries. These diseases are also largely preventable by means of effective interventions that tackle their risk factors, that is, tobacco use, unhealthy diet, physical inactivity, and harmful use of alcohol. As said, as CVD accounts for a large toll in South Asia, they are the major focus of this book.
Box 4.1 Framework Convention on Tobacco Control

The Framework Convention on Tobacco Control (FCTC) marked its fifth anniversary in 2010. It is unique for two reasons: it is the first international health treaty and it has become one of the most widely and rapidly ratified treaties in the history of the United Nations. The FCTC represents a new approach to international health cooperation and is a model for a global response to the harm that tobacco causes to health. International cooperation and assistance remain critical for its success as do leadership, commitment, and political will among all stakeholders. The FCTC focuses on six strategic areas with efforts to:

- Enact (if consistent with each country’s constitution) comprehensive bans on tobacco advertising, promotion, and sponsorship within 5 years of becoming a party to the Convention.
- Obligate, within 3 years of becoming a party, placement of health warnings on tobacco packages that cover at least 30 percent of the principal display areas.
- Ban the use of misleading and deceptive terms such as “low tar”, “light”, “mild,” or “ultra-light” within 3 years of becoming a party.
- Protect citizens from exposure to tobacco smoke in workplaces, public transport, and indoor public places. There is no set time for this.
- Combat smuggling, including placing origin and final destination markings on packs. There is no set time for this.
- Increase tobacco taxes (no quantitative or time-bound targets).

Source: http://www.who.int/fctc/en/.

What Can Governments Do?

Moving to the role of governments, the World Bank Human Development Network document, Public Policy and the Challenge of Chronic Noncommunicable Diseases (Adeyi et al. 2007) had two key messages. First, public policies are needed to prevent NCDs, to promote healthy aging, and to avoid premature death. Second, with governments recognizing that the financial burden will increase in the future, public policies need to respond to the pressures that NCDs will impose on future public and private health care delivery systems.

The role of governments and the economic rationale for them to spend public resources on NCD prevention and control require careful examination (Adeyi et al. 2007). In terms of public goods (such as health burden information, health promotion, and health system governance), there is a clear government role for stewardship to ensure that population strategies and policies are effective, and that the care delivered is of high quality and safe. Because NCD care can be expensive for patients—and a major portion of health treatment is paid out of pocket in South Asia—equity issues arise and health
decision makers need to carefully consider catastrophic and impoverishing health costs (discussed in Chapter 1) in developing public policies.

For each country, the focus and prioritization of efforts depend on the disease burden, health and non-health sector capacity, government priorities and resources, and the policy environment. Policy makers need to consider the role of the public sector in the following (and see Chapters 6 and 7):

- Population-based NCD burden assessments and surveillance to monitor change and improve policy decisions
- Strategy development and coordination within and outside the health sector
- Implementation of population-based health promotion laws and campaigns in the community, to reduce modifiable risk factors
- Improvement in access to individual-based prevention and treatment within the clinical setting
- Implementation of activities including setting human resource and health facility standards; assessing the quality of care, treatments, drugs, and technology; developing and enforcing a regulatory framework; and providing and/or regulating health financing, which should address allocation of services, equity, risk sharing, and consumption smoothing.

Even though most of these functions apply to far wider diseases and health conditions than NCDs, they highlight the need to improve the health system infrastructure for addressing NCDs. Such improvement will also result in benefits for other disease prevention and control measures.

Some countries are already taking action. They have developed policies and are launching programs, but most of these moves are still in their very early stages, and implementation and scaling up are slow. However, although few empirical data exist, as national budgets become stressed and health budgets shrink, low- and middle-income country governments are often encouraged to focus on addressing the Millennium Development Goals (MDGs), which still have many health challenges, but which as a set or international targets do not take into account the increasing impact of NCDs. Development partners, in focusing their efforts on issues that will more readily elicit support from their constituents, have largely funded the MDGs. Another challenge is that NCD prevention policies (such as tobacco taxation) are largely implemented outside the health sector and require the health sector to develop new relationships both with non-health sector stakeholders and with public–private partnerships.

**Prevention of NCDs**

The commonly used construct for combating NCDs—primary, secondary, and tertiary prevention (Box 4.2)—is useful, especially for health workers considering the range of interventions within populations for which they provide care. It also conforms to the different levels of health services, which are relevant to health care providers and policy makers.
However, policy makers are concerned not only with prevention but also treatment of NCDs, which is an equally important intervention that needs to be considered in any framework of policy options.

**Defining the Focus of NCD Interventions: Prevention vs. Treatment**

An early and important policy question that concerns government decision makers, universally, is how much focus should be on prevention of disease and how much on treating those already affected while tackling NCDs.

In parallel, whether governments should focus more on populations or more on individuals requires careful consideration of the burden, capacity, and many other country-level factors. Developed-country experiences can lend important insight into making this decision. Major declines in CVD mortality have been seen in several developed countries from about the early 1970s (Figure 4.1). These findings received considerable attention and much effort was made to understand the underlying reasons.

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**Box 4.2 Construct for NCDs**

Primary prevention is directed toward entire populations or subgroups at high risk. The interventions fall into three broad categories: personal behavior change, control of environmental hazards, and population-based medical interventions such as immunization. The aim of primary prevention is to reduce the level of one or more identified risk factors that will result in lowering the probability of the initial occurrence of a disease. Smoking cessation in the population due to a higher tax for cigarettes is an example.

Secondary prevention consists of ongoing interventions (chronic care) aimed at decreasing the severity and frequency of recurrent events or complications of chronic diseases. Treating blood pressure to prevent heart attacks or blood glucose to prevent ketoacidosis and development of diabetic retinopathy are examples.

Tertiary prevention generally consists of the prevention of disease progression and attendant suffering after the disease is clinically obvious and a diagnosis established. This activity also includes the rehabilitation of disabling conditions. Examples include preventing recurrence of heart attack with anticlotting medications and physical modalities to regain function among stroke patients.

For many common chronic illnesses, protocols to promote secondary and tertiary preventive interventions have been developed, often called “disease management.” Disease treatments are not usually included, but the boundary with tertiary prevention is not always clear.

Various operational definitions are used for primary, secondary, and tertiary level prevention. Also, depending on the condition or disease, treatment can be consider primary prevention for one condition but secondary prevention for another condition—making the terminology less useful. Thus this book focuses on _where_ policies will be implemented (such as outside or inside the sector, or the clinic).

During the last few decades, knowledge of pathophysiology, of risk factors and their role in causing disease, and of the impact of reducing risk factors on developing disease, has increased dramatically. In addition, many effective treatments to lower the risk of complications have been developed. Several studies have examined these secular trends to determine the factors accounting for these declines (see the sources at Table 4.1 for a nonexhaustive listing). The main finding was that nearly half the reduction can be attributed to population-level changes in risk factors, such as tobacco use, diet, and physical activity, and the rest to treatment of disease and its complications—with most of the treatment effect due to medication use (Table 5.1). This makes a case that both prevention and treatment are needed and that the challenge is determining the strategic mix. For mental health and injury, the situation is similar and calls for consideration of both prevention and treatment.

Table 4.1 Reduction in secular trend of CVD mortality attributed to population-level risk reduction and to treatment with medication and surgery (%)

<table>
<thead>
<tr>
<th>Country and period</th>
<th>Population-level risk factor</th>
<th>Treatment with medication and surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotland 1975–94</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>New Zealand 1982–93</td>
<td>54</td>
<td>46</td>
</tr>
<tr>
<td>Finland 1982–97</td>
<td>48</td>
<td>31</td>
</tr>
<tr>
<td>Ireland 1985–2000</td>
<td>48</td>
<td>44</td>
</tr>
<tr>
<td>United States 1980–2000</td>
<td>47</td>
<td>44</td>
</tr>
</tbody>
</table>

Sources: Bennett et al. 2006; Capewell 1999; Capewell et al. 1999; Capewell, Beaglehole et al. 2000; Capewell, Livingston et al. 2000; Ford et al. 2007; Vartiainen et al. 1994.

The distribution of risk in the population must also be considered. Currently, most people will be of low or moderate risk for developing disease and its complications (possibly 75–80 percent). The remaining
20–25 percent are at high risk and have already had (or soon will) have disease onset. The goal for the former group is to keep them from moving to high risk, or, optimally, to move them toward lower risk for disease onset. This is primarily accomplished through population-level risk factor reduction supplemented with individual-level health promotion reinforcement during routine clinic encounters. The goal for the latter category is to reduce the risk of developing disease-related complications and disability through individual clinic-based efforts. Additionally, those at high risk will also benefit from population-based measures since they are also community members.

**Cost-effectiveness Evidence on Prevention, Control, and Treatment of NCDs**

Policy makers and others use cost-effectiveness studies (among others) to help decide on interventions to improve public health. Cost-effectiveness analysis (CEA) compares the costs of the intervention to the resulting change in health.\(^{14}\)

A systematic review on CEA evidence to address NCDs in low- and middle-income countries found few of them have been analyzed to determine how much health improvement can be gained per dollar spent (Mulligan et al. 2006). Since then, more efforts have been undertaken both to review the available evidence and to build new evidence, partly through modeling approaches (rather than evidence from actual interventions).

World Bank (2006) broadly addressed many health conditions and attempted to determine cost-effectiveness of interventions in low- and middle-income countries. In the following year, the World Bank (Adeyi et al. 2007) published a book containing a comprehensive review of evidence based on cost-effective interventions. WHO has developed its approach on generalized CEA via its CHOICE project.\(^{15}\) CHOICE reports results for 14 global subregions, including the South-East Asian Region of WHO.\(^{16}\) Building on work for both World Bank (2006) and CHOICE, a 2007 Lancet series on chronic disease has calculated the cost-effectiveness both for selected population-based interventions (Asaria et al. 2007) and for drug-based reduction of individual susceptibility to CVD among high-risk individuals (Lim et al. 2007). The results of all these studies noted here form the basis of the findings in the rest of this chapter.

While there will probably always remain a certain tension in the debate between prevention and treatment of chronic NCDs, most experts would agree that a comprehensive approach that is balanced across all levels and facets of intervention is the only appropriate way to tackle them. (Chapter 5 expands on this point.)

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\(^{14}\) Cost-benefit analysis (CBA) is another method of determining cost-effectiveness, widely applied in public policy evaluation on other areas. In contrast to CEA, it monetizes both the benefits and costs associated with an intervention and would in principle allow for a more appropriate assessment of whether any intervention has the potential to improve social welfare. To date it has commonly not been applied widely in the health field.

\(^{15}\) See [www.who.int/choice](http://www.who.int/choice) (accessed May 15, 2009). Generalized CEA aims to allow policy makers to evaluate the efficiency of the mix of health interventions available and to maximize the generalizability of results across settings. The scarcity of cost-effectiveness studies worldwide means that essentially all countries need to borrow results of cost or effectiveness studies from other settings, but the fact that most published studies are very specific to a particular setting makes this problematic.

\(^{16}\) In the Global Burden of Disease project as well as in CHOICE, the South-East Asian Region of WHO (SEAR) is split into SEAR-D (comprising Bangladesh, Bhutan, Democratic People’s Republic of Korea, India, Maldives, Myanmar, and Nepal) and SEAR-B (comprising Indonesia, Sri Lanka, and Thailand), with “D” and “B” indicating different adult vs. child mortality strata.
The majority of studies discussed below looked at one single intervention at a time, comparing it to an alternative of no intervention. Murray et al. (2003) have made an effort to evaluate different combinations of various levels of interventions, primarily through a modeling approach. They examined 17 population-based and individual-based health service interventions or combinations of the two, for 14 WHO subregions (including SEAR-D and SEAR-B). Population-based interventions included health education through the mass media (focusing on blood pressure, cholesterol concentration, and body mass), and either legislation or voluntary agreements on salt content to ensure appropriate labeling and stepwise decreases in the salt content of processed foods. Individual-based health-service interventions included detection and treatment of people with high concentrations of cholesterol for two thresholds; treatment of individuals with high systolic blood pressure with two thresholds; treatment of individuals for both these risk factors; and treatment of individuals based on their absolute risk of a cardiovascular event in the next 10 years with four thresholds.

According to Murray et al. (2003), the optimum overall strategy is a combination of the population-based and individual-based interventions. Interestingly, they find that if resources are extremely scarce, the population-based nonpersonal interventions will be chosen first.

Population-based Interventions

In terms of population-based interventions specifically, few public health experts would question the benefits of evidence-based tobacco control measures, as contained in WHO’s Framework Convention on Tobacco Control (FCTC). Asaria et al. (2007) model the effects of a key set of tobacco measures contained in the FCTC (increases in the price of tobacco, enforcement of smoke-free workplaces, packaging and labeling changes, public awareness campaigns, and a comprehensive ban on advertising, promotion, and sponsorship) in 23 low- and middle-income countries, including three South Asian ones (Bangladesh, India, and Pakistan), over a period of 10 years (2006–2015). The estimated effects are given in Table 4.2.

<table>
<thead>
<tr>
<th>Bangladesh</th>
<th>India</th>
<th>Pakistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Increase (%) in real price of tobacco products required to reduce smoking prevalence by 10%</td>
<td>24.7</td>
<td>24.7</td>
</tr>
<tr>
<td>Predicted decrease (%) in smoking prevalence as a result of non-price interventions</td>
<td>12.9</td>
<td>11.7</td>
</tr>
<tr>
<td>Predicted decrease (%) in smoking prevalence as a result of price and non-price interventions combined</td>
<td>21.6</td>
<td>20.6</td>
</tr>
</tbody>
</table>

Source: Asaria et al. (2007).

Asaria et al. also model the likely impact of a reduction in salt intake by 15 percent. According to the authors this reduction should be achieved by a voluntary reduction in the salt content of processed foods and condiments by manufacturers, plus a sustained mass-media campaign aimed to encourage
dietary change within households and communities. The effects for the three South Asian countries are given in Table 4.3.\textsuperscript{18}

<table>
<thead>
<tr>
<th>Reduction in salt intake (g per day)</th>
<th>Bangladesh</th>
<th>India</th>
<th>Pakistan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>30–44 years</td>
<td>2.0</td>
<td>1.8</td>
<td>2.0</td>
</tr>
<tr>
<td>45–59 years</td>
<td>2.0</td>
<td>1.7</td>
<td>2.0</td>
</tr>
<tr>
<td>60–69 years</td>
<td>2.0</td>
<td>1.7</td>
<td>2.0</td>
</tr>
<tr>
<td>70–79 years</td>
<td>2.0</td>
<td>1.7</td>
<td>2.0</td>
</tr>
<tr>
<td>80–100 years</td>
<td>2.0</td>
<td>1.7</td>
<td>2.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Associated reduction in mean systolic blood pressure by 2015 (mm Hg)</th>
<th>Bangladesh</th>
<th>India</th>
<th>Pakistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>30–44 years</td>
<td>1.3</td>
<td>1.1</td>
<td>1.6</td>
</tr>
<tr>
<td>45–59 years</td>
<td>1.7</td>
<td>1.6</td>
<td>2.0</td>
</tr>
<tr>
<td>60–69 years</td>
<td>2.3</td>
<td>2.2</td>
<td>2.5</td>
</tr>
<tr>
<td>70–79 years</td>
<td>2.8</td>
<td>2.8</td>
<td>3.1</td>
</tr>
<tr>
<td>80–100 years</td>
<td>3.5</td>
<td>3.5</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Source: Asaria et al. (2007).

If the tobacco and the salt interventions are implemented jointly, the authors estimate that over the entire 23 countries, 13.8 million deaths could be averted, at a cost of less than US$0.40 per person a year in low-income and lower middle-income countries, and US$0.50–1.00 per person a year in upper middle-income countries (as of 2005). In terms of absolute population numbers, the biggest gains are expected in the countries with the largest population sizes, that is, mainly China and India. In terms of mortality reductions expressed as deaths averted per 100,000 population, the biggest gains are in the high CVD countries in Eastern Europe (Russian Federation and Ukraine). For Bangladesh, India, and Pakistan, the deaths expected to be averted are in a range of about 50–70 per 100,000 of the relevant population (aged 30 or more).\textsuperscript{19}

World Bank (2006) identifies a limited set of what it calls “neglected low-cost opportunities” for the South Asian region to address CVD (Table A3.1, Appendix 3). At the population level this is again first of all tobacco taxation, leading to an increase in the price of cigarettes by 33 percent, but also non-price interventions of the kind proposed by Asaria et al.

Beyond tobacco control measures and salt regulations, the cost-effectiveness evidence appears to be comparatively scarce in low- and middle-income countries, and there are hardly any studies directly from South Asia. The relative lack of CEA evidence hinges on the lack or absence of effectiveness studies for many types of interventions in a developing-country context.

As briefly noted in Chapter 3, some encouraging effectiveness evidence for population-based interventions to lower saturated fat intake have come from two countries. In the first intervention, a

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\textsuperscript{18} Similarly favorable cost-effectiveness ratios have been found in Murray et al. (2003) for efforts at salt legislation.

\textsuperscript{19} Arunatilake and Opatha (2003) provide a specific analysis on the economics of tobacco in Sri Lanka. They analyze the relationship between demand for cigarettes and prices and incomes, looking at different socioeconomic groups. They also use the estimated elasticities to simulate the likely impact of a tax increase on prices, on government revenue, and on demand, expenditures, and tax burdens of different socioeconomic groups. See Karki et al. (2003) for a similar analysis on the economics of tobacco control in Nepal.
government-led program in Mauritius (Hodge et al. 1996) changed the main cooking oil from a predominantly saturated-fat palm oil to a soybean oil high in unsaturated fatty acids. As a result, total cholesterol concentrations fell by 14 percent during the 5-year study period from 1987 to 1992. Changes in other risk factors were mixed, with reductions in blood pressure and smoking rates, yet increases in obesity and diabetes.

The second is a natural experiment in Poland. In the early 1990s, subsidies for animal products such as butter and lard were reduced, resulting in large-scale substitution from saturated to polyunsaturated fats (Zatonski et al. 1998; Zatonski and Willett 2005). Based on observational data the research argued that this substitution caused the decrease in mortality due to coronary heart disease of greater than 25 percent between 1991 and 2002, as it could not be explained by increased fruit consumption or decreases in smoking. In light of the ecological nature of this conclusion, concerns about its validity do, however, remain (Ebrahim and Smith 1998).

Based on the above encouraging findings on the potential for fiscal policy to change behavior (and in light of the success of tobacco taxation), more research along these lines for low- and middle-income countries would be highly worthwhile (Nugent and Knaul 2006). One obvious further application of fiscal policy would be alcohol taxation, where an extensive literature documents the effectiveness of taxes in reducing drinking and drinking-related harm (Wagenaar et al. 2009).

Moving from the population-based level to a more focused higher-risk approach, there is some evidence from India where a behavior change program has achieved a 28.5 percent reduction in the diabetes incidence among high-risk Asian Indians (Ramachandran et al. 2006). A recently published worksite health promotion intervention in India also has shown significant reductions in cardiovascular risk factors and intermediate CVD outcomes in India (Prabhakaran et al. 2009).

Similarly positive results from lifestyle modification to reduce diabetes onset in high-risk groups come from China (Pan et al. 1997), Finland (Tuomilehto et al. 2001), and the United States (Knowler et al. 2002), with a high share of these effects being sustained beyond the end of the intervention (Lindström et al. 2006). Economic evaluations of the Indian and U.S. studies find favorable cost-effectiveness. However, it remains unclear if implementation would be feasible in the South Asia context.

**Individual-based Interventions**

There is fairly strong effectiveness evidence from randomized control trials supporting the use a number of drugs to prevent (or manage) CVD by reducing blood pressure or blood cholesterol (Jackson et al. 2005). This evidence has been used by Lim et al. (2007) to model the cost-effectiveness of pharmacological interventions among high-risk individuals in the same set of 23 low- and middle-income countries as Asaria et al. (2007).

In particular, Lim et al. model the financial costs and the mortality effects from scaling up, above current coverage levels, a multidrug regimen for the prevention of CVD (a statin, aspirin, and two blood-pressure-lowering medicines). Over a 10-year period, their average estimate suggests that this multidrug regimen could avert 17.9 million deaths from CVD in these 23 countries. Approximately 56 percent of

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20 Wagenaar et al. have conducted a systematic review of 112 studies examining relationships between measures of beverage alcohol tax or price levels and alcohol sales or self-reported drinking. Meta-analytical results document the highly significant relationships (P < 0.001) between alcohol tax or price measures and indexes of sales or consumption of alcohol (aggregate-level r = -0.17 for beer, -0.30 for wine, -0.29 for spirits, and -0.44 for total alcohol). Price/tax also affects heavy drinking significantly, but slightly less than overall drinking. For a similar review of elasticities of tobacco taxation to demand for smoking, see Gallet and List (2003).
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deads averted would be in those younger than 70 years, with more deaths averted in women than in men owing to larger absolute numbers of women at older ages. The 10-year average yearly cost per head would be US$1.08 ($0.75–1.40), ranging from US$0.43 to US$0.90 across low-income countries and from US$0.54 to US$2.93 across middle-income countries. For Bangladesh the annual financial costs of the package correspond to close to 5 percent of the annual health budget, while in India costs would account for more than 4 percent and in Pakistan about 3 percent.

While promising, it is an open question whether and how the interventions can be implemented in a real-life developing-country context. Concerns do remain in that health services for chronic NCDs tend to be fragmented and too weakly organized to be able to confront the challenge of preventing or managing chronic NCDs (Miranda et al. 2008). A key point is that risk factors tend to cluster (obesity, hypertension, and diabetes, for example, can occur in a single individual) and strategies should target multiple common ones. A recently published trial—the Indian Polycap Study—has, however, demonstrated a significantly reduced CVD risk in a sample from India, suggesting that different versions of a polypill could be conveniently used to reduce multiple risk factors and cardiovascular risk (Yusuf et al. 2009). Other trials in developing-country contexts are also under way.

Combined Population- and Individual-based Interventions

World Bank (2006) recommends a set of combined population- and individual-based interventions to tackle part of the CVD burden in low- and middle-income countries (Appendix 3, Tables A3.2 and A3.3):

- Management of acute myocardial infarction with aspirin and beta-blockers
- Primary prevention of coronary artery disease with legislation substituting 2 percent of trans fat with polyunsaturated fat
- Secondary prevention of congestive heart failure with angiotensin-converting enzyme inhibitors and beta-blockers incremental to diuretics
- Secondary prevention of myocardial infarction and stroke with a polypill containing aspirin, beta-blocker, thiazide diuretic, angiotensin-converting enzyme inhibitor, and statin.