

## Health promotion and disease prevention: the economic case

### Why this research?

This research on the economics of health promotion and disease prevention was undertaken to provide policy-makers and advocates across the 53 countries of the WHO European Region with practical guidance on making an economic argument for investment in public health, particularly in these times of austerity. It was commissioned by the WHO Regional Office for Europe to support the development and implementation of the new health policy framework for Europe, Health 2020.

### How was it carried out?

The study looked at research endeavouring to make the economic case for investing upstream – that is, prior to the onset of noncommunicable diseases and before health care services are required. It highlights actions that are supported by sound cost-effectiveness or cost-benefit analyses, including those to limit risky behaviour such as tobacco use and alcohol consumption, promote physical and mental health through diet, activity and prevention of mental disorders, and reduce preventable injuries from, for example, road traffic accidents and exposure to environmental hazards.

Most studies identified rely on modelling analyses to synthesize evidence on effectiveness and costs, but models have limitations and should be interpreted with caution.

### What's new and key messages

**An evidence base exists**, with a number of cost-effective<sup>1</sup> health promotion and disease prevention interventions being available. **But the evidence must be treated with caution**, given that many interventions have only been assessed in a small number of settings and studies employ different methods and assumptions. It is **helpful to highlight economic benefits of most interest to sectors responsible for funding actions** to encourage implementation of cost-effective health promotion and disease prevention interventions.

### What policy actions are recommended?

The study provides an overview of what is known about the economic case for investing in different areas of health promotion and noncommunicable disease prevention.

#### Tobacco control

Evidence of cost-effective actions for tobacco control programmes is strong, with many being inexpensive to implement. They include raising taxes in a coordinated way with a high minimum tax (the single most cost-effective action), encouraging smoke-free environments, banning advertising and promotion and deploying media campaigns. Adequate implementation and monitoring, government policies independent of the tobacco industry and action against corruption are needed to support effective policies.

#### Alcohol

The cost-effectiveness of alcohol policies is supported by a substantial evidence base of systematic reviews and meta-analyses. The most cost-effective interventions include: restricting access to retailed alcohol; enforcing bans on alcohol advertising, including through social media; raising taxes; and instituting a minimum price per gram. Less cost-effective (but still worthwhile) measures include: enforcing drink-driving laws through breath-testing; delivering brief advice for higher-risk drinking; and providing treatment for alcohol-related disorders. Media campaigns on their own and school-based health promotion programmes do not appear to be cost-effective.

#### Healthy eating

Actions to promote healthy eating are especially cost-effective when carried out at population rather than health service level. Reformulating processed food to decrease salt and saturated fat (particularly *trans*-fat) is a low-cost intervention that may be pursued through multistakeholder agreements. Fiscal measures (including taxes and subsidies) and regulation of food advertising to children also have low cost and favourable cost-effectiveness, but feasibility could be hindered by conflicting interests. Programmes to increase awareness, such as mass media campaigns and food-labelling schemes, are efficient investments but with poorer cost-effectiveness ratios, particularly in lower socioeconomic

<sup>1</sup> Defined as having a cost per quality-adjusted life-year gained or cost per disability-adjusted life-year averted of less than US\$ 50 000.



### **Physical activity**

Promoting physical activity through mass-media campaigns is a very cost-effective and relatively inexpensive action, but health outcome returns may be lower than those provided by more targeted interventions, such as those in workplaces. Transport system changes and increased access to opportunities for physical activity in the wider environment (through bicycle routes, for instance) also have potential economic benefits but require careful evaluation to ascertain affordability and feasibility.

### **Mental health**

Robust evidence indicates that preventing depression, the single leading cause of disability worldwide, is feasible and cost-effective. Depression is associated with premature death and reduced family functioning and entails staggering lifetime economic costs due to health service use and productivity losses that can partly be avoided through appropriate forms of prevention and early detection.

### **Life-course**

Evidence supports actions across the life-course, starting from early interventions in childhood to strengthen social and emotional learning, develop coping skills and improve bonding with parents, which can generate benefits lasting into adulthood. Cost-effective programmes targeted at safeguarding the mental well-being of high-risk groups such as isolated older people and new mothers also exist.

### **Road traffic accidents**

Actions to prevent road traffic accidents, such as road design modification, urban traffic calming with mandatory speed limits and physical measures and camera and radar speed enforcement programmes, are supported by sound economic evidence, especially when used in higher-risk areas. Some generate positive returns on investment that are at least three times greater than costs. Active enforcement of legislation to promote good road safety behaviours, including measures to reduce drink-driving, can also be highly cost-effective.

### **Environmental hazards**

Evidence from economic studies supports actions to tackle environmental chemical hazards. Examples include comprehensive reform such as the Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) agreement implemented in Europe in 2007, removal of lead-based paint hazards, abatement of mercury pollution from coal-fired power plants and reduction of vehicle emissions in high-traffic areas. Congestion charging schemes introduced to many metropolitan areas may produce savings in health care and other costs associated with childhood asthma, bronchiolitis and other early respiratory illnesses.

### **Education investments**

Investments in education are also investments in health. A growing body of empirical research suggests that when countries adopt policies to increase education, the investments also pay off in healthier behaviour and longer and healthier lives. Studies of compulsory schooling reforms adopted in a number of European countries conclude that they not only lead to additional years of completed schooling, but also reduce population rates of smoking and obesity.

## **How can implementation be facilitated and uptake promoted?**

Engaging across sectors and ministries poses a fundamental challenge. One way to address the issue may be to identify benefits of direct interest to the sector in question in addition to health sector benefits. Others include engaging with stakeholders at a very early stage in the evidence-informed policy-making process and looking at ways of changing funding arrangements to overcome narrow sector-specific interests.

Most countries are putting efforts into improving health education and information. The evidence in this summary suggests, however, that these measures alone are not sufficient and are not always cost-effective. More stringent approaches, such as regulation of advertising or fiscal measures, are intrusive on individual choice and likely to generate conflict among relevant stakeholders, but are also likely to weigh less on public finances and produce health returns more promptly.



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