



# Tobacco and inequities

Guidance for addressing inequities  
in tobacco-related harm







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in tobacco-related harm

Written by: Belinda Loring

## Abstract

This policy guidance aims to support European policy-makers to improve the design and implementation of policies to reduce inequities in tobacco-related harm. Smoking kills more Europeans than any other avoidable factor. Socioeconomic inequities in tobacco consumption in Europe are extensive, and are widening. The overall reduction in smoking in Europe has been a public health success, but the effects have mainly been seen in middle- and high-income groups, causing a substantial widening of inequities. Reducing health inequities is a key strategic objective of Health 2020 – the European policy framework for health and well-being endorsed by the 53 Member States of the WHO European Region in 2012. This guide seeks to assist European policy-makers in contributing to achieving the objectives of Health 2020 in a practical way. It draws on key evidence, including from the WHO Regional Office for Europe's *Review of social determinants and the health divide in the WHO European Region*. It sets out options and practical methods to reduce the level and unequal distribution of tobacco use in Europe, through approaches that address the social determinants of tobacco use and the related health, social and economic consequences.

## Keywords

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## Foreword

Overall population health indicators have improved across Europe over recent decades, yet that improvement has not been experienced equally everywhere, or by all. There are widespread inequities in health between and within societies, reflecting the different conditions in which people live. These health inequities offend against the human right to health and are unnecessary and unjust.

Health 2020 is a new value- and evidence-based health policy framework for Europe, supporting action across government and society to promote health and well-being, the reduction of health inequities and the pursuit of people-centred health systems. It was adopted at the 62nd session of the Regional Committee held in Malta in September 2012. Its commitment is to health and well-being as a vital human right, essential to human, social and economic development and a sustainable and equitable Europe. Health is a fundamental resource for the lives of people, families and communities.

To make this vision a reality we need to tackle the root causes of health inequities within and between countries. We know more about these now from the 2013 report of the European review of social determinants of health and the health divide, led by Professor Sir Michael Marmot and his team at the University College London Institute of Health Equity. Yet opportunities to be healthy are far from being equally distributed in our countries, and are closely linked to good upbringing and education, decent work, housing and income support throughout our life course. Today's disease burden is rooted in how we address these social factors that shape current patterns of ill health and lifestyles, and in the way our resources are distributed and utilized.

For these reasons I welcome the publication of this series of policy briefs, which describe practical actions to address health inequities, especially in relation to priority public health challenges facing Europe: tobacco, alcohol, obesity and injury. I hope this series will offer policy-makers and public health professionals the tools and guidance they need to implement the Health 2020 vision and the recommendations of the social determinants review. The policy briefs were prepared in collaboration with the European Union and I would like to express my gratitude for this support and for the recognition that the European Union and WHO both share this common commitment to addressing equity.

Achieving the promise of Health 2020 will depend on successful implementation of the relevant policies within countries. We can and must seize new opportunities to enhance the health and well-being of all. We have an opportunity to promote effective practices and policy innovations among those working to improve health outcomes. The present (often extreme) health inequities across our Region must be tackled and the health gap among and within our European Member States reduced.

**Zsuzsanna Jakab** WHO Regional Director for Europe





# Introduction

## Purpose of this guidance

This policy guidance aims to support European policy-makers to improve the design and implementation of policies to reduce inequities in tobacco-related harm.

Smoking kills more Europeans than any other avoidable factor. Compared to the rest of the world, the WHO European Region has the highest rate of smoking, and the highest proportion of deaths attributable to tobacco. On average, 32% of adults smoke, and 16% of all deaths in adults aged over 30 in the WHO European Region are due to tobacco (1). Tobacco causes premature death and disability across the entire life course, from still-birth and infant mortality, to respiratory diseases in childhood, to increased infectious and noncommunicable diseases in adulthood. The annual cost of tobacco-related disease in the European Union (EU) alone is estimated at €100 billion – or 1% of gross domestic product (2).

Socioeconomic inequities in tobacco consumption in Europe are large, and are widening. The overall reduction in smoking in Europe has been a public health success, but the main effects have been seen in middle- and high-income groups, causing a substantial widening of inequities. National population-based tobacco control policies are important but are unlikely to significantly reduce inequities without additional measures. When developing tobacco control policies at European, national and local levels, it is essential to consider the equity implications with the best available evidence. This is important to ensure that policy choices (i) do not make inequities worse, and (ii) reduce inequities in smoking and related harm.

Tobacco is a leading contributing cause of overall health inequities in Europe. Inequities in mortality from smoking-related conditions account for 22% of the overall inequities in death rate from any cause among men, and 6% among women (3). Deaths attributable to smoking explain more than half the inequities in mortality between men of high and low socioeconomic groups in the United Kingdom and Poland (4). The contribution of smoking to inequities in mortality for European women is likely to rise further, due to the delayed consequences of increased smoking in women. The unequal distribution of tobacco use within societies is in turn influenced by a range of social, economic and environmental factors; namely, the social determinants of health (SDH).

Addressing the SDH and health inequities is an essential requirement for successfully combating tobacco-related harm. This guide draws on key evidence, including from the WHO Regional Office for Europe's *Review of social determinants and the health divide in the WHO European Region* (5). It sets out options and practical methods to reduce the level and unequal distribution of tobacco use in Europe, through approaches which address the social determinants of tobacco use and the related health, social and economic consequences.

### Key messages

- Socioeconomic inequities in tobacco consumption in Europe are large, and are widening.
- Tobacco use is a leading contributor to overall health inequities in Europe.
- Policies that reduce smoking prevalence do not necessarily reduce inequities, and can in fact make inequities worse.
- Impact on inequities needs to be considered for tobacco control measures to be successful.
- Tobacco control policies have different impacts on different social groups.
- A fair and effective policy response to tobacco needs to consider:
  - inequities in tobacco use between different social groups
  - inequities in exposure to tobacco
  - inequities in vulnerability to harm from tobacco exposure
  - differences in access to, pathway through, and outcome from the health system
  - differences in the socioeconomic harms from/consequences of tobacco use.

### Using this guide

Inequities in tobacco are strongly influenced by diverse contexts across Europe. It is not possible to make specific policy recommendations that will work in every country in Europe. This guide provides a framework that policy-makers at national, regional and local levels can apply to their own unique context, in order to consider the processes by which inequities might occur, and to suggest policy interventions that may be helpful in addressing each of these factors. Additional resources are listed at the end of the guide to direct policy-makers to further evidence, promising practices and tools to support policy formulation and evaluation.

Not all European countries have data on the prevalence of tobacco use that can be disaggregated by socioeconomic factors beyond age and sex. There are few published studies of interventions to reduce tobacco consumption which focus on equity or the distribution of impacts within the population. Efforts to improve data collection and its disaggregation will enhance capacity to monitor the differential impacts of policies and interventions on social groups, and increase knowledge about how best to reduce inequities in tobacco use.

### Relevance to other key European policy goals

Reducing health inequities, along with improving governance for health and health equity, are key strategic objectives of Health 2020 – the European policy framework for health and well-being endorsed by the 53 Member States of the WHO European Region in 2012. Tackling the major challenge posed by noncommunicable diseases, including key risk factors such as tobacco is one of Health 2020's policy priorities. To achieve these

objectives, the framework strongly emphasizes the need to strengthen population-based prevention, and accelerate action on the SDH across government. This guide seeks to assist European policy-makers in contributing towards achieving the objectives of Health 2020 in a practical way.

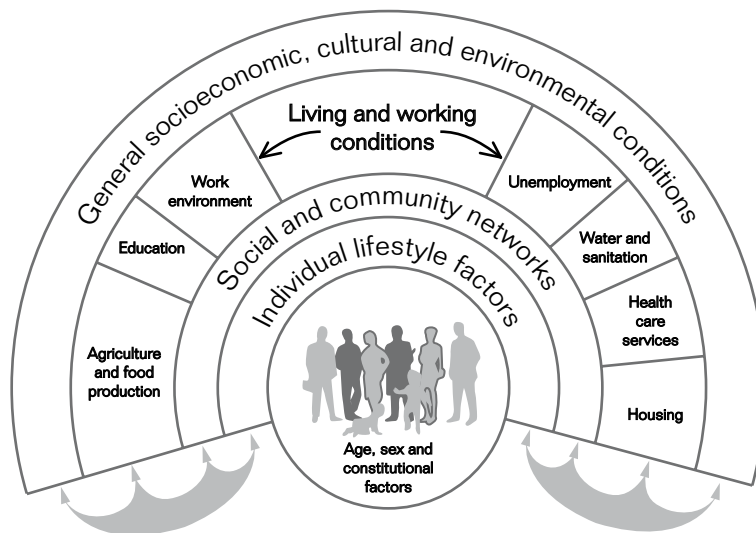
The *Action Plan for the implementation of the European Strategy for the Prevention and Control of Noncommunicable Diseases 2012–2016 (6)*, endorsed by Member States in 2011, places equity, cross-cutting approaches and life-course considerations as central principles. Reducing the prevalence of tobacco use is a priority of the Action Plan, using fiscal policies and marketing restrictions in particular.



## Inequities in tobacco-related harm in Europe

Health inequities are defined as systematic differences in health that can be avoided by appropriate policy intervention and that are therefore deemed to be unfair and unjust. To be able to devise effective action, it is necessary first to understand the causes of these inequities in health. Health inequities are not solely related to access to health care services; there are many other determinants related to living and working conditions, as well as the overall macro-policies prevailing in a country or region (Fig. 1). Inequities in health are caused by the unequal distribution of these determinants of health, including power, income, goods and services, poor and unequal living conditions, and the differences in health-damaging behaviours that these wider determinants produce.

Fig. 1. The main determinants of health



Source: Dahlgren & Whitehead (7).

Within European countries, tobacco use and tobacco-related deaths are much higher in certain social groups. Understanding what works to reduce tobacco use across all social groups is critical if overall tobacco consumption is to be addressed. Inequities in smoking are related to inequities in (i) smoking initiation and (ii) smoking cessation, and are influenced by factors across the entire life course. In a number of European countries, children from less-affluent families are more likely to be exposed to smoking in the home, more likely to become smokers themselves, and take up smoking at a younger age (8, 9). Smoking cessation rates are lowest in adults who experience multiple aspects of disadvantage.

In Europe, inequities in tobacco consumption vary between different countries and age groups. Inequities in smoking have been observed based on education level, sex, occupational level, ethnicity, housing tenure and other measures of wealth (10). Prisoners, homeless people and people with mental health problems are often more

likely to smoke (11). Multiple factors can interact to amplify the resulting inequities in tobacco use. In the United Kingdom, smoking-related death rates are 2–3 times higher in the most disadvantaged groups than among those that are better off (12).

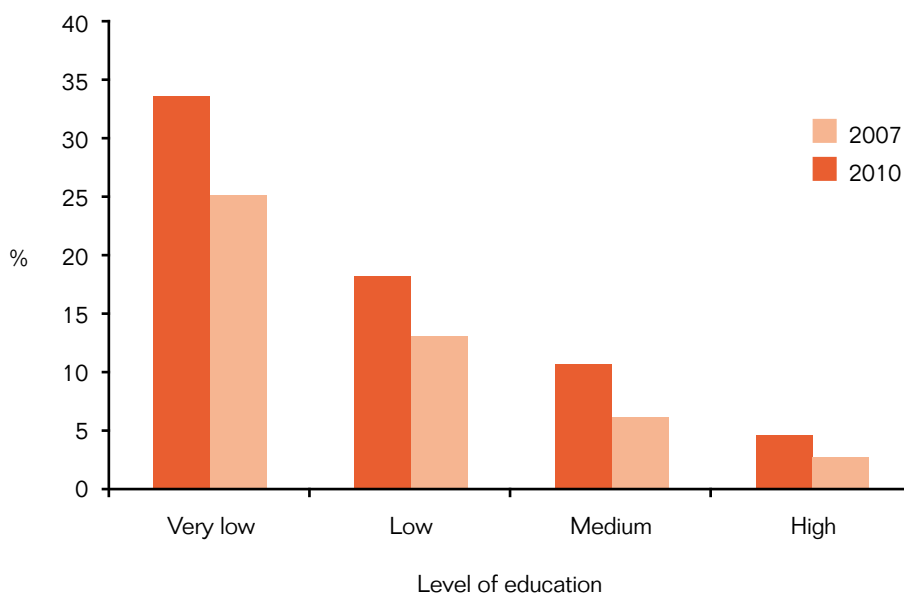
In general terms, lower socioeconomic groups in Europe have higher rates of smoking than higher socioeconomic groups. Lower socioeconomic groups also commonly start smoking at a younger age, smoke more cigarettes per day and stop smoking less often than people in higher socioeconomic groups (10). Low-income smokers are more intensely addicted to nicotine (13) and are likely to require more support to stop smoking. The pattern and magnitude of tobacco inequities in Europe can be divided into three broad groups, reflecting the relative stage of the tobacco epidemic (10). In northern European countries there are large socioeconomic inequities, with tobacco consumption much more common among both men and women in low socioeconomic groups. In eastern European countries, there are moderate inequities, with tobacco consumption more common among both men and women in low socioeconomic groups. Southern European countries have the narrowest socioeconomic inequities in tobacco use, and for women the gradient is sometimes reversed, with smoking more common in higher socioeconomic groups (10). Across Europe, socioeconomic inequities in smoking are larger amongst younger adults than older adults.

Worldwide, more men than women die from tobacco-related causes, but this difference is especially pronounced in the WHO European Region, with a male-to-female mortality ratio of 5:1 (1). However, there are other aspects of tobacco use in Europe to consider, from a gender perspective. Women achieve lower abstinence rates than men after smoking cessation (14). Women/girls are more vulnerable to the impacts of tobacco, developing health consequences at a lower level of exposure than men (15), and some tobacco marketing strategies are being specifically targeted at young women. In a study of women aged 25–39 years in 19 European countries, those in lower socioeconomic groups were much more likely to have ever smoked, whereas in women over 60 years of age, women in higher socioeconomic groups were more likely to have smoked (10). This demonstrates that within a generation the tobacco epidemic in Europe has transitioned from a behaviour attributable to advantaged social groups to a problem concentrated in lower socioeconomic groups. In a number of European countries, including Austria, the Czech Republic, Italy, Spain and the United Kingdom, smoking is more common among adolescent girls than boys (8).

There are significant ethnic inequities in smoking prevalence and smoking-related harm. Roma populations have much higher rates of tobacco use in a number of European countries (16, 17). In Croatia, it is estimated that almost all Roma are exposed to tobacco use in the home (18). Migrants in Germany and Switzerland have much higher smoking rates than the general population (19, 20). Significant ethnic differences in smoking during pregnancy have been noted between various ethnic groups in the Netherlands (15). Ethnic differences also exist in the acceptability of tobacco control policies – in Hungary, Roma were much less likely to support any tobacco control measures than non-Roma of similar socioeconomic status (21). In the United Kingdom, ethnic differences in tobacco use include the use of chewing tobacco in populations of South-Asian origin.

There are also significant inequities in exposure to harm from other people’s smoking. In Denmark, children with parents with low levels of education are 11 times more likely to be exposed to tobacco smoke in the home (Fig. 2), putting them at increased risk of direct health harms and taking up smoking themselves (9). In Wales, the introduction of smoke-free legislation caused a reduction in children exposed to tobacco in the home for children from more affluent households – whose exposure was already significantly lower prior to the introduction of the legislation – leading to increased socioeconomic disparity (22).

**Fig. 2. Social gradient for smoking in homes with children, by level of education, Denmark**



Source: Pisinger et al (9).

### Key messages

- Inequities in tobacco use in Europe exist based on factors including economic status, education, gender, ethnicity and place of residence.
- Patterns of inequities in tobacco use vary between countries in Europe, so inequities need to be examined from a national perspective.
- In general, lower socioeconomic groups use tobacco more, and experience higher levels of death and disability from tobacco use than wealthier groups.
- Inequities in tobacco use and tobacco-related harm begin in utero and compound over the life course.
- Women are more vulnerable to developing health consequences from tobacco, and in some parts of Europe smoking is rising in women and girls.
- Experiencing multiple aspects of socioeconomic disadvantage amplifies inequities in tobacco-related harm.





## What can be done?

There is good evidence for policies to reduce tobacco use. Four of the ten best-buys (the most cost-effective and feasible interventions) for noncommunicable disease prevention and control relate to tobacco: (1) raising tobacco taxes, (2) protecting people from tobacco smoke, (3) warning about the dangers of smoking and (4) enforcing bans on tobacco advertising (23).

The WHO Framework Convention on Tobacco Control (FCTC) is a powerful legal instrument to help fight the tobacco epidemic (24). In the WHO European Region, 50 out of 53 countries and the European Community have ratified the treaty. The FCTC emphasizes that a comprehensive approach is required to address tobacco harm – there is no single solution. To help countries fulfil their FCTC obligations, WHO introduced the MPOWER package comprising six evidence-based tobacco control measures within the treaty that are proven to reduce tobacco use and save lives: (1) monitoring tobacco use and prevention policies; (2) protecting people from tobacco smoke; (3) offering help to stop using tobacco; (4) warning about the dangers of tobacco; (5) enforcing bans on tobacco advertising, promotion and sponsorship; and (6) raising taxes on tobacco.

For all of the effective tobacco control measures, there are additional measures that need to be put in place, to ensure these policies work effectively for all population groups, especially those groups with the highest tobacco use and the greatest need to benefit. Table 1 synthesizes the current evidence regarding the impact of tobacco control policies on inequities, and suggests key actions to implement these policies more equitably.

**Table 1. Impact of tobacco control policies on inequities and action for more equitable implementation**

Tobacco control policy	Impact on inequities	How to implement more equitably
<b>Monitor tobacco use and policies</b>	Evidence of decreasing overall tobacco use, but of widening inequities. Impact of tobacco control policies on different subgroups is not often evaluated.	Evaluate impact of policies on different socioeconomic groups. Include measures of socioeconomic status in all routine tobacco prevalence surveys.
<b>Increase price of tobacco through taxation</b>	Greater impact on smoking cessation and decreased initiation in poor and young individuals, with a higher tax burden on higher socioeconomic groups.	Alongside any price increase, ensure nicotine replacement therapy (NRT) and smoking cessation support are affordable and accessible to low-income groups.
<b>Introduce smoke-free places</b>	Some evidence of greater compliance with, and impact and acceptability of workplace bans in higher socioeconomic groups.	Ensure enforcement in low-income workplaces. Target campaigns to build support for the ban among disadvantaged groups.

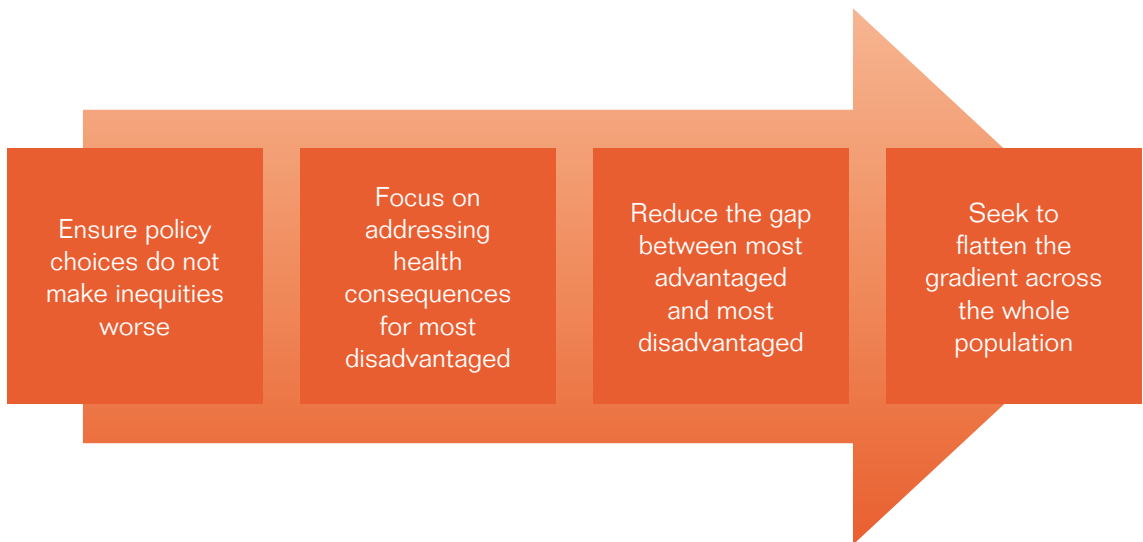
Table 1. contd

Tobacco control policy	Impact on inequities	How to implement more equitably
<b>Introduce mass media campaigns warning of tobacco harms</b>	Some evidence of greater impact in higher socioeconomic groups.	Less likely to widen inequities if the campaign: <ul style="list-style-type: none"> <li>• uses TV rather than print;</li> <li>• is intensive in exposure;</li> <li>• uses messages targeting disadvantaged groups;</li> <li>• uses emotive personal stories.</li> </ul>
<b>Restrict sale of tobacco to minors</b>	Some evidence of greater effectiveness in girls than boys. Inadequate evidence to assess socioeconomic gradient.	Strict enforcement of laws, especially in deprived neighbourhoods.
<b>Ban tobacco advertising</b>	No evidence of a gradient in impact, but inadequate evidence to assess. Evidence of the tobacco industry targeting marketing at more vulnerable groups.	Universal comprehensive bans on tobacco advertising.
<b>Place warning labels on tobacco products</b>	No evidence of a gradient in impact, but inadequate evidence to assess. Pictorial warnings reach a larger audience than text warnings (including vulnerable groups with low literacy levels).	Include warnings tailored to certain groups/in certain languages. Require large, pictorial warnings to be placed on packaging.
<b>Provide support for smokers to stop smoking</b>	Evidence that some smoking cessation services fail to reach the most disadvantaged groups, and that those who do access services have lower cessation success rates.	<ul style="list-style-type: none"> <li>• Remove financial barriers, including free or subsidized NRT.</li> <li>• Deliver services in broader range of settings (including non-health care).</li> <li>• Offer specific services tailored to needs of particular groups (e.g. ethnic groups, prisoners, pregnant women).</li> <li>• Introduce mandatory training for all front-line health care staff.</li> <li>• Use smoking cessation telephone lines and SMS (text messaging) to reach young people and disadvantaged groups.</li> </ul>

### Step-wise approach

Countries in Europe have very different experiences and capacities to address health inequities; however, no matter what the starting point, something can be done. An incremental approach can be taken to reducing inequities, wherever one begins (Fig. 3).

Fig. 3. Incremental approach to reducing inequities



It is not just the most disadvantaged who suffer a disproportionate burden from tobacco use. A social gradient exists, whereby each socioeconomic group suffers relatively more tobacco-related harm than the next group above them in the social spectrum. Addressing gaps between groups and reducing the social gradient requires a combination of universal policies and additional measures according to the different levels of need involved.

### “First do no harm”

Some public health interventions inadvertently make inequities worse. The main benefits of tobacco control measures in Europe have been seen in middle- and high-income groups, causing a substantial widening of inequities. In a review of the impact of tobacco control in 18 European countries, smokers with a higher level of education were more likely to have stopped smoking than those with a lower level of education, in all countries (25).

Unless equity is explicitly taken into consideration, the business-as-usual approach tends to create policies, programmes and services that have a social gradient in their effect. Interventions are often less effective for those who are more disadvantaged, even though they have the most to gain. Unfortunately, although this is not policy-makers’ intent, it means that inequities get worse rather than better.

This effect has been observed in relation to a number of tobacco control measures in

Europe (Table 1). For example, mass media campaigns, smoke-free workplace policies and smoking cessation services have all been found to be preferentially effective in more advantaged social groups (26, 27). This does not have to be the case, however. As part of a comprehensive tobacco control strategy, mass media campaigns can be an effective tool to reduce smoking, and their potential to increase inequities can be minimized if deliberate measures are taken. Campaign exposure, choosing the right method of communication and the right types of messages are all important factors for equity-proofing communication campaigns. Tobacco-related mass media campaigns that have produced equivalent effects across ethnic and socioeconomic groups have used TV, and have been intensive in their exposure and duration (28). Effort needs to be made to ensure the messages and methods are designed with and for the most disadvantaged groups. However, targeted campaigns can still fail if the campaign intensity or reach is low (28). There is evidence to suggest that campaigns featuring high-emotion personal testimonials may be more effective with low socioeconomic groups, whereas messages providing encouragement or cessation advice may widen inequities (28).

Even for highly effective tobacco control strategies, their effectiveness for different socioeconomic groups has not been well evaluated. There is insufficient evidence to assess whether inequities exist in terms of the effectiveness of certain tobacco control policies such as bans on tobacco advertising and sale to minors, smoke-free schools, or health warnings on tobacco products (26). Europe also has poor data on the differential effectiveness of tobacco control policies according to ethnicity. It cannot be assumed that these measures will have the same effects across society. A number of tools are available for assessing the equity impact of policies and interventions (see the section on where to find out more at the end of this policy brief).

### Key messages

- Well-intentioned public health interventions often make health inequities worse – equity needs to be explicitly considered in the design of all policies and programmes to address tobacco-related harm.
- Do not assume that what works on average, works for everyone – it is essential to investigate the effect of interventions on different socioeconomic groups.
- All policies need to be monitored to ensure they work effectively in practice to deliver the intended equity results.

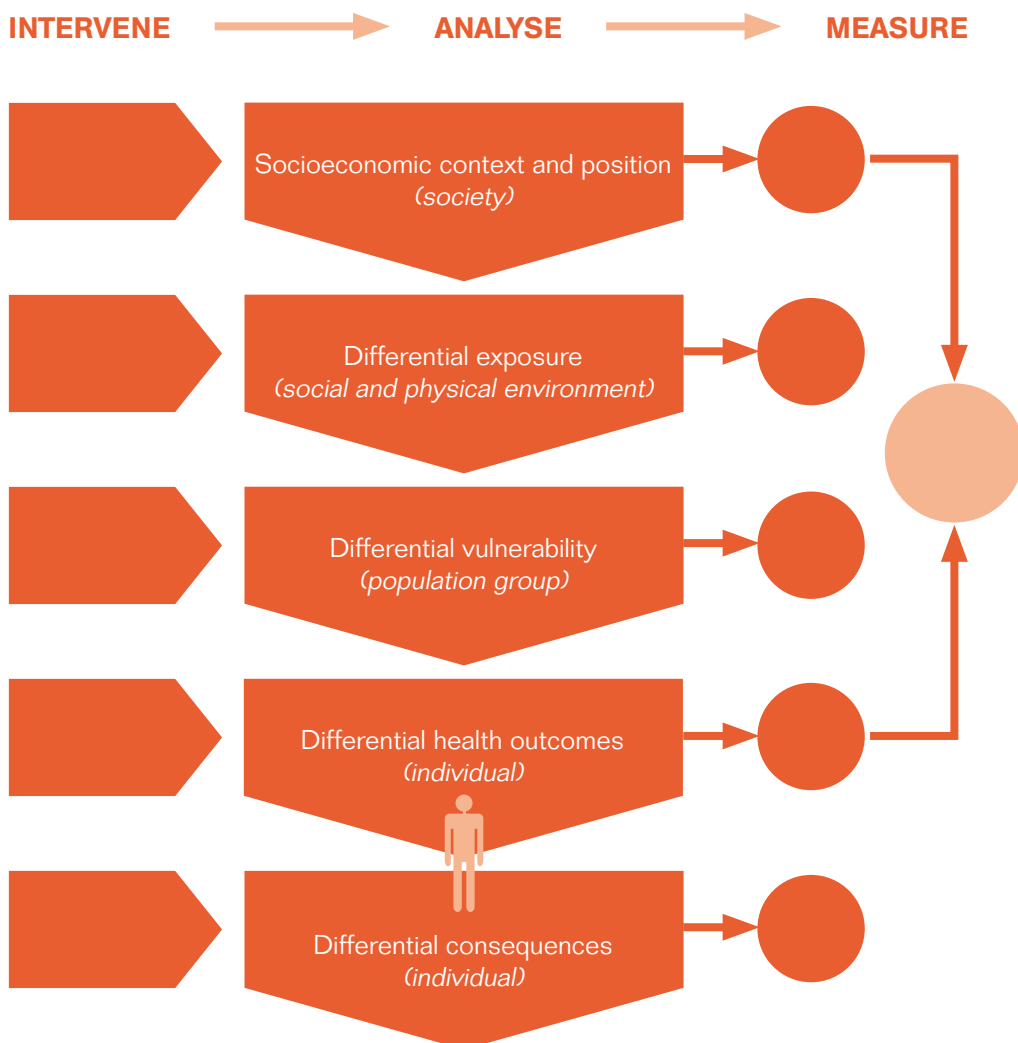
### Policy interventions at different levels

Inequities in tobacco-related harm can arise from factors at many levels. This includes factors in the broader socioeconomic context, different exposures, different vulnerabilities, different experience within the health system, and different consequences from tobacco use (Fig. 4). For the most disadvantaged in society, inequities exist at all of these levels, leading to compounding disadvantage.

For example, poor, socially excluded groups are more likely to have increased exposure to life stressors and fewer buffering and coping resources; live in crowded homes with others who smoke (exposing larger numbers of children to smoke); have reduced access to affordable and appropriate cessation support; experience greater adverse consequences for their household budget from expenditure on tobacco; and are more likely to suffer other health problems which make smoking even more dangerous. In addition, multiple aspects of disadvantage accumulate over the life course, so that experiences in the womb or in early childhood all contribute to inequities in adult life (Fig. 5).

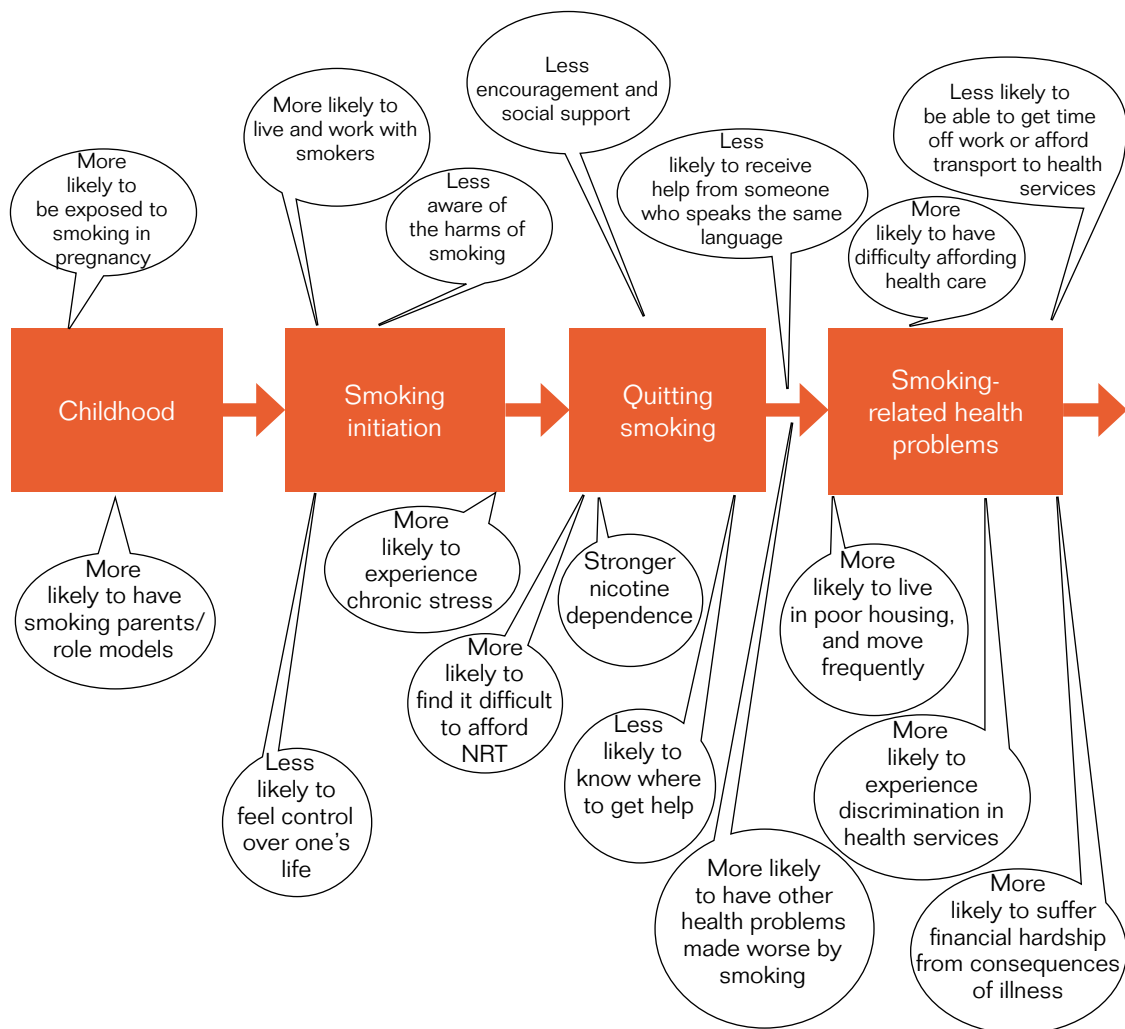
Thinking about the ways in which inequities in tobacco-related harm may arise can be a helpful way to identify points at which to intervene. Groups that experience excess harm from tobacco commonly experience premature death and disability, and excess harm from a range of other preventable causes. Addressing the social determinants of inequities in tobacco use will have benefits for a range of other health and social problems.

**Fig. 4. Levels at which health inequities can arise and be addressed**



Source: Blas & Kurup (29).

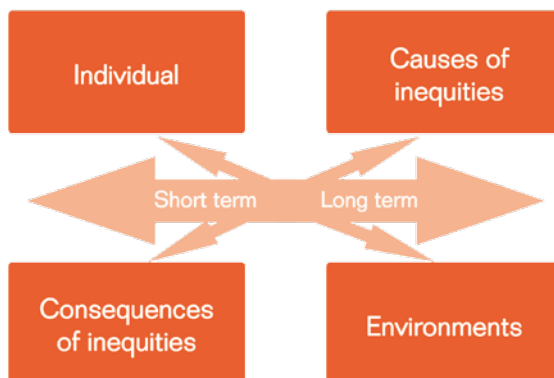
Fig. 5. How smoking inequities compound over the life course



A comprehensive approach to reducing inequities in tobacco-related harm involves a combination of policies that address inequities in the root social determinants, as well as policies that treat the symptoms or attempt to compensate for inequities in the SDH. This requires a mix of interventions that have short-term actions but a long-term focus, as well as both simple and complex interventions (Fig. 6).

For example, in addition to health service interventions to improve access to smoking cessation support for low-income groups, there is a need for policies to change the intermediate environmental factors (such as making tobacco more expensive and less accessible), as well as shifting macro-level policies to a longer-term focus to reduce poverty and promote resilience (including social protection, raising levels of education and skills, and reducing social exclusion). While it can be tempting to prefer interventions which act quickly, and are directed to cause and effect, relying solely on these interventions will not solve the underlying causes that give rise to the tobacco-related inequities in the first place.

**Fig. 6. Addressing inequities requires a combination of policies**



It is important to note that many of the interventions to address inequities in tobacco-related harm offer broader benefits for other health and social inequities. For example, raising the price of tobacco by increasing tax not only leads to people stopping smoking, but could also free up more of the household budget for spending on education, health care and food. Reducing chronic stress through improving working conditions and boosting skills not only offers benefits for tobacco control, but could also improve mental health, reduce alcohol abuse and violence, and contribute to higher household incomes and tax revenues through better jobs. Improving access to primary health care improves access not only to smoking cessation support, but also to screening and treatment for other physical and mental health issues, as well as assisting with links to other social services.

### ***Socioeconomic context and position***

Factors in the global, European or national socioeconomic contexts can influence how the SDH are distributed. This includes factors in the socioeconomic context which influence how risk is produced, distributed and played out in European societies. These factors can influence which groups are most at risk of tobacco-related harm, and they may be modifiable or able to be compensated for (Table 2).

For example, increasing the price of tobacco is not only one of the most effective measures to reduce smoking (Box 1), but it also has strong potential to reduce inequities. In many countries, tobacco use in low-income groups is more responsive to price than in higher income groups (30). This means that a tobacco price increase will lead to the largest decline in smoking in the poorest groups, while a greater burden of the tax will fall on higher income groups who are more likely to keep smoking (30). The positive impact of policies to raise the price of tobacco is greatest in precisely those groups which have the highest burden of tobacco harm and the greatest potential to benefit from tobacco control. Because nicotine is a highly addictive substance, some low-income users will inevitably continue to smoke. For this reason, any tax increase needs to be associated with freely available, appropriate smoking cessation support. Countries have addressed this risk by earmarking a portion of tobacco taxation to support people on low

incomes, including poverty reduction and social protection measures (30). The potential for increased tobacco taxation to reduce inequities will be limited if tobacco companies remain able to absorb tax increases or cross-subsidize their cheapest brands by raising the price on more expensive brands. Policies to ensure full disclosure of tobacco pricing, as well as measures – such as minimum pricing and specific tobacco quantity-based excise taxes rather than valued-based taxes – may help to overcome these problems (31). Turkey, for example, has a minimum tax for lower priced tobacco brands (30).

**Table 2. Factors in the socioeconomic context that shape inequities and interventions to consider**

Sources/drivers for inequities	Interventions to consider
Levels and distribution of poverty	<ul style="list-style-type: none"> <li>• Social protection – increased spending on social welfare policies can mitigate the impacts of economic recession and unemployment.</li> <li>• Early childhood investment – ensure every child gets the best start (high-quality early childhood education, parenting support, generous social protection).</li> </ul>
Effects of economic crisis and unemployment	<ul style="list-style-type: none"> <li>• Set up active workforce programmes and promotion of lifelong opportunities for education and skills training.</li> </ul>
Cultural norms about smoking	<ul style="list-style-type: none"> <li>• Implement strategies to encourage antismoking attitudes in disadvantaged groups.</li> </ul>
Availability and affordability of tobacco	<ul style="list-style-type: none"> <li>• Increase the price of tobacco by raising tobacco tax (associated with extra efforts to support low-income smokers to overcome their nicotine addiction).</li> <li>• Ensure tax increases are passed on to consumers and apply to the cheapest brands (e.g. specific excise tax, rather than <i>ad valorem</i> taxes; and minimum pricing).</li> <li>• Ensure strict enforcement of laws preventing tobacco sale to minors, especially in deprived neighbourhoods.</li> </ul>
Social exclusion/marginalization	<ul style="list-style-type: none"> <li>• Implement community empowerment and skill development programmes to address broader issues of hopelessness and exclusion affecting groups with higher prevalence of smoking.</li> <li>• Involve people from excluded groups in the development and implementation of policies that allow them to fulfil their rights (e.g. to education, health, housing).</li> </ul>



**Box 1. Ukraine: rapid action on raising tobacco price**

The Government of Ukraine is using substantial and frequent increases in tobacco taxation to decrease tobacco consumption (32). Since 2008, the price of tobacco in Ukraine has been increased over six-fold. The excise tax was increased again by 15% in 2012. Daily smoking prevalence has declined by 13%, and Ukraine is planning to further capitalize on the potential of raising the price of tobacco in the context of other comprehensive tobacco control measures.

**Differential exposures**

Certain groups may have increased exposure to factors that mean they are more likely to consume tobacco or experience tobacco-related harm. This could mean factors such as exposure to discrimination and chronic stress, and increased exposure to tobacco promotion (Table 3). Exposure to other smokers is a significant factor – children who live with a smoker are twice as likely to take up smoking themselves (33), and children from disadvantaged groups are more likely to live with people who smoke. In Greece, pregnant women with low levels of education are more likely to be exposed to smoking at home (34). In the EU, manual workers and those with low education levels are more likely to be exposed to tobacco smoke at work, are exposed for more hours per day, and are less likely to be protected by smoke-free policies at work (35). Spain represents a good example of how this can be addressed (Box 2). Comprehensive smoke-free policies prohibiting smoking in public places and workplaces has been associated with reductions in smoking among low-income women in the United States (36). However, smoke-free policies do not always have equal or even desired effects on low-income children and women. Low-income women are more likely to be exposed to second-hand smoke, may have limited capacity to manage their exposure to second-hand smoke both at home and in the workplace, and may experience heightened stigmatization as a result of second-hand smoke policies. Partner smoking is the single greatest predictor of whether or not a pregnant woman will stop smoking (15).

**Table 3. How differential exposures could occur and interventions to consider**

Sources/drivers for inequities	Interventions to consider
<p>Differential exposure to chronic life stressors</p> <p><i>E.g. people living in poverty, socially excluded groups, people in insecure and low-income employment, and migrants experience more stress and discrimination</i></p>	<ul style="list-style-type: none"> <li>• Enable social protection and cash transfers, especially for families comprising children and unemployed people.</li> <li>• Introduce parenting support programmes and investment in high-quality early childhood education and childcare.</li> <li>• Promote lifelong opportunities for education and skills training.</li> <li>• Improve psychosocial conditions in workplaces, especially for low-income workers.</li> <li>• Introduce active labour-market programmes and skills training for unemployed people.</li> <li>• Encourage actions to address social exclusion.</li> </ul>

Table 3. contd

Sources/drivers for inequities	Interventions to consider
Differential exposure to tobacco advertising and antismoking awareness campaigns	<ul style="list-style-type: none"> <li>• Ensure messages warning about smoking harms are tailored to groups with high smoking rates, are delivered via TV and other highly accessible media.</li> </ul>
Differential exposure to other smokers <i>E.g. people in disadvantaged groups are more likely to be living with other smokers, making it more likely that they will start smoking themselves, and making it harder for them to stop – these factors thereby expose them directly to the health harms of passive smoking</i>	<ul style="list-style-type: none"> <li>• Ensure strict enforcement of smoke-free laws, including high levels of enforcement in low-income workplaces and disadvantaged neighbourhoods.</li> <li>• Implement measures to reduce household overcrowding.</li> <li>• Promote smoke-free homes and cars, especially for children and pregnant women.</li> <li>• Involve male partners in strategies to support smoking cessation for pregnant women.</li> </ul>

### Box 2. Spain: enforcing smoke-free laws for all workers

Spain has implemented the toughest smoke-free environment laws in Europe, and uses effective enforcement to make sure everyone benefits from the policy. Smoking was banned in most workplaces in 2006, and in 2011 the ban was extended to all enclosed public places, open-air children's playgrounds, and at access points to schools and hospitals. A key benefit of the 2011 legislation was that it included all bars and restaurants – workplaces that disproportionately involve low-income workers in less-secure employment. A recent study found 95–99% compliance with the bans (37).

### Differential vulnerabilities

Various factors make certain groups more vulnerable than others to tobacco consumption or tobacco-related harm, even if their exposures are the same. Vulnerabilities that contribute to inequities can be social in nature (such as lower levels of resilience or social support) or biological (for example, women and children are vulnerable to health harms from smoking and from exposure to environmental tobacco smoke). Different psychological factors and coping skills can make some young people more vulnerable to starting smoking. Young people who feel optimistic and feel a sense of control over their lives are less likely to become smokers (38). Tobacco marketing can be more effective on those with low self-esteem, by associating tobacco products with psychological and social needs (15). Table 4 shows how differential vulnerabilities could occur and interventions to consider in order to target them.

**Table 4. How differential vulnerabilities could occur and interventions to consider**

Sources/drivers for inequities	Interventions to consider
<p>Less resilience/support to cope with stressors</p> <p><i>E.g. adolescents with low self-confidence and low levels of education are more vulnerable to peer pressure and marketing (38)</i></p>	<ul style="list-style-type: none"> <li>• Introduce comprehensive bans on tobacco marketing.</li> <li>• Implement measures to build self-efficacy and confidence skills of disadvantaged adolescents.</li> <li>• Build social support networks in disadvantaged areas, such as group smoking cessation programmes for vulnerable groups.</li> </ul>
<p>Biological vulnerabilities to harms from tobacco smoke</p> <p><i>E.g. women and children are more vulnerable</i></p>	<ul style="list-style-type: none"> <li>• Introduce smoke-free environment legislation covering environments in which children are most exposed (for example, smoke-free cars legislation and regulation encouraging parents to make homes smoke free).</li> <li>• Focus on pregnancy as a window of opportunity to intervene with smoking women, partners and family members.</li> </ul>
<p>Higher rates of co-morbidities in certain groups can also contribute to inequities in tobacco-related harm</p> <p><i>E.g. disadvantaged groups are more likely to have multiple chronic disease risk factors, and poorer general health, making smoking even more dangerous</i></p>	<ul style="list-style-type: none"> <li>• Take a comprehensive approach to improving living conditions, as well as the financial and social well-being of disadvantaged groups.</li> <li>• Scale up population-based prevention measures (reformulation of food products to reduce salt and trans-fats, alcohol control) for other preventable noncommunicable diseases.</li> <li>• Scale up access to universal primary health care, ensuring disadvantaged groups are supported to access preventive care.</li> </ul>
<p>Biological difference in the effectiveness of NRT</p> <p><i>E.g. some evidence suggests that nicotine replacement products are less effective for females than for males (14)</i></p>	<ul style="list-style-type: none"> <li>• Deliver smoking cessation services that address women’s particular concerns and needs.</li> <li>• Focus on the emotional aspects of nicotine addiction, as well as pharmacological treatment.</li> <li>• Women-specific programmes may particularly attract women who may otherwise not seek any treatment.</li> </ul>

**Differential health outcomes**

In addition to differential exposures and vulnerabilities that put groups at greater risk of tobacco-related harm, various health system factors can also cause certain groups to experience poorer health outcomes from tobacco-related conditions. Inequities exist in access to smoking cessation support, as well as health care services and treatment for tobacco-related health problems, which can also help to explain why certain groups fare

less well, even though their smoking levels may be similar to others. Differences have also been observed in Europe in the treatment received within health systems, based on socioeconomic factors, and this can also contribute to inequities in health outcomes.

For example, people from disadvantaged groups can be just as likely as others to attempt to stop smoking, but may not be as successful in their attempts. In the United Kingdom, the cessation rate for smokers in the lowest socioeconomic group is half that achieved by the highest socioeconomic group (39). Understanding barriers to and motivations for cessation among disadvantaged populations is crucial; different ethnic and other subgroups have different fears, motivations and concerns about stopping smoking that need to be understood if smoking cessation support is to be effective (40). For women, concerns about putting on weight once they cease smoking are frequently raised as barriers to stopping, and services need to address these concerns if programmes are to be equitably effective for women (14). The types of interventions that are effective in mainstream populations – including individual and group behavioural counselling, telephone counselling, and physician advice – can also be effective in disadvantaged populations, as long as they are adapted to be accessible and appropriate (41). Box 3 provides details of the approach to smoking cessation in United Kingdom prisons.

A number of countries in Europe have developed initiatives to address cultural barriers to accessing smoking cessation services. In Switzerland, a specific group treatment for Turkish-speaking migrants was developed to provide the migrant population with equal access to smoking cessation assistance, with 37.7% of participants remaining smoke free at a 12-month follow-up (20). Germany partnered with Islamic religious leaders to promote a smoke-free Ramadan (19). Scotland and Wales have removed prescription charges on NRT for all smokers who want to stop smoking (12).

Even countries with free universal smoking cessation services have found that there are inequities in who accesses these services, and in who is successful in managing to stop smoking. The NHS smoking cessation services in the United Kingdom were set up to offer universal support with a particular focus on disadvantaged smokers, providing services in local communities. Although the service proved reasonably successful in reaching disadvantaged smokers, cessation success was lower than for less-deprived smokers (11). Similar results have been found in Denmark (42), indicating that more needs to be done to achieve equitable outcomes for disadvantaged smokers.

A review of pilot projects aiming to reduce smoking among six hard-to-reach and deprived groups in England (prisoners, parents living in deprived areas, pregnant smokers, South-Asian tobacco chewers, smokers with mental health problems, smokers in low-income workplaces) produced a number of recommendations for improving equity in smoking cessation services (11), as listed on the following page.

- Introduce mandatory identification of tobacco users across primary, secondary and community health care settings.
- Implement routine expired air carbon monoxide monitoring, particularly for high-risk groups.
- Introduce financial incentives for providers and national guidance to encourage high levels of implementation.
- Adopt joined-up tobacco dependence treatment pathways for target groups (such as those in the criminal justice or mental health systems).
- Encourage flexibility to tailor interventions, outside standardized guidelines.
- Implement smoking cessation service targets that do not favour throughput or short-term cessation success.
- Introduce mandatory training for all front-line health care staff.

### **Box 3. United Kingdom: smoking cessation in prisons**

Prisoners represent a disproportionately poor and disadvantaged group, with higher smoking rates than the general population. In England, a number of prisons have introduced programmes to provide smoking cessation support. The prisoners are offered group or one-to-one counselling and NRT. The NRT is free of charge for the prisoners and funded by the local prisons. The average cessation rate for four weeks was 41%, validated by carbon monoxide monitoring (43). These results are comparable to cessation rates in community settings. This suggests potential for using smoking cessation in prisons to improve the health of disadvantaged groups and their families. A number of prisons in Europe are also implementing smoke-free policies, primarily to reduce the health harms from second-hand smoke. Forced cessation has so far not shown any long-term impact on cessation rates, but could be a helpful adjunct to support smoking cessation services offered to prisoners (43).

New forms of media, such as SMS (text messaging), show promise as methods of delivering smoking cessation services and support, with lower rates of inequities. Some evidence suggests that financial incentives for smokers can increase cessation rates (44), including in vulnerable groups, but there is no compelling evidence so far of any long-term success (45). All of these innovative measures require further investigation. Table 5 shows ways in which differential health outcomes occur and interventions that should be considered to tackle the inequities that arise.

**Table. 5 How differential health outcomes could occur and interventions to consider**

Sources/drivers for inequities	Interventions to consider
Cost barriers to accessing smoking cessation support and health care	<ul style="list-style-type: none"> <li>• Offer free or heavily subsidized NRT for disadvantaged groups.</li> <li>• Provide universal health services.</li> <li>• Remove financial barriers for those who cannot pay (user charges, transport costs).</li> <li>• Establish free-call smoking cessation counselling telephone lines (see for example Box 4).</li> </ul>
Non-financial barriers to accessing smoking cessation support	<ul style="list-style-type: none"> <li>• Simplify eligibility requirements and support provided to those without documentation.</li> <li>• Improve acceptability of services for high-risk groups (staff training, recruitment policies, gender and cultural sensitivity, opening hours, location of services).</li> <li>• Provide smoking cessation therapy in prisons.</li> </ul>
Different treatment within the health care system	<ul style="list-style-type: none"> <li>• Provide training for primary health care professionals. Review the provision of smoking cessation advice in terms of equity.</li> <li>• Monitor equity in service provision, along with effectiveness.</li> </ul>
Groups with higher co-morbidities <i>E.g. smoking contributes to poorer outcomes for many other health conditions (diabetes, pregnancy, surgical procedures, infections, physical activity)</i>	<ul style="list-style-type: none"> <li>• Improve access to primary health care for underserved or high-need groups.</li> <li>• Ensure smoking cessation support is routinely offered at all health care visits and hospitalizations.</li> <li>• Address causes of social exclusion, disempowerment, low levels of education, low income and poor living conditions, all of which contribute to poorer general health in disadvantaged groups.</li> </ul>

**Box 4. Turkey: smoking cessation support**

As part of Turkey’s comprehensive and successful tobacco control policies, steps have been taken to improve accessibility and affordability of smoking cessation services. In 2010, a free national 24/7 quitline was established, which now receives 9000 calls per day. Smoking cessation counselling and NRT are available free of charge through primary care and special smoking cessation clinics.

### Differential consequences

For certain groups, tobacco consumption can have more severe consequences than for other groups, in addition to poorer health outcomes. These consequences can include fires, and exacerbation of household poverty. For the children of the poorest smokers, consequences can include missing out on education, clothing, healthy food, and health care. Table 6 details the drivers for inequities and the interventions to be considered in order to combat them.

**Table 6. How differential consequences could occur and interventions to consider**

Sources/drivers for inequities	Interventions to consider
Impoverishment for lower income smokers and families – including crowding out of household expenditure on health care, food, education and clothing	<ul style="list-style-type: none"> <li>Implement adequate social protection policies for children, including universal provision of high-quality early childhood education, free universal education and health care.</li> </ul>
<p>Fires</p> <p><i>E.g. smoking is single largest cause of household fires in the United Kingdom, disproportionately affecting disadvantaged groups with higher rates of smoking</i></p>	<ul style="list-style-type: none"> <li>Encourage home fire checks by the fire service – these could include asking about smoking and providing information on cessation support.</li> <li>Make fire alarms and fire safety equipment mandatory in low-income housing.</li> </ul>

### Key policy recommendations

- A comprehensive approach to reducing inequities in tobacco-related harm involves a combination of policies that address inequities in the root social determinants, as well as policies that treat the symptoms or attempt to compensate for inequities in the SDH.
- Increasing the price of tobacco through tobacco taxation is the most promising intervention to reduce social inequities in tobacco-related harm. Price increases should be accompanied with adequate smoking cessation support for low-income groups.
- Other tobacco control policies considered to be especially effective in low-income groups include:
  - banning of marketing
  - workplace interventions
  - free NRT
  - smoking cessation counselling.
- It would be beneficial to formulate tobacco control targets according to socioeconomic groups, age and sex and to put systems in place to routinely monitor progress towards these targets.

### Key policy recommendations

- Differential access to treatment within the health system contribute to inequities in tobacco-related harm. Actions to address this include:
  - reducing financial, geographical and cultural barriers to accessing smoking cessation support, primary care and hospital services;
  - supporting tailor-made, gender-responsive, free tobacco cessation services in disadvantaged areas.
- Consequences of tobacco use are more severe for those already experiencing poverty and social exclusion – especially for children. Adequate social protection policies, along with universal free education in schools can reduce these inequity consequences.

### Checklist: are you on track?

1. Do you routinely measure tobacco consumption by socioeconomic group (e.g. gender, ethnicity, education level)?
2. Have you identified which groups experience most harm (health and/or social) from tobacco, and are they clearly prioritized in your strategies and plans?
3. Do you routinely assess the equity impact of tobacco control policies and plans before they are implemented?
4. Can the most marginalized groups in society meaningfully participate in decision-making processes about tobacco control policies?
5. Do you have robust policies in place with the following specific goals?
  - To increase the price of tobacco.
  - To ban tobacco marketing.
  - To introduce free or heavily subsidized NRT.
  - To implement workplace interventions to encourage smoking cessation.
  - To offer smoking cessation counselling (accessible to low-income groups).
6. Do you have effective policies in place to address the root social determinants of inequities in tobacco use? Such measures should include:
  - social protection, especially for families with children and the unemployed;
  - high-quality early childhood education and parenting support;
  - active labour force programmes for unemployed people, including skills development;
  - policies to reduce social exclusion;
  - policies to reduce household overcrowding;
  - improving psychosocial working conditions for low-income workers.
7. Do you evaluate the impact of all tobacco control interventions on different social groups?
8. Have you set targets for reducing tobacco use in different social groups?
9. Is there clear accountability and leadership for reducing inequities in tobacco-related harm?



## Where to find out more

### Tobacco use in Europe

- **WHO Global Health Observatory data repository** (46).
- **Eurostat**. European Commission Statistical Office of the European Union (public health database) (47).
- **Health Behaviour in School-aged Children (HBSC) survey** (48).
- **Global Youth Tobacco Survey (GYTS)** (49).
- **Global Adult Tobacco Survey (GATS)** (50).

### Tobacco control policy options

- **WHO Framework Convention on Tobacco Control** (24).
- **WHO European Tobacco Control Database** (51).
- **Action Plan for implementation of the European Strategy for the Prevention and Control of Noncommunicable Diseases 2012–2016** (6).
- **MPOWER**. WHO Tobacco Free Initiative (52).
- **Gender, health, tobacco and equity** (53).

### Actions to reduce health inequities through action on SDH

- **Equity, social determinants and public health programmes** (29).
- **Review of social determinants and the health divide in the WHO European Region: final report** (5).
- **Strategic review of health inequalities in England post-2010 (Marmot Review). Task group 8: priority public health conditions. Final report** (54).
- **Resource of health system actions on socially determined health inequalities**. WHO Regional Office for Europe online database (55).
- **Action:SDH**. A global electronic discussion platform and clearing house of actions to improve health equity through addressing the SDH (56).
- **European Portal for Action on Health Inequalities**. An Equity Action partnership information resource on health equity and SDH in Europe, including a database of policy initiatives (57).

### Policy equity assessment tools

- **Health inequalities impact assessment. An approach to fair and effective policy making. Guidance, tools and templates (58).**
- **Methodological guide to integrate equity into health strategies, programmes and activities (59).**
- **Tools and approaches for assessing and supporting public health action on the social determinants of health and health equity (60).**

### Data disaggregation and tools

- **Equity in Health project interactive atlases. WHO Regional Office for Europe online resource (61).**
- **Handbook on health inequality monitoring with a special focus on low- and middle-income countries (62).**

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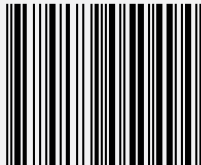
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