The role of public health organizations in addressing public health problems in Europe

51
Health Policy Series

The case of obesity, alcohol and antimicrobial resistance

Edited by:
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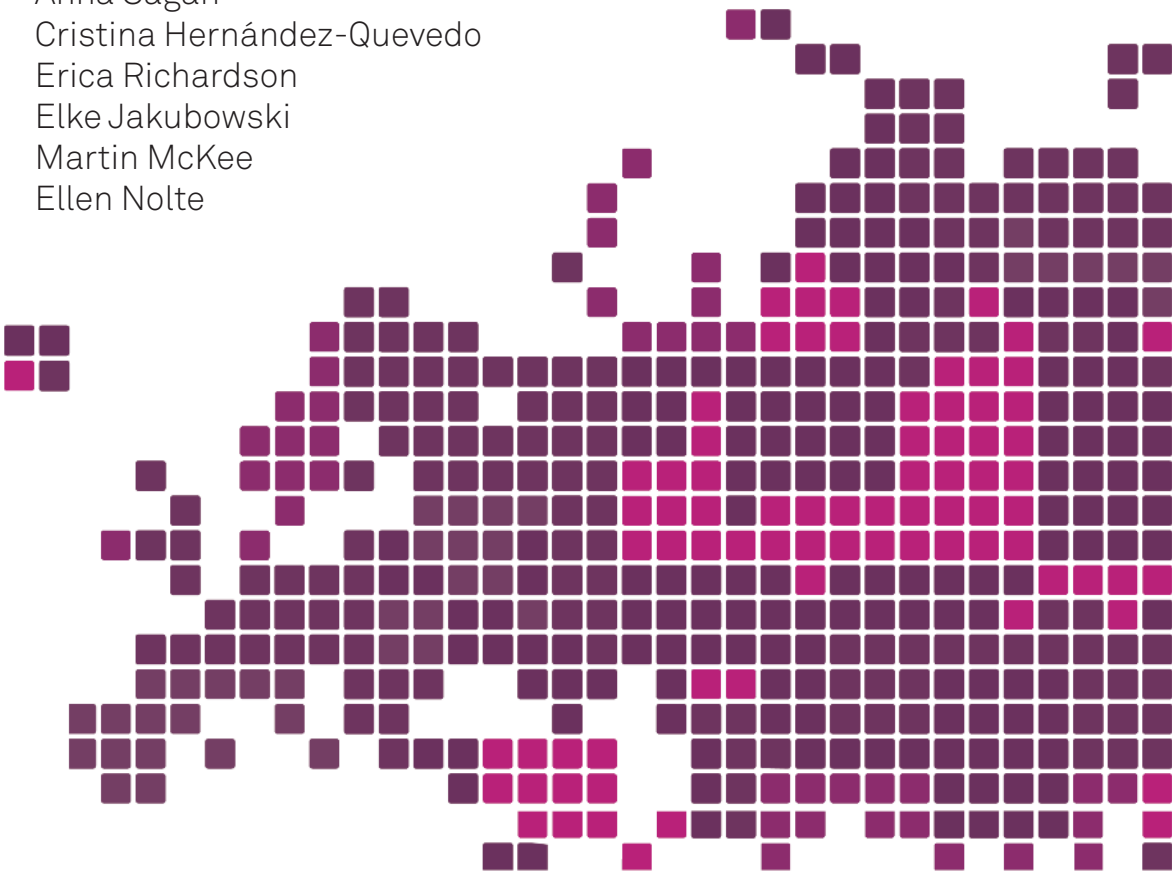

European Observatory on Health Systems and Policies
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The role of public health organizations in addressing public health problems in Europe

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Part I
Cross-country analysis

Chapter 1
Introduction

Bernd Rechel, Elke Jakubowski, Martin McKee, Ellen Nolte

This volume analyses the role of public health organizations in addressing three key public health challenges in Europe: obesity, alcohol and antimicrobial resistance (AMR). It accompanies an in-depth comparative analysis of the organization and financing of public health services in Europe (Rechel et al., 2018a), based on detailed country reports (Rechel et al., 2018b).

Growing levels of overweight and obesity, continued harmful consumption of alcohol, and the growing threat of AMR are some of the greatest challenges to the health of European populations. While the magnitude of these problems varies from country to country, they affect all countries in Europe. For each problem, it is clear that public health agencies and organizations must play a part in any response, with intersectoral action beyond the health system needed. What is less clear is what role public health organizations currently play in addressing these problems.

This is the gap that this volume aims to fill. It is based on country reports from eight European countries (England, France, Germany, Italy, the Republic of Moldova, the Netherlands, Poland, and Sweden) on the involvement of public health organizations in addressing alcohol consumption and obesity and on reports from nine European countries (England, France, Germany, Italy, the Republic of Moldova, the Netherlands, Poland, Slovenia and Sweden) on their involvement in addressing antimicrobial resistance (see Online Appendix).

While the accompanying volume on the organization and financing of public health services (Rechel et al., 2018a) focuses on public health activities or operations, the focus of the current volume is on public health organizations, as only organizations can have designated roles in addressing public health challenges.

The political and administrative context in the nine countries

The following sections provide context for the subsequent chapters, summarizing key elements of the systems of central and local government in each of the countries covered by this study. The content draws extensively on information collected by the European Union's Committee of the Regions and summarized in its information portal on Division of Powers, where more detailed information can be found (European Union's Committee of the Regions, 2018).

England

England is one of the four nations that make up the United Kingdom of Great Britain and Northern Ireland (Great Britain comprises England, Scotland, and Wales). The system of local government in England is extremely complex. There is no English legislature as such, and laws are enacted by the United Kingdom Parliament, with members drawn from all four countries. Parliament is bicameral, with an upper house, the House of Lords, consisting primarily of appointed members, but also a small number of hereditary peers as well as bishops of the Church of England. The United Kingdom has no written constitution, so Parliament can set its own rules of procedure. One example, introduced in 2015, was the principle of English votes for English laws. These rather complex arrangements allow laws that only apply to England to be voted on only by English Members of Parliament.

There are nine regions in England, but with one exception, London, these exist primarily as statistical units, with no powers. London, in contrast, has an elected assembly and mayor, with responsibility for policing, transport, housing, planning, and the environment. London is further divided into 32 boroughs, each with an elected council, with responsibility for education, waste disposal, public health, and social care. In the rest of the country there are a mix of single tier authorities, with responsibility for issues such as transport, strategic planning, waste disposal, and public health. However, there are also areas where there are two tiers of local government. These include many of the main cities and some counties. Below them are lower tier authorities, with responsibility for planning, public health, and waste disposal among other areas. There are also some specific arrangements, such as the City of London, which is unusual in having an assembly, the corporation, elected by both residents and businesses.

The remaining three countries in the United Kingdom (Scotland, Wales, and Northern Ireland) have devolved powers, although these vary greatly.

The situation in Northern Ireland is particularly complicated because the arrangements there are subject to the Good Friday agreement, giving the government of Ireland certain rights. Finally, the United Kingdom has a number of overseas territories, again each with specific relationships with government in Westminster, often based on agreements entered into several hundred years ago.

France

In France, executive power resides with the government, comprising the Prime Minister and junior and senior ministers. The Prime Minister is nominated by the president and should be someone whose political views reflect the majority in the elected National Assembly. Other ministers are appointed by the president on the advice of the Prime Minister. The government is accountable to the legislature. The legislature is bicameral, consisting of a Senate and a National Assembly. The Senate is elected indirectly by an electoral college, including members of the National Assembly and representatives of local government.

France is divided into 18 regions, including 13 in metropolitan France and five overseas. The regions, managed by regional councils comprising directly elected representatives, have no legislative power but can raise their own finances, in addition to disbursements from the central government. Their primary responsibilities relate to education, public transport, universities, and support for business. The regions are further divided into 96 departments. The departments are managed by a directly elected counsel, and president, although there is also a prefect, representing the central government. Their responsibilities include some aspects of social and welfare activities, some elements of education, roads and public transport, and municipal infrastructure. These are further divided into communes and arrondissements, although these are not legal entities but may have responsibility for some public services, such as fire departments. The overseas regions, including French Guiana, La Reunion, Martinique, and Guadalupe, are treated in exactly the same way as those in metropolitan France. There are also several overseas collectivities, with varying degrees of autonomy, in the Caribbean and Pacific oceans.

Germany

Germany is a federal republic, with many powers exercised at the regional, or *Länder* level, with the division of powers set out in the Constitution. The legislature is bicameral, comprising the directly elected *Bundestag* and the *Bundesrat*, consisting of representatives of the *Länder*, in numbers corresponding to their population size. Both chambers can initiate legislation, and where

a law has major implications for the *Länder*, the two chambers must reach agreement. For other laws, the *Bundesrat* can object, but this can be overruled by the *Bundestag*.

There are 16 *Länder*, of varying sizes. Below them are 295 *Kreise*, or counties, and 11 313 *Gemeinden*, or municipalities. Cities with more than 100 000 inhabitants combine county and municipal responsibilities, as do a few smaller cities. The *Länder* have the power to legislate except where the Federal Government has enacted legislation. In 2006, the German Basic Law underwent a major reform, clarifying the divisions of power and giving the *Länder* a greater say in European legislation.

Areas where the Federal Government has sole responsibility are relatively limited, and include foreign policy, defence, currency, and citizenship. In relation to health, the Federal Government is responsible for regulating key aspects of social health insurance. Administratively, the *Länder* have a high level of autonomy. In addition to their right to enact their own primary legislation, they are responsible for implementing federal legislation. The health sector is characterized by the extensive involvement of the social partners, in particular the representatives of the sickness funds, hospitals, and physicians. These operate within a series of federal level agreements, although with implementation often adapted to agreements reached at the level of the *Länder*.

The counties are responsible for transport infrastructure, spatial planning, emergency services, social welfare, building and maintenance of hospitals, secondary schools and technical colleges, waste collection, and supervision of food production. The responsibilities of the municipalities vary among the *Länder*, but include local public health services, town planning, primary education, and recreation and leisure facilities. Municipalities that are larger towns and cities have additional responsibilities, relating to food safety, registration of vital statistics, and traffic management.

Italy

Italy is a parliamentary republic. Executive power is exercised by the Council of Ministers, led by the Prime Minister who is appointed by the president on the basis of electoral results. The Prime Minister may be the leader of the largest party but may also be someone who can assemble a coalition that can itself achieve a parliamentary majority. The legislature is bicameral, with a chamber of deputies elected by direct universal suffrage and the Senate, also elected directly, but by voters who are 25 years of age or older. They are complemented by a number of senators for life, who include former presidents and individuals of great distinction.

Italy is divided into 20 regions, five of which have a higher degree of autonomy, for historic reasons. All of the regions except Aosta are subdivided into provinces. The regions have had increased autonomy since 2001. Each region has an elected parliament, as well as a president, who in most of the regions is also directly elected. The regions have limited financial autonomy, retaining a percentage of taxes levied from the population. The Italian constitution gives regions exclusive legislative power in respect of any matter not expressly given to the central government. However, many of the most important powers are given to the central government, including defence, foreign policy, social welfare, statistics, and criminal justice. Central government also establishes fundamental principles for those areas where the regions can legislate. These include education, professional standards, public health, health care, planning, and transport. The provinces have responsibility for areas such as the environment, policing, and economic development.

Republic of Moldova

The executive branch of the government of the Republic of Moldova is formed by the Prime Minister, Deputy Prime Minister, and ministers. These are nominated by the president after consultation with the majority in Parliament and must be approved by Parliament. Since 2000, the president has been elected by the Parliament. The distribution of powers within the different tiers of government within Moldova has changed since independence, reflecting the political orientation of successive governments. During the Soviet period, Moldova functioned as a single republic, divided into districts, or *rayons*. Following independence, the territory on the eastern side of the Dniester river broke away and the administration there rejects the authority of the Moldovan government. What follows relates to the territory under the control of the Moldovan government. In 1998, *rayons* were merged to form *judete*, or counties, following the system in place in neighbouring Romania, and which had been in place when the two countries were united. These larger units were considered to provide the administrative capacity needed for development. At the same time, the minimum size of the lowest tier of government, the commune or village, was increased, and the number of units markedly reduced. The local administrations were elected, but the administration of the *judetes* was subject to the oversight of a prefect appointed by the central government. In 2001, many of these changes were reversed by the newly elected communist government, restoring the *rayon* system. The 32 *rayons*, as well as the two large municipalities, Chisinau, the capital, and Balti, and one autonomous territorial unit, Gagauazia, each of which function effectively as a *rayon*, are administered by elected councils, with the head of the *rayon* elected by the members of the

council. The next level down comprises the smaller municipalities (urban) and communes, or villages. Again, they have elected councils. Formally, these subordinate tiers have considerable financial autonomy. However, in practice, this is very limited and budgetary processes are highly centralized. The division of competencies between the different tiers of government has been described as unclear and contradictory. However, formally, the lowest tier, the municipalities and communes, are responsible for urban planning, preschool education, social housing, and waste management. The *rayons* are responsible for transport infrastructure, primary education, and social protection. Other functions are undertaken at district level by branches of national ministries, sometimes working closely with the rayon authorities. Other functions, including the maintenance of schools and hospitals and certain aspects of social protection, remain the responsibility of central government, but their day-to-day operation is delegated to the rayons and municipalities, which then act as agents of central government.

The Netherlands

The Netherlands is a constitutional monarchy with a high degree of decentralization. It has been described as a consociational state, with governance characterized by the quest for a high degree of consensus, within both the political community and society in general. In addition to the European part of the Netherlands, there are a number of Dutch islands in the Caribbean, some of which are provinces of the Netherlands, while others have varying degrees of autonomy. Executive power lies with the government, but formal separation of powers is less pronounced than in many other countries. The legislature, the States General, is bicameral, comprising a House of Representatives and a Senate. The House of Representatives has the right to propose and amend legislation and the role of the Senate is largely advisory. Members of the House of Representatives are directly elected whereas those of the Senate are elected indirectly by provincial councillors. Legislation is reviewed by a council of state. This comprises appointed members, including mainly legal experts and former politicians, and is chaired by the monarch. Its role is to ensure that legislation is constitutional and, while it cannot veto laws, the parliament is required to respond to its expressed views. There are also a number of statutory advisory councils, reflecting the consensual approach to Dutch politics. These include the Social Economic Council, which is consulted on many social and economic areas, but also has the right to enact legislation on its own in several areas. Another is the National Institute for Public Health and the Environment (RIVM), with a statutory responsibility to advise on areas within its remit. Others include the Scientific Council for Government Policy and Statistics Netherlands.

The Netherlands is divided into 12 provinces, responsible for planning, health policy, and recreation, although within limits decided by the national government. Executive power in the provinces lies with a commissioner appointed by central government and a council appointed by the provincial legislature. The provinces are further divided into municipalities, responsible for education, some aspects of planning, and social security, again within national guidelines. Executive powers lie in the hands of the mayor, appointed by central government, and aldermen, appointed by the directly elected municipal council. The cities of Amsterdam and Rotterdam have their own special arrangements.

Poland

Poland is a republic in which the president is the head of state and the Prime Minister is the head of government. The executive comprises the Council of Ministers, led by the Prime Minister, with members typically drawn from the majority party or coalition in the lower house of parliament. The legislature is bicameral, with the lower house, the *Sejm*, elected by proportional representation. Members of the Senate are elected by a first-past-the-post voting system. The president has the power to veto legislation, but this can be overridden by a three-fifths majority in the Sejm.

Poland is divided into 16 *voivodeships*, or provinces, each of which is further divided into *powiats*, or counties, and then into *gminas*, or municipalities. The *voivodeships* are administered by an elected assembly, the *sejmik*, which appoints an executive board, but shares power with a governor appointed by the government in Warsaw. They are responsible for promoting economic development, managing regional public services, including higher education, specialized health care providers, and ambulance services, and development of regional infrastructure, such as transport networks. The *powiats* have responsibility for education, most hospitals, (apart from the most specialized facilities), secondary education, environmental protection, public safety, and consumer rights. The *gminas* are the basic unit of local self-government, as set out in the Polish constitution, and have legislative powers in all areas not specifically allocated to other tiers. In practice, they have many of the same responsibilities as *powiats*, only for services and facilities provided to local communities, such as primary education and primary health care, as well as spatial planning. Of the 379 *powiats*, 65 are cities, which also act as single *gminas*, combining the roles held at both levels. These are governed by elected city councils and directly elected mayors. Warsaw has a special status, combining *powiat* and *gmina* responsibilities, but divided into 18 districts.

Slovenia

Slovenia is a parliamentary republic, with a bicameral legislature, comprising the National Assembly and National Council. Below the level of the national government, there are 12 regions, which exist purely for statistical purposes and have no administrative function. Certain functions of central government are also undertaken by the 58 administrative units, each headed by a civil servant appointed by the Minister of Public Administration and the central government. Local government is based in the municipalities, which are largely self-financing, collecting a range of tax and other revenues. Responsibilities of the municipalities include preschool and primary education, primary health care, emergency services, social welfare, housing, spatial planning, and environmental protection. Those municipalities in urban areas are legally entitled to take on wider responsibilities, including secondary education and hospitals, but have yet to do so. Thus, Slovenia remains a largely centralized state, with many functions undertaken at local level by branches of central government.

Sweden

In Sweden, the government operates as a collective body, consisting of the Prime Minister, appointed by the Speaker of the Parliament, and other ministers, appointed by the Prime Minister. Government is accountable to the parliament. Sweden is unusual in that individual Cabinet ministers do not bear individual responsibility for the activities of agencies within their portfolio. The director generals of these agencies report to the Cabinet as a whole, and ministers cannot intervene unless specifically permitted to by law. The Parliament, or *Riksdag*, is a unicameral legislature, elected by proportional representation. Sweden is divided into 21 counties. Each county has an administrative board, appointed by the central government with responsibility for ensuring that the activities of the county are consistent with national policy, and a directly elected county council. The main responsibilities of the county council are the health system, public health, and public transport. Counties are, in turn, divided into municipalities, which take two forms, depending on size, with differing responsibilities. The island of Gotland is treated differently, because of its geography, and the Gotland municipality functions as a county council.

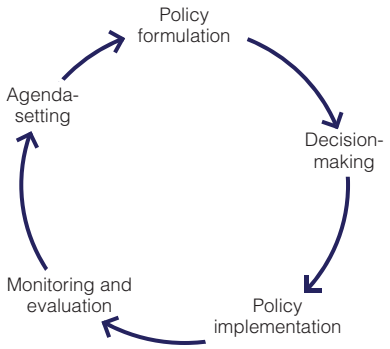
The policy cycle

Our assessment of the involvement of public health organizations in addressing key public health challenges was based on the "stages heuristic" developed by Sabatier and Jenkins-Smith (1993). This tool allows the analysis of policies

and programmes in each of the key stages of an ideal policy cycle (Fig. 1.1), consisting of:

1. problem identification and issue recognition (agenda-setting)
2. policy formulation
3. decision-making
4. policy implementation
5. monitoring and evaluation

Fig. 1.1 *Key stages of the policy cycle*



Source: Authors' compilation

While recognizing this to be a simplified conceptualization of "real-world" policy-making, it is a useful way of exploring how key stages of policy-making involve different actors, processes and contexts. In reality, policies rarely follow a rational or circular movement, through each step of the policy cycle. Instead, a policy can begin at any stage and may not move in a sequential path through all the stages. Furthermore, in many countries scientific evidence plays at best a limited role in informing the policy-making process, or even if it does, ideological beliefs, budgetary constraints, and the feasibility of implementation may play more important roles.

The country reports on selected public health problems explored how public health organizations are involved in addressing the public health challenges at each of the stages of the policy cycle. They identified the power and influence of public health organizations vis-à-vis other key actors in each of the stages, thereby allowing a judgement about strengths, weaknesses and enabling factors.

Structure of the book

This book consists of two parts. The first part presents the findings of the cross-country comparison of the involvement of public health organizations in addressing the three public health challenges: obesity (Chapter 2), alcohol control (Chapter 3) and antimicrobial resistance (Chapter 4). Each of these chapters outlines the scale of the problem, describes the policy responses, and then explores the role of public health organizations in addressing the public health challenge, looking at each of the stages of the policy cycle (problem identification and issue recognition, policy formulation, decision-making, implementation, and monitoring and evaluation). Chapter 5 draws together the key findings and policy lessons from this comparison. The second part of the book provides the detailed country reports on the role of public health organizations in addressing the three public health problems.

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Chapter 2
Obesity

Cristina Hernández-Quevedo, Bernd Rechel

Introduction

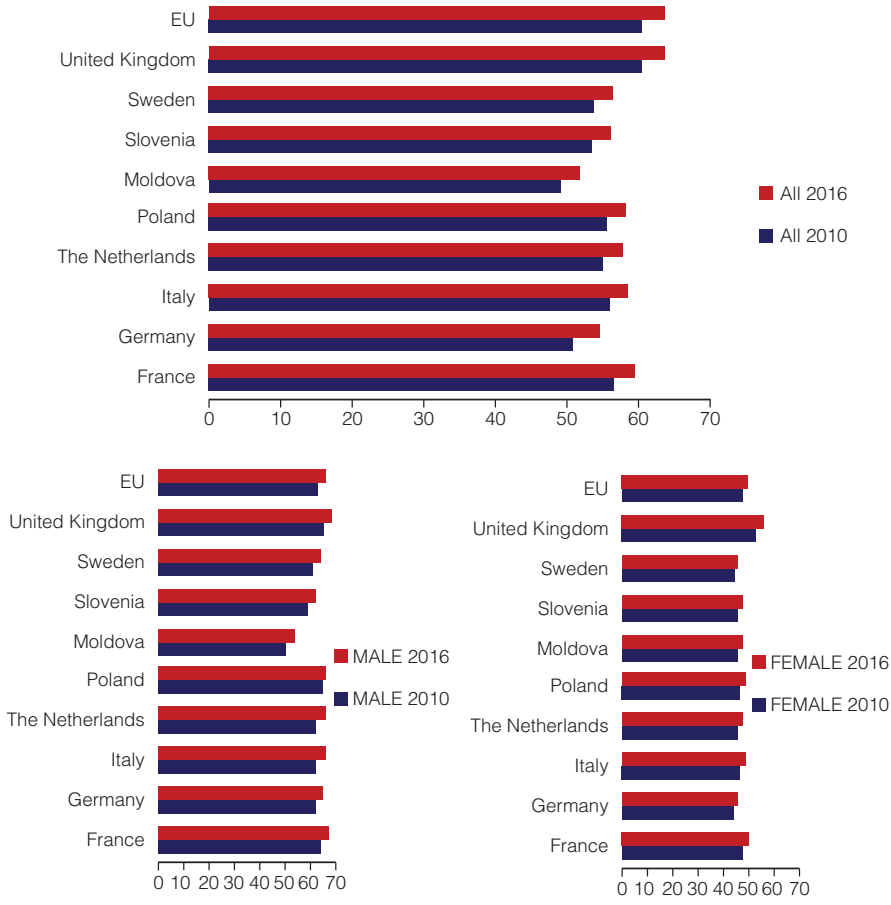
Obesity and overweight are among the greatest public health challenges in the WHO European Region and are a major risk factor for several of the leading noncommunicable diseases. Indeed, prevalence rates of obesity have tripled in many European countries since the 1980s, posing important challenges to health systems across the region. This chapter examines the involvement of public health organizations in policies aiming to address the challenge of obesity in nine European countries (England, France, Germany, Italy, the Republic of Moldova, the Netherlands, Poland, Slovenia and Sweden). It is based on detailed country reports that describe the policy response and the involvement of public health organizations in the different stages of the policy cycle (see Online Appendix).

Scale of the problem

Obesity has been recognized as a core challenge for health systems worldwide, having been termed "the epidemic of the 21st century" (WHO, 2000). It has emerged on the political agenda of many countries and international organizations, as evidenced by an increasing number of national and international strategies and action plans to reduce its prevalence (WHO, 2004; WHO Europe, 2006; European Commission, 2014). Thus, obesity and overweight are no longer regarded as purely private issues (Vallgårda, 2015). Obesity has also been recognised as having an equity dimension: there is a socioeconomic gradient in both adults and children, with higher obesity rates in lower socioeconomic groups and in disadvantaged areas (Magnusson et al., 2014).

In all countries included in this study, the prevalence of obesity has increased between 2010 and 2016 (see Figs. 2.1 and 2.2). In the United Kingdom, projections made in 2007 suggested that over half of the adult population could be obese by 2050 (Foresight, 2007). One-third (33%) of women are forecast to be obese in 2030 in the United Kingdom, compared with over one-quarter (26%) in 2010, while 36% of UK men are forecast to be obese in 2030 compared with 26% in 2010 (WHO & UK Health Forum, 2015).

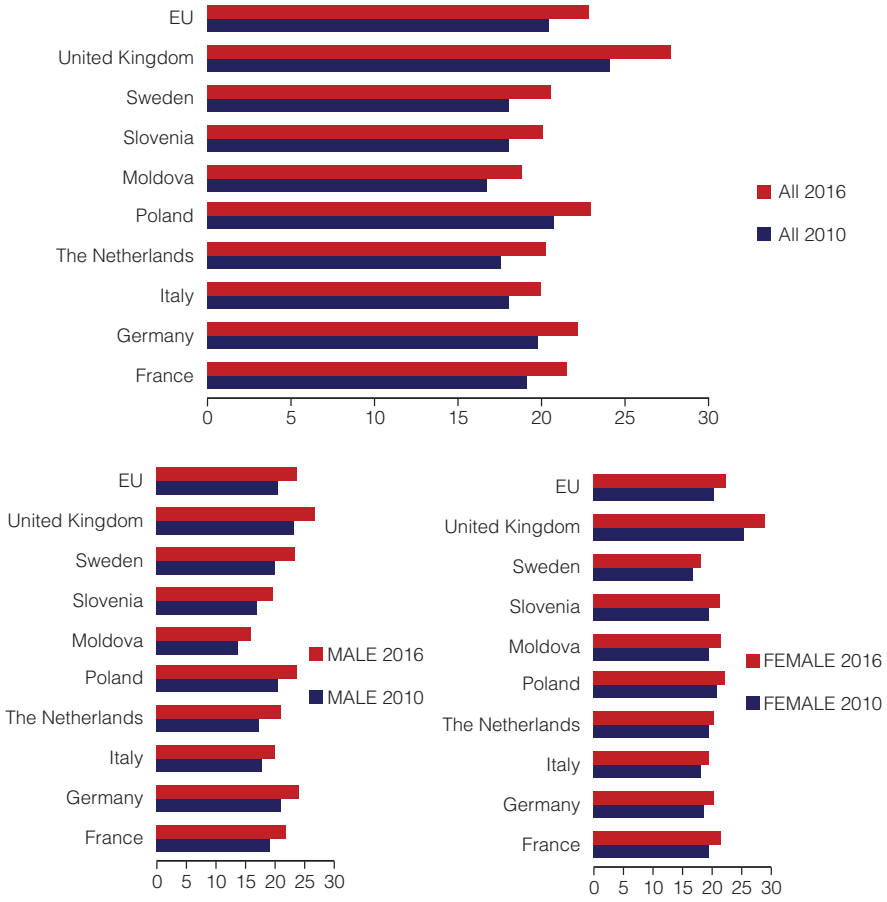
Fig. 2.1 *Age-standardized prevalence of overweight (defined as BMI ≥ 25 kg/m²) in people aged 18 years and over, WHO estimates, 2010 and 2016 (%)*



Source: WHO Regional Office for Europe, 2018

In England and Germany, the prevalence of childhood obesity is twice as high in the most deprived areas when compared to the least deprived areas. In 2014 in the Netherlands, 63.1% of the population with only primary school education were overweight compared to 40.7% of those with university

Fig. 2.2 *Age-standardized prevalence of obesity (defined as BMI ≥ 30 kg/m²) in people aged 18 years and over, WHO estimates, 2010 and 2016 (%)*



Source: WHO Regional Office for Europe, 2018

education. For obesity, these percentages were 23.1% and 8.4% respectively (CBS, 2016). In Sweden, growing social inequalities are increasingly perceived as a key contributor to rising overweight and obesity rates, given that unhealthy nutrition and low levels of physical activity are more prevalent among lower educated groups (Public Health Agency of Sweden, 2014; Li et al., 2014; Magnusson et al., 2014; Moraeus et al., 2012).

Overweight and obesity among children are problems in each of the countries included in this volume, as illustrated by the Childhood Obesity Surveillance Initiative (COSI) data for 6–8-year-old children for the period 2012–2013[1]: while in Moldova the prevalence of overweight children is below 20%, in Italy, which has the highest levels, it is over 35%. Sweden (2006–2007 data) and

1 No COSI data are available for the United Kingdom, Poland, the Netherlands, Germany and France.

Moldova have the lowest prevalences of obesity in children among the countries included, at lower than 6%, while Italy has the highest prevalence of obesity, over 14% (WHO Regional Office for Europe, 2016).

The costs to the health system are substantial. Currently, treating obesity and its consequences is estimated to cost the English National Health Service (NHS) 6.1 billion pounds sterling (approximately 7 billion euros) per year, with the wider costs of obesity to society being estimated to be around three times this amount (Public Health England, 2017), while in Germany, the economic costs of obesity (including treatment, medications, surgery, rehabilitation and sick pay) are estimated to amount to up to 27 billion euros per year (Effertz, 2015). In the Netherlands, total direct costs of overweight to the health system were estimated at 2.2% of total health expenditure, not accounting for indirect costs (e.g. higher sick leave, lower labour productivity, lower performance at school).

Policies and programmes

Policy response at the global level

Action on obesity is required at global and local levels (Swinburn et al., 2015), with an emphasis on measures to tackle price, availability, and marketing of energy-dense food and drinks (Kleinert & Horton, 2015). In 2013, the WHO's World Health Assembly adopted the Global Action Plan for the Prevention and Control of Non-communicable Diseases 2013–2020, intended to tackle preventable chronic diseases, inter alia by stopping the increase in obesity and diabetes (Bergström et al., 2013). The Plan recognizes that an unhealthy diet and physical inactivity trigger major noncommunicable diseases and points to the need for a strong and effective cooperation between different actors and sectors of society, coordinated by national governments to tackle these risk factors. Among the policy actions to tackle physical inactivity and unhealthy diet, the Plan recommends the implementation of the WHO's Global Strategy on Diet, Physical Activity and Health (2004) and the WHO's Global Strategy for Infant and Young Child Feeding (2003), besides a list of additional policy actions (e.g. reduce salt intake, increase public awareness).

Policy response at the European level

In September 2015, the countries of the WHO European Region adopted the Physical Activity Strategy for the WHO European Region 2016–2025, with a specific focus on multisectoral collaboration (WHO Regional Office for Europe, 2015). Countries have also subscribed to the WHO's Global Action Plan for the Prevention and Control of Non-communicable Diseases.

2013–2020, including the recommendations on physical activity for health for children and adults.

The WHO's European Food and Nutrition Action Plan 2015–2020 and the Physical Activity Strategy for the European Region set priority areas for accelerating progress in meeting voluntary global targets on noncommunicable diseases (NCDs) of the WHO's Global Action Plan, particularly in relation to overweight and obesity. The WHO's European Food and Nutrition Action Plan 2015–2020 aims to reduce significantly the burden of overweight, obesity and all other forms of malnutrition prevalent in the WHO European Region, with a guiding principle of tackling inequalities in access to healthy food (achieving universal access across social gradients, by improving the availability, affordability and acceptability of healthy diets), emphasizing the recognition of existing inequalities in obesity and overweight.

The former WHO Director-General also established a high-level Commission on Ending Childhood Obesity to better inform a comprehensive response to childhood obesity, which met for the first time in 2014. In its latest report, the Commission introduced a comprehensive and integrated package of recommendations to address childhood obesity based on the following actions: promoting intake of healthy foods, promoting physical activity, preconception and pregnancy care, early childhood diet and physical activity, healthy nutrition and physical activity for school-age children and weight management (WHO, 2016).

At the European Union (EU) level, a Plan of Action was adopted in 2014 against childhood obesity for the period 2014–2020, which covered eight focal areas, including family, environment and research (European Commission, 2014). The Plan recognizes the increase in obesity and overweight in adults, children and young people in the EU and aims to demonstrate the shared commitment of EU member states to addressing childhood obesity; set out priority areas for action; develop a possible toolbox of measures for consideration; and propose ways of collectively keeping track of progress (European Commission, 2014). The Action Plan recognizes and respects Member States' roles and freedom of action.

National action plans and strategies

At the national level, many policies and programmes have been adopted in recent years in Europe, focusing on both the prevention of obesity and its treatment and management. Almost all of the nine countries considered in depth here have adopted national strategies or programmes in this area (Table 2.1). All plans define the physical and food environment as a crucial factor in the development of obesity.

Table 2.1 *Obesity policies in the nine selected European countries*

	National policy or action plan	Main goals for obesity	Coordination	Roles and responsibilities of public health organizations	Explicit budget attached to action plan
England	Childhood obesity: a plan for action (2016)	Significantly reduce England's rate of childhood obesity within the next 10 years	Department of Health	Public Health England to review the nutrient profile model; update School Food Standards; provide guidance on reducing sugar content of foods; and set targets for product composition	Soft drinks industry levy will be invested in programmes to reduce obesity and encourage physical activity and balanced diets for school-age children
France	National Health and Nutrition Programme (2001)	Stabilizing the prevalence of obesity and reducing overweight in adults; reducing the prevalence of obesity and overweight among children and adolescents	Ministry of Health	The French Institute for Prevention and Health Education (INPES) is in charge of national communication campaigns; it also has a role in promoting interventions at the regional and local levels; several public health agencies are involved in monitoring the prevalence of obesity	–
Germany	National Initiative to Promote Healthy Diets and Physical Activity (2008)	No explicit focus on weight, but rather on physical activity and nutrition	Federal Ministry of Food and Agriculture and Federal Ministry of Health	Implementation supported by the Federal Centre for Health Education at the national level, and the State Associations for Health and Health Promotion at the level of the states; several public health agencies are involved in monitoring the prevalence of obesity	30 million euros for the first three years (2008–2010)

Italy	Obesity-related goals included in National Prevention Plan	–	–	–	–
Moldova	National Food and Nutrition Programme (2014)	Zero increase in obesity prevalence among children and adults	Ministry of Health	Support monitoring and evaluation	During the period of 2014–2015, no funds allocated for implementation
The Netherlands	Overweight is one of the strategic areas of action of the National Prevention Plan	–	–	–	–
Poland	Obesity-related goals included in strategic health policy documents	–	–	–	–
Slovenia	National programme on nutrition and physical activity for 2015–2025	Reducing the prevalence of obesity	Ministry of Health	The National Institute of Public Health was involved in drafting the national programme	A budget for implementation is set out in the action plan
Sweden	No national plan	–	–	–	–

Source: Authors' compilation

Only Sweden has no national plan, although Stockholm County Council has a county Action Plan for overweight and obesity (*Så kan vi vända trenden, Handlingsprogram övervikt och fetma 2016–2020*), which includes action related to nutrition in schools; school-based health and nutrition programmes; regulation/guidelines on types of foods and beverages available; promotion of healthy diet and prevention of obesity and diet-related NCDs; and nutrition counselling on healthy diets. Quantitative objectives are also established in the Plan, for example: the proportion of 4-year-old children who are overweight should decrease to less than 7% and to less than 2% for obesity (by 2020) while the proportion of adults who are overweight should decrease to less than 25% and the percentage of adults with obesity, to less than 7% (by 2020) (WHO, 2016).

In Italy, several policies and programmes have been adopted over the years to tackle obesity. The existence of a National Prevention Plan was a major development in this area, as were Regional Prevention Plans, which increasingly concentrate on the prevention of noncommunicable diseases and the promotion of healthy lifestyles. However, this progress threatens to be undermined by recent budget cuts to prevention, which have left fewer resources that can be allocated to tackling obesity. There are also few efforts to make the required structural and systematic changes to urban environments to encourage people to increase their physical activity (De Feo & Sbraccia, 2014).

In France, the National Nutrition and Health Programme (PNNS) was initiated in 2001 and extended in 2006, as the initial objectives were not uniformly addressed and social inequalities in health increased. An obesity plan for France was adopted and a five-year government programme on nutrition and health was launched in 2010, both based on cross-government cooperation. Later in 2011, the programme was again extended until 2015, and proposals for a 2017–2010 PNNS were published in September 2017 (HCSP, 2017).

In Germany, one of the most important initiatives is the National Initiative to Promote Healthy Diets and Physical Activity, adopted in 2008. However, it focuses on physical activity and nutrition rather than weight. This focus on individual behaviours is favoured by the food industry, neglecting evidence on the importance of tackling the upstream social, commercial, and political determinants, most notably the role of the food and agriculture industries (IN FORM, 2014).

In England and the Netherlands, emphasis has been placed on collaboration with the private sector. In England, this has taken on the form of the Responsibility Deal, with a stated aim of bringing the food industry into discussions and to facilitate protection of the public from unhealthy foods and drinks. Although evaluations have revealed it to have been a failure, focusing on industry-friendly

but ineffective measures (Box 2.1), the UK was an early mover on restricting marketing to children via legislation and introducing the front-of-pack traffic light label. Change4Life was also a well-funded behaviour change campaign.

Box 2.1 *Obesity policies in England*

Among the nine selected countries, the prevalence of obesity is highest in the United Kingdom (Fig. 2.2). Yet, obesity policies have been slow to emerge in England. There was a late recognition of the problem, followed by individual-oriented actions. The UK was an early mover on restricting marketing to children via legislation and introducing the front-of-pack traffic light label. However, recent governments in England (and other parts of the UK) have focused on weaker self-regulatory initiatives.

The Public Health Responsibility Deal, launched in March 2011, was intended to bring the industry into discussions and to facilitate protection of the public from unhealthy foods and drinks. However, formal evaluations have revealed the voluntary pledges by industry to be largely ineffective, highlighting the need for regulation, taxation, and legislation. Even the industry now acknowledges this apparent failure and some corporations seek regulatory action, as they crave a level playing field in which the pledges they make become requirements for all businesses, not just those signed up to the Responsibility Deal.

Despite paper commitments to preventing ill-health in major national health strategies from NHS England and Public Health England, cuts to local authority funding in general and to public health budgets in particular also threaten to undermine the response to the obesity challenge. An action plan on childhood obesity was published in 2016, but largely shied away from regulatory measures. However, in recognition of the fact that teenagers in England are the biggest consumers of sugar-sweetened drinks in Europe, an introduction of a tax on sugary drinks was announced in March 2016 and came into force in April 2018.

Source: Country report for England, see Online Appendix

In the Netherlands, the government has taken the view that it cannot effectively address the problem of overweight on its own, but that it is highly dependent on other public and private actors. However, the effectiveness of public–private partnerships in preventing obesity is uncertain and they may offer the food industry, which is especially strong in the Netherlands, respectability and new channels for selling their products to young (and old) people.

In Moldova, the National Health Policy (2007–2021) was the first policy document that addressed obesity as one of the main health determinants and called for intersectoral, whole of government, and whole of society actions to prevent it. In 2014, the Moldovan Government endorsed the first National Food and Nutrition Programme for 2014–2020 and the Action Plan for 2014–

2016. One specific objective of this programme is to halt the increase in obesity prevalence among children and adults.

In Poland, a Regulation of the Minister of Health (of 26 July 2016) addressed groups of foodstuffs intended for sale to children and adolescents in the education system (Table 2.2). In addition, a School Programme Strategy 2017/2018 to 2022/2023 has, as one of its goals, the promotion of a healthy, balanced diet among children and parents. In particular, it aims to change the eating habits of children by increasing the share of fruit and vegetables already provided (FV scheme) and milk (Milk scheme). Furthermore, the National Programme for the Prevention of Overweight, Obesity and Non-Communicable Diseases through Diet and Improved Physical Activity (2007–2016) includes goals to tackle: overweight, obesity and diet-related NCDs; overweight and obesity in school-age children and adolescents; overweight and obesity in adults; and diet-related NCDs (WHO Global Nutrition Policy Review 2009–2010). The Framework of the National Health Programme for 2016–2020 includes healthy public policies.

In contrast to the other countries reviewed in depth here, Sweden has no national strategy on obesity. In 2003, the government asked the Swedish National Food Administration and the then National Public Health Institute to prepare a draft national action plan for healthy eating and physical activity. A document with 79 action points was presented in 2006, but the plan was never formally adopted (Box 2.2).

The role of public health organizations in addressing obesity in the selected countries

Problem identification and issue recognition

While obesity is generally perceived as a public health problem, the level of recognition differs between and within countries, with obesity hardly appearing in public policy debates in some of the countries included, such as Moldova or Poland. One of the challenges, pointed out in discussions on Italy, is that public health thinking in some countries is still largely based on infectious or environmental disease pathways and less oriented towards integrated multi-disciplinary approaches and efforts to address the social and behavioural determinants of health and disease. Another challenge, pointed out in discussions on Italy and Poland, is that the problem of obesity is still poorly recognized by medical professionals and policy-makers. In contrast to many other European countries, many policy-makers in Italy believe that lifestyle interventions and weight-loss maintenance tools and policies are successful, despite evidence that suggests that weight loss is, in practice, extremely challenging to maintain

Table 2.2 *Measures relating to schools (including standards or rules for foods, bans on vending machines, standards for marketing) and marketing food high in saturated fats, trans-fatty acids, free sugars or salt (HFFS foods) to children in 2017*

	Are school health and nutrition policies, programmes or related standards being implemented?	Standards or rules for foods and beverages available in schools?	Ban on vending machines in schools?	Standards for marketing of food and non-alcoholic beverages to children in the school setting?	Measures to regulate or guide marketing of HFSS foods or drinks to children being implemented?
France	Yes	Yes	Yes	n/a	Yes
Germany	Yes	Yes	n/a	n/a	(a)
Italy	Yes	Yes	n/a	n/a	n/a
Republic of Moldova	Yes	Yes	n/a	n/a	No
The Netherlands	Yes	Yes	n/a	n/a	Yes
Poland	Yes	Yes	n/a	Yes	Yes
Slovenia	Yes	Yes	Yes	n/a	Yes
Sweden	Yes	Yes	n/a	n/a	Yes
United Kingdom	Yes	Yes	n/a	n/a	n/a

Source: WHO Regional Office for Europe, (2018); European Health Information Gateway [online database], accessed 7 March 2017

Notes: n/a: information not available; (a) food marketing restricted in some other way without making reference to HFSS foods/drinks, and including a positive role of marketing/sponsoring

Box 2.2 *Lack of coordination and of a national strategy to tackle obesity in Sweden*

In Sweden, so far there is no national strategy or action plan on obesity, nor are there guidelines for the treatment and management of obesity. There are ongoing discussions between the Public Health Agency of Sweden, other relevant agencies and actors, and the government regarding obesity and necessary actions. A 2015 article (Schäfer Elinder et al., 2015) in the journal of the Swedish Medical Association called for a national strategy on nutrition and physical activity. Although obesity is recognized as a major public health problem, current work mainly focuses on people with other risk factors for disease and efforts are poorly coordinated. While there are regional action plans on obesity, they lack the support of a national strategy. Furthermore, targeted measures are still needed for groups in the population with particular needs if health inequalities are to be reduced. Some small-scale intervention projects are ongoing, with limited funding, but large-scale evidence-based interventions are not in place, and a monitoring system to evaluate the effects of interventions has yet to be developed.

(EASO, 2014). In Poland, too, obesity is mainly seen as an individual lifestyle problem and not as a population health problem – a stance that is strongly promoted by the food industry (with the industry in Poland also opposing salt reduction) (WHO Regional Office for Europe, 2013).

Where health policy focuses on the language of lifestyle choices, it is reasonable to assume that the food industry is playing a role, with increasing revelations about how some of the global corporations have used their considerable financial resources to shape the policy debate and, in particular, the available research, with their involvement often concealed. Economic factors also play a role: in 2014, the Italian Minister of Health did not agree with proposed new guidelines by WHO to halve consumption of sugar from 10% of total daily calories to 5%, as there was concern that the effects of such a policy were likely to affect many national brands (Health News Today, 2014).

National level

The role of public health organizations in problem identification and issue recognition varies, but at the national level, the Ministry of Health or its subordinated agencies are usually in charge of identifying problems that require government attention (e.g. Public Health England, Santé Publique in France or the National Centre for Disease Prevention and Control in Italy).

In some countries, advisory bodies to the Ministry of Health have been created, such as the Council for Diet, Physical Activity and Health in Poland, although its role has remained marginal. In some countries, such as Germany, public health organizations have only had a small role in shaping policy responses.

The German alliance "Platform on Diet and Physical Activity" (PEB) is dominated by representatives from the food industry, while public health organizations are not involved at all. It seems likely that this is a major explanation of the individually focused approach dominant in Germany, recalling earlier concerns about the powerful role of the tobacco industry in the German research and policy communities (Grüning et al., 2006).

The degree of intersectoral collaboration also matters for problem identification and issue recognition. In England, for example, government departments other than Health have key roles to play in obesity policy, including the Department for Education, the Department of Culture, Media and Sport (physical activity and control of advertising /marketing standards), the Department for Communities and Local Government, and the Department for Environment, Food and Rural Affairs. This is not the case in other countries, such as the Republic of Moldova, where a lack of intersectoral collaboration has been pointed out.

Regional/local level

At regional or local level, local authorities tend to be responsible for assessing the health needs of the population, including those related to obesity, and for organizing and funding effective local interventions (e.g. regional and local self-governments in Poland, municipalities in Sweden, and regional health agencies in France).

Other actors

While in some countries (such as England), NGOs play a strong role in advocating for policy (although now more limited following the passage of legislation on lobbying promoted by some industry-funded thinktanks concerned about the role of civil society), as well as provision of activities related to food, in particular the rapidly growing number of foodbanks (supporting those facing food insecurity as a consequence of austerity measures), fitness and healthy environments, in others (such as Poland), they have little impact on problem identification and issue recognition. Other important actors are international organizations and scientific or professional associations (Box 2.3).

International commitments have been crucial in encouraging some countries to develop their strategies to deal with obesity, such as Moldova (Box 2.4). Furthermore, a number of institutions are part of the WHO's European Network for the Promotion of Health-Enhancing Physical Activity (HEPA) (WHO, 2016).

These policy documents, together with the situation described above, led to the development and the approval by the Moldovan Government of the National

Box 2.3 *Interaction of public health agencies with other agencies in Italy*

In problem identification and agenda-setting, Italian public health agencies interact with a number of other bodies, including international organizations, such as WHO (e.g. through the Health Behaviour of School Children survey and the WHO Global Action Plan for the Prevention and Control of NCDs 2013–2020); many scientific associations (such as the Italian Barometer Diabetes Observatory Foundation; the Italian Human Nutrition Society, the Italian Obesity Society, for Eating Disorders and Weight, the Italian Foundation for the Fight Against Childhood Obesity, the Italian Association for Dietetics and Clinical Nutrition, and the Italian Society for Obesity Surgery and Metabolic Diseases); as well as with GPs and paediatricians who are involved daily in dealing with this issue.

Box 2.4 *Problem identification and issue recognition in Moldova*

The Ministry of Health of the Republic of Moldova identified obesity as one of the main public health problems in 2007 and addressed it in the National Health Policy, calling for intersectoral action. Subsequently, the problem of obesity was addressed by the Law on Public Health adopted in 2009 and the Food Law amended in 2012, when the preparation, sale and distribution of unhealthy food were banned within and around schools. Nevertheless, few actions have been taken to address this issue.

Developments at the global and European levels have played an important role. The political Declaration of the United Nations High-level Meeting on the Prevention and Control of NCDs in 2011 (UN Declaration 2011), the WHO European Nutrition and Noncommunicable Policies (Vienna Declaration and European Food and Nutrition Action Plan 2015–2020), supported by commitments by the Ministry of Health to halt the rise in obesity, have helped place the issue on the national policy agenda. Furthermore, following the STEPS 2013 and MICS 2012 survey results and data on the incidence of obesity-related NCDs, such as diabetes, cardiovascular diseases and cancers, the Ministry of Health put obesity higher up the health agenda. This decision was supported by the National Centre of Public Health (NCPH) of the Ministry of Health and other ministries such as the Ministry of Education, the Ministry of Agriculture and Food Industry, the Ministry of Youth and Sports, the Ministry of Economy, the Ministry of Finance, as well as academia and civil society. WHO, as the main international partner, also played an important role in agenda-setting.

Food and Nutrition Programme for 2014–2020, where obesity was addressed as one of the key public health problems.

The food industry and the private sector are also involved in different initiatives and, as mentioned above, influence (or rather prevent) problem identification and issue recognition. For example, in England, Change4Life (Change4Life,

2018), the national website providing advice on healthy lifestyles, was established in 2008 with contributions from private industries, although it is now managed by Public Health England. Furthermore, commercial weight management services, such as Weight Watchers and Rosemary Conley, are increasingly being commissioned by local authority public health services, instead of or alongside NHS-provided services. In Poland, the food industry plays an important role in public health discussion, promoting the idea that the solution to the obesity problem lies in health promotion, education and personal responsibility for making decisions on nutrition and physical activity, all measures known to be ineffective.

Policy formulation

National level

In all nine countries, the Ministry of Health is responsible for the formulation of overall national health policies, as well as for defining priority areas for national programmes. Often, the Ministry of Health plays a coordinating role, drawing on the advice of arms-lengths bodies and scientific associations, while building capacity of other bodies to promote and support obesity control measures. In Germany, the National Initiative to Promote Healthy Diets and Physical Activity, established in 2008, was drawn up by a joint working group of the national government, the federal states, and local organizations, which has also been involved in the implementation of the corresponding Action Plan (IN FORM, 2008). Similarly, in Italy, a technical committee has been set up for this purpose, the National Platform on Diet, Physical Activity and Tobacco. It is composed of representatives from national administrations, regions and autonomous provinces, institutes and research centres, GPs and paediatricians, as well as manufacturers' and consumers' associations and most trade unions. The Platform is tasked with formulating policies and implementing actions.

Not all ministries of health have been successful in assuming a role in obesity policies. In Sweden, efforts to strengthen national influence in the area of obesity during the latter part of the 1990s and throughout the 2000s, for example by developing national "action plans", were unsuccessful. Challenges faced by other countries include a lack of capacity in the Ministry of Health. This has been described in Moldova, where there is no designated person at the Ministry of Health or the National Centre of Public Health working on obesity. The lack of locally produced evidence on the clinical and cost–effectiveness of interventions in the area of obesity was noted in Poland, as well as its limited use of international evidence.

The EU contributes to national policy formulation to tackle obesity. As mentioned above, an EU Action Plan on Childhood Obesity 2014–2020 has been formulated (European Commission, 2014), which has been endorsed by several countries, including Sweden. Successive reforms of the Common Agriculture Policy have also responded to criticism that it encouraged consumption of energy-dense foods.

Intersectorality

Tackling obesity is one of the areas in which intersectoral cooperation seems to be better developed than in many other health policy areas. In several countries, other ministries are involved in policy formulation (e.g. France; see Box 2.5).

Box 2.5 *Intersectorality in policy formulation in France*

In France, the Minister of Agriculture, the Minister of Health, and the Minister for Consumers collaborate on obesity through the National Food Council (*Conseil National de l'Alimentation* (CAN)). This Council was created in 1985 as an independent advisory body, placed with the ministers responsible for agriculture, health and consumer protection. It advises on food policy, and issues opinions on topics such as food quality, consumer information, nutrition, safety, access to food, and crisis prevention. The CNA is also expected to participate in the development and monitoring of the implementation of the National Programme for Food.

In Slovenia, an intersectoral working group was established under the Ministry of Health to develop a national programme, comprising representatives from the National Institute of Public Health and other ministries (Ministry of Agriculture and Food Industry; Ministry of Education and Sport; Ministry of Labour, Family and Social Affairs; Ministry of Economy; Ministry of Transport; Ministry of Environment; and Ministry of Defence).

Regional/local level

Regional or local administrations are responsible for the formulation of policies at those levels, as well as implementation of some national policies on obesity. Even in more centralized countries such as France, the regions (more specifically, the regional health agencies (ARSs)) are tasked with ensuring that health care provision meets the needs of the local population. This is also the case in England, where local authorities, through their Health and Wellbeing Boards and public health departments, are charged with the assessment of local needs and policy formulation. The Fingertips information system managed by Public Health England (PHE; Public Health England, 2018) is a major intelligence resource for local authority public health.

In more decentralized countries, such as Italy, the central government sets the main policy directions, while the regions are responsible for the formulation of their respective regional policies and for the organization of regional public health services and health care. In Italy, regional departments of health and public health observatories are key actors involved in formulating regional policies on obesity. The situation is similar in Sweden, where county councils are tasked with regional policy formulation. Some county councils (e.g. Stockholm and the region of Västra Götaland) have been active in the prevention of obesity, elaborating action plans for health services, but also in collaboration with other actors. In Poland, this role falls to regional self-governments.

Information to support policy formulation

In all countries covered, public health organizations provide information to support policy formulation. In France, for example, the EHESP School of Public Health, INPES (now merged into *Santé publique France*) and the Ministry of Health have launched a national initiative to help ARSs and NGOs by providing easy access to literature, data, and the scope for transferability of measures developed in one region to others.

In Italy, the national lifestyle and disease monitoring systems that collect data on adults and children ("Keep an Eye on Health", HBSC Study, PASSI and PASSI d'Argento systems) provide data to guide policy formulation and decision-making and to provide useful information for all stakeholders (policy-makers, administrators, health workers and citizens). These information systems provide data on the prevalence of overweight and obesity, monitor trends over time, assess the need for interventions and gauge the effectiveness of implemented actions in different areas of the country.

Decision-making

Decisions are taken at different levels within government, depending on both the nature of the decision being made and the distribution of administrative and regulatory powers in a country and the discretion given to lower administrative tiers. The ability to coordinate decisions across organizations at a particular level and at different levels also varies. Thus, in Sweden, while municipalities can seek advice from county councils, there are no formal mechanisms for coordinating among adjacent municipalities. In contrast, Italy has established mechanisms for coordinating national and regional decision-making (Box 2.6).

Other actors

In several of the countries included, the food industry has considerable influence, both formal and informal, into policy. In Moldova, for example,

Box 2.6 *Coordinating national and regional decision-making in Italy*

In Italy, the "conference system" is the main mechanism to achieve coordination across levels of government. It is based on three coordination bodies: 1) the Conference between the State, Regions and Autonomous Provinces (in short, State-Regions Conference) is the permanent interface where central and regional governments discuss, negotiate and make agreements on public policy where their mandates overlap; 2) the Conference between the State, Municipalities and other Local Authorities, whose functions include coordinating the relations between the central government and local authorities, as well as analysing and serving as a forum to discuss issues of interest to local authorities; and 3) the Unified Conference between the State, Regions, Municipalities and Local Authorities, the institutional mechanism that coordinates the relationships between the central government, the regions and the local authorities. In addition, one of the most important mechanisms through which the regions and central authorities engage with each other is through discussions that lead up to the ratification of Health Pacts (*Patto per la Salute*), which are three-year agreements on health care. Negotiations between the state and regional governments also result in the ratification of National Prevention Plans, the most recent of which covers the period 2014–2018.

it exerts influence through the Ministry of Economy and the Ministry of Agriculture and Food Industry. It attempted to block legislation banning sale of unhealthy foods within and around schools and intervenes every time new initiatives emerge that may affect its commercial interests. In Poland, it is one of the most influential lobby groups, with well-organized representation and significant financial resources.

Policy implementation

Responsibility for the implementation of policies again varies according to the policies in question, reflecting the powers at each level. In some countries, the Ministry of Health and the regions (e.g. France, Italy), county councils (e.g. Sweden) or municipalities (e.g. Sweden) share responsibility for policy implementation, although in practice this may be poorly coordinated, as has been noted in Sweden. However, responsibilities are not always clearly delineated, and this was identified as a challenge to the successful implementation of measures against obesity in Moldova.

In most countries, the Ministry of Health has overall responsibility for the implementation of (national) obesity policies. In this task, it can often rely on dedicated health agencies under its supervision, as well as on other public bodies. For example, in France, INPES (now merged into Santé Publique

France) is in charge of implementing policies in matters of prevention and health education included in the government's public health policy framework. In Sweden, the public health agencies at national level that have a clear mandate for policy on obesity include the Public Health Agency of Sweden, the National Food Agency and the National Board of Health and Welfare.

Intersectoral collaboration

Several ministries have a role to play in relation to obesity. In Germany, a national steering group oversees implementation of the Action Plan to Promote Healthy Diets and Physical Activity. The steering group consists of one representative of each of the lead ministries of the Federal Government, one representative of each of the Conferences of the Ministers of Health, Consumer Protection and Agriculture and one representative of the municipal umbrella associations. It also includes representatives of employer and employee associations, a representative of the Federal Association for Disease Prevention and Health Promotion, of the Platform Diet and Physical Activity, a representative of civil society and one representative of the main specialist associations and societies.

In France, the Minister of Agriculture, the Minister of Health and the Minister for Consumer Protection collaborate on the implementation of obesity policies through the National Food Council (*Conseil National de l'Alimentation* (CNA)), established in 1985 (CNA, 2016). In Italy, public health agencies and services engage with a large number of health professionals (e.g. GPs, paediatricians, nutritionists) and other involved stakeholders (e.g. trade and food chain associations, private sector).

In Moldova, as well, a number of other authorities are involved in the implementation of the NFNP Action Plan. Thus, the Ministry of Finance is responsible for excise taxes for food high in saturated fat and sugary soft drinks; the Ministry of Education for school curricula and healthy nutrition education; the Ministry of Agriculture and Food Industry for free school fruit and vegetable schemes; and local authorities for ensuring a healthy nutritional environment in the schools. However, so far, little has actually happened.

Regional level

In several countries, certain obesity policies are implemented by public health organizations at the regional level. One example is France, where ARSs (regional health agencies) play a key role in policy implementation (Box 2.7).

In England, local authorities have certain responsibilities for local policies on obesity (see Box 2.8).

Box 2.7 *The role of ARSs in policy implementation in France*

In France, the 26 ARSs seek to improve links between the ambulatory and hospital sectors, and between health and social care sector services at the regional level, subject to budget constraints, through a regional strategic health plan (*Plan stratégique régional de santé* (PSRS)) based on population needs.

With regard to obesity, ARSs implement public health actions defined in the National Health and Nutrition Plan (*Plan national nutrition santé* (PNNS)) in collaboration with all stakeholders, often subcontracting NGOs, and with a focus on reducing social inequalities in health. The regional prefect (*Préfet de Région*) coordinates the action of other territorial state services involved in the implementation of the PNNS, such as environmental and agricultural services.

Box 2.8 *The role of local authorities in policy implementation in England*

In England, local authorities have some discretion about what to prioritize, albeit subject to severe financial pressures following a decade of austerity. They can act through environmental licensing, consumer protection and social care and through partnerships with health and community organizations. Since 2013, when they assumed responsibility for public health, they have started to commission certain services, including weight management programmes. The extent to which they prioritize public health is often influenced by their political composition, with some ideologically opposed to action on social determinants of health.

Local authorities (in charge of public health, as well as adult and children social care) and NHS Clinical Commissioning Groups are able to collaborate through the Health and Wellbeing Boards, while the Director of Public Health can make recommendations for action and contribute to joint strategic needs assessment. Different Health and Wellbeing Boards vary in their composition and so can involve food and agricultural interests, with the risks that this brings. Some Health and Wellbeing Boards include representation from district councils – the so-called second tier councils outside the large metropolitan areas. The district council portfolio includes town planning, housing, environmental health and trading standards and leisure and therefore will have a strong interest in obesity. Health and Wellbeing Boards have the potential to deliver joint programmes on obesity, through policies and directly managed or commissioned services.

One of the main challenges to implementation of obesity policies is funding. Faced with funding cuts, many local authorities are looking at obesity services as a likely area to cut and Birmingham, for example, has stopped funding weight management services.

In Italy, regional health departments implement national guidelines and laws and may directly fund some regional projects, which are all detailed under Regional Prevention Plans. They work with their networks of Local Health Authorities and hospital trusts (*Aziende Ospedaliere*, AOs) to which executive functions are largely delegated.

In the Netherlands, responsibility for implementation of the national public health plan and the corresponding municipal public health plans rests largely with the municipalities. However, an evaluation by the Healthcare Inspectorate of the content and quality of local health plans in 2009 found that these were often insufficient, did not always include all strategic priorities ("spearheads") and were poorly implemented (Health Care Inspectorate, 2009).

In Sweden, county and municipal levels have considerable autonomy in implementing activities for public health, including setting priorities, funding and implementing activities (Allin et al., 2004). Some county councils (e.g. Stockholm and the region of Västra Götaland) have been very active in the area of obesity and have elaborated action plans on obesity for health care services.

Other actors

A large range of other actors are involved in the implementation of obesity policies in the various countries, including other public authorities, NGOs, the media, but also the food industry.

In Italy, formal mechanisms for collaboration have been established with the National Institute of Health (ISS), AGENAS, the National Medicines Agency (*Agenzia Italiana del Farmaco*), the Ministry of Education, University and Research (e.g. Keep an Eye on Health; HBSC), the European Network for the Promotion of Health-Enhancing Physical Activity – HEPA, the Department of Youth Affairs, the Ministry of Agriculture (e.g. for the development of dietary guidelines), the food industry, trade and food chain associations, and the National Committee for Dietetics and Nutrition.

In Germany, the Platform for Diet and Physical Activity (PEB) was established in September 2004 (Platform for Diet and Physical Activity, 2018). It aims to promote healthy diets and active lifestyles and to give consumers a voice in the discussion with policy-makers and representatives from industry. The platform promotes a number of programmes and is supported by a scientific committee. It brings together approximately 100 stakeholders, including stakeholders from the food industry, food producers, researchers, health insurers, sports unions and government representatives (EASO-Study, 2014). However, the platform has been heavily influenced by the food industry, which dominates its membership. Out of more than 100 members, only 6 represent consumers and

educators, 8 come from the sports sector, 10 represent the public sector, 11 are from science, 16 from the field of health, 20 represent companies, associations or foundations, and 31 represent the food industry, including Coca Cola and Danone (ZDF Frontal 21, 2014). Public health organizations have not been involved in the platform.

In some other countries, the food industry is also heavily involved in the implementation of obesity-related policies. In Poland, the food industry closely cooperates with the Ministry of Health, as well as with the National Food and Nutrition Institute (NFNI) and the Chief Sanitary Inspectorate. For example, it contributes to public health education campaigns aiming to raise awareness on obesity, such as the "*Trzymaj Formę*" ("Keep in shape") campaign run by the Chief Sanitary Inspectorate (*Trzymaj Formę*, 2018). This has similarities with the discredited Global Energy Balance Network established by Coca Cola to focus attention on physical inactivity rather than consumption of its sugar-sweetened products (Barlow et al., 2018). A consistent feature of food industry messaging is individual responsibility for health and health choices, rather than legislative or regulatory action, promoted through well-funded mass media campaigns and, in some countries, educational activities and sponsorship in schools. Most large private or public food corporations in Poland support actions aimed at raising awareness in the area of nutrition and physical activity, such as through sponsoring sport events organized at the local or national level, e.g. football championships for school pupils. In contrast, the involvement of NGOs in policy implementation is limited in Poland.

In Sweden, measures have been promulgated in some other areas to address obesity. Maternal and child health services, which reach virtually all pregnant women, partners and their children, are responsible for monitoring the development of weight and height among children and mothers, and provide some health information to families. Another important policy is the provision of Sweden's free and nutritious school meals for all pupils in primary and secondary schools, which dates back to the 19th century, and more recently, EU-subsidized low-fat school milk (Patterson & Schäfer Elinder, 2014).

Funding

One of the main challenges to implementation of obesity policies is funding. In Moldova, for example, during the period of 2014–2015, no funds were allocated for policy implementation (Box 2.9).

Monitoring and evaluation

Most of the nine countries (except Sweden and Poland) have some mechanisms

Box 2.9 *Lack of funding for policy implementation in Moldova*

In order to implement Moldova's National Food and Nutrition Programme all relevant public authorities are tasked with developing their respective internal action plans and to report on an annual basis to the Ministry of Health on the results achieved. The Ministry of Health has adopted its own action plan that details the tasks and procedures for implementation of obesity-related interventions by the public health centres and medical institutions subordinated to the Ministry of Health. Interventions for obesity prevention as well as other public health interventions are financed by the state budget that is allocated through the Ministry of Finance based on the midterm budgetary framework. However, although obesity has been recognized by the Ministry of Health as a priority issue and the Action Plan of the National Food and Nutrition Programme has been approved by the Government, no specific activities were included in the midterm budgetary framework for 2014–2015. Therefore, no financial resources were allocated by the government to implement the National Food and Nutrition Programme Action Plan. Activities reflected in the Action Plan are to some degree implemented using the scarce internal resources of institutions, both human and financial, or using support provided by development partners.

in place for monitoring national obesity levels. Public health agencies tend to play a role but other actors may be important, such as national statistical institutes or NGOs. The monitoring and evaluation of national public health policies on obesity is less well developed, but in those countries where it exists, public health agencies tend to have a leading role.

Monitoring of obesity levels

In France, this role falls in part to the French Institute for Prevention and Health Education (*Institut national de prevention et d'éducation pour la santé* (INPES)), now part of Santé Publique France. Since the early 1990s, INPES, in cooperation with many institutions, has been conducting a series of surveys which examine health behaviours and attitudes. The National Institute for Public Health Surveillance (InVS), another public health agency in France now merged into Santé Publique France, is responsible for surveillance in all domains of public health. It is responsible for collecting, analysing and updating information on health risks, causes and trends, and to identify the most vulnerable or most-at-risk population groups.

In England, Public Health England has a role in the overall monitoring of obesity prevalence and other important lifestyle factors, including dietary habits, through the National Diet and Nutrition Survey. The Health Survey for England is also an important source of data. The National Obesity Observatory

is now part of Public Health England's knowledge and intelligence function, which helps to assimilate evidence into analytical and evidential tools for the local system, including the dataset for local authorities known as Fingertips (Public Health England, 2018). NHS Choices is a major online public and patient health information resource. Its information on obesity is extensive, and written in accessible English (NHS Choices, 2014). There is also a specific weight loss support guide (NHS Choices, 2014b).

In Germany, support from the Federal Government for the monitoring of obesity levels has been systematically extended in recent years, e.g. through the German Health Survey, the German Health Survey for Children and Adolescents, the National Food Consumption Survey and nutrition monitoring, which is hoped to result in a strong health monitoring system based on regular surveys (IN FORM, 2008).

In Italy, an example of routine monitoring is the Ministry of Health's annual monitoring of the delivery of the health benefits package, known as the Essential Levels of Assistance (*Livelli Essenziali di Assistenza* (LEA)) across the country. Obesity is included as part of the descriptive lifestyle indicators and as a risk factor for chronic noncommunicable diseases. In addition, the National Observatory on Alcohol and the National Institute of Statistics (ISTAT) and the National Institute of Health (ISS) coordinate the main national surveillance systems for children and adults which provide useful information for planning preventive and protective measures for population health.

In the Netherlands, development of the national public health plan is based on the periodical publication of the National Public Health Status and Foresight Report by the National Institute for Public Health and the Environment (*Rijksinstituut voor Volksgezondheid en Milieu* (RIVM)). One of RIVM's main responsibilities is data collection on population health, including obesity.

In Moldova, the obesity surveillance system has been strengthened with technical support by WHO and financial support by development partners such as the EU and the Swiss Development Agency. In 2013, the Republic of Moldova became part of the COSI and STEPS surveys. The first COSI survey was implemented in 2013 and the same year also saw the first STEPS survey of NCD risk factors among Moldova's adult population (18–69 years).

In Sweden, nationally representative data on overweight and obesity are lacking (Box 2.10). In Poland, too, there is little systematic data collection on the prevalence of obesity and overweight and data gathered are often not representative of the whole population nor comparable across surveys. The 2015 Public Health Act states that at least 10% of resources allocated to the implementation of the National Health Programmes (NHP) will be dedicated

Box 2.10 *Monitoring obesity prevalence in Sweden*

In Sweden, the responsibility for performing surveys lies with the Public Health Agency. Trends in dietary habits and levels of physical activity in the population have been monitored by the agency and reported in public health reports. Nationally representative data on obesity among children in Sweden are not available (Sundblom et al., 2008), but some regions have been monitoring long-term trends based on data from routine school health examinations (Marild et al., 2004; Petersen et al., 2003). Small-scale projects designed to reduce childhood obesity are evaluated through maternal and child health services, but no national database exists.

There are currently no national surveys measuring the height and weight of adults in Sweden. Both at national and regional level, surveys only cover self-reported height and weight, which are then used to calculate overweight and obesity rates. A number of smaller research projects also collect data on overweight and obesity (Doring et al., 2014; Nyberg et al., 2015), although they do not form part of the health information system run by the Ministry of Health and Social Affairs.

to monitoring, evaluation, and scientific research in the field of public health, including obesity. If this target is met, significant improvements could be made to data collection and evaluation in this area.

In a number of countries, national institutes of statistics contribute to the monitoring of obesity prevalence. For example, in Italy, the National Institute of Statistics (ISTAT) produces the multipurpose Aspects of Daily Life Survey, and collaborates with the National Observatory on Health Status in the Italian Regions (*Osservatorio Nazionale sulla Salute nelle Regioni Italiane*), which collects comparable regional data from different sources and monitors population health in Italy's regions.

Monitoring and evaluation of obesity policies

Several countries have also established mechanisms for the monitoring and evaluation of obesity policies.

In the Netherlands, evaluation of the national public health plan is the responsibility of the Health Care Inspectorate. An evaluation by the Healthcare Inspectorate of the content and quality of local health plans in 2009 found that 50% of municipalities did not monitor or evaluate their activities in public health (Health Care Inspectorate, 2009).

In the Republic of Moldova, the Ministry of Health is responsible for monitoring and reporting annually to the government on progress with implementation of the first National Food and Nutrition Programme for 2014–2020 (NFNP).

In Poland, systematic evaluation of programmes is still lacking. However, the 2015 Public Health Act states that at least 10% of resources allocated to the implementation of the National Health Programmes (NHP) will be dedicated to monitoring, evaluation and scientific research in the field of public health.

In Sweden, the responsibility for conducting evaluations of national public health policies lies with the Public Health Agency. Other national-level institutions evaluate the implementation of their own protocols. For example, in 2015 the National Board of Health and Welfare evaluated the implementation of national guidelines on disease prevention that it had issued in 2011, concluding that action needed to be intensified (National Board of Health and Welfare, 2015).

In Italy, monitoring and evaluation of policies addressing obesity are directly undertaken by regional health departments. In some regions, health agencies have been given dedicated funds to provide technical and scientific advice to the regional health departments and local health authorities. Furthermore, some public health observatories have been set up in different regions, provinces and local health authorities to deliver a range of quality indicators for planning and monitoring purposes. In a further initiative, in November 2014, the State-Regions Conference approved the issuing of a decree that will provide an improved instrument for the evaluation of Regional Prevention Plans for 2014–2018, extending to some of the most significant areas of prevention.

Conclusion and outlook

Obesity is one of the greatest challenges to health systems worldwide. Effective responses require an intersectoral approach, but public health organizations should play a key role. This chapter has presented an in-depth assessment of the role played by public health organizations in addressing obesity in nine European countries, exploring their involvement in the various stages of the policy cycle, from agenda-setting to policy formulation, decision-making, policy implementation, monitoring and evaluation.

As expected, policy development, implementation, monitoring, and evaluation take place at different levels within each country, largely reflecting the distribution of responsibilities within the administrative structure. What is important is not the level that these activities take place but whether they are at the level that corresponds with the ability to obtain resources and to take action. Thus, in Moldova, there is a national plan and many different organizations are expected to implement it but they have been given no resources to do so. In England, local authorities have responsibility to address the health needs of their populations but many of the most effective measures in tackling obesity are

denied to them because of constraints in their powers in areas such as planning (for example, limiting numbers of outlets selling junk foods in certain areas).

Monitoring and evaluation is generally limited. There are few high-quality surveys undertaken regularly, with measurement, as opposed to the less accurate self-report, of height and weight. The Health Survey for England is a rare exception.

Worryingly, the food industry has a major influence on obesity policies in several countries, despite what is now considerable evidence of how they divert attention away from measures that work towards those that are ineffective.

One striking finding from the countries studied is the lack of action on the upstream determinants of health. These should address, for example, food insecurity – now a major problem in many countries, with large numbers of people unable to afford a healthy diet. This is compounded, in some countries, by difficulties in accessing fresh food at affordable prices, as retailers inevitably concentrate their outlets where they can maximize profits. Countries should also make full use of fiscal measures. The sugar tax in the United Kingdom is a good example of what can be done, as manufacturers have suddenly discovered that it is possible to reformulate products to have less sugar, after many years of arguing that it was impossible. However, much more could be done elsewhere and, as with tobacco taxation, it is important to maintain continued upward pressure. Other opportunities are almost completely lacking. Thus, the alcohol industry has been very successful in blocking nutritional labelling on its products, even though they are a major source of calories for many people. Urban planning and other measures to encourage physical activity are other areas where responses have been patchy, although there are some excellent examples of what can be done in some countries, such as the networks of cycle lanes in the Netherlands, Denmark and Germany.

However, the biggest barrier to effective responses is the continued perception of obesity as a result of freely taken lifestyle choices, with the corollary that measures to legislate or regulate are in some way an assault on freedom. This conveniently ignores how many policies that are adopted are even greater restrictions on freedom, such as welfare policies that deny the poorest in society the ability to eat a healthy diet, or lobbying activities, sometimes verging on corruption, that block healthy public policies ever getting onto the agenda.

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Chapter 3
Alcohol

Anna Sagan, Bernd Rechel

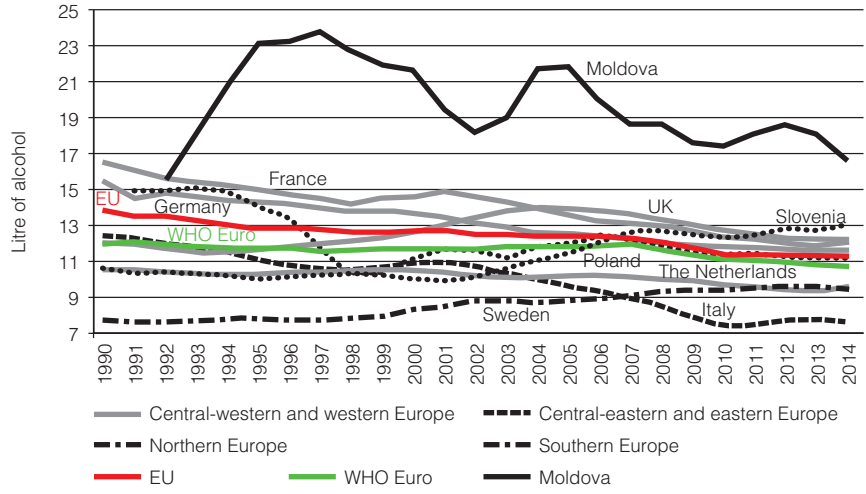
Introduction

Alcohol consumption remains one of the major risk factors for disease and premature mortality in Europe, with all countries having recognized, to some extent, the importance of alcohol control policies. This chapter examines the involvement of public health organizations in these policies in nine European countries (England, France, Germany, Italy, the Republic of Moldova, the Netherlands, Poland, Slovenia and Sweden). It is based on country reports that describe the policy response and the involvement of public health organizations in the different stages of the policy cycle in more detail (see Online Appendix).

Scale of the problem

In 2014, an adult EU citizen drank on average 11.3 litres of pure alcohol per year (Fig. 3.1). This is almost double the world average of 6.3 litres per capita (WHO GHO, 2016; 2008–2010 data), making the EU the region with the highest alcohol consumption in the world. While average alcohol consumption in the EU decreased steadily between 1990 and 2014, by almost 20%, a closer look at the selected nine countries reveals wide variations in amounts consumed (Figs. 3.1 and 3.2), consumption patterns (Fig. 3.3) and consumption trends (Figs. 3.1, 3.2 and 3.3). Five out of the eight EU countries studied saw declines in the total amount of alcohol consumed, with Italy noting the largest fall (39%). At the other end of the spectrum were Poland, the Netherlands and the United Kingdom, where increases of up to 23% (Poland) were noted between 1990 and 2014. This is consistent with trends widely described in the literature: reductions of consumption in southern Europe, increases in north-western Europe and fluctuations and recent increases in central and eastern Europe (see, for example, Shield et al., 2012), though of course there are some notable exceptions to these country groupings (Shield et al., 2012).

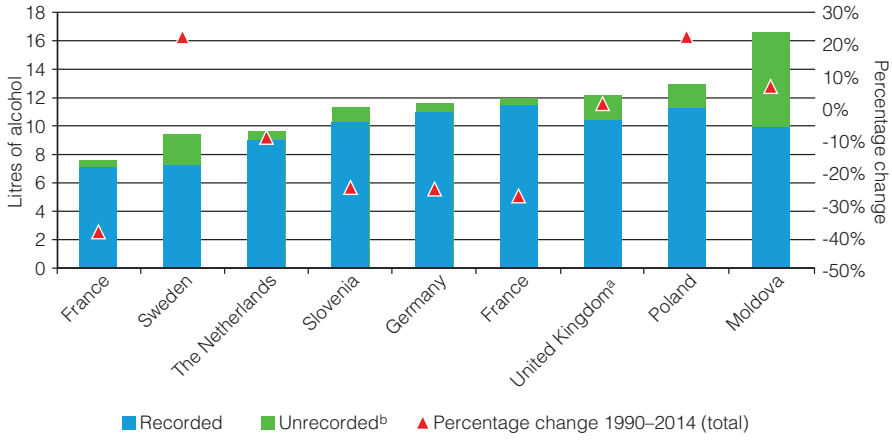
Fig. 3.1 *Total adult per capita consumption of alcohol (in litres of pure alcohol) in selected EU member states and the Republic of Moldova, 1990–2014*



Source: WHO, 2016b

Notes: Country groupings for EU countries based on Shield et al., 2012
Data available for the UK as a whole, including England

Fig. 3.2 *Consumption of alcohol (in litres of pure alcohol) in selected EU member states and the Republic of Moldova, 2014*

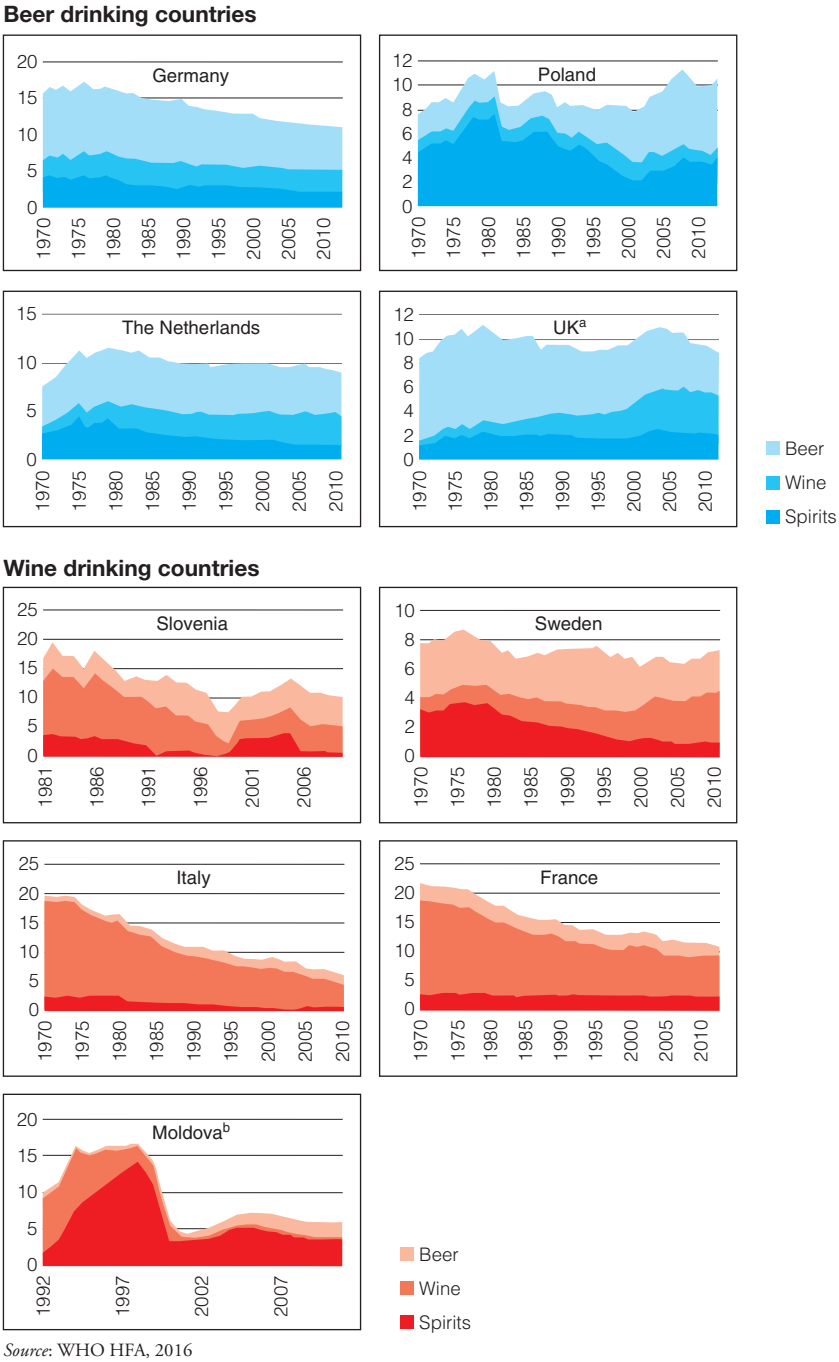


Source: WHO, 2016b

Notes: [a]Data available for the UK as a whole, including England.
[b]Unrecorded consumption refers to alcohol which is not taxed and is outside the usual system of governmental control, such as home or informally produced alcohol (legal or illegal), smuggled alcohol, surrogate alcohol (which is alcohol not intended for human consumption), or alcohol obtained through cross-border shopping (which is recorded in a different jurisdiction).

While in most EU countries unrecorded consumption of alcohol is relatively small, meaning that recorded consumption is a good approximation of total consumption, this is not the case in the Republic of Moldova – the only

Fig. 3.3 *Trends in recorded consumption of beer, wine and spirits in selected EU member states and the Republic of Moldova, 1970–2013*



Source: WHO HFA, 2016

Note: Countries sorted according to alcoholic beverage accounting for the highest percentage of total alcohol consumption in 2013.

[a] Data available for the UK as a whole, including England.

[b] Because of the high unrecorded consumption of wine, we classify Moldova as a wine drinking country in spite of the fact that spirits consumption in this country in 2013 accounted for the highest share of total alcohol consumption.

non-EU country studied in this volume. In 2011 Moldova was ranked as the country with the highest alcohol consumption in the world (WHO, 2011). In 2014, total adult consumption of pure alcohol per capita stood at 16.6 litres, the highest among the nine countries studied (Fig. 3.1). Unrecorded consumption in this country accounts for about 40% of total consumption (WHO, 2016b). Home-produced wine accounts for most unrecorded alcohol consumption in Moldova and, if accurately recorded, it would make Moldova a predominantly wine-drinking and not a spirit-drinking country, as it appears in official statistics (see Fig. 3.3).

Policy responses and policies affecting alcohol consumption at the European level

Policy responses at the European level

The WHO Regional Office for Europe has a long history of proposing action on alcohol, set out in many publications and policy documents (Table 3.1). These efforts were given a boost in 2010 by the adoption of the WHO global strategy to reduce the harmful use of alcohol (Anderson et al., 2012).

In the EU, alcohol policy became politically prominent with the introduction and aggressive marketing of alcopops (sweet fizzy alcoholic drinks) to adolescents after 1995 (Anderson & Baumberg, 2006). The publication, in 2001, of the European Council conclusions inviting the European Commission (EC) to develop a Community strategy to reduce alcohol-related harm and of the Council recommendation to address drinking by young people, particularly children and adolescents, is considered the start of specific action on alcohol as a public health issue at the EU level (Anderson et al., 2012) (Table 3.1).

The role of the alcohol industry features strongly throughout this chapter. While a considerable proportion of alcohol production and sales remains in the hands of small operators, such as individual vineyards or micro-brewers, there has been substantial consolidation of the industry in recent years, with many seemingly independent labels owned by a small number of global corporations. These corporations are extremely powerful and have adopted many of the same tactics as the tobacco industry. They seek to shape the dominant narrative to suit their interests, for example by focusing the agenda on problem drinkers even though much alcohol-related harm arises in people who, while drinking above recommended limits, would not fall within this category. The corporations consistently oppose those measures that are most effective, on price, availability, and marketing, instead supporting largely ineffective educational approaches. They seek to shape the research agenda, for example by promoting impossibly high standards against which to establish causal relationships, as in the

Table 3.1 *Selected scientific and political documents on alcohol from the WHO Regional Office for Europe and the European Union*

WHO Regional Office for Europe	European Union
1975 – Alcohol control policies in a public health perspective	2001 – Council conclusions of 5 June 2001 on a Community strategy to reduce alcohol-related harm (2001/C 175/01)
1992 – European Alcohol Action Plan 1992–1999	2001 – Council recommendation of 5 June 2001 on the drinking of alcohol by young people, in particular children and adolescents (2001/458/EC)
1995, 2000 – European Charter on Alcohol	2002 – Decision No. 1786/2002/EC of the European Parliament and of the Council of 23 September 2002 adopting a programme of Community action in the field of public health (2003–2008)
2001 – Declaration on young people and alcohol	2006 – EU strategy to support Member States in reducing alcohol-related harm (Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions) (expired in 2012, not renewed)
2006 – Framework for alcohol policy in the WHO European Region (provides framework for implementing the European Alcohol Action Plan)	2007 – Decision No. 1350/2007/EC of the European Parliament and of the Council of 23 October 2007 establishing a second programme of Community action in the field of health (2008–2013)
2009 – Evidence for the effectiveness and cost–effectiveness of interventions to reduce alcohol-related harm	2009 – Council conclusions of 1 December 2009 on alcohol and health (2009/C 302/07)
2009 – Handbook for action to reduce alcohol-related harm	2014 – Joint Action on Reducing Alcohol-Related Harm 2014–2016
2010 – Best practice in estimating the costs of alcohol – Recommendations for future studies	2014 – Action Plan on Youth Drinking and on Heavy Episodic Drinking (Binge Drinking) (2014–2016)
2010 – European status report on alcohol and health 2010	
2012 – European action plan to reduce the harmful use of alcohol 2012–2020	
2012 – Alcohol in the European Union – Consumption, harm and policy approaches	
2013 – Status report on alcohol and health in 35 European Countries 2013	
2016 – Prevention of harm caused by alcohol exposure in pregnancy. Rapid review and case studies from Member States	
2016 – Public health successes and missed opportunities. Trends in alcohol consumption and attributable mortality in the WHO European Region, 1990–2014	
2017 – Policy in action: A tool for measuring alcohol policy implementation	

Source: Adapted from Anderson et al., 2012, and updated.

notorious Brussels Declaration, which also involved the tobacco industry (McCambridge et al., 2018). As with the tobacco, junk food, and gambling industries, they emphasize that problems are "complex", allowing them to attack individual measures, even though the public health community is well aware of the need for multifaceted approaches. They also operate through third parties, with their involvement concealed to varying degrees. These include associations purporting to represent retail outlets and thinktanks opposed to government action in any sector (except in areas such as protection of the intellectual property of manufactures where they do seek government action).

Yet, despite this, in some countries they are still viewed as legitimate partners by governments and even by some of those working in public health, although much less so than in the past.

Trade policies affecting alcohol consumption at the European level

Trade and other economic policies have a major impact on the policy options available to national policy-makers. This includes regulations of the World Trade Organization, which prioritizes trade over health, and EU trade law, which includes a "national treatment" rule on taxation, according to which states are forbidden to discriminate – either directly or indirectly – in favour of domestic goods against those from elsewhere in the EU. Agriculture and taxation policy at the European level is also of major relevance, with the Common Agricultural Policy subsidizing the production of alcoholic beverages (Anderson & Baumberg, 2006). An example of how these policies operate can be seen in Finland. Following the accession of nearby Estonia to the EU in 2004, the Finnish alcohol industry lobbied hard, and successfully, for reductions in taxation, using the improbable argument that very large numbers of Finns would make the sea crossing to Tallinn to buy alcohol (of course some did, but the threat was exaggerated). As predicted, alcohol-related deaths increased rapidly in Finland and, eventually the policy was reversed, but not before considerable unnecessary loss of life.

National alcohol control policies and strategies

A number of effective and cost–effective policy options are available to reduce alcohol consumption, in particular heavy drinking. These include so-called best buys of increasing price via taxation (unless there is much unrecorded consumption), restricting availability, and imposing a ban on marketing and advertising (Shield et al., 2016). The objective, justified on health grounds, is to shift the entire distribution of consumption in the population downwards. The alcohol industry strongly opposes these measures, preferring individual measures targeted at problem drinkers (many of whom have numerous other problems that should be addressed) and largely ineffective educational measures.

Growing recognition of the tactics of the alcohol industry has encouraged exchange of ideas on policies in many European countries (Anderson and Baumberg, 2006). In the immediate period after the Second World War, Norway, Sweden and Finland, which historically had very serious alcohol-related problems, but also strong temperance movements, had the strictest alcohol policies (as measured on the European Comparative Alcohol Study

(ECAS)[1] scale), with physical availability of alcohol tightly controlled through monopolies and rationing, among others. In contrast, alcohol policy barely existed in southern Europe, while countries in-between on the policy scale concentrated mainly on licensing restrictions.

By the end of the 20th century nearly all countries increased the strength of their alcohol control policies, justifying them on health or social grounds, with France and Spain seeing the biggest increases. The only exception was Finland (Norway and Sweden also dropped slightly on the ECAS scale), where traditional monopolies had been scaled back and some other restrictions relaxed, as noted above.

Yet, alcohol control policies still differ widely in important aspects, such as age limits, the existence of monopolies, taxes, advertising restrictions and regulations on drink-driving (Table 3.2).

Table 3.2 *Selected alcohol policies in the nine countries*

	Minimum age	Monopolies[a] and licensing hours	Taxes (% total retail price of 1 litre of pure alcohol)	Advertising on national TV	Drink-driving
France	Off-premise: 18 (SWB) On-premise: 18 (SWB)	Monopoly: No Off-premise sales restrictions: outlet density (SWB)	Excise tax: yes (SWB); 5.7% VAT on alcohol: 19.6	Ban (SWB)	Legal BAC limits: 0.05 (GYP)
Germany	Off-premise: 16 (BW), 18 (S) On-premise: 16 (BW), 18 (S)	Monopoly: No Off-premise sales restrictions: No	Excise tax: yes (SWB); N/A VAT on alcohol: 19	Partial restriction time/place/ content (SWB)	Legal BAC limits: 0.05 (G); zero tolerance (YP)
Italy	Off-premise: No (SWB) On-premise: 16 (SWB)	Monopoly: No Off-premise sales restrictions: outlet density (SWB)	Excise tax: yes (SB); N/A VAT on alcohol: 21	Partial restriction time/place/ content (SWB)	Legal BAC limits: 0.05 (G); zero tolerance (YP)
The Netherlands	Off-premise: 16 (BW), 18 (S) On-premise: 16 (BW), 18 (S)	Monopoly: No Off-premise sales restrictions: No	Excise tax: yes (SWB); 29.5% VAT on alcohol: 19	Partial restriction time/place (SWB)	Legal BAC limits: 0.02 (Y), 0.05 (GP)

1 The European Comparative Alcohol Study (ECAS) covered the years 1950–2000 and included all EU member states as of 1995 as well as Norway, and was co-financed by the EU.

Table 3.2 *contd.*

Poland	Off-premise: 18 (SWB) On-premise: 18 (SWB)	Monopoly: No Off-premise sales restrictions: places (SWB)	Excise tax: yes (SWB); 18.2% VAT on alcohol: 23	Ban (SW); partial restriction time/place (B)	Legal BAC limits: 0.02 (GYP)
Republic of Moldova	Off-premise: 18 (SWB) On-premise: 18 (SWB)	Monopoly: Yes Off-premise sales restrictions: places (WS)	Excise tax: yes (SWB); N/A VAT on alcohol: 20	Partial restriction time/place (SW); no restrictions (B)[b]	Legal BAC limits: 0.03 (GYP)
Slovenia	Off-premise: 18 (SWB) On-premise: 18 (SWB)	Monopoly: No Off-premise sales restrictions: hours, places (SWB)	Excise tax: yes (SWB); 12.5% VAT on alcohol: 20	Ban (S); partial restriction time/place (WB)	Legal BAC limits: 0.05 (G); zero tolerance (YP)
Sweden	Off-premise: 16 (BW), 18 (S) On-premise: 18 (SWB)	Monopoly: Yes Off-premise sales restrictions: days (SWB), hours (SWB); outlet density (SWB)	Excise tax: yes (SWB); 25.4% VAT on alcohol: 25	Ban (SWB)	Legal BAC limits: 0.02 (GYP)
United Kingdom	Off-premise: 18 (SWB) On-premise: 18 (SWB)	Monopoly: No Off-premise sales restrictions: outlet density (SWB)	Excise tax: yes (SWB); 19.5% VAT on alcohol: 20	Partial restriction time/place/ content (SWB)	Legal BAC limits: 0.08 (GYP)

Source: GHO, 2016

Notes: S: spirits; W: wine; B: beer; BAC: blood alcohol content; G: general population; Y: young/novice drivers; P: professional/commercial drivers; N/A: not available.

[a]Government monopoly on retail sales.

[b]The Ministry of Health is in the process of amending legislation on advertising to include a total ban for alcoholic beverages (Moldova report on alcohol control, see Online Appendix).

The role of public health organizations in alcohol control in the selected countries

Problem identification and issue recognition

While only two out of nine countries covered in this study (the Republic of Moldova and England) had a distinct alcohol strategy at the time of writing (2017), all recognized alcohol as a national health policy priority. The lack of a distinct strategy may not necessarily be bad – it can indicate a more cohesive, integrated approach to tackling addiction problems. For example, the Swedish

Alcohol, Narcotic Drugs, Doping and Tobacco (ANDT) Strategy 2011–2015 combined the formerly separate goals for alcohol and narcotic drugs with those for tobacco and doping.

The Swedish strategy appears almost as a textbook example of a public health strategy. Its aim was to develop a cohesive view of the common factors underlying the origins of these problems and their solutions and improve coordination and cooperation between the various actors involved in the strategy's implementation (Swedish Ministry of Health and Social Affairs, 2011). The strategy takes a public health perspective and relates to international policies in the field. It is multisectoral, has a life-course perspective, and includes primary prevention as well as rehabilitation. It seeks to limit the physical availability of alcohol (with the support of the police, customs, and inspection of responsible sale of alcohol at restaurants and bars); preventing children and youth from damage and delaying their initiation of alcohol use; and improving health services for people in need of medical treatment and social care. The strategy encompasses many relevant actors at different levels, with a leading role for public health organizations at the national level, but also designated coordination mechanisms at county and municipal level. It is accompanied by a plan for monitoring and evaluation, including international comparison and evaluation.

In all countries included in this volume it is the Ministry of Health (or its equivalent) that holds the responsibility for problem identification and issue recognition in the area of alcohol control. In this task, the ministries are supported by national, often subordinate agencies that provide the relevant evidence base, by monitoring consumption patterns and relevant public health indicators. These agencies may also provide policy advice (e.g. Public Health England).

Concerns about the health consequences of alcohol can reach the agenda in many ways, for example through publication of research by academic bodies, advocacy by NGOs, and in some cases, media reporting. In England, a report on alcohol-related harm commissioned by the Chief Medical Officer was especially influential. It included a series of meta-analyses quantifying the relationship between alcohol and a range of diseases. The analysis showing that any level of consumption increased the risk of cancer was especially important, although this stimulated the alcohol industry, aided by certain thinktanks with extremely opaque funding, to launch a sustained attack both on the report and on the Chief Medical Officer personally (and her family members). Research commissioned by the English Department of Health on the advantages of minimum unit pricing has also been very influential. Adoption of this policy in Scotland was very strongly opposed by the industry, which launched a legal challenge against it. This was widely interpreted as a means to delay its eventual

implementation in 2018, with most commentators viewing the industry's attempt to use European law as futile.

International organizations can also play a role, (e.g. through the European Information Network on Drugs and Drug Addiction in France where the French Observatory on Drugs and Addictions is the focal point) or WHO's work in this area (e.g. Moldova started addressing alcohol health-related issues in 2011 when WHO's global status report on alcohol and health ranked it as the country with the highest level of alcohol consumption in the world).

At the regional and local levels, governments (e.g. regional governments in Italy, local authorities in England) or health agencies (e.g. regional health agencies in France) may draw attention to alcohol-related problems or otherwise may have a role in setting the national policy agenda (e.g. via the State-Regions Conference in Italy).

Public health organizations can play a role in supporting the Ministry of Health in problem identification and policy formulation. This is often done by national public health agencies, reflecting their greater analytic capacity (e.g. the National Institute on Health Prevention and Education (INPES) and the National Institute for Public Health Surveillance (InVS) in France; the National Public Health Institute in Slovenia; and the Department of Health and Public Health England in England) and/or national agencies that are specifically focused on alcohol or other addiction problems (e.g. the French Observatory on Drugs and Addictions in France; the National Observatory on Alcohol in Italy; the State Agency for the Prevention of Alcohol-Related Problems (PARPA) in Poland; and the Alcohol, Narcotic Drugs, Doping and Tobacco (ANDT) committee within the Ministry of Health and Social Affairs in Sweden). Their work is informed by national statistical agencies. However, it would be wrong to focus only on formal institutional structures; several successful initiatives have been developed by committed individuals who have developed local coalitions for action, such as work on reducing alcohol-related harm in Cardiff, the capital of Wales, led by a maxillofacial surgeon working with the local public health department, the police, and other agencies and retail outlets.

Public health agencies should report relevant public health indicators as part of their monitoring role, and, where they have the means to do so, might propose policies. Again, the level at which this is undertaken follows the administrative structure of the country in question, with a greater role for the regions in France and Italy.

Policy formulation

Several ministries are likely to be engaged in policy on alcohol, depending on how the issue is framed. Thus, in countries where alcohol manufacture is important (which includes, to a greater or lesser degree all of the countries included here), ministries of agriculture or trade may dominate. Finance ministries lead on alcohol taxation. Alcohol-related harm, especially that involving violence, is likely to fall within the scope of interior ministries, while drink-driving also falls within the remit of transport ministries. However, this list is not exhaustive and other ministries, such as education, may also have an interest. In this complex environment, health ministries may struggle to get their voices heard, even if they have given priority to alcohol-related health problems, which not all do. Where they do, there may be mechanisms to enhance coordination, such as the Interministerial Mission for the Fight against Drugs and Addictive Behaviours in France or Intergovernmental Group on Road Safety in Slovenia. Such mechanisms may also include other actors, such as scientific organizations, academia, NGOs, media, civil organizations, etc. Examples of such collaboration can be found in Germany, Italy, Moldova and the Netherlands (see Box 3.1).

Box 3.1 *Collaborative approach to alcohol policy formulation – examples from Germany and Italy*

Several countries among the nine countries analysed in this chapter have established strong collaborative approaches to developing alcohol policies. In Italy and Germany, this collaboration stems from the federal structures of these countries. In Italy, it also appears to arise from the need to ensure coherence between the state and regional levels and from the approach to alcohol policy, which consists of wide-ranging strategies whose implementation involves many actors at different government levels (see the Policy implementation section).

In **Italy**, collaboration in policy formulation among the various levels of administration (from national to local), but also among other bodies such as the NGOs and research organizations, is ensured mainly by formal mechanisms that regulate two national committees: the National Platform on Diet, Physical Activity and Tobacco and, until 2010, the National Consultation on Alcohol and Alcohol-related Problems. Both of these committees have played key roles in the initiation of new policies on alcohol, bringing together representatives of civil society, the scientific community, industry and members of key institutions. The Platform provides the arena for the definition of cross-sectoral strategies and for the development of synergies among all stakeholders according to the principle of "health in all policies". The Minister of Health chairs the platform and every three years appoints its members. The responsibilities of the National Conference included cooperation with international organizations that

Box 3.1 *contd.*

deal with alcohol and alcohol-related problems and the formulation of proposals and opinions for ministers and regional governments; the National Conference also served as an informal mechanism that promoted debate among key stakeholders. Its funding was not renewed in 2010 but some associations have recently asked for its reestablishment.

In **Germany**, Gesundheitziele.de (health-targets.de) is a collaboration that started as a joint pilot project of the German Federal Ministry of Health and the GVG (Association for Social Security Policy and Research) in 2000. Since 2007, it has been a forum of more than 120 member organizations aiming to advance the development of the national health target process. Among them are the Federal Government, the States (Länder), municipal associations, statutory and private health insurance organizations, pension insurance organizations, health care providers, self-help and welfare organizations and research institutes. There is also one representative of the Federal Association of Physicians of the Public Health Service (BVÖGD) on the Committee that serves as a discussion forum for all technical questions of national health targets and contributed to developing their content. For specific tasks, the Committee sets up working groups that assess the scientific basis for the respective health target and formulate specific objectives. Among the 33 members of the working group on "Reducing Alcohol Consumption" two were from the public health service (ÖGD): one from the Public Health Office in Cologne and the Federal Association of Physicians of the Public Health Service and one from State Public Health Office in the federal state of Baden-Württemberg. The Committee was chaired by the Director of the Federal Centre for Health Education. The public health service is thus actively involved in the agenda-setting in the area of alcohol control. However, how far the national health target will affect the local level depends very much on the local agenda, on how far alcohol consumption has been recognized as a problem, and on the amount of project funding that is available for alcohol prevention (see the Policy implementation section).

Source: Country reports, see Online Appendix.

In many cases, the alcohol and hospitality industries may also be involved, sometimes playing a disproportionately powerful role. Even when not formally involved in coordinating structures, they may contribute to policy through consultations or lobbying (see Box 3.2). In this context, the role of the hospitality industry deserves particular attention. In some cases, its trade associations genuinely represent the interests of those operating bars and restaurants but in others they are essentially fronts for the large alcohol corporations. These differing roles are apparent in England and Scotland, where the two trade groups take different positions on minimum unit pricing, a policy that favours small retail outlets by reducing competition from large supermarkets.

Box 3.2 *The importance of the alcohol industry in policy formulation – examples from the United Kingdom and the Republic of Moldova*

The alcohol and hospitality industry has had an influential role in policy formulation in the **United Kingdom**. The Portman Group (TPG) (Portman Group, 2018) is an organization founded and financed by the alcohol industry that claims to promote social responsibility within the industry, primarily focusing on responsible marketing, labelling and speaking for its members. The Portman Group purports to "show leadership on best practice in the area of alcohol responsibility" and to "foster a balanced understanding of alcohol-related issues". However, many alcohol experts regard it as an attempt by the alcohol industry to portray alcohol as distinct from other kinds of drugs and to give it a respectable public face. It also offers a means to obtain high-level access by industry to government officials. Reflecting on the role played by the Portman Group in the development of the English Public Health White Paper "Choosing Health: Making healthy choices easier" (2004), an alcohol industry executive told The Grocer magazine, "The Portman Group was set up as our insurance policy. Getting all the different competitors to work together has not been plain sailing but the creation of the group has definitely benefited us all. There was nothing in the White Paper that was a surprise. We are already ahead of the game in most areas" (Powerbase, 2018).

When the minimum unit price proposed under the 2012 alcohol strategy in England was rejected, alcohol policy was wrapped up in a voluntary agreement with industry in the form of the "Responsibility Deal". The Responsibility Deal was intended to be a partnership between government, industry and public health organizations to agree interventions by industry which would demonstrate their corporate social responsibility and promote health. There was an overarching Responsibility Deal forum chaired by a senior civil servant and more specific Responsibility Deal forums dealing with alcohol, food, physical activity and health in the workplace. Researchers from the London School of Hygiene & Tropical Medicine (LSHTM) were commissioned to evaluate the initiative. Many public health advocacy organizations refused to take part in the Responsibility Deal, and more left the initiative in 2013 when it became clear that government commitments to legislate on minimum unit price for alcohol were side-lined and that these and other meaningful interventions by government were facing behind the scenes lobbying by industry. By 2016, the alcohol core group membership was dominated by industry partners, with the exceptions of Addaction (a drug and alcohol treatment charity receiving funding from the industry), Mentor UK (an NGO aiming to prevent drug and alcohol misuse among children and young people) and the Association of Chief Police Officers. One specific expectation of the Responsibility Deal was that interventions could be delivered within the lifetime of a single parliament. That did not happen, and industry successfully delayed effective interventions such as legislation, taxation and regulation.

Box 3.2 *contd.*

The alcohol industry in the **Republic of Moldova** is a major contributor to the national economy, contributing about 7% of national industrial production (down from about 20% in 2003–2006; the decline largely being the result of the embargo imposed by the Russian Federation since 2006). While the alcohol industry has so far not taken part directly in policy formulation, the Ministry of Economy is influential in supporting the business environment, including the alcohol industry. Even decisions on increasing excise taxes, reducing access to alcoholic beverages, and advertising bans, which have been proven effective in reducing alcohol consumption, are influenced by the alcohol industry. As a result, some decisions on alcohol control policies involve compromises. For example, while the sale of alcoholic beverages in retail stores was banned between 22:00 and 08:00, sales in bars, clubs and restaurants were not prohibited.

While the alcohol industry is powerful, the Ministry of Health has strong allies that promote and support its alcohol control policies: the Ministry of Internal Affairs, the Ministry of Education, the Ministry of Youth and Sport, and the Ministry of Social Protection, Labour and Family. In 2011, the Ministry of Health initiated discussions on the harmful use of alcohol as a risk factor with a major impact on public health. The authority used the WHO's global status report on alcohol (2011) as "a window of opportunity" for proposing an alcohol strategy. Inviting the participation and involvement of other authorities responsible for alcohol control policies in policy formulation has guaranteed the broad approval of the National Alcohol Control Programme.

Source: Country reports, see Online Appendix

At the regional and local levels, authorities are usually expected to transpose national policies into local ones, taking into account their specific contexts. Where powers are devolved, they may be able to play a greater role in formulating policies. Examples from the nine selected countries include the power to introduce local regulations (e.g. France, Italy, Slovenia) or lobbying the national government (e.g. lobbying by city mayors in the Netherlands).

Decision-making

National decision-making again follows the administrative structure of the country concerned, with legislation being made in national parliaments or, in some cases, regional assemblies. In some countries, legitimation of policies may additionally be sought through national committees representing various stakeholders (e.g. through the National Platform on Diet, Physical Activity and Tobacco in Italy) or through expert committees (Sweden), regulatory impact assessment (e.g. in Moldova, for policies impacting alcohol producers and business environment), or public consultation processes (Poland, Slovenia).

Legitimation is usually sought at the national level and less so at regional or local levels, where national policies are typically merely transposed to local ones.

Public health organizations can contribute to legislative and regulatory decision-making. In Germany this may be through regional or local health conferences or by providing expert opinions, whereas Slovenia invited members of the National Public Health Institute to provide expert opinions as invited guests in parliamentarian discussions, and Italy established the National Platform on Diet, Physical Activity and Tobacco.

Policy implementation

Responsibility for implementation of policies largely lies with the relevant ministries, which may delegate this responsibility to a subordinate agency and/or another body, and/or regional or local authorities, depending on the administrative structure of the country.

A key challenge to the implementation of alcohol strategies in the countries included here is lack of dedicated resources. Local and regional authorities in England and Italy have experienced large reductions in funding in recent years. An added problem in England following the transfer of public health to local government is that action on alcohol-related harm may be seen as an issue that impacts on health service costs, and so should be picked up by the NHS commissioners rather than local authorities. An added problem is that police budgets in England have been severely cut, with likely implications for enforcement of drink-driving laws. In Italy, the impact of reduced financing has already been felt: in 2010 the National Consultation on Alcohol and Alcohol-related Problems was discontinued, while the funds allocated for the prevention of alcohol-related harm, including drink-driving enforcement by the police, were considerably lower than the maximum amount allowed by different laws. In Moldova, in the period 2012–2015 there were no resources allocated for the implementation of the Alcohol Control Programme. All activities had to be undertaken within existing budgets of relevant authorities. In Germany, where alcohol control is not formally on the agendas of local public health organizations, competition for project funding between different providers of prevention measures makes it more difficult to fund these activities.

Public health organizations may play a role in policy implementation. The Ministries of Health delegate responsibility to a national public health agency, another national body (France, Moldova, Poland, Sweden, Slovenia) or to regional/local authorities (France, Germany, Italy, Moldova, the Netherlands, Sweden, England). The role of public health organizations at the local level, and therefore policy implementation, appear to be weaker in Germany (Box 3.3)

Box 3.3 *Role of public health organizations at the local level in Germany*

In **Germany**, the role of public health organizations in policy implementation is confined to setting up and running some local projects or being involved in local activities. However, the main actors in the field are not local public health organizations, but schools, youth clubs, social workers and youth centres. Alcohol control is not a key task of local public health organizations in Germany and therefore not explicitly on their agenda. Only a few (typically 1 to 3) employees within the local public health service, such as social workers, health workers or social medical assistants, are in charge of running alcohol prevention projects, if they get approval from the head of department or the local public health office. Competition for project funding between different providers of prevention measures makes it more difficult to fund these activities, in contrast to crisis interventions or medical checks by local child and youth health services. As a result, coordinated action tends to be minimal. The dominant model in prevention and health promotion involves many uncoordinated small projects that often have no clear concept or goals, will not be monitored or evaluated, cannot provide any evidence on their outcomes, and sometimes not even on how many people they have reached. The "Competition on Drug Prevention" has been an attempt to improve the quality and impact of these prevention measures but it has not been successful. If local health conferences or so-called prevention councils identify alcohol consumption as a critical local issue and put it on the municipal agenda (violations of the Youth Protection Act or cases of alcohol abuse are administrative offences), then they might encourage local stakeholders to set up preventive activities. Local public health services would then lead some information events and small projects in schools and youth centres. Overall, however, the power and influence of public health agencies vis-à-vis other key actors tends to be rather weak. Drug commissioners and addiction counselling centres have a more professional stake in this issue. As far as children and adolescents are concerned, the local youth service and the police are in charge of dealing with alcohol-related problems, and in some special cases the social psychiatric service might be needed.

Source: Country reports, see Online Appendix

and Moldova. This is mainly due to lack of capacity, competition for funding and local priorities.

Monitoring and evaluation

National public health agencies may play a role in monitoring health data (working with national statistical offices and sometimes with involvement of other organizations[2]). Data on trade in alcohol are also collected by national

2 For example, in Italy, data is mainly collected by the National Observatory on Alcohol and the National Institute of Statistics (ISTAT) but data from other sources such as public health institutes of universities is also used.

statistical organizations, for use in national financial and trade accounts. However, the extent to which these measures capture illicit or home-made production and trade, both important in some countries, varies.

While there are usually reasonable data on alcohol consumption and its health consequences, there is typically much less information on enforcement of policies. Among the nine countries studied, only Moldova reports undertaking monitoring and evaluation of its national programme – this is done with the support of WHO, due to the lack of national capacity. Lack of capacity is also cited as the reason for the lack of routine monitoring and evaluation in Germany. Only Italy, Sweden and Poland seem to do more in terms of evaluating and monitoring of their national programmes. However, in Italy and Poland the focus is on keeping track of the activities undertaken within the programmes and only Sweden seems to undertake an actual evaluation of measures implemented.

Monitoring of public health indicators is the key role of public health organizations in most countries. But even here, there are notable exceptions, with the main reason being the lack of capacity. In Germany, limited public health capacity means that monitoring and evaluation are not routinely done within public health organizations, except where they are involved in specific research projects. In Moldova, what monitoring capacity exists in the Ministry of Health is due to support from WHO.

Conclusions and outlook

In all the countries covered in this study, public health organizations struggle to have their voices heard in the alcohol policy arena. In part this reflects the involvement of many other ministries in different aspects of alcohol policy. However, with a few exceptions, such as England, it reflects a failure by public health leaders to place the health effects of alcohol on the policy agenda across government. To the extent that public health organizations do play a role, this varies across the stages of the policy cycle (Table 3.3). Public health organizations tend to have a greater role in monitoring indictors such as levels of alcohol consumption or mortality and morbidity associated with alcohol (with data often collected by statistical and other agencies). Public health organizations may also play a role in problem identification and policy formulation. In some countries, their influence can also be seen in policy implementation. However, they play little role in evaluating existing policies, with Sweden being the main exception.

Several countries have made some progress in developing intersectoral and collaborative approaches to developing alcohol policies with the involvement

Table 3.3 *Role of public health organizations in the alcohol policy process*

	Problem identification	Policy formulation	Decision-making	Policy implementation	Monitoring and evaluation
England	++ (N – national PH agencies); + (L – local health authorities)	++ (N – national PH agencies)	-	+ (L – Health and Wellbeing Boards; public health agencies)	+++ (M)
France	++ (N, I – national PH agencies; R – regional health agencies)	++ (N – national PH agencies; R – regional health agencies)	n.a.	++ (N – national PH agencies, R – regional health agencies)	+++ (M)
Germany	++ (N – national PH agencies); + (R – health ministries of state governments)	++ (N – national PH agencies)	+ (R/L – regional or local health conferences)	+ (L – local public health services)	+ (M)
Italy	++ (N, I – national PH agencies; R – regional health departments of regional governments)	++ (N – national PH agencies; R – regional health departments of regional governments)	+ (N – National Platform on Diet, Physical Activity and Tobacco)	++ (N – national PH agencies; R- regional health departments; L – local health authorities)	+++ (M)
Moldova	++ (N – national PH agencies and experts)	++ (N – national PH agencies); + (L – rayon Centres of Public Health)	-	- (L – rayon councils)	+ (M, E)
The Netherlands	n.a.	++ (N – national PH agencies); + (L – municipalities)	n.a.	++ (L – municipalities)	+++ (M)
Poland	++ (N – national PH agencies)	++ (N – national PH agencies)	+ (N – via public consultations)	++ (N – national PH agencies)	+++ (M)
Slovenia	+++(N – national PH institute)	++(N – national PH agencies)	+ (N – via public consultations)	++ (N – national PH agencies)	+++ (M)
Sweden	++ (N – national PH agencies)	++ (N – national PH agencies)	-	++ (N – national PH agencies, L – county administrative boards, municipalities)	+++ (M, E)

Source: Author's compilation

Notes: +++: strong; ++: medium; +: weak; -: no role or very limited. N: national level; I: international level; R: regional level; L: local level. M: monitoring; E: evaluation. n.a.: no applicable

of public health agencies. Some countries (such as England or the Netherlands) have embraced private sector involvement (e.g. public–private partnerships or networks in the Netherlands), but these have afforded the alcohol industry a means of undermining effective interventions. There is also a more covert impact of the alcohol industry on policy development, in particular in countries where it is of major relevance to the national economy, such as Moldova. However, even there, strategic interventions by the Ministry of Health can help to push the agenda forward and open new policy instruments to public health advocates.

A final conclusion relates to the existence of stand-alone alcohol policies. It is noteworthy that these are absent in most of the countries covered by this study. However, this does not mean that the issue is not addressed. Alcohol policies can be embedded in wider strategies, such as in Sweden, which has adopted a strategy on alcohol, narcotic drugs, doping and tobacco. More important from a public health perspective is whether strategies or policies are appropriately budgeted and implemented. It is here where there is much scope for improvement.

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Chapter 4
Antimicrobial resistance

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Introduction

Antimicrobial resistance (AMR) is increasingly being recognized as a serious global health threat, as demonstrated by high-level policy initiatives, such as the Transatlantic Taskforce on Antimicrobial Resistance (TATFAR), the Global Antibiotic Resistance Partnership (GARP), the Global Health Security Agenda (GHSA), the Joint Programming Initiative on Antimicrobial Resistance (JPIAMR), and the political commitment by the United Nations in 2016 to tackle AMR globally (Mushtaq, 2016; WHO, 2015a; WHO, 2011).

Antibiotic resistance has been compared to climate change, because it is a shared global problem that does not respect national borders while at the same time national and local action will produce direct local benefits. It has been estimated that, globally, some 700 000 people die of resistant infections every year and that, by 2050, about 10 million lives will be at risk annually as a consequence of the rise in drug-resistant infections (O'Neill, 2016). The economic burden on the EU, Iceland and Norway in 2007 was estimated to be in excess of 1.5 billion euros per year (ECDC, 2009). The source of the problem and an effective response cut across sectors, from human and veterinary health to agriculture and the environment more broadly, involving a variety of sometimes competing jurisdictions, public health services and institutions. Data from the European Antimicrobial Resistance Surveillance Network (EARS-Net) and the Central Asian and Eastern European Surveillance of Antimicrobial Resistance (CAESAR) (Box 4.1) show that antibiotic resistance is widespread in the WHO European Region.

AMR arises when antimicrobial drugs, most prominently antibiotics, but also antivirals, antifungals and medicines that are active against parasites (such

as antimalarial drugs), fail to eliminate infections completely, allowing any microbes that have become resistant to the drug being used, either through spontaneous mutation or transfer of genetic material from other microbes through plasmids to flourish and spread. This process is encouraged by widespread use of antimicrobials, especially in animal production, and by suboptimal treatment regimes. The problem is compounded by the lack of new antimicrobial agents, a consequence of the dominant model of drug discovery and development. From a commercial point of view, the ideal drug is one that is needed by large numbers of people who will take it for the rest of their lives. Examples include drugs for hypertension or asthma. These "blockbusters" can be extremely lucrative. However, the manufacturers have a limited period of time to achieve a return on their investment as, eventually, their patent protection will expire. Their challenge is to sell as much as possible in this period. Obviously, this model does not apply to rare diseases, so governments (including the European Union) have developed variants on the standard model for these "orphan" drugs, allowing longer patent protection. This does not, however, resolve the problem with antimicrobials. The more that are sold in a short time, the more likely is resistance to occur. Once resistance is widespread, patent protection is irrelevant. Consequently, these products are extremely unattractive to the pharmaceutical industry, which instead has concentrated its attention in infectious diseases on vaccines, with their more dependable income streams. An alternative approach, which has been implemented successfully for the so-called neglected tropical diseases has been to engage in public–private partnerships whereby the manufacturers receive an assured, but limited return on their investment, also recognizing that, even with successful commercial medicines, much of the basic research underpinning them was carried out in publicly funded university laboratories and with government research grants. Acknowledging the urgency of the situation, critical changes have been made to the latest, 2017, edition of WHO's Essential Medicines List (EMLs). Antibiotics used to treat 21 of the most common general infections are now grouped into three categories – ACCESS, WATCH and RESERVE, with recommendations on when each category should be used.

National strategies to control antimicrobial resistance vary in scope, scale, and reach (WHO, 2015b), reflecting, in part, the complexity involved in devising and implementing policies across sectors but, more importantly perhaps, also reflecting differences in political and regulatory contexts and priorities, health systems' resources, infrastructure, and capacity, among other factors (Dar et al., 2016). Thus, high levels of AMR and patterns of antibiotic misuse and overuse have been linked to shortcomings in health service delivery, poor infection prevention and control practices, and lack of universal health coverage (Alsan et al., 2015). Work that has examined national responses to AMR has so far focused

on components considered to be core to addressing antimicrobial resistance effectively, such as intersectorality, surveillance and monitoring, prevention and control of antimicrobials, stewardship, awareness and education (WHO, 2015b), as well as financial sustainability (Cecchini et al., 2015). This chapter specifically examines the role of public health organizations in the development and implementation of AMR policies in European settings.

Scale of the problem

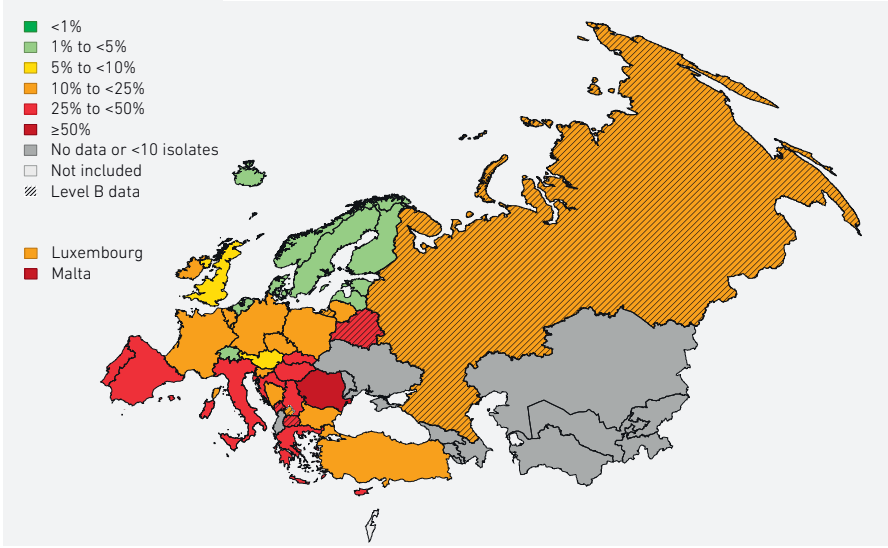
Across Europe, levels of antibiotic resistance vary, with lower rates of resistance reported in countries in the north and west of the region while reported levels tend to be higher in the south and east. It is beyond the scope of this chapter to provide a detailed account of the entirety of the burden posed by antimicrobial resistance in Europe. Instead, we focus on a few selected indicators in order to illustrate the variation across the region (see also Box 4.1), highlighting in particular those countries that were subject to in-depth analysis (see the Online Appendix for the country reports).

Fig. 4.1 shows regional variation in antimicrobial resistance in *Staphylococcus aureus*, a common cause of severe infections in health facilities and the community, against methicillin (Methicillin-resistant *Staphylococcus aureus* (MRSA)) (panel A), and of resistance in *E. coli* to third-generation cephalosporins (panel B). MRSA is among resistant pathogens that are widely recognized to pose urgent or serious threat to human health (CDC, 2013); this also includes resistant enterobacteria such as *Klebsiella pneumoniae*, a major cause of hospital-acquired infections including pneumonia, to carbapenem antibiotics (carbapenem-resistant *Enterobacteriaceae* (CRE)) and bacteria such as *E. coli* resistant to a wide range of penicillins and cephalosporins. MRSA has been recently listed as a high priority (priority 2) pathogen for research and development of new antibiotics, while carbapenem-resistant *Enterobacteriaceae* have been listed as critically important (priority 1) (WHO, 2017).

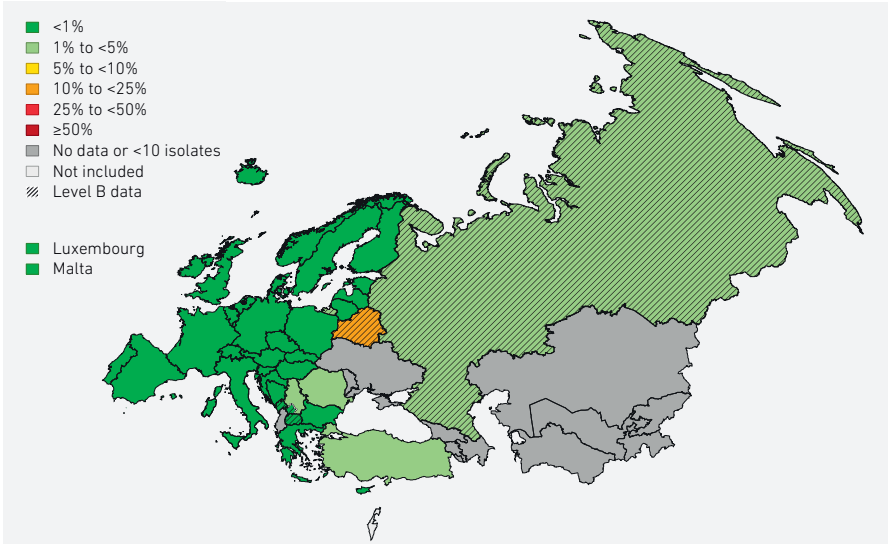
While not directly comparable, these findings are mirrored by 2016 data on self-reported antibiotic use among residents in 37 European countries (European Commission, 2016d). Among EU member states, approximately one-third (34%) of respondents reported using antibiotics in the past 12 months, with reported proportions lowest in the Netherlands and Sweden, at around one-fifth, followed by Germany, Slovenia and Poland, at between 23% and 28%, up to 35% in the United Kingdom, 39% and France and 43% in Italy. Self-reported consumption levels in Italy were only surpassed by Spain and Malta, where almost half of respondents (47–48%) reported to have used antibiotics during the preceding 12 months.

Fig. 4.1 *Percentage of invasive isolates of* S. aureus *with resistance to methicillin (MRSA) (A) and percentage of invasive isolates of E. coli with resistance to third-generation cephalosporins (B), by country, EU/EEA countries, 2015–2016*

A



B



Source: WHO Regional Office for Europe, 2017

Note: Level B data: The data provide an indication of esistance patterns present in clinical settings in the country/ area, but the proportion of resistance should be interpreted with care. Improvements are needed to attain a more valid assessment of the magnitude and trends of AMR in the country/area.

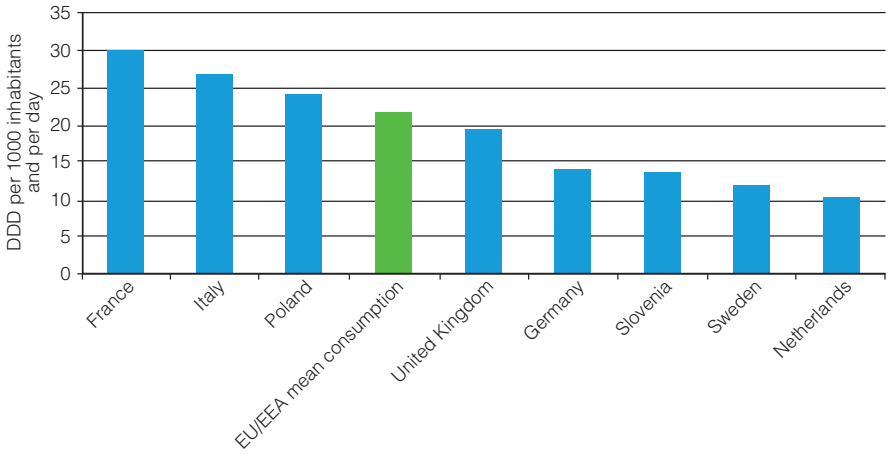
Box 4.1 *Surveillance data on AMR in Europe*

Data on antimicrobial resistance and consumption in the European Union are compiled by the European Centre for Disease Prevention and Control (ECDC). ECDC hosts the major European surveillance networks for AMR. EARS-Net is a network of national surveillance initiatives in the EU-28 plus Norway and Iceland that provide European reference data on antimicrobial resistance with a focus on seven priority pathogens considered to pose a serious threat or concern for human health (ECDC, 2015). A compatible system covering the WHO European Region (Central Asian and Eastern European Surveillance of Antimicrobial Resistance (CAESAR) network) has been operating since 2012. In both systems, a designated country coordinator represents the national network at the European level. ESAC-Net (formerly ESAC) is a Europe-wide network of national surveillance systems, which provides European reference data on antimicrobial consumption in the community and in hospitals, covering EU and European Economic Area/European Free Trade Association (EEA/EFTA) countries (ECDC, 2016a). A compatible system covering the WHO European Region is the antimicrobial medicines consumption (WHO AMC) network, which has been assisting countries since 2011. HAI-Net provides European reference data on health care-associated infections (HAIs) and antimicrobials using point prevalence surveys of acute care hospitals in Europe (ECDC, 2016b).

Observed variations reflect differences across countries in the use of antimicrobial drugs (in both, humans and animals), the effectiveness of infection control, and health care utilization patterns (ECDC, 2015a). For example, Fig. 4.2 shows levels of consumption of antibacterial drugs in the community (i.e. outside of hospitals) in 2014 in eight of the nine countries covered by this study. This shows considerable variation in consumption, with an almost threefold difference between the Netherlands, which, in 2014, reported the lowest levels of use, at just over 10 defined daily doses (DDD) per 1 000 inhabitants and per day, compared to Italy and France, at some 28–29 DDD per 1 000 inhabitants and per day (ECDC, 2015b). Data for the Republic of Moldova were only available for 2011, with reported consumption levels similar to those reported for Poland (Versporten et al., 2014) (Fig. 4.2). This compared to a (population-weighted) EU/EEA mean consumption of 21.6 DDD per 1 000 inhabitants and per day, with an overall increasing trend over the period 2010–2014.

Likewise, there are substantial differences in the use of antimicrobials in the veterinary sector, as indicated by sales data collected for the 26 countries in the European Surveillance of Veterinary Antimicrobial Consumption (ESVAC) project (European Medicines Agency, 2015). This found that, in 2015, animal population-adjusted sales of veterinary antimicrobial agents varied across countries covered by this study, with particularly low volumes (expressed

Fig. 4.2 *Consumption of antibacterials for systemic use (ATC group J01) in the community in eight European countries, 2016*



Source: ECDC, 2018 (ESAC-Net)

Notes: DDD: defined daily doses; EU: European Union; EEA: European Economic Area.

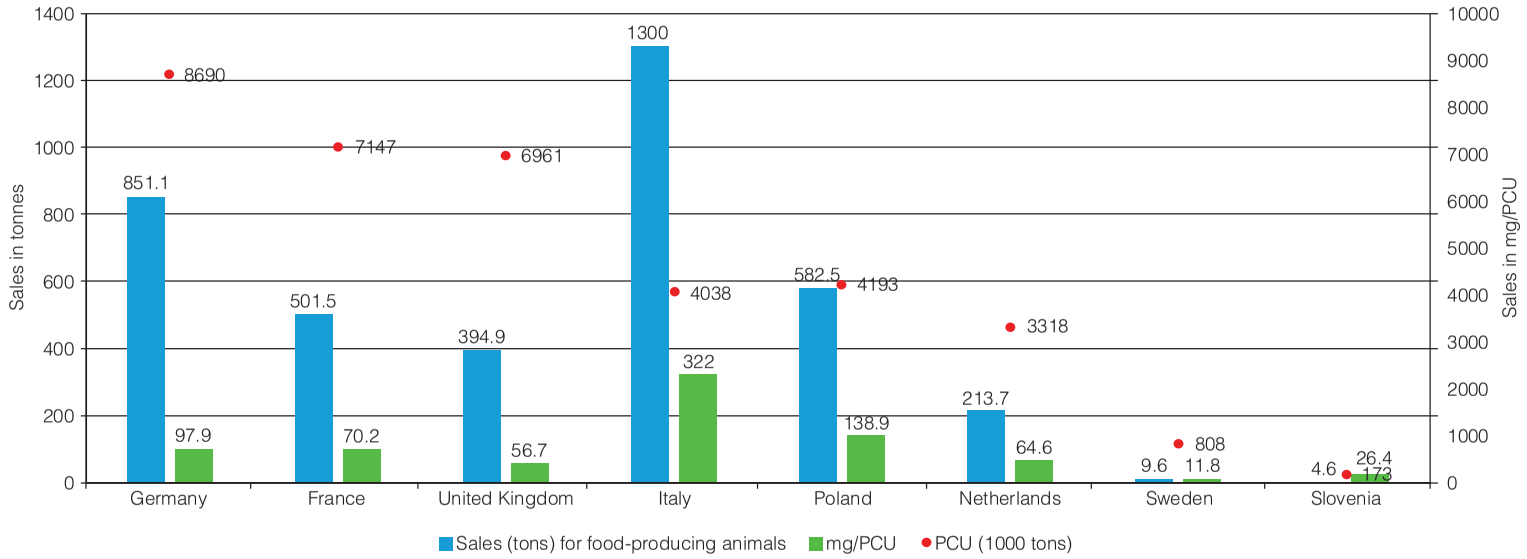
as mg per population-corrected units) reported for Slovenia and Sweden, while volumes were highest in Italy (Fig. 4.3).

The same survey found that the sales of antibiotics for use in animals in Europe had fallen by approximately 8% between 2011 and 2013 (European Medicines Agency, 2015). Factors that may have contributed to this decline include responsible-use campaigns, increased awareness of the threat of AMR, restrictions on use, targets for reduced consumption, and changes in animal demographics.

Awareness of the risks posed by overuse and misuse of antibiotics among the general population has remained a challenge however. According to the 2016 Eurobarometer survey on AMR, the vast majority of Europeans who responded to the survey reported being aware that unnecessary use of antibiotics makes them become ineffective (84%) (European Commission, 2016d). At the same time, fewer than half (43%) of respondents reported knowing that antibiotics are ineffective against viruses, while just over half (56%) reported awareness that antibiotics are ineffective against colds and flu. Levels of knowledge had not changed noticeably compared to an earlier survey conducted in 2013.

Overall, it is difficult to provide a comprehensive picture of the AMR burden countries in Europe are faced with, in particular given the dynamics of the situation and the variations in reliability and representativeness of available data on AMR. One of the key challenges for AMR surveillance is the limited routine antibiotic susceptibility testing caused by the underutilization of microbiological diagnostics in clinical practice, which represents a broader threat to patient safety and quality of care. It is therefore important for policy-

Fig. 4.3 *Sales, in tonnes of active ingredient, of veterinary antimicrobial agents in eight European countries, 2015*



Source: Authors' compilation, based on European Medicines Agency, 2017

Notes: mg: milligram; PCU: population-corrected unit. PCU: population-corrected unit.

makers to develop a comprehensive public health response to AMR. The next sections look at EU and national initiatives in coordinating and implementing activities to counteract AMR from a policy perspective.

Policy response at the European level

Since 2011 a series of high-level strategic plans on AMR have been introduced: the European strategic action plan on antibiotic resistance, building on seven key strategic objectives (WHO, 2011); the European Commission (EC) Council Recommendations and an "Action Plan against the rising threats from Antimicrobial Resistance" (European Commission, 2011), with 12 action points similar to the objectives formulated in 2015 by WHO, followed by the European One Health Action Plan against Antimicrobial Resistance (European Commission, 2017); and finally the 2015 Global AMR Action Plan, launched during the 68th World Health Assembly, bringing the response to AMR to a global scale (WHO, 2016).

The Global AMR Action Plan calls on all WHO member states to develop national AMR action plans in line with its five key strategic objectives, namely:

1. Improve awareness and understanding of antimicrobial resistance through effective communication, education and training;
2. Strengthen the knowledge and evidence base through surveillance and research;
3. Reduce the incidence of infection through effective sanitation, hygiene and infection prevention measures;
4. Optimize the use of antimicrobial medicines in human and animal health;
5. Develop the economic case for sustainable investment that takes account of the needs of all countries, and increase investment in new medicines, diagnostic tools, vaccines and other interventions.

All but one country (the Republic of Moldova) analysed in depth in this and the accompanying volumes are EU member states; they are thus expected to align their national policy responses with the 12 action points expressed in the EC Action Plan. EU membership grants these countries access to an extensive network of EU institutions, networks and initiatives relevant for AMR, such as the ECDC and its AMR surveillance network EARS-Net; the antimicrobial use surveillance network ESAC-Net, the European Medicines Agency (EMA), and the European Food Safety Authority (EFSA). These institutions publish regular reports containing data from all or most EU member states. They also provide technical assistance and funding to countries covered by the European

Neighbourhood Policy through the Technical Assistance and Information Exchange instrument of the EC (TAIEX); these countries include the Republic of Moldova.

Awareness-raising of AMR at the European level has been encouraged by the ECDC in the annual European Antibiotic Awareness Day (EAAD), which takes place each year, since 2008, on 18 November. Since November 2015 this event has been expanded to the global level through the World Antibiotic Awareness Week (WAAW) organized by WHO.

EU member states are required to adhere to EU legislation related to AMR (European Commission, 2016a, 2016b). In addition to legislation, the EU has also adopted a number of policies and programmes related to AMR (European Commission, 2016c). Important steps taken by the EU between 2006 and 2015 (taken from the progress report on the Commission's 2011 Action Plan, February 2015) included:

- EU legislation on animal nutrition banned the use of antibiotics used for growth promotion in animal feed from January 2006.
- The EFSA (in 2007) published specifications for the harmonized monitoring of antimicrobial resistance in two important zoonotic bacteria (Salmonella and Campylobacter) found in animals and foods.
- Commission Decision 2013/652/EU of 12 November 2013 established a list of combinations of bacterial species, food-producing animal populations and food products and identified priorities for the monitoring of AMR from a public health perspective. Monitoring of AMR in *E. coli* became mandatory, as it is for Salmonella and *Campylobacter jejuni* in the major food-producing animal populations (broilers, laying hens, fattening turkeys, fattening pigs, calves) and their derived meat (EFSA and ECDC, 2016).
- In a joint report published in 2015, the three sister agencies EFSA, ECDC and EMA concluded that the use of certain antimicrobials in animals and humans is associated with the occurrence of resistance to these antimicrobials.

National action plans and strategies

The WHO's Global Action Plan on AMR, agreed at the 2017 World Health Assembly, clearly states the expectation that countries will develop their own national action plans on antimicrobial resistance. National action plans are expected to be aligned with the Global Action Plan and with the standards and guidelines established by intergovernmental bodies such as the Codex Alimentarius Commission, the Food and Agriculture Organization of the United

Nations (FAO) and the World Organisation for Animal Health (OIE). National action plans are considered by WHO as a crucial step towards prioritizing actions to be taken at the national level. They also provide the basis for an assessment of resource needs. A national action plan is an important document guiding health authorities and civil society in managing and implementing appropriate AMR control activities, while being part of a collective strategy to meet the overall objectives of the Global Action Plan. From the nine countries analysed in depth in this volume, only five (France, Germany, Sweden, the Netherlands and the United Kingdom) had formulated a national action plan by mid-2016. Table 4.1 provides a comparative overview of these five national action plans. There are efforts under way to work towards more coordinated action in some of the other countries, such as the Republic of Moldova and Slovenia. Overall, in Europe, approximately 16 countries (including the five mentioned) had formulated national action plans by mid-2016.

Action plans adopted so far differ greatly in their structure, goals, level of detail and focus on results and monitoring. A recent comparative analysis of nine selected national strategies and policies (including France, Germany, Sweden and the United Kingdom) commissioned by the Swiss Federal Office of Public Health (FOPH) found that the main areas of work covered by the strategies included surveillance and monitoring, prescribing practices and regulations, infection prevention and control, awareness and education, research and development, collaboration and coordination mechanisms, as well as preparation of the required framework for action (Bonk, 2015).

National surveillance efforts

All EU member states carry out national AMR surveillance and report data to EARS-Net, ESAC-Net, ESVAC and HAI-Net. ESAC-Net is developing a hospital-based surveillance system of antimicrobial consumption to improve the reporting of antimicrobial consumption in hospitals. This surveillance will assist countries not currently reporting data in the hospital sector to do so in the future. In addition, consumption data will be collected by type of hospital, as well as by hospital activity indicators, in order to relate consumption to actual hospital activity.

The Netherlands collects sales data on veterinary antimicrobial medicinal products by species at farm level. Automated data collection systems are being implemented in some other countries (e.g. Belgium, Finland, Germany and Norway). Other countries, such as France, Sweden and the United Kingdom, have established systems to stratify sales data by animal species. Comparable consumption data by species, however, are not available (ECDC, EFSA, EMA, 2015).

Table 4.1 *National antimicrobial resistance action plans*

	National action plan	Coordination	Roles and responsibilities of public health organizations	Public information campaigns	One Health integration	Explicit budget attached to action plan	Monitoring and performance measures
France	Plan national d'alerte sur les antibiotiques 2011–2016. The follow-on strategy from 2016 is currently being developed	An Intersectoral Coordinating Mechanism has been established only recently to lead the work on the new AMR strategy (starting 2016)	The National Institute for Public Health Surveillance (Institut national de veille sanitaire (InVS)) is responsible for surveillance and alerts and provides evidence to the Ministry of Health for the formulation of national policies. A number of agencies are involved in policy implementation. At the regional level, this includes the country's 26 regional health agencies	Since 2002 the National Health Insurance has implemented the national campaign "Antibiotics are not automatic", using various channels of communication	Yes	Not specified in the national action plan	Specific indicators have been developed to measure progress in all areas outlined in the national plan
Germany	The 5-year German Antimicrobial Resistance Strategy (DART) was published in 2008, followed by an intermediate DART strategy report in 2011. The new 5-year DART 2020 was published in 2015	The Federal Ministry of Health (BMG) led the development of the German AMR strategy together with the Federal Ministry of Food, Agriculture and Consumer Protection (BMELV, now Federal Ministry of Food and	A Commission on AMR was set up in 2011 at the Robert Koch-Institute. Public health organizations contribute to the formulation of national policies, are charged with the surveillance of trends, create and moderate	The general public has been addressed by information materials provided in print and on the Internet, e.g. by the Regional Networks	Yes	No	GERMAP, a report on the antibiotic resistance and antibiotic usage situation in human and animal health in Germany is published

Table 4.1 *contd.*

	National action plan	Coordination	Roles and responsibilities of public health organizations	Public information campaigns	One Health integration	Explicit budget attached to action plan	Monitoring and performance measures
Germany (contd).		Agriculture, BMEL) and the Federal Ministry of Education and Research (BMBF). An Interministerial AMR working group has been set up	AMR networks at the level of federal states and municipalities, and are tasked with monitoring hygiene standards in health facilities.	and the Federal Centre for Health Education.			regularly. The strategy itself defines no explicit indicators or measures.
Sweden	The Swedish Plan for Action against Antibiotic Resistance (SPAR) was adopted in 2000. In March 2015 the national action plan has been complemented with a new plan for the work of national authorities against antibiotic resistance and health care associated infections. In 2016 a new Strategy to combat antibiotic resistance was adopted, covering the period until 2020	The Public Health Agency of Sweden, under the Ministry of Health and Social Affairs has the main coordinating role for AMR. There is an Intersectoral Coordinating Mechanism consisting of 20 governmental agencies in 2012	The Public Health Agency is responsible for the analysis of national surveillance data, while the National Veterinary Institute is responsible for the monitoring of AMR in food-producing animals, while for food the National Food Agency is undertaking this work. The Swedish Strategic Programme Against Antibiotic Resistance (STRAMA), a voluntary network of agencies and organizations at the national level, has played a central role	Improved public awareness and understanding is one of seven objectives of the 2016 strategy. The 2010 communication strategy focused on physicians and patients. Local campaigns have been initiated by County Councils and local STRAMA groups.	Yes	Not specified in 2016 strategy.	Annual SWEDRES-SWARM report on AMR and antimicrobial usage in human and veterinary medicine. This report comprises a detailed description of measures, indicators and evaluation procedures.

The Netherlands	2015 National Action Plan on AMR (Kamerbrief over aanpak antibioticaresistentie)	Responsibility lies jointly with the Ministry of Health, the Ministry of Infrastructure and Environment, and the Ministry of Economy	Various organizations have been involved in the development of AMR policies, including the Working Party on Antibiotics Policy (SWAB), the Healthcare Inspectorate, and the National Institute for Public Health and the Environment. The National Institute for Public Health and the Environment is also charged with AMR surveillance	A public communication strategy is envisaged in the 2015 action plan, as well as a public information campaign starting in 2015	Yes	Yes	Specific targets, activities, timelines and responsible organizations are set out in the national action plan and a first progress report was anticipated for the end of 2015
United Kingdom	The UK Antimicrobial Resistance Strategy 2013–2018 builds on the first UK AMR Strategy and Action Plan published in 2000	Overall responsibility lies with the Department of Health (DH). The devolved administrations (Scotland, Wales and Northern Ireland) are represented on the interdepartmental High-level Steering Group (HLSG) that oversees implementation of the programme and have developed their own strategies and action plans; these contribute to delivery of the wider UK Strategy	Public Health England (PHE) leads the implementation across the health care sector; the Department for Environment, Food and Rural Affairs (Defra) has responsibility for coordinating cross-sector activities relating to the delivery of the animal health, agriculture, food and environmental aspects of the AMR programme	In 2014 PHE established the Antibiotic Guardian pledge campaign, encouraging everyone to pledge to make better use of antibiotics	Yes	No budget set out in the strategy.	Strategy implementation and progress are overseen and monitored on an ongoing basis by an interdepartmental High-level Steering Group (HLSG). The strategy defines clear outcome measures

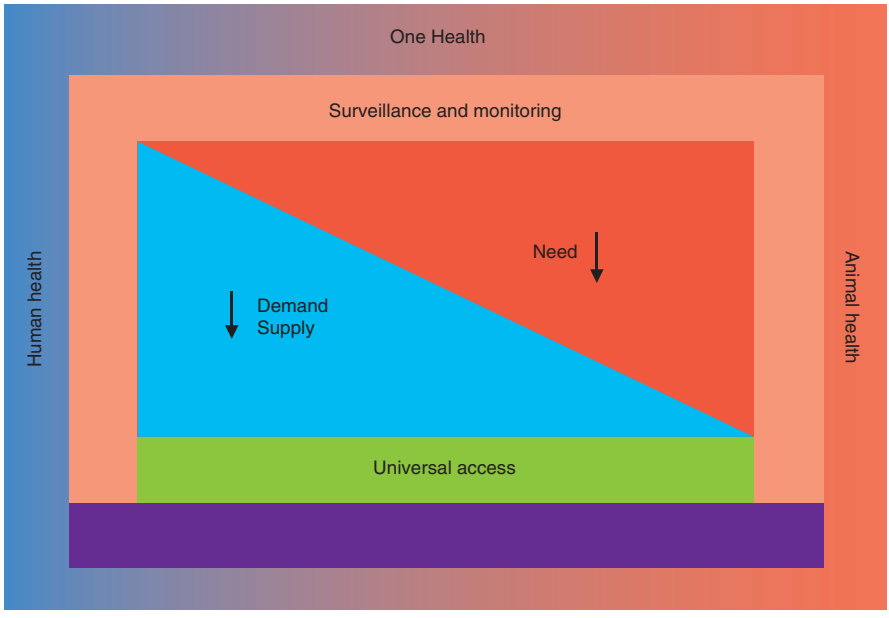
Source: Author's compilation based on Bonk, 2015

The Republic of Moldova receives support from the WHO Regional Office for Europe to build capacity for national AMR surveillance and to develop a national AMR action plan but has not yet implemented it or submitted data to CAESAR; however, antibiotic consumption data are available from a recent study (Versporten et al., 2014).

The role of public health organizations in addressing AMR in the selected countries

Public health organizations are involved in the response to AMR in all of the nine countries. However, their involvement tends to cover only certain aspects of policy actions. The different areas of policies involved in the response to AMR are illustrated in Fig. 4.4.

Fig. 4.4 *Policy framework for sustainable access to effective antimicrobials*



Source: Dar et al., 2016

Fig. 4.4 shows that an effective response to AMR includes both human and animal health, innovation, surveillance and monitoring, universal access, reducing need through infection prevention and reducing unnecessary demand through more responsible use. As a rule, public health organizations in the nine countries take a leading role for surveillance and monitoring and are involved in infection prevention and control activities. However, they tend not to be actively involved in the other policy areas.

Public health organizations also differ in terms of their involvement in the different stages of the policy cycle (problem identification and issue recognition, policy formulation, decision-making, policy implementation, and monitoring and evaluation). They tend to be very involved in problem identification and issue recognition, policy implementation, and monitoring and evaluation, but less so in policy formulation and least in decision-making.

Problem identification and issue recognition

In most of the nine countries AMR is perceived as a serious public health problem of growing concern; there are, however, differences in the way the issue is recognized and framed as a public health issue. Several countries, including Germany, France and the United Kingdom, had highlighted the role of health care-associated-infections (e.g. MRSA), as early as in the 1990s. The additional health care cost due to resistant infections, as well as the number of deaths related to such infections, helped to put the topic high on national policy agendas, although in England an additional factor was the exploitation of hospital-acquired infections by one leading national newspaper as part of its campaign against the NHS, a campaign that included misleading reports of the scale of infection produced by a subsequently discredited scientist (Goldacre, 2009). In that case, and in others outside Europe (Saliba et al., 2016), concerns about AMR have sometimes been exploited for ideological or political purposes.

Some of the selected countries (e.g. Italy and Germany) highlight the involvement of public health organizations in awareness campaigns directed at health professionals or the general public, thus contributing to problem identification and issue recognition.

Countries with functional surveillance for AMR and antibiotic consumption report using antibiotic resistance data or antibiotic consumption data to inform the policy process; in some cases data from animals are also systematically collected and taken into account. This role of antimicrobial consumption data for issue recognition has been highlighted by Italy and Slovenia. In countries where formal mechanisms for the systematic collection of data on resistance and antibiotic consumption are missing (i.e. the Republic of Moldova), international organizations and networks, such as the ECDC or WHO, help to put the issue on the political agenda in a top-down approach. A sub-set of countries credit high-level initiatives and networks, as well as global data rather than national level data, with framing the issue in the country concerned (Slovenia, Poland and Moldova). This external influence is reinforced by high-level international initiatives, such as the Group of Seven (G7), the Transatlantic Taskforce on Antimicrobial Resistance (TATFAR) and the Global Health Security Agenda (GHSA). Furthermore, for EU member states an extensive body of EU

legislation and policies exerts a powerful influence on the national response to AMR. There is also a growing body of literature on policies and economic implications of AMR, mainly based on experiences from high-income countries, and this contributed to shaping the agenda across countries, e.g. the Review on Antimicrobial Resistance commissioned by the UK government (O'Neill, 2014).

Policy formulation

Depending on the level of engagement of national stakeholders, policy formulation for AMR is usually led by the Ministry of Health. Subject to how departments are organized, responsibilities for the veterinary component of AMR can lie with the Ministry of Health (as is the case in Italy) or be linked to the Ministry of Agriculture or the Ministry of Economic Affairs, as is the case in the Netherlands. This division of responsibilities across departments and ministries underlines the importance of intersectoral coordination of policy and action. In rare cases, such as Germany, the issue has been elevated to the Cabinet of Ministers. Countries working with an intersectoral coordinating mechanism still usually identify a lead Ministry to coordinate and chair the work; this is usually the role of the Ministry of Health, although other ministries endorse and support national plans and are responsible for implementation of specific activities. Collaboration among institutions across administrative layers, from local to national institutions, takes place through formal and informal mechanisms. Some countries highlight the role of policy networks. The Netherlands, France, and Sweden mobilized extensive networks of interdisciplinary professionals, in the form of working groups or task forces, to feed into the strategy development process for AMR. One of the earliest and best-known examples in this regard is the Swedish strategic programme against antibiotic resistance (STRAMA). This programme was established by professionals in 1995. It consisted of voluntary networks of agencies and organizations at the national level and of multiprofessional teams at the local level. Intersectoral collaboration in policy formulation and implementation, both at the national and local level, has remained crucial to the AMR response in Sweden (Box 4.2).

Decision-making

Decisions regarding national level policies are universally seen as a government function, handled through a parliamentary process. Decisions and directives are executed through country-specific agencies and administrative boards. The role of the regional level differs across countries, and it is often unclear how

Box 4.2 *Intersectoral AMR policy formulation in Sweden*

In Sweden, the response to AMR has been characterized by extensive collaboration across different sectors of society, involving a range of actors, including many relevant government agencies, such as the Swedish Board of Agriculture, the Work Environment Agency, the National Food Agency, the Swedish Chemicals Agency, the Medical Products Agency, the Swedish Civil Contingencies Agency, the Swedish Environment Protection Agency, the National Board of Health and Welfare, the National Veterinary Institute, the Dental and Pharmaceutical Benefits Agency, the Health and Social Care Inspectorate, the Public Health Agency of Sweden, the Swedish Research Council Formas, the Swedish Research Council for Health, Working Life and Social Welfare (Forte), the Swedish Research Council (VR) and Sweden's innovation agency VINNOVA. At the national level, researchers at different universities are part of the national collaboration network (One Health Sweden), involving those interested in zoonotic infections and antibiotic resistance, with support from the Swedish research councils.

Source: Country report for Sweden, see Online Appendix

effectively decisions are being translated from the national level into appropriate directives or other actions at the regional and local level.

Case studies from Sweden and Italy stress the importance of national entities in formulating and adapting national policy into local policies; however, regional differences exist and the involvement of public health organizations in informing national strategies and moderating often complex networks is not always fully formalized or seen as a mandatory function (i.e. Germany).

The Central and Eastern European countries in this group of countries (Slovenia, Poland and Moldova) rely more on central level government to both frame the issue and formulate policy in a top-down approach, while public health organizations play a role in monitoring and implementation of activities.

As mentioned above, EU institutions also play a pivotal role in decision-making on AMR. Directives issued by the European Commission affect directly national legislation, particularly with regard to the regulation of veterinary antimicrobial agents.

Policy implementation

The responsibility to implement AMR-related policies lies foremost with the ministries and their subordinate structures. In most cases the ministry in charge is the Ministry of Health; depending on the decentralization of the country, regions have a range of responsibilities for implementing and monitoring

strategies, programmes and specific projects related to AMR. As a rule, AMR falls within the mandate of several health-related organizations, including public health organizations, sanitary and veterinary inspectorates, health advocacy departments, institutions for medical education, national institutes of medicine, national drug agencies, health insurance funds, and institutes for quality control in health care.

It is at times unclear how effective the implementation of policies is at the regional and local level. To give an example: most countries have a legal provision banning the sale of antimicrobial drugs without a prescription. This policy is however not followed consistently in all settings. Data from a survey carried out across the EU/EEA in 2015 indicate over-the-counter (OTC) availability of antibiotics in 20 EU/EEA Member States. The type (topical, systemic or both) and number of OTC antibiotics available in each member state varied widely. No OTC antibiotics were available in Austria, Finland, Ireland, Malta, the Netherlands and Slovenia, whereas in countries such as Belgium and Hungary a relatively wide range of different OTC antibiotics (eight and five, respectively) were available (Both et al., 2015). Restrictions on OTC sales of medicines for human use may not apply to their vetinary use.

Evidence from the nine countries suggests that activities may vary a lot between different regions in the same country. In Italy, for example, local health authorities enjoy a high level of autonomy and may or may not prioritize translation of national level directives into local and regional activities. A subset of regions may also be targeted more than others by national AMR-related projects. The outcome of this approach is a heterogeneous uptake of national policies and regional variations in policy implementation. Similar gaps have been identified in England (Box 4.3).

Yet, regional level initiatives also have many advantages. It is often easier to engage relevant stakeholders and to achieve change. In Germany, for example, public health organizations have been engaged in setting up and coordinating regional networks for the prevention and control of antibiotic resistance in a number of regions (Box 4.4).

National responses to AMR usually encourage stakeholders from different sectors, including the veterinary sector, to take on roles in implementing recommendations and activities listed in national plans and strategies, in line with a One Health approach. However, several of the countries covered in this study mention a lack of collaboration across the human and animal health interface.

Academic institutions play a key role in developing undergraduate and postgraduate curricula and educational materials related to AMR, which benefit the skills of the health workforce and ultimately the quality of patient care.

Box 4.3 *Regional policy implementation in England*

In England, local authorities are now responsible for local public health policies and services, which were previously located within the NHS. Local authority Directors of Public Health are expected to work with local stakeholders to provide information and advice to the public regarding steps they can take to address AMR; work with Clinical Commissioning Groups to ensure effective antimicrobial stewardship and support the implementation of the NICE guideline on antimicrobial stewardship; ensure there are effective infection prevention and control governance arrangements in their local area. Directors of Public Health are statutory members of the local Health and Wellbeing Board, the body which oversees policy and investment in health and social care between local government and the local Clinical Commissioning Group. This body needs to understand and agree local programmes for AMR stewardship and investment. To date, however, the local authority role and action on AMR has been patchy and limited. Public Health England estimated that in 2015 only one-fifth of local authorities have antibiotic stewardship steering groups in place.

Source: Country report for England, see Online Appendix

Box 4.4 *Regional AMR networks in Germany*

In Germany, cooperation at the regional level has been included as an explicit goal in the National AMR Strategy. The German public health service (ÖGD) has played an important role in setting up and coordinating regional AMR networks at the level of federal states (state health departments) and at the local (municipality) level. This goes back to the 1990s, when cases of methicillin-resistant *Staphylococcus aureus* (MRSA) placed the issue on the agenda of local public health authorities, facilitated by Euregio MRSA-Net cross-border projects (e.g. MRSA-Net Twente-Münsterland). Regional networks on multidrug-resistant pathogens have formed an important prerequisite for a successful MRSA management strategy. This approach based on regional networks has been incorporated into national strategies to control the spread of MRSA. The public health service is perceived to be well placed to play a key role in establishing and taking forward local networks to tackle AMR. It is regarded as impartial, is present in each locality, and has the required expertise. Its knowledge about the situation in the various local health facilities is an important basis for the activities of the public health service (ÖGD).

Source: Country report for Germany, see Online Appendix

They also often play an important role in advising on AMR, e.g. as members of intersectoral coordinating mechanisms and technical working groups, such as in France or Germany.

It seems crucial that national plans are clear about what is expected from the different stakeholders and that they make sure to adequately acknowledge

their contributions by costing them, and by assigning clear mandates and, where applicable, budgetary resources to all institutions involved. At present, however, most national action plans offer little in terms of explicit operational plans, budgets, and assigning roles and responsibilities to all stakeholders that should be involved to guide a comprehensive AMR response. As a consequence, the response remains fragmented, with only one or few sectors or institutions involved. The division of leadership and steering roles seems to have an effect on how sectors or institutions interact. If for instance the AMR response is coordinated top-down, e.g. by presidential executive order (as is the case in the US) or through a Cabinet of Ministers (as is the case in Germany), it is less likely for one Ministry to work in isolation. Moreover, a clear allocation of funding for the implementation of planned activities on AMR at the institutional level is often lacking.

Implementation of clinical guidelines and recommendations is the responsibility of individual hospitals and health care providers. However, in many countries it is unclear how far these are being followed and whether compliance is being monitored. This issue is particularly acute in countries that do not carry out systematic monitoring, such as through clinical audit and prescription monitoring. The Italian country report (see Online Appendix) blames the absence of a well-structured system to issuing guidelines for treatment of resistant infections for the heterogeneous uptake of such measures across regions. However, even where monitoring is undertaken, as in England, there is a need for caution following evidence of opportunistic behaviour by providers, with patient and professional assessments of cleanliness improving just before what are meant to be unannounced inspections, only to fall back thereafter (Toffolutti et al., 2017).

Public health organizations tend to be involved in the implementation of AMR policies, but their involvement is often not coordinated and steered by a dedicated entity that has the mandate and capacity to coordinate and delegate tasks across the different services that need to be involved. The report on England, for example, describes the role and action of local public health organizations in implementing AMR activities as being limited and patchy; few have set up local committees mirroring activities at the national level.

A final challenge relates to the financial resources required for implementation. The Netherlands is the only one of the nine selected countries that has a clear budget attached to its AMR strategy; funding arrangements for the envisaged activities are more nebulous in the other countries. The funding of AMR networks has been identified as a challenge in Germany, while in Slovenia there is both a lack of human and financial resources for addressing AMR. Funding constraints can play another role. Research in England showed how outsourcing

of hospital cleaning to private companies, while cheaper in the short term, was associated with higher rates of MRSA and, ultimately, higher health care costs.

Monitoring and evaluation

Very few countries have adopted a national action plan for AMR that defines indicators and targets to be monitored. Currently only the Netherlands and the United Kingdom have decided to specify indicators in their national plans. Other means of routine monitoring and reporting exist through national and regional surveillance. EU surveillance networks collect national surveillance data and publish them on a regular basis (usually annually). In addition, reports on AMR-related topics are published by public health institutions in several countries.

Which public health organizations participate in monitoring and evaluation depends on how the national AMR response is organized. Reference laboratories, medicines agencies and epidemiological surveillance centres tend to play central roles. National public health agencies often hold the coordinating role, such as the Public Health Agency in Sweden.

The national legal framework for AMR has implications for which aspects of AMR the country is obligated to evaluate, analyse, and report on. In Germany, for instance, these requirements are defined by the 2001 Infection Protection Act. However, the ability to report data from the different sectors involved may differ greatly across countries. Non-EU countries, such as the Republic of Moldova, have generally less well-established mechanisms to collect and share relevant data. The Country Report from Poland highlights how coordination of information networks, for example through ECDC data calls, is important to engage national monitoring entities (see Online Appendix). However, the ability to report data from the veterinary and agriculture sector is generally less developed than for the human health sector, as formal reporting mechanisms are still underdeveloped in many countries.

Conclusion and outlook

While a global set of basic principles to address antibiotic resistance has been articulated, national action is essential for real progress in every country. Countries in Europe may be similar in their income levels, but not necessarily in how antibiotics are provided, paid for, and used. Policies and initiatives to counteract AMR, effective implementation and regulatory oversight, as well as reliable data on levels of antibiotic use and resistance, are considered essential elements of a national response to AMR. A strong institutional landscape,

supported by a national coordination mechanism, which assigns clear roles and responsibilities to national stakeholders and holds them accountable, has been shown to be most effective (WHO, 2011; UNDP, 2011).

Addressing AMR at the national level requires involvement of human and veterinary public health organizations. The complexity of the issue and the need for an integrated response can be challenging, especially in the light of service gaps, weak communication and weak translation of national policies into action at the regional and local level. Challenges also exist because of an absence of clear structures of accountability between public health institutions at different levels, inadequate funding, as well as lack of clarity on institutional roles and responsibilities. National coordination can be considered a weakness for some countries, particularly when there is a failure to coordinate across sectors and to mobilize and integrate different layers of public health organizations in a concerted response.

While in most countries the issue is perceived more as a human health problem, other countries have taken targeted actions in the veterinary sector too, likely due to political pressure and in an attempt to protect economic interests related to the livestock industry. While routine surveillance of resistant pathogens from animal samples is less common, there are clear attempts to regulate the use of antimicrobials in animals. In fact, most EC directives regarding AMR focus on animal health.

Public health organizations are generally well represented when it comes to information provision and monitoring, which in turn helps to frame the issue and raise awareness for AMR. In the absence of strong formal surveillance mechanisms, global initiatives may be more effective in setting the national AMR agenda, as has been described for the Republic of Moldova.

Public health organizations tend to have little involvement in decision-making at national level, although they may play some role where there are regional administrative tiers. Here, they can play an important role in implementation of policies as well as coordination of local action.

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Chapter 5
Key policy lessons

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The role of public health organizations in addressing obesity, alcohol and AMR

All three public health issues examined in this volume (obesity, alcohol and AMR) have been recognized as public health challenges by the nine selected countries, and across Europe in general. While alcohol consumption has shown a declining trend in most countries, obesity levels are still rising and trends in AMR are difficult to ascertain. All three problems also share the existence of various European initiatives to address them.

Nevertheless, countries differ substantially in how they are responding to the three public health challenges. The role of public health organizations also differs, both between countries and public health challenges, as well as between the stages of the policy cycle (problem identification and issue recognition, policy formulation, decision-making, policy implementation, and monitoring and evaluation). However, there are also commonalities. As a rule, public health organizations in the nine countries play a role in surveillance and monitoring of the prevalence of the respective problem. They tend to be involved in problem identification and, to some extent, in issue recognition, as well as in policy formulation and monitoring and evaluation, but less so in policy implementation and least in decision-making.

The role of public health organizations in problem identification and issue recognition varies, but at the national level, the Ministry of Health or its subordinated agencies, such as national public health agencies, can play an important role in identifying and framing issues as health problems that require government attention. Yet, while Ministries of Health in all countries are responsible for the formulation of national *health* policies, many of the major threats to health are viewed as falling within the scope of other ministries. In some cases, this is appropriate, but in others it represents the prioritization

of commercial and trade considerations over health. As a consequence, public health organizations often have, at most, an advisory role in legislative and regulatory processes. Where there should be less controversy is the role of public health organizations in monitoring and evaluation of policies and programmes but, as was seen in each of the areas covered in this volume, few have significant capacity to do so, although to some extent these functions are fulfilled by national statistical agencies. Yet, while these agencies have the mandate, and ability, to collect data, public health organizations should have a responsibility to analyse them and, where necessary, advocate for, or, in some cases, take action.

Recognizing public health challenges as such

While all nine countries covered in this study have formally recognized the three public health challenges of obesity, alcohol and AMR, the level of recognition differs between and within countries. Obesity, for example, hardly appears in the public policy debates of some of the countries covered, such as Moldova or Poland, while public recognition of alcohol consumption as harmful to health is limited in countries with powerful alcohol industries such as France, Germany and Moldova. Even policy-makers or public health professionals may not yet recognize the scale of the problem. In contrast to many other European countries, policy-makers in Italy, for example, believe that lifestyle interventions and weight-loss maintenance tools and policies are successful and have a considerable impact on obesity, despite evidence that suggests that weight loss is, in practice, extremely challenging to maintain (EASO, 2014).

In the areas of obesity and alcohol, powerful vested interests promote the idea of food and alcohol consumption being an individual lifestyle choice rather than a population health challenge and public health organizations have been unsuccessful in challenging this perception. In Poland, the focus of health policy debates on lifestyle choices is partly due to the active role of food industry representatives in these debates, where they have been arguing successfully that the responsibility for health choices lies with individuals and not with the state. The recent law on public health seeks to promote societal responsibility for obesity prevention but it has to be seen whether implementation, such as through strengthening the mandate and capacity of public health organizations in this area, will follow suit. Recently, the Italian Minister of Health did not agree with proposed new guidelines by WHO to halve consumption of daily sugar intake, from 10% of total daily calories to 5%, worried that the effects of such a policy are likely to affect many national brands (Health News Today, 2014). In such cases, public health agencies could play an important role

as advocates for consumer health but they are either not mandated to, lack the formal or informal power or autonomy, or simply lack the capacity and leadership to act in this way.

Another challenge is that public health thinking and infrastructure in some countries is still largely based on infectious or environmental disease pathways and less oriented towards integration, multi-disciplinary approaches and efforts to address the social and behavioural determinants of health and disease. The continued perception of obesity and alcohol consumption as a problem of individual lifestyle choices and the failure of public health agencies to overcome this perspective might help to explain the current status of health policies in a number of European countries. This will be an important area for future advocacy by the public health community, but it will also be an important agenda for creating new thinking and authority in public health organizations as advocates of, and for, consumer health. This may also imply that representatives of the public health community will have to start engaging more effectively in political processes to have their voice heard and to engage more actively with the media and social networks.

The role of industry

One of the most important messages pervading this volume is that public health policy is shaped substantially by the vested interests of producers. This is especially obvious in the cases of obesity and alcohol, although even with AMR some sections of the agri-food industry have sought to block restrictions on the use of antibiotics as growth promoters, a view that now has diminished traction in Europe, although it is still important in other parts of the world. Indeed, this and other phytosanitary aspects of food production have featured strongly in the debate about the United Kingdom's decision to leave the European Union, with some prominent politicians seeing it as an opportunity to remove existing safeguards as a means of promoting trade.

Unlike the tobacco industry, whose products are lethal when used as intended, there are reasons why governments will engage with food and, to a lesser extent, alcohol industries. Thus, food is essential for survival and the industry has the ability, through reformulation, to make it as nutritious as possible, while remaining affordable. What is clear is that consolidation of the food and alcohol industries has created corporations with vastly greater power and resources than many governments. Moreover, in too many cases they have used their power to undermine public health, and often in ways that are far from transparent. This has two implications for public health organizations. First, there is a need for considerable caution in interactions with industry, which should take place

with complete transparency. Second, it highlights the importance of funding and conducting research on what is now termed the corporate determinants of health.

Intersectoral collaboration

How public health challenges are being addressed is at least as important as whether they are being addressed or not. This is largely linked to the societal and administrative context of the country in question. The above-mentioned examples of public health action in Sweden on alcohol and AMR illustrate a network-based, intersectoral and consensus-building approach. This approach can be crucial for ensuring the successful implementation of adopted policies.

The Swedish Alcohol, Narcotic Drugs, Doping and Tobacco (ANDT) Strategy 2011–2015 aimed from the outset to improve coordination and cooperation between the various actors involved in its implementation. The strategy encompasses many relevant actors at different levels. It deals with limiting the physical availability of alcohol (with the support of the police, customs, and inspection of the responsible sale of alcohol at restaurants and bars); preventing children and youth from damages and delaying their initiation of alcohol use; and improving health services for people in need of medical treatment and social care. In Germany, the response to AMR has been coordinated by the Cabinet of Ministers, facilitating cross-sectoral ownership and collaboration.

For all three public health challenges examined in this study, there is an evident need for intersectoral collaboration and many of the nine countries have established formal or informal mechanisms for achieving this, both for problem recognition and policy development, as well as for implementation. Examples from the area of obesity can illustrate the collaborations that take place.

In Germany, a national steering group oversees implementation of the Action Plan to Promote Healthy Diets and Physical Activity. It consists of one representative of each of the lead ministries of the Federal Government, one representative of each of the Conferences of the Ministers of Health, Consumer Protection and Agriculture and one representative of the municipal umbrella associations. Furthermore, it includes representatives of employer and employee associations, a representative of the Federal Association for Disease Prevention and Health Promotion, of the Platform Diet and Physical Activity, a representative of civil society and one representative of the main specialist associations and societies.

In England, government departments other than the Department of Health have key roles in obesity policy, including the Department for Education,

the Department of Culture, Media and Sport (physical activity and control of advertising /marketing standards), the Department for Communities and Local Government, and the Department for Environment, Food and Rural Affairs.

A related issue is how AMR is being perceived and addressed. While global policy initiatives have pointed to the necessity of addressing both human and animal health in a more holistic way, in what has been termed the "one health" approach, this has not yet triggered integrated action in all countries between public health, veterinary and agricultural services. In most of the nine countries, the issue is still perceived more as a human health problem, although some countries have taken targeted actions in the veterinary sector too, likely due to political pressure and in an attempt to protect economic interests related to the livestock industry. In fact, most European Commission directives regarding AMR focus on animal health.

Partnerships and networks involving public health organizations

Professional and policy networks have been essential forums for addressing these public health problems in several countries, in terms of problem recognition, policy formulation and implementation. One of the earliest and best-known examples in this regard is the Swedish strategic programme against antibiotic resistance (STRAMA). This programme was established by professionals in 1995. It consisted of voluntary networks of agencies and organizations at the national level and of multiprofessional teams at the local level. Intersectoral collaboration and networking in policy formulation and implementation, both at the national and local level, has remained crucial to the AMR response in Sweden. Similarly, the Netherlands and France have mobilized extensive networks of interdisciplinary professionals in form of working groups or task forces to feed into the strategy development process for AMR.

In Italy, public health agencies interact with a number of other bodies in terms of problem identification and agenda-setting, including international organizations, such as WHO (e.g. through the HBSC study and the WHO Global Action Plan for the Prevention and Control of NCDs 2013–2020); many scientific associations (such as the Italian Barometer Diabetes Observatory Foundation, the Italian Human Nutrition Society, the Italian Obesity Society, the Italian Association for Eating Disorders and Weight, the Italian Foundation for the Fight Against Childhood Obesity, the Italian Association for Dietetics and Clinical Nutrition, and the Italian Society for Obesity Surgery and Metabolic Diseases); and with GPs and paediatricians who are involved daily in dealing with this issue.

In Germany, cooperation at the regional level has been included as an explicit goal in the National AMR Strategy. The German public health service (ÖGD) has played an important role in setting up and coordinating regional AMR networks at the level of federal states (state health departments) and at the local (municipality) level. This goes back to the 1990s, when cases of methicillin-resistant *Staphylococcus aureus* (MRSA) placed the issue on the agenda of local public health authorities, facilitated by Euregio MRSA-Net cross-border projects (e.g. MRSA-Net Twente-Münsterland). Regional networks on multidrug-resistant pathogens have formed an important prerequisite for a successful MRSA management strategy. This approach, based on regional networks, has been incorporated into national strategies to control the spread of MRSA. The public health service is perceived to be well placed to play a key role in establishing and taking forward local networks to tackle antimicrobial resistance. It is regarded as impartial, is present in each locality and has the required expertise. Its knowledge about the situation in the various local health facilities is an important basis for the activities of the public health service (ÖGD).

The need for coordination mechanisms

With such a large number of actors and agencies involved in policy formulation and implementation, there is a clear need for coordination mechanisms. Public health organizations are sometimes well placed to contribute to coordination. As mentioned above, one of the strengths of the Swedish Alcohol, Narcotic Drugs, Doping And Tobacco (ANDT) Strategy 2011–2015 is that it has designated coordination mechanisms at national, county council and municipal level. However, in many countries such mechanisms are lacking. This can then lead to the absence of clear structures of accountability between public health institutions at different levels, lacking clarity on institutional roles and responsibilities, and the failure to coordinate across sectors.

A related issue is the cooperation needed between actors at different administrative tiers. Here, several factors are important. One is the division of powers and responsibilities set out in the constitution or similar documents. Another is whether there is political alignment. Thus, coordination may be more difficult where different political parties hold power at national and regional level. However, as this volume shows, there is a wide variety of formal and less formal coordination mechanisms that can be created.

International organizations can be crucial

International and supranational organizations can play a crucial role in

advancing national policy responses, including through public health organizations. This is most evident in the EU where the operation of the single market requires consistent approaches to many issues, and where European legislation either has direct effect or must be transposed, via Directives, into national law. Short of legislation, EU measures may have normative power in addressing shared concerns, such as the EU Action Plan on AMR or the 2014 Plan of Action against Childhood Obesity, and these can further help to trigger national action.

Global initiatives are also relevant. In the area of AMR, these include high-level initiatives, such as those from the Group of Seven (G7), the Transatlantic Taskforce on Antimicrobial Resistance (TATFAR) and the Global Health Security Agenda (GHSA). WHO has been active with regard to all three public health challenges addressed in this volume. The WHO's Global Action Plan on AMR clearly states the expectation that countries will develop their own national action plans on antimicrobial resistance by 2017.

Finally, the WHO Regional Office for Europe has adopted a number of relevant initiatives, which have in particular been helpful for countries with WHO Country Offices (such as Slovenia, Poland and Moldova). WHO has helped to shape the policy agenda in these countries through both data collection exercises and providing a blueprint for national policies, although, as mentioned above, question marks remain over their financing and implementation.

National strategies and action plans are needed ...

National strategies and action plans are an essential step towards action at the national and subnational level. They help to identify public health priorities, and can set out targets and indicators, required actions, the actors to be involved in implementation, funding requirements and how the implementation of strategies and action plans will be monitored and evaluated. However, these often fall short of attributing specific responsibilities to public health organizations as implementing agents. Even when they have such responsibilities, they may lack the means and resources to enact these tasks. When these additional responsibilities are simply added to the legally mandatory services and perceived as voluntarily, they tend to compete with the mandatory ones.

In the area of AMR, the WHO Member States committed themselves, at the 2017 World Health Assembly, to the Global Action Plan on AMR that requires them to develop national action plans. These national plans are expected to be aligned with the Global Action Plan and with the standards and guidelines established by intergovernmental bodies such as the Codex Alimentarius Commission, the Food and Agriculture Organization of the United Nations

(FAO), and the World Organization for Animal Health (OIE). Yet, of the nine countries analysed in depth in this volume, only five (France, Germany, Sweden, the Netherlands and the United Kingdom) had formulated a national action plan by mid-2016. There was also a dearth of national strategies and action plans in the area of alcohol control, with only two out of nine countries covered in this study having a separate alcohol strategy by mid-2016. Most action was seen in the area of obesity, where all selected countries had adopted national strategies or programmes, with the exception of Sweden.

... but they are often incomplete ...

Yet, even where national strategies or action plans have been adopted, or related policy action included in national health policies, the anticipated action may still be narrowly focused or otherwise limited. In the area of AMR, for example, action plans adopted so far differ greatly in their structure, goals, level of detail and focus on results and monitoring. Very few countries have adopted a national action plan for AMR that defines indicators and targets to be monitored. Currently only the Netherlands and the United Kingdom have such a system in place. Crucially, most national action plans offer little in terms of explicit operational plans, budgets and assigning roles and responsibilities to all stakeholders that should be involved to guide a comprehensive AMR response, including public health organizations. As a consequence, the response remains fragmented, with only one or few sectors or institutions involved.

... and lack funding

A clear allocation of funding for the implementation of planned activities is often lacking. A case in point is Moldova, where, in the period of 2014–2015, no funds were allocated for implementing the National Food and Nutrition Programme. Although obesity had been recognized by the Ministry of Health as a priority issue and the Action Plan of the National Food and Nutrition Programme had been approved by Government, no specific activities were reflected in the midterm budgetary framework for 2014–2015. Activities included in the Action Plan are to some degree implemented using the scarce internal resources of institutions, both human and financial, or using support provided by international development partners. In some other countries (e.g. Italy and Poland), too, there was no dedicated budget to address obesity.

In Italy, alcohol control policies have suffered from budgetary cuts to public health services. In 2010 the National Consultation on Alcohol and Alcohol-related Problems was discontinued, while the funds allocated for the prevention

of alcohol-related harm, including through traffic controls by the police, were considerably lower than the maximum amount allowed by different laws. In Moldova, in the period 2012–2015 there were no resources allocated for the implementation of the Alcohol Control Programme. All activities had to be performed from the existing budgets of the responsible authorities.

National plans or strategies can be embedded in wider strategies

While the existence of a well-structured and resourced national strategy or action plan can be indicative of the recognition of a problem and the political will to address it, the lack of a separate strategy does not necessarily mean that the issue is not being addressed. It can be embedded in wider strategies, such as in Sweden, which has adopted a strategy on alcohol, narcotic drugs, doping and tobacco. This can be viewed as a more cohesive and integrated approach to tackling addiction problems. The Swedish Alcohol, Narcotic Drugs, Doping and Tobacco (ANDT) Strategy 2011–2015 combined the formerly separate goals for alcohol and narcotic drugs with those for tobacco and doping. It aimed to develop a cohesive view of the common factors underlying the origins of the problems and their solutions and improve coordination and cooperation between the various actors involved in the strategy's implementation (Swedish Ministry of Health and Social Affairs, 2011).

Even well performing countries can do better

One important finding of our study is that even well performing countries might do much better in addressing the main public health challenges by greater involvement of public health organizations. One illustrative case in point is Sweden. Sweden is generally recognized as having made tremendous achievements in the area of public health. A comparative assessment of successes and failures of health policy in Europe, looking at areas as diverse as, inter alia, air pollution, traffic safety, alcohol and tobacco control, and child health, found that overall Sweden had the highest summary score for health policy performance (Mackenbach and McKee, 2013).

This leading position of Sweden was confirmed in our study in the areas of alcohol control and AMR. The Swedish Alcohol, Narcotic Drugs, Doping and Tobacco (ANDT) Strategy 2011–2015, for example, is characterized by broad intersectoral collaboration, designated coordination mechanisms at national, county council and municipal level, and designated funds for implementation, as well as for monitoring and evaluation. Similarly, Sweden has been leading

in the area of AMR, with the Swedish Strategic Programme Against Antibiotic Resistance (STRAMA), established by professionals in 1995 and consisting of voluntary networks of agencies and organizations at the national level and of multiprofessional teams at the local level.

In contrast, Sweden stands out among the selected countries as the only one without a national strategy or programme on obesity. There are also no clinical guidelines for the treatment and management of obesity. Discussions are ongoing between the Public Health Agency of Sweden, other relevant agencies and actors, and the government regarding obesity and necessary actions. Although obesity is recognized as a major public health problem, current work mainly focuses on people with other risk factors for disease, and efforts are poorly coordinated. While there are regional action plans on obesity, they lack the support needed from a national strategy in order to be fully effective (Schäfer Elinder et al., 2015). Furthermore, there are currently no national surveys measuring the height and weight of adults in Sweden. Both at national and regional level, surveys only cover self-reported height and weight, which are then used to calculate overweight and obesity rates. A number of smaller research projects also collect data on overweight and obesity, but they do not form part of the health information system run by the Ministry of Health and Social Affairs.

Little is known about the nitty-gritty of implementation

While national policies may exist on paper, little is often documented or known about how far they are implemented in practice and at the local level, including the role of public health organizations in implementation. AMR can serve as an example. Most European countries have a legal provision banning the sale of antimicrobial drugs without a prescription. However, there is evidence that this policy is not being followed consistently.

Strengthening monitoring and evaluation

As mentioned above, public health services can play a role in monitoring of public health indicators on which national programmes and strategies are based – in theory. However, even here major gaps and notable exceptions have emerged in practice, such as the above-mentioned lack of monitoring obesity levels in Sweden.

The monitoring and evaluation of public health programmes, strategies or policy measures is rarely performed and there is a lack of a feedback mechanism to strengthen policy development accordingly. In the area of alcohol control,

for example, Moldova is the only one of the nine countries studied in depth in this volume that reports undertaking monitoring and evaluation of its national programme – this is done with the support of WHO, due to the lack of national capacity. Lack of capacity is also cited as the reason for the lack of routine monitoring and evaluation in Germany. Only Italy, Sweden and Poland seem to do more in terms of evaluating and monitoring of their national programmes. However, in Italy and Poland the focus is on keeping track of the activities undertaken within the programmes and only Sweden seems to undertake an actual evaluation of the implemented measures.

Conclusions

This study has found that there is much scope for public health organizations to be more involved in addressing public health problems. In particular, they can play a key role in facilitating intersectoral collaboration, setting up professional and policy partnerships and networks, and coordinating different actors. It will also be crucial for them to increase awareness of public health challenges, establish systems for the monitoring and evaluation of any policies and programmes that are set up, and counter the obstructive influence of the food and alcohol industry. We hope that this volume not only sets out some of the challenges ahead, but also provides examples of how they can be tackled.

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Part II
Country reports

Available as an Online Appendix

Growing levels of obesity (including among children), continued harmful consumption of alcohol, and the growing threat of antimicrobial resistance (AMR) are some of the greatest contemporary challenges to the health of European populations. While their magnitude varies from country to country, all are looking for policy options to contain these threats to population health.

It is clear that public health organizations must play a part in any response, and that intersectoral action beyond the health system is needed. What is less clear, however, is what role public health organizations currently play in addressing these problems.

This is the gap that this volume aims to fill. It is based on detailed country reports from nine European countries (England, France, Germany, Italy, the Republic of Moldova, the Netherlands, Poland, Slovenia and Sweden) on the involvement of public health organizations in addressing obesity, alcohol and antimicrobial resistance. These reports explore the power and influence of public health organizations vis-a-vis other key actors in each of the stages of the policy cycle (problem identification and issue recognition, policy formulation, decision-making, implementation, and monitoring and evaluation).

A cross-country comparison assesses the involvement of public health organizations in the nine countries covered. It outlines the scale of the problem, describes the policy responses, and explores the role of public health organizations in addressing these three public health challenges.

This study is the result of close collaboration between the European Observatory on Health Systems and Policies and the WHO Regional Office for Europe, Division of Health Systems and Public Health. It accompanies two other Observatory publications: *Organization and financing of public health services in Europe* and *Organization and financing of public health services in Europe: country reports*.

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