

# ANTIMICROBIAL RESISTANCE & THE GLOBAL CHARTER FOR THE PUBLIC'S HEALTH

*Synthesis and Recommendations*

*Report  
December 2018*





Co-funded by  
the Health Programme  
of the European Union

The European Public Health Alliance has received funding under an operating grant from the European Union's Health Programme (2014-2020). The content of this document represents the views of the author only and is his/her sole responsibility; it cannot be considered to reflect the views of the European Commission and/or the Consumers, Health, Agriculture and Food Executive Agency or any other body of the European Union. The European Commission and the Agency do not accept any responsibility for use that may be made of the information it contains.

Transparency Register Number:  
18941013532-08

*Eilers, L. & Marschang, S., European Public Health Alliance (EPHA)*  
*Lomazzi, M., World Federation of Public Health Associations (WFPHA)*

# TABLE OF CONTENTS

I. INTRODUCTION	4
<i>Antimicrobial resistance</i>	4
<i>A Global Charter for the Public's Health – why is there a need for a framework?</i>	4
II. THE ADDED VALUE OF THE CHARTER IN TACKLING AMR	5
1. GOVERNANCE	6
2. INFORMATION	7
3. PROTECTION	8
4. PREVENTION	9
5. HEALTH PROMOTION	10
6. ADVOCACY	11
7. CAPACITY	12
III. Conclusion	12
REFERENCE LIST	13



## I. INTRODUCTION

### Antimicrobial resistance

Antimicrobial resistance (AMR) presents a serious challenge to global public health. The prevalence of AMR in humans and animals is steadily increasing, causing significant suffering and a high economic burden.

Inaction, in terms of reversing AMR trends, also puts the achievement of the Sustainable Development Goals at risk, inter alia affecting health security, poverty, economic growth, and food security (WHO, 2017). Therefore, the topic is receiving increasing attention at the national and international level, including from high-level fora such as the United Nations General Assembly (UNGA) and the Group of Twenty (G20). Overconsumption and misuse of antibiotics are the main drivers

that accelerate the natural development of resistance in microorganisms. Globalisation notably exerts negative and positive impacts on this phenomenon as people and countries are becoming increasingly interconnected and interdependent. On the one hand, it facilitates an exchange of best practices and harmonisation of safety standards. On the other hand, international trade agreements, tourism, and other forms of mobility facilitate the rapid spread of AMR on a global level.

### A Global Charter for the Public's Health – why is there a need for a framework?

AMR is a multisectoral problem, which must be dealt with on a regional, national, and supranational level. To systematically tackle

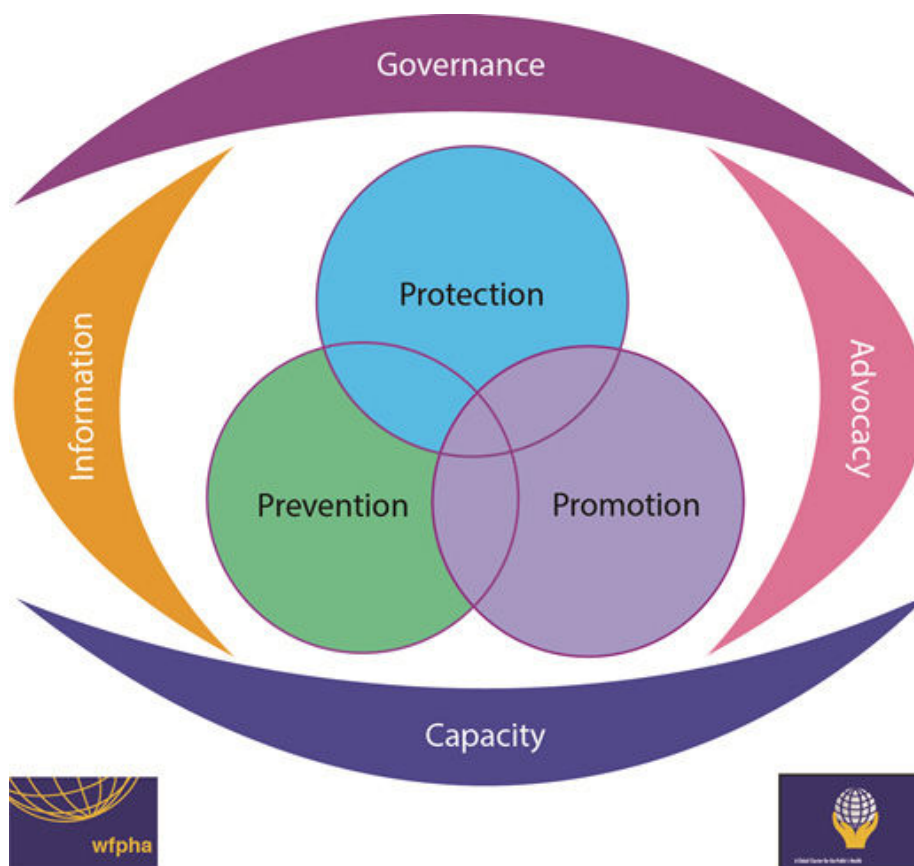


Figure 1: The Global Charter for the Public's Health



AMR, there is a need for a framework that takes these preconditions into account. The Global Charter for the Public's Health (The Charter) is one promising useful framework developed by the World Federation of Public Health Associations (WFPHA) between 2015 and 2016 (see Figure 1). The framework consists of core services (Protection, Prevention and Promotion) and enabler functions (Governance, Advocacy, Capacity, and Information), and helps to address public health challenges by promoting multi-sectoral policies and coordination. Furthermore, it provides the foundation to develop a global public health system to support the achievement of the Sustainable Development Goals (Lomazzi, 2016).

The Charter can be easily adapted for the development of strategies against AMR starting from capacity building through appropriate education and training, and leading to effective advocacy both towards government and the public. It integrates public health functions into the national health system through appropriate governance, underlining the key role which public health professionals should play in the fight against AMR in partnership with all actors impacting AMR.

## II. The added value of The Charter in tackling AMR

There is a common understanding that a multisectoral approach can be more effective in tackling AMR than implementing vertical policies. Furthermore, the little progress achieved thus far in the development of new antibiotics has shifted the focus of

the AMR discussion towards precautionary strategies. The WFPHA recognises this and highlights, in its framework, the potential benefits which arise from jointly addressing health promotion, primary prevention, and environmental health (Lomazzi, 2016, Moore et al., 2016).

The first added value of The Charter is that services and functions are interdependent and overlapping. Secondly, The Charter brings together existing models which enable its users to put AMR in a global context. Thirdly, it "allow[s] public health systems to communicate globally, compare capacity and improve performance through systematic action" (Lomazzi, 2016). Lastly, the framework can be applied in low, middle, or high-income countries, which is crucial for the fight against AMR because of its relevance to all countries.

### Global Charter for the Public's Health Headings

- 1. Governance:** public health legislation; health and cross-sector policy; strategy; financing; organisation; assurance: transparency, accountability, and audit.
- 2. Information:** surveillance, monitoring and evaluation; monitoring of health determinants; research and evidence; risk and innovation; dissemination and uptake
- 3. Protection:** international health regulation and coordination; health impact assessment; communicable disease control; emergency



preparedness; occupational health; environmental health; climate change and sustainability

**4. Prevention:** primary prevention: vaccination; secondary prevention: screening; tertiary prevention: evidence-based, community-based, integrated, person-centred quality healthcare and rehabilitation; healthcare management and planning.

**5. Promotion:** inequalities; environmental determinants; social and economic determinants; resilience; behaviour and health literacy; life-course; healthy settings.

**6. Advocacy:** leadership and ethics; health equity; social-mobilisation and solidarity; education of the public; people-centred approach; voluntary community sector engagement; communications; sustainable development

**7. Capacity:** workforce development for public health, health workers and wider workforce; workforce planning: numbers, resources, infrastructure; standards, curriculum, accreditation; capabilities, teaching and training

*Lomazzi, 2016*

## 1. GOVERNANCE

**Current state:** Health policies are mainly the competence of national governments. However, policies regarding AMR have often

been initiated at the international level. At the World Health Assembly 2015, Member States of the World Health Organization (WHO) committed to developing multisectoral action plans on AMR by mid-2017, aligned with the Global Action Plan on AMR (WHO, 2015a).

The European Commission (EC) also published two Action Plans on AMR in 2011 and 2017 respectively and makes significant investments in AMR research and development (R&D). However, national governments themselves are responsible for implementing and financing their own strategies and activities. Some financial and strategic support is foreseen by the EC in collaboration with the WHO, to assist European Union Member States (EU MS) to develop and implement national plans against AMR as well as support partner countries in their AMR policies, through several international cooperation and development instruments (European Commission, 2017). Nonetheless, many countries, including several EU MS lack the resources, expertise and capacity to develop and implement comprehensive national action plans (NAPs) to combat AMR in the spirit of a One Health approach, in line with the Global Action Plan and the EU One Health Action Plan against AMR.

**Required actions:** The leading role of the tripartite collaboration (WHO-Food and Agriculture Organization (FAO) and the World Organisation for Animal Health (OIE)) and the EC should be strengthened. To maintain this global leadership role, it is important to clarify ambitions and to encourage and improve



collaboration across sectors. The protection of human, animal, and environmental health needs to be safeguarded, based on a One Health approach, which balances the need to access effective antibiotics with the necessity to curb their irresponsible and unnecessary use. It is highly recommended that the EU AMR One Health Network of experts focuses on prevention and health promotion services and recognises existing differences between countries in terms of the availability of antibiotics, infection prevention and control policies and attitudes towards antibiotics use. This is crucial because AMR is a cross-border health threat and *“a gap in Europe’s ‘safety net’ in any country risks swiftly undermining progress in others”* (EPHA, 2017).

The European Public Health Alliance (EPHA), therefore, recommends that the EU AMR One Health Network should agree on European and national targets to reduce antibiotic consumption and AMR prevalence. Prescription patterns and the use of antimicrobial drugs need to be investigated in a transparent and accountable way. According to The Charter, conducting and evaluating local and national case studies facilitates the highlighting of best practices. MS are encouraged to make use of available policy tools and should be able to access financial resources, provided by the EC to support the development and implementation of strategic One Health NAPs. These plans should also include measurable targets to be achieved within a specified time frame.

Furthermore, governments need to ensure that the prevention of AMR is being prioritised

in all policies. EPHA urges the EC and its partners to allocate funds to core services and enabler functions, including research projects, boosting the activities of the European Centre for Disease Prevention and Control (ECDC) and other relevant agencies, and supporting the implementation of NAPs in EU MS. The WFPHA supports this call at global level, calling on all governments, industry, non-governmental organisations, health professionals, public and private research organizations to ensure that public health remains at the centre of all policy and scientific endeavours to tackle the threat of AMR and proposes the establishment of antibiotic efficacy as a global public good.

**Target state: clear defined leadership and responsibilities, collaboration between organisations, sectors, and countries**

## 2. INFORMATION

**Current state:** At an international level, information on AMR prevalence and trends is currently collected in the surveillance network for human and veterinary antimicrobial resistance and consumption. The European Centre for Disease Prevention and Control (ECDC) collects European data on antibiotic consumption and AMR in humans, while the European Medicines Agency (EMA) is responsible for the collection of data on the sales of antibiotics in animals. The Joint Inter-agency Antimicrobial Consumption and Resistance (JIACRA) reports provide a joint overview of sales data of antimicrobials for humans and animals (ECDC, EFSA and EMA, 2017). ECDC, EMA and the European



Food Safety Agency (EFSA) have also jointly developed a set of harmonised and common outcome indicators on AMR surveillance and antimicrobial consumption in humans and food-producing animals, which aim to facilitate target-setting and monitoring progress in reducing AMR at a national level (ECDC, EFSA BIOHAZ Panel and CVMP, 2017).

Since 2017, government experts and representatives of EU agencies exchange information and best practices within the AMR One Health Network, which provides a platform for discussion on the development, progress and implementation of the EU Action Plan. In addition, the EC highlights the importance of investing in R&D and supports, for example, public-private partnerships through the Innovative Medicines Initiative, as well as the Joint Programming Initiative on AMR (European Commission, 2017).

**Required actions:** Harmonised and holistic surveillance systems and evaluation of data are crucial for monitoring and understanding AMR prevalence and trends in countries. Currently, the social and economic burden of AMR and healthcare-associated infections (HCAI) in Europe as well as globally is unknown because available figures are outdated and do not cover all bacteria. The availability of regularly updated statistics is therefore crucial for recognising the real scope of AMR and consequently, the provision of sufficient resources. Furthermore, significant data gaps exist in all One Health sectors, particularly, in the environment and the veterinary sectors. The use of antibiotics in animals should be monitored by collecting

data on animal species, including companion animals, age categories and type of farming systems. MS should also set quantitative targets based on the outcome indicators proposed by ECDC, EFSA and EMA which will also enable benchmarking and facilitate comparison between countries. Additionally, surveillance systems should also include the results of rapid diagnostic tests.

Further information and guidance on the availability of EU funds and how they can be accessed should be communicated to MS. The development of new antimicrobial substances and alternatives to antibiotics is crucial for ensuring treatment possibilities for future generations. More research is also needed on the global transmission dynamics between humans, animals, food, and the environment and the role played by socioeconomic factors. Lastly, strengthened public awareness, more effective ways to enhance health literacy and ensure prudent use of antibiotics is urgently needed. To achieve this, governments should commit to supporting effective campaigns warning of the dangers of misuse of antimicrobials, through traditional and social media and other appropriate means.

**Target state: harmonised and complete surveillance, more research and better communication**

### 3. PROTECTION

**Current state:** The Global Action Plan on AMR (WHO, 2015b) and the EU One Health Action Plan against AMR are two important strategies currently being implemented which





aim to protect Europe's population from AMR. (European Commission, 2017). On a global level, the FAO, OIE, and the WHO established a tripartite collaboration and developed a joint draft roadmap to establish a global framework for the development and stewardship to combat AMR (WHO, FAO and OIE, 2017). On a European level, the previously mentioned One Health Network of experts was set up in 2017 facilitating collaboration between the EC, EU agencies and national decision-makers.

**Required actions:** Governments should continue to support international initiatives, such as the global framework established by the UN tripartite organisations. The EU One Health Action Plan should be evaluated regularly to assess progress. Policy measures and legislation in other AMR-related areas, e.g. food safety, consumer protection, patient safety, medical labelling, animal health and the environment, are also important tools to ensure the prevention of AMR, if implemented accordingly. Legislation can also be used to improve access to quality medicines and impose restrictions on antibiotic prescriptions.

Moreover, the recent adoption of the Regulations on veterinary medicinal products and medicated feed introduce strict limitations on the preventative use of antimicrobials (prophylactic use) in healthy animals and collective treatments (metaphylactic use), highlighting the need for more responsible use of antibiotics in animals to limit the growing risk of AMR (OJ, 2019).

Monitoring and surveillance systems

such as the WHO's Global Antimicrobial Resistance Surveillance System (GLASS), can detect and highlight the consequences of antimicrobials misuse. However, physicians and veterinarians should also be informed of the WHO List of Critically Important Antimicrobials for Human Medicine/Essential Medicine List, ensuring the tailored and responsible prescription of antimicrobial drugs. R&D efforts should be better linked to the epidemiology of AMR.

Potential international trade agreements should take environmental standards (the manufacture, distribution, control and disposals of antimicrobials), the occurrence of AMR, and consumption of antibiotics in all One Health domains (especially agriculture) in other countries, into consideration.

**Target state: holistic legal protection mechanisms**

## 4. PREVENTION

**Current State:** Efforts are being made to prevent AMR primarily by preventing infections. This has been partly achieved by increased vaccination and improvements in hygiene and patient safety in hospital environments. Furthermore, prudent use of antibiotics in humans and animals coupled with safety measures to prevent antibiotics from entering the environment, reduces the risk of AMR development. Secondary prevention should be based on thorough screening and rapid diagnostics tests. Screening allows for early detection of resistance, i.e. resistant tuberculosis strains



whilst rapid diagnostic tests, are a fast and effective way to determine whether antibiotics are needed at all; and if they are, which types should be recommended. However, the current cost of rapid diagnostic testing restricts their access and deployment. Tertiary prevention or the treatment of AMR should be tailored and based on the best available evidence. If appropriate, contagious persons should be isolated in hospital settings to reduce the risk of spreading AMR.

**Required actions:** Infections and certain non-communicable diseases should be prevented through education and making information on hygiene, sanitation, and healthy behaviours more available. This applies to the general public, as well as to health professionals and people responsible for animal husbandry. Prevention of the spread of AMR should be improved through training and provision of guidelines on the screening of high-risk patients and animals. At the same time, the availability and affordability of rapid diagnostic tests should be improved so that their use becomes a standard procedure, ensuring optimised prescription of antibiotics for humans and animals.

AMR prevention can also be facilitated by good husbandry practices, vaccination, hygiene, and biosecurity measures as laid down in the EU Regulation on transmissible animal diseases (known as the Animal Health Law), and recommended by the WHO. More global action is needed in preventing antimicrobial residues from entering the environment also given that antimicrobials seem to be largely manufactured outside the

EU. Therefore, all pharmaceutical producers should be obliged to comply with Good Manufacturing Practices and meet standard environmental criteria. Efforts should also be made to optimize the use of antimicrobial medicines in human and animal health as well as in agriculture and to support good stewardship, ensuring appropriate use of existing antibiotics.

**Target state: eradication of AMR through a preventative approach**

## 5. HEALTH PROMOTION

**Current state:** Currently, health promotion activities mainly focus on raising public awareness of the prudent use of antibiotics and shaping the behaviours of patients and healthcare professionals. Campaigns taking place annually around the World Antibiotics Awareness Week and the European Antibiotics Awareness Day are examples of good practice. Nevertheless, a Eurobarometer survey revealed that many Europeans are not fully informed about the effectiveness of antibiotics and the need for their prudent use (European Commission, 2016). Moreover, although the EC aims to support activities for infection prevention and control in vulnerable groups (European Commission, 2017), its actions have failed to bring about a reduction in inequalities between and within countries.

**Required actions:** A continuous effort is needed to promote the prudent use of antibiotics, especially last-line antibiotics, in humans and animals. Education of patients, students, health professionals,



pharmacists, veterinarians and farmers are the key to improvement. Dedicated actions are needed to eradicate inequalities in access, availability, and attitudes towards effective antibiotics between countries and socio-economic groups. Research on AMR should be public health driven and should be expanded to the social sciences and psychology to explore the links between social and economic determinants of health and AMR. Several countries have established excellent initiatives and have successfully tackled AMR by applying the One Health approach to address the “causes of the causes” of increasing AMR. These best practice examples need to be communicated effectively and adapted to the needs of other countries. Individuals should be empowered to allow effective behavioural change.

**Target state: Promotion of education and best practices**

## 6. ADVOCACY

**Current state:** The WHO is a key player in advocating for policies aiming to eliminate AMR. It is important that Europe plays a strong role as the leading global region which includes several best practice examples. In this regard, civil society should be included in the supranational AMR governance structure to ensure that relevant actions reach the appropriate actors at the local level. EPHA, together with other organisations is advocating for better policy alignment and dedicated AMR resources for EU MS. More than 40 different European organisations have signed a Joint Statement and Call To

Action on AMR presented to the EU Health Policy Platform following the release of the EU One Health Action Plan (EPHA, 2018). Recognising the importance of multi-sectoral collaboration and the One Health approach, EPHA acknowledges and endorses The Charter as a comprehensive framework for tackling AMR. WFPHA’s Call for Action, with the support of about 70 health organizations including several public health organisations worldwide, emphasizes this need.

**Required actions:** Civil society participation in AMR awareness-raising and implementation of actions is crucial and needs to be strengthened. The voice of all relevant actors should be reflected in the media, the community, and in national policies. Stakeholders should advocate for prioritisation of public health in actions, strategies and research efforts against AMR. It is important to establish multi-stakeholder platforms and cross-sectoral alliances in the common fight against AMR. Currently, civil society and NGOs are not formally included in the EU AMR One Health Network and similar platforms, despite the fact that they can provide valuable evidence and identify “real-life” implementation barriers preventing the implementation of the EU One Health Action Plan and NAPs on AMR. Consequently, the EC should consider both expanding the scope and membership of the AMR One Health Network and providing guidance to other regions in the fight against AMR.

**Target state: Involvement of all relevant stakeholders**



## 7. CAPACITY

**Current state:** Capacity building involves the provision of training for healthcare professionals and veterinarians. Prescribing guidelines and standards, currently carried out nationally, must be developed, implemented and evaluated. Additionally, this knowledge should be transferred to farmers to allow the effective application of good practices and adherence to standards. Farmers' organizations should coordinate with multi and bilateral organizations as well as regional networks in this context.

**Required actions:** More investment is needed in healthcare infrastructure, human resources, surveillance and monitoring systems, technology, and laboratory equipment. Currently, national governments lack sufficient numbers of trained infection prevention and control practitioners. EPHA and WFPHA also recommend that AMR is highlighted in the educational curricula of students and guidelines for professionals on the prudent prescription of antibiotics are harmonised. Doctors and nurses, pharmacists, veterinarians, dentists, public health and healthcare professionals and students should receive professional, effective training to be better equipped to handle challenges related to HCAs and AMR. Multidisciplinary antimicrobial stewardship programmes also play an important role in fighting AMR in the hospital environment and herd plans are important in reducing AMR in agriculture. Furthermore, relevant information should be communicated to patients and the general public. R&D incentives should be aligned

to public health needs and more attention should be focused on vulnerable population groups.

**Target state: sufficient resources available in every country**

## III. Conclusion

EPHA supports the application of The Charter at the global, national, and local level and according to the strategic approach of the framework, emphasises the need for global public health activities. Therefore, it is suggested that the interdependent components of a common framework should be considered in NAPs on AMR. Despite increased political momentum for the importance of tackling AMR, both national governments and the EU should consider stepping up their efforts in the fight against AMR.

The Charter addresses several characteristics policymakers should consider when designing effective policies against AMR. Its potential might facilitate communication, comparison, and improvements within and between countries. Inequalities and socio-economic determinants should be addressed as key priorities in AMR strategies. Stronger political commitment and improved resources in health and to address AMR are crucial to ensure a healthy population, sustainable development, and economic growth. Above all, a strategic, multi-sectoral approach is needed to successfully address AMR in our globalised world and to achieve the Sustainable Development Goals.





## REFERENCE LIST

- ECDC, EFSA and EMA. (2017). ECDC/EFSA/EMA second joint report on the integrated analysis of the consumption of antimicrobial agents and occurrence of antimicrobial resistance in bacteria from humans and food-producing animals – Joint Interagency Antimicrobial Consumption and Resistance Analysis (JIACRA) Report. EFSA Journal 2017;15(7):4872, 135 pp. Retrieved from: <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2017.4872>
- ECDC, EFSA BIOHAZ Panel and CVMP, 2017. ECDC, EFSA and EMA Joint Scientific Opinion on a list of outcome indicators as regards surveillance of antimicrobial resistance and antimicrobial consumption in humans and food-producing animals. EFSA Journal 2017;15(10):5017, 70 pp. Retrieved from: <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2017.5017>
- European Public Health Alliance (EPHA). (2017). New EU Action Plan on Antimicrobial Resistance advances One Health but falls short on concrete action. Brussels. Retrieved from: <https://epha.org/wp-content/uploads/2017/06/29062017-EU-AMR-Action-plan.pdf>
- European Public Health Alliance (EPHA). (2018). EU Health Policy Platform. Joint Statement on Antimicrobial Resistance (AMR). Retrieved from: [https://epha.org/wp-content/uploads/2018/02/antimicrobial-resistance-joint-statement\\_final.pdf](https://epha.org/wp-content/uploads/2018/02/antimicrobial-resistance-joint-statement_final.pdf)
- European Commission. (2017). A European One Health Action Plan against Antimicrobial Resistance (AMR). Retrieved from: [https://ec.europa.eu/health/amr/sites/amr/files/amr\\_action\\_plan\\_2017\\_en.pdf](https://ec.europa.eu/health/amr/sites/amr/files/amr_action_plan_2017_en.pdf)
- European Commission. (2016). Special Eurobarometer 445 – Antimicrobial Resistance. Retrieved from: [https://ec.europa.eu/health/amr/sites/amr/files/eb445\\_amr\\_generalreport\\_en.pdf](https://ec.europa.eu/health/amr/sites/amr/files/eb445_amr_generalreport_en.pdf)
- Lomazzi, M. (2016). A Global Charter for the Public's Health—the public health system: role, functions, competencies and education requirements\*. The European Journal of Public Health, 26(2), 210–212. Retrieved from: [https://www.wfpha.org/images/Charter\\_WFPHA.pdf](https://www.wfpha.org/images/Charter_WFPHA.pdf)
- Moore, M., McKee, M., Borisch, B., Ricciardi, W. (2016). The Global Charter for the Public's Health. The European Journal of Public Health, 26 (2), 207. Retrieved from: <https://bit.ly/2GuWNFu>
- Official Journal of the European Union (OJ). (2019). Regulation (EU) 2019/4 of the European Parliament and of the Council of 11 December 2018 on the manufacture, placing on the market and use of medicated feed, amending Regulation (EC) No 183/2005 of the European Parliament and of the Council and repealing Council Directive 90/167/EEC and Regulation (EU) 2019/6 of the European



Parliament and of the Council of 11 December 2018 on veterinary medicinal products and repealing Directive 2001/82/EC. OJ L 4/1/. Retrieved from: <https://bit.ly/2QEatzo>

World Health Organization. (2015a). Global action plan on antimicrobial resistance. Text adopted by the 68th World Health Assembly (WHA68.7), 26 May 2015. Geneva. Retrieved from: [http://apps.who.int/gb/ebwha/pdf\\_files/WHA68/A68\\_R7-en.pdf?ua=1](http://apps.who.int/gb/ebwha/pdf_files/WHA68/A68_R7-en.pdf?ua=1)

World Health Organization. (2015b). Global Action Plan on Antimicrobial Resistance. Geneva: World Health Organization. Retrieved from: [http://apps.who.int/iris/bitstream/10665/193736/1/9789241509763\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/193736/1/9789241509763_eng.pdf?ua=1)

World Health Organization. (2017). Fact sheets on sustainable development goals: health targets - Antimicrobial Resistance. Retrieved from: [http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0005/348224/Fact-sheet-SDG-AMR-FINAL-07-09-2017.pdf?ua=1](http://www.euro.who.int/__data/assets/pdf_file/0005/348224/Fact-sheet-SDG-AMR-FINAL-07-09-2017.pdf?ua=1)

WHO, FAO and OIE. (2017). Global Framework for Development & Stewardship to Combat Antimicrobial Resistance. Draft Roadmap. Retrieved from: [http://www.who.int/phi/implementation/research/WHA\\_BackgroundPaper-GlobalFrameworkDevelopmentStewardship.pdf](http://www.who.int/phi/implementation/research/WHA_BackgroundPaper-GlobalFrameworkDevelopmentStewardship.pdf)







European public health alliance

European Public Health Alliance (EPHA) AISBL  
Rue de Trèves 49-51, 1040 Brussels (B) • +32 02 230 30 56 •  
[www.ephah.org](http://www.ephah.org) • [ephah@ephah.org](mailto:ephah@ephah.org) @EPHA\_EU • Transparency  
Register Number: 18941013532-08