

ADVOCACY BRIEF

PURSUING EFFORTS TO TACKLE ANTIMICROBIAL RESISTANCE AT THE EUROPEAN LEVEL:

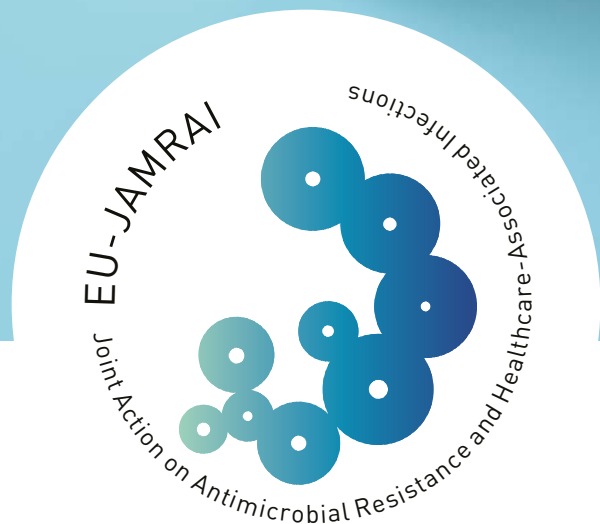
The Need for a second Joint Action on Antimicrobial Resistance and Healthcare-Associated Infections



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EU-JAMRAI | Advocacy brief: Pursuing efforts to tackle AMR at EU level:
The Need for a second Joint Action on AMR and HAIs

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PURSuing EFFORTS TO TACKLE ANTIMICROBIAL RESISTANCE AT THE EUROPEAN LEVEL:

The Need for a second Joint Action on Antimicrobial Resistance (AMR) and Healthcare-Associated Infections (HAI)

BACK-GROUND



Joint Action
Antimicrobial Resistance and
Healthcare-Associated Infections

Antimicrobial resistance (AMR), known as the ability of microorganisms to resist antimicrobial drugs, is a global major public health threat. Excessive and inappropriate use of antimicrobial drugs as well as poor infection prevention and control practices are the two main drivers of AMR.

Human health, animal health and the environment are interrelated, as bacteria are transmissible. The issue of AMR requires a holistic and multi-sectoral approach, known as the One Health approach.



At the international level, AMR is recognized by the WHO as being one of the major global threats and placed as a top priority for action on the global health agenda. Indeed, the numbers published by the WHO and the OECD¹ are alarming:

■ 33.000 patients die annually in the European Union (EU) as a result of infections caused by resistant bacteria². This emphasises the need for concerted efforts involving MS to improve infection prevention and control (IPC), as transmission is an important driver in the spread of AMR, and prevention of both community-acquired and

healthcare-associated infections can decrease antibiotic use. Promoting prudent antibiotic use, known as antibiotic stewardship programmes, is also paramount.

■ The rates of antibiotic use vary a lot depending on each country, some of them facing alarming levels of use. By 2050, Southern Europe will be strongly impacted: Italy, Greece and Portugal are forecasted to be the countries with the highest mortality rates³ from AMR among the OECD member states.



BACK- GROUND

In 2016, OECD estimated that antimicrobial resistance represents 1.5 billion euros each year as extra health-care costs and productivity losses⁴. Furthermore, OECD estimated that investing 1.5 euros per capita per year in promoting better hygiene in healthcare services and prudent use of antibiotics would avoid about 27,000 deaths per year in EU/EEA countries.

Concerning the animal sector, in the EU/EEA, about two thirds of total antimicrobial use is for food-producing animals⁵. Globally, if no effective policy action is put in place, antimicrobial use in food-producing animals will rise by 67% between 2010

and 2030⁶. Across the EU, between 2011 and 2016, it has been estimated that sales of veterinary antimicrobials were reduced by 20%⁵, but still remains too high and highly variable between countries.

Lastly, the environment is also involved in the AMR dissemination. Indeed, it is both a reservoir of antibiotic-resistance genes or resistant bacteria, and a potential transmission route⁷.

If no effective public health action is reinforced and/or put in place in the coming years, AMR and its impact will undoubtedly grow further.

ACHIEVEMENTS OF THE 2017-2021 EU-JAMRAI

In September 2017, supported by the European Union's Health Programme through the European Commission's General Directorate for Health and Food Safety (DG SANTE), the [EU-JAMRAI joint action](#), coordinated by the French National Institute for Health and Medical Research (Inserm) together with the French Ministry of Health, gathered all key actors in the EU to address this major problem at an unprecedented ambition scale: EU's 26 Member States, international organisations such as ECDC, OECD and WHO and more than 30 stakeholders (representatives of the civil society, health professionals, patient associations, professional societies, actors from the animal sector and the industry).

After three and a half years of coordinated work, the EU-JAMRAI is ready to propose concrete steps aiming at strengthening the national and European responses against AMR and healthcare-associated infections.





UNMET NEEDS IDENTIFIED BY THE EU-JAMRAI

The EU-JAMRAI has facilitated and improved the coordination between Member States and with the relevant stakeholders. The three-and-a-half-year project project has promoted the development of exchange of best practices in the EU, as well as their sustainability and integration into national policies. However, while achieving most of its objectives over the period, the EU-JAMRAI identified several unmet needs that still need to be urgently addressed.

The objective of this document is to present and elaborate on the most critical ones, showing that pursuing and enlarging the scope of the EU-JAMRAI activities through a new dedicated European joint action, namely the EU-JAMRAI-2, is required.



- The work achieved by the EU-JAMRAI, and lately the impact of the COVID-19 pandemic, have highlighted the need to consider the AMR issue within a **One Health perspective**, by better integrating the environmental dimension of the problem, which was not included in the original scope of the EU-JAMRAI activities.
- The EU-JAMRAI has also shown an alarming gap concerning the **European surveillance of AMR in diseased**

animals as compared to clinical (human) surveillance. A number of EU countries (at least 11) already have a national surveillance system of AMR in diseased animals; however, these are highly fragmented and heterogeneous. On the other hand, several EU countries are currently developing their surveillance system, without European guidance. As a solution, the establishment of a European network of AMR surveillance in diseased animals (**EARS-Vet**) has been initiated by participating experts. However, this initiative remains at an early stage and will deserve further work, e.g. the launch of a pilot phase. Moreover, currently there is **no surveillance of AMR in the environment in Europe**, thus, the burden of AMR in the environment cannot be quantified.

- Additionally, over the last three and a half years, one of the main objectives of the EU-JAMRAI has been to strengthen a network of supervisory bodies supporting experience and best practice sharing between Member States. The work of the EU-JAMRAI underlined the importance to continue to improve and sustain this **EU-wide collaboration between Member States**, especially at technical and expert level within a dedicated high-level working group that will be able to deal with concrete solutions to the problems posed by AMR. The current Joint Action has contributed to this networking. However, a greater emphasis needs now to be given to reinforce the communication and coordination with relevant sectors, to collectively define and assess the progress of future actions taken to address these priorities. This needs to be done in a sustainable manner.
- The EU-JAMRAI has also shown the needs for **pull mechanisms trials at the EU level to support antibiotic access and innovation**.



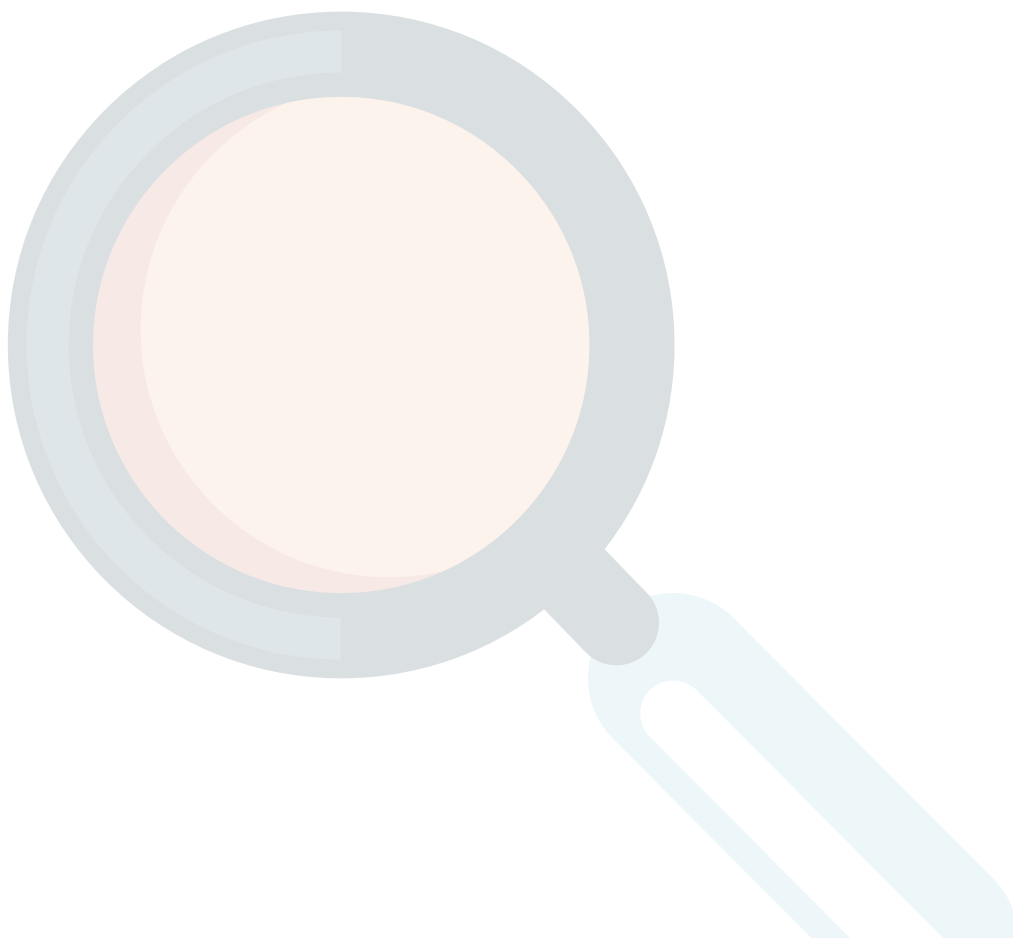
UNMET NEEDS IDENTIFIED BY THE EU-JAMRAI

The COVID-19 pandemic shed also the light on the major problem of antibiotic shortages that the EU-JAMRAI did not plan to address, being outside of its mandate. Sharing experiences and evidence-based good practices on this topic will be essential in the next years to limit and prevent this serious threat for the EU.

The EU-JAMRAI has developed many activities according to its Social Behaviour Change Communication

strategy. Among all these activities, the EU-JAMRAI has launched a contest to find the **first global symbol that represents the global threat of antibiotic resistance**. Promoting the winning symbol in the next years will be essential for raising EU citizens' awareness on AMR.

Because we believe these unmet needs identified by the EU-JAMRAI are critical issues that must be urgently addressed at the EU level and given the result obtained so far, but also the existing momentum within the EU-JAMRAI consortium, we are calling the Member States and the European Commission to fund a second Joint Action to continue the fight against AMR and healthcare-associated infections.





POTENTIAL OBJECTIVES AND ACTIONS FOR A FUTURE JOINT ACTION (JA)

AMR is a top priority topic and is part of the elected President Ursula von der Leyen's mission letter to Stella Kyriakides, Commissioner for Health and Food Safety at the European Commission⁸. A second European Joint Action on AMR would also be the adequate instrument to collectively address:

■ **The 2019 Conclusions of the EU Council on AMR;**

■ **The 2017 EU One Health Action Plan against AMR.**

The EU-JAMRAI-2 project could propose concrete steps enabling EU countries and beyond to further strengthen the implementation of efficient, evidence-based and sustainable policies to tackle AMR and HAI (healthcare-associated infections) in line with the One Health perspective. In order to achieve this goal, the Joint Action not only will build on the work accomplished by the EU-JAMRAI and its momentum but will also address the previously identified unmet needs.

The objectives of a new Joint Action (EU-JAMRAI-2) would be to address concretely the following unmet needs:

1. ■ The One Health approach to AMR, in particular in link with the "Farm-to-Fork" overarching strategy, the Green Deal requirements and the Just Transition Deal.
2. ■ To build in the frame of the digital ERA (e.g. European health data space) a surveillance system for real time surveillance of AMR in a One Health approach (human, animal and environmental components) and ensure that the subsequent interoperable data set supports "One Health" research activities and impact assessment of implemented measures.
3. ■ Secure access to antibiotics through the preparation of potential new legislation in the frame of the European pharmaceutical strategy road map.

4. ■ Spur prevention measures, in the frame of EU4Health, to both promote:

- a. Infection prevention and control.
- b. Antimicrobial stewardship best practices.

5. ■ Raise awareness on AMR through the promotion of the antibiotic resistance symbol.

This will be achieved through the reinforcement of the networks of policy makers, experts, organizations and professionals (human health, animal health, environment) and the sharing of best practices; the support of Member States in the development and implementation of national strategies and action plans on AMR and HAI, while promoting a trans-sectorial and integrative approach at EU level; an inclusive coordination mechanism at EU level.

EU-JAMRAI-2 will act through 2 types of concrete actions:

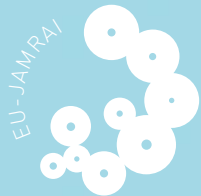
■ **Pilot actions**, for example for objectives 1 & 4 above, where the area is mature enough at EU & global level to facilitate a successful exchange and implementation of best practices (e.g. unit dispensing of antibiotics, incentives to boost innovation [e.g. new antibiotics], solutions to tackle the antibiotics' shortages and lack of availability issue...).

■ **Working groups** attached to the above network to enact recommendations and requirements, for example for objectives 2 & 3, including indicators and targets, legislative steps, etc.



REFE- RENCES

- ¹OECD (2016), Policy insights antimicrobial resistance, Paris: OECD Publishing. <https://www.oecd.org/health/health-systems/AMR-Policy-Insights-November2016.pdf>
- ²Cassani A. et al (2019). Attributable deaths and disability-adjusted life-years caused by infections with antibiotic-resistant bacteria in the EU and the European Economic Area in 2015: a population-level modelling analysis, The Lancet, 19:1, [https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(18\)30605-4/fulltext#seccestitle10](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(18)30605-4/fulltext#seccestitle10)
- ³Cassani A. et al (2019). Attributable deaths and disability-adjusted life-years caused by infections with antibiotic-resistant bacteria in the EU and the European Economic Area in 2015: a population-level modelling analysis, The Lancet, 19:1, [https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(18\)30605-4/fulltext#seccestitle10](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(18)30605-4/fulltext#seccestitle10)
- ⁴OECD (2016), Policy insights antimicrobial resistance, Paris: OECD Publishing. <https://www.oecd.org/health/health-systems/AMR-Policy-Insights-November2016.pdf>
- ⁵European Court of auditors (2019). Addressing antimicrobial resistance: progress in the animal sector, but this health threat remains a challenge for the EU, Luxembourg: Publications Office of the European Union, https://www.eca.europa.eu/Lists/ECADocuments/SR19_21/SR_Antimicrobial_resistance_EN.pdf
- ⁶Van Boeckel, T. et al. (2015), "Global trends in antimicrobial use in food animals", Proceedings of the National Academy of Sciences, Vol. 112/18, pp. 5649-5654, <http://dx.doi.org/10.1073/pnas.1503141112>
- ⁷Larsson DGJ and al. Critical knowledge gaps and research needs related to the environmental dimensions of antibiotic resistance. Environ Int. 2018 Aug;117:132-138. <https://pubmed.ncbi.nlm.nih.gov/29747082/>
- ⁸President of the European Commission (2019). Commissioner for Health and Food Safety's mission letter https://ec.europa.eu/commission/commissioners/sites/comm-cwt2019/files/commissioner_mission_letters/mission-letter-stella-kyriakides_en.pdf



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