

## SAFEGUARD VITAL ANTIMICROBIALS FOR HUMAN HEALTH

Antimicrobial resistance (AMR) is the natural process through which microorganisms become resistant to the antimicrobials designed to treat them.<sup>1</sup> Although AMR is a natural process, the overuse and misuse of antimicrobials can quickly accelerate it. In the EU, AMR causes an estimated 33,000 deaths per year<sup>2</sup> and unless further action is taken, AMR could cause 390,000 deaths per year in Europe by 2050 and 10 million deaths globally, which is more than the projected number of deaths caused by cancer and diabetes combined.<sup>3</sup> This situation is especially worrying in the case of last-resort antibiotics that are used to treat infections that are resistant to common antibiotics.

### How does the food-producing sector contribute to AMR in Europe?

In livestock farming antimicrobials are not only used to treat infected animals. They are also used for growth promotion and the prevention of diseases in uninfected food animals.<sup>4</sup> Using antibiotics for growth promotion has been banned in the EU since 2006 but this practice continues in other parts of the world, especially in developing countries.

In 2018, 6,431 tonnes of antimicrobials were used in food production in Europe.<sup>5</sup> Between 2017 and 2030, antimicrobial sales for food production in Europe are projected to increase by around 6.7%.<sup>6</sup> The overuse and misuse of antibiotics in farming is associated with a growing number of resistant bacteria that can spread to humans through direct contact when handling, transporting, or processing food animals or through the environment.<sup>7 8</sup>

## EXAMPLES OF ANTIMICROBIAL RESISTANCE IN EUROPE



In a 2015 Belgian study, **calves raised intensively indoors** had an antibiotic treatment incidence that was about **25 times higher** than beef cattle raised mainly in fields.  
(Alliance to save our antibiotics, 2021)



**Simple resistance or multi-resistance to various antibiotics** was found in **more than half of chicken meat samples** from three leading EU poultry companies.  
(German Watch, 2020)



Piglets raised in **France, Belgium, and Germany** consume between **20-30 times more antibiotics** than piglets raised in **Sweden**, where a protective legislative framework is in place.  
(Sjolund et al., 2016)



**In Spain** the resistance to ciprofloxacin (an antibiotic used in poultry) in E.Coli samples **increased from 17% to 91%** from 2001 to 2016.  
(Roth et al., 2019)

### Case study: Pigs and colistin

Due to profitability, piglets are commonly weaned early from their mothers.<sup>13</sup> This leads to stress and neonatal diarrhea, which needs to be treated with antibiotics.<sup>14</sup> Colistin is used to both treat and prevent post-weaning diarrhea in groups of animals. This is particularly concerning because colistin is a last-resort treatment for life-threatening human infections caused by carbapenem-resistant Enterobacteriaceae. Alternative prevention and treatment measures, such as later weaning, would reduce and remove the need to use last-resort antibiotics in animal husbandry.

The new Veterinary Medicinal Products Regulation enters into force in January 2022. It is a key EU instrument in the fight against AMR. This new legislation includes specific measures that ensure responsible use of antimicrobials in animals, such as reserving certain key antimicrobials for human health. In a [delegated act](#), the European Commission has [proposed criteria](#) to identify these reserve antimicrobials, but we are concerned that these criteria might not be ambitious enough to sufficiently safeguard vital antimicrobials for human health.

On 13 July, the ENVI Committee of the European Parliament approved a [motion for a resolution](#) objecting to the EU Commission's delegated act. In September, this objection will be voted upon in plenary. We call on you to vote in favour of this objection to ensure that the rules to ban unnecessary use of antimicrobials in animals are effective enough to protect human health in the face of growing AMR.

### Why should you support the objection to the delegated act?

AMR has been identified as one of top 10 global public health threats to human health<sup>15</sup>. It is therefore essential that the criteria provide the right framework to safeguard the effectiveness of key antimicrobials, which are often the last-resort tools healthcare professionals can use to fight drug-resistant infections in humans.

To maintain the effectiveness of antimicrobials for human medical therapies, the delegated act must set out clearly formulated criteria. The current draft published by the European Commission, lacks clarity, especially in the following points:

1. The delegated act sets out three different criteria for the designation of antimicrobials reserved for humans, all of which need to be met in all species for antimicrobials to receive this designation. This implies that critically important antimicrobials with the highest priority for humans (according to the WHO), could continue to be widely used in animals, including in intensive animal farming - regardless of whether their use is essential or not.
2. Criterion B 1 (a-b) requires scientific evidence that transmission of resistance from animal sources to humans is "significant" for antimicrobials authorised for animal use and "likely significant" for antimicrobials not authorised for animal use. This sets the bar far higher than the WHO's second criterion to categorise antimicrobial classes used in human medicine as "critically important", "highly important", or 'important'. WHO's criterion states that the transmission of organisms that cause disease or their genes does not need to be demonstrated, and that the potential for such transmission to exist is sufficient evidence.
3. Criterion C attempts to establish whether or not an antibiotic is essential for animal health. However, it does not apply the designation of "non-essential for animal health" to antimicrobials

that could be substituted with improved farming practices and animal husbandry. Some antimicrobials are used only to sustain irresponsible farming practices, such as colistin in pigs weaned too early. Allowing these antibiotics to be used only because of poor husbandry practices is unacceptable.

### **Will this objection affect companion animals?**

The care of individual animals or pets will not be jeopardised by the objection to the delegated act. On the contrary, the objection explicitly calls for an exception for the treatment of individual animals. The motion aims at reducing the large quantities of reserve antibiotics that are administered to groups of healthy animals in farming due to unsustainable practices. If the objection passes the plenary session, the European Commission will have to submit a new proposal on how the intended improvements presented in the objection could be incorporated into the delegated act. The essential treatment of companion or individual farm animals will remain unaffected.

In its current form, it is the delegated act that potentially threatens the treatment of companion animals with certain antimicrobial agents. It is possible that some active substances from the Highest Priority Critically Important Antimicrobials for Humans group be banned for use in animal health, including for the treatment of individual animals. The actual danger for companion and individual farm animals, therefore lies in the current imprecise design of the Veterinary Medicines Regulation and of the delegated act currently in question.

## Signatories:



**Health Care Without Harm Europe**

<https://noharm-europe.org/>



**Germanwatch e.V.**

<https://germanwatch.org/>



**Alliance to Save our Antibiotics**

<https://www.saveourantibiotics.org/>



**Ärzte gegen Massentierhaltung n.e.V. (Doctors against Factory Farming)**

<https://www.aerzte-gegen-massentierhaltung.de/>



**Cystic Fibrosis Europe**

<https://www.cf-europe.eu/>



**Mukoviszidose e.V. - Bundesverband Cystische Fibrose**

<https://www.muko.info/>



**Deutsche Umwelthilfe e.V. (Environmental Action Germany)**

<https://www.duh.de/home/>



**Pestizid Aktions-Netzwerk e.V. (PAN Germany)**

<https://pan-germany.org/>



**Tierärzte für verantwortbare Landwirtschaft e.V.**

<http://www.tfvl.de/>

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- <sup>2</sup> OECD (2019) Antimicrobial resistance. Tackling the burden in the European Union. <https://www.oecd.org/health/health-systems/AMR-Tackling-the-Burden-in-the-EU-OECD-ECDC-Briefing-Note-2019.pdf>
- <sup>3</sup> AMR review (2016). Tackling drug resistant infections globally. Report and recommendations. [https://amr-review.org/sites/default/files/160518\\_Final%20paper\\_with%20cover.pdf](https://amr-review.org/sites/default/files/160518_Final%20paper_with%20cover.pdf)
- <sup>4</sup> Manyih-Loh. et al. (2018) Antibiotic Use in Agriculture and Its Consequential Resistance in Environmental Sources: Potential Public Health Implications. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6017557/>
- <sup>5</sup> EMA (2020). Sales of veterinary antimicrobial agents in 31 European countries in 2018. <https://www.ema.europa.eu/en/veterinary-regulatory/overview/antimicrobial-resistance/european-surveillance-veterinary-antimicrobial-consumption-esvac>
- <sup>6</sup> Tiseo, K. et al. (2020) Global Trends in Antimicrobial Use in Food Animals from 2017 to 2030. doi: [10.3390/antibiotics9120918](https://doi.org/10.3390/antibiotics9120918)
- <sup>7</sup> Alliance to save our antibiotics (2021). Antibiotic use in Organic Farming; Lowering use through Good Husbandry. [https://www.saveourantibiotics.org/media/1914/20210406\\_antibiotic\\_use\\_in\\_organic\\_farming.pdf](https://www.saveourantibiotics.org/media/1914/20210406_antibiotic_use_in_organic_farming.pdf)
- <sup>8</sup> HCWH (2017) Food pathways to antimicrobial resistance: a call for international action [https://noharm-europe.org/sites/default/files/documents-files/5017/2017-09-26\\_AMR\\_in\\_Food\\_Policy\\_Overview\\_FINAL.pdf](https://noharm-europe.org/sites/default/files/documents-files/5017/2017-09-26_AMR_in_Food_Policy_Overview_FINAL.pdf)
- <sup>9</sup> Alliance to save our antibiotics (2021). Antibiotic use in Organic Farming; Lowering use through Good Husbandry.
- <sup>10</sup> German Watch (2020) Chicken meat tested for resistance to Critically Important Antimicrobials for Human Medicine <https://germanwatch.org/en/19459>
- <sup>11</sup> Sjolund et al. (2016) Quantitative and qualitative antimicrobial usage patterns in farrow-to-finish pig herds in Belgium, France, Germany and Sweden. DOI: 10.1016/j.prevetmed.2016.06.003
- <sup>12</sup> Roth, N. et al. (2019). The application of antibiotics in broiler production and the resulting antibiotic resistance in Escherichia coli: A global overview. <https://doi.org/10.3382/ps/pey539>
- <sup>13</sup> Johnson, A. et al. (2012) How Does Weaning Age Affect the Welfare of the Nursery Pig? <https://porkgateway.org/resource/how-does-weaning-age-affect-the-welfare-of-the-nursery-pig/>
- <sup>14</sup> Rhouma, M. et al. (2017) Post weaning diarrhea in pigs: risk factors and non-colistin-based control strategies. doi: 10.1186/s13028-017-0299-7
- <sup>15</sup> WHO (2019) Ten threats to global health in 2019 <https://www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019>