Identifying Specific Targets for the Member States to Achieve the European Union's Goal of 50 per cent Reduction in Sales of Veterinary Antimicrobials by 2030

Identifier des objectifs spécifiques pour les États membres afin d'atteindre l'objectif de l'Union européenne de réduction de 50 pour cent des ventes d'antimicrobiens vétérinaires d'ici 2030

Identifizierung spezifischer Vorgaben für die Mitgliedstaaten zur Erreichung des Ziels der Europäischen Union, den Verkauf von antimikrobiellen Tierarzneimitteln bis zum Jahr 2030 um 50 Prozent zu reduzieren

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Introduction

Antimicrobials (AMs) are essential medicines for treating infections in humans, animals and plants and are considered one of the most relevant health science achievements of the 20th-century. Commercial production of the first AM substances for farmed animals began before the Second World War. It escalated in the 1950s in developed countries, where the market for AMs for human treatments started to slow down. The growth of the veterinary AM market was supported by the possible multiple uses, which include therapeutic treatments on individual animals suffering from diseases as well as non-therapeutic uses, i.e. metaphylactic treatments of groups of animals of which only some show symptoms of infection to avoid further spread, prophylaxis on healthy animals at risk of infection, and use as feed supplements, also known as antibiotic growth promoters (AGPs) (Landers *et al.*, 2012). The latter is due to the discovery in the late 1940s that the administration of AMs to young animals stimulates faster weight gain (Kirchhelle, 2018). In the second half of the 20th century, the massive use of AMs facilitated the concentration of livestock in large farms, contributing significantly to the development of intensive animal husbandry that met the animal products needs of the rapidly growing global population. In 2019 the World Organisation for Animal Health (WOAH) estimated global consumption of veterinary AMs at 84.4 thousand tonnes (WOAH, 2023). Overall, the global veterinary AM consumption is assessed to be significantly higher than the use on humans and is projected to grow further (Ardakani *et al.*, 2024).

Antimicrobial use (AMU) implies the insurgence of antimicrobial resistance (AMR), which is the ability of pathogenic bacteria to become resistant to one or more of the AM active substances that are normally used to combat them. AM-resistant human diseases are principally related to AMU on human patients, especially where use is relevant, e.g. in hospital intensive care units. But also AMU in farms is a source of AMR spreading that severely affects livestock productivity and can infect humans (Ardakani *et al.*, 2023).

> **"** Pour tous les scénarios examinés, les pays avec les ventes les plus élevées d'antimicrobiens vétérinaires par rapport à la 'Population Correction Unit' (PCU), et avec un grand nombre de têtes de bétail en 2018, font toujours partie des groupes de pays les plus problématiques. **"**

The World Health Organization (WHO) has recognised AMR as a growing global health threat and launched the 'Global Action Plan on AMR' in 2015 (WHO, 2015). Based on a One Health approach, the Plan includes actions for a more prudent AMU in farms. The European Union (EU) adopted its first strategy against AMR in 2001, which led to the introduction in 2003 of AMR controls in the European surveillance system against the spread of zoonotic diseases in the agri-food supply chain (Directive 2003/99/EC), the phasing-out of AGP use in Member States' farms between 2003 and 2006 (Regulation (EC) 1831/2003), and the creation, by the European Medicine Agency (EMA), of the European Surveillance of Veterinary Antimicrobial Consumption (ESVAC) in 2009, a harmonised system for monitoring veterinary AMU in the Member States based on sales of active ingredients per livestock units (EMA, 2023). In 2010, the ESVAC published its first annual report on sales of veterinary AMs in Europe. Thirty-one countries currently participate in the project, including the 27 EU Member States, Iceland, Norway, Switzerland and the United Kingdom.

Initiatives to combat AMR in livestock have since multiplied thanks to the Action Plans implemented by the European Commission in 2011 and 2017, which supported the introduction of stricter measures to regulate AMU in farms. The measures were adopted within the framework of a progressive reform of European legislation on animal health, veterinary medicines, and medicated feeds (Regulations (EC) 2016/429, 2019/6, and 2019/4), including a broad exclusion of the Critically Important Antimicrobials for Human Medicine (CIAs) from veterinary uses, a stricter limitation of non-therapeutic AM treatments on animals, and the systematic control of AM consumption in farms through an electronic prescription system. The measures were aided by support for good husbandry and veterinary practices, professional training, and research on alternatives to AM implemented within the framework of EU policies in other sectors, e.g. agriculture and rural development, environment, food

safety and research. Between 2011 and 2020, the EU Member States' sales of veterinary AMs per livestock unit have reduced by 43.3 per cent (EMA, 2023). Although data on consumption by species are available only for some EU countries, relevant improvements resulted in the poultry and cattle sectors. In the pig sector, the progression has been slower (Waluszewski *et al.*, 2021).

In this framework, the European Commission's 'Farm-to-Fork (F2F) strategy for a fair, healthy and environmentally-friendly food system' set the objective to reduce sales of veterinary AMs in the EU by 50 per cent by 2030 compared to the reference year of 2018 (European Commission, 2020a, 2020b). Figure 1 shows the sales of veterinary AMs in the EU countries. It can be observed how the level of sales varies in individual countries compared to the sales of the EU considered as a whole. The official indicator used in these data are mg/PCUs, which enable us to relate the volume of sales (in tonnes) with the weight of the livestock population

of a given country. PCU thus means 'population correction unit' and corresponds to 1 kg of animal biomass that could be treated with AM in the year of the estimate (EMA, 2023).

> **Bei allen untersuchten Szenarien gehören die Länder mit dem höchsten Absatz an veterinärmedizinischen antimikrobiellen Mitteln im Verhältnis zum PCU (Population Correction Unit) und mit großen Viehbeständen im Jahr 2018 immer zu den besonders problematischsten Ländern.**

Figure 1: Sales of veterinary antimicrobial active ingredients in mg/PCU in the EU countries in 2018. For the EU considered as a whole, 2018 sales were 118.3 mg/PCU
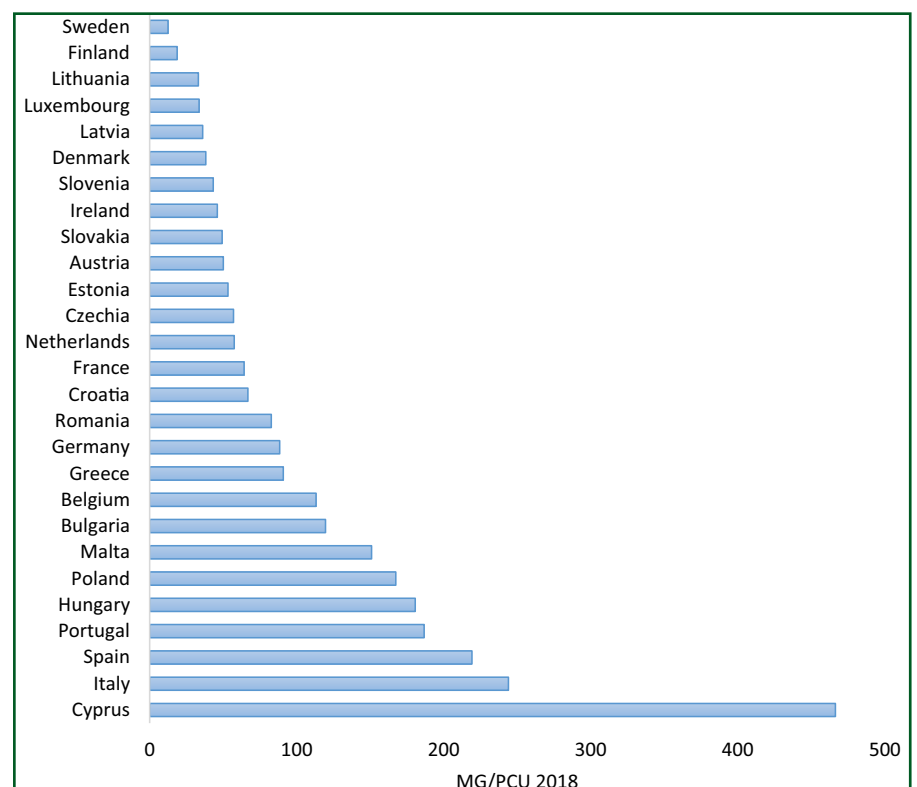
Source: EMA (2023).

However, the F2F objective of 50 per cent of AMU reduction by 2030 is poorly defined, unlike for example the European legislation on 55 per cent reduction of greenhouse gas (GHG) emissions by 2030, which sets unique targets for each Member State and sector based on their current emissions and GDP. The legislation stemming from the F2F strategy lacks such specificity, and the 50 per cent reduction target concerns all the sales in the EU.

This article addresses this issue by proposing a method for determining individual country targets for veterinary AM sales reduction based on available and comparable data. To this aim, we analyse the current sales of antimicrobials in livestock production at the country level using the ESVAC data. We then propose different weighting factors to estimate the reduction targets for each country to meet the F2F goal. Overall, we aim to provide a more comprehensive approach to setting country-specific targets for AMU reduction, aligning with the objectives of the F2F strategy and with the principle of promoting sustainable and equitable economic growth across the continent.

Methods

The F2F strategy set the objective 'to reduce overall EU sales of antimicrobials for farmed animals and in aquaculture by 50 per cent by 2030' (European Commission, 2020a), not only without setting specific targets per Member State, as mentioned in the previous section but without even establishing to which benchmark the expected 50 per cent reduction should refer. Only the subsequent 'Recommendations to the Member States as regards their strategic plan for the Common Agricultural Policy' of the European Commission clarified that the reduction referred to ESVAC's estimates of sales of veterinary AMs in 2018 expressed in mg of active ingredients per animal population correction unit (PCU) at risk of treatment (European Commission, 2020b), where 1 PCU corresponds to 1 kg of animal biomass.

Based on the principle that the largest AM-consuming countries should contribute the most to achieving the F2F target, we have constructed the target scenario for each country for 2030. This construction makes use of various socio-economic and geographical weighting factors relevant to policy design, resulting in different distributional effects (see Table 1).

First, we define a scenario where the reduction efforts are evenly distributed among the EU countries, followed by a scenario using a socio-economic indicator, the GDP per capita, as a weighting factor. However, such an indicator may not provide the most accurate country weighting in relation to the risks of AMR insurgence and spread. This could be more influenced by other factors, such as the geographical distribution and density of farmed animals and human population (Holmes et al., 2016; Vikesland et al., 2019). Therefore, we estimated three further indicators based on different weighting factors that could better identify the effort to be required from each individual country, in terms of reducing veterinary AMU, to contain the risk of AMR spreading to the human population. Considering the dynamics of AMR propagation and assuming a direct correlation between veterinary AM sales and the risks AMR spreading to the human population, these indicators are based on the following scenarios:

- Scenario A, the countries' efforts are evenly distributed (reference Scenario);

- Scenario B, the countries' efforts are weighted by GDP per capita;
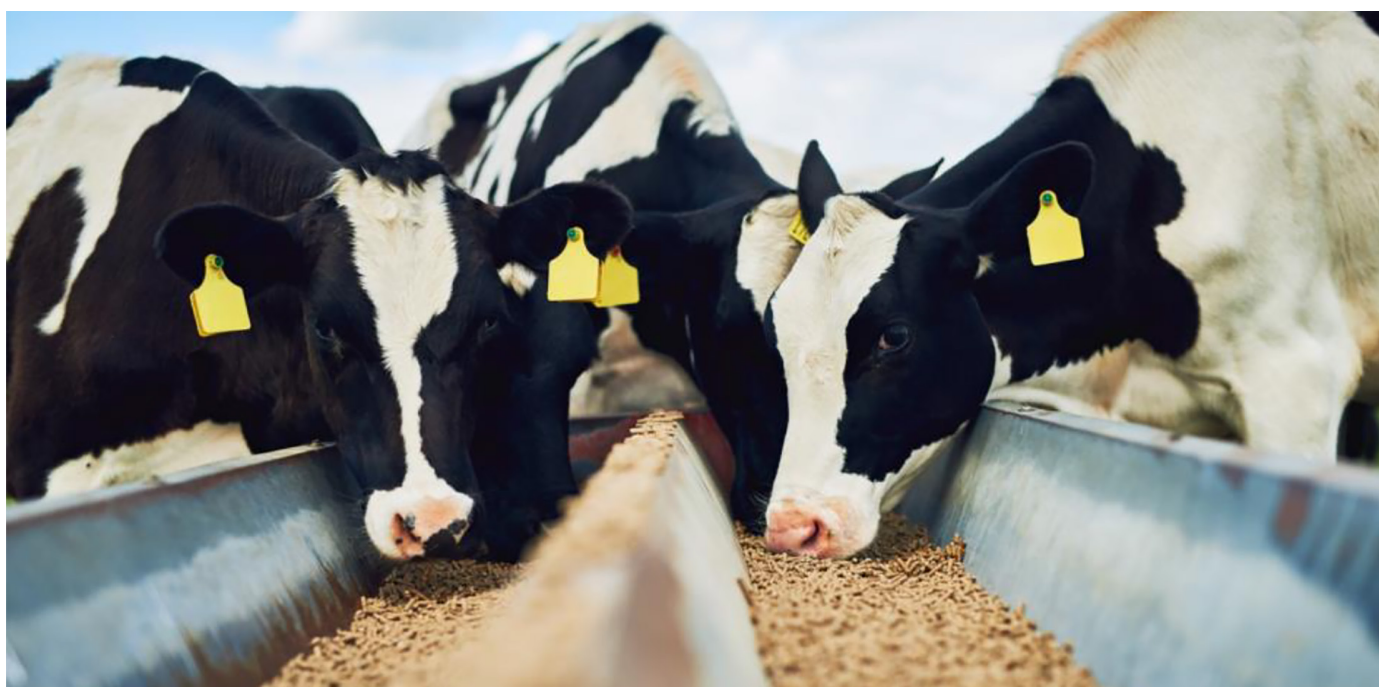
Initiatives to combat AMR in livestock have multiplied thanks to the Action Plans implemented by the European Commission in 2011 and 2017 © Shutterstock.

Table 1: Sales of veterinary AM active principles in the EU Member States in 2018 and estimated individual country targets to achieve the EU Farm-to-Fork goal to reduce sales by 50 per cent by 2030 under different scenarios

Country	ESVAC estimations 2018		2030 veterinary AM sales reduction efforts evenly distributed (Scenario A)		2030 veterinary AM sales reduction efforts weighted by PCUs x population density (Scenario E)	
	PCUs (1,000 tonnes)	Sales mg/PCU	2030 target (mg/PCU)	2018–2030 reduction (%)	2030 target (mg/PCU)	2018–2030 reduction (%)
Austria	957.20	50.10	50.10		50.10	
Belgium	1724.40	113.10	63.38	–44	80.80	–29
Bulgaria	399.90	119.60	63.38	–47	118.78	–1
Croatia	293.00	66.80	63.38	–5	66.80	
Cyprus	114.50	466.30	63.38	–86	119.63	–74
Czechia	704.60	57.00	57.00		57.00	
Denmark	2446.70	38.20	38.20		38.20	
Estonia	114.00	53.30	53.30		53.30	
Finland	496.80	18.70	18.70		18.70	
France	7107.00	64.20	63.38	–1	64.20	
Germany	8517.60	88.40	63.38	–28	12.50	–86
Greece	1243.90	90.90	63.38	–30	90.90	
Hungary	831.80	180.60	63.38	–65	115.00	–36
Ireland	2142.10	46.00	46.00		46.00	
Italy	3819.30	244.00	63.38	–74	74.54	–69
Latvia	167.30	36.10	36.10		36.10	
Lithuania	323.80	33.10	33.10		33.10	
Luxembourg	54.70	33.60	33.60		33.60	
Malta	14.20	150.90	63.38	–57	118.90	–20
Netherlands	3200.80	57.50	57.50		38.90	–32
Poland	4672.60	167.40	63.38	–62	85.88	–49
Portugal	1028.10	186.60	63.38	–66	113.33	–39
Romania	2788.20	82.70	63.38	–23	82.70	
Slovakia	246.60	49.30	49.30		49.30	
Slovenia	179.80	43.20	43.20		43.20	
Spain	7865.40	219.20	63.38	–71	75.65	–65
Sweden	782.70	12.50	12.50		12.50	
Total EU 27 countries	**52237.00**	**118.29**	**59.15**		**59.15**	

Source: Authors' own elaboration from ESVAC data (EMA, 2023).

- Scenario C, the countries' efforts are weighted by PCU / Total Country Area in km²;

- Scenario D, the countries' efforts are weighted by PCU / Total Human Population;

- Scenario E, the countries' efforts are weighted by PCU multiplied by the Human Population Density (inhabitants per km²).

Scenario A assumes equal effort from countries based on their current AM consumption and a shared 50 per cent reduction target. Scenario B uses GDP per capita as a weight, expecting more developed economies to contribute more significantly to AMU reduction. Unlike greenhouse gas emissions, veterinary AM consumption might not directly correlate to economic growth, and reducing it might not significantly affect the economy (Appiah *et al.*, 2021). Moreover, higher income countries might have more resources for investing in alternatives to AMU (vaccination, biosecurity, animal welfare, awareness, training and others).

Scenarios C, D and E concern AMR geographic spread: C assumes that a large animal population within an area could facilitate the selection and spread of AMR genes from pathogens affecting animals; in D, an extensive presence of animals in proximity with the human population could accelerate AMR spread from animals to humans; and, in E, a combination of both, a high proportion of animals in a densely inhabited area, could boost the spread of AMR genes and diseases from animals to humans.

For the estimations, we assume that:

I   In 2030, the EU countries will have the same farmed animal population in terms of PCU as in 2018.

II The countries that in 2018 were already below the EU 2030 target (i.e. 59.2 mg of AM active ingredients sold per PCU) should maintain the same level of sales up until 2030.

- The calculations for Scenario A above, i.e. the case in which the reduction efforts are evenly distributed among the EU countries, proceed according to the following steps: Considering the ESVAC data, in 2018, the total sales of veterinary AM active ingredients in the EU Member States were 6,179.2 tonnes. Assuming a constant number of

PCUs (Assumption I), a 50 per cent reduction will lead to a total sales of 3,089.7 tonnes in 2030.

- The sales in mg/PCU will consequently decrease from 118.3 to 59.2 mg/PCU for all the EU-27 countries combined.

- According to Assumption II, the 14 least virtuous EU countries in terms of veterinary AM sales in the year 2018 would have an advantage for the 2030 target achievement since, in the other 13 EU countries, the sales of AM active ingredients were already less, and in some cases much less, than the target threshold of 59.2 mg per PCU. Therefore, to achieve the target for the whole of the EU, it is enough that the laggard countries for AM sales reduction in 2018 decrease sales of AM active ingredients to 63.4 mg per PCU by 2030, while the virtuous countries maintain the 2018 sales level.

- Developing further the procedure described above, we estimated the percentage reduction in sales of veterinary AM active ingredients required in each of the laggard countries to achieve the EU target.

For these calculations we used available data from ESVAC and EUROSTAT databases for the corresponding years.

Results

The first section of Table 1 shows the sales of veterinary AM active principles in 2018. The second section shows the estimation of the veterinary AM sales reduction effort required from the EU countries in the reference Scenario A, i.e. under the hypothesis of an even distribution of the effort. The third section shows the effort required by assuming Scenario E, which we consider the most appropriate for fighting AMR. Results from the other scenarios are not presented in Table 1 but are discussed in the text.

In the reference Scenario A, Spain, Italy, Poland, Germany and Portugal require the largest total sales reductions. In relative terms, the highest efforts should be made by Cyprus, Italy, Spain, Portugal and Hungary, which need the highest percentage reductions.

In Scenario B, where the 2030 targets of individual countries are obtained with weighting factors based on GDP per capita, assuming that a zero AM sales target is not possible because of the need to treat sick animals for animal welfare reasons, the lowest level of AM sales recorded in 2018 (i.e. Sweden with 12.475 mg per PCU) was assigned as 2030 target to the country with the highest GDP per capita in the same year (Luxembourg). The main differences compared to the previous Scenario concern the Netherlands (target reduced by –14 per cent), Ireland (–37 per cent), and Luxembourg (–62 per cent). Because of their high GDP per capita, in Scenario B, they shift to the group of countries that need to reduce AM sales, which is not the case without the GDP weighting. On the other hand, Bulgaria, Poland, Portugal, Romania and Greece increase their target compared to the reference Scenario A. The remaining countries record minor changes.

In Scenarios C, D and E, we maintained the minimum individual target of 12.5 mg sales of AM active ingredients per PCU for the countries showing the highest weighting indicators. Thus, in Scenario C, weighting by PCU relative to the total country area, the Netherlands has the highest score and was attributed to the mentioned target and, with Belgium, should perform the biggest AM sales reduction. In Scenario D, weighting by PCU relative to the country population, the minimum target was assigned to Ireland (PCU 2 million tonnes and 4.9 million inhabitants). But Denmark and Spain should also perform relevant AM sales reductions.

> **"** For all the scenarios examined, the countries with the highest sales of veterinary AMs relative to PCU, and with large numbers of livestock in 2018, always fall into the most problematic country groups. **"**

In Scenario E, weighting by the PCUs multiplied by the country's population density, Germany obtains the minimum individual target. This Scenario is likely to provide the most accurate indicator for evaluating the countries' efforts to achieve an equitable and effective reduction in AM sales among the EU countries (since this is the only available indicator for comparing AMU among the 27 EU countries). With Germany,

It is essential to contextualise AMU reduction objectives if we wish to engage all relevant stakeholders towards a common goal © Shutterstock.

Improving the monitoring system by establishing a more accurate indicator of AMU is fundamental © Shutterstock.

Italy and Spain should also contribute with large reductions in sales of veterinary AM to achieve the F2F 2030 target.

Regardless of the Scenario considered, Spain, Italy, Hungary, Cyprus and Poland must always make relevant efforts to reduce their veterinary AM sales because of the high levels recorded in 2018. According to the last available ESVAC data (EMA, 2023), some countries have made significant efforts to reduce their veterinary AM sales. Spain, Portugal, Romania, Italy, Belgium, France, Hungary and Malta have halved AM active ingredient sales in 2022 compared to 2018. On the contrary, Greece, Poland and Lithuania have increased AM sales over the same period. In 2022, EU sales were 84.4 mg per PCU, just over half of the reduction target set for 2030.

Conclusions: a method for defining specific reduction levels

The European Commission's F2F strategy aims to achieve a 50 per cent reduction of the veterinary AM sales in the EU by 2030 compared to the 2018 level. The target is set for the entire territory of the EU and does not take into account the extreme variation of AMU between countries. For example, in the least performing country, Cyprus, the sales were more than 37 times higher than in Sweden, the most performing country. These differences highlight the value of identifying appropriate targets for individual countries, balancing the potential for reducing AMU in farms along with the effectiveness in combating AMR.

This article thus introduces a method for defining specific reduction levels in each EU Member State, based on economic and geographical criteria; thus allowing, on the one hand, effective AMR control and, on the other hand, the achievement of the European target.

A common element for all the scenarios examined is that the countries with the highest levels of sales of veterinary AMs relative to PCU, and the presence of large numbers of livestock in 2018, always fall into the most problematic country groups. These include Spain, Italy and Poland, which together accounted for more than 55 per cent of EU sales.

When considering the densities of both animal and human populations, additional countries emerge that should implement significant AM sales reductions. These include Germany in Scenario E, the Netherlands and Belgium in Scenario C, and Denmark and Ireland in Scenario D. When the potential for veterinary AM sales reduction is evaluated on economic factors (GDP per capita in our case, i.e. Scenario B) Luxembourg, the Netherlands and Ireland are required to reduce the most. It is worth noting that even countries like Luxembourg, Denmark, Ireland and the Netherlands, which had AM sales levels below the target benchmark in 2018, may be required to further significantly reduce sales. This is particularly relevant when considering risk factors for AMR spread or the economic potential outlined in our scenarios. In certain cases, this is tied to the prominence of the pig sector, which consumes the most AMs among livestock sectors. This can be observed in countries such as Denmark and the Netherlands.

Beyond antimicrobial sales, other important aspects must be considered in the efforts to fight

AMR. First, improving the monitoring system by establishing a more accurate indicator of AMU is fundamental. Expressing AMU in sales volumes (tonnes), even when corrected by the livestock population (mg/PCU) remains a poor indicator. Other indicators such as the Defined Daily Dose (DDD) for example, offer better information on AM consumption, since some active ingredients can be applied in smaller doses than others (Fujimoto *et al.*, 2021). However, this information is not available for all Member States. Thus, our first recommendation is to have a better indicator of AMU at EU level, for a more reliable comparison among countries, sectors and farms.

Second, collecting this information per animal species will enable the design of sector targeted policies. However, to date, antimicrobial sales is the only indicator available at EU level that enables the creation of a multi-country target policy, as discussed in this article. As shown by other articles of this Special Issue, it is essential to contextualise AMU reduction objectives if we wish to engage all relevant stakeholders towards a common goal. Better information on each sector, or even on each production system, would enable the implementation of more acceptable and efficient tools to reduce AMU.

Third, introducing specific policy measures to limit the use of 'Highest Priority Critically Important Antimicrobials' (HPCIA), as classified by the WHO, is essential to preserve AMs which are more important to humans. HPCIA need to have specific targets and regulation, as some of these targets are already in force from 2022 in the new EU regulations.

Quantitative targets can be established based on our results, as a more effective indicator, such as DDD, is not currently available at the EU level. The reduction targets should be correlated with specific HPCIA targets to promote more effective AMR control.

Acknowledgements

Further Reading

■ Appiah, M., Li, F. and Korankye, B. (2021). Modeling the linkages among CO2 emission, energy consumption, and industrialization in sub-Saharan African (SSA) countries. *Environmental Science and Pollution Research*, **28**: 38506–38521.

■ Ardakani, Z., Aragrande, M. and Canali, M. (2024). Global antimicrobial use in livestock farming: an estimate for cattle, chickens, and pigs. *Animal*, **18**(2): 101060.

■ Ardakani, Z., Canali, M., Aragrande, M., Tomassone, L., Simoes, M., Balzani, A. and Beber, C.L. (2023). Evaluating the contribution of antimicrobial use in farmed animals to global antimicrobial resistance in humans. *One Health*, **17**: 100647.

■ EMA (2023). *Sales of veterinary antimicrobial agents in 31 European countries in 2022. Trends from 2010 to 2022. 13th ESVAC report (EMA/299538/2023)*. Amsterdam: EMA.

■ European Commission (2020a). *A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system, COM(2020)381 final*. Brussels: EC.

■ European Commission (2020b). *Recommendations to the Member States as regards their strategic plan for the Common Agricultural Policy. COM(2020) 846 final*. Brussels: European Commission.

■ Fujimoto, K., Kawasaki, M., Abe, R., Yokoyama, T., Haga, T. and Sugiura, K. (2021). Establishing defined daily doses (DDDs) for antimicrobial agents used in pigs, cattle and poultry in Japan and comparing them with European DDD values. *PLoS ONE*, **16**: e0245105.

■ Holmes, A.H., Moore, L.S.P., Sundsfjord, A., Steinbakk, M., Regmi, S., Karkey, A., Guerin, P.J. and Piddock, L.J.V. (2016). Understanding the mechanisms and drivers of antimicrobial resistance. *The Lancet*, **387**: 176–187.

■ Kirchhelle, C. (2018). Pharming animals: a global history of antibiotics in food production (1935–2017), *Palgrave Communications*, **4**: 96.

■ Landers, T.F., Cohen, B., Wittum, T.E. and Larson, E.L. (2012). A review of antibiotic use in food animals: Perspective, policy, and potential. *Public Health Reports*, **127**: 4–22.

■ Vikesland, P., Garner, E., Gupta, S., Kang, S., Maile-Moskowitz, A. and Zhu, N. (2019). Differential drivers of antimicrobial resistance across the world. *Accounts of Chemical Research Journal*, **52**: 916–924.

■ Waluszewski, A., Cinti, A. and Perna, A. (2021). Antibiotics in pig meat production: Restrictions as the odd case and overuse as normality? Experiences from Sweden and Italy. *Humanities and Social Sciences Communications*, **8**: 172.

■ WHO (2015). *Global Action Plan on Antimicrobial Resistance*. Geneva: WHO, World Health Organization. Available online at: https://www.who.int/antimicrobial-resistance/publications/global-action-plan/en/

■ WOAH (2023). *Seventh Annual Report on Antimicrobial Agents Intended for Use in Animals*. Paris: WOAH, World Organisation for Animal Health. Available online at: https://www.woah.org/app/uploads/2023/05/a-seventh-annual-report-amu-final-3.pdf

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Summary

Identifying Specific Targets for the Member States to Achieve the European Union's Goal of 50 per cent Reduction in Sales of Veterinary Antimicrobials by 2030

This article proposes a tailored approach to reduce antimicrobial use (AMU) in livestock among EU countries, in alignment with the EU Farm-to-Fork initiative that targets a 50 per cent reduction by 2030. We argue against a one-size-fits-all target and introduce country-specific targets based on individual factors such as current antimicrobial sales, GDP, and livestock and human densities. Using data from the European Surveillance of Veterinary Antimicrobial Consumption (ESVAC), the article identifies countries with high densities of animals and humans, as well as high levels of AMU per livestock unit, such as Germany, Belgium, Italy, Spain and Poland, as needing to prioritise greater reduction efforts. The article also underlines the need for a more precise EU-level indicator of AMU, as sales do not directly represent use. It suggests that specific targets and regulations should apply to antimicrobials classified as 'Highest Priority Critically Important Antimicrobials' by the WHO. The article recommends extending these targets to different sectors and even individual farms, with high-consumption sectors and poorly performing farms making greater efforts. By considering these factors, the article aims to provide a fair and effective approach to reducing AMU, mitigate the risks associated with antimicrobial resistance, and contribute to achieving the Farm-to-Fork strategy AMU reduction target.

Identifier des objectifs spécifiques pour les États membres afin d'atteindre l'objectif de l'Union européenne de réduction de 50 pour cent des ventes d'antimicrobiens vétérinaires d'ici 2030

Cet article propose une approche sur mesure pour réduire l'utilisation d'antimicrobiens (UAM) dans l'élevage des pays de l'Union européenne, conformément à l'initiative européenne De la ferme à l'assiette qui vise une réduction de 50 pour cent d'ici 2030. Nous argumentons contre un objectif unique et pour l'introduction d'objectifs spécifiques à chaque pays, fondés sur des facteurs individuels tels que les ventes réelles d'antimicrobiens, le PIB et les densités animales et humaines. À l'aide des données de la Surveillance européenne de la consommation d'antimicrobiens vétérinaires (ESVAC), l'article identifie les pays présentant de fortes densités en animaux et humains, ainsi que des niveaux élevés d'UAM par unité de bétail, comme l'Allemagne, la Belgique, l'Italie, l'Espagne et la Pologne, comme devant privilégier des efforts de réduction plus importants. L'article souligne également la nécessité d'un indicateur de l'UAM plus précis au niveau européen, dans la mesure où les ventes ne représentent pas directement l'utilisation. Il suggère que des objectifs et des réglementations spécifiques devraient s'appliquer aux antimicrobiens classés comme 'antimicrobiens d'importance critique de la plus haute priorité' par l'OMS. L'article recommande d'étendre ces objectifs à différents secteurs et même à des exploitations individuelles, les secteurs à forte consommation et les exploitations peu performantes faisant davantage d'efforts. En considérant ces facteurs, l'article vise à proposer une approche juste et efficace pour réduire l'UAM, atténuer les risques associés à la résistance aux antimicrobiens et contribuer à atteindre l'objectif de réduction de l'UAM de la stratégie De la ferme à l'assiette.

Identifizierung spezifischer Vorgaben für die Mitgliedstaaten zur Erreichung des Ziels der Europäischen Union, den Verkauf von antimikrobiellen Tierarzneimitteln bis zum Jahr 2030 um 50 Prozent zu reduzieren

In diesem Artikel wird ein ‚maßgeschneiderter'Ansatz zur Verringerung des Einsatzes antimikrobieller Mittel (AMU) in der Tierhaltung der Mitgliedstaaten vorgeschlagen. Hintergrund ist die EU-Initiative 'Farm-to-Fork', die eine 50-prozentige Reduzierung bis 2030 anstrebt. Wir sprechen uns gegen einen ‚Einheitsansatz'und für länderspezifische Ziele aus, die auf dem jeweiligen Verkauf von antimikrobiellen Mitteln, dem BIP sowie der Tier- und Bevölkerungsdichte basieren. Anhand von Daten aus dem Europäischen Überwachungssystem zum Antibiotikaverbrauch (European Surveillance of Veterinary Antimicrobial Consumption, ESVAC) zeigten wir, dass Länder mit einer hohen Tier- und Bevölkerungsdichte sowie einer hohen Einsatzmenge von antimikrobiellen Mitteln pro Großvieheinheit, wie Deutschland, Belgien, Italien, Spanien und Polen, größere Anstrengungen zur Reduzierung des Einsatzes unternehmen müssen. Dieser Artikel unterstreicht auch die Notwendigkeit eines präziseren Indikators für den Einsatz antimikrobieller Mittel auf EU-Ebene, da die Verkäufe nicht direkt den Verbrauch widerspiegeln. Wir schlagen vor, dass für antimikrobielle Mittel, die von der WHO als besonders kritisch eingestuft werden (‚Highest Priority Critically Important Antimicrobials'), gesonderte Ziele und Vorschriften gelten. Der Artikel empfiehlt, diese Ziele auf verschiedene Sektoren und sogar einzelne Betriebe auszuweiten. Dabei sollten Sektoren mit einem hohen Verbrauch und Betriebe mit schlechter Leistung größere Anstrengungen unternehmen. Durch die Berücksichtigung dieser Einflussfaktoren soll ein gerechter und wirksamer Ansatz zur Verringerung des Einsatzes antimikrobieller Mittel vorgeschlagen werden. Hierdurch werden die mit der Antibiotikaresistenz verbundenen Risiken gemindert und es wird zu dem Ziel der Farm-to-Fork-Strategie zur Reduzierung der antimikrobiellen Mittel beigetragen.