



EU Health Awards for NGOs

Fighting Antimicrobial Resistance

FVE's Strategy 2011 – 2020

1 SYNOPSIS

The Federation of Veterinarians of Europe (FVE) is the leading veterinary professional organisation of Europe, with member organisations in all EU countries. Through these member organisations FVE represents around 235 000 European veterinarians, active in many different positions: clinicians, researchers, academics, food hygienists, policy makers, etc. Many of them have direct links to the use of antimicrobials and to the fight against antimicrobial resistance.

FVE's mission includes enhancing animal health and public health. FVE is strongly committed to the One-Health concept addressing health risks at the animal-human-ecosystems interfaces. Antimicrobial resistance is a clear example of a One-Health issue. Antimicrobial resistance in animals, people and the environment are linked together, and fighting antimicrobial resistance in animals contributes to the protection of people against antimicrobial resistant micro-organisms.

Since the publication of the EU Action Plan against the rising threats from AMR in November 2011, the fight against AMR is for FVE a key strategic goal and part of FVE's Strategy Plans for 2011 – 2015 and for 2015 - 2020.

In delivering its strategy, FVE has taken numerous actions to promote the responsible use of antimicrobials and to reduce the use of antimicrobials in animals. These actions include: raising awareness about antimicrobial resistance, involving stakeholders - from the animal health and the human health sector - and the general public, promoting disease prevention in order to reduce the need to use of antimicrobials in animals, promoting the responsible use of antimicrobials, and research projects.

In this paper we present a summary of initiatives developed by FVE, by itself or in partnership with other European or international organisations, to fight antimicrobial resistance. We recommend the reader to use the links to websites presented in this paper, to get more detailed information about specific actions.

Our initiatives have contributed to a reduction of the use of antimicrobials in animals the EU. First signals for an actual decrease in antimicrobial resistance in animals are becoming visible. They encourage us to continue on the chosen path, in the interest of the health of animals and people!

2 INTRODUCTION

The Federation of Veterinarians of Europe (FVE) is a Federation of 46 national veterinary professional organisations from 38 countries, including all EU member countries. The FVE membership also comprises 4 international organisations (sections) representing a specific part of the European veterinary profession. Through its members FVE represents around 235 000 European veterinarians.

FVE's mission is to enhance animal health, animal welfare, public health and the protection of the environment by promoting the veterinary profession. Together with its members, FVE aims to support veterinarians in delivering their professional responsibilities to the best possible standard, and that this expertise is recognised and valued by the society. In delivering this mission, FVE has fully adopted the One-Health concept addressing health risks at the animal-human-ecosystems interfaces.

Antimicrobial resistance is a clear example of such a One-Health issue. Antimicrobial resistance in animals, people and the environment are linked together. Resistant strains and resistance genes can be easily transmitted between animals and people sharing the same environment. Therefore fighting antimicrobial resistance in animals is essential for the health and welfare of animals, as well as for the health and wellbeing of people and the sustainability of our world.

FVE has constantly taken action to fight antimicrobial resistance in animals and to reduce the risk for people to come in contact with resistant strains in line with the European Commission Action plan against the rising threats from Antimicrobial Resistance and the Regulation 282/ 2014 on the establishment of a third Programme for the Union's action in the field of health (2014-2020).

3 CASE STUDY

Right from the publication of the EU Action Plan against the rising threats from AMR in November 2011 until today, onwards FVE has taken a leadership role in the fight against antimicrobial resistance. For example in our [FVE's strategy 2011 – 2015](#): "Veterinarians care for animals and people" we have stated:

- Some diseases can become resistant to treatment, meaning it's impossible to cure the infected animal and stop the disease from spreading. This could have a devastating impact on animal health and public health. We will support the responsible use of medicines in animals to prevent this. We believe the veterinary profession, the medical profession, animal owners, patient organisations, politicians and industry need to work together to prevent and control antimicrobial resistance. We will promote this.
- We strongly support the One Health concept, a worldwide strategy for expanding interdisciplinary collaborations and communications in all aspects of health care for humans, animals and the environment;
- We will strengthen our contact with other professions working to protect the health and welfare of people and animals – in particular medical doctors and veterinary paraprofessionals;

Equally, in the following and current "[FVE's strategy 2015 – 2020](#) Veterinarians caring for animals and people", we recognize the role veterinarians play in areas like animal health, food safety, environmental protection, and antimicrobial resistance and we have set the following goal:

- Promoting responsible use of antimicrobials – veterinarians have an important role to play in controlling the use of antimicrobials, medicines that have to be used correctly to avoid them to become ineffective, so they can continue to protect animal and human health, now and in the future.

Over the years 2011 – 2016 we have implemented the above mentioned strategies. Our targets related to combating antimicrobial resistance are worked out in several, different actions including data collection, position papers, conferences and awareness campaigns, good practice documents, research activities, etc. Those activities that fit in the EU Action Plan against the rising threats from AMR, are described in more detail on the following pages.

4 ACTION PROPOSED

4.1 CONFERENCES

One of the tools to raise awareness and to engage stakeholders and policy makers in the dialogue and decision making on how to fight antimicrobial resistance is the organisation of international conferences.

- On November 18th 2011, FVE with the support of the Polish Presidency of the Council and the European Commission organised an international and inter-professional conference under the title "Antimicrobials: a true One Health issue: Challenges and opportunities in the medical and veterinary field." The conference was attended by around 250 participants from more than 20 countries. Speakers from the EU institutions and experts from the medical and veterinary world initiated a lively debate that was continued by panelists from organisations like the World Organisation for Animal Health (OIE) the Standing Committee of European Doctors (CPME) and the International Federation for Animal Health (IFAH).
- About 2.5 years later, on April 7th 2014, FVE organised a second international and inter-professional conference to mark the World Health Day 2014. This time the organisation was done together with CPME, and with the support of the Greek Presidency of the Council and of the European Commission. The title of the conference was: Ensuring Health & Sustainability in Europe: Doctors and Veterinarians emphasize "prevention is better than cure".
- FVE actively contributed to discussions in many events advocating for and raising awareness about the need to take action against AMR, through the implementation of best practices in both human and veterinary medicine. For example :
 - the conference "Combating Antimicrobial Resistance - Time for Joint Action" organized by the Danish presidency of the Council of the European union, Copenhagen-Denmark, March 2012;
 - the conference "Farmers and veterinarians together to tackle antimicrobial resistances " held in Brussels in October 2015, by the European Federation for Animal Health and Sanitary Security (FESASS);
 - conference of the Heads of Medicines Agency on that took place in Amsterdam – the Netherlands in February 2016;

- European Antibiotic Awareness Day press-events in Brussels 2011, Brussels 2012, Brussels 2013, Stockholm 2014, and Brussels 2015.
- The 321st session of the European Parliament Intergroup on the Welfare and Conservation of Animals , in February 2016 in Strasbourg.

4.2 POSITION PAPERS

Over the years we produced several policy statements, position papers and articles underlining our commitment to combating the rising threats from AMR.

- An important one, unanimously adopted by our member organisations, is the amendment of the [European Veterinary Code of Conduct](#). In this Code the following paragraph was added:

Veterinarians & Medicines

“... In particular, and especially in respect of antimicrobial medicines, veterinarians shall be mindful of the impact which the use of veterinary medicinal products may have on the use of the same or similar medicines in humans. Veterinarians shall at all times be conscious of issues related to the development of resistance to specific medicines or groups of medicines and should make reasonable efforts to encourage compliance by the end user.”

- Positions papers that have been presented between 2011 and 2016 are the following:
 - [The Federation of Veterinarians of Europe views and action points for keeping antimicrobials effective, now and in the future](#) underlining that *“the on-going analysis of this risk and adequate management measures require commitment and collaboration of all parties concerned: the veterinary profession, the medical profession, animal owners, patient organisations, politicians and industry, etc.”*
 - [Veterinarians are an important part of the solution to the urgent matter of antimicrobial resistance](#) stating that *“Veterinarians in the European Union are members of a regulated health profession, trained to undertake their responsibilities in the use of medicinal products with diligence and with a high degree of expertise, and in the case of antimicrobials in strict accordance with prudent use guidelines”*.
 - [The Federation of Veterinarians of Europe \(FVE\) insists on a reliable quality assurance for the veterinary prescription](#) calling for legislators to consider that *“A veterinary prescription shall be issued by a veterinarian”* explaining that *“Incorrect prescriptions go hand in hand with misuse and overuse of medicinal products, can endanger the health and welfare of animals and can enhance the occurrence and spread of resistance.”*
- FVE has developed in collaboration with veterinary profession in other parts of world, in particular the American Veterinary Medical Association (AVMA) and the Canadian Veterinary Medical Association (CVMA) the following statement on
 - [AVMA- CVMA – FVE Joint Statement on responsible and judicious use of antimicrobials](#) indicates that *“Responsible and judicious use of antimicrobials is in the best interests of both animal health and human health. Approaches to preserve antimicrobial efficacy must be well coordinated and encompass everyone involved in the use of antimicrobials, including physicians, veterinarians, individual patients, animal caretakers, and producers”*.

4.3 GUIDANCE LEAFLETS

One of the actions with a very direct and visible effect is the development of 7 different leaflets to promote the responsible use of antimicrobials. Two of these leaflets were developed together with other health professionals, i.e. the medical doctors and the dentists. The leaflets target different interest groups ranging from the general public to animal owners, health professionals or policy makers.

[FVE leaflets on responsible use of antimicrobials](#) (translated in EU languages)

- FVE advice to the [general public](#);
- FVE advice to [veterinarians](#);
- FVE advice to the owners of [companion animals](#);
- FVE advice to the owners of [horses](#);
- FVE and Copa-Cogeca advice to the [farmers](#);
- FVE, CPME and CED [advice to the public](#);
- FVE, CPME and CED [advice to Health Professionals](#).

4.4 LIAISON WITH STAKEHOLDERS

Antimicrobial resistance is a multifactorial problem, therefore FVE strongly believes that the solution to effectively fight antimicrobial resistance lays on the collaboration. Having recognized the value of cross-sectoral collaboration, FVE has been engaged in an open dialogue with stakeholders of different background.

- European veterinarians and European doctors have joined forces to bring across the message for multi-sectorial collaboration against antimicrobial resistance. The first FVE – CPME Memorandum of Understanding was signed in [2013](#) and was further updated in [2015](#). The updated MoU was signed in the margin of the EAAD press-event to mark the joint fight antimicrobial resistance.
- FVE is a founding member of the European Platform on Responsible Use of Medicines in Animals (EPRUMA) and took over the [EPRUMA Chairmanship](#) in 2015. EPRUMA is a multi-stakeholder platform linking best practice with animal health and public health. [Partners of EPRUMA](#) are organisations representing veterinarians, farmers and agri-cooperatives, manufacturers of animal medicines and diagnostics, feed manufacturers, professionals working in animal health, sanitary security and sustainable agriculture and pharmacists. Four national Responsible Use stakeholder platforms from Belgium, United Kingdom, the Netherlands and Spain contribute to the open dialogue as associate members. EPRUMA has been active since 2005 and aims to ensure best practice through responsible use of medicines in the prevention and control of animal diseases. The two latest publications of EPRUMA are the [EPRUMA veterinary terminology](#) and the guidance leaflet [EPRUMA next level](#).
- FVE recognizes that antimicrobial resistance is a global issue. FVE used its close relationship with the veterinary profession in other parts of world, like the American Veterinary Medical Association (AVMA) and the Canadian Veterinary Medical Association (CVMA). Additionally FVE participated in many global initiatives like the [One Health Initiative](#), the [One Health Platform](#) and the [One Health Commission](#).
- FVE encourages its national members to work with the national and local authorities against antimicrobial resistance. Several EU Member States, with the support and contribution of the national veterinary associations, have national plans to ensure responsible use of antibiotics and sustainable

agriculture. That has contributed to decrease in the use of antibiotics in animals and to the levels of antimicrobial resistance in a number of countries, e.g. Denmark, France, the Netherlands¹.

- FVE encourages and supports its members also to work together and exchange information to find out best practices, see for example the report from the [exchange of experiences on antibiotics in Frankfurt/Germany](#).

4.5 ADVOCACY/ COLLABORATION TO INTERNATIONAL ORGANISATIONS AND THE EUROPEAN INSTITUTIONS

FVE has built a network of experts. FVE is in the forefront of raising awareness about antimicrobial resistance, brings its expertise and continuously contributes to the ongoing discussions at all levels.

FVE advocates the need for responsible use of antibiotics – especially of the critically important antibiotics, sustainable farming, intersectoral collaboration, monitoring of the antimicrobial use and of antimicrobial resistance, strengthening of veterinary prescription to ensure animal and public health in Europe proportional measures to human and veterinary sector and shared responsibility.

We share our knowledge for example via our contributions to :

- [Input of to the draft proposal of the European Commission for a regulation on transmissible animal diseases](#) (Animal Health Law)
- [Input to the draft proposal of the European Commission for the regulation of veterinary medicinal products](#).
- [Input to the draft proposal for a Regulation on the manufacture, placing on the market and use of medicated feed](#)
- Input to several EMA Consultations with regard to antimicrobial resistance, the use of certain antibiotics and the risk for public health, e.g.
 - ESVAC Vision and Strategy 2016-2020;
 - The use of colistin products in animals within the European Union - development of resistance and possible impact on human and animal health;
 - CVMP strategy on antimicrobials 2016-2020;
 - The use of extended-spectrum penicillins in animals in the European Union -development of resistance and impact on human and animal health;
 - The risk to public health from antimicrobial resistance due to the use of an antimicrobial veterinary medicinal product in food-producing animals;
 - The use of aminoglycosides in animals in the European Union - Development of resistance and impact on human and animal health;
 - The impact on public health and animal health of the use of antibiotics in animals;
 - On injection site residues - considerations for risk assessment and residue surveillance;
 - CVMP strategy on antimicrobials 2011-2015;
 - The use of macrolides, lincosamides and streptogramins (MLS) in food-producing animals in the European Union: development of resistance and impact on human and animal health;

¹ [5th ESVAC report](#)

- Recently FVE - with the input from experts in the different fields of veterinary medicine: cattle, pigs, poultry, sheep-goat, horses, aquatic animals, rabbits and bees - provided advice to the ad hoc joint EMA/EFSA working group working on a scientific opinion on measures to reduce the need to use antimicrobial agents in animal husbandry in the EU.
- Input to the World Organisation for Animal Health (OIE), e.g.
 - In 2014, [FVE and OIE exchanged official letters](#) in order to strengthen our collaboration in several fields of activity. Both organisations identified AMR as a key area for joining forces.
 - Poster presenting the [FVE AMR guidance leaflets](#)
 - Poster presenting the results of the FVE survey on [Factors influencing antibiotic prescribing habits and use of sensitivity testing](#)
- Input to the World Health Organisation (WHO)

FVE is considered a key stakeholder² and an ongoing collaboration between FVE and WHO is established.

4.6 RESEARCH PROJECTS

In 2012, FVE in collaboration with the Heads of Medicines Agencies (HMA) launched a survey among European veterinary practitioners to identify the [Factors influencing antibiotic prescribing habits and use of sensitivity testing](#) and the [Antibiotics used most commonly to treat animals in Europe](#). Results are published in a peer reviewed journal.

FVE also added value in scientific consortiums working on better understanding of controlling of antimicrobial resistance, e.g.

- [EFFORT](#) (Ecology from Farm to Fork Of microbial drug Resistance and Transmission) project which will provide scientific evidence and high quality data that will inform decision makers, the scientific community and other stakeholders about the consequences of anti-microbial resistance (AMR) in the food chain, in relation to animal health and welfare, food safety and economic aspects.
- [JPIAMR](#) (joint Programming Initiative on Antimicrobial Resistance) project, which aims to align resources by creating a collaborative platform, maximising existing and future efforts to combat AMR.

FVE has also been the coordinator of the FP7 project [CALLISTO](#) (Companion Animal multisectorial interprofessional and Interdisciplinary Strategic Think tank On zoonoses) project, which looked into the potential risks for human health that can be transmitted from companion animals. The risk of antimicrobial resistance has also been considered and in the [final recommendations](#) it is stated that *“the emergence of antimicrobial resistance in companion animals should be monitored and controls should be placed on the use of human critically important antibiotics in companion animal species, developing in parallel new approaches to antimicrobial therapy.”*

5 METHODOLOGY

Following the publication of the [Action plan against the rising threats from Antimicrobial](#)

² <http://apps.who.int/medicinedocs/documents/s16207e/s16207e.pdf>

[Resistance](#) by the European Commission in November 2011, FVE seriously considered all the key actions proposed by the Commission. FVE immediately decided to put the fight against antimicrobial resistance high on its priority list. The matter was introduced in the FVE Strategy Plans. The Strategy was delivered through the activities described in [Chapter 4](#).

FVE has been advocating the value of One Health and the need for a collaborative interdisciplinary approach. FVE welcomed the publication of [the 3rd Health Programme](#) in 2014. Although One Health approach is not explicitly mentioned in the text, we are convinced that healthy animals contribute to the health and wellbeing of people. Reducing the need to treat animals and to use antimicrobials in animals further contributes to the health of people.

FVE plays a role in promoting health, prevent diseases and foster supportive environments for healthy lifestyles taking into account the 'health in all policies' principle (Thematic Priority 1) and protecting Union citizens from serious cross-border health threats (Thematic Priority 2).

Particular attention has been given to the recommendations, which have been considered when drafting the next FVE Strategy 2015-2020:

- 1.2. Drugs-related health damage, including information and prevention;
- 1.6. Health information and knowledge system to contribute to evidence-based decision-making;
- 2.3. Implementation of Union legislation on communicable diseases and other health threats, including those caused by biological and chemical incidents, environment and climate change;
- 2.4. Health information and knowledge system to contribute to evidence-based decision-making

The activities described in [Chapter 4](#) have been implemented the FVE strategic goals ([Chapter 3](#)) in line with the European legislation. The FVE actions were designed in a way to ensure that they reach a very large audience, from the general public – including animal owners, to veterinarians and health care professionals, to policy makers and legislators at national, European and international level. The ultimate goal has been to engage as many as possible in a coordinated effort against antimicrobial resistance.

6 RESULTS AND CONCLUSIONS

The different activities undertaken by FVE have contributed to

- A better understanding of the use of antimicrobials in animals and possibilities to reduce this use;
- An improved awareness about the occurrence of and risks associated with antimicrobial resistance in animals and potential spread to people;
- A better understanding and collaboration of the different stakeholders in the animal sector in relation to fighting antimicrobial resistance;
- An enhanced collaboration between veterinary and other health professions in the fight against antimicrobial resistance;
- The implementation of best practices for the responsible use of antimicrobials in animals;
- A reduced use of antimicrobials in the animal health sector.

Although there still is a long way to go, the FVE initiatives have stimulated a break in the trend in the use of antimicrobials. After years of increasing amounts, we now see a reduction in the amounts used and first signals that it has a positive impact on AMR are becoming visible.

6.1 RELEVANCE AND EFFECTIVENESS

FVE and its members contribute to reducing the threat from antimicrobial resistance to human health within the European Union by raising awareness about responsible use of medicines in animals, best practices and sustainable farming, responsible ownership; by supporting health professional in their daily lives through guidance material; by providing scientific advice to European and international organisations; by engaging with other stakeholders on responsible use of medicines both in human and veterinary sector.

We are proud to see that our actions have given positive results and have motivated the veterinary profession in implementing best practices like good management husbandry and biosecurity systems, avoiding overuse or misuse of antibiotics in animals and striving for sustainable farming in the European Union.

The last ESVAC³ report shows those achievements in practice. Data collection on sales of veterinary antibiotics in 23 countries in the EU and European Economic Area (EEA) shows an average decrease of 7.9% (in mg/CRU) for the period 2011 to 2013. Since 2010, 11 of the 23 countries have achieved a decrease ranging between 5.6%–51% (mg/PCU). In some countries the progress was impressive, usually as a result of the adoption of a national action plan putting strict targets for the future. France, Italy, The Netherlands and Spain are such examples.

In the Netherlands a 52% drop in sales (in mg/PCU) of veterinary antimicrobial agents was observed from 2010 to 2013, while in 2012, the government set a new reduction target: -70% for 2015, with reference to 2009. The sales of 3rd- and 4th-generation cephalosporins declined by 94% and the sales of fluoroquinolones decreased by 45% from 2011 to 2012, and continued to decline in 2013. This result was achieved by the efforts of private quality production systems. The private quality systems in the pig sector banned the use of 3rd- and 4th-generation cephalosporins; and in the dairy sector the systems banned the use of 3rd- and 4th-generation cephalosporins for drying off cows. In 2012, a legal base was created for mandatory antimicrobial susceptibility testing before using third-choice antibiotics. It came into force at the beginning of 2013.

The [Joint Interagency Antimicrobial Consumption and Resistance Analysis \(JIACRA\) Report](#) indicates that *“In both humans and animals, positive associations between consumption of antimicrobials and the corresponding resistance in bacteria were observed for most of the combinations investigated. In some cases, a positive association was also found between antimicrobial consumption in animals and resistance in bacteria from humans”*. That being said, the liaison that is inevitably made is that any action taken in the veterinary sector to ensure responsible use of antibiotics has directly a positive impact to public health.

6.2 TRANSFERABILITY, SUSTAINABILITY AND INTERSECTORAL COLLABORATION

The actions undertaken by FVE form an ongoing line of collecting information, raising awareness, motivating and engaging people and promoting good practices. A leading principle always has been to look

³ ESVAC:

at what can we do, what is in our sphere of influence, and how can we involve people in achieving our goals and objectives.

The emphasis on One-Health, is not limited to antimicrobial resistance. It can be applied to other health issues as well. In the first place to the prevention of transmissible diseases, in particular zoonotic diseases. But there are more health issues where the understanding of animal health contributes to a better understanding of human health as well.

FVE has not searched for additional resources or funding for the implementation of our actions. On the contrary, we looked into the available resources and tools and tried to use these as good as possible.

The fight against antimicrobial resistance has stimulated our collaboration with the medical profession and with other interest group and the academic world. It has convinced us in our opinion that for such a complex and multifaceted topic as antimicrobial resistance, strong collaboration is needed; a collaboration that can only be built on the understanding of each other's position and responsibility.

6.3 INNOVATION AND CREATIVITY

The success of the FVE strategy has been the principle of collaboration and shared responsibility. Each one of us in our society, doctors, veterinarians, farmers, patients, pharma industry, legislators, public health authorities, etc., have their particular role to play. It is important that each of the stakeholders take their share of responsibility, recognise the value of the contribution other stakeholder can make and all together work collaboratively against antimicrobial resistance in a coordinated way that ensures progress and success in our ultimate goals.

FVE and the veterinary profession have taken our responsibility, have put in place an ongoing strategy for fighting antimicrobial resistance, have committed to common efforts with other stakeholders both from medical and veterinary sector and are optimistic for the future as we have already seen the progress made in the veterinary sector. That is our motivation to continue and intensify our efforts to ensure public health under the auspice of One Health.

7 EPILOGUE

The fight against AMR is not won by single actions by individuals or organisations. The critical factor for success is collaboration, where-in each party involved contributes to the common goal. In this way FVE has set up several actions and collaborated with several partners. We have reached out, in different ways, to our own members, the European veterinary profession, politicians and decision makers, other NGOs, the academic world, animal owners, sister organisations in other parts of the world, etc. Step by step, we keep on pushing forward. The remarkable changes in the use of antimicrobials in animals, the signals indicating a reduction of resistance, and the impact this will have on the future of public health, are very encouraging for us to continue on this path.