

Joint Action Antimicrobial Resistance and Healthcare-Associated Infections

Report on the questionnaire for associations, vets, farmers and other professionals related to animal health

> WP7 | Appropriate use of antimicrobials in human and animals Leader acronym | AEMPS & FHI
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The EU Joint Action on AMR and HAIs is divided up into nine workpackages including both administrative and functional tasks. Workpackage 7 concerns the appropriate use of antimicrobials in humans and animals and has four main tasks:

- Task 7.1: Identify and review existing guidelines, tools and importantly, implementation methods for antibiotic stewardship by level-of-care (hospital, long-term care facility and community setting) and in food and companion animals and to summarize available information on the ECDC website
- Task 7.2. Workshop involving all the registered partners to discuss models of implementation
- Task 7.3 Qualitative evaluation of the level of implementation and acceptance of antibiotic stewardship at different levels of healthcare and in animals, in different country settings. This will focus on identifying and establishing success factors and barriers.
- Task 7.4.1 Develop and test near real-time surveillance of antimicrobials and multidrug resistant bacteria
 - Subtask 7.4.1. Surveillance in human medicines consumption of antimicrobials and AMR
 - Subtask 7.4.2. Surveillance of AMR in animals

- 1. The identification of partners and stakeholders interested in the tasks related to animal health in WP7 was conducted in January-February 2018. This allowed us to develop a complete contact list for the project.
- 2. A first draft of the survey was developed by AEMPS and distributed to all contributors and stakeholders (e.g. EPRUMA and Vet+I), who subsequently circulated the survey to their contacts. Based on feedback on the draft survey, an updated version of the survey was completed and tested. The aim of the survey was to collect relevant associations', vets' and other organizations' views related to which guidelines or tools have been effective to decrease antimicrobial consumption and improve the prudent use in animals, and the gaps or rooms for improvement.
- 3. The survey was developed as an electronic questionnaire in English and all questions were mandatory to answer. Distribution started on the 16th March 2018 in a phased of approach; first through EPRUMA who has contact information for all organizations and associations related to animal health in Europe, thereafter through the EU-JAMRAI partners. It was stated that if language was a concern we could develop a translated version in collaboration with the implicated country, as there was no budget for translation. Only Poland asked for a translated version (in May), and the survey was translated in collaboration with The Polish Association of Producers and Importers of Veterinary Medicinal Products ("POLPROWET").
- 4. To increase the number of respondents, several announcements and reminders were made, for example:
 - Twitter: https://twitter.com/EUjamrai/status/976008591630094337
 - EU-JAMRJAI website: https://eu-jamrai.eu/questionnaire-animal-health-wp7/
 - Partners' website/publications, e.g. the article published on the Norwegian Veterinary Institute's website: https://www.vetinst.no/nyheter/delta-i-internasjonalsp%C3%B8rreunders%C3%B8kelse-om-bruk-av-antibiotika-til-dyr
- 5. Contact was also established with members of the Committee for Medicinal Products for Veterinary Use (CVMP) and other collaborating stakeholders to ask them for help with the distribution of the questionnaire in countries where we did not have a partner participating in the project.

Participating countries

Austria	Ireland	Republic of Serbia
Belgium	Italy	Romania
Czech Republic	Lithuania	Slovakia
Denmark	Macedonia (Republic of North Macedonia)	Slovenia
Estonia	Malta	Spain
Finland	Netherlands	Sweden
France	Norway	United Kingdom
Germany	Poland	USA
Greece	Portugal	

Questionnaire

Comment of the second	ppiate use of antimicrobials in animals. WP7. European Joint Action on AMR and HCAI (EU-JAMRAI)
TIONNAIRE FO	R ASSOCIATIONS, VETS, FARMERS AND OTHER PROFESSIONALS RELATED TO ANIMAL HEALTH
	This questionnaire is a working document prepared by <u>work package 7</u> "Appropriate use of antimicrobials in human and animals", as part of the <u>European Joint Action on Antimicrobial Resistance and Healthcare Associated Infections (EU-JAMRAI)</u> , co-funded by the Health Programme of the European Union.
	The Joint Action will enhance cooperation between Member States, the European Commission and its agencies and other international organisations and will enable each target group to contribute to address the issue of AMR and Healthcare Associated Infections.
	Universe of this questionnaire: this consultation aims to collect the views of associations, vets, farmers and other professionals related to animal health on which guidelines or tools have been effective to decrease antimicrobials consumption and improve the prudent use in animals, and the gaps or room to improvement.
	The results will be summarize globally, so responders will remain anonymous, and published within the EU-JAMRAI web and will be the base for a coming workshop on November 7th 2018, in Vienna, Austria.
	OK
	0 of 7 answered

* 1. Identification of re	esponder 🔽		
Name of contact person			
Name of Company/			
Association/ Institution/			
Organization			
Email Address			
Linali Address			

_	
* 2. Country	
O Austria	🔵 Latvia
O Belgium	Liechtenstein
🔵 Bulgaria	🔵 Lithuania
🔿 Croatia	Luxembourg
O Cyprus	🔵 Malta
Czech Republic	Netherlands
🔵 Denmark	Norway
🔵 Estonia	O Poland
Finland	O Portugal
France	🔿 Romania
Germany	🔘 Slovakia
⊖ Greece	🔘 Slovenia
Hungary	🔘 Spain
🔵 Iceland	🔘 Sweden
🔵 Ireland	Switzerland
◯ Italy	🔘 United Kingdom
Other (please specify)	
* 3. Main sector of the responding orga	nisation/association. One answer possible. 🔽
O Veterinary healthcare provider	Academia or scientific society
Farmers and animal keepers	Food industry
Other (please specify)	

nore than one if it's your case.	you are working with or have expertise on. You can clich
Pigs (production)	Rabbits (production)
Fish (production)	Horses (meat production)
Poultry (production)	Cats (companion)
Large ruminants (milk production)	Dogs (companion)
Large ruminants (meat production)	Exotics (companion)
Small ruminants (milk production)	Horses (companion)
Small ruminants (meat production)	

* 5. Which of the following tools has been most useful to you to decrease antimicrobial consumption and improve the prudent use?

	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
Improvements in biosecurity	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Increase vaccination	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Nutrition optimization	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Routine diagnostic tests	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
A clear action plan	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Antibiograms	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Guidelines and/or recommendations	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Other (please specify)						

* 6. Besides the previous ones, is there any specific guideline of	or tool you would like
to mention?.Please, specify title/author and a link, if possible.	

* 7. Specific measures needed to help to decrease antimicrobials consumption and to increase the prudent use. Indicate from 0 (strongly disagree) to 10 (strongly agree).

	1	2	3	4	5	6	7	8	9	10
Good practice guidelines	\bigcirc									
Autoconsumption Control Tools	\bigcirc									
Legislation	\bigcirc									
Training	\bigcirc									
Biosecurity measures	\bigcirc									
Prescription guidelines	\bigcirc									
Regional epidemiological maps for resistance of clinical pathogens	0	0	0	0	0	0	0	0	0	0
Reduction / ban to use of specific AM on voluntary basis (for eg. Spanish Voluntary agreement to reduce colistin consumption to 5 mg/PCU)	0	0	0	0	0	0	0	0	0	0
Rapid diagnosis test	\bigcirc									
Sensitive test (to help to choose the best antimicrobial and avoid the use of CIAs)	0	\bigcirc	0	0	0	0	0	0	0	0
Prevention tools such as vaccination or optimised nutrition	0	0	0	0	0	0	0	0	0	0
Other (please specify)										
					1					

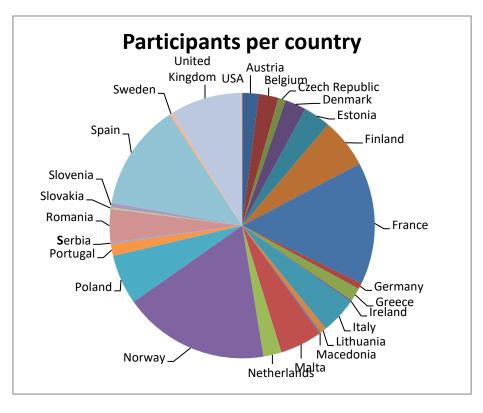
Results

• **Country**: We received 522 responses to the survey, from 26 countries. There is a high heterogeneity about the number of responses between countries.

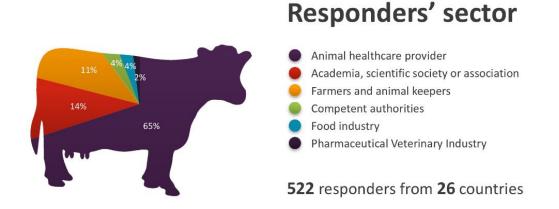
Country	Number of responses
Austria	11
Belgium	13
Czech Republic	5
Denmark	14
Estonia	18
Finland	33
France	81
Germany	4
Greece	9
Ireland	1
Italy	24
Lithuania	4
Macedonia	1

Malta	28
Netherlands	12
Norway	97
Poland	33
Portugal	8
Republic of Serbia	1
Romania	22
Slovakia	1
Slovenia	3
Spain	71
Sweden	2
United Kingdom	47
USA	1
Total	522

10



• Main sector of the responding organisation/association: from all responses 350 (65%) were from animal healthcare providers/veterinary practitioners followed by the responses of the scientific associations (14%) and those of farmers and animal keepers (11%).



• Type of animal species/production you are working with or have expertise on: The next table shows the relation between the answering sectors and the type of animal expertise associated.

					Produc	tion		Companion					
Sector/	Fish	Pigs	Poultry	-	Large	Small ruminant (milk)	Small ruminant (meat)	Rabbit	Horse (meat)	Cat	Dog	Exotic	Horse
Type of animal expertise				Ruminant (milk)	Ruminant (meat)								
Academia, scientific society or association	11	42	35	43	35	27	27	13	9	24	27	13	18
Veterinary practitioner	14	82	55	136	118	52	78	37	30	246	251	83	87
Competent authorities	7	21	18	18	19	15	18	8	11	11	11	7	9
Farmers and animal keepers	4	15	13	16	27	5	30	3	4	7	9	0	8
Food industry	4	6	13	5	4	3	4	4	3	3	3	0	3
Pharmaceutical Veterinary Industry	2	4	4	5	4	3	3	2	3	6	5	1	3
Total	42	171	138	224	208	105	161	67	60	298	307	104	129

Veterinary practitioner is the sector with the higher rate of responses whereas both, food and pharmaceutical industries are the sector with fewer responses. Large rumiants and companion animals are well represented while the fish sector is the one with fewer responses.

• Which of the following tools have been most useful to you to decrease antimicrobial consumption and improve the prudent use?

3 most USEFUL tools to reduce **ATB** consumption in animals:

Guidelines and/or recommendations

A clear action plan

Improvements in biosecurity

Well established guidelines (strongly agree+ agree 82%) was felt as the most useful tool. A clear action plan (strongly agree+ agree 75%) and improvements in biosecurity as prevention of the use of antimicrobial consumption and to improve the prudent use were also felt as one of the most important tools (strongly agree+ agree 63%).

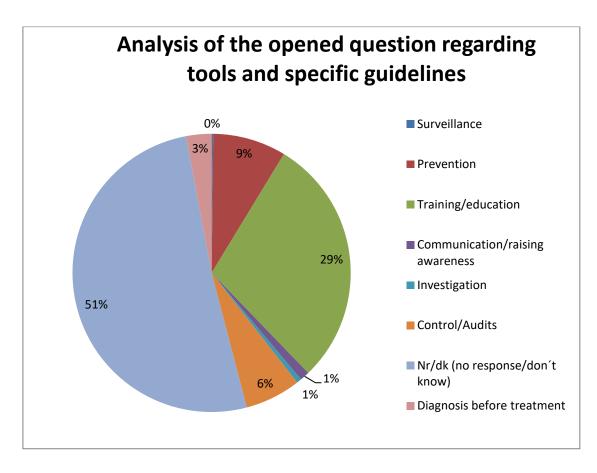
• Beside the previous ones is there any specific guideline or tool you would like to mention? We have organized and coded the answers provided to this question in order to make it more understandable. We have comprised the answers in 8 groups; 6 are aligned with the main working areas of the Global Action Plan, European One Health Action Plan and the Spanish Action Plan (Surveillance, Prevention, Control, Communication, Training and Investigation)

Code Variable

- 1 Surveillance
- 2 Prevention
- 3 Training/education
- 4 Communication/raising awareness

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- 6 Control/Audits
- 7 Nr/dk (no response/don't know)
- 8 Diagnosis before treatment



More than half of the respondents (51%) left this question unanswered. This might be due to the fact that most of the answers to this question were the same as question 5 in the questionnaire. A 29% of the responders felt that education and better knowledge are indispensable tools to improve the use of antimicrobial agents.

• Specific measures needed to help decrease antimicrobial consumption and to increase the prudent use.



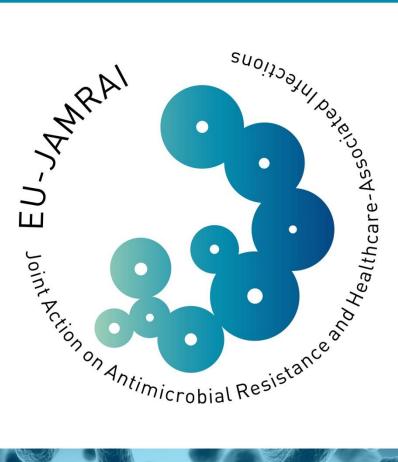
Good practice guidelines (strongly agree+ agree 89%), prescription guidelines (strongly agree + agree 74%) and training of professionals (strongly agree+ agree 79%) were the tools that professionals felt that are the most needed tools.

Conclusions

- The survey was distributed and disseminated widely and the response rate was high
- The biggest response group were the veterinary practitioners
- A clear action plan, Improvements in biosecurity and well established guidelines have been regarded as the most useful tools
- Education and better knowledge were felt as indispensable tools to improve the use of antimicrobial agents

Recommendations

- To have a clear action plan that can be included in national plans in a One Health way will improve the prudent use of antimicrobial agents
- To develop specific prescription guidelines is essential
- To have good biosecurity and hygiene measures is fundamental to prevent the need of antimicrobial agents
- On-going education of professionals is a fundamental area that must be strengthened
- The periodicity of this kind of surveys is a key tool to assess the weaknesses and strengths regarding antimicrobial consumption and prudent use





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