

UK 5 YEAR ANTIMICROBIAL RESISTANCE (AMR) STRATEGY

ACTION PLAN FOR THE RESPONSIBLE USE OF MEDICINES IN AGRICULTURE ALLIANCE (RUMA) AND ITS INDIVIDUAL MEMBERS

1. The UK 5 year AMR Strategy was launched on 10 September 2013. RUMA, a unique alliance of 23 organisations across the whole UK livestock sector, was among the groups that welcomed and supported the strategy.
2. The Alliance has discussed the actions that will be required to implement the strategy and has developed this action plan, based on the detailed actions in Annex B of the Strategy, to set out the actions that RUMA and/or its members will take. Inevitably, the plan is still at an early stage. RUMA members have agreed to review and record progress against the plan at RUMA's quarterly meetings and to publish the plan and its subsequent revisions to provide an open report on how this work is developing. During these reviews new actions will be added to the plan including any identified by the high level steering group made up of DARC, ARHAI and ACSMF members who the strategy says will agree an action plan to implement the strategy.
3. A list of RUMA members and the acronyms used in this plan are at Annex A.
4. If you have any comments on the plan please send them to RUMA's Secretary General, John FitzGerald, at rumasec@btinternet.com.

RUMA
April 2014

Strategy actions – Annex B	Section 5.6 Actions for Animal Health (Bold added by RUMA)	RUMA/members' action	Progress
<p>Key area 1: improving infection prevention and control practices Actions needed to further improve infection prevention and control in human and animal systems are:</p>	<p>- considering the use of farm assurance schemes as a mechanism to increase adherence to best husbandry including isolation of sick animals, testing of new stock and responsible use of antibiotic principles, while ensuring animal health and welfare, NFU, Species Groups, Red Tractor - encouraging retailers to review their standards for meat and animal products and to set clear specifications, concerning bio-security, antimicrobial stewardship and good</p>	<p>RUMA will need to help develop improved infection prevention and control practices and to disseminate advice on them through RUMA Guidelines or advice notes.</p> <p>RUMA to develop protocols for members' advisory staff to ensure they are able to provide up to date advice on antibiotic resistance and responsible use when they interact with farmers.</p>	

	husbandry throughout the supply chain for overseas as well as nationally sourced UK meat and animal products, working with suppliers and veterinarians to ensure compliance, BRC, FSA	<p>FSA will assist BRC, as necessary, in encouraging retailers to review their standards for meat and animal products, and to set clear specifications for <i>inter alia</i> antimicrobial stewardship.</p> <p>BVA to seek meeting(s) with individual retailers to discuss what they are doing in relation to encouraging responsible use and if there are areas where BVA can assist.</p>	
1. ensuring adherence to evidence-based guidelines for preventing healthcare associated infections and clinical best practice guidance for infections caused by managing multi-drug resistant organisms		BVA to provide leadership by promoting and encouraging adherence.	
2. embedding strong infection prevention practices and control of cross-infection in all educational programmes for healthcare workers and veterinary teams,		BVA to provide leadership by promoting and encouraging best practice.	
3. encouraging and supporting animal keepers to improve bio-security and husbandry practices to minimise disease occurrence; for example, through appropriate housing design and good disinfection procedures,	encouraging livestock farmers to adhere to government guidance on bio-security, animal husbandry and on farm health planning for each of the major farming sectors and to take proactive action to reduce the risk of disease occurring in their animals, Defra, NFU, Species Groups, RUMA	<p>NFU, NFUS and Species Groups to lead.</p> <p>RUMA to consider developing an advice note or guideline. Include as element in RUMA endorsed responsible use training.</p> <p>Red Tractor Farm Assurance (RTFA) Standards already require housing to provide a safe and hygienic environment for all livestock.</p>	Red Tractor's revised Farm Assurance Standards, effective from October 2014, will move to a more review focussed approach to health planning to identify potential disease and biosecurity issues to minimise the spread of disease within the farm and between other farms.
4. encouraging appropriate		BVA, NFU, NFUS and Species Groups	

<p>use of best practice in disease control, for example through isolation of sick animals, testing of new stock prior to mixing, use of vaccines and disease eradication programmes,</p>		<p>to lead.</p> <p>RUMA to consider developing an advice note or guideline. Include as element in RUMA endorsed responsible use training.</p> <p>Members' staff visiting farms to provide advice on best practice in disease control in line with RUMA Guidelines.</p> <p>RUMA to consider whether existing guidance is sufficient or a RUMA protocol should be drafted for staff visiting farms.</p> <p>AIC's input into feed delivery to the farm. Biosecurity during feed delivery. Vehicle scheduling to follow the health pyramid – first drop Monday morning at the highest health unit and then follow down the pyramid. Lorry disinfection if in doubt.</p> <p>RTFA Standard AH.6 requires producers to provide appropriate facilities for the segregation/isolation and the care of sick or injured animals. It states that if the condition is infectious, the animal or animals must be isolated from the main herd/flock if appropriate to prevent the spread of disease.</p>	<p>Red Tractor's revised Farm Assurance Standards, effective from October 2014, will require producers to provide evidence of planning and implementation of appropriate biosecurity measures. This must include measures to manage incoming stock (segregation), isolation of infectious animals and specify both measures adopted routinely and those to be implemented in the event of a disease outbreak. Assessors will be looking for a documented farm biosecurity plan.</p>
<p>5. sharing intelligence on emerging issues in human and animal health; as well as making better use of early warning systems to trigger appropriate containment measures at a</p>		<p>RUMA to consider how it can help address each issue as it emerges and liaise with VMD.</p>	

national and global level to limit spread of AMR,			
6. cost-effective use of licensed vaccines to reduce the incidence of infections as well as promotion of the development of new vaccines, including those against multi-drug resistant organisms.		<p>BVA, NFU, NFUS and Species Groups to provide leadership in promoting vaccine use and calling for the development of new vaccines.</p> <p>Vaccine use is already recommended by RUMA Guidelines. RUMA to consider developing an advice note encouraging the use of vaccines as an integral part of health planning. Include as element in RUMA endorsed responsible use training.</p>	
<p>Key area 2: optimising prescribing practice Actions needed to further improve antimicrobial conservation and stewardship through optimising prescribing practice are:</p>	<p>- improving adherence to responsible prescribing and responsible administration principles for antibiotics by ensuring provision of practice prescribing policies and by dissemination of education material aimed at aiding compliance with medication instructions, RUMA</p>	<p>RUMA to encourage veterinary species groups to develop optimum prescribing practices and to disseminate advice on them through RUMA Guidelines.</p> <p>BVA to consider how to assess responsible use practices in different sectors, e.g. through a survey of members.</p> <p>BVA will undertake a review of its best practice guidance on responsible use (e.g. 8 point plan) and update as necessary.</p> <p>BVA will review its Medicated Feedingstuffs Prescription Pad and update, as necessary, with reference to responsible use.</p>	
7. developing enhanced education and training in prescribing and administration of antibiotics,	<p>- strengthening and embedding an understanding of AMR issues throughout undergraduate courses, RCVS/BVA</p> <p>- considering influencing uptake of training through statutory professional standards, for example, for veterinary surgeons by inclusion in the <i>RCVS Day One Competency</i></p>	<p>BVA to Continue to incorporate responsible use into its Continuing Professional Development (CPD) courses.</p> <p>RUMA, NOAH and NFU to continue working with BCVA on developing vet to</p>	

	<p><i>Framework</i> and/or through the annual continuing professional development (CPD) requirements necessary to retain membership of the RCVS or other professional body, RCVS/BVA</p> <p>- increasing the level of provision of targeted CPD for veterinary professionals, RCVS/BVA</p> <p>- increasing access to relevant training for animal keepers, RUMA, NFU, NOAH, BVA, Species Groups</p>	<p>farmer responsible use training which should include training on administering antibiotics. This would also be an element in RUMA endorsed responsible use training.</p> <p>BVA to encourage resistance and responsible use education, including through engagement with clinical veterinary students.</p>	<p>BVA officers raised the issue of resistance and responsible use with the Heads of UK Veterinary Schools at their meeting in March 2014. There was broad agreement that the curriculum in all schools already more than adequately addresses the teaching of responsible use of medicines and in particular antimicrobials and the challenge of antimicrobial resistance in the context of One Health. The schools keep the teaching of these topics constantly under review to ensure they are accorded the appropriate attention.</p>
<p>8. identifying the optimum arrangements for recording and reporting of data (including the use of electronic prescribing), as well as analysis of data on antibiotic use, resistance and clinical outcomes</p>		<p>BVA, in supporting the principle of recording and reporting of antibiotic use, will consider how such recording and reporting may be encouraged, also how usage may be measured, audited and how prescribing habits could be assessed.</p> <p>RUMA to feed into VMD work in this area - VMD considering options on usage data collection for the UK.</p> <p>Red Tractor consulted on changes to the standards to come into effect from 1st October 2014.</p>	<p>Red Tractor's revised Farm Assurance Standards, effective from October 2014, will introduce new requirements for an annual review of antibiotic use on each farm.</p> <p>- In the beef and lamb sector (England</p>

			<p>only), producers will be required to discuss antibiotic use with the vet during the annual vet visit.</p> <ul style="list-style-type: none"> - In the dairy sector, the herd health and performance review will include a review of medicine antibiotic purchase and use. - In the pig sector, assessors will check that the VHP contains an annual collation of total antibiotics used (including in feed medication) and that this use has been reviewed by the vet. - For broiler chickens, medicines records will be required to contain an annual collation (mg active/kg LWt) of total antibiotic used for each crop and a new standard will specify that the routine use of fluoroquinolones is not permitted and the use of 3rd or 4th generation cephalosporins is not permitted in broiler chicks at any time and there must be no routine use.
<p>9. improving the quality and standardisation of routine antibiotic testing and interpretation of results to improve diagnosis and treatment of infections,</p>	<p>- encouraging animal keepers to work closely with their veterinary surgeons to prioritise diagnosis of disease in livestock and companion animals; and to encourage early use of appropriate diagnostic testing, in particular, bacterial culture and sensitivity tests, RUMA, NFU, BVA</p>	<p>RUMA to encourage work in this area at every opportunity.</p>	<p>RUMA raised the need for the development of quick and inexpensive diagnostic test kits in evidence to the Science and Technology Select Committee on 29 January 2014 and BVA submitted a follow-up paper on 18 February 2014.</p>
<p>10. evaluating the effect of reasonable innovative strategies to increase heterogeneity of local antibiotic prescribing policies over set periods of time on usage, resistance rates and outcomes,</p>		<p>BVA to consider how heterogeneity may be encouraged under the conditions of responsible use.</p>	
<p>11. auditing local prescribing practices and outcomes across the system to assess the effects of antimicrobial stewardship</p>		<p>BVA to discuss how responsible use will be covered in Practice Standard Scheme Inspections with the RCVS and how responsible use will be inspected by</p>	

<p>programmes in human and animal settings,</p>		<p>the VMD.</p> <p>RUMA to encourage the development of antimicrobial stewardship programmes/policies in veterinary practices and to advise VMD and others on gauging outcomes of stewardship initiatives</p>	
<p>12. facilitating development of sector specific prescribing guidelines, which, for example advocate minimising the routine use of preventative antibiotics in animal health and to promote responsible use practices including engaging with representatives across the animal health spectrum to ensure effective dissemination of guidance.</p>	<p>- facilitating development of sector-specific prescribing guidelines and promoting responsible use practices, including effective dissemination of guidance. RUMA, BVA, Species Groups</p>	<p>BVA to lead on sector specific prescribing guidelines in liaison with their species group.</p> <p>RUMA to promote minimising routine preventive antibiotic use.</p> <p>Members to help effective dissemination of guidance e.g. through farm assurance schemes and retailer requirements etc.</p>	<p>The Pig Veterinary Society (PVS) produced prescribing advice for pig vets in February 2014.</p> <p>RUMA launched updated guidelines to farmers on the responsible use of antimicrobials in poultry and game production on 11 April 2014.</p>
<p>Key area 3: improving professional education, training and public engagement Actions needed to improve education, training and engagement are:</p>		<p>RUMA has a key role to play here in helping develop and endorse high quality training in responsible use for vets and farmers.</p> <p>RUMA members can ensure that the responsible use message, including education on resistance, is passed on to farmers during their routine advisory interactions so education is constant and not just based around set piece training.</p>	
<p>13. identifying mechanisms to improve the uptake of guidance for professionals, including through commissioning and audit of prescribing, infection prevention</p>		<p>BVA to consider possible options for such mechanisms.</p>	

and control			
14. development of NICE quality standards,		RUMA to consider NICE quality standards when developed to see if any read across to animal health.	
15. ensuring that generic prescribing competences, which are being developed, are adopted and embedded in curricula, and that antimicrobial stewardship competences are included in professional curricula and continuing professional development,		BVA to continue to promote responsible use in all its CPD. BVA will raise the possibility of including reference to responsible use training for farmers in BVA CPD with the internal BVA CPD Group.	BVA has embedded responsible use into its veterinary surgeon CPD provision.
16. increasing public engagement to promote key messages about antimicrobial use, including promotion of training of non-health professionals, like farmers, with responsibility for administering antibiotics,	- continuing to expand activities aimed at raising awareness and encouraging behaviour change by veterinary and farming associations, for example, through use of farming sector events and trade publications to disseminate responsible use messages, and by concerted active participation across all relevant groups in the <i>European Antibiotics Awareness Day</i> , RUMA , VMD	RUMA to develop requirements for endorsing responsible use training for farmers. RUMA to develop protocols for members' advisory staff to ensure they are able to provide up to date advice on antibiotic resistance and responsible use when they interact with farmers. RUMA members to consider any lessons that can be learnt from responsible use of antibiotics initiatives in the companion animal sector.	VMD offered speakers on antimicrobial resistance and responsible use to agricultural colleges. RUMA published its Antibiotic Resistance Information Note on 23 April 2014.
17. facilitating public debate to shift the societal view to raise awareness of antibiotics and ways to limit their use. This could include considering the potential for restricting the use of antibiotics for low risk self-limiting infections and/or restricting antibiotic use more widely to affect behaviour change.		NFU, NFUS and Species Groups to lead on educating farmers on the importance of restricting antibiotic use. RUMA to consider including such information in guidelines.	

<p>Key area 4: developing new drugs, treatments and diagnostics</p> <p>Actions needed to accelerate the discovery and development of new drugs, vaccines, rapid diagnostics and treatments are:</p>		<p>RUMA will encourage and support efforts to provide these innovations.</p>	
<p>18. encouraging innovation and providing an impetus for improved collaborative action to develop rapid diagnostics and new treatments and vaccines,</p>		<p>BVA and NOAH to lead and advise VMD</p> <p>BVA to lobby for quicker, cheaper and more available accurate sensitivity testing and pen-side testing for veterinarians,</p> <p>BVA to consider meeting with laboratory providers/associations to discuss issues.</p> <p>BVA to consider how it might sound out views on the availability of sensitivity testing – with the possibility of linking to SAVSNET.</p> <p>BRC to encourage cross industry work on diagnostics.</p>	<p>RUMA raised the need for the development of quick and inexpensive diagnostic test kits in evidence to the Science and Technology Select Committee on 29 January 2014 and BVA submitted a follow-up paper on 18 February 2014.</p>
<p>19. supporting innovation through development of the scientific infrastructure, for example, through the BIS 'Strategy for UK Life Sciences',</p>			
<p>20. addressing the commercial viability issues that are hampering investment in antibiotic development, assessing the relative merits of possible incentives to stimulate research</p>		<p>NOAH will lobby for regulatory process to be changed so that it encourages the development of new antibiotics and vaccines.</p>	

<p>and development in new antibiotics and other products and fast-track priority review arrangements for new antimicrobials,</p>			
<p>21. building international partnerships and coalitions to influence change at the national, European and international levels by influencing initiatives like IMI,33 to facilitate more efficient discovery and development of medicines, vaccines and diagnostics,</p>		<p>BVA and NOAH to lead through European (FVE/IFAH) and world (WVA) bodies liaising with VMD/Defra initiatives.</p>	
<p>22. opening up the research agenda, encouraging life sciences companies and academics to work with and share information about targets (pre-competitive phase) and being innovative about the clinical research process to optimise effectiveness and efficiency (shorter time, less costly and fewer late-stage failures) whilst providing safety safeguards.</p>		<p>NOAH to lead, liaising with VMD/BIS/BBSRC</p>	
<p>Key area 5: better access to and use of surveillance data Actions needed to strengthen surveillance in the human and animal sector are:</p>	<p>working collaboratively to strengthen the available evidence base, in particular through the collection and sharing of surveillance and usage data in order to benchmark current levels of resistance and antibiotic consumption and improve early warning systems at national and global levels, Defra, Devolved Administrations - continuing to explore options for the collection and analysis of veterinary medicine prescription data, including the use of local audit, VMD - ensuring that any new data-collection initiatives use methodologies and analytical techniques that harmonise with on-going EU-led projects, to maximise their potential to enhance the wider evidence base. Defra</p>	<p>RUMA's role in this area will be to encourage and support efforts to collect and analyse better data to support more informed decision making.</p>	

<p>23. linking clinical and laboratory data in human health to improve control of the most resistant bacteria and to identify key 'drug-bug' combinations detailed at Annex C,</p>		<p>RUMA to consider whether this can be done for animal health.</p>	
<p>24. developing antimicrobial usage and resistance surveillance programmes that can link to electronic prescribing systems as they are introduced,</p>		<p>RUMA to liaise with and support VMD's work in developing antibiotic usage/prescriptions systems for the livestock sector.</p> <p>BVA to encourage vets to participate in surveillance investigations where possible.</p>	<p>RUMA met with VMD on 6 March 2014 to discuss and offer support to their project considering options for collecting usage data.</p>
<p>25. improving the quality and standardisation of routine antibiotic testing and interpretation of results as well as making better use of surveillance data to improve diagnosis and treatment of infections,</p>		<p>BVA to call for such improvements and liaise with RUMA and the VMD.</p>	
<p>26. exploring linkage of human and veterinary data and consideration of sharing laboratory/ testing methods between the sectors</p>		<p>RUMA to advise VMD as appropriate.</p>	
<p>27. extending alerts about new and emerging antibiotic resistance issues, to a wide range of professionals.</p>		<p>BVA to assist VMD initiatives in extending alerts to the veterinary profession.</p>	
<p>Key area 6: better identification and prioritisation of AMR research needs Actions to support the better identification and prioritisation of AMR research needs are:</p>	<p>encouraging the research needed to gain a greater understanding of the impact of interventions intended to minimise development and spread of antibiotic resistance, ALL</p>	<p>RUMA could act as a catalyst to allow all animal health interests to identify and prioritise AMR research needs.</p>	
<p>28. ensuring funding of high-quality and relevant AMR projects</p>		<p>RUMA to liaise with VMD on how this can be done in animal health as well? In</p>	

<p>in response to the NIHR themed call announced as part of a co-ordinated response to the publication of the 'CMO's Annual Report'. This call covers all aspects of translational, clinical and public health research that could contribute to a reduction in the spread or occurrence of AMR, through new developments or changes in practice</p>		<p>particular, efforts will be made to identify funding sources and to try to get a "Fair" share for animal health?</p>	
<p>29. the NIHR plans to fund a 'Health Protection Research Unit on AMR/HCAI' from April 2014. An open competition inviting universities in partnership with PHE is already underway,</p>		<p>RUMA to liaise with VMD on any animal health elements in this work.</p>	
<p>30. ensuring that research funders continue to collaborate so that both research needs continue to be identified as the evidence base evolves and key priorities continue to be funded,</p>		<p>RUMA members to identify opportunities for better collaboration</p>	
<p>31. identifying, through expert advice from the Advisory Committee on Antimicrobial Resistance and Healthcare Associated Infection (ARHAI) and the Defra Antimicrobial Resistance Co-ordination Group (DARC), emerging AMR research needs in humans and animals,</p>		<p>RUMA members to respond to consultations by DARC.</p>	
<p>32. forging stronger partnership around investigating the mechanisms leading to AMR with a view to identify potential new targets for drugs and vaccines.</p>		<p>RUMA members to support efforts to forge stronger partnerships</p>	
<p>Key area 7: strengthened international collaboration</p>		<p>This area is primarily aimed at international collaboration at</p>	

<p>Actions needed to strengthen international collaboration with international bodies to improve knowledge and understanding of AMR, improve conservation and stewardship of existing antibiotics and facilitate development of new antibiotics, diagnostics and novel therapies are:</p>		<p>Government level. RUMA will continue to work with EPRUMA and individual country responsible use groups to encourage the development of guidelines, their implementation and to support evidence based and proportionate actions to conserve antibiotics and develop new antibiotics, diagnostics and novel therapies. RUMA will respond positively to all consultation requests.</p>	
<p>33. continuing to demonstrate leadership in the task of building political support for action at a global and national level,</p>		<p>RUMA developing antibiotic resistance and antibiotic use papers to inform the political debate and to demonstrate that resistance is a global one-health issue.</p>	<p>RUMA has issued evidence submissions to the Science and technology Select Committee (Dec 2013) and the APPG on Eggs, Pigs and Poultry (Feb 2014)</p>
<p>34. supporting efforts to strengthen international partnerships and coalitions to facilitate the development of new antibiotics and other treatments</p>		<p>NOAH to lead RUMA efforts to support international partnerships, working with VMD.</p>	
<p>35. seeking assurances from WHO of its commitment to accelerate the pace of progress with respect to implementation of the 2001 WHO 'Global Strategy on the Containment of AMR',</p>		<p>RUMA to support</p>	
<p>36. pressing the European Commission to accelerate progress to implement the '2011 EU AMR Strategic Action Plan',</p>		<p>RUMA to support</p>	
<p>37. facilitating international action by helping WHO develop a framework for action to underpin an integrated programme of work to harness greater collaborative working,</p>		<p>RUMA to support</p>	
<p>38. taking a leading role in the development of a new AMR resolution for consideration by the World Health Assembly and</p>		<p>RUMA to support</p>	

pursing supporting action in FAO and OIE (the UN bodies for food and animal health),			
39. consider the need for a future international treaty to protect special medicines like antibiotics which are in short supply		RUMA to support	

ANNEX

The RUMA Alliance is made up of the following 23 organisations:

Agricultural Industries Confederation (AIC)
 Animal Health Distributors Association (AHDA)
 Animal Medicines Training Regulatory Authority (AMTRA)
 BPEX and EBLEX
 British Egg Industry Council (BEIC)
 British Poultry Council (BPC)
 British Retail Consortium (BRC)
 British Veterinary Association (BVA)
 City and Guilds Land Based Services
 DairyCo
 Dairy UK
 Game Farmers' Association (GFA)
 LEAF
 National Beef Association (NBA)
 National Farmers' Union (NFU)
 National Office of Animal Health (NOAH)
 National Pig Association (NPA)
 National Sheep Association (NSA)
 NFU Scotland (NFUS)
 Red Tractor Assurance (RT)
 Royal Association of British Dairy Farmers (RABDF)
 RSPCA
 Royal Pharmaceutical Society (RPS)

Other Acronyms used in this Plan

ACSMF – Advisory Committee on the Safety of Medicated Feedingstuffs

AMR – Antimicrobial Resistance

AMR/HCAI – Antimicrobial Resistance/Healthcare Associated Infection

APPG – All Party Parliamentary Group

ARHAI - Advisory Committee on Antimicrobial Resistance and Healthcare Associated Infection

BBSRC – Biotechnology and Biological Sciences Research Council

BIS – Department for Business innovation and Skills

CMO – Chief Medical Officer

CPD – Continuing Professional Development

DARC – Defra Antimicrobial Resistance Co-ordination Group

Defra – Department for Environment, Food and Rural Affairs

EPRUMA – European Platform for Responsible Use of Medicines in Animals

EU – European Union

FAO – Food and Agriculture Organisation

FSA – Food Standards Agency

IMI – Innovative Medicines Initiative

NICE – National Institute for Clinical Excellence

NIHR – National Institute for Health Research

OIE – World Organisation for Animal Health

PHE – Public Health England

PVS – Pig Veterinary Society

RCVS – Royal College of Veterinary Surgeons

RTFA – Red Tractor Farm Assurance

RUMA – Responsible Use of Medicines in Agriculture Alliance

VMD– Veterinary Medicines Directorate

WHO – World Health Organisation

WVA – World Veterinary Association