The European Green Deal: opportunities to anticipate and address emerging issues

Joint Event EREN- StaDG-ER

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Reduction of antimicrobial use (AMU) in farmed animals

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Trusted science for safe food

efsa
European Food Safety Authority

Federation of Veterinarians of Europe (FVE) and the F2F strategy

- FVE represents around 300,000 veterinarians across 39 European countries
- It promotes animal health & welfare, public health & the environment through the veterinary profession
- The European veterinary profession actively contributes to sustainable food systems throughout the promotion of One Health (animal health, welfare and public health)
- FVE work and **collaborate with EU Institutions** and all the relevant stakeholders **to set up common and measurable targets** to help and assist the agricultural sectors in the transition towards the F2F objectives

Background

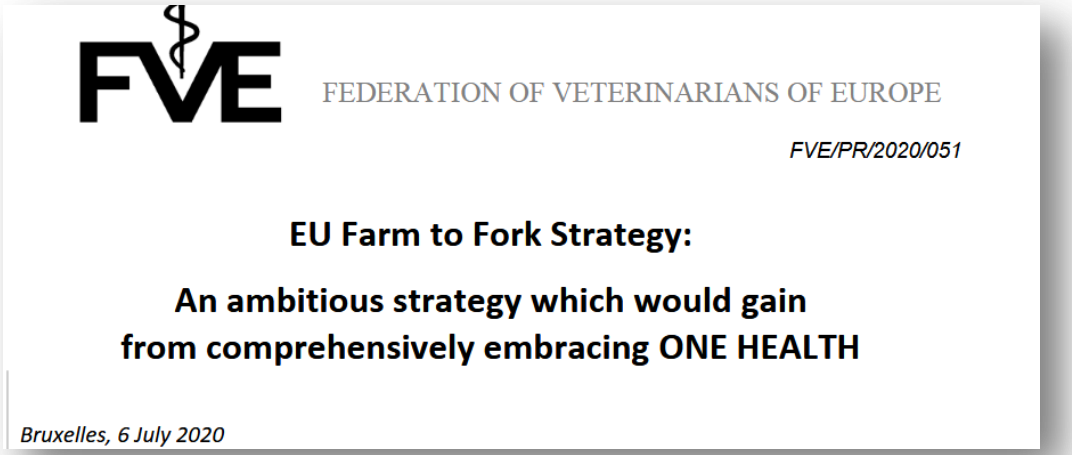
- The F2F and Biodiversity strategies, landmark of the Green Deal, aim to make a more sustainable agriculture, and fair, healthy and environmentally friendly food systems.

- F2F's antimicrobial resistance (AMR) target: reducing sales of antimicrobials for farm animals and in aquaculture **by 50% by 2030**, to tackle AMR that leads to an estimated 33,000 human deaths in the EU each year

- Past/ongoing EFSA BIOHAZ work on:
  - the use of antimicrobials and the need to reduce antimicrobials (EMA & EFSA, 2016)
  - to assess links between use of antimicrobials and resistance (together with EMA and ECDC, 2015 & 2017)

EU Commission's F2F Strategy

- FVE welcomed the F2F Strategy
- Goals are in line with FVE's mission to enhance animal health, animal welfare, public health and the protection of the environment and supports the EU Commission's roadmap to achieving the United Nations' Sustainable Development Goals (SDGs)
- its impact will depend on the way ideas will be turned into firm actions
- **HOWEVER: no cumulative impact assessment performed** by the European Commission



FVE

FEDERATION OF VETERINARIANS OF EUROPE

FVE/PR/2020/051

EU Farm to Fork Strategy:

An ambitious strategy which would gain from comprehensively embracing ONE HEALTH

Bruxelles, 6 July 2020

FVE AMR achievements

- Since 2011, FVE active member of the EPRUMA
- EU Commission actions: new Regulations on veterinary medicinal products and medicated feed provide for a wide range of measures to help achieve this objective and promote one health
- FVE/EMA webinars on new Regulation VMPs and feed
- Through the AMR stakeholders' network FVE promotes campaigns and good practices integrating human – animal – environment perspectives.

FVE AMR achievements

- FVE report for RONAFA
- FVE research on antimicrobials most used in veterinary practice
- Many FVE and joint guidelines for responsible use:
  https://fve.org/publications/fve-guidelines-responsible-use-of-antibiotics/
- AVMA, CVMA, FVE position papers on AB use and monitoring

FVE reflection on the achievability of F2F antimicrobial reduction target

- 50% reduction target of F2F is vagues.

- some countries already reduced more than 50%, will be unrealistic to ask for another 50%.

- it lacks a wider perspectives encompassing animal health/welfare/economic/farm output

Reduction of antimicrobials and medicines usage

- EMA 10th report on the European Surveillance of Veterinary Antimicrobial Consumption (ESVAC) (2020)
  - **2011-2018 - Overall sales decrease by more than 34,6 %** of veterinary antimicrobials for 25 countries across Europe
  - Total reduction of sales of veterinary antimicrobials:
    - polymyxins (Colistin) -69.8%
    - 3rd and 4th generation Cephalosporins -24.4% – fluoroquinolones – 4,2%
- The new vet med regulations will include **further new elements to reduce AB use**, including the monitoring per species and rules on oral medication

FEDERATION OF VETERINARIANS OF EUROPE

FVE/2020/press release _003
21 October 2020

Press Release

Responsible Use of antimicrobials in animals has further increased in EU

21 October 2020 - Today, the European Medicines Agency published its 10th report on the European Surveillance of **Veterinary Antimicrobial Consumption** (ESVAC).

Reduction of antimicrobials and medicines usage

- Antimicrobials remain essential for the health and welfare of animals because we all acknowledge that even under very good husbandry conditions, livestock can contract infectious diseases, which need to be treated

- The decrease by more than 34% of veterinary antimicrobials was achieved by a responsible and prudent use of antimicrobials that should be used carefully and not overused or misused

Antimicrobials use cost/benefit

- Antimicrobials use
  - cost: AMR, proved links between use of antimicrobials and resistance (EMA and ECDC, 2015 & 2017)
  - benefit: reduced prevalence and incidence of diseases

- Reduced antimicrobials (eg. organic farming, 'card antimicrobial scheme')
  - cost (unintended negative effects): low control of infectious diseases & increase of lesions (meat inspection?)
  - cost of prevention
  - benefit: less AMR

Reduction of antimicrobials and medicines usage – emerging issues?

- Cost of reduced antimicrobials scheme from organic farming, card antimicrobial scheme
  - **unintended negative effects**
    - low control of infectious disease incidence/prevalence?
    - increase of lesions (see Danish evidence during meat inspection)
    - low meat quality (economics!)
- However, in many countries reduction is possible without an increase in diseases, or lesions or lower meat quality: eg. the Netherlands reduced more than 50% but found no impact on animal health, welfare or food quality.

FVE reflection

How to anticipate possible emerging issues from F2F reduction target on antimicrobials?

- a good assessment system? not only measure AB use but in addition some key health, welfare and food safety indicators

Alternative measures to anticipate emerging issues from reduced antimicrobial usage

- Replacement of antimicrobials with **farm preventative approaches**
  - improvement of biosecurity and biocontainment
  - innovative therapies and vaccines
  - improved health&welfare care: eg. managing optimum stocking density and husbandry
  - robust diseases monitoring and prevention and control measures.
  - changes of feeding schemes**,** manipulation of microbiome using:
    - additives (eg. pre-,pro-and proteo-biotics)
    - bacteriophages
    - immunomodulators
    - organic acids
    - plant secondary compounds

Alternative measures to anticipate emerging issues from reduced antimicrobial usage

- Following tailor-made implementation of alternative measures, a substantial reduction of antimicrobial usage in pig production was achievable <u>without jeopardizing animal health</u>

Porcine Health Manag. 2020 Mar 2;6:6. doi: 10.1186/s40813-020-0145-6. eCollection 2020.

Effectiveness of alternative measures to reduce antimicrobial usage in pig production in four European countries

Svenja Raasch [1], Lucie Collineau [2 3], Merel Postma [4], Annette Backhans [5 6], Marie Sjölund [5 6], Catherine Belloc [3], Ulf Emanuelson [5], Elisabeth Grosse Beilage [1], Katharina Stärk [2], Jeroen Dewulf [4]
on the behalf of the MINAPIG Consortium

Alternative measures to anticipate emerging issues from reduced antimicrobial usage

- New technologies being developed for well-boats used in aquaculture to remove animal medicines from the water before releasing them to the environment

Alternative measures to anticipate emerging issues from reduced antimicrobial usage

- Improving animal health & animal welfare leads to:
  - **reduction of antimicrobials and medicines usage**
  - timesaving and more efficient livestock transport
  - humane slaughtering conditions
  - enhanced food production (and productivity)
  - reduced environmental footprint per unit of product
  - streamlined and effective collaboration between farmers, veterinarians, nutritionists and breeders to ensure best practice

One Health approach to anticipate AMR risk

- Even if we stop all use of antibiotics in animals, the human AMR burden will not be solved
- Joint Interagency Antimicrobial Consumption and Resistance Analysis (JIACRA) Report
- Need for One Health approach by promoting prudent use in all areas where antibiotics are used (human, animal, plants) and on a global level.
- FVE & other One Health partners such as CPME, CED, FEAM, the EP AMR Group, etc.
- FVE is also involved in many EU Projects regarding AB use and AMR e.g. HealthyLivestock, ENOVAT, AVANT, etc.