



# **Challenges in Research and Risk Assessment field**

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1. ***Do we need a global research agenda? If yes, should Europe take the lead in developing this agenda?***
  - Yes
  - Coordinated efforts are very important, more so in multisectorial “themes” such as contribution of the food chain in the amplification and spread of AMR.

## ***2. Which specific data is needed in order to be able to assess individual control options to limit the spread of AMR?***

- Baseline resistance (pathogens and indicators) prevalence data: comparable data across MS that would also make possible the investigation of trends.
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- Baseline antimicrobial consumption data that is stratified by animal species and production sector.
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- Data on genetic relatedness of genes/plasmids/ R clones in combination with quantitative information on their prevalence in food-producing animals, foods, the community and health care.
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- Data collection activities need to be performed pre- and post- intervention studies

### ***3. Could current surveillance systems detect emerging risks?***

- Surveillance systems are currently developed taking into consideration feasibility and economical constraints. Therefore they may not be suited to detect early emergence (especially at low prevalence) of new resistance mechanisms.

#### ***4. What is the impact of international trade (products and animals) and travel on the development /spread of resistance in humans and animals in the EU?***

- An extensive trade of animals occurs in EU MS, with few countries leading the production and the export, and with a reduced number of companies producing pure line grandparent stock. AMR organisms are not uncommon at the top of the production pyramids.
- During the post-harvest phase including manufacturing and retail there is a constant flow of products in all directions in EU. This may have a significant impact in the dissemination of bacterial flora associated with food. Recent EFSA Opinions have highlighted the importance of these factors in the spread of food-borne pathogens.
- Several suggestions for introduction of EU monitoring systems to control trade of AMR-contaminated food producing animals in production pyramids.