95TH ADVISORY FORUM
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THE EU SUMMARY REPORT ON ANTIMICROBIAL RESISTANCE (AMR) IN 2022- 2023

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EUROPEAN FOOD SAFETY AUTHORITY

REPORTING AMR IN THE EU

- Outcomes of the monitoring
  - Occurrence of AMR
  - Combined resistance to **Critically Important Antimicrobials (CIAs)**
  - **Key Outcome Indicators** of AMR:
    - **Complete Susceptibility** in indicator *E. coli*
    - **Prevalence of ESBL/AmpC-** producing *E. coli*
  - **Temporal trends**

Inclusion of human, animal and food data allows:

- **One Health approach,**
- **Integrated analyses** across humans and food/animals,
- Comparison of resistance/ particular resistance profiles.

In the animal/ food sector, AMR **monitoring** is performed on a **biennial basis** and the **sampling** in a **rotating basis**

Good compromise between scientific needs and MSs capacities

EUSR AMR 2022-2023 – MAIN FINDINGS

- Resistance to **commonly used antimicrobials** in veterinary medicine (ampicillin, tetracyclines and sulfonamides):
  - ➢ remains high for ***Salmonella*** and ***Campylobacter*** isolates from humans and food-producing-animals (except for *Salmonella* in laying hens).
  - ➢ is also frequently detected in ***E. coli*** isolates from food-producing animals.

EUSR AMR 2022-2023 – MAIN FINDINGS

- The **high/ extremely high** resistance to **ciprofloxacin**, a critically important antimicrobial for human treatment, is of concern. It has been observed in:
  - ***C. jejuni*** and ***C. coli*** from humans and food-producing animals
  - ***Salmonella*** from humans and poultry
  - ***E. coli*** from poultry
- Resistance to **other critically important antimicrobials** for human medicine is **uncommon** (E.g. 3rd generation cephalosporins in *Salmonella* and *E. coli*, macrolides in *Campylobacter)*.

EUSR AMR 2022-2023 – MAIN FINDINGS

- **Carbapenem resistance** remains **rare but concerning**.

Salmonella spp.: **Carbapenemase-producing (CP)** isolates were found in humans (5 in 2022 and 6 in 2023) but **not** in food-producing animals.

***E. coli*: CP-isolates** were detected in food-producing animals (pigs, cattle under 1 year of age, poultry and meat thereof) at **very low level**.

BUT
Presence of carbapenemase-producing bacteria in several countries/ several animal species and with several genes…

… **highlights the need for continued monitoring, and further epidemiological investigations.**

EUSR AMR 2022-2023 – MAIN FINDINGS

KEY OUTCOME INDICATOR COMPLETE SUSCEPTIBILITY IN INDICATOR *E. COLI* (KOI CS)

Marked variations among countries

Statistically significant **increasing trends in 44.4% of the reporting countries** (12 of 27)

KEY OUTCOME INDICATOR PREVALENCE OF ESBL- AND/OR AMPC-PRODUCING *E. COLI* (KOI ESBL)

Marked variations among countries

Statistically significant **decreasing trends in 70% of the reporting countries** (21 of 30)

BIOHAZ SELF-TASK
CARBAPENEMASE-PRODUCING ENTEROBACTERALES IN FOOD CHAIN

Time: 3 years, June 2024- June 2027

Outputs:

- BIOHAZ **scientific opinion** on the **state of the art** (including results to a survey to MSs)
- **Monopole Framework Partnership agreement (FPA)** with EURL/NRLs-AR Network, **external reports**
- **BIOHAZ scientific opinion** evaluating the **results of the project, advice** to risk managers

FPA "data generation on CPs in food-producing animals"
Contract: 2.5 years (mid 2024-end 2026), Budget 1.5 mill Co-funding (20%).

Contractor (coordinator + MSs): EURL-AR/NRLs-AR Network labs, Art. 36
https://www.eurl-ar.eu/participants.aspx

DIFFICULTIES ENCOUNTERED BY MS IN DATA PROVISION

1. Resources constraints (related to limited availability of budget for data analyses)
2. Variability in the analytical capacity (about technologies and competencies) between MSs, e.g. in relation to the use of the new technologies such as WGS
3. Turnover of people involved in data reporting (data providers) and of AMR Network Members
4. Accuracy and completeness of the AMR data:
    a. Data fragmentation due to different data sources and different actors involved at country level → Coordination within the country
    b. Manual manipulation of the data prone to errors
5. Timelines for data validation/ corrections

COLLABORATION WITH MS

1. Harmonised monitoring and reporting system (Revision of the guidelines and technical specifications)
2. Technical and scientific support and assistance (training activities for data reporting)
3. Knowledge transfer (during the annual AMR network meetings, and throughout the year via web communication tools)
4. Grants and procurements:
    a. For automatisation of data extraction and data transmission
    b. For increasing the data quality
    c. For designing the reporting tools and reporting system

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