



EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

5. Trial of ESVAC protocol for per-species consumption in pigs

ESVAC annual stakeholders meeting 2016

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ESVAC

An agency of the European Union





Outline

- Background
- Objectives of trial
- Protocol tested
- Results
- Concluding remarks
- Next steps



Background

- EC has requested EMA to provide approach to estimate antimicrobial consumption in at least pigs, cattle and poultry
- It was decided to start by collecting data in pigs
- Therefore required variables needed to be identified and protocol and template developed
- Protocol and templates were subsequently tested during trial

Objectives of the trial

To identify:

1. extent to which variables required to analyse and report harmonised and standardised data on consumption of antimicrobials (including medicated feed) and pig farm population were available;
2. if all required information on treatments with medicated feed could be captured with proposed variables or if additional variables were required;
3. applicability of templates;
4. feasibility of proposed system;
5. structure of pig industry in participating MSs – i.e. numbers and types of farms, such as farrow-to-finish or finisher farms.



Protocol tested

- Convenience sample of 5 farrow-to-finish farms per country
- Data on all antimicrobials administered during calendar year (numerator), from
 - Health records/treatment log books
 - Delivery notes
 - Invoices
 - Prescriptions/veterinary practice records
- Data on pig farm population (denominator)
 - Number of pigs produced per calendar year
 - Average number of pigs present per category per day
- Data on national pig farming structure
- Short feasibility survey conducted on resources needed to collect and provide data



Results

- 46 farms enrolled (42 farrow-to-finish) from 10 countries
 - BE, CZ, DE, ES, FI, FR, IT, NL, SK, UK
- ~ 6,700 records
- Data sources used:
 - Health records/treatment log books: 21 farms
 - Prescriptions/veterinary practice records: 9 farms
 - Delivery notes: 5 farms
 - Invoices: 1 farm
 - Combination of sources: 9 farms
 - Treatments with medicated feed mainly from prescriptions/practice records



Results (cont.)

- Quantity of active substance consumed could be calculated for 99.7% of records
- Pig category treated clearly identified for 78% of records
 - But hardly/not in delivery notes or invoices
- Pig farm population data complete/available for 26 farms
 - Only number of pigs produced: 8 farms
 - Only number of pigs present: 8 farms
 - Not available or incomplete: 12 farms
- Majority of pig farms in participating countries farrow-to-finish, farrow-to-wean or wean-to-finish



Results feasibility

- Wide variety in resources needed to collect and provide data needed
 - Median time needed to fill in “ESVAC On Farm” template: 4 hours
 - Median time needed to fill in “ESVAC Pig” template: 12 hours
- Least resources needed in trial when data extracted in automated manner from continuous data collection system
- With experience less time needed to collect data
- Recommended to enable provision of aggregated data (i.e. all treatments with one VMP within a farm summarized and reported in one observation)



Concluding remarks

- Possible for ESVAC to define those parameters that need to be measured per farm:
 - For antimicrobial consumption to be measured in standardised units
 - By means of either on-farm data collection or data on veterinary prescriptions
- Pig farm population data:
 - Challenging to collect but essential to standardise consumption using an agreed denominator
 - Further work ongoing with ESVAC species EAG to clarify best option for establishing harmonised denominator



Concluding remarks (cont.)

- Data at farm level (i.e. per species) sufficient for ESVAC to e.g. analyse trends per species
 - Data by production stage (pig category) provides more detailed understanding
- Not possible for all MSs to use one data source or one form of consumption data
 - Data sources heterogeneous but relatively comparable output
- For analysing and reporting harmonised data at EU level:
 - MSs should ensure that actual amount of active ingredient consumed and denominator are calculated according to ESVAC recommendations
 - Data quality control system needs to be put in place at farm and national level



Next steps

- Report on trial in pigs to be published on Agency's website, tentative deadline April
- Publication of revised guidance (and template) on Agency's website for public consultation
- ESVAC in collaboration with the EAGs will initiate discussions with MSs and with EC
→ how guidance could be used as basis for harmonised data collection throughout EU



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Thank you for your attention

Further information

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