



健康
畜禽

Healthy Livestock

HEALTH PLANS AS ALLIES

WPI Biosecurity / Pigs / Health Plans Effectiveness



HEALTHY LIVESTOCK

Using antimicrobials in animals contributes to the rise and spread of antimicrobial resistance. By doing so it reduces the availability of safe and effective medicines against infectious diseases for both humans and animals. HealthyLivestock is a research project aiming to find ways to reduce the need to use of antimicrobials in livestock by improving the health and welfare of the animals.



BIOSECURITY

“Biosecurity is the prevention of disease-causing agents entering or leaving any place where they can pose a risk to farm animals, other animals, humans, or the safety and quality of a food product”.

Good biosecurity should be practiced at all times, not just during a disease outbreak. Taking the right measures in the early stages of disease outbreak can help prevent or reduce its spread.



SYSTEMATIC AND STRUCTURED HEALTH PLANS

Achieving and maintaining a high pig health state is essential for pig farm sustainability. Healthy pigs limit the risk of farm economic losses, because of improved performance, reduced mortality and treatment costs. Keeping healthy pigs in farms can avoid major economic losses for the pig industry. For instance, PRRSv cost in the US was estimated at \$664 million annually and, in Europe, if the farm was severely affected in all stages annual losses ranged from a median of 650.090€.poultry are related to preventive measures, including biosecurity. Furthermore, maintaining pigs healthy ensures a part of animal welfare that is an important consumer concern. One way of achieving and maintaining a high pig health state is the farmers' compliance with veterinarians' recommendations. Veterinarians' recommendations are intended to achieve a good health state. Despite this supposed relevance, no health improvements can be observed if farmers have difficulties to comply with formulated recommendations. Tailor-made health and/or welfare plans include farm-specific recommendations adapted to farmers' objectives. Most of the recommendations in pigs and poultry are related to preventive measures, including biosecurity.

A Tailor Made Health Plan (TMHP) was a set of tailor-made recommendations at farm scale.

Two distinct types of TMHP could be formulated:

- i) in presence of health disorder, measures were recommended to improve one targeted health disorder (TMHPdisorder)
- ii) in absence of health disorder, measures were recommended to prevent pathogen introduction or circulation (TMHPprev).

Effectiveness assessment of tailor-made health and/or welfare plans are necessary to provide feedback of their benefits to farmers and herd veterinarians.



HEALTHY LIVESTOCK ON HEALTH PLANS IN PIGS

This study aimed at assessing the effectiveness of TMHP in pig farms. The intervention study was carried out in France and in Italy.

In HealthyLivestock we considered farm-specific targets to improve and monitored the following indicators:

- Biosecurity
- Health
- Antimicrobials use

The effectiveness of TMHP was assessed after visit 3, considering both health disorder status, indicators' evolution and compliance with recommendations.



RESULTS

- The number of recommendations per farm ranged from 1 to 22.
- All the implemented measures at the visit 1 were still implemented at the visit 3 in the majority of the farms.
- A total of two farmers in France and of seven farmers in Italy did not comply with any of the formulated recommendations.
- The reasons for non-full compliance were feasibility, lack of money, lack of time and unwillingness.





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RESULTS

- The reasons for non-full compliance were feasibility, lack of money, lack of time and unwillingness.
- Most of TMHPdisorder were effective if we consider veterinarians' indications (6/9 with an assessment based on compliance and indicator evolutions; 4/5 with an assessment only based on compliance).
- Only one third of the TMHPprev resulted in compliance with recommendations (12/37), but a distinction has to be made between French (11/17) and Italian (1/20) TMHPprev.



WHAT CAN YOU DO YOURSELF?

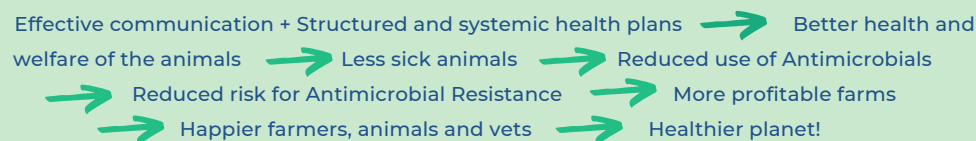
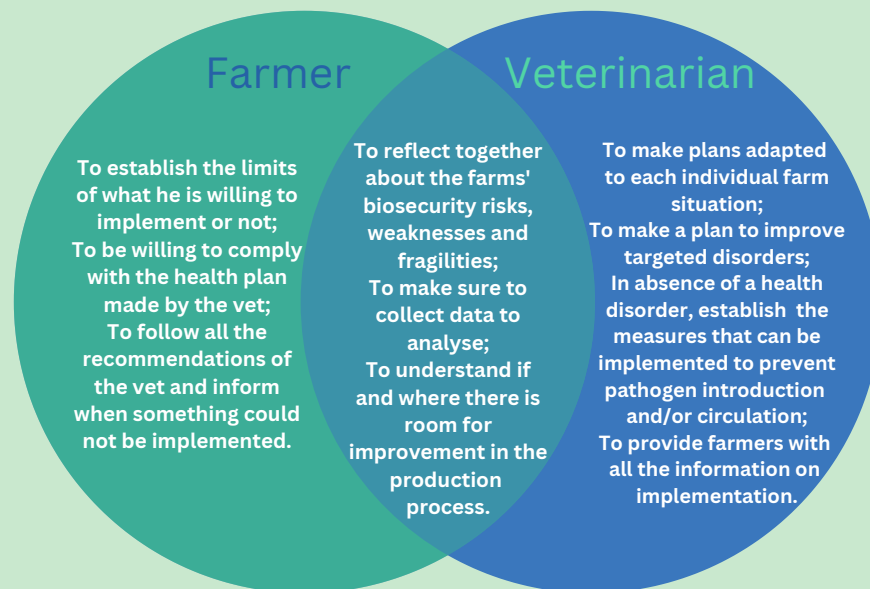
From April 2021, Article 25 of the European Union Animal Health Law, Regulation 2016/429 shall be implemented and it requires operators to make sure that establishments receive animal health visits from a veterinarian.

The creation of systematic and structured health plans is as important as obtaining feedback on them that lead to follow up actions.

Assessment with BEAT is a good starting point for the making of tailor-made health plan for each farm, in agreement with farmers and their vets responsible for herd health, including targets that could be checked and updated in the medium and long term as an ongoing process.

Prevention is more difficult to achieve in absence of a health disorder when recommendations are not prioritized.

Effectiveness assessment is essential when formulating TMHP since it can demonstrate to farmers the benefits of their implementations. It can also provide herd veterinarians an insight of the reasons for compliance with TMHP recommendations. This study shows that TMHP are effective when a low number of prioritized tailor-made recommendations is formulated. Future studies focusing on tailor-made intervention should define tailor-made indicators to more accurately assess health disorder evolutions.



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