

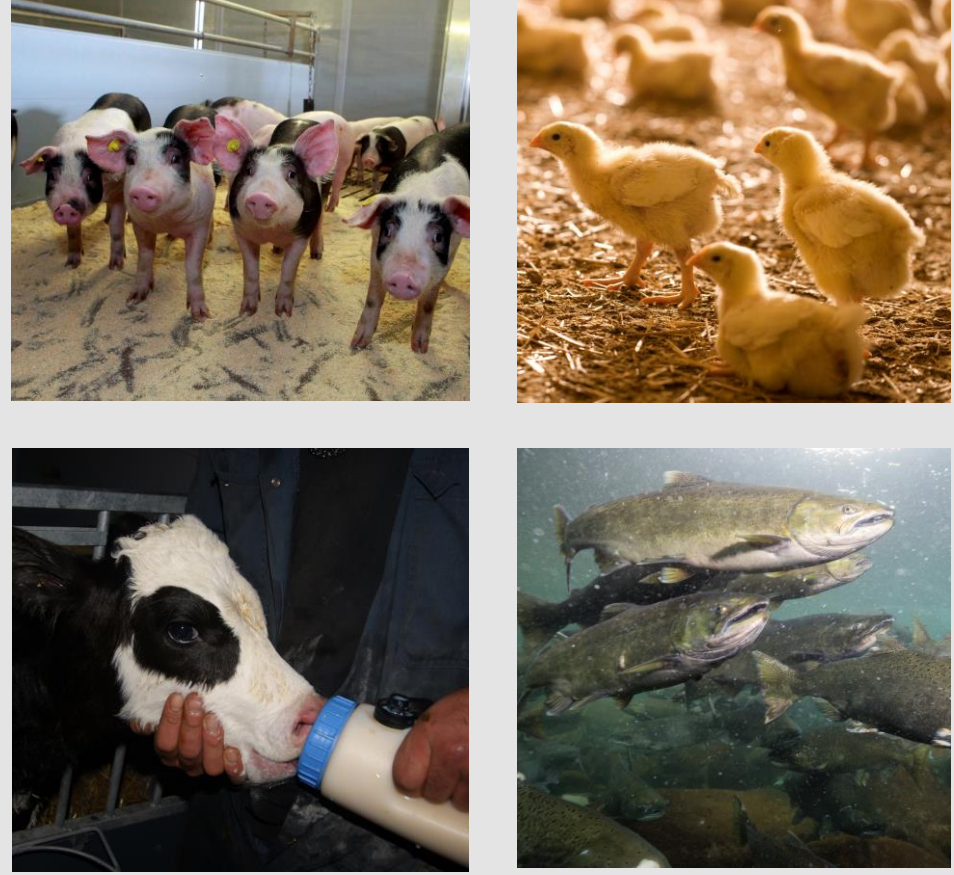
Innovative tool development: Experiences from the DECIDE project

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Aim & focus



The goal of the DECIDE project is to develop data-based and data-driven tools that may help controlling endemic contagious diseases in farmed animals, thereby reducing the health and welfare burden of these diseases. The focus is on gastro-intestinal and respiratory infections in pigs, poultry and calves and mortality in salmonids.

Decision support tools	
Data-driven tools	Co-creation with stakeholders
Output generated from existing data sources, considering: <ul style="list-style-type: none">• Data access• Early warning and disease transmission• Multidimensional burden of disease	<ul style="list-style-type: none">• Identify needs and discuss potential use• Solve technicalities to create the actual tool• Demonstrate the tool• Feedback on usability and usefulness



Tool development process

Collaboration with stakeholders, with other DECIDE WPs, case studies and teams

Stage 1: Data acquisition and management

- Data agreements
- Data transfer
- Data management and analysis
- Documenting data structure

Stage 2: Tool design and development

- Design of the tool
- Modelling
- Creating relevant features
- Coding the tool

Stage 3: Tool deployment

- Making the tool available to the relevant users
- Selection of platform for deployment
- Automatization of workflow


Stage 4: Evaluation and updating

- Evaluation of useability and usefulness
- Updates and new features based on evaluation and feedback
- Tool sustainability


Find the tools at: www.decideproject.eu

Challenges	Solutions
Collaboration with stakeholders	Development of “business cases” to show the benefits to the stakeholders; built trust!
Data access, use and sharing	Implement metadata; involve data providers; built trust!
Legal aspects	Anonymisation of data, bilateral contracts, joint controller agreement
Data infrastructure and resources.	For modern solutions to access and manage data, bring code to data, design and host tools, interdisciplinary teams are crucial (just vet epi is not enough)
Generalizing tools	Use ontologies; copy aspects of tools rather than re-using code.
Maintaining tools after end of project	Defining sustainability plans is critical for the long term success of data tools.


Conclusions




Co-creation with stakeholders and focus on their needs is essential



Need for interdisciplinary collaborations



Improvement of data infrastructure is needed



“Tensions” Research vs Practice will remain and some tools will only stay conceptual