

# *Stakeholder-preferred ways to reduce production diseases*

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## Production diseases have economic impacts

- Livestock diseases compromise animal health and welfare and generate inefficiencies
  - ➔ Resources are needed to treat animals
  - ➔ Reduced profitability and product quality
  - ➔ Increased environmental footprint and antimicrobial use
- Information on the costs of diseases is needed to assess the severity of the problem and to help allocate resources
- This presentation will show which production diseases are considered the most important economically and how much they cost.

The economic impacts of diseases fall into four areas

Revenues and production foregone

Extra production costs

Saved production costs

Additional revenues

- The incidence, severity and costs of disease can vary by case
- The costs of preventive measures are incurred before potential benefits are observed → Incentives to reduce disease risks may change as the risk of disease changes

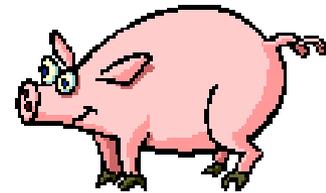
## Our approach

### **Survey of views of stakeholders**

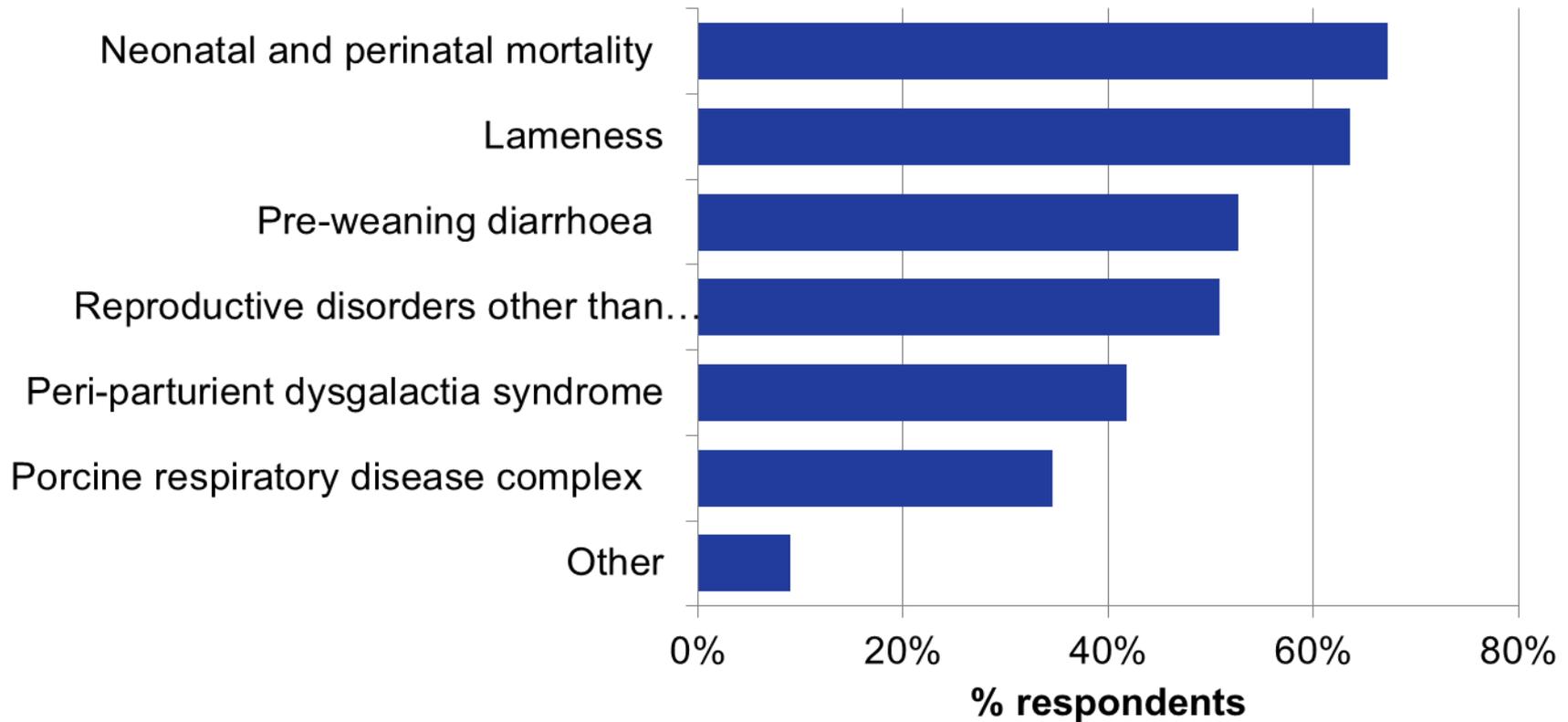
- Sent to 200 stakeholders in five countries (FI, DE, UK, ES, PL)
- 100 responses (45+55) received
- DE and PL had low response rate
- They were asked about the importance of production diseases and disease interventions



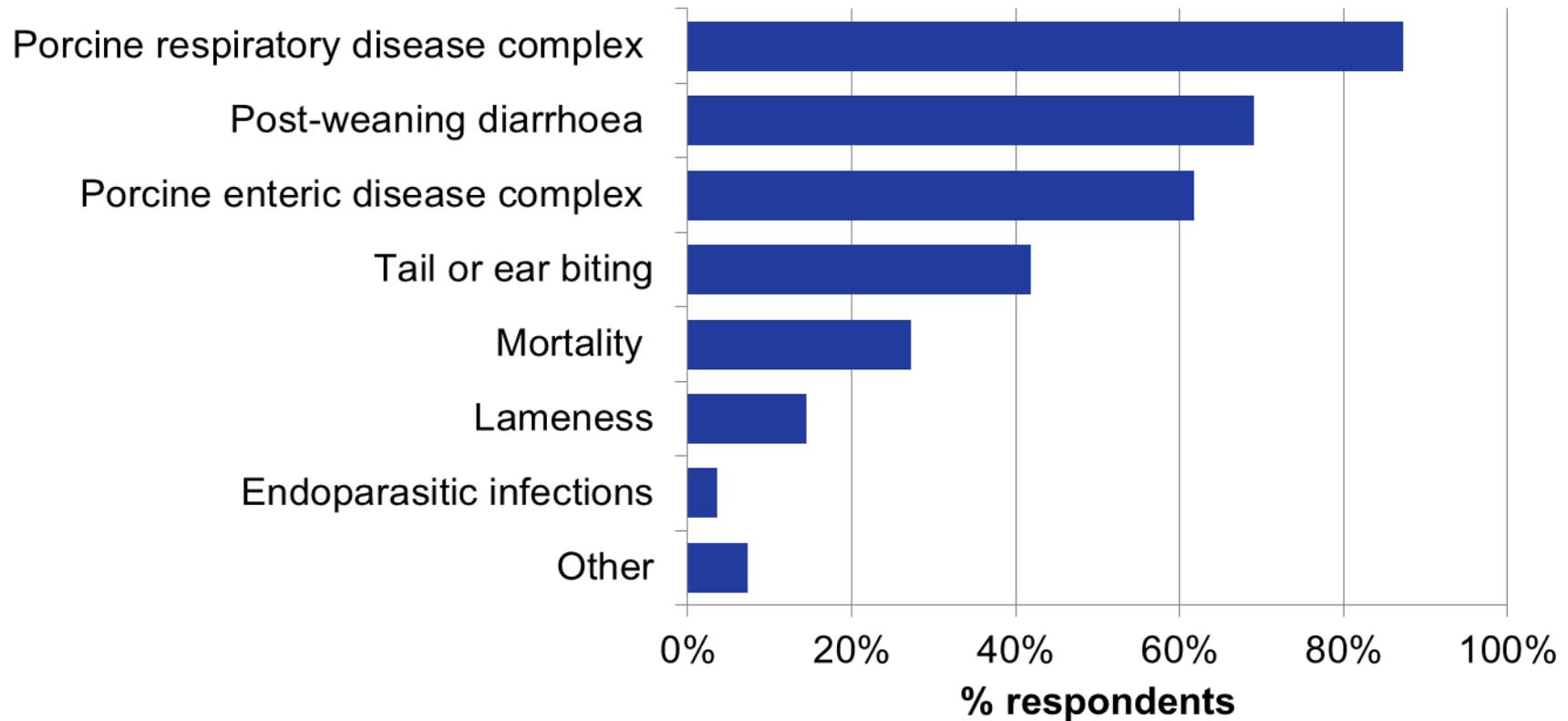
What do stakeholders view as the most important production diseases economically?



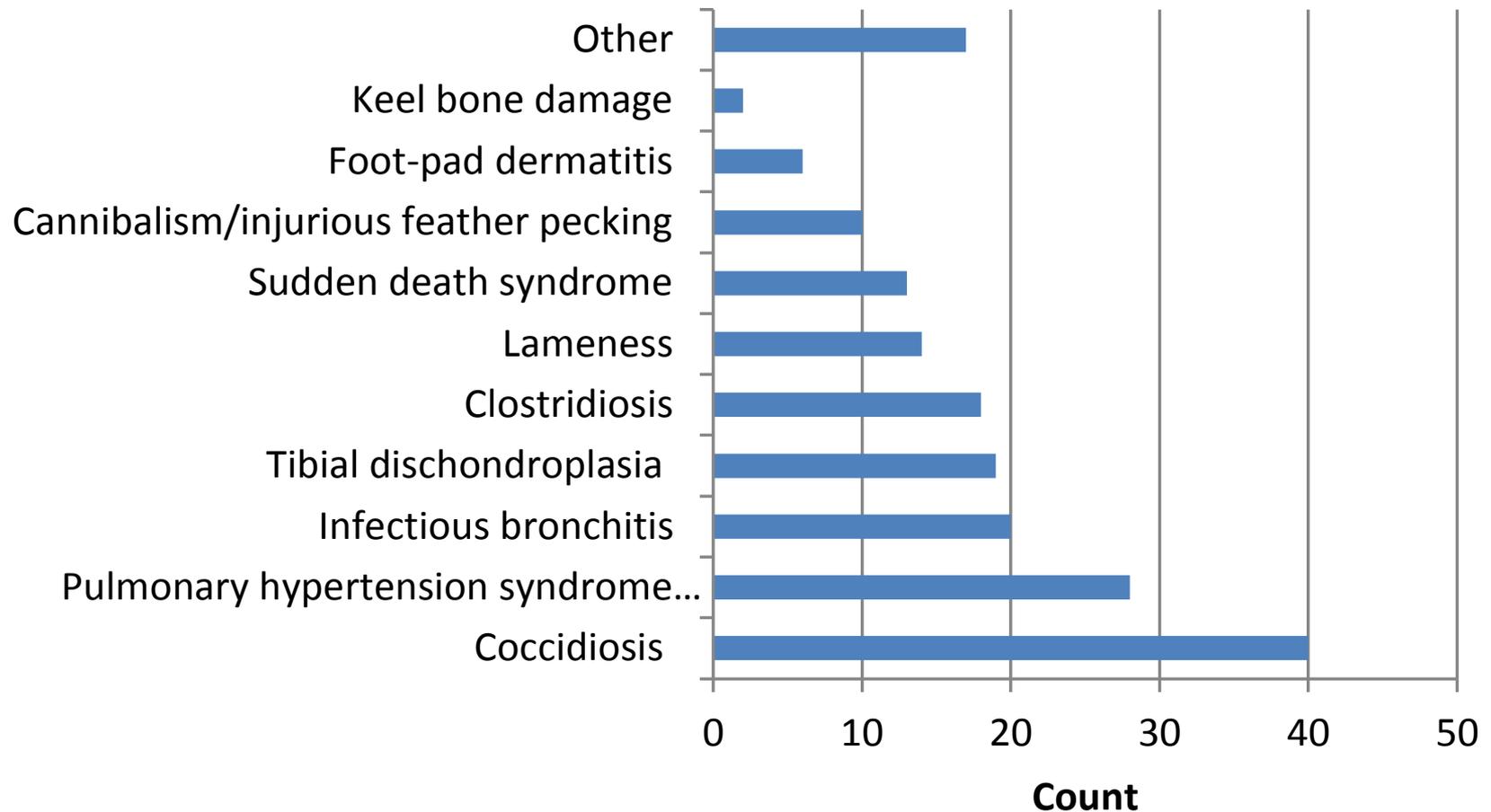
## Production diseases affecting sows



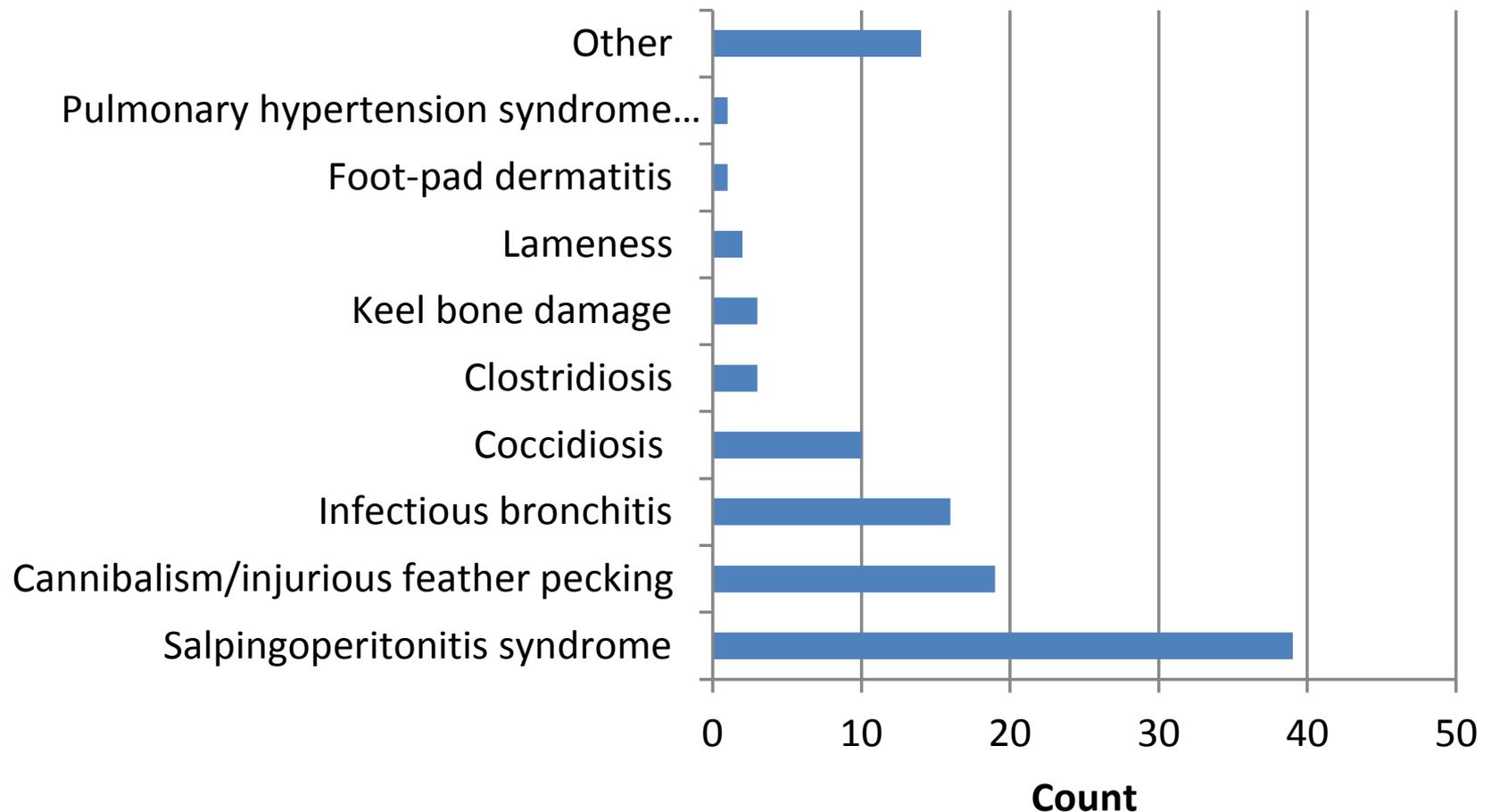
## Production diseases affecting weaners, growers and fattening pigs?



## Production diseases affecting broilers



## Production diseases affecting laying hens



A blurred background image of a calculator with several coins scattered on its surface. The calculator is a standard handheld model with a display screen and a grid of buttons. The coins are of various denominations and are scattered across the calculator's keypad and the surface it sits on. The overall image has a soft, out-of-focus quality with a warm, golden-brown color palette.

**How costly are production diseases?**

# Production diseases affecting pigs

## Respiratory diseases

- Losses due to porcine respiratory disease complex (*M. hyo.*, App and associated pathogens) were €6.8 (2-19 ) per fattening pig produced by an affected herd.

## Mortality

- Pre-weaning mortality cost €12 to €23 per litter
- Post-weaning mortality cost €2 to €4 per pig.
- Likely overall costs of mortality were €3 to €9 per pig.

## Enteric diseases:

- Post-weaning enteric diseases were €3.4 per finished pig, ranging up to €13.
- The costs of ileitis were on average €11.7 per diseased pig.

## Lameness

- Cost range from €145 to €180 per lame sow and from €12 to €65 per lame finishing pig

## Mastitis, Metritis and Agalactia

- The costs of mastitis or the complex syndrome 'Mastitis, Metritis and Agalactia' can range up to €95 per affected sow. In the most severe cases up to €470.

## Parasites

- The costs of untreated parasites (*A. Suum*) were on average at €6.9 per pig

## Tail biting

- Tail biting cost about €2 per produced pig

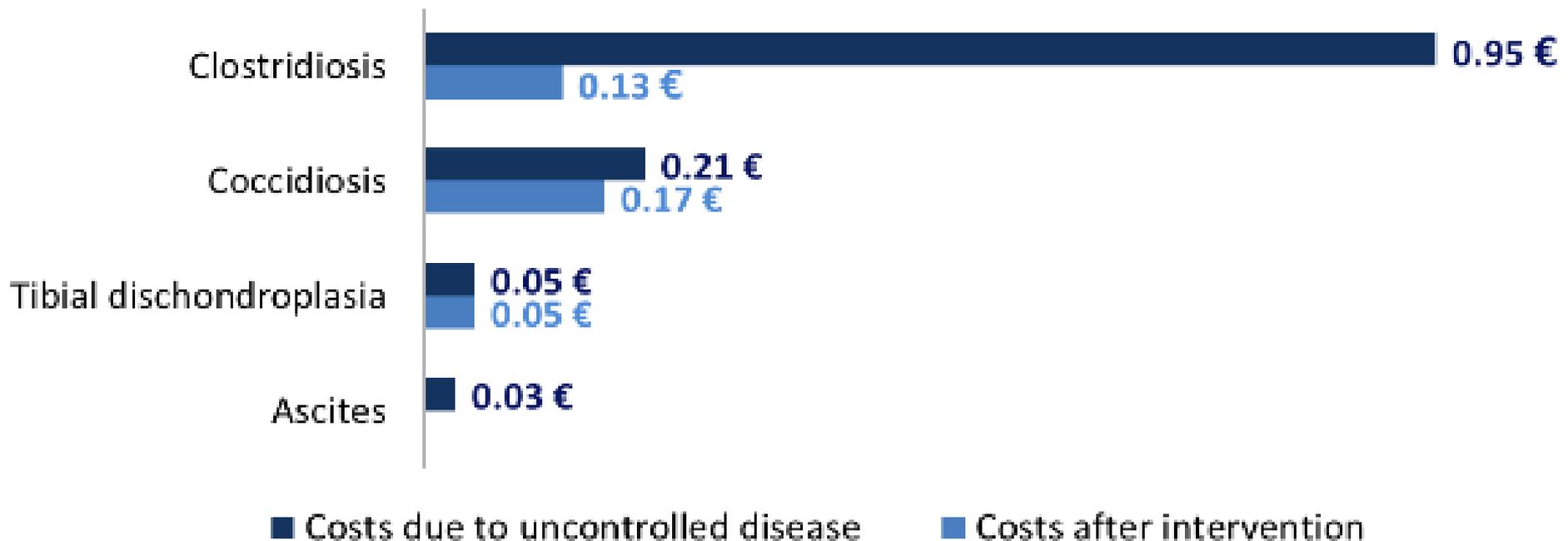
# Cost of production diseases per pig



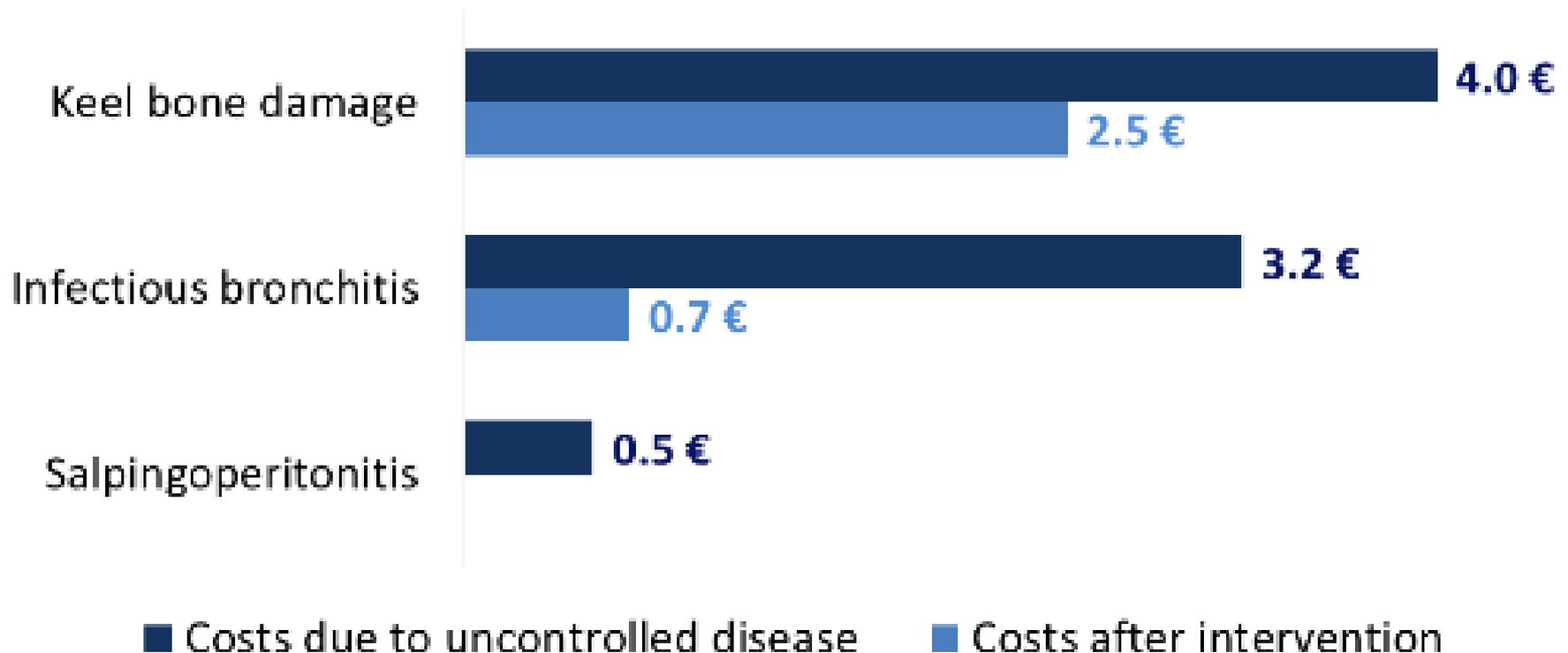
\* Respiratory disease and mortality costs are per pig in an affected herd  
 \*\* The costs of mastitis/MMA and premature replacement have been converted from € per sow to € per fattening pig originating from an affected sow

The costs of mastitis/MMA and premature replacement have been converted from euro per sow to euro per fattening pig originating from an affected sow

## Losses due to four controlled & uncontrolled production diseases in broiler flocks (€/bird)



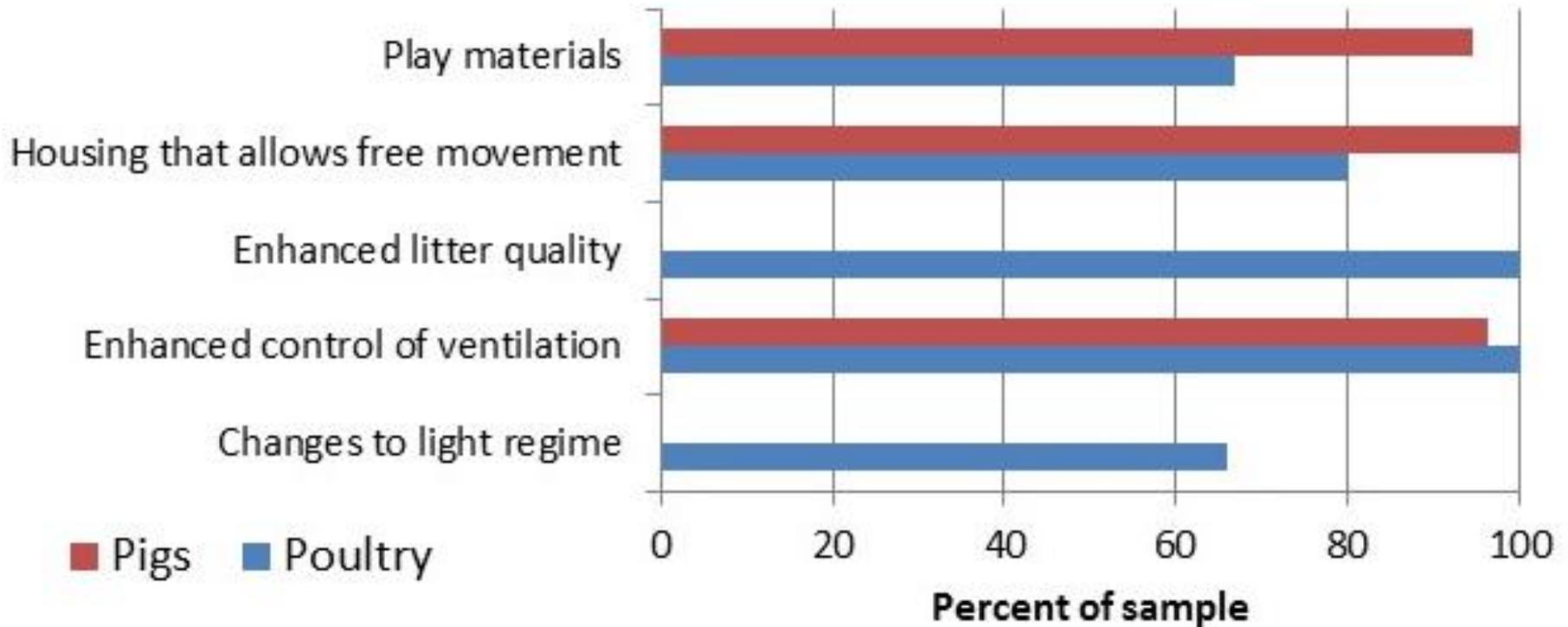
## Losses due to three controlled & uncontrolled production diseases in laying flocks (€/bird)



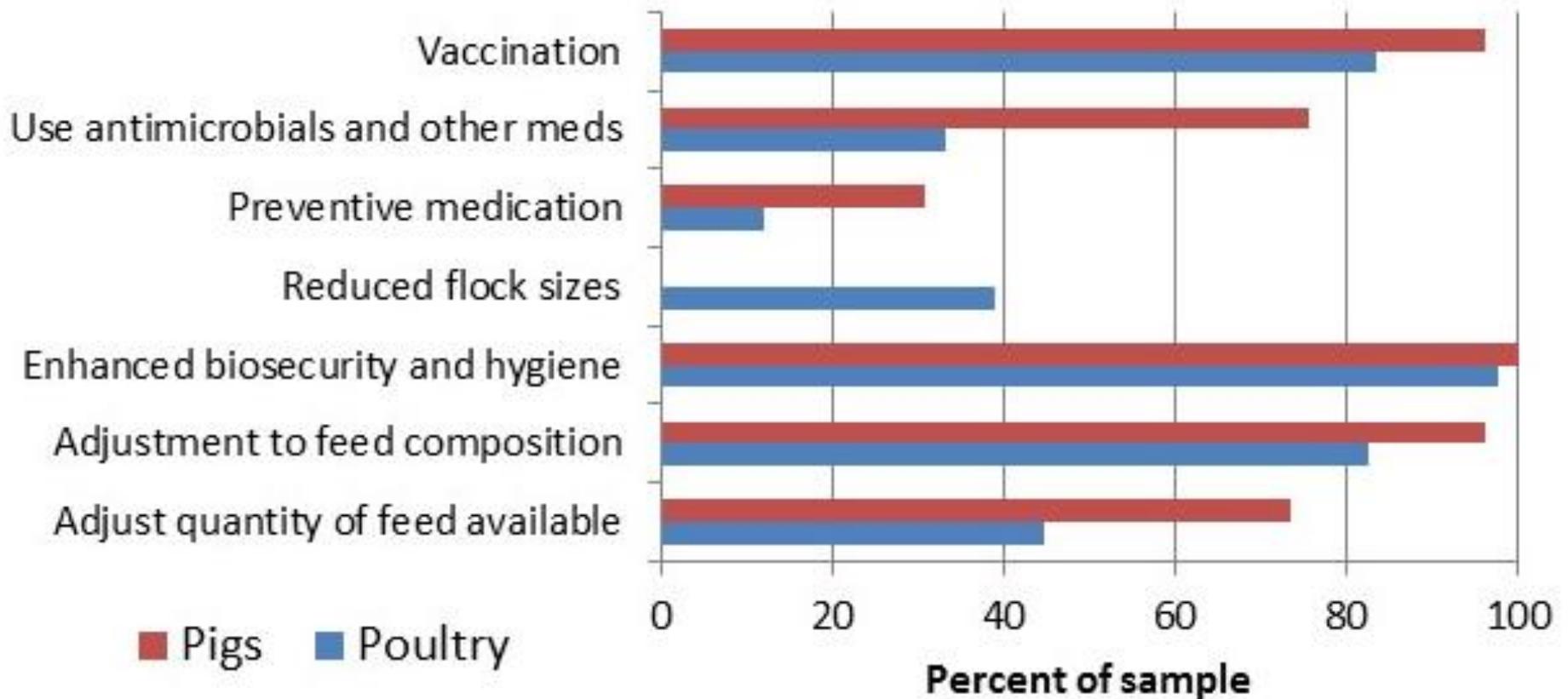
Wat are the most preferred ways to control for production diseases?



## Preferred interventions to control multiple diseases



## Most preferred management interventions to control multiple diseases



## Summary

- Very limited research on economics of production diseases
- ➔ Disease cost statements in various publications are often not well-founded in scientific terms.
- Production diseases can lead to substantial economic losses
- Stakeholders preferred preventive interventions
  - Doing nothing is not an option



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