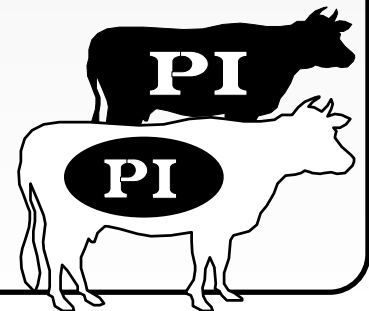


*Work package 2*

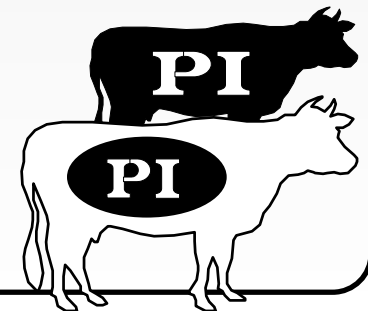
*Epidemiology and risks*

**Status and plans**



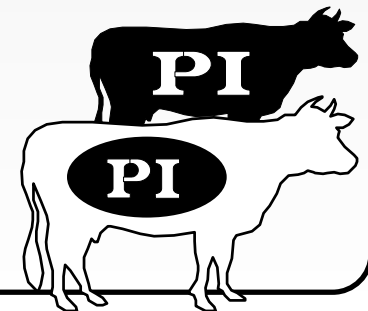
# Activities

- Meeting in Copenhagen 2002 – draft work plan
- Contributions to first questionnaire
- Task force meeting in July 2003 – extended work plan – work meeting



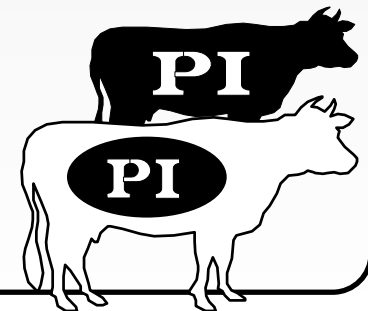
## **Overall objectives**

- 1) Establish system for collecting information on BVDV data sources in Europe
- 2) Evaluate methods for infection dynamics modelling and identify information necessary for improving them
- 3) Evaluate methods for identification of risk factors for reinfection during different phases of disease control and risk of reinfection in free areas
- 4) Evaluate risk factors for BVDV and their relative importance in different regions.
- 5) Evaluate health and production effects of BVDV under different production settings



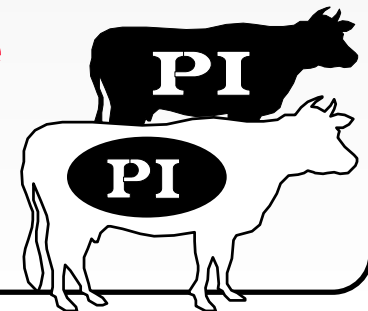
# Collecting information on BVDV data sources in Europe

- **Overview on how incidence and prevalence are measured**
  - Summary of published studies ✓
  - Good monitoring practice ✓
  - Guidelines for biological interpretation ✓
  - Identify current status and future needs of partners, with respect to BVDV monitoring
- **Propose case definitions for new infections (at individual/farm/regional level)**
  - Description of existing schemes



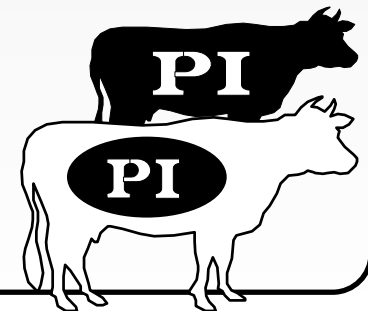
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  - Guidelines for biological interpretation ✓
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- **Propose case definitions for new infections (at individual/farm/regional level)**
  - Description of existing schemes - **Questionnaire**



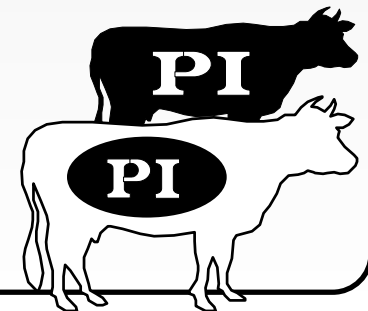
# **..information on BVDV data sources..cont'd**

- **Identify BVDV data sources and sources of demographic data of relevance to BVDV control**
  - Catalogue of data sources for future reference – coordinated research activities



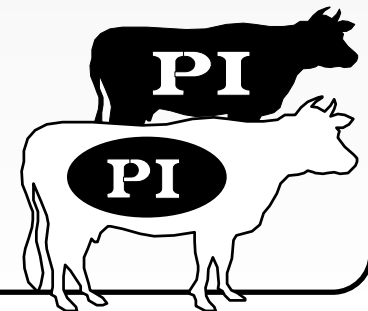
# **..information on BVDV data sources..cont'd**

- **Identify BVDV data sources and sources of demographic data of relevance to BVDV control**
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  - **Questionnaire**



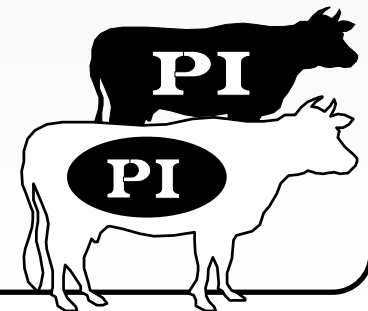
# Methods for infection dynamics modelling – how to improve them?

- General review of existing models ✓
- Identify how within-herd models could be used to provide input to a between-herd model
- Investigate if an existing between-herd model (*INTERSPREAD*) could be used to evaluate effect of control options under different regional conditions
- *Research proposal*



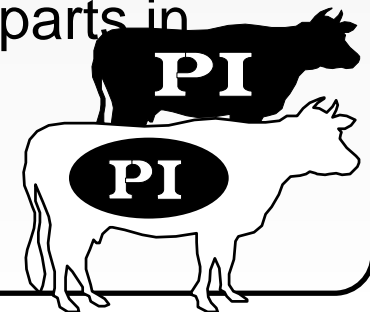
# Methods for identifying risk factors for reinfection - risk of reinfection in free areas

- **Produce standardised routines for investigating cases of new infections**
  - Suggest path for investigations of new infections ✓
  - Determining the time of infection - Pros and cons with different sources of information
  - Template of interview sheet
- *Research proposal*



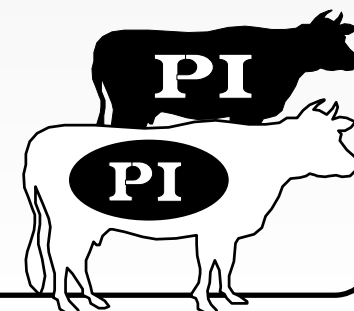
# Evaluate risk factors for BVDV and their relative importance in different regions

- **Characterise (regional) units of observation - establish list of known and probable risk factors in each area**
  - Summary table with demographic baseline information ✓
  - Review of known (investigated) risk factors for BVDV. ✓
  - Regional description of country
- **Perform a meta-analysis using data from existing prevalence studies** ✓
  - Paper drafted. Special issue of PVM? Or relevant parts in report.



# Evaluate risk factors for BVDV and their relative importance in different regions

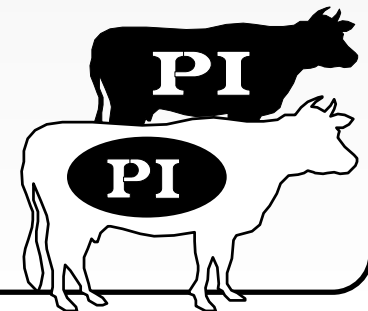
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# Health and production effects of BVDV under different production settings

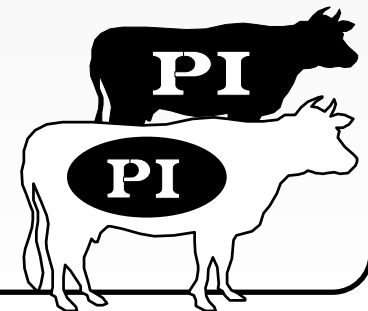
- **Compile information on health- and production effects and identify knowledge gaps**
  - Review of investigated health- and production effects ✓
- **Define what health- and production effects should be investigated**
  - Perceived knowledge gaps? What is needed from the viewpoint of WP4?
- **Compile experience with adapting existing models (SIMHERD) to evaluate health and production effects (of BVDV) under different production settings.**

- *Research proposal*



# Achievements – in summary

- Reviews of
  - BVDV prevalence (based on published papers)
  - Risk factors (based on published papers)
  - Production effects (-"-)
- Draft summary tables with basic demographic data
- Review of BVDV transmission models
- Draft paper – metaanalysis of risk factors for BVDV infection
- Draft questionnaires
  - *Data sources*
  - *Description of schemes*
  - *Regional description of countries*
- Outline of position paper



# Original plan

## ● Month 6:

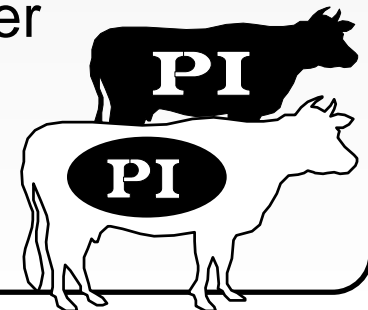
- Draft research proposals on BVDV infection dynamics modelling and BVDV re-infection risk analysis
- Recommendations for collection and use of European BVDV data

## ● Month 18:

- Recommendations for risk assessment with respect to BVDV re-infection
- Report on risk factors for BVDV in Europe
- Preliminary contribution to the BVDV control position paper

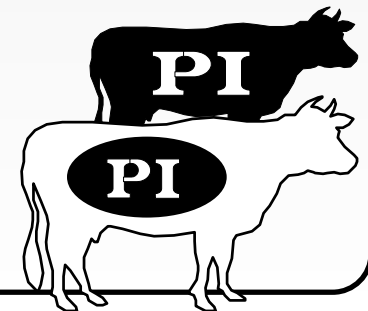
## ● Month 27:

- Final contribution to the BVDV control position paper



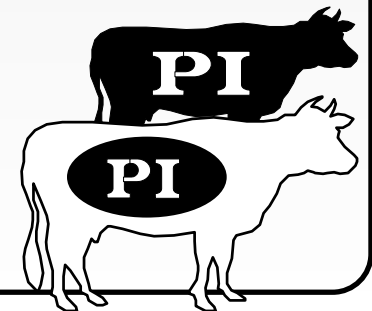
# Revised plan

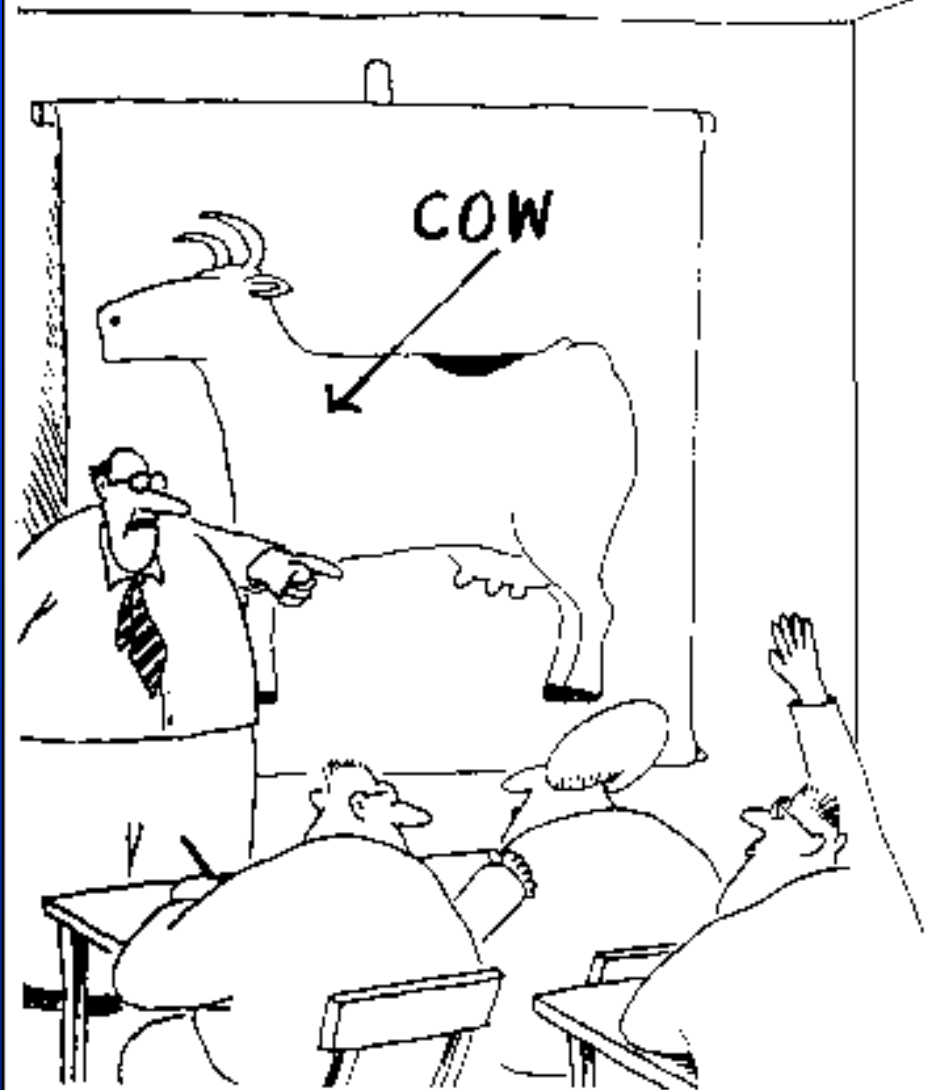
- **Month 13:**
  - Inventory of European BVDV data
- **Month 18:**
  - Recommendations for collection and use of European BVDV data
  - Recommendations for risk assessment with respect to BVDV re-infection
  - Report on risk factors for BVDV in Europe
  - Preliminary contribution to the BVDV control position paper
- **Month 27:**
  - Final contribution to the BVDV control position paper
  - Research proposals?



# Plans for the near future

- Questionnaires
- Draft contribution to position paper
- Research proposals?





"Yes. . . I believe there's a question in the back."