# DTU Vet National Veterinary Institute



## Planning a cross-sectional study of antimicrobial resistance genes in Danish pig farms

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#### **OBJECTIVES**

Plan a cross-sectional study of the antimicrobial resistance genes in conventional Danish pigs farms. The sample should meet the following criteria:

- Include 500-1000 farms
- Farms randomly selected
- Allow studying the impact of trade partners
- Allow studying potential spatial clustering
- The sampling period should be short

### DATA

Data was provided by the Food and Agriculture council giving the number of farms each slaughterhouse received pigs from during weeks 6-10 2014 and weeks 46-50 2014 Data was supplemented with Cartesian coordinates of the farms.

slaughterhouse (A-F).

Figure 1 Location of the farms that send pig to slaughter at each

#### RESULTS

Sampling was performed in 6 slaughterhouses. The number of farms sampled at each slaughterhouse is shown in table 1. The farms were sampled at random and for each slaughterhouse, 6-50 farms were sampled per day per slaughterhouse.

Slaughterhouse	Α	В	С	D	Ε	Total finisher	F
Number of farms planned sampling	140	300	160	120	80	800	200
Number of unique farms sampled	125	249	124	104	65	660	*



Table 1 Number of the farms to be sampled at each slaughterhouse (A-F) and the resulting number of unique farms sampled at each slaughterhouse. \*: still sampling

Figure 2 Location of the farms in the final sample of farms with finisher pigs

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