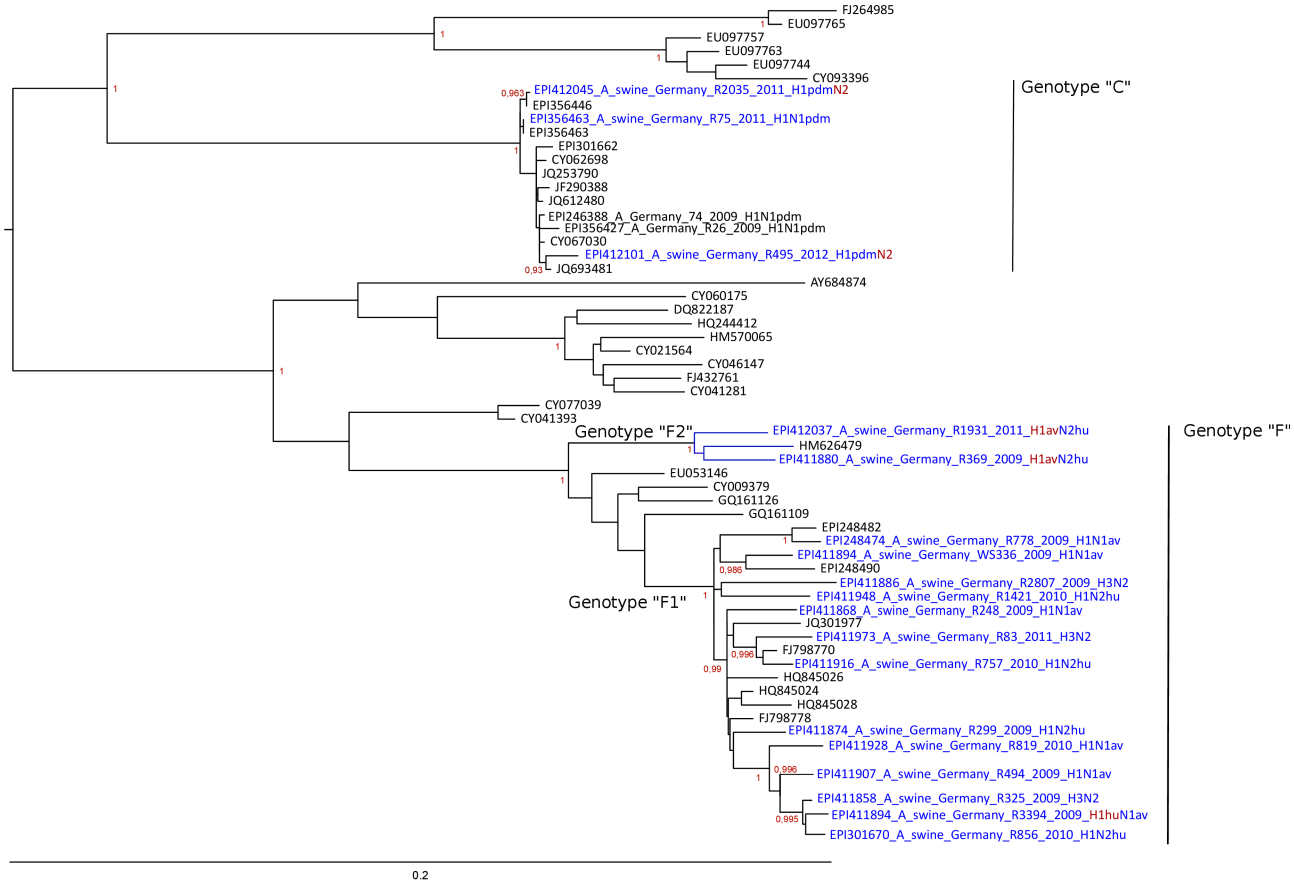
Legend to supplemental figure S1. Phylogenetic analysis in a maximum likelihood framework (PhyML) of the hemagglutinin HA1 genome segment of porcine influenza A viruses of subtype H1(N2) detected in selected swine herds in the Northwest of Germany, 2009 - 2012. Tree is drawn to scale as indicated by the scale bar. EpiFlu database accession numbers can be retrieved from supplemental Table S1b. Further sequences have been extracted from GenBank or the EpiFlu databases and their accession numbers are indicated in the trees. Details of the phylogenetic analysis are given in the Methods section.

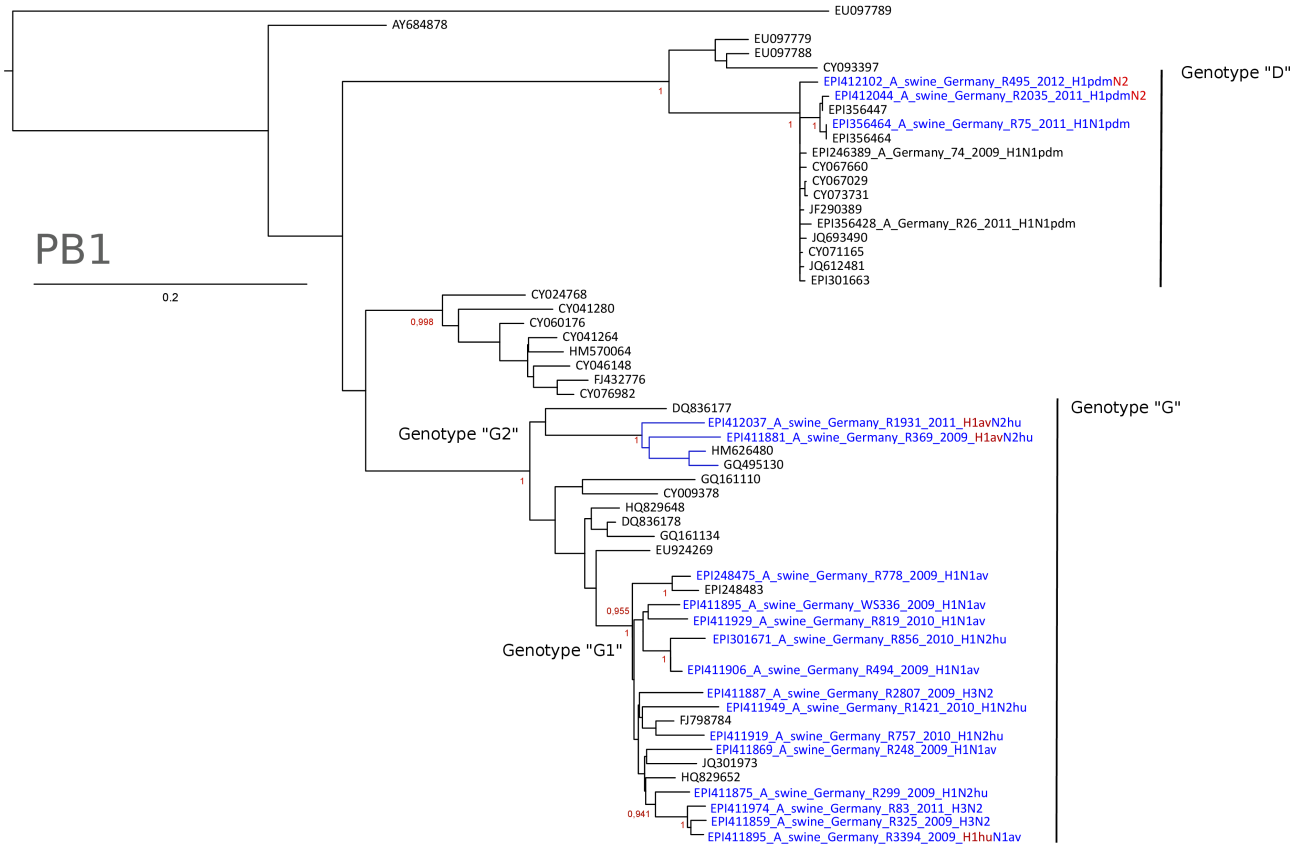
Supplemental figure 1.

Legend to supplemental figure S2. Phylogenetic analysis in a maximum likelihood framework (PhyML) of "internal" genome segments of porcine influenza A viruses detected in selected swine herds in the Northwest of Germany, 2009 - 2011. Trees are drawn to scale as indicated by the scale bar. Isolates analyzed in the frame of this study are shown in blue; genotyping of these isolates on basis of the phylogenetic analyses is presented in Table 2. EpiFlu database accession numbers can be retrieved from supplemental Table 1Sb. Further sequences have been extracted from GenBank or the EpiFlu databases and their accession numbers are indicated in the trees. Details of the phylogenetic analysis are given in the Methods section. A – PB2, B – PB1, C – PA, D – NP, E – M, F – NS.

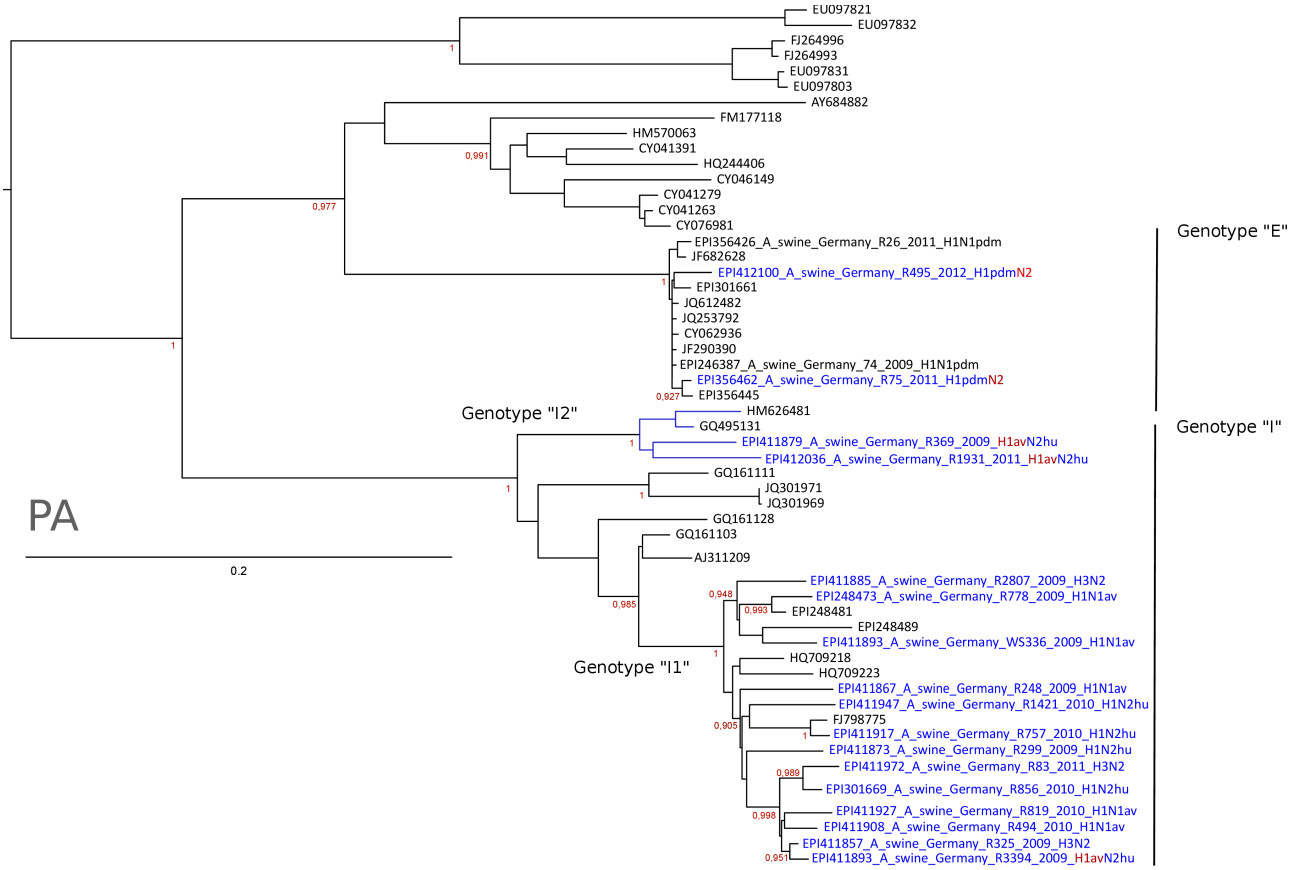
Supplemental figure 2A.



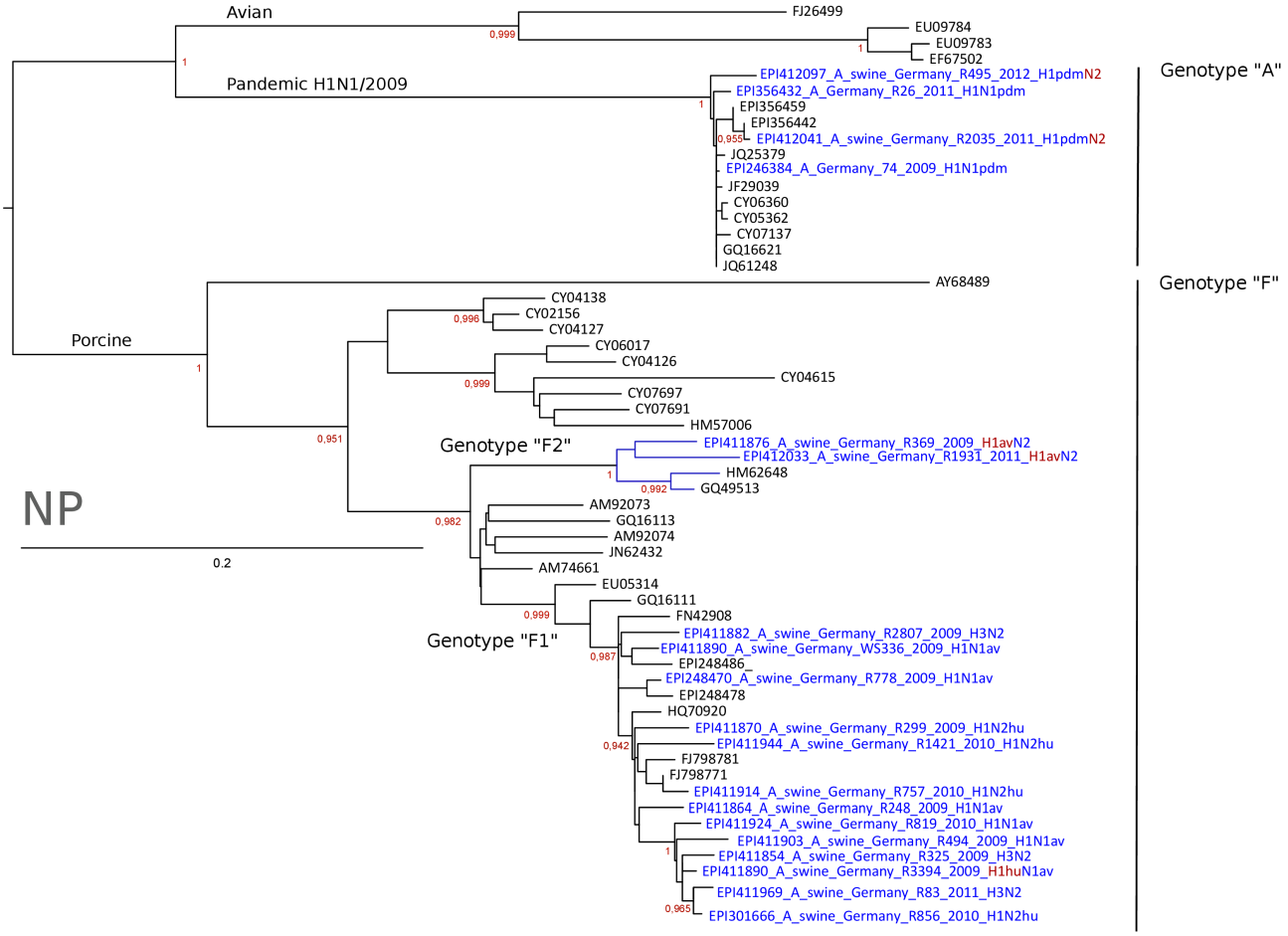
Supplemental figure 2B.



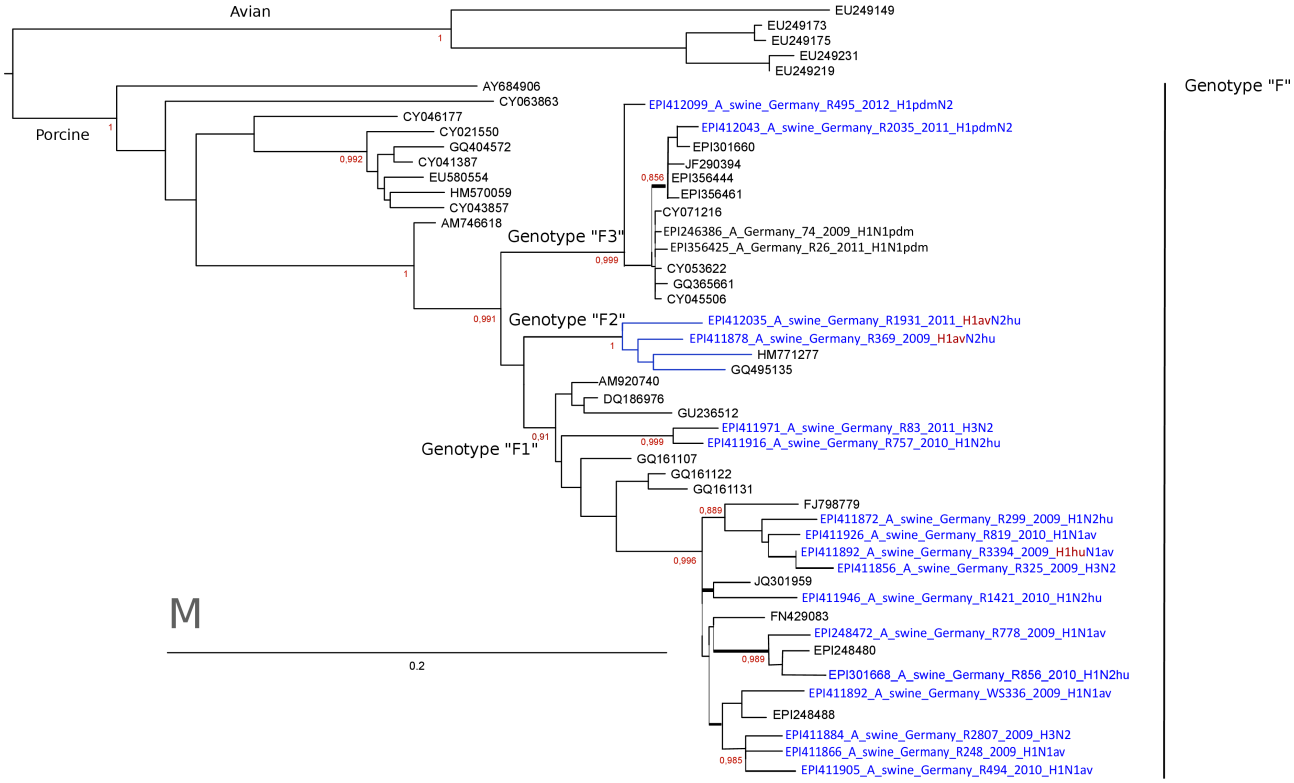
Supplemental figure 2C.



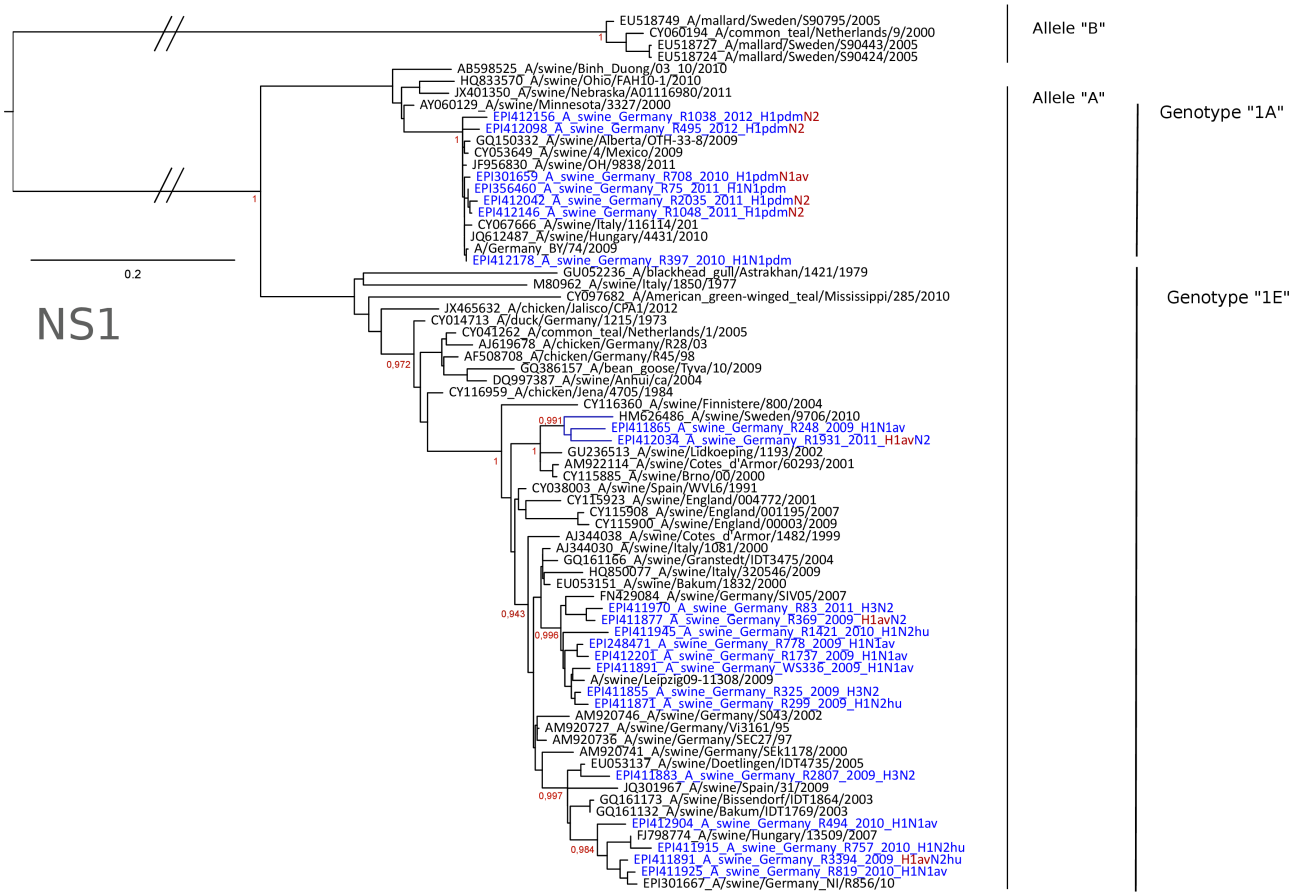
Supplemental figure 2D.



Supplemental figure 2E.



Supplemental figure 2F.



FB-Nr. _____

Project: “SIV infection and reproductive disorders in sow herds“

Date of inquiry:_____

Lab-number of corresponding samples:

Veterinarian (name, first name)

Zip code, city

Farmer (name, first name)

Zip code, city

Veterinarian: I declare that I approve that the collected data will be used for further analysis and publication by the Field Station of Epidemiology and that this will be done anonymously

☐ yes ☐ no

FB-Nr. _____

I. Herd type and size

☐ Farrow-to-finish (slaughter pig market weight ca. 115 kg)

☐ Farrow-to-feed (piglet market weight 28 kg)

☐ Farrow-to-wean (piglet market weight 8 kg)

Increase in the number of sows since 2009

☐ yes ☐ no

Number of producing sows _____

Number of places for weaners _____

Number of places for fatteners _____

II.1 Utilisation concept of the building with farrowing units

II.1.1 Which production stages are in the same building the farrowing units are?
[multiple answers possible]

☐ none

☐ nursery units

☐ fattening units

☐ gilt acclimatisation unit

☐ insemination centre

☐ gestating sow unit

II.2 Management lactating sows and suckling pigs

II.2.1 Weaning age

☐ 21-22 days of age

☐ 23-24 days of age

- ☐ 25-26 days of age
- ☐ 26-27 days of age
- ☐ > 28 days

II.2.2 Batch farrowing system

- ☐ none
- ☐ 1 week
- ☐ 2 week
- ☐ 3 weeks
- ☐ 4 weeks
- ☐ other _____

II.2.3 All-in-all-out policy in the farrowing units

- ☐ yes
- ☐ no

II.2.4 Separate farrowing unit for sows that do not belong to a regular batch (e.g. after return to oestrus)

- ☐ yes
- ☐ no

II.2.5 Cross-fostering of suckling pigs (number of pigs)

- ☐ < 5 %
- ☐ 5 – 10 %
- ☐ > 10 %
- ☐ not specified

II.2.6 Disposition of runting or diseased piglets after weaning

- ☐ stay in the farrowing pen
- ☐ are moved to a pen for diseased pigs in the same unit

- ☐ are moved to a unit for diseased pigs
- ☐ euthanasia
- ☐ other (e.g. nurse) _____

II.3 Management insemination centre

II.3.1 All-in-all-out policy in the insemination centre

☐ yes

☐ no

II.4 Management gestating sows

II.4.1 All-in-all-out policy in the unit(s) of gestating sows

☐ yes

☐ no

II.4.2 Housing of the gestating sows

☐ gestation crates

☐ loose housing system

☐ both

II.5 Vaccination program - sows

Vaccination against	Yes	No	Vaccine	Herd vaccination*	Group vaccination**
SIV					
PRRS					
PCV2					
Erysipelas					
Parvovirus					
Rhinitis atrophicans					
E. coli/ Cl. perfringens					
Autogeneous vaccines against *S. suis/ H. parasuis*					
Other					

* Vaccination of the entire sow herd at one time; ** vaccination of batches of sows at a specified time of the reproduction cycle (e.g. during mid-gestation or suckling period)

II.6 Vaccination program - piglets

Vaccination against	Yes	No
SIV		
PRRS		
PCV2		
Mycoplasma hyopneumoniae		
Ileitis		

III. Management gilts

III.1 Replacement gilts

III.1.1 Origin

☐ self recruitment

☐ purchase

If purchased:

III.1.2 Quarantine/Acclimatisation

☐ yes ☐ no

If yes:

III.1.3 Duration of quarantine/acclimatisation period

☐ ≤ 5 weeks

☐ 6-7 weeks

☐ ≥ 8weeks

☐ not specified

III.1.4 Nose-to-nose-contact to older sows during acclimatisation

☐ yes ☐ no

FB-Nr. _____

III.1.5 Site of the acclimatisation barn

- ☐ separate location
- ☐ separate building but same location as farrowing barn
- ☐ separate unit in the farrowing barn

III.2 Vaccination program - gilts

Vaccination against	Yes	No
SIV		
PRRS		
PCV2		
Erysipelas		
Parvovirus		
Rhinitis atrophicans		
Glässer Disease		

FB-Nr. _____

IV. Course of the disease

IV.1 When (prior to sample submission) did the disease in the sow herd start?

- ☐ 1-3 weeks
- ☐ ≥ 3 weeks
- ☐ not specified

IV.2 Which sows were affected?

- ☐ only ≥ 2nd parity sows
- ☐ only first litter sows
- ☐ both
- ☐ not specified

IV.3 Occurrence of reproductive disorders?

[multiple answers possible]

Reproduction stage	Yes	No
1-23 days of gestation (return to oestrus)		
24-38 days of gestation (return to oestrus/abortion)		
39-60 days of gestation (return to oestrus/abortion)		
61-100 days of gestation (return to oestrus/abortion)		
> 100 days of gestation (abortion)		
Birth of stillborn/ weak born piglets		
No reproductive disorders		

IV.4 Which other clincal symptoms appeared in sows?

[multiple answers possible]

- ☐ fever > 40,0°C
- ☐ under temperature < 37,5 °C
- ☐ reduced feed intake
- ☐ anorexia
- ☐ apathy
- ☐ cough
- ☐ nasal discharge and/or sneezing
- ☐ laboured breathing
- ☐ cyanosis
- ☐ sudden death
- ☐ no clinical symptoms