Danish Agriculture & Food Council
Pig Research Centre

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STRATEGY FOR THE REDUCTION OF PORCINE REPRODUCTIVE AND RESPIRATORY SYNDROME **(PRRS)** IN PIGS IN DENMARK

The Danish Veterinary Association

Minister for Food, Agriculture and Fisheries

Contents:

1. Introduction

The Danish Veterinary and Food Administration, in collaboration with the Danish Agriculture & Food Council, Danske Svineslagterier, the Danish Agriculture & Food Council's Pig Sector and the Danish Veterinary Association have drawn up a plan to reduce PRRS in Denmark.

The purpose is to improve the health of Danish pigs and prevent the production fluctuations that occur during an outbreak of PRRS. Antibiotic usage is therefore likely to be reduced and welfare improved.

1.1 PRRS and eradication

Porcine Reproductive and Respiratory Syndrome (PRRS) is a viral infection that can infect pigs of all age groups, but with particular consequences for sow herds. The symptoms of PRRS vary between infected herds. In some cases, a herd may be infected with PRRS without any subsequent symptoms. In other cases, PRRS can present major problems and losses due to a rate of high mortality and increased antibiotic usage.

The deployment of an eradication programme can result in a disease-free herd. This is relatively straightforward for some herds, but an expensive exercise for others. There is also the risk of reinfection as the disease is airborne.
Any realistic possibility of eradicating an infected herd will therefore rest on the disease status of any surrounding herds in order that the infected herd, post eradication, will not be reinfected.

A reduction strategy in Denmark, therefore, demands a coordinated effort at regional level.

This requires an effort throughout the industry to ensure knowledge and coordination at regional level both on the part of practising pig veterinarians to support individual producers, and on the part of the authorities to establish a regulatory framework that ensures knowledge of the disease status of all herds and to implement control procedures that ensure compliance with the rules.

1.2 Benefits of reducing PRRS in Denmark

By far the majority of herds that become PRRS-free will see reduced antibiotic usage, improved piglet and weaner survival and increased earnings. This is based on a large number of studies conducted by SEGES Innovation.

The studies indicate that PRRS positive herds use more antibiotics. It should therefore be assumed that antibiotic usage will be reduced if more Danish herds become PRRS-free.

The studies have indicated increased piglet and weaner mortality in PRRS positive herds. It is therefore likely that piglet and weaner survival will increase as more herds become PRRS negative.

Calculations show that PRRS leads to financial losses in affected herds and that when new, more loss-making variants of PRRS emerge, financial losses will increase.

All in all, it can be expected, based on previous studies, that antibiotic usage will fall, survival will increase and the profitability of Danish pig producers will improve if the number of PRRS positive herds falls. A reduction in PRRS, therefore, will contribute to improved animal welfare and less antibiotic usage as well as better financial results for the industry as a whole.

1.3 Organising action to reduce the occurrence of PRRS

The strategy for reducing PRRS has been drawn up in a collaboration between The Danish Veterinary and Food Administration (FVST), the Danish Agriculture & Food Council (L&F), the Danish Agriculture & Food Council's Pig Sector, Danske Svineslagterier (DSS) and the Danish Veterinary Association (DDD). The Danish Veterinary and Food Administration has also sought the comments of the Danish Veterinary Consortium (DK-VET).

Implementing the PRRS reduction strategy will be organised by a steering group and a working group.

The steering group comprises representatives from FVST, L&F, LFG, DSS, DDD and DK-VET.

The working group comprises representatives from FVST, L&F, LFG, DSS, DDD, DK-VET and SEGES.

THE WORKING GROUP'S TASKS WILL BE TO:

- Provide crucial knowledge about the spread of infection, effective eradication strategies as well as justification for eradication.
- Implement regional initiatives in areas with many PRRS antibody positive herds. To this end, the industry will set up regional councils under the auspices of L&F, with representation from relevant veterinary practices and producers with a view to coordinating with producers in a given area.
- Prepare ongoing monitoring and propose adjustment of monitoring programmes, i.e. antibody declaration, clinical declaration and the forthcoming virus declaration of PRRS in finishers.
- Provide digital solutions for managing data.
- Monitor the set deadlines for implementing antibody/clinical/virus declarations and ensure progress in the development of the numbers of PRRS negative herds. Should key areas be delayed, this will require a reassessment of the timetable and possible adjustment.

2. Background

Porcine Reproductive and Respiratory Syndrome (PRRS) was detected in Denmark for the first time in 1992 and has since become endemic.

2.1 Porcine Reproductive and Respiratory Syndrome (PRRS)

Porcine Reproductive and Respiratory Syndrome (PRRS) is a disease in pigs that can affect all age groups. PRRS cannot infect other animal species or humans. The cause is the Porcine Reproductive and Respiratory Syndrome (PRRS) virus.

There are two types of PRRSV: PRRS virus 1 and PRRS virus 2. A herd may have both types.

In sows, PRRS can lead to reproductive problems and higher mortality among piglets. Among growing pigs, the disease can cause respiratory problems. Respiratory problems are increased by secondary bacterial infections that require treatment with antibiotics and a higher mortality rate. It is important to point out that some PRRS infections pass more or less unnoticed in herds and are only identified when annual blood samples are taken.

2.1.1 Prevalence of PRRS in Denmark

As not all herds are examined for PRRS today, there are no figures available for the number of herds in Denmark with PRRS. However, a large proportion of producers have voluntarily declared their herd's PRRS status in the Danish SPF system. Declaration of PRRS in the SPF system is based on the monitoring of antibodies against PRRS.

56 per cent of Danish sows are in a PRRS-negative SPF declared herd and the same applies to just 22 per cent of finishers (table 1). PRRS-unknown herds are not included in the SPF system.

Table 1. Division of animals based on PRRS-status in the SPF system.

Division of animals (percentage)			
	SPF PRRS negative	SPF PRRS positive	PRRS unknown
Finishers	22 %	8 %	69 %
Sows	56 %	25 %	19 %

Data is based on extracts from the SPF database for the period December 2019-January 2020.

The number of herds (CHR numbers) with PRRS-negative, PRRS-positive and PRRS-unknown status, based on SPF data and data from CHR, are divided as follows for herds with over 10 sows or with over 100 animals (table 2).

[1] *SPF=Specific Pathogen Free herds declared free from a wide range of diseases which, under normal breeding conditions, cause serious problems and are subject to specific infection protection requirements.*

Table 2. Division of herds based on PRRS status in the SPF system.

Division of herds, number			
	SPF PRRS negative	SPF PRRS positive	PRRS unknown
Sows, piglets (if any)	223	109	92
Sows and finishers	684	257	334
Piglets only	151	93	100
Finishers, piglets (if any)	715	305	2358

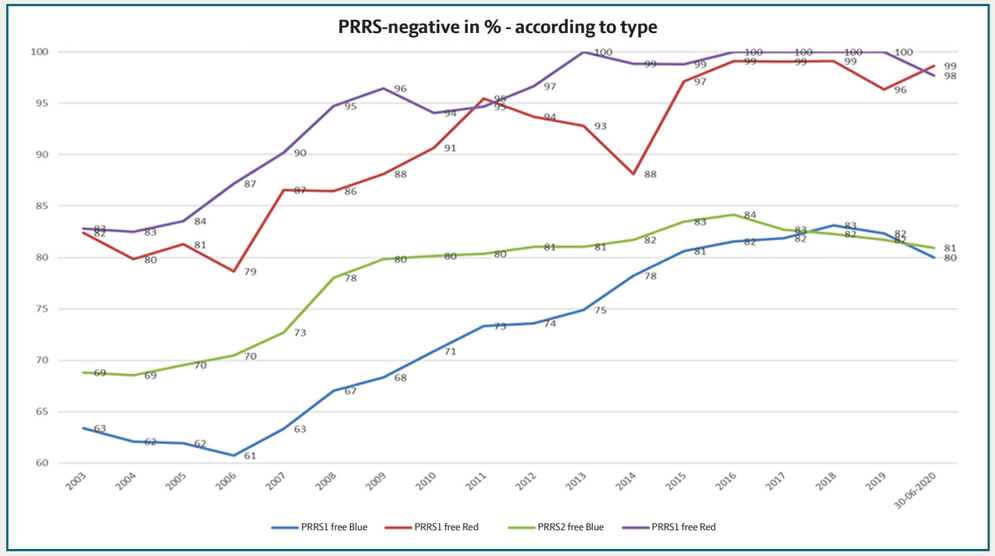
Data based on extract from CHR register and SPF database for the period December 2020 to January 2021.

FVST maintains an official list of PRRS herds where the PRRS virus has been detected by one of more virological methods. Meat from finishers from such herds cannot be exported to countries that impose special PRRS certification requirements.

2.2 Development in the number of herds with PRRS in the SPF-system

Approx. 81% of Danish sows are in a herd that has been declared in the SPF system. For such herds, SPF-SUND (SPF HEALTH) calculates the percentage of PRRS antibody negative herds each year, both for breeding herds (red herds) and production herds (blue herds) divided into PRRS1 and PRRS2 (figure 1).

Fig 1. Development in the number of herds with PRRS in the Danish SPF system.



3. Objective for reducing Porcine Reproductive and Respiratory Syndrome

The overall objective of the strategy to reduce Porcine Reproductive and Respiratory Syndrome (PRRS) is to increase the number of herds free from PRRS over a number of years.

3.1 Objective

The objective is to increase the number of herds declared PRRS antibody negative by 2025. This will be achieved through targeted management of PRRS, which will provide an incentive for increasing the numbers of PRRS negative finisher herds. This, in turn, will increase demand for PRRS antibody negative piglets and provide an incentive for eradicating sow herds. The objective is not eradication of all pig herds in Denmark for PRRS, but a reduction in the number of herds with PRRS.

The objective of the adopted measures will be:

FINISHERS, NUMBER OF DECLARED PRRS ANTIBODY NEGATIVE

SOW HERDS, NUMBER OF DECLARED PRRS ANTIBODY NEGATIVE

The intermediate objective for the number of declared PRRS antibody negative finishers will be:

4. Declaration of Porcine Reproductive and Respiratory Syndrome to date

Porcine Reproductive and Respiratory Syndrome (PRRS) has been voluntarily declared in pig herds through the SPF system since 1993

Until now, PRRS monitoring has been organised under the auspices of the SPF system. Voluntary PRRS declaration, based on antibodies against PRRS, is handled by the industry. The proportion of sows that are PRRS-declared in the SPF system is approx. 80 per cent while only approx.30 per cent of finishers are currently declared.

Monitoring is based on antibody testing through blood tests performed at a Danish laboratory. 20 samples are taken once a year in production herds. 10 samples per CHR number are taken in SPF joint operation herds. Breeding herds (red SPF-herds) have 10 blood samples taken once a month.

ANTIBODY TESTING IS A BLOOD TEST. FOUR DIFFERENT TESTS ARE CURRENTLY USED IN DENMARK

- IdexxELISA: performed as an overall PRRS test, which does not distinguish between type 1 and type 2.
- IPT (Immunoperoxidase test): Available in two variants, i.e. IPT-PRRS1 (based on a Danish wild virus isolate) and IPT-PRRS 2 (based on a vaccine strain).
- Multiplex PRRS: Can distinguish between PRRS1 and PRRS2 based on a ratio.
- MFIA (Multiplexed Fluorometric ImmunoAssay) PRRS: Can distinguish between PRRS1 and PRRS2 based on a ratio.

5. Future management of Porcine Reproductive and Respiratory Syndrome in herds

In future, all herds are subject to Porcine Reproductive and Respiratory Syndrome (PRRS) antibody declarations, and the antibody declaration must be followed up by a clinical declaration for finishers in PRRS antibody positive herds. Eventually, antibody declarations will be supplemented by a PRRS virus declaration based on PCR testing. Declaration of all herds is crucial for eradication of PRRS in individual herds or geographical areas, as the status of all neighbouring herds must be known.

The requirement for declaration of PRRS status is stipulated in a new executive order, while eradication with a view to changing the individual herd status is up to the respective owner.

5.1 Herd declaration

A prerequisite for a reduction strategy in Denmark is that the PRRS status of all pig herds is known as the disease is airborne and therefore presents a significant risk to close, neighbouring herds.

A herd is defined by its CHR number.

Herd declarations will therefore change from being a voluntary declaration handled by the industry to being an official declaration under an executive order issued by the Danish Veterinary and Food Administration. The declaration will comprise an antibody component, whereby all herds, including herds with no finishers, are divided into PRRS antibody negative and PRRS antibody positive. The order specifies that PRRS antibody positive herds shall be subject to a clinical declaration prior to slaughter. Clinical declarations will be supplemented by a virus declaration for the PRRS virus based on PCR testing no later than 1 July 2025.

The samples must be analysed by officially authorised laboratories. The SPF system additionally requires tests to be confirmed in a significant number of known negative samples to minimise the number of single positive reagents triggering the ongoing monitoring. As the declaration is also used by the SPF system, the test, when used on SPF herds, must also be approved for this purpose.

The declaration requirement applies to all herds with more than 10 sows or more than 100 animals in total.

The PRRS status declaration requirements will be made legally binding as part of the revision of the PRRS Executive Order.

5.1.1 Antibody declaration

A PRRS antibody declaration with the same guidelines as in the SPF system will be introduced into all herds with more than 10 sows or more than 100 animals in total.

If the farm has an SPR or PRRS declaration already, this will be sufficient for the antibody declaration.

Depending on the PRRS status of the herd, there are different blood sample requirements for the antibody declaration. In all cases, it is the practising veterinarian who takes the samples and performs the clinical assessment.

PREREQUISITES FOR MAINTAINING A PRRS ANTIBODY NEGATIVE DECLARATION DEPENDS ON THE FOUR FOLLOWING POINTS BEING COMPLIED WITH:

- 20 blood samples per CHR number are taken at least once a year, all of which must be negative for PRRSV antibodies.
- there must be no clinical signs of PRRS.
- an infection protection plan has been drawn up focused on preventing the introduction of infection.
- If animals are bought in, they must come from a PRRS antibody negative herd (c.f. SPF system's definition – antibody-free).

IF A HERD WITH PRRS ANTIBODY POSITIVE STATUS AIMS TO ACHIEVE PRRS ANTIBODY NEGATIVE STATUS, THE FOLLOWING POINTS MUST BE COMPLIED WITH:

- total eradication is performed.
- if a total eradication is not performed, 20 blood samples must be taken twice (40 samples in all) per CHR number. There must be six months between the two samples All of them must be negative for PRRSV antibodies
- there must be no clinical signs of PRRS.
- an infection protection plan has been drawn up focused on preventing the introduction of infection.
- If animals are bought in, they must come from a PRRS antibody negative herd (c.f. SPF system's definition – antibody-free).

IF A HERD WHOSE PRRS STATUS IS CURRENTLY UNKNOWN AIMS TO ACHIEVE PRRS ANTIBODY NEGATIVE STATUS, THE FOLLOWING MUST BE COMPLIED WITH:

- A specific number of blood samples must be taken, depending on the type of herd. In herds comprising sows and growing pigs, 2 x 40 blood samples are required (20 from sows and 20 from growing pigs). In herds comprising growing pigs or sows only, 2 x 20 blood samples are required (a total of 80 and 40 samples respectively) per CHR number. There must be a one-month gap between the two tests and all must be negative for PRRSV antibodies.
- there must be no clinical signs of PRRS.
- an infection protection plan has been drawn up focused on preventing the introduction of infection
- If animals are bought in, they must originate from a PRRS negative herd (c.f. SPF system's definition – antibody-free).

A sample size of 20 will be selected when testing for antibodies.

A summary of the number of tests and intervals is given in table 3.

Table 3. Overview of the number of blood tests to achieve PRRS antibody negative status.

	Number of tests	Interval
Maintenance of PRRS antibody negative status	20	Once a year
From PRRS antibody postive to PRRS antibody negative	20x2	6 month
From PRRS unknown to PRRS antibody negative		
> Herds with sows and piglets/finishers	40x2	1 month
> Herds with either sows or piglets/finishers	20x2	1 month

TESTS TO BE TAKEN REPRESENTATIVELY AND DIVIDED AS FOLLOWS:

- Sow herd with no piglets/finishers: all samples to be taken in the gestation unit.
- Sow herd with piglets/finishers. Half the samples to be taken in the gestation unit and the other half among the oldest piglets/finishers, if possible in a continuously operated collection unit.
- Only piglets/finishers: samples to be taken in at least three sections from among the oldest pigs, if possible in a continuously operated collection unit.

The PRRS antibody declaration is handled by SPF-Sund (SPF Health). Data is collected in a national PRRS database, which is managed by L&F. The Danish Veterinary and Food Administration (FVST) has full access to data at any time and can use it for official control. The costs for managing the PRRS antibody declaration lie with the industry and are not the concern of the Danish Veterinary and Food Administration.

5.1.2 Clinical declaration

Every month (in practice with a maximum interval of 35 days, corresponding to the frequency of health advisory visits to most sow herds) or prior to slaughter from all-in-all-out productions at CHR level, finisher herds declared PRRS antibody positive must have a declaration signed by the practising veterinarian and the producer certifying that there are no clinical signs of PRRS in the herd, c.f. guidelines from the Danish Veterinary and Food Administration, FVST ("Guidelines on handling PRRS" FVST 1 September 2020). The declaration covers pigs that are on the property at the time the declaration is signed and are slaughtered over the following four weeks. The declaration must be available at the herd location and presented at FVST inspections.

In cases of clinical signs of PRRS in the herd, the practising veterinarian must, as is currently required, submit the necessary material for testing for the PRRS virus to SSI and report any positive result to the Danish Veterinary & Food Administration (FVST). i.e., the same normal procedure as with clinical suspicion of PRRS, c.f. Guidelines on handling PRRS, FVST 1 September 2020. See also section 5.2, concerning a change to the rules from the beginning of 2022 requiring notification by the veterinarian to the FVST at the time that PRRS is suspected.

5.1.3 Virus declaration

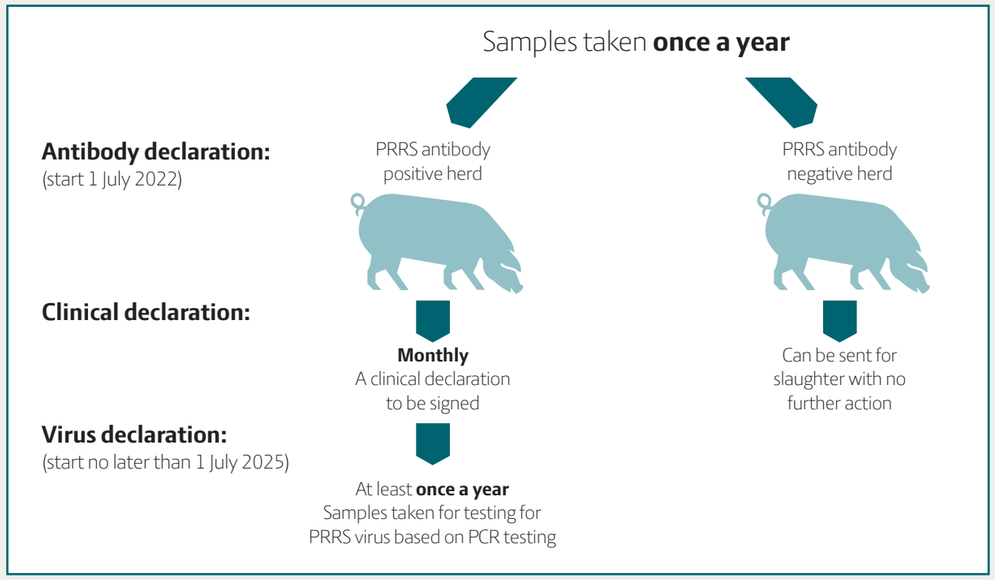
No later than 1 July 2025, PRRS antibody positive finisher herds must, in addition to an antibody declaration and a clinical declaration, have a virus declaration (PCR test). The virus declaration process may be started earlier if the reduction in the number of PRRS antibody positive herds proceeds faster than expected. This is evaluated on an ongoing basis:

Virus declaration is fundamentally based on blood samples being taken from PRRS antibody positive finisher herds at least once a year for examination for the PRRS virus by PCR testing. Details of the sample material, the number of samples and interval may be adjusted during the process depending on the results from supporting research activities and assessment based on more solid data.

Evaluation of the effect of the PRRS reduction strategy at the end of 2022 and 2023 will provide the basis for a decision on virus declarations in PRRS antibody positive finisher herds to be implemented earlier than 1 July 2025.

A summary of the actual declaration of PRRS in herds can be seen in fig. 2.

Fig 2. Future declaration of PRRS in finishers



5.2 Suspected PRRS

PRRS has so far been a so-called List 2 disease, which means that a veterinarian must report the presence of the disease to FVST, when there is a positive PRRS diagnosis, i.e. a positive laboratory response. In 2022, the PRRS Executive Order will be amended, c.f. new Animal Health Act. This means that the veterinarian must notify the FVST as soon as there is a clinical suspicion of PRRS in a herd. Similar to other reportable diseases, the point at which the disease was first suspected must be given, i.e. the date and time. If the PRRS virus is found in samples taken for reasons other than suspected PRRS, e.g. status tests taken in connection with PRRS eradication) the date and time of the testing must also be indicated.

5.3 Herd eradication

It is up to individual pig producers, in collaboration with veterinarians, to prepare a strategy for reducing PRRS in their herd. In 2022, the industry will set up regional PRRS reduction councils, under the auspices of a Danish Agriculture & Food Council veterinarian, who will coordinate action in areas with widespread PRRS antibody positive herds. The council is expected to bring practising veterinarians and pig producers in the area together to devise a common strategy for reducing PRRS in the geographical area.

5.4 Integrated herds

It is difficult to eradicate PRRS in integrated herds unless total eradication is carried out and all animals are removed from the farm, or, if the sow unit is stable, piglets and finishers are removed for a period. The reason is that the presence of pigs of all age groups – from sows to finishers – means that the PRRS virus is difficult to eradicate as there will constantly be animals that can be infected by the PRRS virus and therefore perpetuate it. In many cases, the structure of the herd is such that a total separation of age groups is impossible.

It is assumed that the number of integrated herds is declining and will continue to fall over the coming years. In 2020, integrated herds were divided as follows when herds comprising more than 10 sows or more than 100 animals in total (table 4) were taken into account. In the table, the number of integrated herds is divided according to the number of finishers per sow, i.e. as an indication of whether the majority are "residual pigs" or actual full-time herds. A dividing line of five finishers per year sow has been selected where herds with more finishers per year sow are regarded as full-time. If the dividing line is raised to 10 pigs, then the number of herds decreases by only a few herds (42 SPF PRRS positive, 147 SPF unknown-unknown). As can been seen from table 4, many of the integrated herds have limited finisher production. All in all, therefore, it may be concluded that there are few actual integrated herds.

Table 4. The number of sow herds supplying finishers from the same CHR number and the number of finishers produced.

SPF PRR positive				
Number of sows	Herds in total	Produced finishers in total	Herds with +5 finishers per sow	Produced finishers in herds with ´+5 per sow
Under 100 sows	11	21.366	11	21.366
100 - 300 sows	24	58.043	17	56.489
300 - 500 sows	43	69.252	10	51.782
500 - 700 sows	39	63.153	6	45.648
Over 700 sows	115	119.072	0	0
Total	232	330.885	44	175.285
SPF PRRS-unknown				
Number of sows	Herds in total	Produced finishers in total	Herds with +5 finishers per sow	Produced finishers in herds with ´+5 per sow
Under 100 sows	61	21.366	53	85.355
100 - 300 sows	72	58.043	63	217.776
300 - 500 sows	68	69.252	32	164.970
500 - 700 sows	46	63.153	12	76.080
Over 700 sows	81	119.072	0	0
Total	328	330.885	160	544.181

[a]+5 finishers per sow means that more than 5 finishers per sow are delivered from the herd.

Over the coming years, an eradication project must cover the possibility of eradicating integrated herds or devising proposals for other management solutions. Moreover, the structural development of integrated herds will be closely monitored.

5.5 Use of PRRS vaccines

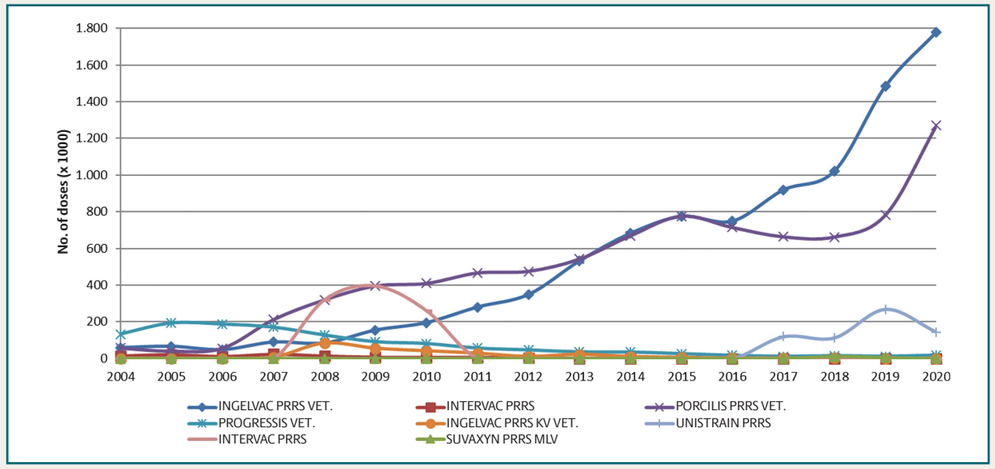
Vaccination against PRRS is the key to PRRS eradication in a number of herds.

5.5.1 PRRS vaccine prescriptions

Today, Modified-Live Vaccines are mainly used against PRRS in Danish herds. There are three MLV vaccines against PRRS-type 1 (Unistrain PRRS vaccine, PORCILIS® PRRS VET, Suvaxyn PRRS MLV) and against PRRS type 2, there is an MLV-vaccine (INGELVAC® PRRS VET). In addition, there are two inactivated PRRS vaccines on the market, one of which can be prescribed with special permission (Progressis® Vet., SUIVAC® PRRS-IN). SUIVAC® PRRS-IN is effective against both PRRS-type 1 and type 2.

In 2020, 3.2 million doses of the PRRS vaccine were used. Almost half were prescribed for piglets, 1 million doses were prescribed for sows and the rest for finishers and gilts (fig. 3).

Fig 3. Development in the sale of PRRS vaccines in Denmark.



PRRS vaccines may only be used in PRRS herds and in this context, following detection of PRRS antibodies or PRRS virus. In cases where PRRS vaccination is started based on a veterinary assessment of clinical symptoms of PRRS, this must be confirmed or refuted by submission of material for testing for the PRRS virus to SSI and a positive result reported to the Danish Veterinary and Food Administration.

5.5.2 Detection of PRRS virus in a PRRS-vaccinated herd

When MLV PRRS vaccines are used, it can be expected that pigs will subsequently shed the PRRS vaccine virus for a period. It is only in cases where, based on a veterinary assessment, clinical symptoms of PRRS are found, that material must be submitted for examination for the PRRS virus to SSI and a positive result reported to the Danish Veterinary and Food Administration. Irrespective of at which point the PRRS virus is detected in a PRRS vaccinated herd, this will result in the herd appearing on the Danish Veterinary and Food Administration's official list of PRRS virus positive herds.

5.6 Free testing

With increased monitoring of finisher units, the PRRS virus is likely to be detected in more herds. If a herd is subject to restrictions following detection of the PRRS virus but is completely eradicated and PRRS antibody negative animals are introduced, the restrictions can be lifted.

Total eradication is performed by the herd being completely emptied of animals, thoroughly cleaned and disinfected. It is estimated that a week's empty period, following thorough cleaning and disinfection, ought to be sufficient to eradicate PRRS. After this, new animals that have been declared PRRS antibody negative can be introduced. This must be documented by the practising veterinarian.

In addition, 14 days before the first delivery for slaughter from the new herd, it is required that 20 blood tests must be taken from the oldest finishers for examination for the PRRS virus by PCR. The lifting of restrictions (removal from the Danish Veterinary and Food Service's official list of PRRS herds) takes effect when the 20 blood samples show a negative response to the PRRS virus.

5.7 Price differentiation

The slaughtering of pigs from herds where the PRRS virus has been detected carries additional costs. Slaughterhouses will impose a deduction for this on an individual basis.

6. General management of Porcine Reproductive and Respiratory Syndrome

A successful strategy to reduce Porcine Reproductive and Respiratory Syndrome (PRRS) in Denmark requires both action from the breeding system and supporting official controls.

6.1 Listing of PRRS

Under the new Animal Health Law, Regulation (EU) 2016/429 of the European Parliament and of the Council, c.f. the Commission's Implementing Regulation 2018/1882, PRRS must be listed as a category D+E disease, which means that the suspected presence of PRRS must be reported to the Danish Veterinary and Food Administration.

6.2 Breeding systems

Under the EU's Animal Health Law, breeding systems and boar stations must free from PRRS to ensure future trade opportunities. All AI stations in Denmark are free from the PRRS virus. In addition, all Danbred breeding herds are PRRS negative or undergoing eradication. Other breeding companies in Denmark, TopigsNorsvin, German Pietrain, PIC and Danish Genetics, are free from the PRRS virus. All breeding companies are now declared by the SPF system.

Next, it must be ensured that the next link in the breeding pyramid – multipliers - are PRRS negative. Currently, 90 per cent of the Danbred multiplier herds are PRRS negative and it is expected that the rest will be so very soon.

6.3 Official control

The Danish Veterinary and Food Administration will be responsible for drawing up the legal basis for requirements concerning the PRRS status declaration and the implementation of official control by the parties involved and the declarations needed under the new Executive Order.

Official control will take the form of a cross-cutting control of all elements in the production chain and comprise control targetted at herds, the declaration system, laboratories and veterinarians.

6.3.1 Control targetted at veterinarians

Every year, the Danish Veterinary and Food Administration carries out general random checks of veterinarians. Official monitoring is currently based on the veterinarians' reporting obligation. That is to say, control of the clinical monitoring documentation carried out in connection with herd visits, where practising veterinarians perform clinical assessments based on a suspicion of the presence of a virus. If the suspicion cannot be dismissed, it must be determined by PCR analysis. Appropriate application of this procedure is controlled as part of the official monitoring of veterinarians by random checks carried out by the Danish Veterinary and Food Administration.

[2] Definition of list D and E diseases in accordance with the Commission's Implementing Regulation (EU) 2018/1882: Category D-disease means a listed disease for which measures are needed to prevent it from spreading on account of its entry into the Union or movements between Member States; Category E-disease means a listed disease for which there is a need for surveillance within the Union.

6.3.2 Control targetted at herds

Every year, the Danish Veterinary and Food Administration carries out a welfare audit at some Danish farms. A welfare audit has been conducted at 10 per cent of farms on an annual basis since August 2021. This is deemed appropriate.

In the initial phase of the project, the Danish Veterinary and Food Administration will undertake a control campaign targetted at compliance with the new regulations under the new PRRS Executive Order.

When a declaration of PRRS antibody positive herds is supported by a virus declaration, the Danish Veterinarian and Food Administration will perform random checks of 'free-from PRRS virus' by taking samples during control visits.

6.3.3 Control targetted at diagnostic laboratories

Private laboratories wishing to provide diagnostic services as part of this strategy must be officially designated laboratories according to Article 37 of the Official Control Regulation or national reference laboratories designated in accordance with Official Control Regulation article 100, for the study of PRRS. The obligations of these laboratories comply with the Official Control Regulation's articles 38 and 101, including the handling of samples and analytical methods, etc. The Danish Veterinary and Food Administration can organise audits of the officially authorised laboratories c.f. the Official Control Regulation, Article 39.

6.3.4 Control targetted at declaration system

The Danish Veterinarian and Food Administration controls the documentation of the PRRS antibody declaration system by means of random control of data at the SPF system. The industry is currently expanding the SPF system with PRRS data. The Danish Veterinarian and Food Administration has access to the data at all times.

7. Implementation

Implementation of the Porcine Reproductive and Respiratory Syndrome (PRRS) strategy will start in mid-2022.

7.1 Implementation

The plan for reducing the occurrence of PRRS in Denmark can only be implemented through coordinated action between the authorities, the industry and practising veterinarians.

The Danish Veterinary and Food Administration will establish the new regulatory basis by a revision of the PRRS Executive Order. This is expected to come into force on 1 July 2022. Effective eradication processes assume knowledge of the PRRS status of all herds so that regional action can be organised appropriately to minimise the risk of reinfection. This, in turn, assumes a requirement laid down in the Executive Order in relation to PRRS antibody declaration, clinical declaration and the forthcoming PRRS virus declaration.

The industry has a key role as regards ensuring the necessary knowledge base about the spread of infection, effective eradication strategies as well as the reason for eradication. Another major challenge lies in the regional effort in areas with many PRRS antibody positive herds. To this end, there will be an opportunity to set up regional councils comprising representatives from relevant veterinary practices and pig producers to coordinate joint action to reduce PRRS in a given area. The industry will also have a key role in ensuring digital solutions for the handling of data. The Danish Veterinary and Food Administration will not be part of the regional councils but can be consulted if necessary for clarification on legislative matters.

PRRS antibody and clinical declarations will be initiated when the revised PRRS Executive Order comes into force.

7.2 Follow-up on implementation of PRRS reduction strategy

The working and steering group will follow the implementation of the PRRS reduction strategy and the development in the occurrence of PRRS antibody negative herds based on the implementation plan.

By 1 July 2025, the supplementary virus declaration for finishers based on PCR testing comes into force with an adjustment to the PRRS Executive Order.

In the summer 2023 and 2024, progress in the strategy for reducing PRRS will be assessed, and a decision will be taken as to whether the PRRS antibody declaration for finishers should be supplemented by a virus declaration for the PRRS virus earlier than 1 July 2025. The decision will be taken by the steering group and will require an amendment to the PRRS Executive Order.

8. References

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