Code of Practice for Importation of Fresh Boar Semen into Northern Ireland & ROI

Produced by Veterinary Practitioners in Northern Ireland and the Republic of Ireland

June 2016

#### 1. Introduction

This code of practice details procedures which will minimise the risk of importing disease into Northern Ireland and the Republic of Ireland with shipments of fresh or frozen pig semen / AI.

A range of complex diseases can be introduced with the importation of any semen product, making the development of a Code of Practice that totally eliminates the risk of introducing disease a difficult process. It is understood that semen can act as a vector of certain diseases, particularly viruses. The risk associated with the transmission of various bacterial diseases is reduced by the way semen is treated post collection, through the addition of antibacterial preparations.

This Code of Practice will not cover all disease situations that may arise. However, it seeks to address best practice and should apply to the importation of all pig semen. It details the quarantine facilities for stud boars along with transportation and testing regimes that should pertain to a range of named diseases. Where a new disease situation arises, which is not covered by these existing protocols, application to import semen can be considered on an individual basis.

It was initially conceived that semen importation would be an occasional event and administered in isolation facilities, with served sows retained in isolation until they farrow. This is indeed the case for some imported semen, especially that originating from outside the European Union. However semen is also imported directly onto commercial units on a regular basis, usually for the production of replacement gilts. This protocol will address both these importation situations.

The administration of each consignment of imported semen will be overseen by either the secretary of the National Pig Health Council (NPHC) or the Ulster Farmers Union (UFU) Pork and Bacon Committee depending on whether in the Republic of Ireland or Northern Ireland respectively. The respective committees will nominate a group of independent veterinarians to act on a sub-committee and address all issues relating to disease and biosecurity associated with any importation of semen. Prior to importation, the importer must make contact with the Secretary of the NPHC or Secretary of the UFU Pork and Bacon Committee, seeking clarification on particular points and, if necessary, an application considered on an individual basis. This contact should be made in advance of the importation of the first consignment of semen so that disease conditions specific to that area and that country can be considered. Also this will allow additional measures to be implemented if, in the opinion of the NPHC / UFU sub-committee, these are necessary.

This code of practice is intended to supplement and not to replace the European Communities Trade in Porcine Semen (Animal Health Regulations) 1993.

#### 2. Country of origin

In general, it is recommended that importations of fresh or frozen semen be restricted to countries and herds that have a health status that is equal to or superior to that of BOTH Northern Ireland and the Republic of Ireland.

The island of Ireland would be considered to enjoy an unequalled health status compared to neighbouring EU countries. Regional freedoms elsewhere are far more important than country status and each proposal to import should be dealt with on a case by case basis. In specific instances, increased levels of pre-import testing may be required based on risk analysis of the proposed country of origin of the semen. It is assumed that the health status between Northern Ireland and the Republic of Ireland is identical and hence this protocol does not apply to cross border trade between the two regions.

Under this protocol, the extent of testing if boars and isolation of sows following insemination depends on the country/region of origin of the semen. The country/region of origin will be divided into three zones based on disease risk. These zones are as follows:

- Zone A UK & Ireland
- Zone B no ASF, CSF & US PRRS, Br,
- Zone C All other regions

### **3.** Requirements for imported semen from all regions

The licensed AI centre must satisfy National/EU health requirements. Each importer must register with the Department of Agriculture, Food and the Marine (DAFM) or Department of Agriculture Environment and Rural Affairs (DAERA) depending on jurisdiction. They must comply with all the appropriate requirements of the European Communities (Trade in Porcine Semen – Animal Health Regulations, 1993).

.DAFM / DAERA must be notified at least 48 hours before importation via TRACES. Notwithstanding EU and DAFM / DAERAI requirements, the NPHC/ UFU Pork and Bacon Committee have endorsed these guidelines, which are more stringent than the intra-Community requirements regarding the free movement of animal products within the EU in an attempt to further reduce the possibility of disease introduction or spread. Hence the period of notification, testing etc. is greater than that required by the local authority.

# Official certification of semen derived from herds of origin in the EU

The following official certification must accompany AI imported to Northern Ireland / Republic of Ireland

- EU health certificate (*Council Directive 90/429/EEU Annex D*)
- International health certificate (please check?)
- Zoo-technical certificate in the case of pedigree animals.

Official certification of semen derived from AI centres in third countries National rules for the importation of fresh semen shall apply, except where specific

EU rules exist.

# 4. National Pig Health Council / UFU Pork & Bacon Committee requirements for export of semen from all regions

Semen collection must adhere to the following procedure and be restricted to licensed A.I. centres that satisfy the following criteria:

• The Secretary of the NPHC or UFU Pork and Bacon Committee must be contacted at least 28 working days before the first proposed importation of

semen is due to take place. The bio-security certificate S1 and the importers declaration certificate S6 must be forwarded at this time.

• Blood samples must be collected from 26 resident or cull boars in the A1 centre. If there are less than 26 boars in the AI centre, all boars should be tested. The blood samples should be subjected to authorised serological tests for:

Disease	Authorised Serological Tests
PRRS (US & EU Strains)	PCR / ELISA
Aujeszky's Disease (PRV)	PRV (Total Ab) ELISA
TGE	Differential ELISA
PED	ELISA (serum); PCR
CSF / ASF	ELISA
Brucellosis	ELISA / CFT

Table 1. Authorised tests for semen imports into Ireland

- Only a laboratory approved by the NPHC / UFU can be used for disease testing. It is the responsibility of the consultant veterinarian to the importing farm to source and provide details of this laboratory.
- The collection and submission of samples to the laboratory is the responsibility of the consultant veterinarian to the importing farm
- Boars in the AI centre must be tested for all the above diseases and negative results confirmed within 7 days prior to first collection of semen destined for export,.
- Certificates S2, S3, S4 and S5 must be completed and forwarded to the Secretary of the NPHC / UFU Pork and Bacon Committee following receipt of the above negative results for all diseases. This must be completed 7 days before the first consignment of semen is exported to Northern Ireland or Republic of Ireland.
- Exporting AI centres must continue to test for PRRS on a weekly basis. A total of 26 boars, including the boars which are collected for export, must be tested and results sent to the Secretary of the NPHC and UFU Pork and Bacon Committee
- New boars destined for the AI centre must be quarantined for a period of not less than 30 days. Following quarantine blood samples must be

collected and tested for the diseases stated in table 1 and found to be negative. Only then can they enter the AI centre. Evidence of this can be requested from the AI centre at any time.

If the above criteria are met then AI centres in Zones A and B can export semen directly onto farms in Northern Ireland and the Republic of Ireland.

#### 5. Antibiotic additives

An effective combination of antibiotics, in particular against *leptospira* and *mycoplasma* species, must be added to the semen after final dilution. This combination must produce an effect at least equivalent to the following dilutions:

Not less than: 500iu per ml Streptomycin 500iu per ml Penicillin 150mg/L Lincomycin 300mg/L Spectinomycin

Immediately after the addition of the antibiotics, the diluted semen must be kept at a temperature of at least 15<sup>o</sup>C for a period of not less than 45 minutes. Defined methods of freezing must be applied to diluted semen within a specified time frame if destined for freezing.

# 6. Isolation Quarters in NI and ROI for sows inseminated with semen from Zone C.

Semen from boar centres in Zones A and B can be imported directly onto commercial farms if they adhere to the above standards. AI centres from Zone C must further comply with the standards below

- The premises where sows and gilts are inseminated must not be within 5km of existing pig farms and ideally at least 1km from any route along which there is regular transport/transit of pigs.
- It is envisaged that a consignment of imported fresh or frozen semen would be used on a batch of gilts or sows in an isolation facility /

6

quarantine. Personnel involved with the care of inseminated sows must not have contact with other pigs.

- After a minimum of 35 days from the time the last sow is inseminated, all isolated sows must be blood sampled for PRRS (US Strain), AD, TGE, ASF, CSF and PED with acceptable (negative) results. The collection and submission of samples to a laboratory approved by the NPHC / UFU is the responsibility of the consultant veterinarian to the importing farm
- No sow shall be removed from the isolation facility without the authorisation of the NPHC / UFU.
- Before removing sows from the isolation quarters, the consultant veterinarian to the importing herd shall contact the source AI stud for confirmation that there has been no clinical evidence of PRRS (US Strain), AD, TGE, CSF, ASF or PED in the stud since the semen was collected.
- At this stage all serological test results and health certificate S9, issued by the consultant veterinarian, must be forwarded to the NPHC /UFU.
- All serological test results, along with the relevant certificates and the owner declaration will be examined by the veterinary sub-committee.
  Where satisfied, approval for the removal of the inseminated sows from the isolation premises will be notified to the NPHC / UFU. The decision of the NPHC/UFU will be final.
- Where problems arise in respect to serological test results or certification by the consultant veterinarian, consultations between the herd veterinary surgeon and the veterinary sub-committee and will take place to determine what further action is required. The decision of the NPHC / UFU veterinary committee is final.

In the event of clinical or serological evidence of any of the relevant diseases being recognized amongst the inseminated sows, they must be slaughtered and disposed of in consultation with DAFM / DAERA. It is recommended that importers should insure against this eventuality.

7. Additional procedure for applicants importing semen from zone C The importer must forward the following information to the Secretary of the NPHC / UFU Pork and Bacon Committee on Certificate S8 at least 28 days before the

proposed date of the first importation

- Name and address of the source AI centre.
- Name and address of the veterinarian to the source AI centre.
- Date and place of proposed importation, including the method of dispatch
- Name and address of the importing herd.
- Name and address of private veterinarian to the importing herd.
- Address of the isolation farm to the importing herd.
- Name and address of the stockperson assigned to the isolation farm
- Certificate S1 signed by the importer's veterinarian.
- Certificate S7 signed by the importer's veterinarian.
- Certificate S6 signed by the importer.

The application, complete with all the relevant certificates S2, S3, S4 and S5, should be made by the private veterinarian to the importing herd. This documentation must reach the NPHC / UFU at least 28 working days prior to the proposed date of importation.

# 8. AI Centres in Northern Ireland and Republic of Ireland

• AI centres in Northern Ireland and the Republic of Ireland must test for PRRS weekly. A total of 26 boars, including the boars which are collected for use in Northern Ireland and the Republic of Ireland must be tested and results sent to the Secretary of the NPHC and UFU Pork and Bacon Committee. If there are less than 26 boars in the AI centre, all boars should be tested.

#### 9 Veterinary Examiner

Prior to the first importation of semen from zones A and B and for all importations from zone C, the pig veterinary sub-committee of the NPHC / UFU will appoint one of its members as an import assessor. Where possible, the assessor will not be the

nominated private veterinarian for the importer to ensure transparency and that there is no conflict of interest.

#### 10. Pig Producer Register

The NPHC /UFU secretary will set up and maintain a register of all pig producers who import pigs or pig genetic material (semen or embryos, fresh or frozen) into NI or ROI.

Note: Applications to UFU should be forwarded to the secretary of the UFU Pork and Bacon Committee at the following below. NPHC applications should be forwarded to the NPHC secretary listed below. Each secretary should inform the secretary in the other region of any proposed importation prior to it being undertaken.

Secretary of the National Pig Health Committee Irish Farm Centre, Naas Road, Bluebell, Dublin 12. 00353 871150029

Secretary UFU Pork and Bacon Committee Ulster Farmers' Union 475 Antrim Road Belfast, Antrim *BT15 3DA*.

#### 00442890370222

Whilst every care has been taken in the preparation of this Code of Practice, no responsibility whatsoever can be taken by the NPHC / UFU or any if its participating bodies or their members or associates for any loss or damage howsoever arising, whether directly or indirectly out of this Code of Practice, the use of any part of it, or the recommendations contained therein. This document was compiled by the Veterinary Practitioners in Northern Ireland and the Republic of Ireland, May 201

Attached documentation

S1. Bio-security Certificate in respect of Fresh or Frozen Boar Semen destined for Import into ROI/ Northern Ireland (Zone A, B and C)

S2. Porcine Reproductive and Respiratory Syndrome (PRRS) Certificate in respect of Fresh or Frozen Boar Semen destined for import into ROI/ Northern Ireland (Zone A, B and C)

S3. Aujeszky's Disease (AD) Certificate in respect of Fresh or Frozen Boar Semen destined for import into ROI/ Northern Ireland (Zone A, B and C)

S4. Transmissible Gastroenteritis (TGE) Certificate in respect of Fresh or Frozen Boar Semen destined for import into ROI/ Northern Ireland (Zone A, B and C)

S5. Porcine Epidemic Diarrhoea (PED) Certificate in respect of Fresh or Frozen Boar Semen destined for import into ROI/ Northern Ireland (Zone A, B and C)

*S6.* Declaration by Importer in respect of Fresh or Frozen Boar Semen imported into *ROI*/*Northern Ireland* (*Zone C*)

S7 Declaration re Isolation Farm in Importing ROI/ Northern Ireland (Zone C)

**S8** Fresh or Frozen Boar Semen Imports– Application Form to NPHC /UFU (Zone C)

S9 Health Certificate in respect of sows/gilts inseminated with fresh or frozen boar semen imported into ROI/ Northern Ireland (Zone C)

C1 Semen Import - Documentation Checklist (Vet)

C2 Semen Import - Documentation Checklist (Vet)

# Bio-security Certificate in respect of Fresh or Frozen Boar Semen destined for Import into ROI/ Northern Ireland

AI Centre	Veterinary Surgeon to AI Centre
Name	Name
Address	Address

Declaration by Veterinarian to the AI Stud

1. I \_\_\_\_\_\_, consultant veterinarian to the AI centre named above, declare that the AI centre is satisfactory in terms of husbandry, hygiene and general biosecurity and is at least 1km removed from any route along which there is regular traffic / transit of pigs.

AI Centre	Boar ID Numbers	
Name		
Address		
Examining Lab	Veterinary	
	Consultant	
Name	Name	
Address	Address	

Serological test applied:

Date of Blood Sampling: .....

I ....., consultant veterinarian to the AI centre named above, declare that it may be deemed free of PRRS on the bases of clinical and/or pathological examinations together with negative serological test results on 30 boars within the stud.

- Note 1: Within the 7 day period prior to export, the consultant veterinarian must blood sample at least 30\* of the boars, which have been present in the AI centre for a minimum period of 30 days; using either the PCR, IPMA or the ELISA test. The sera must prove negative for PRRS virus or antibodies. (\*This level has been chosen in order to ensure 95% confidence at 5% sero-prevalence)
- Note 2: Where the total number of boars in the AI centre is less than 30, all boars must be sampled.
- Note 3: All appropriate laboratory test reports must be attached to this certificate.
- Note 4: Clinical, pathological or serological evidence of disease should not have been identified in the herd within the past two years.

#### Aujeszky's Disease (AD) Certificate in respect of Fresh or Frozen Boar Semen destined for import into ROI/ Northern Ireland

AI Centre	Pig ID Numbers	
Name		
Address		
Examining Lab	Veterinary	
	Consultant	
Name	Name	
Address	Address	

Serological test applied:

Date of Blood Sampling: .....

I ....., consultant veterinarian to the AI centre named above, declare that the AI centre may be deemed free of AD on the bases of clinical or pathological examinations together with negative serological test results on 30 boars pigs from within the herd.

- Note 1: Within the 30 day period prior to export, the consultant veterinarian must blood sample at least 25 of the boars, which have been present in the AI centre for a minimum period of 30 days; these samples should be subjected to the PRV (total Ab) ELISA and the results must indicate absence of AD field infection.
- Note 2: Where the total number of boars in the AI centre is less than 25, all boars must be sampled.
- Note 3: All appropriate laboratory test reports must be attached to this certificate.
- Note 4: Clinical, pathological or serological evidence of disease should not have been identified in the herd within the past two years.
- Note 5: Both NI & ROI are officially free of Aujeszky's Disease

#### Transmissible Gastroenteritis (TGE) Certificate in respect of Fresh or Frozen Boar Semen destined for import into ROI/ Northern Ireland

AI Centre	Pig ID Numbers	
Name		
Address		
Examining Lab	Veterinary	
	Consultant	
Name	Name	
Address	Address	

Serological test applied:

Date of Blood Sampling: .....

I ....., consultant veterinarian to the AI centre named above, declare that the AI centre may be deemed free of TGE on the bases of clinical or pathological examinations together with negative serological test results (TGE differential ELISA) on 25 boars from within the stud.

- Note 1: Within the 30 day period prior to export, the consultant veterinarian must blood sample at least 30 of the boars, which have been present in the AI centre for a minimum period of 30 days; the TGE differential ELISA results must prove negative.
- Note 2: Where the total number of boars in the AI centre is less than 25, all boars must be sampled.
- Note 3: All appropriate laboratory test reports must be attached to this certificate.
- Note 4: Clinical, pathological or serological evidence of disease should not have been identified in the herd within the past two years.

#### Porcine Epidemic Diarrhoea (PED) Certificate in respect of Fresh or Frozen Boar Semen destined for import into ROI/ Northern Ireland

AI Centre	Pig ID Numbers	
Name		
Address		
Examining Lab	Veterinary	
	Consultant	
Name	Name	
Address	Address	

Serological test applied:

Date of Blood Sampling: .....

I ....., consultant veterinarian to the AI centre named above, declare that the AI centre may be deemed free of PED on the bases of clinical or pathological examinations together with negative serological test results on 30 pigs selected from representative areas within the herd.

- Note 1: Within the 30 day period prior to export, the consultant veterinarian must blood sample at least 30 of the boars, which have been present in the AI centre for a minimum period of 30 days; the PED ELISA results must prove negative.
- Note 2: Where the total number of boars in the AI centre is less than 30, all boars must be sampled.
- Note 3: All appropriate laboratory test reports must be attached to this certificate.
- Note 4: Clinical, pathological or serological evidence of disease should not have been identified in the herd within the past two years.

Undertaking by Importer in respect of Fresh or Frozen Boar Semen imported into Ireland (ROI & NI)

Donor Herd	Importer
Name:	Name:
Address:	Address:
Date of Proposed Importation:	

I \_\_\_\_\_\_, on behalf of the above named importer, hereby undertake that in the event of clinical or serological evidence of PRRS (US Strain), AD, TGE or PED being recognised amongst the inseminated sows they will be slaughtered and disposed of efficiently and in a bio-secure manner so that the health of any other farm will not be put at risk by these pigs.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

S6

Owner	Veterinarian	
Name:	Name:	
Address:	Address:	

I \_\_\_\_\_\_, consultant veterinarian to the importing herd, certify that the locations of the isolation premises is not within 5 kms of pig farms, is at least 1 km removed from a route along which there is regular transport / transit of pigs. The isolation facility is satisfactory in terms of husbandry, hygiene and general security.

Signed:	Date:
0	

# Fresh Boar Semen Imports-Application Form to NPHC /UFU

# **Proposed Exporting AI Centre**

# Veterinarian to AI Centre

Name	Name	
Address	Address	
Date of proposed importation:		
Place of proposed importation:		
Method of Despatch:		

# Importer

# Consultant Veterinarian to Importing Herd

Name	
Address	

### **Isolation Farm**

. . . . . . . . . . . . .

	Name Address
Name/Address of the Stockperson designated for sole use on the isolation farm:	

# Health Certificate in respect of sows/gilts inseminated with fresh boar semen imported into Ireland (ROI & NI)

Importer	Veterinary Consultant
Name	
Address	
Import Ref. No.	
Date of Importation	
Date(s) of Insemination	
Date of Blood Sampling of inseminated pigs	

I ....., consultant veterinarian to the importing herd, certify that to the best of my ability not earlier than 35 days\* after insemination of the final animal, all inseminated animals were blood sampled for PRRS (US Strain), AD, TGE, CSF, ASF and PED with negative results<sup>1</sup>.

Signed ..... Date .....

Note 1: All appropriate laboratory test results must be attached to this Certificate Note 2: \* Based on information supplied by the farm that used the imported AI

#### National Pig Health Committee / UFU Pork and Bacon Committee

# Semen Import - Documentation Checklist (Vet)

Document	Details	Date of	Comments
		submission	
<b>S1</b>	Biosecurity	At least 28 days	
	Certificate	prior to import	
	(Zone A, B and C)		
S2	PRRS	At least 28 days	
	Certificate	prior to import	
	(Zone A, B and C)		
<b>S</b> 3	AD	At least 28 days	
	Certificate	prior to import	
	(Zone A, B and C)		
<b>S4</b>	TGE	At least 28 days	
	Certificate	prior to import	
	(Zone A, B and C)		
<b>S</b> 5	PED	At least 28 days	
	Certificate	prior to import	
	(Zone A, B and C)		
<b>S6</b>	Importer	At least 28 days	
	Declaration	prior to import	
	(Zone C)		
<b>S7</b>	<b>Isolation farm</b>	At least 28 days	
	Declaration	prior to import	
	(Zone C)		
<b>S8</b>	Application form	At least 28 days	
	(Zone C)	prior to import	
<b>S</b> 9	Health Certificate	At least 35 days	
	Sows and Gilts	after last sow is	
	(Zone C)	inseminated	

Based on the documentation presented to me I certify that the conditions laid out in the NPHC/UFU Code of Practice for Importation of semen into ROI and NI have been met for this importation:

Signed:	Date:
---------	-------

# National Pig Health Committee / UFU Pork and Bacon Committee

# **Semen Import - Documentation Checklist (Importer)**

Document	Details	Date of	Comments
		submission	
S1	Biosecurity	At least 28 days	
	Certificate	prior to import	
	(Zone A, B and C)		
S2	PRRS	At least 28 days	
	Certificate	prior to import	
	(Zone A, B and C)		
<b>S</b> 3	AD	At least 28 days	
	Certificate	prior to import	
	(Zone A, B and C)		
S4	TGE	At least 28 days	
	Certificate	prior to import	
	(Zone A, B and C)		
S5	PED	At least 28 days	
	Certificate	prior to import	
	(Zone A, B and C)		
<b>S6</b>	Importer	At least 28 days	
	Declaration	prior to import	
	(Zone C)		
S7	Isolation farm	At least 28 days	
	Declaration	prior to import	
	(Zone C)		
<b>S8</b>	Application form	At least 28 days	
	(Zone C)	prior to import	
<b>S9</b>	Health Certificate	At least 35 days	
	Sows and Gilts	after last sow is	
	(Zone C)	inseminated	

C2